

Georgia Power Company
Plant Wansley Ash Pond
Heard County

2018 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT

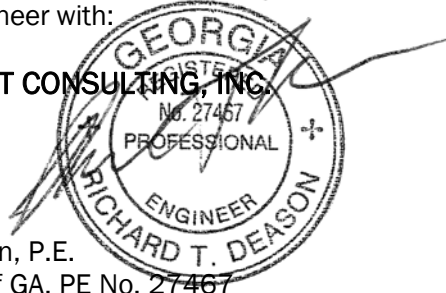
The logo for Atlantic Coast Consulting, Inc. (ACC) features the letters 'ACC' in a white, stylized, cursive script font.

ATLANTIC COAST
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CERTIFICATION STATEMENT

This 2018 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant Wansley Ash Pond has been prepared in accordance with the United States Environmental Protection Agency (US EPA) coal combustion residual rule (40 Code of Federal Regulations (CFR) 257 Subpart D) and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10 under the supervision of a licensed professional engineer with:

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1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] Part 257, Subpart D) and the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management 391-3-4-.10, Atlantic Coast Consulting, Inc. (ACC), has prepared this *2018 Annual Groundwater Monitoring and Corrective Action Report* to document all groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Wansley Ash Pond (the Site). Semi-annual monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of 40 CFR §257.90 through §257.95 of the Federal CCR rule, and Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a).

The Site is located at 1371 Liberty Church Road, approximately 12 miles southeast of the City of Carrollton, Georgia and is situated on approximately 5,100 acres (Figure 1, Site Location Map). The site is located northwest of the plant. Semi-annual monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of 40 CFR §257.90 through §257.95.

This report documents semi-annual monitoring activities completed through the 2018 calendar year in accordance with 40 CFR §257.90(e).

1.1 Regional Geology and Hydrogeologic Setting

The Site is located in the Piedmont physiographic province of Georgia, which is characterized by low, linear ridges separated by broad, open valleys trending northeast-southwest. Piedmont contains predominately metamorphic rock of Precambrian to Paleozoic age. Over geologic time the Piedmont has experienced multiple events of uplift, folding and faulting, alternation, and erosion.

Soils in the Piedmont formed mostly from the in-place weathering of the underlying crystalline bedrock. Near the ground surface, the soils are silt and clay-rich. Sand and fine sand become more prominent with depth. Also, with increasing depth the weathered materials tend to retain details of the structural features of the underlying bedrock.

The Site is situated on several bedrock types composed of schist, gneiss, quartzite, and amphibolite identified in boring logs. Residual soils are primarily sandy silt, silty sand, sandy clay, and silty clay which overlie bedrock across the site. Saprolitic soils were described at variable thickness across the site, but were generally encountered at or near ground surface.

Groundwater occurs across the Site in the overburden soils, as well as in the underlying and hydraulically connected bedrock. Top of the rock surface generally follows topography and generally controls groundwater flow direction in the uppermost aquifer as well. The predominant groundwater flow direction is to the south and east.

1.2 Groundwater Monitoring System and CCR Unit Description

Pursuant to §257.91, a groundwater monitoring system was installed within the uppermost aquifer at the site. The monitoring system is designed to monitor groundwater passing the ash pond boundary within the uppermost aquifer. Well locations were designed to serve as upgradient or downgradient monitoring points based on groundwater flow direction (Table 1, Groundwater Monitoring Network Well Construction Details).

2.0 GROUNDWATER MONITORING ACTIVITIES

In accordance with 40 CFR §257.90(e), the following describes monitoring-related activities performed during the preceding year and discusses any change in status of the monitoring program. All groundwater sampling was performed in accordance with 40 CFR §257.93. Samples were collected from each well in the monitoring system shown on Figure 2, Well Location Map in March, June, and November 2018. Table 2, Groundwater Sampling Event Summary for 2018, presents a summary of groundwater sampling events completed at the site.

2.1 Monitoring Well Installation and Maintenance

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

Two additional wells were installed to further characterize site conditions in September 2018. Characterization wells WAMW-1 and WAMW-2 were installed in the vicinity of well WGWC-19. The locations of the characterization wells are presented on Figure 2. Details regarding well construction are included on Table 1B. Details regarding the installation of these wells will be documented in the facility Operating Record pursuant to 40 CFR §257.91(e)(1).

2.2 Assessment Monitoring

Based on results of the *2017 Annual Groundwater and Corrective Action Monitoring Report*, GPC initiated an assessment monitoring program on January 15, 2018. Monitoring wells were sampled for Appendix IV parameters in March 2018 as the initial assessment monitoring event. Monitoring wells were sampled for Appendix III and detected Appendix IV parameters in June and September 2018 as the semi-annual assessment monitoring events. Samples were collected from the monitoring network shown on Figure 2. A summary of groundwater sampling events completed in 2018 is provided in Table 2.

2.3 Other Groundwater Sampling

Characterization wells WAMW-1 and WAMW-2 were sampled in October 2018 for Appendix III and detected Appendix IV parameters. Results for these samples are included in Appendix A, Laboratory Analytical and Field Sampling Reports.

3.0 SAMPLE METHODOLOGY & ANALYSIS

The following sections describe the methods used to conduct groundwater monitoring at the Site.

3.1 Groundwater Flow Direction, Gradient, and Velocity

Prior to each sampling event, groundwater levels were measured and recorded to the nearest 0.01 foot within a 24-hour period from the certified well network and piezometers. Groundwater levels recorded during the monitoring events are summarized in Tables 3A, 3B, and 3C, Summary of Groundwater Elevations – March 2018, June 2018, and September 2018, respectively. Groundwater levels and top of casing elevations were used to calculate groundwater elevation and develop the potentiometric surface elevation contour maps provided in Figure 3,

Potentiometric Surface Contour Map – June 2018 and Figure 4, Potentiometric Surface Contour Map – September 2018. The general direction of groundwater flow across the site is to the southeast. The groundwater flow patterns observed during the 2018 monitoring events are consistent with historical observations.

The groundwater flow velocity at the site was calculated using a derivation of Darcy's Law.

Specifically:

Equation

$$v = \frac{k (dh/dl)}{P_e} \quad \text{where:} \quad \begin{array}{l} v = \text{ground water velocity} \\ k = \text{hydraulic conductivity} \\ dh/dl = \text{hydraulic gradient} \\ P_e = \text{effective porosity} \end{array}$$

Groundwater flow velocities were calculated for the site based on hydraulic gradients, average permeability based on previous slug test data, and an estimated effective porosity of 0.25 (based on a review of several sources, including Driscoll, 1986; US EPA, 1989; Freeze and Cherry, 1979). Groundwater flow velocities have been calculated and are tabulated on Tables 4A and 4B, Groundwater Flow Velocity Calculations – June 2018 and September 2018, respectively. The calculated flow velocity was approximately 0.20 feet per day during both 2018 monitoring events.

3.2 Groundwater Sampling

Groundwater samples were collected using low-flow sampling procedures in accordance with 40 CFR §257.93(a). Purging and sampling was performed using dedicated, bladder pumps, non-dedicated bladder pumps, and peristaltic pumps. For wells sampled with non-dedicated bladder pumps, the pumps were lowered into the well so that the intake was at the midpoint of the well screen (or as appropriate determined by the water level). Peristaltic pump samples were collected using new disposable polyethylene tubing. All non-disposable equipment was decontaminated before use and between well locations.

A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, and dissolved oxygen) during well purging to verify stabilization prior to sampling. Turbidity was measured using a Hach 2100Q portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- ± 0.1 standard units for pH
- $\pm 5\%$ for specific conductance
- DO ± 0.2 milligrams per liter (mg/L) or $\pm 10\%$, whichever is greater. No criterion applies if DO < 0.5 mg/L
- Turbidity measurements less than 10 nephelometric turbidity units (NTU)

Once stabilization was achieved, samples were collected directly into appropriately-preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to TestAmerica, Inc. (TAL) in Pensacola, Florida following chain-of-custody protocol. Stabilization logs for each well during each monitoring event are included in Appendix A.

3.3 Laboratory Analyses

Groundwater samples were collected during three groundwater monitoring events in 2018. Analytical methods used for groundwater monitoring parameters are provided in laboratory reports in Appendix A. Analytical data collected in respective 2018 monitoring events (March 2018, June 2018 and September 2018) are summarized in Table 5A, Summary of Groundwater Analytical Data – March 2018, Table 5B, Summary of Groundwater Analytical Data – June 2018, and Summary of Groundwater Analytical Data – September 2018.

Laboratory analyses were performed by Test America, Inc. (TAL) of Pensacola, Florida. TAL is accredited by the National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed for this project. In addition, TAL is certified to perform analysis by the State of Georgia. Laboratory reports and chain-of-custody records for the monitoring events are presented in Appendix A.

3.4 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples are collected at a rate of one sample per every 10 assessment samples. Equipment blanks (where non-dedicated sampling equipment is used) and duplicate samples were collected during each sampling event. QA/QC sample data were evaluated during data validation and are included in Appendix A.

Groundwater quality data in this report was validated in accordance with US EPA guidance (US EPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestion spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using US EPA procedures as guidance (US EPA, 2017).

Values followed by a "J" flag indicate that the value is an estimated analyte concentration detected between the method detection limit (MDL) and the laboratory reporting limit (PQL). The estimated value is positively identified, but is below the lowest level that can be reliably achieved within specified limits of precision and accuracy under routine laboratory operating conditions. "J" flagged data are used to establish background statistical limits but are not used when performing statistical analyses.

4.0 STATISTICAL ANALYSIS

Statistical analysis of Appendix III and IV groundwater monitoring data was performed on samples collected from the certified groundwater monitoring network pursuant to 40 CFR §257.93 and following the appropriate PE-certified method. The statistical method used at the site was developed by MacStat Consulting, Ltd, in accordance with 40 CFR §257.93(f) using methodology presented in *Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance*, March 2009, EPA 530/R-09-007 (USEPA, 2009). To develop the statistical method, analytical data collected during the background period were evaluated and used to develop statistical limits for each Appendix III parameter. Subsequent detection monitoring results were compared to the statistical limits to determine if concentrations were statistically different from background.

4.1 Statistical Methods

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

4.1.1 Appendix III Constituents

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

4.1.2 Assessment Monitoring Statistics

Parametric tolerance limits were used to calculate background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standard (GWPS) established under 40 CFR §257.95(h) and GA EPD Rule 391-3-4-.10(6)(a).

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

- (1) The maximum contaminant level (MCL) established under §§141.62 and 141.66 of this title;
- (2) Where an MCL has not been established:
 - (i) Cobalt (0.006 mg/L);
 - (ii) Lead (0.015 mg/L)
 - (iii) Lithium (0.040 mg/L);
 - (iv) Molybdenum (0.1 mg/L).
- (3) Background levels for constituents where the background level is higher than the MCL or rule specified GWPS.

USEPA revised the Federal CCR Rule on July 30, 2018, providing GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR 257.95(h)(2). Presently those updated GWPS have not yet been incorporated in the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); and therefore, background concentrations are the deferred GWPS for constituents where an MCL has not been established (or where background is higher than the MCL), and used to evaluate the existence of a statistically significant increase (SSI). Under the existing GA EPD rules, the GWPS is:

- (1) The MCL;
- (2) Where an MCL has not been established, the background concentration;

(3) Background levels for constituents where the background level is higher than the MCL.

Following the above federal and state rule requirements, GWPS have been established for statistical comparison of Appendix IV constituents. Table 6, Summary of Background Levels and Groundwater Protection Standards, summarizes the background limit established at each monitoring well and the GWPS established under State and Federal rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established under the state and federal rules. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed the GWPS at a Statistically Significant Level (SSL).

4.2 Statistical Analysis Results

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

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

4.2.1 First Semi-Annual Assessment Monitoring Event

Statistical analysis of Appendix IV data identified an Appendix IV constituent (lithium) to be at a SSL above the established GWPS for one groundwater monitoring well. The lower 95% confidence level for lithium at WGWC-19 statistically exceeded the state-derived and federally-derived GWPS. This analysis was completed on October 15, 2018.

Further, using GWPS established according to Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a), statistical analysis of Appendix IV data identified the following additional statistical exceedances of GWPS for lithium in wells WGWC-8, WGWC-9 and WGWC-10.

4.2.2 Second Semi-Annual Assessment Monitoring Event

Statistical analysis of Appendix IV data identified SSLs of lithium above the GWPS in the same wells that were identified during the first semi-annual event. This analysis was completed on December 17, 2018.

5.0 ALTERNATE SOURCE DEMONSTRATIONS

In accordance with 40 CFR §257.95, Georgia Power prepared an alternate source demonstration (ASD) for lithium. A summary demonstrating that a source other than Wansley Ash Pond caused the elevated levels in Site groundwater is provided below. The complete ASD report is provided in Appendix C.

The ASD provided in Appendix C details various lines of evidence used to conclude that the upgradient groundwater monitoring well data set does not fully depict the naturally occurring range

of lithium concentrations present in groundwater at the Site; and as supported by the evidence presented in the ASD, the concentrations of lithium observed at WGWC-19 (and other site monitoring wells) are attributed to naturally occurring background conditions. In summary, the following lines of evidence strongly support a naturally occurring source for lithium in groundwater at the Site:

- 1) Lithium detections in groundwater are primarily restricted to the schist-amphibolite unit, as evident from rock analysis at the Site. This unit is not present upgradient, but is present downgradient. Concentrations of lithium in rock samples from this material are above both upgradient levels and crustal averages.
- 2) Relatively higher concentrations of lithium in rock generally correspond to higher concentrations in groundwater. A site-wide sample set of dissolved silicon confirmed that the silicate minerals present in the units are interacting with groundwater (i.e. there is some degree of solubility for the rock unit minerals, including lithium bearing silicate minerals);
- 3) Presence of lithium in the upgradient groundwater at the hydraulically unconnected landfill. Lithium occurs in groundwater at an empty landfill cell (Cell 3) where no CCR material has been placed. Conditions at the Cell 3 wells are geologically more similar to downgradient wells at the Ash Pond than the upgradient network for the Ash Pond;
- 4) Lack of correlation of lithium with Appendix III parameters (e.g. WGWC-19 produces the highest site-wide concentrations of lithium, but shows no indication of impact from the CCR unit).

6.0 MONITORING PROGRAM STATUS

In accordance with 40 CFR §257.94(e), Georgia Power implemented assessment monitoring in January 2018. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Ash Pond during sampling events conducted in 2018.

7.0 CONCLUSIONS & FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for the Site identified SSIs of Appendix III groundwater monitoring parameters above background and an SSL of an Appendix IV groundwater monitoring parameter above a GWPS. In accordance with 40 CFR §257.95(g)(3), Georgia Power prepared an ASD for lithium found in well WGWC-19 that concludes the source is naturally occurring; therefore, this CCR unit will remain in assessment monitoring. The next semi-annual monitoring event is planned for the first half of 2019.

8.0 REFERENCES

Atlantic Coast Consulting, Inc. (ACC), *Alternate Source Demonstration – Plant Wansley Ash Pond*, January 2019.

Georgia Environmental Protection Division, 1997 – *Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia – Circular 14*.

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Sanitas: Groundwater Statistical Software, Sanitas Technologies, Shawnee, KS, 2007.
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U.S. EPA, 2009, *Unified Guidance*, Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities. Office of Solid Waste Management Division, U.S. EPA, Washington, D.C.

U.S. EPA, 2013, Groundwater Sampling – Operating Procedure: SESDPROC-3-1-R3, Athens, Georgia, 31 p.

U.S. EPA, 2015, Field Equipment Cleaning and Decontamination – Operating Procedure: SESDPROC-205-R3, Athens, Georgia, 18 p.

TABLES



Table 1A
Groundwater Monitoring Network Well Construction Details

Well	Installation Date (mm/dd/yyyy)	Bottom Depth (ft BTOC)	Bottom Elevation (ft MSL)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (ft MSL)	Purpose
WGWA-1	10/21/2015	129.86	653.00	119.86	663.00	Upgradient
WGWA-2	10/16/2015	102.65	655.64	92.65	665.64	Upgradient
WGWA-3	12/15/2014	19.00	810.00	9.00	820.00	Upgradient
WGWA-4	01/13/2015	73.90	760.40	63.90	770.40	Upgradient
WGWA-5	12/23/2014	23.60	878.50	13.60	888.50	Upgradient
WGWA-6	01/13/2015	104.50	792.60	94.50	802.60	Upgradient
WGWA-7	12/22/2014	39.60	857.80	29.60	867.80	Upgradient
WGWA-18	12/16/2014	39.60	838.50	29.60	848.50	Upgradient
WGWC-8	10/29/2015	59.63	720.37	49.63	730.37	Downgradient
WGWC-9	12/04/2014	61.08	751.00	51.08	761.00	Downgradient
WGWC-10	10/27/2015	148.98	663.61	138.98	673.61	Downgradient
WGWC-11	10/21/2015	49.50	774.50	39.50	784.50	Downgradient
WGWC-12	01/22/2017	76.57	746.55	66.57	756.55	Downgradient
WGWC-13	11/14/2015	95.55	714.49	85.55	724.49	Downgradient
WGWC-14A	01/31/2017	43.08	768.01	33.08	778.01	Downgradient
WGWC-15	11/11/2015	53.36	751.62	43.36	761.62	Downgradient
WGWC-16	11/11/2015	34.78	769.71	24.78	779.71	Downgradient
WGWC-17	11/06/2015	95.94	720.08	85.94	730.08	Downgradient
WGWC-19	10/28/2017	94.84	688.60	84.84	698.60	Downgradient

Notes:

1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.



Table 1B
Piezometer and Characterization Well Construction Details

Well	Installation Date (mm/dd/yyyy)	Bottom Depth (ft BTOC)	Bottom Elevation (ft MSL)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (ft MSL)	Purpose
PZ-1	12/12/2014	46.10	810.68	36.10	820.68	Piezometer
PZ-4	12/22/2014	17.00	872.09	7.00	882.09	Piezometer
PZ-6	12/17/2014	23.00	892.33	13.00	902.33	Piezometer
PZ-8	12/15/2014	37.50	845.34	27.50	855.34	Piezometer
PZ-10	12/05/2014	30.00	802.16	20.00	812.16	Piezometer
PZ-11	12/05/2014	30.00	792.99	20.00	802.99	Piezometer
PZ-12	12/08/2014	47.00	771.88	37.00	781.88	Piezometer
PZ-13	12/09/2014	56.90	793.14	46.90	803.14	Piezometer
PZ-15	12/10/2014	37.00	789.96	27.00	799.96	Piezometer
PZ-16	12/11/2014	24.50	776.05	14.50	786.05	Piezometer
PZ-17	12/11/2014	48.00	783.21	38.00	793.21	Piezometer
PZ-18	12/11/2014	37.00	777.22	27.00	787.22	Piezometer
PZ-20	01/31/2017	35.00	752.27	25.00	762.27	Piezometer
PZ-21	01/25/2017	30.00	784.71	20.00	794.71	Piezometer
WAMW-1	9/16/2018	124.14	658.76	114.14	668.76	Characterization
WAMW-2	09/14/2018	86.14	681.72	76.14	691.72	Characterization

Notes:

1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.



Table 2
Groundwater Sampling Event Summary for 2018

Well	Hydraulic Location	Mar. 28-30, 2018	June 13-14, 2018	Sept. 24 - Oct. 4, 2018
		Initial Assessment	First Semi-Annual	Second Semi-Annual
WGWA-1	Upgradient	Initial	A-01	A-02
WGWA-2	Upgradient	Initial	A-01	A-02
WGWA-3	Upgradient	Initial	A-01	A-02
WGWA-4	Upgradient	Initial	A-01	A-02
WGWA-5	Upgradient	Initial	A-01	A-02
WGWA-6	Upgradient	Initial	A-01	A-02
WGWA-7	Upgradient	Initial	A-01	A-02
WGWA-18	Upgradient	Initial	A-01	A-02
WGWC-8	Downgradient	Initial	A-01	A-02
WGWC-9	Downgradient	Initial	A-01	A-02
WGWC-10	Downgradient	Initial	A-01	A-02
WGWC-11	Downgradient	Initial	A-01	A-02
WGWC-12	Downgradient	Initial	A-01	A-02
WGWC-13	Downgradient	Initial	A-01	A-02
WGWC-14A	Downgradient	Initial	A-01	A-02
WGWC-15	Downgradient	Initial	A-01	A-02
WGWC-16	Downgradient	Initial	A-01	A-02
WGWC-17	Downgradient	Initial	A-01	A-02
WGWC-19	Downgradient	Initial	A-01	A-02

Notes:

1. Initial = Initial Assessment Event (All Appendix IV)
2. A-XX = Assessment Event Number (Appendix III and Detected Appendix IV)



Table 3A
Summary of Groundwater Elevations
March 2018

Well ID	TOC Elevation (ft MSL)	Depth-to-Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	782.86	23.93	758.93
WGWA-2	758.29	8.56	749.73
WGWA-3	829.00	2.68	826.32
WGWA-4	834.30	3.83	830.47
WGWA-5	902.10	11.11	890.99
WGWA-6	897.10	12.92	884.18
WGWA-7	897.40	23.00	874.40
WGWA-18	878.10	18.65	859.45
WGWC-8	780.00	2.72	777.28
WGWC-9	812.08	14.41	797.67
WGWC-10	812.59	18.87	793.72
WGWC-11	824.00	25.39	798.61
WGWC-12	823.12	24.49	798.63
WGWC-13	810.04	13.93	796.11
WGWC-14A	811.09	14.53	796.56
WGWC-15	804.98	9.50	795.48
WGWC-16	804.49	8.98	795.51
WGWC-17	816.02	19.90	796.12
WGWC-19	783.44	19.18	764.26
PZ-1	856.78	38.25	818.53
PZ-4	889.09	15.65	873.44
PZ-6	915.33	18.83	896.50
PZ-8	882.84	30.33	852.51
PZ-10	832.16	25.86	806.30
PZ-11	822.99	19.15	803.84
PZ-12	818.88	24.57	794.31
PZ-13	850.04	53.66	796.38
PZ-15	826.96	29.30	797.66
PZ-16	800.55	10.23	790.32
PZ-17	831.21	36.38	794.83
PZ-18	814.22	14.37	799.85
PZ-20	787.27	13.53	773.74
PZ-21	814.71	17.31	797.40

- Notes:
1. ft BTOC indicates feet below top of casing.
 2. ft MSL indicates feet mean sea level.
 3. Depths to water measured March 27, 2018.



Table 3B
Summary of Groundwater Elevations
June 2018

Well ID	TOC Elevation (ft MSL)	Depth-to-Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	782.86	25.89	756.97
WGWA-2	758.29	10.23	748.06
WGWA-3	829.00	3.60	825.40
WGWA-4	834.30	4.80	829.50
WGWA-5	902.10	13.66	888.44
WGWA-6	897.10	14.36	882.74
WGWA-7	897.40	24.32	873.08
WGWA-18	878.10	18.96	859.14
WGWC-8	780.00	4.56	775.44
WGWC-9	812.08	15.73	796.35
WGWC-10	812.59	19.49	793.10
WGWC-11	824.00	25.33	798.67
WGWC-12	823.12	24.85	798.27
WGWC-13	810.04	16.80	793.24
WGWC-14A	811.09	18.52	792.57
WGWC-15	804.98	11.18	793.80
WGWC-16	804.49	10.60	793.89
WGWC-17	816.02	21.39	794.63
WGWC-19	783.44	19.39	764.05
PZ-1	856.78	37.78	819.00
PZ-4	889.09	17.91	871.18
PZ-6	915.33	20.08	895.25
PZ-8	882.84	29.45	853.39
PZ-10	832.16	27.05	805.11
PZ-11	822.99	19.73	803.26
PZ-12	818.88	25.81	793.07
PZ-13	850.04	52.68	797.36
PZ-15	826.96	27.66	799.30
PZ-16	800.55	11.40	789.15
PZ-17	831.21	36.13	795.08
PZ-18	814.22	15.86	798.36
PZ-20	787.27	14.30	772.97
PZ-21	814.71	19.43	795.28

- Notes:
2. ft BTOC indicates feet below top of casing.
 4. ft MSL indicates feet mean sea level.
 5. Depths to water measured June 18, 2018.



Table 3C
Summary of Groundwater Elevations
September 2018

Well ID	TOC Elevation (ft MSL)	Depth-to-Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	782.86	28.47	754.39
WGWA-2	758.29	12.52	745.77
WGWA-3	829.00	3.84	825.16
WGWA-4	834.30	6.20	828.10
WGWA-5	902.10	18.66	883.44
WGWA-6	897.10	16.13	880.97
WGWA-7	897.40	26.89	870.51
WGWA-18	878.10	21.18	856.92
WGWC-8	780.00	6.02	773.98
WGWC-9	812.08	16.28	795.80
WGWC-10	812.59	20.99	791.60
WGWC-11	824.00	28.56	795.44
WGWC-12	823.12	28.01	795.11
WGWC-13	810.04	19.70	790.34
WGWC-14A	811.09	20.43	790.66
WGWC-15	804.98	13.61	791.37
WGWC-16	804.49	13.05	791.44
WGWC-17	816.02	23.61	792.41
WGWC-19	783.44	21.24	762.20
PZ-1	856.78	38.28	818.50
PZ-4	889.09	19.33	869.76
PZ-6	915.33	21.36	893.97
PZ-8	882.84	30.46	852.38
PZ-10	832.16	28.19	803.97
PZ-11	822.99	23.17	799.82
PZ-12	818.88	28.14	790.74
PZ-13	850.04	53.06	796.98
PZ-15	826.96	30.62	796.34
PZ-16	800.55	12.72	787.83
PZ-17	831.21	37.02	794.19
PZ-18	814.22	18.16	796.06
PZ-20	787.27	17.81	769.46
PZ-21	814.71	22.65	792.06
WAMW-1	782.90	21.56	761.34
WAMW-2	767.86	14.75	753.11

Notes:

1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.
3. Depths to water measured September 24, 2018.



TABLE 4A
Groundwater Flow Velocity Calculation
June 2018

Equation

$$v = \frac{k (i)}{P_e}$$

where: v = ground water velocity
 k = hydraulic conductivity
 i = hydraulic gradient
 P_e = effective porosity

Values Used in Calculation

	Value		Source
k =	2.4E-04	cm/sec	See note 1.
	0.67	ft/day	
i ₁ =	0.060	unitless	from WGWA-3 to WGWC-17 from PZ-10 to WGWC-19
i ₂ =	0.086	unitless	
i =	0.073	unitless	Average (i ₁ , i ₂)
P _e =	0.25	unitless	See note 1.

Calculation

$$v = \frac{(0.67)(0.073)}{0.10} \qquad v = 0.20 \text{ ft/day}$$

Notes

- (1) Plant Wansley Proposed Combustion By-Product Disposal Facility -
 Site Acceptability Report



TABLE 4B
Groundwater Flow Velocity Calculation
September 2018

Equation

$$v = \frac{k (i)}{P_e} \quad \text{where: } \begin{array}{l} v = \text{ground water velocity} \\ k = \text{hydraulic conductivity} \\ i = \text{hydraulic gradient} \\ P_e = \text{effective porosity} \end{array}$$

Values Used in Calculation

	Value		Source
k =	2.4E-04	cm/sec	See note 1.
	0.67	ft/day	
i ₁ =	0.064	unitless	from WGWA-3 to WGWC-17 from PZ-10 to WGWC-19
i ₂ =	0.087	unitless	
i =	0.076	unitless	Average (i ₁ , i ₂)
P _e =	0.25	unitless	See note 1.

Calculation

$$v = \frac{(0.67)(0.076)}{0.10} \quad v = 0.20 \text{ ft/day}$$

Notes

- (1) Plant Wansley Proposed Combustion By-Product Disposal Facility -
 Site Acceptability Report

Table 5A
Summary of Groundwater Analytical Data
March 2018

Substance	MCL/ (SMCL)	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	
		3/27/2018	3/27/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	3/28/2018	
Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND (0.00046 J)	
	Barium	2	0.041	0.021	0.014	0.0052	0.015	0.0059	0.010	0.019
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	0.0049
	Cobalt	N/R	ND (0.00091 J)	ND (0.0012 J)	ND	ND	ND (0.0015 J)	ND	ND	ND (0.0013 J)
	Fluoride	4	ND	ND	ND	ND (0.12 J)	ND	ND (0.088 J)	ND	ND (0.11 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND (0.0045 J)	ND (0.0081 J)	ND (0.0013 J)	0.0056	ND	0.0064	ND (0.0014 J)	ND (0.0012 J)
	Mercury	0.002	ND	ND	ND	ND	ND (0.000089 J)	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND (0.00089 J)
	Radium	5	0.475	0.453	0.150 U	1.32	0.492	7.52	0.315 U	0.424
	Selenium	0.05	ND (0.00055 J)	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5A
Summary of Groundwater Analytical Data
March 2018

Substance	MCL/ (SMCL)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	
		3/29/2018	3/29/2018	3/30/2018	3/29/2018	3/29/2018	3/29/2018	3/29/2018	3/30/2018	
Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.00067 J)	0.0018	
	Barium	2	ND (0.00085 J)	ND	0.042	0.028	0.017	0.061	0.028	0.021
	Beryllium	0.004	ND (0.0018 J)	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	0.0027	ND (0.0012 J)	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00066 J)	ND	0.0035	ND	ND (0.00080 J)	ND (0.00080 J)	0.015	ND
	Fluoride	4	0.36	1.4	ND (0.13 J)	ND	ND (0.089 J)	0.27	ND	0.79
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	0.018	0.048	0.016	ND (0.0018 J)	0.010	ND (0.0022 J)	ND (0.0025 J)	0.0077
	Mercury	0.002	ND	ND	ND	ND	ND (0.00011 J)	ND	ND	ND (0.000086 J)
	Molybdenum	N/R	ND	ND (0.0048 J)	ND	ND	ND	ND (0.0028 J)	ND	ND (0.0049 J)
	Radium	5	2.31	0.278 U	0.575	0.461	0.419	0.510	0.580	0.0985 U
	Selenium	0.05	0.0034	0.0021	ND	ND	ND	ND	ND (0.00030 J)	ND
Thallium	0.002	ND	ND	ND (0.000085 J)	ND	ND	ND	ND (0.00020 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5A
Summary of Groundwater Analytical Data
March 2018

Substance	MCL/ (SMCL)	WGWC-16	WGWC-17	WGWC-19	
		3/29/2018	3/30/2018	3/29/2018	
Appendix IV	Antimony	0.006	ND	ND	
	Arsenic	0.01	0.0014	ND	
	Barium	2	0.050	0.015	ND (0.00097 J)
	Beryllium	0.004	ND	ND	ND
	Cadmium	0.005	ND (0.00082 J)	ND	ND
	Chromium	0.1	ND	ND	ND
	Cobalt	N/R	0.0092	ND (0.0016 J)	ND
	Fluoride	4	ND (0.13 J)	ND (0.095 J)	0.34
	Lead	0.015	ND	ND	ND
	Lithium	N/R	0.015	0.0067	0.072
	Mercury	0.002	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0024 J)	ND (0.0012 J)
	Radium	5	1.60	0.135 U	0.252 U
	Selenium	0.05	0.016	ND	ND
Thallium	0.002	ND (0.00019 J)	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5B
Summary of Groundwater Analytical Data
June 2018

Substance	MCL/ (SMCL)	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18
		6/13/2018	6/14/2018	6/14/2018	6/14/2018	6/13/2018	6/13/2018	6/14/2018	6/13/2018
Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.1	12	2.0	15	1.2	25	0.94
	Chloride	(250)	3.8	2.3	1.6	1.2	1.7	1.4	1.7
	Fluoride	4	ND	ND	ND	ND (0.12 J)	ND	ND (0.093 J)	ND
	Sulfate	(250)	ND	ND (0.84 J)	ND	6.9	ND	8.3	ND
	TDS	(500)	24	80	26	92	ND	110	14
Appendix IV	Arsenic	0.01	ND (0.0010 J)	ND (0.0012 J)	ND (0.00087 J)	ND (0.00050 J)	ND	ND	ND (0.00050 J)
	Barium	2	0.045	0.020	0.013	0.0057	0.016	0.0067	0.012
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00094 J)	ND (0.00085 J)	ND	ND	ND (0.0011 J)	ND	ND
	Lithium	N/R	ND (0.0033 J)	0.0072	ND (0.0012 J)	ND (0.0045 J)	ND	ND (0.0041 J)	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND
	Radium	5	-0.0181 U	0.402	0.258 U	0.857	0.275 U	8.77	0.410
	Selenium	0.05	ND	ND	ND	ND (0.00032 J)	ND (0.00025 J)	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5B
Summary of Groundwater Analytical Data
June 2018

Substance	MCL/ (SMCL)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	
		6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	6/14/2018	
Appendix III	Boron	N/R	1.7	0.39	ND	ND	ND	ND	ND	
	Calcium	N/R	52	7.5	7.7	2.2	13	5.5	1.1	29
	Chloride	(250)	58	1.2	1.3	3.0	3.0	1.2	2.8	4.3
	Fluoride	4	0.56	1.4	ND (0.15 J)	ND	ND (0.10 J)	0.27	ND	0.79
	Sulfate	(250)	170	37	2.0	1.7	14	5.0	5.8	44
	TDS	(500)	410	120	40	16	94	88	52	170
Appendix IV	Arsenic	0.01	ND	ND	ND (0.00050 J)	ND	ND (0.00052 J)	ND (0.00093 J)	ND	0.0020
	Barium	2	0.0028	ND (0.00088 J)	0.038	0.030	0.015	0.055	0.023	0.022
	Beryllium	0.004	ND (0.0015 J)	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND (0.0023 J)	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.0011 J)	ND	ND (0.0012 J)	ND	ND (0.00067 J)	ND (0.00054 J)	0.011	ND
	Lithium	N/R	0.015	0.034	0.0084	ND (0.0011 J)	0.0062	ND (0.0018 J)	ND (0.0018 J)	0.0052
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0046 J)	ND	ND	ND	ND (0.0018 J)	ND	ND (0.0056 J)
	Radium	5	1.86	0.157 U	0.523	0.275 U	-0.263 U	0.463	0.550	0.171 U
	Selenium	0.05	0.0031	0.0025	ND	ND	ND	ND	ND	ND (0.00050 J)
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND (0.00014 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5B
Summary of Groundwater Analytical Data
June 2018

	Substance	MCL/ (SMCL)	WGWC-16	WGWC-17	WGWC-19
			6/14/2018	6/14/2018	6/14/2018
Appendix III	Boron	N/R	5.4	ND	ND
	Calcium	N/R	260	6.2	8.9
	Chloride	(250)	290	1.5	2.4
	Fluoride	4	ND	ND (0.11 J)	0.35
	Sulfate	(250)	620	16	3.5
	TDS	(500)	1500	100	74
Appendix IV	Arsenic	0.01	ND	ND (0.00076 J)	ND
	Barium	2	0.046	0.013	ND (0.0011 J)
	Beryllium	0.004	ND	ND	ND
	Cadmium	0.005	ND (0.00070 J)	ND	ND
	Chromium	0.1	ND	ND	ND
	Cobalt	N/R	0.0035	ND (0.00055 J)	ND
	Lithium	N/R	0.0090	ND (0.0046 J)	0.048
	Mercury	0.002	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0026 J)	ND (0.0014 J)
	Radium	5	1.09	-0.373 U	0.0458 U
	Selenium	0.05	0.012	ND	ND
Thallium	0.002	ND (0.00017 J)	ND	ND	

Notes:

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3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
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6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Table 5C
Summary of Groundwater Analytical Data
September 2018**

Substance	MCL/ (SMCL)	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18
		9/27/2018	9/24/2018	10/3/2018	10/3/2018	10/3/2018	10/2/2018	10/3/2018	9/28/2018
Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.2	11	1.8	16	1.4	26	1.2
	Chloride	(250)	4.0	2.4	1.6	1.2	1.8	1.4	1.8
	Fluoride	4	ND	ND	ND	ND (0.13 J)	ND	ND (0.13 J)	ND
	Sulfate	(250)	ND	ND (0.79 J)	ND (0.73 J)	7.0	ND	8.3	ND
	TDS	(500)	28	76	50	100	24	130	6.0
Appendix IV	Arsenic	0.01	ND	ND	ND (0.00069 J)	ND	ND (0.00085 J)	ND	ND
	Barium	2	0.047	0.020	0.014	0.0054	0.016	0.0066	0.011
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00085 J)	ND (0.00085 J)	ND	ND	ND (0.0013 J)	ND	ND
	Lithium	N/R	ND (0.0042 J)	0.0082	ND (0.0012 J)	0.0050	ND	ND (0.0038 J)	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.342	0.318	0.178 U	0.943	0.720	8.72	0.650
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5C
Summary of Groundwater Analytical Data
September 2018

Substance	MCL/ (SMCL)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	
		10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/4/2018	10/3/2018	
Appendix III	Boron	N/R	1.9	0.37	ND	ND	ND	ND	ND	
	Calcium	N/R	65	8.0	8.5	2.0	15	5.9	2.0	31
	Chloride	(250)	300	1.2	1.3	3.1	3.1	1.2	2.2	4.8
	Fluoride	4	0.27	1.4	ND (0.18 J)	ND	ND (0.12 J)	0.23	ND	0.79
	Sulfate	(250)	780	38	1.9	1.6	14	4.3	2.8	49
	TDS	(500)	520	140	60	56	110	100	130	260
Appendix IV	Arsenic	0.01	0.0015	ND	ND (0.00089 J)	ND (0.00054 J)	ND	0.0015	0.0017	0.0024
	Barium	2	ND (0.0017 J)	ND (0.00076 J)	0.040	0.035	0.017	0.046	0.036	0.024
	Beryllium	0.004	ND (0.0019 J)	ND (0.00036 J)	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	0.0031	ND	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND (0.00086 J)	ND	ND (0.00079 J)	ND	0.0055	ND
	Lithium	N/R	0.013	0.039	0.0085	ND (0.0014 J)	0.0066	ND (0.0025 J)	ND (0.0016 J)	0.0060
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0030 J)	ND	ND	ND	ND	ND	ND (0.0041 J)
	Radium	5	2.44	0.480	0.840	1.18	1.29	0.990	0.563	0.766
	Selenium	0.05	0.0033	0.0020	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND (0.00013 J)	ND	

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

Table 5C
Summary of Groundwater Analytical Data
September 2018

	Substance	MCL/ (SMCL)	WGWC-16	WGWC-17	WGWC-19	WAMW-1	WAMW-2
			10/4/2018	10/4/2018	10/4/2018	10/18/2018	10/16/2018
Appendix III	Boron	N/R	5.5	ND	ND	ND	ND
	Calcium	N/R	250	6.4	10	19	18
	Chloride	(250)	290	1.5	2.6	2.6	2.5
	Fluoride	4	ND (0.85 J)	ND (0.11 J)	0.35	0.60	0.47
	Sulfate	(250)	560	15	4.6	3.7	9.5
	TDS	(500)	1700	98	100	120	110
Appendix IV	Arsenic	0.01	0.0013	ND (0.00088 J)	ND	ND (0.00052 J)	ND (0.00066 J)
	Barium	2	0.046	0.013	ND (0.0012 J)	0.0050	0.0069
	Beryllium	0.004	ND	ND	ND	ND	ND
	Cadmium	0.005	ND (0.00065 J)	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND
	Cobalt	N/R	0.0078	ND (0.00041 J)	ND	ND	ND
	Lithium	N/R	0.012	0.0050	0.062	0.026	0.023
	Mercury	0.002	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.00085 J)	ND	ND (0.0028 J)	ND
	Radium	5	1.99	0.775	0.381	0.314 U	0.476
	Selenium	0.05	0.013	ND	ND	ND	ND
	Thallium	0.002	ND (0.00015 J)	ND	ND	ND	ND

Notes:

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the laboratory method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instrument could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated value.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.



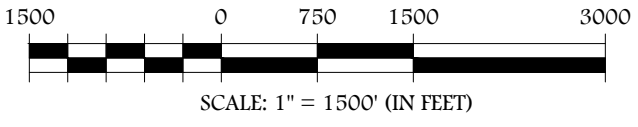
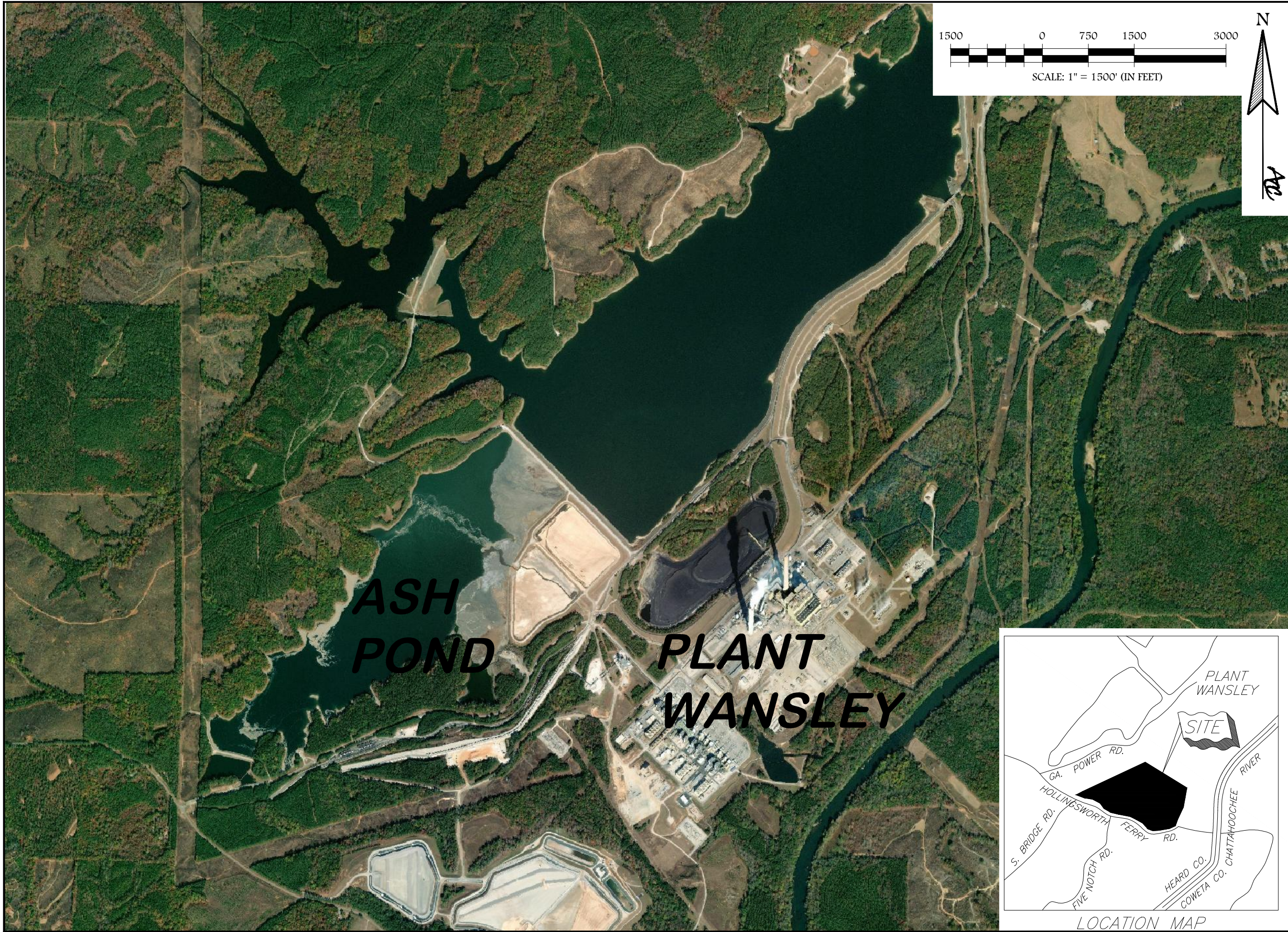
Table 6
Summary of Background Levels and Groundwater Protection Standards

Constituent	Site Background	Federal GWPS	State GWPS
Arsenic	0.0025	0.010	0.010
Barium	0.051	2	2
Beryllium	0.00125	0.004	0.004
Cadmium	0.00125	0.005	0.005
Chromium	0.005	0.1	0.1
Cobalt	0.013	0.013	0.013
Fluoride	0.28	4	4
Lithium	0.009	0.040	0.009
Mercury	0.00025	0.002	0.002
Molybdenum	0.0075	0.1	0.0075
Radium	10.4	10.4	10.4
Selenium	0.0028	0.050	0.050
Thallium	0.0005	0.002	0.002

Notes:

1. Site Background = Parametric tolerance limits calculated from pooled upgradient well data.
2. Federal GWPS = Groundwater protection standard, per 257.95(h)(1-3).
3. State GWPS = Groundwater protection standard, per Georgia EPD Rule 391-3-4-.10(6)(a).
4. Units are milligrams per liter (mg/L), except for radium, which are picocuries per liter.

FIGURES



ACC
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 CONSULTING, INC.
 630 Colonial Park Dr.
 Suite 110
 Roswell, GA 30075
 o 770.594.5998
 www.atlcc.net

PROJECT:
**PLANT WANSLEY
 ASH POND**

1371 LIBERTY CHURCH ROAD
 CARROLLTON, GEORGIA

REVISIONS

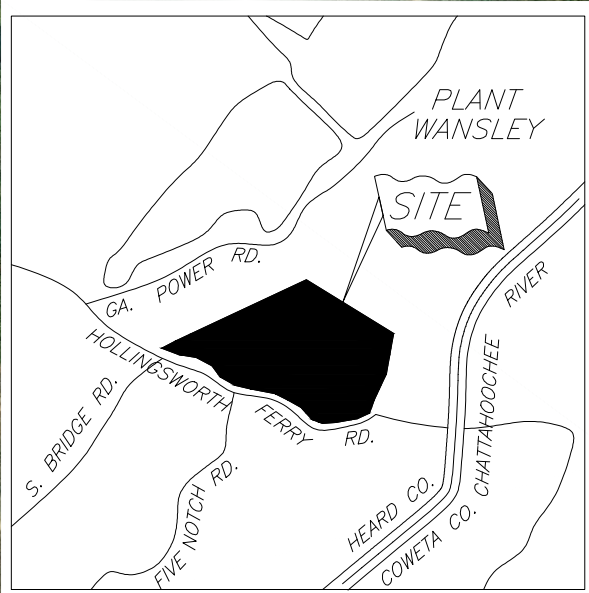
No.	DATE	DESCRIPTION

Drawn by: **MM** Checked by: **EP**

PROJECT NUMBER:
I054-110
 January 2019

Site Location Map

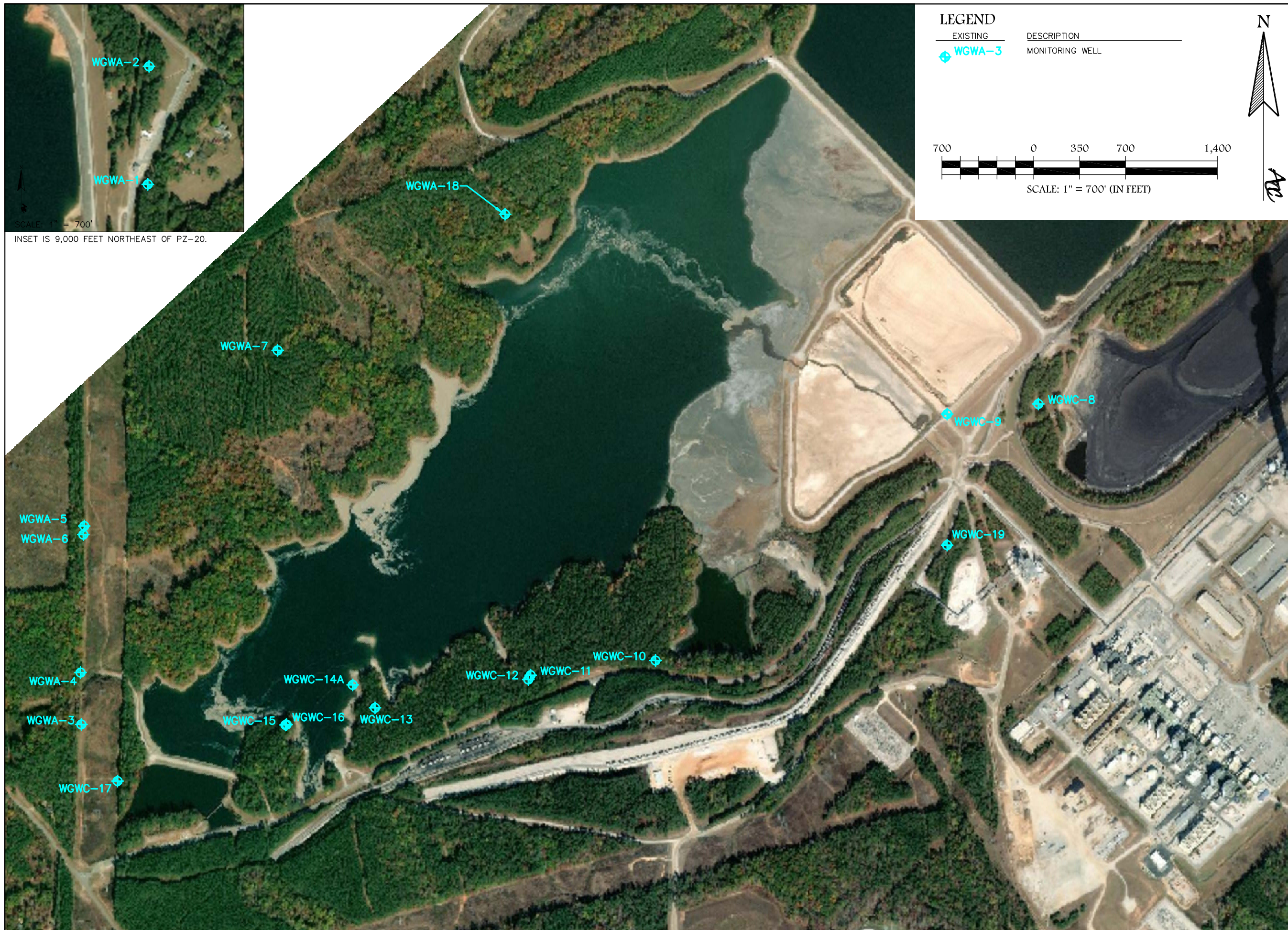
FIGURE **1**



LOCATION MAP

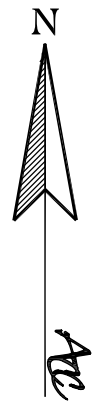
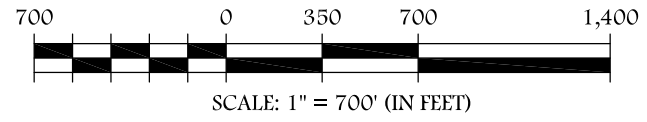


SCALE: 1" = 700'
INSET IS 9,000 FEET NORTHEAST OF PZ-20.



LEGEND

EXISTING	DESCRIPTION
 WGWA-3	MONITORING WELL



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PROJECT:
**PLANT WANSLEY
ASH POND**

1371 LIBERTY CHURCH ROAD
CARROLLTON, GEORGIA

REVISIONS

Drawn by: **MM** Checked by: **JF**

PROJECT NUMBER:
IO54-110
October 2018

**MONITORING
WELL NETWORK**



LEGEND

EXISTING	DESCRIPTION
	MONITORING WELL GROUNDWATER ELEVATION
	PIEZOMETER GROUNDWATER ELEVATION
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION

700 0 350 700 1,400

SCALE: 1" = 700' (IN FEET)

N

ATC

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PROJECT:
PLANT WANSLEY ASH POND

**Summary of Groundwater Elevations
 Plant Wansley Ash Pond
 June 2018 Sampling Event**

Monitoring Well ID	Total Depth (ft)	Top of Casing (ft MSL)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	129.86	782.86	25.89	756.97
WGWA-2	102.65	758.29	10.23	748.06
WGWA-3	19.00	829.00	3.60	825.40
WGWA-4	73.90	834.30	4.80	829.50
WGWA-5	23.60	902.10	13.66	888.44
WGWA-6	104.50	897.10	14.36	882.74
WGWA-7	39.60	897.40	24.32	873.08
WGWA-18	39.60	878.10	18.96	859.14
WGWC-8	59.63	780.00	4.56	775.44
WGWC-9	61.08	812.08	15.73	796.35
WGWC-10	148.98	812.59	19.49	793.10
WGWC-11	49.50	824.00	25.33	798.67
WGWC-12	76.57	823.12	24.85	798.27
WGWC-13	95.55	810.04	16.80	793.24
WGWC-14A	43.08	811.09	18.52	792.57
WGWC-15	53.36	804.98	11.18	793.80
WGWC-16	34.78	804.49	10.60	793.89
WGWC-17	95.94	816.02	21.39	794.63
WGWC-19	94.84	783.44	19.39	764.05
PZ-1	46.10	856.78	37.78	819.00
PZ-4	17.00	889.09	17.91	871.18
PZ-6	23.00	915.33	20.08	895.25
PZ-8	37.50	882.84	29.45	853.39
PZ-10	30.00	832.16	27.05	805.11
PZ-11	30.00	822.99	19.73	803.26
PZ-12	47.00	818.88	25.81	793.07
PZ-13	56.90	850.04	52.68	797.36
PZ-15	37.00	826.96	27.66	799.30
PZ-16	24.50	800.55	11.40	789.15
PZ-17	48.00	831.21	36.13	795.08
PZ-18	37.00	814.22	15.86	798.36
PZ-20	35.00	787.27	14.30	772.97
PZ-21	30.00	814.71	19.43	795.28

REVISIONS

NO.	DATE	DESCRIPTION

Drawn by: **MM** Checked by: **EP**

PROJECT NUMBER:
 IO54-110
 October 2018

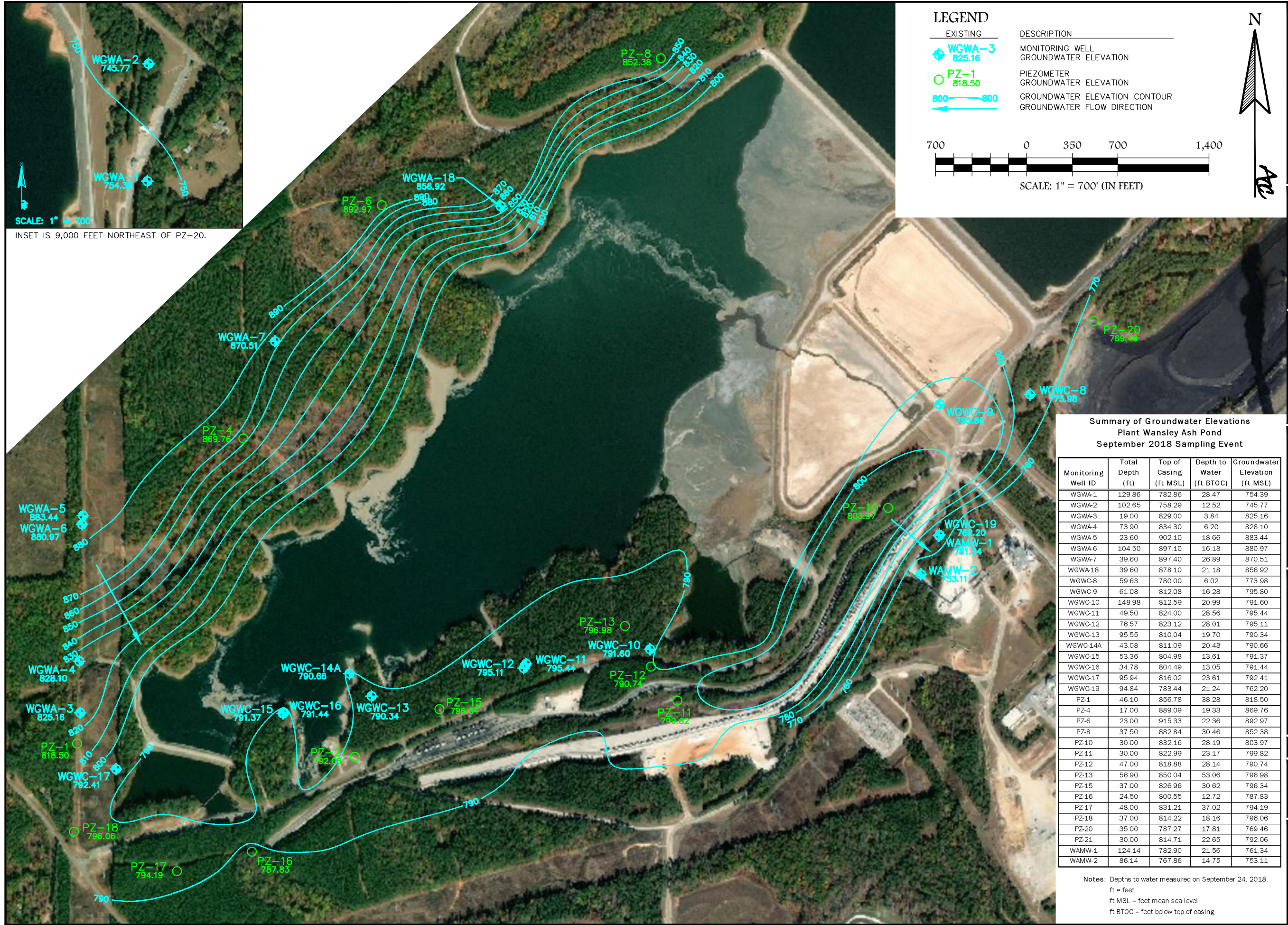
Notes: Depths to water measured on June 18, 2018.
 ft = feet
 ft MSL = feet mean sea level
 ft BTOC = feet below top of casing

**JUNE 2018
 POTENTIOMETRIC
 SURFACE
 CONTOUR MAP**



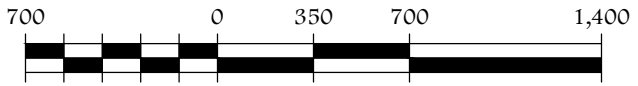
SCALE: 1" = 700'

INSET IS 9,000 FEET NORTHEAST OF PZ-20.

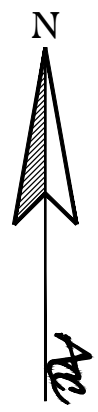


LEGEND

EXISTING	DESCRIPTION
	MONITORING WELL GROUNDWATER ELEVATION
	PIEZOMETER GROUNDWATER ELEVATION
	GROUNDWATER ELEVATION CONTOUR
	GROUNDWATER FLOW DIRECTION



SCALE: 1" = 700' (IN FEET)



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PROJECT:
**PLANT WANSLEY
 ASH POND**

Summary of Groundwater Elevations
 Plant Wansley Ash Pond
 September 2018 Sampling Event

Monitoring Well ID	Total Depth (ft)	Top of Casing (ft MSL)	Depth to Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	129.86	782.86	28.47	754.39
WGWA-2	102.65	758.29	12.52	745.77
WGWA-3	19.00	829.00	3.84	825.16
WGWA-4	73.90	834.30	6.20	828.10
WGWA-5	23.60	902.10	18.66	883.44
WGWA-6	104.50	897.10	16.13	880.97
WGWA-7	39.60	897.40	26.89	870.51
WGWA-18	39.60	878.10	21.18	856.92
WGWC-8	59.63	780.00	6.02	773.98
WGWC-9	61.08	812.08	16.28	795.80
WGWC-10	148.98	812.59	20.99	791.60
WGWC-11	49.50	824.00	28.56	795.44
WGWC-12	76.57	823.12	28.01	795.11
WGWC-13	95.55	810.04	19.70	790.34
WGWC-14A	43.08	811.09	20.43	790.66
WGWC-15	53.36	804.98	13.61	791.37
WGWC-16	34.78	804.49	13.05	791.44
WGWC-17	95.94	816.02	23.61	792.41
WGWC-19	94.84	783.44	21.24	762.20
PZ-1	46.10	856.78	38.28	818.50
PZ-4	17.00	889.09	19.33	869.76
PZ-6	23.00	915.33	22.36	892.97
PZ-8	37.50	882.84	30.46	852.38
PZ-10	30.00	832.16	28.19	803.97
PZ-11	30.00	822.99	23.17	799.82
PZ-12	47.00	818.88	28.14	790.74
PZ-13	56.90	850.04	53.06	796.98
PZ-15	37.00	826.96	30.62	796.34
PZ-16	24.50	800.55	12.72	787.83
PZ-17	48.00	831.21	37.02	794.19
PZ-18	37.00	814.22	18.16	796.06
PZ-20	35.00	787.27	17.81	769.46
PZ-21	30.00	814.71	22.65	792.06
WAMW-1	124.14	782.90	21.56	761.34
WAMW-2	86.14	767.86	14.75	753.11

Notes: Depths to water measured on September 24, 2018.
 ft = feet
 ft MSL = feet mean sea level
 ft BTOC = feet below top of casing

REVISIONS

NO.	DATE	DESCRIPTION

Drawn by: MM Checked by: EP
 PROJECT NUMBER:
 IO54-110
 October 2018

**SEPTEMBER 2018
 POTENTIOMETRIC
 SURFACE
 CONTOUR MAP**
 FIGURE 4

APPENDICES

APPENDIX A

Laboratory Analytical and Field Sampling Reports

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: 400-151568-2

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

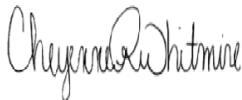
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

4/13/2018 4:26:33 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Job ID: 400-151568-2

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-151568-2**

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 393140 and 393192 and analytical batch 393655 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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-151568-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.021		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0081	F1	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-1

Lab Sample ID: 400-151568-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.041		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.00091	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0045	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.00055	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-3

Lab Sample ID: 400-151568-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0013	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-4

Lab Sample ID: 400-151568-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.0052		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0056		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0027		0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lithium	0.0013	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-7

Lab Sample ID: 400-151568-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.010		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0014	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-6 (Continued)

Lab Sample ID: 400-151568-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.088	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.0059		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0064		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: DUP-1

Lab Sample ID: 400-151568-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.087	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.0062		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0073		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.015		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.0015	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000089	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: WGWA-18

Lab Sample ID: 400-151568-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.11	J	0.20	0.082	mg/L	1		300.0	Total/NA
Arsenic	0.00046	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.019		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Chromium	0.0049		0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0012	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.00089	J	0.015	0.00085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.34		0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.00097	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.072		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0012	J	0.015	0.00085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-8 (Continued)

Lab Sample ID: 400-151568-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.36		0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.00085	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.0018	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.00066	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.018		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.0034		0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	1.4		0.20	0.082	mg/L	1		300.0	Total/NA
Lithium	0.048		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0048	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.0021		0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.000080	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.015		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0025	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.00030	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00020	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.27		0.20	0.082	mg/L	1		300.0	Total/NA
Arsenic	0.00067	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.061		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.00080	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0022	J	0.0050	0.0011	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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-13 (Continued)

Lab Sample ID: 400-151568-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	0.0028	J	0.015	0.00085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Chromium	0.0012	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lithium	0.0018	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.089	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.017		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.00080	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.010		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Mercury	0.00011	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.000093	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.79		0.20	0.082	mg/L	1		300.0	Total/NA
Arsenic	0.0018		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.021		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0077		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0049	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Mercury	0.000086	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Mercury	0.000071	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-17 (Continued)

Lab Sample ID: 400-151568-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.095	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.015		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0067		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0024	J	0.015	0.00085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.13	J	0.20	0.082	mg/L	1		300.0	Total/NA
Barium	0.042		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Chromium	0.0027		0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0035		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.016		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Thallium	0.000085	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.13	J	0.20	0.082	mg/L	1		300.0	Total/NA
Arsenic	0.0014		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.050		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00082	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0092		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.015		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.016		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00019	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Arsenic	0.0013		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.050		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00069	J	0.0025	0.00034	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 Wansley

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: DUP-2 (Continued)

Lab Sample ID: 400-151568-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0091		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.016		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.016		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00022	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Mercury	0.000092	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
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

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Sample Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-151568-1	WGWA-2	Water	03/27/18 15:05	03/30/18 11:14
400-151568-2	WGWA-1	Water	03/27/18 15:55	03/30/18 11:14
400-151568-3	WGWA-3	Water	03/28/18 12:20	03/30/18 11:14
400-151568-4	WGWA-4	Water	03/28/18 11:15	03/30/18 11:14
400-151568-5	FB-1-3-28-18	Water	03/28/18 10:00	03/30/18 11:14
400-151568-6	WGWA-7	Water	03/28/18 13:25	03/30/18 11:14
400-151568-7	WGWA-6	Water	03/28/18 10:15	03/30/18 11:14
400-151568-8	DUP-1	Water	03/28/18 00:00	03/30/18 11:14
400-151568-9	WGWA-5	Water	03/28/18 14:15	03/31/18 08:46
400-151568-10	WGWA-18	Water	03/28/18 15:20	03/31/18 08:46
400-151568-11	WGWC-19	Water	03/29/18 10:45	03/31/18 08:46
400-151568-12	WGWC-8	Water	03/29/18 14:05	03/31/18 08:46
400-151568-13	WGWC-9	Water	03/29/18 12:30	03/31/18 08:46
400-151568-14	FB-2-3-29-18	Water	03/29/18 13:40	03/31/18 08:46
400-151568-15	WGWC-14A	Water	03/29/18 15:00	03/31/18 08:46
400-151568-16	WGWC-13	Water	03/29/18 13:30	03/31/18 08:46
400-151568-17	WGWC-11	Water	03/29/18 12:10	03/31/18 08:46
400-151568-18	WGWC-12	Water	03/29/18 11:05	03/31/18 08:46
400-151568-19	EB-1-3-29-18	Water	03/29/18 10:00	03/31/18 08:46
400-151568-20	WGWC-15	Water	03/30/18 10:10	04/03/18 09:32
400-151568-21	EB-2-3-30-18	Water	03/30/18 09:50	04/03/18 09:32
400-151568-22	WGWC-17	Water	03/30/18 11:20	04/03/18 09:32
400-151568-23	WGWC-10	Water	03/30/18 12:35	04/03/18 09:32
400-151568-24	WGWC-16	Water	03/29/18 15:20	04/03/18 09:32
400-151568-25	DUP-2	Water	03/29/18 00:00	04/03/18 09:32

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-151568-1

Date Collected: 03/27/18 15:05

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 00:52	1

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		04/08/18 13:48	04/11/18 18:04	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 18:04	5
Barium	0.021		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 18:04	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 18:04	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 18:04	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 18:04	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 18:04	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 18:04	5
Lithium	0.0081	F1	0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 18:04	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 18:04	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 18:04	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 18:04	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		04/11/18 15:15	04/13/18 10:48	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 400-151568-2

Date Collected: 03/27/18 15:55

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 02:00	1

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		04/08/18 13:48	04/11/18 15:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 15:52	5
Barium	0.041		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 15:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 15:52	5
Cobalt	0.00091	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 15:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 15:52	5
Lithium	0.0045	J	0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 15:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 15:52	5
Selenium	0.00055	J	0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 15:52	5
Thallium	<0.00085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 10:50	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWA-3

Lab Sample ID: 400-151568-3

Date Collected: 03/28/18 12:20

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 02:23	1

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		04/08/18 13:48	04/11/18 15:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 15:57	5
Barium	0.014		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 15:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 15:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 15:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 15:57	5
Lithium	0.0013 J		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 15:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 15:57	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 15:57	5
Thallium	<0.00085		0.00050	0.00085	mg/L		04/08/18 13:48	04/11/18 15:57	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		04/11/18 15:15	04/13/18 11:08	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-151568-4

Date Collected: 03/28/18 11:15

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.12	J	0.20	0.082	mg/L			04/10/18 02:46	1

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		04/08/18 13:48	04/11/18 16:01	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:01	5
Barium	0.0052		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:01	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:01	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:01	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:01	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:01	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:01	5
Lithium	0.0056		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:01	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:01	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:01	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 11:10	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 03:09	1

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		04/08/18 13:48	04/11/18 16:28	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:28	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:28	5
Chromium	0.0027		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:28	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:28	5
Lithium	0.0013 J		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:28	5
Thallium	<0.00085		0.00050	0.00085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 11:12	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-7

Date Collected: 03/28/18 13:25

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 04:17	1

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		04/08/18 13:48	04/11/18 16:33	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:33	5
Barium	0.010		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:33	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:33	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:33	5
Lithium	0.0014 J		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:33	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:33	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		04/11/18 15:15	04/13/18 11:13	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Date Collected: 03/28/18 10:15

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.088	J	0.20	0.082	mg/L			04/10/18 04:40	1

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		04/08/18 13:48	04/11/18 16:42	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:42	5
Barium	0.0059		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:42	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:42	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:42	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:42	5
Lithium	0.0064		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:42	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:42	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		04/11/18 15:15	04/13/18 11:15	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: DUP-1

Date Collected: 03/28/18 00:00

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.087	J	0.20	0.082	mg/L			04/10/18 05:03	1

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		04/08/18 13:48	04/11/18 16:37	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:37	5
Barium	0.0062		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:37	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:37	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:37	5
Lithium	0.0073		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:37	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:37	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:37	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		04/11/18 15:15	04/13/18 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Date Collected: 03/28/18 14:15

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 05:26	1

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		04/08/18 13:48	04/11/18 16:46	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:46	5
Barium	0.015		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:46	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:46	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:46	5
Cobalt	0.0015	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:46	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:46	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:46	5
Thallium	<0.00085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000089	J	0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 11:18	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-18

Date Collected: 03/28/18 15:20

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.11	J	0.20	0.082	mg/L			04/10/18 05:49	1

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		04/08/18 13:48	04/11/18 16:51	5
Arsenic	0.00046	J	0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:51	5
Barium	0.019		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:51	5
Chromium	0.0049		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:51	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:51	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:51	5
Lithium	0.0012	J	0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:51	5
Molybdenum	0.00089	J	0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:51	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:51	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:51	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		04/11/18 15:15	04/13/18 11:20	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34		0.20	0.082	mg/L			04/10/18 06:12	1

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		04/08/18 13:48	04/11/18 16:55	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 16:55	5
Barium	0.00097	J	0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 16:55	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:55	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 16:55	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 16:55	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 16:55	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 16:55	5
Lithium	0.072		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 16:55	5
Molybdenum	0.0012	J	0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 16:55	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 16:55	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 16:55	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		04/11/18 15:15	04/13/18 11:42	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-8
Date Collected: 03/29/18 14:05
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-12
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.36		0.20	0.082	mg/L			04/10/18 06:57	1

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		04/08/18 13:48	04/11/18 17:00	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:00	5
Barium	0.00085	J	0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:00	5
Beryllium	0.0018	J	0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:00	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:00	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:00	5
Cobalt	0.00066	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:00	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:00	5
Lithium	0.018		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:00	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:00	5
Selenium	0.0034		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:00	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 11:44	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.4		0.20	0.082	mg/L			04/10/18 07:20	1

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		04/08/18 13:48	04/11/18 17:04	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:04	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:04	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:04	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:04	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:04	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:04	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:04	5
Lithium	0.048		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:04	5
Molybdenum	0.0048	J	0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:04	5
Selenium	0.0021		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:04	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 17:04	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		04/11/18 15:15	04/13/18 11:46	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 07:43	1

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		04/08/18 13:48	04/11/18 17:10	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:10	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:10	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:10	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:10	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:10	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:10	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:10	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:10	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:10	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:10	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 17:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000080	J	0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 11:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 08:51	1

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		04/08/18 13:48	04/11/18 17:37	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:37	5
Barium	0.028		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:37	5
Cobalt	0.015		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:37	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:37	5
Lithium	0.0025 J		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:37	5
Selenium	0.00030 J		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:37	5
Thallium	0.00020 J		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 11:49	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20	0.082	mg/L			04/10/18 09:14	1

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		04/08/18 13:48	04/11/18 17:42	5
Arsenic	0.00067	J	0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:42	5
Barium	0.061		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:42	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:42	5
Cobalt	0.00080	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:42	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:42	5
Lithium	0.0022	J	0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:42	5
Molybdenum	0.0028	J	0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 17:42	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		04/11/18 15:15	04/13/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-11

Date Collected: 03/29/18 12:10

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-17

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 09:37	1

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		04/08/18 13:48	04/11/18 17:46	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:46	5
Barium	0.028		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:46	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:46	5
Chromium	0.0012	J	0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:46	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:46	5
Lithium	0.0018	J	0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:46	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 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		04/11/18 15:15	04/13/18 11:53	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.089	J	0.20	0.082	mg/L			04/10/18 10:00	1

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		04/08/18 13:48	04/11/18 17:51	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:51	5
Barium	0.017		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:51	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:51	5
Cobalt	0.00080	J	0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:51	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:51	5
Lithium	0.010		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:51	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:51	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:51	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 17:51	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00011	J	0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 11:54	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 10:23	1

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		04/08/18 13:48	04/11/18 17:55	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 17:55	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 17:55	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:55	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 17:55	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 17:55	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 17:55	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 17:55	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 17:55	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 17:55	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 17:55	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 17:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000093	J	0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 11:56	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.79		0.20	0.082	mg/L			04/10/18 10:45	1

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		04/08/18 13:48	04/11/18 18:00	5
Arsenic	0.0018		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 18:00	5
Barium	0.021		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 18:00	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 18:00	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 18:00	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 18:00	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 18:00	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 18:00	5
Lithium	0.0077		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 18:00	5
Molybdenum	0.0049	J	0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 18:00	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 18:00	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 18:00	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000086	J	0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 11:58	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 13:05	1

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		04/09/18 11:52	04/11/18 14:04	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 14:04	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 14:04	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:04	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:04	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 14:04	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 14:04	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 14:04	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 14:04	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 14:04	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 14:04	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/18 11:52	04/11/18 14:04	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000071	J	0.00020	0.000070	mg/L		04/11/18 17:19	04/13/18 09:53	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Date Collected: 03/30/18 11:20

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.095	J	0.20	0.082	mg/L			04/10/18 13:28	1

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		04/09/18 11:52	04/11/18 14:09	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 14:09	5
Barium	0.015		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 14:09	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 14:09	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 14:09	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 14:09	5
Lithium	0.0067		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 14:09	5
Molybdenum	0.0024	J	0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 14:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 14:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/09/18 11:52	04/11/18 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		04/11/18 17:19	04/13/18 09:54	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13	J	0.20	0.082	mg/L			04/10/18 14:36	1

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		04/09/18 11:52	04/11/18 14:13	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 14:13	5
Barium	0.042		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 14:13	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:13	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:13	5
Chromium	0.0027		0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 14:13	5
Cobalt	0.0035		0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 14:13	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 14:13	5
Lithium	0.016		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 14:13	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 14:13	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 14:13	5
Thallium	0.000085	J	0.00050	0.000085	mg/L		04/09/18 11:52	04/11/18 14:13	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		04/11/18 17:19	04/13/18 10:07	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13	J	0.20	0.082	mg/L			04/10/18 18:23	1

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		04/09/18 11:52	04/11/18 14:18	5
Arsenic	0.0014		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 14:18	5
Barium	0.050		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 14:18	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:18	5
Cadmium	0.00082	J	0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:18	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 14:18	5
Cobalt	0.0092		0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 14:18	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 14:18	5
Lithium	0.015		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 14:18	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 14:18	5
Selenium	0.016		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 14:18	5
Thallium	0.00019	J	0.00050	0.000085	mg/L		04/09/18 11:52	04/11/18 14:18	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		04/11/18 17:19	04/13/18 10:08	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 03/29/18 00:00

Date Received: 04/03/18 09:32

Lab Sample ID: 400-151568-25

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.12	J	0.20	0.082	mg/L			04/10/18 18:46	1

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		04/09/18 11:52	04/11/18 14:22	5
Arsenic	0.0013		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 14:22	5
Barium	0.050		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 14:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:22	5
Cadmium	0.00069	J	0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 14:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 14:22	5
Cobalt	0.0091		0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 14:22	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 14:22	5
Lithium	0.016		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 14:22	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 14:22	5
Selenium	0.016		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 14:22	5
Thallium	0.00022	J	0.00050	0.000085	mg/L		04/09/18 11:52	04/11/18 14:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000092	J	0.00020	0.000070	mg/L		04/11/18 17:19	04/13/18 10:10	1

Definitions/Glossary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Qualifiers

HPLC/IC

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.

Metals

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	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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-2

Date Collected: 03/27/18 15:05

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 00:52	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 18:04	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 10:48	JAP	TAL PEN

Client Sample ID: WGWA-1

Date Collected: 03/27/18 15:55

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:00	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 15:52	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 10:50	JAP	TAL PEN

Client Sample ID: WGWA-3

Date Collected: 03/28/18 12:20

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 15:57	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:08	JAP	TAL PEN

Client Sample ID: WGWA-4

Date Collected: 03/28/18 11:15

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:46	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:01	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:10	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 03:09	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:28	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:12	JAP	TAL PEN

Client Sample ID: WGWA-7

Lab Sample ID: 400-151568-6

Date Collected: 03/28/18 13:25

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 04:17	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:33	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:13	JAP	TAL PEN

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Date Collected: 03/28/18 10:15

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 04:40	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:42	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:15	JAP	TAL PEN

Client Sample ID: DUP-1

Lab Sample ID: 400-151568-8

Date Collected: 03/28/18 00:00

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:03	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:37	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:17	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Date Collected: 03/28/18 14:15

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:26	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:46	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:18	JAP	TAL PEN

Client Sample ID: WGWA-18

Lab Sample ID: 400-151568-10

Date Collected: 03/28/18 15:20

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:49	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:51	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:20	JAP	TAL PEN

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 06:12	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:55	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:42	JAP	TAL PEN

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

Date Collected: 03/29/18 14:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 06:57	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:00	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:44	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 07:20	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:04	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:46	JAP	TAL PEN

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 07:43	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:10	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:47	JAP	TAL PEN

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 08:51	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:37	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:49	JAP	TAL PEN

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 09:14	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:42	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:51	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Date Collected: 03/29/18 12:10

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 09:37	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:46	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:53	JAP	TAL PEN

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:00	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:51	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:54	JAP	TAL PEN

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:55	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:56	JAP	TAL PEN

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:45	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 18:00	DRE	TAL PEN
Total/NA	Prep	7470A			393578	04/11/18 15:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 11:58	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 13:05	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:04	DRE	TAL PEN
Total/NA	Prep	7470A			393598	04/11/18 17:19	DN1	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 09:53	JAP	TAL PEN

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Date Collected: 03/30/18 11:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 13:28	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:09	DRE	TAL PEN
Total/NA	Prep	7470A			393598	04/11/18 17:19	DN1	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 09:54	JAP	TAL PEN

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 14:36	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:13	DRE	TAL PEN
Total/NA	Prep	7470A			393598	04/11/18 17:19	DN1	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 10:07	JAP	TAL PEN

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 18:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:18	DRE	TAL PEN
Total/NA	Prep	7470A			393598	04/11/18 17:19	DN1	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 10:08	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Date Collected: 03/29/18 00:00

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 18:46	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:22	DRE	TAL PEN
Total/NA	Prep	7470A			393598	04/11/18 17:19	DN1	TAL PEN
Total/NA	Analysis	7470A		1	393870	04/13/18 10:10	JAP	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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

HPLC/IC

Analysis Batch: 393342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	300.0	
400-151568-2	WGWA-1	Total/NA	Water	300.0	
400-151568-3	WGWA-3	Total/NA	Water	300.0	
400-151568-4	WGWA-4	Total/NA	Water	300.0	
400-151568-5	FB-1-3-28-18	Total/NA	Water	300.0	
400-151568-6	WGWA-7	Total/NA	Water	300.0	
400-151568-7	WGWA-6	Total/NA	Water	300.0	
400-151568-8	DUP-1	Total/NA	Water	300.0	
400-151568-9	WGWA-5	Total/NA	Water	300.0	
400-151568-10	WGWA-18	Total/NA	Water	300.0	
400-151568-11	WGWC-19	Total/NA	Water	300.0	
400-151568-12	WGWC-8	Total/NA	Water	300.0	
400-151568-13	WGWC-9	Total/NA	Water	300.0	
400-151568-14	FB-2-3-29-18	Total/NA	Water	300.0	
400-151568-15	WGWC-14A	Total/NA	Water	300.0	
400-151568-16	WGWC-13	Total/NA	Water	300.0	
400-151568-17	WGWC-11	Total/NA	Water	300.0	
400-151568-18	WGWC-12	Total/NA	Water	300.0	
400-151568-19	EB-1-3-29-18	Total/NA	Water	300.0	
400-151568-20	WGWC-15	Total/NA	Water	300.0	
MB 400-393342/36	Method Blank	Total/NA	Water	300.0	
LCS 400-393342/37	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-393342/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-151568-1 MS	WGWA-2	Total/NA	Water	300.0	
400-151568-1 MSD	WGWA-2	Total/NA	Water	300.0	

Analysis Batch: 393353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-21	EB-2-3-30-18	Total/NA	Water	300.0	
400-151568-22	WGWC-17	Total/NA	Water	300.0	
400-151568-23	WGWC-10	Total/NA	Water	300.0	
400-151568-24	WGWC-16	Total/NA	Water	300.0	
400-151568-25	DUP-2	Total/NA	Water	300.0	
MB 400-393353/4	Method Blank	Total/NA	Water	300.0	
LCS 400-393353/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-393353/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-151568-22 MS	WGWC-17	Total/NA	Water	300.0	
400-151568-22 MSD	WGWC-17	Total/NA	Water	300.0	

Metals

Prep Batch: 393140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total Recoverable	Water	3005A	
400-151568-2	WGWA-1	Total Recoverable	Water	3005A	
400-151568-3	WGWA-3	Total Recoverable	Water	3005A	
400-151568-4	WGWA-4	Total Recoverable	Water	3005A	
400-151568-5	FB-1-3-28-18	Total Recoverable	Water	3005A	
400-151568-6	WGWA-7	Total Recoverable	Water	3005A	
400-151568-7	WGWA-6	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Metals (Continued)

Prep Batch: 393140 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-8	DUP-1	Total Recoverable	Water	3005A	
400-151568-9	WGWA-5	Total Recoverable	Water	3005A	
400-151568-10	WGWA-18	Total Recoverable	Water	3005A	
400-151568-11	WGWC-19	Total Recoverable	Water	3005A	
400-151568-12	WGWC-8	Total Recoverable	Water	3005A	
400-151568-13	WGWC-9	Total Recoverable	Water	3005A	
400-151568-14	FB-2-3-29-18	Total Recoverable	Water	3005A	
400-151568-15	WGWC-14A	Total Recoverable	Water	3005A	
400-151568-16	WGWC-13	Total Recoverable	Water	3005A	
400-151568-17	WGWC-11	Total Recoverable	Water	3005A	
400-151568-18	WGWC-12	Total Recoverable	Water	3005A	
400-151568-19	EB-1-3-29-18	Total Recoverable	Water	3005A	
400-151568-20	WGWC-15	Total Recoverable	Water	3005A	
MB 400-393140/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-393140/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-151568-1 MS	WGWA-2	Total Recoverable	Water	3005A	
400-151568-1 MSD	WGWA-2	Total Recoverable	Water	3005A	

Prep Batch: 393192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-21	EB-2-3-30-18	Total Recoverable	Water	3005A	
400-151568-22	WGWC-17	Total Recoverable	Water	3005A	
400-151568-23	WGWC-10	Total Recoverable	Water	3005A	
400-151568-24	WGWC-16	Total Recoverable	Water	3005A	
400-151568-25	DUP-2	Total Recoverable	Water	3005A	
MB 400-393192/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-393192/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-151567-B-11-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-151567-B-11-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 393578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	7470A	
400-151568-2	WGWA-1	Total/NA	Water	7470A	
400-151568-3	WGWA-3	Total/NA	Water	7470A	
400-151568-4	WGWA-4	Total/NA	Water	7470A	
400-151568-5	FB-1-3-28-18	Total/NA	Water	7470A	
400-151568-6	WGWA-7	Total/NA	Water	7470A	
400-151568-7	WGWA-6	Total/NA	Water	7470A	
400-151568-8	DUP-1	Total/NA	Water	7470A	
400-151568-9	WGWA-5	Total/NA	Water	7470A	
400-151568-10	WGWA-18	Total/NA	Water	7470A	
400-151568-11	WGWC-19	Total/NA	Water	7470A	
400-151568-12	WGWC-8	Total/NA	Water	7470A	
400-151568-13	WGWC-9	Total/NA	Water	7470A	
400-151568-14	FB-2-3-29-18	Total/NA	Water	7470A	
400-151568-15	WGWC-14A	Total/NA	Water	7470A	
400-151568-16	WGWC-13	Total/NA	Water	7470A	
400-151568-17	WGWC-11	Total/NA	Water	7470A	
400-151568-18	WGWC-12	Total/NA	Water	7470A	
400-151568-19	EB-1-3-29-18	Total/NA	Water	7470A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Metals (Continued)

Prep Batch: 393578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-20	WGWC-15	Total/NA	Water	7470A	
MB 400-393578/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-393578/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-151568-2 MS	WGWA-1	Total/NA	Water	7470A	
400-151568-2 MSD	WGWA-1	Total/NA	Water	7470A	

Prep Batch: 393598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-21	EB-2-3-30-18	Total/NA	Water	7470A	
400-151568-22	WGWC-17	Total/NA	Water	7470A	
400-151568-23	WGWC-10	Total/NA	Water	7470A	
400-151568-24	WGWC-16	Total/NA	Water	7470A	
400-151568-25	DUP-2	Total/NA	Water	7470A	
MB 400-393598/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-393598/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-151322-B-6-C MS	Matrix Spike	Total/NA	Water	7470A	
400-151322-B-6-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 393655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total Recoverable	Water	6020	393140
400-151568-2	WGWA-1	Total Recoverable	Water	6020	393140
400-151568-3	WGWA-3	Total Recoverable	Water	6020	393140
400-151568-4	WGWA-4	Total Recoverable	Water	6020	393140
400-151568-5	FB-1-3-28-18	Total Recoverable	Water	6020	393140
400-151568-6	WGWA-7	Total Recoverable	Water	6020	393140
400-151568-7	WGWA-6	Total Recoverable	Water	6020	393140
400-151568-8	DUP-1	Total Recoverable	Water	6020	393140
400-151568-9	WGWA-5	Total Recoverable	Water	6020	393140
400-151568-10	WGWA-18	Total Recoverable	Water	6020	393140
400-151568-11	WGWC-19	Total Recoverable	Water	6020	393140
400-151568-12	WGWC-8	Total Recoverable	Water	6020	393140
400-151568-13	WGWC-9	Total Recoverable	Water	6020	393140
400-151568-14	FB-2-3-29-18	Total Recoverable	Water	6020	393140
400-151568-15	WGWC-14A	Total Recoverable	Water	6020	393140
400-151568-16	WGWC-13	Total Recoverable	Water	6020	393140
400-151568-17	WGWC-11	Total Recoverable	Water	6020	393140
400-151568-18	WGWC-12	Total Recoverable	Water	6020	393140
400-151568-19	EB-1-3-29-18	Total Recoverable	Water	6020	393140
400-151568-20	WGWC-15	Total Recoverable	Water	6020	393140
400-151568-21	EB-2-3-30-18	Total Recoverable	Water	6020	393192
400-151568-22	WGWC-17	Total Recoverable	Water	6020	393192
400-151568-23	WGWC-10	Total Recoverable	Water	6020	393192
400-151568-24	WGWC-16	Total Recoverable	Water	6020	393192
400-151568-25	DUP-2	Total Recoverable	Water	6020	393192
MB 400-393140/1-A ^5	Method Blank	Total Recoverable	Water	6020	393140
MB 400-393192/1-A ^5	Method Blank	Total Recoverable	Water	6020	393192
LCS 400-393140/2-A	Lab Control Sample	Total Recoverable	Water	6020	393140
LCS 400-393192/2-A	Lab Control Sample	Total Recoverable	Water	6020	393192
400-151567-B-11-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	393192
400-151567-B-11-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	393192

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-2
 SDG: Ash Pond

Metals (Continued)

Analysis Batch: 393655 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1 MS	WGWA-2	Total Recoverable	Water	6020	393140
400-151568-1 MSD	WGWA-2	Total Recoverable	Water	6020	393140

Analysis Batch: 393870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	7470A	393578
400-151568-2	WGWA-1	Total/NA	Water	7470A	393578
400-151568-3	WGWA-3	Total/NA	Water	7470A	393578
400-151568-4	WGWA-4	Total/NA	Water	7470A	393578
400-151568-5	FB-1-3-28-18	Total/NA	Water	7470A	393578
400-151568-6	WGWA-7	Total/NA	Water	7470A	393578
400-151568-7	WGWA-6	Total/NA	Water	7470A	393578
400-151568-8	DUP-1	Total/NA	Water	7470A	393578
400-151568-9	WGWA-5	Total/NA	Water	7470A	393578
400-151568-10	WGWA-18	Total/NA	Water	7470A	393578
400-151568-11	WGWC-19	Total/NA	Water	7470A	393578
400-151568-12	WGWC-8	Total/NA	Water	7470A	393578
400-151568-13	WGWC-9	Total/NA	Water	7470A	393578
400-151568-14	FB-2-3-29-18	Total/NA	Water	7470A	393578
400-151568-15	WGWC-14A	Total/NA	Water	7470A	393578
400-151568-16	WGWC-13	Total/NA	Water	7470A	393578
400-151568-17	WGWC-11	Total/NA	Water	7470A	393578
400-151568-18	WGWC-12	Total/NA	Water	7470A	393578
400-151568-19	EB-1-3-29-18	Total/NA	Water	7470A	393578
400-151568-20	WGWC-15	Total/NA	Water	7470A	393578
400-151568-21	EB-2-3-30-18	Total/NA	Water	7470A	393598
400-151568-22	WGWC-17	Total/NA	Water	7470A	393598
400-151568-23	WGWC-10	Total/NA	Water	7470A	393598
400-151568-24	WGWC-16	Total/NA	Water	7470A	393598
400-151568-25	DUP-2	Total/NA	Water	7470A	393598
MB 400-393578/14-A	Method Blank	Total/NA	Water	7470A	393578
MB 400-393598/14-A	Method Blank	Total/NA	Water	7470A	393598
LCS 400-393578/15-A	Lab Control Sample	Total/NA	Water	7470A	393578
LCS 400-393598/15-A	Lab Control Sample	Total/NA	Water	7470A	393598
400-151322-B-6-C MS	Matrix Spike	Total/NA	Water	7470A	393598
400-151322-B-6-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	393598
400-151568-2 MS	WGWA-1	Total/NA	Water	7470A	393578
400-151568-2 MSD	WGWA-1	Total/NA	Water	7470A	393578

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-393342/36
Matrix: Water
Analysis Batch: 393342

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/09/18 23:43	1

Lab Sample ID: LCS 400-393342/37
Matrix: Water
Analysis Batch: 393342

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 400-393342/38
Matrix: Water
Analysis Batch: 393342

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
Fluoride	10.0	10.0		mg/L		100	90 - 110	1	15

Lab Sample ID: 400-151568-1 MS
Matrix: Water
Analysis Batch: 393342

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.082		10.0	10.2		mg/L		102	80 - 120

Lab Sample ID: 400-151568-1 MSD
Matrix: Water
Analysis Batch: 393342

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.082		10.0	10.2		mg/L		102	80 - 120	0	20

Lab Sample ID: MB 400-393353/4
Matrix: Water
Analysis Batch: 393353

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			04/10/18 11:56	1

Lab Sample ID: LCS 400-393353/5
Matrix: Water
Analysis Batch: 393353

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-393353/6
Matrix: Water
Analysis Batch: 393353

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
Fluoride	10.0	10.0		mg/L		100	90 - 110	0	15

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Lab Sample ID: 400-151568-22 MS
Matrix: Water
Analysis Batch: 393353

Client Sample ID: WGWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.095	J	10.0	10.2		mg/L		101	80 - 120

Lab Sample ID: 400-151568-22 MSD
Matrix: Water
Analysis Batch: 393353

Client Sample ID: WGWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.095	J	10.0	10.1		mg/L		100	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-393140/1-A ^5
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 393140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/08/18 13:48	04/11/18 15:39	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/08/18 13:48	04/11/18 15:39	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/08/18 13:48	04/11/18 15:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/08/18 13:48	04/11/18 15:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/08/18 13:48	04/11/18 15:39	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/08/18 13:48	04/11/18 15:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/08/18 13:48	04/11/18 15:39	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/08/18 13:48	04/11/18 15:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/08/18 13:48	04/11/18 15:39	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/08/18 13:48	04/11/18 15:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/08/18 13:48	04/11/18 15:39	5

Lab Sample ID: LCS 400-393140/2-A
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 393140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0521		mg/L		104	80 - 120
Arsenic	0.0500	0.0508		mg/L		102	80 - 120
Barium	0.0500	0.0475		mg/L		95	80 - 120
Beryllium	0.0500	0.0517		mg/L		103	80 - 120
Cadmium	0.0500	0.0507		mg/L		101	80 - 120
Chromium	0.0500	0.0514		mg/L		103	80 - 120
Cobalt	0.0500	0.0513		mg/L		103	80 - 120
Lead	0.0500	0.0489		mg/L		98	80 - 120
Lithium	0.0500	0.0511		mg/L		102	80 - 120
Molybdenum	0.0500	0.0505		mg/L		101	80 - 120
Selenium	0.0500	0.0485		mg/L		97	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

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

Lab Sample ID: 400-151568-1 MS

Matrix: Water

Analysis Batch: 393655

Client Sample ID: WGWA-2

Prep Type: Total Recoverable

Prep Batch: 393140

Analyte	Sample	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec.	
	Result			Result	Qualifier				Limits	Limits
Antimony	<0.0010		0.0500	0.0531		mg/L		106	75 - 125	
Arsenic	<0.00046		0.0500	0.0506		mg/L		101	75 - 125	
Barium	0.021		0.0500	0.0670		mg/L		92	75 - 125	
Beryllium	<0.00034		0.0500	0.0510		mg/L		102	75 - 125	
Cadmium	<0.00034		0.0500	0.0494		mg/L		99	75 - 125	
Chromium	<0.0011		0.0500	0.0514		mg/L		103	75 - 125	
Cobalt	0.0012	J	0.0500	0.0518		mg/L		101	75 - 125	
Lead	<0.00035		0.0500	0.0472		mg/L		94	75 - 125	
Lithium	0.0081	F1	0.0500	0.0754	F1	mg/L		135	75 - 125	
Molybdenum	<0.00085		0.0500	0.0496		mg/L		99	75 - 125	
Selenium	<0.00024		0.0500	0.0485		mg/L		97	75 - 125	
Thallium	<0.00085		0.0100	0.0101		mg/L		101	75 - 125	

Lab Sample ID: 400-151568-1 MSD

Matrix: Water

Analysis Batch: 393655

Client Sample ID: WGWA-2

Prep Type: Total Recoverable

Prep Batch: 393140

Analyte	Sample	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	
	Result			Result	Qualifier				Limits	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0522		mg/L		104	75 - 125	2	20	
Arsenic	<0.00046		0.0500	0.0511		mg/L		102	75 - 125	1	20	
Barium	0.021		0.0500	0.0676		mg/L		93	75 - 125	1	20	
Beryllium	<0.00034		0.0500	0.0512		mg/L		102	75 - 125	1	20	
Cadmium	<0.00034		0.0500	0.0502		mg/L		100	75 - 125	2	20	
Chromium	<0.0011		0.0500	0.0516		mg/L		103	75 - 125	0	20	
Cobalt	0.0012	J	0.0500	0.0524		mg/L		102	75 - 125	1	20	
Lead	<0.00035		0.0500	0.0475		mg/L		95	75 - 125	1	20	
Lithium	0.0081	F1	0.0500	0.0751	F1	mg/L		134	75 - 125	0	20	
Molybdenum	<0.00085		0.0500	0.0485		mg/L		97	75 - 125	2	20	
Selenium	<0.00024		0.0500	0.0484		mg/L		97	75 - 125	0	20	
Thallium	<0.00085		0.0100	0.0101		mg/L		101	75 - 125	0	20	

Lab Sample ID: MB 400-393192/1-A ^5

Matrix: Water

Analysis Batch: 393655

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 393192

Analyte	MB MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier					Prepared	Prepared	Analyzed	Analyzed	
Antimony	<0.0010		0.0025	0.0010	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5
Thallium	<0.00085		0.00050	0.00085	mg/L		04/09/18 11:52	04/11/18 12:52	04/11/18 12:52	04/11/18 12:52	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

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

Lab Sample ID: LCS 400-393192/2-A
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 393192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0500	0.0534		mg/L		107	80 - 120
Arsenic	0.0500	0.0497		mg/L		99	80 - 120
Barium	0.0500	0.0489		mg/L		98	80 - 120
Beryllium	0.0500	0.0503		mg/L		101	80 - 120
Cadmium	0.0500	0.0517		mg/L		103	80 - 120
Chromium	0.0500	0.0518		mg/L		104	80 - 120
Cobalt	0.0500	0.0521		mg/L		104	80 - 120
Lead	0.0500	0.0507		mg/L		101	80 - 120
Lithium	0.0500	0.0512		mg/L		102	80 - 120
Molybdenum	0.0500	0.0512		mg/L		102	80 - 120
Selenium	0.0500	0.0491		mg/L		98	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

Lab Sample ID: 400-151567-B-11-B MS ^5
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 393192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0010		0.0500	0.0550		mg/L		110	75 - 125
Arsenic	<0.00046		0.0500	0.0520		mg/L		104	75 - 125
Barium	0.049		0.0500	0.0996		mg/L		100	75 - 125
Beryllium	<0.00034		0.0500	0.0515		mg/L		103	75 - 125
Cadmium	0.0016	J	0.0500	0.0513		mg/L		99	75 - 125
Chromium	<0.0011		0.0500	0.0521		mg/L		104	75 - 125
Cobalt	0.0037		0.0500	0.0551		mg/L		103	75 - 125
Lead	<0.00035		0.0500	0.0488		mg/L		98	75 - 125
Lithium	0.0080	F1	0.0500	0.0739	F1	mg/L		132	75 - 125
Molybdenum	<0.00085		0.0500	0.0527		mg/L		105	75 - 125
Selenium	0.00045	J	0.0500	0.0502		mg/L		99	75 - 125
Thallium	<0.00085		0.0100	0.0102		mg/L		102	75 - 125

Lab Sample ID: 400-151567-B-11-C MSD ^5
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 393192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0531		mg/L		106	75 - 125	3	20
Arsenic	<0.00046		0.0500	0.0519		mg/L		104	75 - 125	0	20
Barium	0.049		0.0500	0.0979		mg/L		97	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0514		mg/L		103	75 - 125	0	20
Cadmium	0.0016	J	0.0500	0.0527		mg/L		102	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0523		mg/L		105	75 - 125	0	20
Cobalt	0.0037		0.0500	0.0555		mg/L		104	75 - 125	1	20
Lead	<0.00035		0.0500	0.0489		mg/L		98	75 - 125	0	20
Lithium	0.0080	F1	0.0500	0.0759	F1	mg/L		136	75 - 125	3	20
Molybdenum	<0.00085		0.0500	0.0512		mg/L		102	75 - 125	3	20
Selenium	0.00045	J	0.0500	0.0489		mg/L		97	75 - 125	3	20
Thallium	<0.00085		0.0100	0.0102		mg/L		102	75 - 125	1	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-393578/14-A
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 393578

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/18 15:15	04/13/18 10:44	1

Lab Sample ID: LCS 400-393578/15-A
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 393578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.00107		mg/L		107	80 - 120

Lab Sample ID: 400-151568-2 MS
Matrix: Water
Analysis Batch: 393870

Client Sample ID: WGWA-1
Prep Type: Total/NA
Prep Batch: 393578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00206		mg/L		102	80 - 120

Lab Sample ID: 400-151568-2 MSD
Matrix: Water
Analysis Batch: 393870

Client Sample ID: WGWA-1
Prep Type: Total/NA
Prep Batch: 393578

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00197		mg/L		98	80 - 120	5	20

Lab Sample ID: MB 400-393598/14-A
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 393598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/18 17:19	04/13/18 09:38	1

Lab Sample ID: LCS 400-393598/15-A
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 393598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.00103		mg/L		102	80 - 120

Lab Sample ID: 400-151322-B-6-C MS
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 393598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00207		mg/L		103	80 - 120

Lab Sample ID: 400-151322-B-6-D MSD
Matrix: Water
Analysis Batch: 393870

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 393598

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00199		mg/L		99	80 - 120	4	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

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- 2
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Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: [Redacted] Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab P/N: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamerica.com Carrier Tracking No.: AXL to - (TA-ATL) Lab P/N: 770-594-5998 Due Date Requested: TAT Requested (days): PO #: SCS10347656 W/C #: [Redacted] Project #: 40007709 S/D/W/H: [Redacted]		C/C No.: 400-72601-28757.2 Page: 1 of 5 Job #: [Redacted]	
Analysis Requested Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ca, Mg, Na, K, SI <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ALK (total, bicarbonate, carbonate) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cl, SO ₄ (EPA 300.0 & SM 2540C) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Total Number of Containers: 2 Special Instructions/Note: Bottles stored with Age IV samples		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - H ₂ SO ₄ F - MeOH G - Ammonia H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO ₂ P - Na ₂ O ₄ S Q - Na ₂ SO ₃ R - Na ₂ SO ₃ S - H ₂ SO ₄ T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification W6WA-Z W6WA-1 W6WA-3 W6WA-4 FB-1-3-28-1B W6WA-7 W6WA-6 DUP-1		Sample Date: 3/27/18 Sample Time: 1505 Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, O=soil, BT=BIOM, A=Air): Water		Preservation Code: G Date/Time: 3/27/18 1505 Date/Time: 3/27/18 1555 Date/Time: 3/28/18 1220 Date/Time: 3/28/18 1115 Date/Time: 3/28/18 1000 Date/Time: 3/28/18 1325 Date/Time: 3/28/18 1015 Date/Time: 3/28/18	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" 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 checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: [Redacted] Relinquished by: [Redacted] Relinquished by: [Redacted]		Date: 3-29-18 11:00 Date/Time: 3/29/18 11:00 Date/Time: 3/29/18 1114		Method of Shipment: Cooler Temperature(s) °C and Other Remarks: 1.3°C JES	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No: [Redacted]		* Separate report for these additional samples	



Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s): A/C to TA-ATL-		COC No: 400-72601-28757.1	
Client Contact: Jojo Abraham		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 2 of 3		Job #: 2 of 3	
Company: Southern Company		PO #: SCS10347656		Analysis Requested		Preservation Codes:	
Address: PO BOX 2641 GSC8		WO #: 40007709		Due Date Requested:		M - Hexane	
City: Birmingham		Project #: 40007709		TAT Requested (days):		N - None	
State, Zip: AL, 35291		SSOW#:		Field Filtered Sample (Yes or No)		O - AsNaO2	
Email: JAbraham@southernco.com		Sample Date		Permitt. MSMSD (Yes or No)		P - Na2OAS	
Project Name: CCR - Plant Wansley - Ash Pond		Sample Time		Fluoride		Q - NaHSO3	
Site: Georgia		Sample Type (C=Comp, G=grab)		Radium 226 & 228 (SW-846 9315/9320)		R - Na2SO3	
Sample Identification		Preservation Code:		Matrix (W=water, S=solid, O=soil, ST=tissue, A=air)		S - H2SO4	
W6WA-5		G		W		T - TSP Dodecahydrate	
W6WA-1B		G		W		I - Ice	
W6WC-19		G		W		J - DI Water	
W6WC-B		G		W		K - EDTA	
W6WC-9		G		W		L - EDA	
FB-2-3-29-1B		G		W		Other:	
W6WC-14A		G		W		Total Number of Containers	
W6WC-13		G		W		Special Instructions/Note:	
W6WC-11		G		W		extra Red collected here	
W6WC-12		G		W			
EB-1-3-29-1B		G		W			
Possible Hazard Identification		Date/Time		Company			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological		3-30-18 11:00		ACC			
Deliverable Requested: I, II, III, IV, Other (specify)		Date/Time		Company			
		3/30/18 6:00		ACC			
Empty Kit Relinquished by:		Date/Time		Company			
Relinquished by: [Signature]		3/30/18 11:00		ACC			
Relinquished by: [Signature]		3/31/18 08:40		ACC			
Custody Seals Intact: Yes A No		Cooler Temperature(s) °C and Other Remarks		3.1°C 2.3°C		AK'S	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-151568-2

SDG Number: Ash Pond

Login Number: 151568

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3 IR8, 3.1°C, 2.3°C IR-8, 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 Wansley

TestAmerica Job ID: 400-151568-2
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

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

* 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: 400-151568-3

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

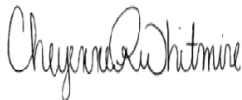
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

5/3/2018 5:25:24 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 Wansley

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-151568-1	WGWA-2	Water	03/27/18 15:05	03/30/18 11:14
400-151568-2	WGWA-1	Water	03/27/18 15:55	03/30/18 11:14
400-151568-3	WGWA-3	Water	03/28/18 12:20	03/30/18 11:14
400-151568-4	WGWA-4	Water	03/28/18 11:15	03/30/18 11:14
400-151568-5	FB-1-3-28-18	Water	03/28/18 10:00	03/30/18 11:14
400-151568-6	WGWA-7	Water	03/28/18 13:25	03/30/18 11:14
400-151568-7	WGWA-6	Water	03/28/18 10:15	03/30/18 11:14
400-151568-8	DUP-1	Water	03/28/18 00:00	03/30/18 11:14
400-151568-9	WGWA-5	Water	03/28/18 14:15	03/31/18 08:46
400-151568-10	WGWA-18	Water	03/28/18 15:20	03/31/18 08:46
400-151568-11	WGWC-19	Water	03/29/18 10:45	03/31/18 08:46
400-151568-12	WGWC-8	Water	03/29/18 14:05	03/31/18 08:46
400-151568-13	WGWC-9	Water	03/29/18 12:30	03/31/18 08:46
400-151568-14	FB-2-3-29-18	Water	03/29/18 13:40	03/31/18 08:46
400-151568-15	WGWC-14A	Water	03/29/18 15:00	03/31/18 08:46
400-151568-16	WGWC-13	Water	03/29/18 13:30	03/31/18 08:46
400-151568-17	WGWC-11	Water	03/29/18 12:10	03/31/18 08:46
400-151568-18	WGWC-12	Water	03/29/18 11:05	03/31/18 08:46
400-151568-19	EB-1-3-29-18	Water	03/29/18 10:00	03/31/18 08:46
400-151568-20	WGWC-15	Water	03/30/18 10:10	04/03/18 09:32
400-151568-21	EB-2-3-30-18	Water	03/30/18 09:50	04/03/18 09:32
400-151568-22	WGWC-17	Water	03/30/18 11:20	04/03/18 09:32
400-151568-23	WGWC-10	Water	03/30/18 12:35	04/03/18 09:32
400-151568-24	WGWC-16	Water	03/29/18 15:20	04/03/18 09:32
400-151568-25	DUP-2	Water	03/29/18 00:00	04/03/18 09:32

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-151568-1

Date Collected: 03/27/18 15:05

Matrix: Water

Date Received: 03/30/18 11:14

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0599	U	0.0579	0.0581	1.00	0.0895	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.393		0.226	0.229	1.00	0.341	pCi/L	04/04/18 10:38	04/12/18 08:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					04/04/18 10:38	04/12/18 08:18	1
Y Carrier	92.3		40 - 110					04/04/18 10:38	04/12/18 08:18	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.453		0.233	0.236	5.00	0.341	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 400-151568-2

Date Collected: 03/27/18 15:55

Matrix: Water

Date Received: 03/30/18 11:14

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0262	U	0.0374	0.0375	1.00	0.0637	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.449		0.230	0.233	1.00	0.339	pCi/L	04/04/18 10:38	04/12/18 08:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 10:38	04/12/18 08:18	1
Y Carrier	89.7		40 - 110					04/04/18 10:38	04/12/18 08:18	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.475		0.233	0.236	5.00	0.339	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-3

Lab Sample ID: 400-151568-3

Date Collected: 03/28/18 12:20

Matrix: Water

Date Received: 03/30/18 11:14

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.116		0.0587	0.0596	1.00	0.0590	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0338	U	0.207	0.207	1.00	0.364	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	93.1		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.150	U	0.215	0.215	5.00	0.364	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-151568-4

Date Collected: 03/28/18 11:15

Matrix: Water

Date Received: 03/30/18 11:14

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.444		0.108	0.115	1.00	0.0606	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.879		0.248	0.261	1.00	0.307	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	95.7		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.32		0.270	0.285	5.00	0.307	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0489	U	0.0449	0.0451	1.00	0.0655	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.225	U	0.191	0.192	1.00	0.304	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	92.0		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.274	U	0.196	0.197	5.00	0.304	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-7
Date Collected: 03/28/18 13:25
Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-6
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	0.0378	U	0.0393	0.0394	1.00	0.0593	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.277	U	0.245	0.246	1.00	0.394	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	92.0		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.315	U	0.248	0.249	5.00	0.394	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWA-6
Date Collected: 03/28/18 10:15
Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-7
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	2.65		0.251	0.346	1.00	0.0576	pCi/L	04/04/18 09:42	04/26/18 06:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					04/04/18 09:42	04/26/18 06:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.86		0.463	0.644	1.00	0.338	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	90.5		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	7.52		0.527	0.731	5.00	0.338	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: DUP-1
Date Collected: 03/28/18 00:00
Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-8
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	3.06		0.283	0.394	1.00	0.0651	pCi/L	04/04/18 09:42	04/26/18 06:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					04/04/18 09:42	04/26/18 06:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.69		0.500	0.724	1.00	0.344	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	93.1		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.75		0.575	0.824	5.00	0.344	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Date Collected: 03/28/18 14:15

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.253		0.0815	0.0846	1.00	0.0555	pCi/L	04/04/18 09:42	04/26/18 06:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	107		40 - 110					04/04/18 09:42	04/26/18 06:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.239	U	0.211	0.212	1.00	0.339	pCi/L	04/04/18 10:38	04/12/18 08:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	107		40 - 110					04/04/18 10:38	04/12/18 08:19	1
Y Carrier	92.3		40 - 110					04/04/18 10:38	04/12/18 08:19	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.492		0.226	0.228	5.00	0.339	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-18

Date Collected: 03/28/18 15:20

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-10

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	0.108		0.0688	0.0695	1.00	0.0918	pCi/L	04/04/18 09:42	04/26/18 06:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					04/04/18 09:42	04/26/18 06:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.316	U	0.265	0.266	1.00	0.424	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	84.9		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.424		0.274	0.275	5.00	0.424	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0914		0.0547	0.0554	1.00	0.0654	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.160	U	0.225	0.225	1.00	0.375	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	91.6		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.252	U	0.232	0.232	5.00	0.375	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

Date Collected: 03/29/18 14:05

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.499		0.113	0.121	1.00	0.0627	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.81		0.315	0.357	1.00	0.327	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	93.1		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.31		0.335	0.377	5.00	0.327	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102		0.0548	0.0555	1.00	0.0576	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.176	U	0.199	0.199	1.00	0.326	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	88.6		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.278	U	0.206	0.207	5.00	0.326	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0543	U	0.0432	0.0434	1.00	0.0574	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.405		0.228	0.231	1.00	0.344	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	89.0		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.459		0.232	0.235	5.00	0.344	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.334		0.0954	0.100	1.00	0.0663	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.246	U	0.193	0.194	1.00	0.303	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	93.5		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.580		0.215	0.218	5.00	0.303	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242		0.0801	0.0830	1.00	0.0585	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.268	U	0.212	0.214	1.00	0.336	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	90.8		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.510		0.227	0.230	5.00	0.336	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Date Collected: 03/29/18 12:10

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0643		0.0454	0.0458	1.00	0.0568	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.397		0.211	0.214	1.00	0.312	pCi/L	04/04/18 10:38	04/12/18 08:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					04/04/18 10:38	04/12/18 08:20	1
Y Carrier	89.3		40 - 110					04/04/18 10:38	04/12/18 08:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.461		0.216	0.219	5.00	0.312	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.191		0.0750	0.0770	1.00	0.0644	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.228	U	0.218	0.219	1.00	0.353	pCi/L	04/04/18 10:38	04/12/18 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/04/18 10:38	04/12/18 08:21	1
Y Carrier	86.4		40 - 110					04/04/18 10:38	04/12/18 08:21	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.419		0.231	0.232	5.00	0.353	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.103		0.0552	0.0560	1.00	0.0562	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					04/04/18 09:42	04/26/18 08:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U	0.194	0.194	1.00	0.320	pCi/L	04/04/18 10:38	04/12/18 08:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					04/04/18 10:38	04/12/18 08:21	1
Y Carrier	92.3		40 - 110					04/04/18 10:38	04/12/18 08:21	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.264	U	0.202	0.202	5.00	0.320	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0553	U	0.0554	0.0556	1.00	0.0868	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0431	U	0.200	0.200	1.00	0.353	pCi/L	04/06/18 10:12	04/13/18 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/06/18 10:12	04/13/18 15:25	1
Y Carrier	91.2		40 - 110					04/06/18 10:12	04/13/18 15:25	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0985	U	0.208	0.208	5.00	0.353	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0411	U	0.0521	0.0522	1.00	0.0863	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.185	U	0.215	0.216	1.00	0.354	pCi/L	04/06/18 10:12	04/13/18 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/06/18 10:12	04/13/18 15:25	1
Y Carrier	92.7		40 - 110					04/06/18 10:12	04/13/18 15:25	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.226	U	0.221	0.222	5.00	0.354	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-17

Date Collected: 03/30/18 11:20

Date Received: 04/03/18 09:32

Lab Sample ID: 400-151568-22

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	0.0376	U	0.0431	0.0432	1.00	0.0692	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0970	U	0.199	0.199	1.00	0.341	pCi/L	04/06/18 10:12	04/13/18 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					04/06/18 10:12	04/13/18 15:25	1
Y Carrier	92.7		40 - 110					04/06/18 10:12	04/13/18 15:25	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.135	U	0.204	0.204	5.00	0.341	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.154		0.0640	0.0655	1.00	0.0584	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.421		0.220	0.223	1.00	0.321	pCi/L	04/06/18 10:12	04/13/18 15:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					04/06/18 10:12	04/13/18 15:25	1
Y Carrier	89.3		40 - 110					04/06/18 10:12	04/13/18 15:25	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.575		0.229	0.232	5.00	0.321	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.406		0.103	0.109	1.00	0.0730	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.19		0.283	0.304	1.00	0.321	pCi/L	04/06/18 10:12	04/13/18 15:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					04/06/18 10:12	04/13/18 15:26	1
Y Carrier	90.8		40 - 110					04/06/18 10:12	04/13/18 15:26	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	1.60		0.301	0.323	5.00	0.321	pCi/L		05/03/18 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 03/29/18 00:00

Date Received: 04/03/18 09:32

Lab Sample ID: 400-151568-25

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	0.434		0.103	0.110	1.00	0.0641	pCi/L	04/06/18 10:02	05/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					04/06/18 10:02	05/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.693		0.251	0.259	1.00	0.338	pCi/L	04/06/18 10:12	04/13/18 15:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					04/06/18 10:12	04/13/18 15:26	1
Y Carrier	89.7		40 - 110					04/06/18 10:12	04/13/18 15:26	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	1.13		0.271	0.281	5.00	0.338	pCi/L		05/03/18 11:51	1

Definitions/Glossary

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

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 Wansley

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-2

Date Collected: 03/27/18 15:05

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:18	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-1

Date Collected: 03/27/18 15:55

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:18	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-3

Date Collected: 03/28/18 12:20

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-4

Date Collected: 03/28/18 11:15

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-7

Lab Sample ID: 400-151568-6

Date Collected: 03/28/18 13:25

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Date Collected: 03/28/18 10:15

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: DUP-1

Lab Sample ID: 400-151568-8

Date Collected: 03/28/18 00:00

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Date Collected: 03/28/18 14:15

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:19	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWA-18

Lab Sample ID: 400-151568-10

Date Collected: 03/28/18 15:20

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 06:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

Date Collected: 03/29/18 14:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Date Collected: 03/29/18 12:10

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360399	04/12/18 08:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360400	04/12/18 08:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			358942	04/04/18 09:42	TJT	TAL SL
Total/NA	Analysis	9315		1	362843	04/26/18 08:37	RTM	TAL SL
Total/NA	Prep	PrecSep_0			358949	04/04/18 10:38	TJT	TAL SL
Total/NA	Analysis	9320		1	360400	04/12/18 08:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Date Collected: 03/30/18 11:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:25	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Date Collected: 03/29/18 00:00

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			359325	04/06/18 10:02	TJT	TAL SL
Total/NA	Analysis	9315		1	363412	05/01/18 05:48	KLS	TAL SL
Total/NA	Prep	PrecSep_0			359326	04/06/18 10:12	TJT	TAL SL
Total/NA	Analysis	9320		1	360645	04/13/18 15:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	363837	05/03/18 11:51	RTM	TAL SL

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Rad

Prep Batch: 358942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	PrecSep-21	
400-151568-2	WGWA-1	Total/NA	Water	PrecSep-21	
400-151568-3	WGWA-3	Total/NA	Water	PrecSep-21	
400-151568-4	WGWA-4	Total/NA	Water	PrecSep-21	
400-151568-5	FB-1-3-28-18	Total/NA	Water	PrecSep-21	
400-151568-6	WGWA-7	Total/NA	Water	PrecSep-21	
400-151568-7	WGWA-6	Total/NA	Water	PrecSep-21	
400-151568-8	DUP-1	Total/NA	Water	PrecSep-21	
400-151568-9	WGWA-5	Total/NA	Water	PrecSep-21	
400-151568-10	WGWA-18	Total/NA	Water	PrecSep-21	
400-151568-11	WGWC-19	Total/NA	Water	PrecSep-21	
400-151568-12	WGWC-8	Total/NA	Water	PrecSep-21	
400-151568-13	WGWC-9	Total/NA	Water	PrecSep-21	
400-151568-14	FB-2-3-29-18	Total/NA	Water	PrecSep-21	
400-151568-15	WGWC-14A	Total/NA	Water	PrecSep-21	
400-151568-16	WGWC-13	Total/NA	Water	PrecSep-21	
400-151568-17	WGWC-11	Total/NA	Water	PrecSep-21	
400-151568-18	WGWC-12	Total/NA	Water	PrecSep-21	
400-151568-19	EB-1-3-29-18	Total/NA	Water	PrecSep-21	
MB 160-358942/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-358942/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-151568-11 DU	WGWC-19	Total/NA	Water	PrecSep-21	

Prep Batch: 358949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	PrecSep_0	
400-151568-2	WGWA-1	Total/NA	Water	PrecSep_0	
400-151568-3	WGWA-3	Total/NA	Water	PrecSep_0	
400-151568-4	WGWA-4	Total/NA	Water	PrecSep_0	
400-151568-5	FB-1-3-28-18	Total/NA	Water	PrecSep_0	
400-151568-6	WGWA-7	Total/NA	Water	PrecSep_0	
400-151568-7	WGWA-6	Total/NA	Water	PrecSep_0	
400-151568-8	DUP-1	Total/NA	Water	PrecSep_0	
400-151568-9	WGWA-5	Total/NA	Water	PrecSep_0	
400-151568-10	WGWA-18	Total/NA	Water	PrecSep_0	
400-151568-11	WGWC-19	Total/NA	Water	PrecSep_0	
400-151568-12	WGWC-8	Total/NA	Water	PrecSep_0	
400-151568-13	WGWC-9	Total/NA	Water	PrecSep_0	
400-151568-14	FB-2-3-29-18	Total/NA	Water	PrecSep_0	
400-151568-15	WGWC-14A	Total/NA	Water	PrecSep_0	
400-151568-16	WGWC-13	Total/NA	Water	PrecSep_0	
400-151568-17	WGWC-11	Total/NA	Water	PrecSep_0	
400-151568-18	WGWC-12	Total/NA	Water	PrecSep_0	
400-151568-19	EB-1-3-29-18	Total/NA	Water	PrecSep_0	
MB 160-358949/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-358949/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-151568-11 DU	WGWC-19	Total/NA	Water	PrecSep_0	

Prep Batch: 359325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-20	WGWC-15	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

Rad (Continued)

Prep Batch: 359325 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-21	EB-2-3-30-18	Total/NA	Water	PrecSep-21	
400-151568-22	WGWC-17	Total/NA	Water	PrecSep-21	
400-151568-23	WGWC-10	Total/NA	Water	PrecSep-21	
400-151568-24	WGWC-16	Total/NA	Water	PrecSep-21	
400-151568-25	DUP-2	Total/NA	Water	PrecSep-21	
MB 160-359325/10-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-359325/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-151568-20 DU	WGWC-15	Total/NA	Water	PrecSep-21	

Prep Batch: 359326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-20	WGWC-15	Total/NA	Water	PrecSep_0	
400-151568-21	EB-2-3-30-18	Total/NA	Water	PrecSep_0	
400-151568-22	WGWC-17	Total/NA	Water	PrecSep_0	
400-151568-23	WGWC-10	Total/NA	Water	PrecSep_0	
400-151568-24	WGWC-16	Total/NA	Water	PrecSep_0	
400-151568-25	DUP-2	Total/NA	Water	PrecSep_0	
MB 160-359326/10-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-359326/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-151568-20 DU	WGWC-15	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-358942/22-A
Matrix: Water
Analysis Batch: 362843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358942

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.04849	U	0.0557	0.0559	1.00	0.0901	pCi/L	04/04/18 09:42	04/26/18 08:37	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	102		40 - 110		04/04/18 09:42	04/26/18 08:37	1			

Lab Sample ID: LCS 160-358942/1-A
Matrix: Water
Analysis Batch: 362843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358942

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.8	10.75		1.09	1.00	0.0653	pCi/L	91	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	Limits						
Ba Carrier	102		40 - 110		04/04/18 09:42	04/26/18 08:37	1		

Lab Sample ID: 400-151568-11 DU
Matrix: Water
Analysis Batch: 362843

Client Sample ID: WGWC-19
Prep Type: Total/NA
Prep Batch: 358942

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.0914		0.1516		0.0737	1.00	0.0843	pCi/L	0.47	1
Carrier	DU DU		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	104		40 - 110		04/06/18 10:02	05/01/18 05:49	1			

Lab Sample ID: MB 160-359325/10-A
Matrix: Water
Analysis Batch: 363412

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 359325

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02871	U	0.0383	0.0384	1.00	0.0641	pCi/L	04/06/18 10:02	05/01/18 05:49	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	104		40 - 110		04/06/18 10:02	05/01/18 05:49	1			

Lab Sample ID: LCS 160-359325/1-A
Matrix: Water
Analysis Batch: 363412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359325

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.8	10.27		1.04	1.00	0.0840	pCi/L	87	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-359325/1-A
Matrix: Water
Analysis Batch: 363412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359325

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	102		40 - 110

Lab Sample ID: 400-151568-20 DU
Matrix: Water
Analysis Batch: 363412

Client Sample ID: WGWC-15
Prep Type: Total/NA
Prep Batch: 359325

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0553	U	0.05190	U	0.0537	1.00	0.0838	pCi/L	0.03	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	93.5		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-358949/22-A
Matrix: Water
Analysis Batch: 360400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 358949

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3603	U	0.235	0.237	1.00	0.363	pCi/L	04/04/18 10:38	04/12/18 08:22	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110	04/04/18 10:38	04/12/18 08:22	1
Y Carrier	88.6		40 - 110	04/04/18 10:38	04/12/18 08:22	1

Lab Sample ID: LCS 160-358949/1-A
Matrix: Water
Analysis Batch: 360399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 358949

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	8.40	8.980		1.03	1.00	0.345	pCi/L	107	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	87.1		40 - 110

Lab Sample ID: 400-151568-11 DU
Matrix: Water
Analysis Batch: 360399

Client Sample ID: WGWC-19
Prep Type: Total/NA
Prep Batch: 358949

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.160	U	0.2758	U	0.220	1.00	0.346	pCi/L	0.26	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

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

Lab Sample ID: 400-151568-11 DU
Matrix: Water
Analysis Batch: 360399

Client Sample ID: WGWC-19
Prep Type: Total/NA
Prep Batch: 358949

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	92.3		40 - 110

Lab Sample ID: MB 160-359326/10-A
Matrix: Water
Analysis Batch: 360645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 359326

Analyte	<i>MB</i> Result	<i>MB</i> Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1146	U	0.197	0.197	1.00	0.335	pCi/L	04/06/18 10:12	04/13/18 15:26	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110	04/06/18 10:12	04/13/18 15:26	1
Y Carrier	87.9		40 - 110	04/06/18 10:12	04/13/18 15:26	1

Lab Sample ID: LCS 160-359326/1-A
Matrix: Water
Analysis Batch: 360645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359326

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	8.40	7.842		0.943	1.00	0.387	pCi/L	93	56 - 140

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	90.8		40 - 110

Lab Sample ID: 400-151568-20 DU
Matrix: Water
Analysis Batch: 360645

Client Sample ID: WGWC-15
Prep Type: Total/NA
Prep Batch: 359326

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.0431	U	0.4830		0.245	1.00	0.349	pCi/L	0.99	1

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	93.5		40 - 110
Y Carrier	90.8		40 - 110

QC Sample Results

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

TestAmerica Job ID: 400-151568-3
 SDG: Ash Pond

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

Lab Sample ID: 400-151568-11 DU
Matrix: Water
Analysis Batch: 363837

Client Sample ID: WGWC-19
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	0.252	U	0.4275		0.232	5.00	0.346	pCi/L	0.38	

Lab Sample ID: 400-151568-20 DU
Matrix: Water
Analysis Batch: 363837

Client Sample ID: WGWC-15
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	0.0985	U	0.5349		0.251	5.00	0.349	pCi/L	0.95	

Chain of Custody Record

Client Information
 Client Contact: Joju Abraham
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone:
 Email: JAbraham@southernco.com
 Project Name: CCR - Plant Wansley - Ash Pond
 Site: Georgia

Sampler: O. FUGUEA, S. ARKER
 Lab PM: Whitmore, Cheyenne R
 Carrier Tracking No(s): A/C to TA-ATC
 Phone: (770) 544-5998
 E-Mail: cheyenne.whitmore@testamericainc.com

CCC No: 400-72601-28757.1
 Page: 3 of 3
 Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Soil, O=Organic, OT=Other, AA=Asphalt)	Method	Notes
WGWC-15	3-30-18	1010	G	W	MN	1 2
EB-Z-3-30-18	3-30-18	0950	G	W	MN	1 1
WGWC-17	3-30-18	1120	G	W	MN	1 1
WGWC-10	3-30-18	1235	G	W	MN	1 1
WGWC-16	3-24-18	1520	G	W	MN	1 1
DUP-2	3-29-18	-	G	W	MN	1 1

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: 4-2-2018 / 11:00 AM
 Relinquished by: [Signature]
 Relinquished by: [Signature] Date/Time: 4/2/18 6:10
 Relinquished by: [Signature] Date/Time: 4/2/18 11:08

Special Instructions/Note:
 Extra Red Ink

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Archlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexene
 N - None
 O - AsNaO2
 P - Na2OAS
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecylhydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)

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

Relinquished by: [Signature] Date: 4/2/18
 Relinquished by: [Signature] Date/Time: 4/2/18 11:08
 Relinquished by: [Signature] Date/Time: 4/2/18 07:5

Custody Seal No.: Yes No
 Cooler Temperature(s) °C and Other Remarks:



Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: [Redacted] Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com Carrier Tracking No(s): A.C.L. to TA - ATL Lab #: 10f		Sample: C. Parker, O. Foy, sea Phone: 770-594-5998 Due Date Requested: IAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSONW#:		COC No: 400-72601-28757.1 Page: [Redacted] Job #:					
Analysis Requested 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 Metals App. IV (EPA 60207470) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Radium 226 & 228 (SW-846 9315/9320) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Fluoride <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Total Number of Containers: 3 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: Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, B=solid, O=soil, A=air, T=tissue, A=acid)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. IV (EPA 60207470)	Radium 226 & 228 (SW-846 9315/9320)	Fluoride	Total Number of Containers	Special Instructions/Note
W6WA-2	3/27/18	1505	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
W6WA-1	3/27/18	1555	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
W6WA-3	3/28/18	1220	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
W6WA-4	3/28/18	1115	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
W6WA-7	3/28/18	1325	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
FB-1-3-28-18	3/28/18	1000	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
W6WA-6	3/28/18	1015	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
DUP - 1	3/28/18	—	G	W	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 3-29-18 / 11:00 Company: ACC Relinquished by: _____ Date/Time: 3/29/18 / 16:00 Company: TH Relinquished by: _____ Date/Time: _____ Company: _____ Custody Seal No. _____ Δ Yes Δ No											

Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: (770) 594-5998 Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab Pk: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): ACC to T.A.-ATL Page: 2 of 3 Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSSW#:		Analysis Requested			
Field Filled Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
Field Filtered Sample (Yes or No)		Metas App. IV (EPA 80207470)		Special Instructions/Note:	
Fluoride (SW-846 9315/9320)		Radium 226 & 228 (SW-846 9315/9320)		Preservation Codes: 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 X - EDTA Y - EDA Z - other (specify)	
Sample Identification		Sample Date		Sample Time	
Sample Type (C=comp, G=grab)		Preservation Code:		Matrix (W=water, S=solid, O=soil, B=other)	
W6WA-5	9	3-28-18	G	W	W
W6WA-18	10	3-28-18	G	W	W
W6WC-19	11	3-29-18	G	W	W
W6WC-B	12	3-29-18	G	W	W
W6WC-9	13	3-29-18	G	W	W
FB-2-3-29-18	14	3-29-18	G	W	W
W6WC-14A	15	3-29-18	G	W	W
W6WC-13	14	3-29-18	G	W	W
W6WC-11	17	3-29-18	G	W	W
W6WC-12	19	3-29-18	G	W	W
EB-1-3-29-18	19	3-29-18	G	W	W
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:					
Relinquished by:		Date/Time: 3-30-18 11:00		Company: ACC	
Relinquished by:		Date/Time: 3/30/18 11:00		Company: ACC	
Relinquished by:		Date/Time: 3/30/18 08:40		Company: ACC	
Relinquished by:		Date/Time:		Company:	
Custody Seal No.		Custody Seal No.		Cooler Temperature(s) °C and Other Remarks: 3.1°C 2.3°C	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-151568-3

SDG Number: Ash Pond

Login Number: 151568

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3 IR8, 3.1°C, 2.3°C IR-8, 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	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-151568-3

SDG Number: Ash Pond

Login Number: 151568

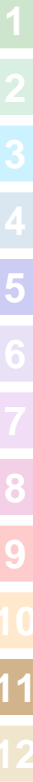
List Number: 3

Creator: Taylor, Kristene N

List Source: TestAmerica St. Louis

List Creation: 04/05/18 09:31 AM

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.	N/A	
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	22.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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 Wansley

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

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

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-18 *
Arizona	State Program	9	AZ0813	12-08-18
California	State Program	9	2886	06-30-18 *
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-18 *
Illinois	NELAP	5	200023	11-30-18
Iowa	State Program	7	373	12-01-18
Kansas	NELAP	7	E-10236	10-31-18
Kentucky (DW)	State Program	4	90125	12-31-18
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA180017	12-31-18
Maryland	State Program	3	310	09-30-18
Michigan	State Program	5	9005	06-30-18
Missouri	State Program	7	780	06-30-18
Nevada	State Program	9	MO000542018-1	07-31-18

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

TestAmerica Pensacola

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-151568-3
SDG: Ash Pond

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New Jersey	NELAP	2	MO002	06-30-18 *
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-18
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-18
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-18
Texas	NELAP	6	T104704193-17-11	07-31-18
US Fish & Wildlife	Federal		058448	08-31-18
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-18
Virginia	NELAP	3	460230	06-14-18 *
Washington	State Program	10	C592	08-30-18
West Virginia DEP	State Program	3	381	08-31-18 *

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

TestAmerica Pensacola

Product Name: Low-Flow System

Date: 2018-03-27 15:54:59

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Test site
Latitude 33° 7' 27.29"
Longitude -83° -15' -47.23"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Bladder
Tubing Diameter .375 in
Tubing Length 130 ft

Pump placement from TOC 124.6 ft

Well Information:

Well ID WGWA-1
Well diameter 2 in
Well Total Depth 129.60 ft
Screen Length 10 ft
Depth to Water 23.93 ft

Pumping Information:

Final Pumping Rate 90 mL/min
Total System Volume 3.308424 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.1 in
Total Volume Pumped 3.3 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	15:30:00	2399.97	17.01	5.61	38.40	0.59	24.00	0.97	107.23
Last 5	15:35:00	2699.97	17.18	5.54	38.45	0.89	24.00	1.21	109.16
Last 5	15:40:00	2999.97	17.38	5.46	38.10	0.72	24.00	1.32	113.92
Last 5	15:45:00	3300.03	17.23	5.41	38.12	0.81	24.00	1.39	117.79
Last 5	15:50:00	3599.97	17.05	5.39	38.02	0.70	24.00	1.44	120.02
Variance 0			0.20	-0.08	-0.35			0.11	4.77
Variance 1			-0.15	-0.05	0.02			0.07	3.87
Variance 2			-0.18	-0.01	-0.10			0.05	2.23

Notes

Collected at 15:55. Cloudy 50s

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-27 15:07:14

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Default Site
Latitude 33° 26' 15.85"
Longitude -85° -1' -20.54"
Sonde SN 466058
Turbidity Make/Model Hach 2100

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 104 ft

Pump placement from TOC 100 ft

Well Information:

Well ID WGWA-2
Well diameter 2 in
Well Total Depth 104.9 ft
Screen Length 10 ft
Depth to Water 8.56 ft

Pumping Information:

Final Pumping Rate 190 mL/min
Total System Volume 0.554593 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8 in
Total Volume Pumped 8.55 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			+/- 10	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:45:00	900.01	15.98	6.03	129.18	1.07	9.40	0.20	98.02
Last 5	14:50:02	1202.00	15.93	6.07	132.44	0.96	9.40	0.25	97.35
Last 5	14:55:05	1505.00	16.02	6.06	136.12	0.86	9.40	0.22	94.13
Last 5	15:00:08	1807.98	16.07	6.14	140.15	0.81	9.40	0.21	87.81
Last 5	15:05:08	2107.98	16.05	6.14	143.04	1.22	9.40	0.20	85.83
Variance 0			0.09	-0.01	3.68			-0.03	-3.22
Variance 1			0.04	0.08	4.02			-0.01	-6.33
Variance 2			-0.02	0.01	2.89			-0.01	-1.98

Notes

58F Cloudy sampled at 1505 on 3-27-18

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 12:17:22

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Bladder
Tubing Diameter .375 in
Tubing Length 19.0 ft

Pump placement from TOC 14.0 ft

Well Information:

Well ID WGWA-3
Well diameter 2 in
Well Total Depth 19.0 ft
Screen Length 10 ft
Depth to Water 2.68 ft

Pumping Information:

Final Pumping Rate 270 mL/min
Total System Volume 0.8976543 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 6.2 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	11:55:57	300.02	18.30	5.91	38.76	0.74	2.70	5.73	75.38
Last 5	12:00:57	600.02	17.78	5.84	38.17	0.92	2.70	6.00	69.76
Last 5	12:05:57	900.01	17.40	5.65	38.43	0.87	2.70	5.60	74.19
Last 5	12:10:57	1200.01	17.41	5.64	38.21	0.84	2.70	5.52	73.39
Last 5	12:15:57	1499.99	17.36	5.60	38.22	0.56	2.70	5.53	76.29
Variance 0			-0.38	-0.19	0.26			-0.40	4.44
Variance 1			0.01	-0.01	-0.22			-0.08	-0.81
Variance 2			-0.04	-0.04	0.02			0.01	2.90

Notes

Collected at 12:20. Sunny 60s.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 11:14:44

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Bladder
Tubing Diameter .375 in
Tubing Length 73.0 ft

Pump placement from TOC 68.1 ft

Well Information:

Well ID WGWA-4
Well diameter 2 in
Well Total Depth 73.1 ft
Screen Length 10 ft
Depth to Water 3.78 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 2.070461 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in
Total Volume Pumped 7 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:51:58	1799.98	16.68	7.05	148.67	0.59	4.40	0.09	58.42
Last 5	10:56:58	2099.98	17.02	6.97	147.48	0.56	4.40	0.10	51.47
Last 5	11:01:58	2399.97	17.15	6.88	146.84	0.60	4.50	0.09	48.53
Last 5	11:06:58	2699.97	17.65	6.86	145.54	0.79	4.50	0.10	43.25
Last 5	11:11:58	2999.97	17.29	6.79	146.28	0.69	4.60	0.10	41.60
Variance 0			0.13	-0.10	-0.64			-0.01	-2.94
Variance 1			0.50	-0.02	-1.30			0.01	-5.28
Variance 2			-0.36	-0.07	0.74			0.00	-1.64

Notes

Collected at 11:15. Sunny 60s. FB 1 here at 10:00

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 14:16:28

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peri Pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 18 ft

Pump placement from TOC 13.5 ft

Well Information:

Well ID WGWA-5
Well diameter 2 in
Well Total Depth 23.19 ft
Screen Length 10 ft
Depth to Water 11.11 ft

Pumping Information:

Final Pumping Rate 190 mL/min
Total System Volume 0.1703416 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 42.75 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	13:55:05	9904.89	17.09	5.97	23.11	10.70	11.40	5.45	158.32
Last 5	14:00:05	10204.88	17.04	5.97	23.06	10.70	11.40	5.47	158.03
Last 5	14:05:05	10504.88	16.89	5.97	23.18	10.20	11.40	5.51	159.06
Last 5	14:10:05	10804.87	16.89	5.97	23.20	10.20	11.40	5.54	159.27
Last 5	14:15:05	11104.87	16.87	5.95	23.13	9.89	11.40	5.54	160.79
Variance 0			-0.15	-0.00	0.12			0.04	1.02
Variance 1			-0.01	0.00	0.02			0.03	0.21
Variance 2			-0.02	-0.02	-0.07			0.00	1.53

Notes

Sampled at 1415 on 3-28-17. 62F Clear.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 10:19:47

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 104.5 ft

Pump placement from TOC 99.5 ft

Well Information:

Well ID WGWA-6
Well diameter 2 in
Well Total Depth 104.5 ft
Screen Length 10 ft
Depth to Water 12.79 ft

Pumping Information:

Final Pumping Rate 225 mL/min
Total System Volume 2.754599 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14 in
Total Volume Pumped 7.875 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	09:55:43	600.02	16.43	7.26	172.23	0.74	14.00	0.11	76.08
Last 5	10:00:43	900.01	16.41	7.29	172.60	0.88	14.00	0.12	71.84
Last 5	10:05:43	1200.00	16.56	7.28	172.90	0.90	14.00	0.14	68.16
Last 5	10:10:45	1502.00	16.47	7.26	173.15	1.16	14.00	0.15	65.43
Last 5	10:15:57	1813.99	16.56	7.28	173.35	1.00	14.00	0.16	61.82
Variance 0			0.15	-0.01	0.30			0.02	-3.68
Variance 1			-0.09	-0.02	0.25			0.01	-2.73
Variance 2			0.09	0.02	0.19			0.01	-3.61

Notes

Sampled at 1015 on 3-28-18. 62F Clear.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 13:25:30

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Peripump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 40.0 ft

Pump placement from TOC 34.6 ft

Well Information:

Well ID WGWA-7
Well diameter 2 in
Well Total Depth 39.6 ft
Screen Length 10 ft
Depth to Water 23.00 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.2685369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 4.5 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:03:49	300.02	17.93	5.20	26.29	3.60	23.00	7.57	104.84
Last 5	13:08:49	600.02	17.77	5.33	26.21	2.25	23.00	7.59	99.37
Last 5	13:13:49	900.01	17.76	5.29	26.22	1.65	23.00	7.60	105.06
Last 5	13:18:49	1200.01	17.78	5.30	26.06	1.02	23.00	7.58	107.43
Last 5	13:23:49	1500.00	17.75	5.29	26.04	0.81	23.00	7.57	111.45
Variance 0			-0.01	-0.04	0.01			0.01	5.70
Variance 1			0.02	0.01	-0.17			-0.02	2.36
Variance 2			-0.03	-0.01	-0.01			-0.01	4.02

Notes

Collected at 13:25. Sunny 70s

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-28 15:21:39

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 40.00 ft

Pump placement from TOC 35.00 ft

Well Information:

Well ID WGWA-18
Well diameter 2 in
Well Total Depth 40.00 ft
Screen Length 10.00 ft
Depth to Water 18.52 ft

Pumping Information:

Final Pumping Rate 30 mL/min
Total System Volume 1.353746 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20 in
Total Volume Pumped 3 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	15:00:09	300.03	19.36	6.84	202.32	8.60	20.00	4.25	74.88
Last 5	15:05:09	600.02	19.89	6.85	189.86	5.11	20.20	4.53	70.47
Last 5	15:10:09	900.01	19.86	6.85	185.48	5.10	20.20	3.36	68.87
Last 5	15:15:11	1202.01	19.68	6.85	184.07	5.02	20.30	3.33	67.20
Last 5	15:20:13	1504.01	19.77	6.84	181.92	4.19	20.40	3.22	65.50
Variance 0			-0.03	0.01	-4.38			-1.17	-1.60
Variance 1			-0.18	-0.00	-1.41			-0.03	-1.67
Variance 2			0.09	-0.01	-2.15			-0.12	-1.70

Notes

Sampled at 1520 on 3-28-18. 78F

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 14:05:04

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 59.0 ft

Pump placement from TOC 54.4 ft

Well Information:

Well ID WGWC-8
Well diameter 2 in
Well Total Depth 59.40 ft
Screen Length 10 ft
Depth to Water 2.87 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 0.7483419 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 24 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	13:39:16	900.01	16.47	5.47	643.20	0.89	4.40	0.87	136.79
Last 5	13:44:16	1200.00	16.57	5.48	653.98	0.79	4.50	0.91	135.38
Last 5	13:49:16	1500.00	16.54	5.46	665.17	0.88	4.60	1.12	135.85
Last 5	13:54:16	1799.99	16.38	5.45	665.64	1.09	4.70	1.08	136.26
Last 5	13:59:16	2099.99	16.41	5.43	674.44	0.95	4.80	1.11	137.19
Variance 0			-0.03	-0.02	11.18			0.21	0.46
Variance 1			-0.17	-0.01	0.48			-0.04	0.41
Variance 2			0.04	-0.02	8.79			0.03	0.93

Notes

Collected at 14:05. Cloudy 60s. FB 2 here at 13:40

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 12:28:43

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type Peripump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 61 ft

Pump placement from TOC 56.4 ft

Well Information:

Well ID WGWC-9
Well diameter 2 in
Well Total Depth 61.42 ft
Screen Length 10 ft
Depth to Water 15.2 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.3622688 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 29 in
Total Volume Pumped 5.2 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	12:07:09	900.00	19.00	6.01	158.76	6.35	17.00	1.02	98.41
Last 5	12:12:09	1199.99	18.92	5.95	158.67	4.78	17.40	1.05	99.60
Last 5	12:17:09	1499.99	19.00	5.95	158.24	4.22	17.60	1.23	97.16
Last 5	12:22:09	1799.99	19.01	5.93	157.55	2.34	17.70	1.28	97.25
Last 5	12:27:09	2099.99	18.79	5.89	157.33	1.47	17.80	1.30	99.39
Variance 0			0.09	0.00	-0.43			0.18	-2.44
Variance 1			0.01	-0.02	-0.69			0.06	0.09
Variance 2			-0.22	-0.03	-0.22			0.02	2.14

Notes

Collected at 12:30. Cloudy 60s

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-30 12:36:58

Project Information:

Operator Name O Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 147.00 ft

Pump placement from TOC 142.16 ft

Well Information:

Well ID WGWC-10
Well diameter 2 in
Well Total Depth 147.16 ft
Screen Length 10.00 ft
Depth to Water 18.73 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 3.677641 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 26 in
Total Volume Pumped 3 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	12:15:38	600.02	15.96	7.00	83.90	5.87	20.30	3.49	74.44
Last 5	12:20:38	900.01	16.07	7.01	83.68	3.70	20.80	3.74	73.83
Last 5	12:25:38	1200.00	16.12	7.03	81.20	7.26	20.80	4.17	71.73
Last 5	12:30:39	1501.00	16.35	7.00	80.22	5.39	20.90	4.30	71.59
Last 5	12:35:39	1800.99	16.65	6.98	80.18	4.55	20.90	4.32	71.58
Variance 0			0.05	0.02	-2.48			0.43	-2.10
Variance 1			0.23	-0.02	-0.98			0.13	-0.14
Variance 2			0.30	-0.03	-0.04			0.02	-0.01

Notes

Sampled at 1235 on 3-30-18. Cloudy 60F.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 12:12:13

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 49.50 ft

Pump placement from TOC 44.50 ft

Well Information:

Well ID WGWC-11
Well diameter 2 in
Well Total Depth 49.50 ft
Screen Length 10 ft
Depth to Water 25.39 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.560073 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 29 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	11:50:00	600.03	17.54	6.88	57.18	5.55	27.40	5.71	36.93
Last 5	11:55:00	900.02	17.46	6.90	57.11	4.60	27.60	5.66	41.08
Last 5	12:00:00	1200.01	17.45	6.87	57.34	4.19	24.70	5.95	46.26
Last 5	12:05:00	1500.00	17.63	6.80	57.67	3.15	24.80	5.78	46.10
Last 5	12:10:00	1800.00	17.59	6.85	57.77	3.31	24.80	5.76	49.96
Variance 0			-0.00	-0.03	0.23			0.29	5.18
Variance 1			0.18	-0.07	0.33			-0.17	-0.16
Variance 2			-0.05	0.05	0.10			-0.02	3.86

Notes

Sampled at 1210 on 3-29-18. 66F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 11:07:12

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 76.5 ft

Pump placement from TOC 71.50 ft

Well Information:

Well ID WGWC-12
Well diameter 2 in
Well Total Depth 76.50 ft
Screen Length 10 ft
Depth to Water 24.33 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.146476 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 16.2 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	10:45:07	4201.94	16.74	7.03	143.47	6.00	24.60	0.38	42.03
Last 5	10:50:07	4501.93	16.76	7.02	143.22	5.85	24.60	0.37	42.65
Last 5	10:55:07	4801.93	16.74	7.06	142.86	5.49	24.60	0.34	36.91
Last 5	11:00:07	5101.92	16.72	7.05	142.57	5.73	24.60	0.34	35.57
Last 5	11:05:07	5401.92	16.69	7.08	142.15	4.72	24.60	0.32	32.37
Variance 0			-0.02	0.04	-0.36			-0.02	-5.74
Variance 1			-0.03	-0.01	-0.29			-0.01	-1.34
Variance 2			-0.03	0.03	-0.42			-0.02	-3.20

Notes

Sampled at 1105 on 3-28-19. 66F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 13:31:19

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 96.31 ft

Pump placement from TOC 91.31 ft

Well Information:

Well ID WGWC-13
Well diameter 2 in
Well Total Depth 96.31 ft
Screen Length 10.00 ft
Depth to Water 13.93 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 2.576723 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 61 in
Total Volume Pumped 5 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	13:10:01	1500.00	18.44	6.96	130.81	1.19	18.40	0.14	63.33
Last 5	13:15:01	1800.00	18.16	6.96	130.13	1.29	18.60	0.14	60.61
Last 5	13:20:01	2100.00	18.02	6.95	126.48	2.07	19.00	0.15	59.36
Last 5	13:25:01	2399.99	18.65	6.91	124.61	1.27	19.00	0.18	53.45
Last 5	13:30:01	2699.99	18.89	6.99	121.48	1.49	19.00	0.23	51.84
Variance 0			-0.15	-0.01	-3.65			0.01	-1.25
Variance 1			0.64	-0.04	-1.87			0.03	-5.91
Variance 2			0.24	0.08	-3.13			0.05	-1.61

Notes

Sampled at 1330 on 3-29-19. 71F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 15:01:34

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peri pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 43 ft

Pump placement from TOC 38.93 ft

Well Information:

Well ID WGWC-14A
Well diameter 2 in
Well Total Depth 42.93 ft
Screen Length 10.00 ft
Depth to Water 14.53 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.2819272 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 15 in
Total Volume Pumped 3.75 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	14:40:01	300.03	17.74	6.54	61.64	6.31	15.50	2.43	68.21
Last 5	14:45:01	600.02	17.99	6.55	61.29	3.83	15.60	2.38	68.33
Last 5	14:50:01	900.02	18.12	6.54	61.03	3.97	15.80	2.33	70.74
Last 5	14:55:01	1200.00	18.35	6.52	61.70	4.14	15.80	2.27	72.24
Last 5	15:00:02	1501.01	18.70	6.51	61.47	2.17	15.80	2.26	74.40
Variance 0			0.14	-0.01	-0.26			-0.05	2.41
Variance 1			0.22	-0.02	0.67			-0.06	1.50
Variance 2			0.35	-0.01	-0.23			-0.01	2.16

Notes

Sampled at 1300 on 3-29-18. 73F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-30 10:15:41

Project Information:

Operator Name O Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 56.00 ft

Pump placement from TOC 51.00 ft

Well Information:

Well ID WGWC-15
Well diameter 2 in
Well Total Depth 56.00 ft
Screen Length 10.00 ft
Depth to Water 9.36 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.701244 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 96 in
Total Volume Pumped 5 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	09:55:02	1200.00	16.43	7.41	298.32	2.66	14.60	0.84	86.05
Last 5	10:00:02	1500.00	16.56	7.39	291.94	2.18	15.90	2.10	84.04
Last 5	10:05:02	1799.99	16.65	7.44	290.27	1.65	17.00	2.23	80.24
Last 5	10:10:02	2099.98	16.34	7.43	289.71	1.79	17.20	2.55	81.62
Last 5	10:15:02	2399.97	15.95	7.48	291.14	1.70	17.30	3.83	78.64
Variance 0			0.09	0.05	-1.67			0.13	-3.80
Variance 1			-0.31	-0.01	-0.57			0.32	1.38
Variance 2			-0.39	0.05	1.43			1.28	-2.97

Notes

Sampled at 1010 on 3-30-18. Cloudy 55F

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 15:19:43

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 34 ft

Pump placement from TOC 29.7 ft

Well Information:

Well ID WGWC-16
Well diameter 2 in
Well Total Depth 34.70 ft
Screen Length 10 ft
Depth to Water 8.97 ft

Pumping Information:

Final Pumping Rate 270 mL/min
Total System Volume 0.6367564 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 2 in
Total Volume Pumped 8.5 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	14:57:57	600.01	17.74	5.51	2024.87	21.00	9.10	2.16	143.12
Last 5	15:02:57	900.01	17.64	5.44	2151.82	11.00	9.10	1.01	143.24
Last 5	15:07:57	1200.01	17.70	5.39	2193.92	5.85	9.10	0.56	142.48
Last 5	15:12:57	1500.01	17.68	5.36	2212.64	4.12	9.10	0.39	142.33
Last 5	15:17:57	1800.01	17.67	5.33	2225.10	2.41	9.10	0.30	142.87
Variance 0			0.06	-0.05	42.10			-0.45	-0.76
Variance 1			-0.03	-0.03	18.71			-0.16	-0.15
Variance 2			-0.00	-0.02	12.47			-0.09	0.54

Notes

Collected at 15:20. Cloudy 70s. DUP 2 here

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-30 11:21:10

Project Information:

Operator Name O Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 96 ft

Pump placement from TOC 91.16 ft

Well Information:

Well ID WGWC-17
Well diameter 2 in
Well Total Depth 96.16 ft
Screen Length 10.00 ft
Depth to Water 19.77 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 2.56999 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 24 in
Total Volume Pumped 4.8 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 100
Last 5	11:00:02	600.02	16.13	6.70	139.37	2.81	21.40	0.19	72.92
Last 5	11:05:02	900.01	16.26	6.66	140.24	2.52	21.50	0.15	74.20
Last 5	11:10:03	1201.01	16.38	6.69	140.33	2.68	21.60	0.17	74.33
Last 5	11:15:07	1505.00	16.29	6.72	138.42	1.76	21.70	0.30	75.00
Last 5	11:20:07	1804.99	16.38	6.71	135.93	1.64	21.80	0.46	73.95
Variance 0			0.11	0.03	0.09			0.02	0.13
Variance 1			-0.08	0.03	-1.91			0.13	0.68
Variance 2			0.09	-0.01	-2.49			0.16	-1.05

Notes

Sampled at 3-30-18 1120. Cloudy 57F.

Grab Samples

Product Name: Low-Flow System

Date: 2018-03-29 10:46:57

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466086
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 95.0 ft

Pump placement from TOC 89.8 ft

Well Information:

Well ID WGWC-19
Well diameter 2 in
Well Total Depth 94.8 ft
Screen Length 10 ft
Depth to Water 19.12 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9090251 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 9 in
Total Volume Pumped 6.8 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	+/- 0.1	+/- 5%	+/- 0		+/- 10%	+/- 0
Last 5	10:24:16	1499.99	17.09	7.07	140.41	6.40	19.90	0.10	75.65
Last 5	10:29:16	1799.99	17.14	7.02	140.91	5.07	20.00	0.11	72.95
Last 5	10:34:16	2099.98	17.10	6.95	141.90	4.91	20.00	0.11	72.64
Last 5	10:39:16	2399.98	16.96	6.91	143.18	3.37	20.00	0.12	71.53
Last 5	10:44:16	2699.98	17.00	6.88	144.30	3.59	20.00	0.13	71.08
Variance 0			-0.04	-0.07	0.98			0.00	-0.31
Variance 1			-0.13	-0.03	1.29			0.01	-1.12
Variance 2			0.04	-0.03	1.12			0.01	-0.45

Notes

Collected at 10:45. Cloudy 60s. Extra Rad here

Grab Samples

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: 400-155198-1

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

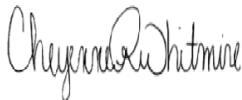
For:

Southern Company

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Authorized for release by:

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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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Job ID: 400-155198-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-155198-1

HPLC/IC

Method(s) 300.0: The following samples were diluted due to high conductivity: WGWA-16 (400-155198-12) and DUP-1 (400-155198-16). Elevated reporting limits (RL) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWA-16 (400-155198-12), DUP-1 (400-155198-16), WGWC-8 (400-155198-18) and DUP-2 (400-155198-24). Elevated reporting limits (RLs) are provided.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 403475 and 403476 and analytical batch 403649 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 serial dilution performed for the following sample associated with batch 403649 was outside control limits due to a unit conversion error: (400-155198-B-11-A SD)

Method(s) 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWA-16 (400-155198-12), DUP-1 (400-155198-16) and DUP-2 (400-155198-24). Elevated reporting limits (RLs) are provided.

Detection Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 400-155198-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.8		1.0	0.89	mg/L	1		300.0	Total/NA
Arsenic	0.0010	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
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	0.00094	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0033	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-2

Lab Sample ID: 400-155198-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	0.84	J	1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.0012	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.020		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	12		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00085	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0072		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	80		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-3

Lab Sample ID: 400-155198-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6		1.0	0.89	mg/L	1		300.0	Total/NA
Arsenic	0.00087	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0012	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-4

Lab Sample ID: 400-155198-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	6.9		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00050	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0057		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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-4 (Continued)

Lab Sample ID: 400-155198-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	15		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0045	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.00032	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	92		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-5

Lab Sample ID: 400-155198-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.7		1.0	0.89	mg/L	1		300.0	Total/NA
Barium	0.016		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
Selenium	0.00025	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-6

Lab Sample ID: 400-155198-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.093	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	8.3		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0067		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	25		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0041	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-7

Lab Sample ID: 400-155198-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.7		1.0	0.89	mg/L	1		300.0	Total/NA
Arsenic	0.00050	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.012		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.94		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	14		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-18

Lab Sample ID: 400-155198-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.0		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.085	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	8.2		1.0	0.70	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-155198-1
 SDG: Ash Pond

Client Sample ID: WGWA-18 (Continued)

Lab Sample ID: 400-155198-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00057	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	11		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0021	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	38		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-9

Lab Sample ID: 400-155198-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	1.4		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	37		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.00088	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.39		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	7.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.034		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0046	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.0025		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-11

Lab Sample ID: 400-155198-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.0		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.7		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.030		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0011	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	16		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-15

Lab Sample ID: 400-155198-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.3		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.79		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	44		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.0020		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.022		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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-15 (Continued)

Lab Sample ID: 400-155198-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	29		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.0052		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0056	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.00050	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	170		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-16

Lab Sample ID: 400-155198-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	290		10	8.9	mg/L	10		300.0	Total/NA
Sulfate - DL	620		20	14	mg/L	20		300.0	Total/NA
Barium	0.046		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00070	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0035		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0090		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.012		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00017	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Boron - DL	5.4		0.50	0.21	mg/L	50		6020	Total Recoverable
Calcium - DL	260		2.5	1.3	mg/L	50		6020	Total Recoverable
Total Dissolved Solids	1500		10	6.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-19

Lab Sample ID: 400-155198-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.4		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.35		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	3.5		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.0011	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	8.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Lithium	0.048		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0014	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	74		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-1-6-13-18

Lab Sample ID: 400-155198-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.029	J	0.050	0.021	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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: EB-2-6-14-18

Lab Sample ID: 400-155198-15

No Detections.

Client Sample ID: DUP-1

Lab Sample ID: 400-155198-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	290		10	8.9	mg/L	10		300.0	Total/NA
Sulfate - DL	600		20	14	mg/L	20		300.0	Total/NA
Barium	0.045		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00061	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0036		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0096		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.011		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00016	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Boron - DL	6.0		0.50	0.21	mg/L	50		6020	Total Recoverable
Calcium - DL	260		2.5	1.3	mg/L	50		6020	Total Recoverable
Total Dissolved Solids	1500		10	6.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-1-6-14-18

Lab Sample ID: 400-155198-17

No Detections.

Client Sample ID: WGWC-8

Lab Sample ID: 400-155198-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.56		0.20	0.082	mg/L	1		300.0	Total/NA
Chloride - DL	58		5.0	4.5	mg/L	5		300.0	Total/NA
Sulfate - DL	170		5.0	3.5	mg/L	5		300.0	Total/NA
Barium	0.0028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.0015	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	1.7		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	52		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	0.015		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.0031		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	410		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-10

Lab Sample ID: 400-155198-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.15	J	0.20	0.082	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-10 (Continued)

Lab Sample ID: 400-155198-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	2.0		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00050	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	7.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0023	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
Lithium	0.0084		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	40		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-12

Lab Sample ID: 400-155198-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.0		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.10	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	14		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00052	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.015		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	13		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00067	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0062		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	94		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-13

Lab Sample ID: 400-155198-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.27		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	5.0		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00093	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	5.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00054	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0018	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0018	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	88		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-14A

Lab Sample ID: 400-155198-22

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-14A (Continued)

Lab Sample ID: 400-155198-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	5.8		1.0	0.70	mg/L	1		300.0	Total/NA
Barium	0.023		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.011		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0018	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Thallium	0.00014	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	52		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-17

Lab Sample ID: 400-155198-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.5		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.11	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	16		1.0	0.70	mg/L	1		300.0	Total/NA
Arsenic	0.00076	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	6.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00055	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0046	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0026	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	100		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-2

Lab Sample ID: 400-155198-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.43		0.20	0.082	mg/L	1		300.0	Total/NA
Chloride - DL	59		5.0	4.5	mg/L	5		300.0	Total/NA
Sulfate - DL	180		5.0	3.5	mg/L	5		300.0	Total/NA
Arsenic	0.0010	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0028		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.0015	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	51		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	0.015		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.0033		0.0013	0.00024	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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: DUP-2 (Continued)

Lab Sample ID: 400-155198-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron - DL	1.7		0.25	0.11	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	420		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-2-6-14-18

Lab Sample ID: 400-155198-25

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 Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	SW846	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-155198-1	WGWA-1	Water	06/13/18 15:43	06/15/18 09:03
400-155198-2	WGWA-2	Water	06/14/18 10:16	06/15/18 09:03
400-155198-3	WGWA-3	Water	06/14/18 11:40	06/15/18 09:03
400-155198-4	WGWA-4	Water	06/14/18 10:45	06/15/18 09:03
400-155198-5	WGWA-5	Water	06/13/18 16:30	06/15/18 09:03
400-155198-6	WGWA-6	Water	06/13/18 15:05	06/15/18 09:03
400-155198-7	WGWA-7	Water	06/14/18 12:55	06/15/18 09:03
400-155198-8	WGWA-18	Water	06/13/18 13:05	06/15/18 09:03
400-155198-9	WGWC-9	Water	06/14/18 12:10	06/15/18 09:03
400-155198-10	WGWC-11	Water	06/14/18 11:54	06/15/18 09:03
400-155198-11	WGWC-15	Water	06/14/18 13:15	06/15/18 09:03
400-155198-12	WGWC-16	Water	06/14/18 11:10	06/15/18 09:03
400-155198-13	WGWC-19	Water	06/14/18 11:00	06/15/18 09:03
400-155198-14	EB-1-6-13-18	Water	06/13/18 14:55	06/15/18 09:03
400-155198-15	EB-2-6-14-18	Water	06/14/18 13:30	06/15/18 09:03
400-155198-16	DUP-1	Water	06/14/18 00:00	06/15/18 09:03
400-155198-17	FB-1-6-14-18	Water	06/14/18 11:45	06/15/18 09:03
400-155198-18	WGWC-8	Water	06/14/18 13:40	06/16/18 08:29
400-155198-19	WGWC-10	Water	06/14/18 17:30	06/16/18 08:29
400-155198-20	WGWC-12	Water	06/14/18 14:36	06/16/18 08:29
400-155198-21	WGWC-13	Water	06/14/18 16:13	06/16/18 08:29
400-155198-22	WGWC-14A	Water	06/14/18 15:50	06/16/18 08:29
400-155198-23	WGWC-17	Water	06/14/18 15:50	06/16/18 08:29
400-155198-24	DUP-2	Water	06/14/18 00:00	06/16/18 08:29
400-155198-25	FB-2-6-14-18	Water	06/14/18 14:55	06/16/18 08:29

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
 SDG: Ash Pond

Client Sample ID: WGWA-1
Date Collected: 06/13/18 15:43
Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-1
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.8		1.0	0.89	mg/L			07/03/18 11:18	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 11:18	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 11:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0010	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 17:33	5
Barium	0.045		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 17:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:33	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 17:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:33	5
Calcium	1.1		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 17:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 17:33	5
Cobalt	0.00094	J	0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 17:33	5
Lithium	0.0033	J	0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 17:33	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 17:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 17:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 17:33	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		07/09/18 12:13	07/09/18 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			06/20/18 17:23	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-155198-2

Date Collected: 06/14/18 10:16

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		1.0	0.89	mg/L			07/03/18 11:41	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 11:41	1
Sulfate	0.84	J	1.0	0.70	mg/L			07/03/18 11:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0012	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 17:37	5
Barium	0.020		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 17:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:37	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 17:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:37	5
Calcium	12		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 17:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 17:37	5
Cobalt	0.00085	J	0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 17:37	5
Lithium	0.0072		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 17:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 17:37	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 17:37	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 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		07/09/18 12:13	07/09/18 17:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	80		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-3

Lab Sample ID: 400-155198-3

Date Collected: 06/14/18 11:40

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.89	mg/L			07/03/18 12:03	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 12:03	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 12:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00087	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 17:42	5
Barium	0.013		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 17:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:42	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 17:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 17:42	5
Calcium	2.0		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 17:42	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 17:42	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 17:42	5
Lithium	0.0012	J	0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 17:42	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 17:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 17:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 17:42	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		07/09/18 12:13	07/09/18 17:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-155198-4

Date Collected: 06/14/18 10:45

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			07/03/18 12:26	1
Fluoride	0.12	J	0.20	0.082	mg/L			07/03/18 12:26	1
Sulfate	6.9		1.0	0.70	mg/L			07/03/18 12:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00050	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 18:04	5
Barium	0.0057		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:04	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:04	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:04	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:04	5
Calcium	15		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:04	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:04	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:04	5
Lithium	0.0045	J	0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:04	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:04	5
Selenium	0.00032	J	0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:04	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 18:04	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		07/09/18 12:13	07/09/18 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	92		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-155198-5

Date Collected: 06/13/18 16:30

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.89	mg/L			07/03/18 12:49	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 12:49	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 12:49	1

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		07/05/18 09:32	07/05/18 18:09	5
Barium	0.016		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:09	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:09	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:09	5
Calcium	1.2		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:09	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:09	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:09	5
Selenium	0.00025	J	0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:09	5
Thallium	<0.00085		0.00050	0.00085	mg/L		07/05/18 09:32	07/05/18 18:09	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		07/09/18 12:13	07/09/18 17:46	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			06/20/18 17:23	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-155198-6

Date Collected: 06/13/18 15:05

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.89	mg/L			07/03/18 15:38	1
Fluoride	0.093	J	0.20	0.082	mg/L			07/03/18 15:38	1
Sulfate	8.3		1.0	0.70	mg/L			07/03/18 15:38	1

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		07/05/18 09:32	07/05/18 18:13	5
Barium	0.0067		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:13	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:13	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:13	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:13	5
Calcium	25		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:13	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:13	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:13	5
Lithium	0.0041	J	0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:13	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:13	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:13	5
Thallium	<0.00085		0.00050	0.00085	mg/L		07/05/18 09:32	07/05/18 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		07/09/18 12:13	07/09/18 17:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		5.0	3.4	mg/L			06/20/18 17:23	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-7

Date Collected: 06/14/18 12:55

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.89	mg/L			07/03/18 20:58	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 20:58	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 20:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00050	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 18:18	5
Barium	0.012		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:18	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:18	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:18	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:18	5
Calcium	0.94		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:18	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:18	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:18	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:18	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:18	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:18	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 18:18	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		07/09/18 12:13	07/09/18 18:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-18

Date Collected: 06/13/18 13:05

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		1.0	0.89	mg/L			07/03/18 23:37	1
Fluoride	0.085	J	0.20	0.082	mg/L			07/03/18 23:37	1
Sulfate	8.2		1.0	0.70	mg/L			07/03/18 23:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00057	J	0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 18:22	5
Barium	0.013		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:22	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:22	5
Calcium	11		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:22	5
Cobalt	0.0021	J	0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:22	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:22	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:22	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 18:22	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		07/09/18 12:13	07/09/18 18:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	38		5.0	3.4	mg/L			06/20/18 17:23	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-9

Date Collected: 06/14/18 12:10

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			07/04/18 00:00	1
Fluoride	1.4		0.20	0.082	mg/L			07/04/18 00:00	1
Sulfate	37		1.0	0.70	mg/L			07/04/18 00:00	1

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		07/05/18 09:32	07/05/18 18:27	5
Barium	0.00088	J	0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:27	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:27	5
Boron	0.39		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:27	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:27	5
Calcium	7.5		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:27	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:27	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:27	5
Lithium	0.034		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:27	5
Molybdenum	0.0046	J	0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:27	5
Selenium	0.0025		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:27	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 18:27	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		07/09/18 12:13	07/09/18 18:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-155198-10

Date Collected: 06/14/18 11:54

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.0		1.0	0.89	mg/L			07/04/18 00:23	1
Fluoride	<0.082		0.20	0.082	mg/L			07/04/18 00:23	1
Sulfate	1.7		1.0	0.70	mg/L			07/04/18 00:23	1

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		07/05/18 09:32	07/05/18 18:31	5
Barium	0.030		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 18:31	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:31	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 18:31	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 18:31	5
Calcium	2.2		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 18:31	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 18:31	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 18:31	5
Lithium	0.0011	J	0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 18:31	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 18:31	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 18:31	5
Thallium	<0.00085		0.00050	0.00085	mg/L		07/05/18 09:32	07/05/18 18:31	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		07/09/18 12:13	07/09/18 18:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	16		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 400-155198-11

Date Collected: 06/14/18 13:15

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.89	mg/L			07/04/18 00:46	1
Fluoride	0.79		0.20	0.082	mg/L			07/04/18 00:46	1
Sulfate	44		1.0	0.70	mg/L			07/04/18 00:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0020		0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 18:54	5
Barium	0.022		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 18:54	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 18:54	5
Boron	<0.021	F1	0.050	0.021	mg/L		07/05/18 09:36	07/05/18 18:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 18:54	5
Calcium	29		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 18:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 18:54	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 18:54	5
Lithium	0.0052		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 18:54	5
Molybdenum	0.0056	J	0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 18:54	5
Selenium	0.00050	J	0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 18:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 18:54	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		07/09/18 12:31	07/11/18 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-155198-12

Date Collected: 06/14/18 11:10

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		10	8.9	mg/L			07/04/18 04:57	10
Fluoride	<0.82		2.0	0.82	mg/L			07/04/18 04:57	10

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	620		20	14	mg/L			07/05/18 20:57	20

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		07/05/18 09:36	07/05/18 19:35	5
Barium	0.046		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:35	5
Cadmium	0.00070	J	0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:35	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:35	5
Cobalt	0.0035		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:35	5
Lithium	0.0090		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:35	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:35	5
Selenium	0.012		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:35	5
Thallium	0.00017	J	0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:35	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.4		0.50	0.21	mg/L		07/05/18 09:36	07/06/18 16:17	50
Calcium	260		2.5	1.3	mg/L		07/05/18 09:36	07/06/18 16:17	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/09/18 12:31	07/11/18 17:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		10	6.8	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-155198-13

Date Collected: 06/14/18 11:00

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		1.0	0.89	mg/L			07/04/18 03:48	1
Fluoride	0.35		0.20	0.082	mg/L			07/04/18 03:48	1
Sulfate	3.5		1.0	0.70	mg/L			07/04/18 03:48	1

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		07/05/18 09:36	07/05/18 19:39	5
Barium	0.0011	J	0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:39	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/06/18 16:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:39	5
Calcium	8.9		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 19:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:39	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:39	5
Lithium	0.048		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:39	5
Molybdenum	0.0014	J	0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:39	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:39	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		07/09/18 12:31	07/11/18 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	74		5.0	3.4	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: EB-1-6-13-18

Lab Sample ID: 400-155198-14

Date Collected: 06/13/18 14:55

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/04/18 05:19	1
Fluoride	<0.082		0.20	0.082	mg/L			07/04/18 05:19	1
Sulfate	<0.70		1.0	0.70	mg/L			07/04/18 05:19	1

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		07/05/18 09:36	07/05/18 19:43	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:43	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:43	5
Boron	0.029	J	0.050	0.021	mg/L		07/05/18 09:36	07/05/18 19:43	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:43	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 19:43	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:43	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:43	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:43	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:43	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:43	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:43	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		07/09/18 12:31	07/11/18 17:40	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			06/20/18 17:23	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: EB-2-6-14-18

Lab Sample ID: 400-155198-15

Date Collected: 06/14/18 13:30

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/04/18 05:42	1
Fluoride	<0.082		0.20	0.082	mg/L			07/04/18 05:42	1
Sulfate	<0.70		1.0	0.70	mg/L			07/04/18 05:42	1

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		07/05/18 09:36	07/05/18 19:48	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:48	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:48	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 19:48	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:48	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 19:48	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:48	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:48	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:48	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:48	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:48	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:48	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		07/09/18 12:31	07/11/18 17:42	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			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: DUP-1

Date Collected: 06/14/18 00:00

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-16

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		10	8.9	mg/L			07/04/18 06:05	10
Fluoride	<0.82		2.0	0.82	mg/L			07/04/18 06:05	10

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	600		20	14	mg/L			07/05/18 21:19	20

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		07/05/18 09:36	07/05/18 19:52	5
Barium	0.045		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:52	5
Cadmium	0.00061	J	0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:52	5
Cobalt	0.0036		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:52	5
Lithium	0.0096		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:52	5
Selenium	0.011		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:52	5
Thallium	0.00016	J	0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:52	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	6.0		0.50	0.21	mg/L		07/05/18 09:36	07/09/18 13:30	50
Calcium	260		2.5	1.3	mg/L		07/05/18 09:36	07/09/18 13:30	50

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/09/18 12:31	07/11/18 17:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1500		10	6.8	mg/L			06/21/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: FB-1-6-14-18

Lab Sample ID: 400-155198-17

Date Collected: 06/14/18 11:45

Matrix: Water

Date Received: 06/15/18 09:03

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/05/18 20:34	1
Fluoride	<0.082		0.20	0.082	mg/L			07/05/18 20:34	1
Sulfate	<0.70		1.0	0.70	mg/L			07/05/18 20:34	1

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		07/05/18 09:36	07/05/18 19:57	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 19:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:57	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/06/18 16:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 19:57	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 19:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 19:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 19:57	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 19:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 19:57	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 19:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 19:57	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		07/09/18 12:31	07/11/18 17:45	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			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 400-155198-18

Date Collected: 06/14/18 13:40

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.56		0.20	0.082	mg/L			07/05/18 16:00	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		5.0	4.5	mg/L			07/09/18 13:45	5
Sulfate	170		5.0	3.5	mg/L			07/09/18 13:45	5

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		07/05/18 09:36	07/05/18 20:19	5
Barium	0.0028		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:19	5
Beryllium	0.0015	J	0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:19	5
Boron	1.7		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:19	5
Calcium	52		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:19	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:19	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:19	5
Lithium	0.015		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:19	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:19	5
Selenium	0.0031		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:19	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		07/09/18 12:31	07/11/18 17:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	410		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-10

Date Collected: 06/14/18 17:30

Date Received: 06/16/18 08:29

Lab Sample ID: 400-155198-19

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			07/05/18 17:08	1
Fluoride	0.15	J	0.20	0.082	mg/L			07/05/18 17:08	1
Sulfate	2.0		1.0	0.70	mg/L			07/05/18 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00050	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:24	5
Barium	0.038		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:24	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:24	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:24	5
Calcium	7.7		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:24	5
Chromium	0.0023	J	0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:24	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:24	5
Lithium	0.0084		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:24	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:24	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:24	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:24	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		07/09/18 12:31	07/11/18 17:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	40		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-155198-20

Date Collected: 06/14/18 14:36

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.0		1.0	0.89	mg/L			07/05/18 17:31	1
Fluoride	0.10	J	0.20	0.082	mg/L			07/05/18 17:31	1
Sulfate	14		1.0	0.70	mg/L			07/05/18 17:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00052	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:29	5
Barium	0.015		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:29	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:29	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:29	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:29	5
Calcium	13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:29	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:29	5
Cobalt	0.00067	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:29	5
Lithium	0.0062		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:29	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:29	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:29	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:29	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		07/09/18 12:31	07/11/18 17:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	94		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-155198-21

Date Collected: 06/14/18 16:13

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			07/05/18 17:54	1
Fluoride	0.27		0.20	0.082	mg/L			07/05/18 17:54	1
Sulfate	5.0		1.0	0.70	mg/L			07/05/18 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00093	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:33	5
Barium	0.055		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:33	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:33	5
Calcium	5.5		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:33	5
Cobalt	0.00054	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:33	5
Lithium	0.0018	J	0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:33	5
Molybdenum	0.0018	J	0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:33	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		07/09/18 12:31	07/11/18 17:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	88		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-155198-22

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0	0.89	mg/L			07/05/18 18:17	1
Fluoride	<0.082		0.20	0.082	mg/L			07/05/18 18:17	1
Sulfate	5.8		1.0	0.70	mg/L			07/05/18 18:17	1

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		07/05/18 09:36	07/05/18 20:37	5
Barium	0.023		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:37	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:37	5
Calcium	1.1		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:37	5
Cobalt	0.011		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:37	5
Lithium	0.0018	J	0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:37	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:37	5
Thallium	0.00014	J	0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:37	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		07/09/18 12:31	07/11/18 18:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	52		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-155198-23

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.89	mg/L			07/05/18 19:25	1
Fluoride	0.11	J	0.20	0.082	mg/L			07/05/18 19:25	1
Sulfate	16		1.0	0.70	mg/L			07/05/18 19:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00076	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:42	5
Barium	0.013		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:42	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:42	5
Calcium	6.2		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:42	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:42	5
Cobalt	0.00055	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:42	5
Lithium	0.0046	J	0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:42	5
Molybdenum	0.0026	J	0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:42	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		07/09/18 12:31	07/11/18 18:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 06/14/18 00:00

Date Received: 06/16/18 08:29

Lab Sample ID: 400-155198-24

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.43		0.20	0.082	mg/L			07/05/18 19:48	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		5.0	4.5	mg/L			07/09/18 14:08	5
Sulfate	180		5.0	3.5	mg/L			07/09/18 14:08	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0010	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:46	5
Barium	0.0028		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:46	5
Beryllium	0.0015	J	0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:46	5
Calcium	51		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:46	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:46	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:46	5
Lithium	0.015		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:46	5
Selenium	0.0033		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 20:46	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.7		0.25	0.11	mg/L		07/05/18 09:36	07/09/18 15:41	25

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/09/18 12:31	07/11/18 18:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		5.0	3.4	mg/L			06/21/18 17:00	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: FB-2-6-14-18

Lab Sample ID: 400-155198-25

Date Collected: 06/14/18 14:55

Matrix: Water

Date Received: 06/16/18 08:29

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/05/18 20:11	1
Fluoride	<0.082		0.20	0.082	mg/L			07/05/18 20:11	1
Sulfate	<0.70		1.0	0.70	mg/L			07/05/18 20:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00059	J	0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 20:51	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 20:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:51	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 20:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 20:51	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 20:51	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 20:51	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 20:51	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 20:51	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 20:51	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 20:51	5
Thallium	<0.00085		0.00050	0.00085	mg/L		07/05/18 09:36	07/05/18 20:51	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		07/09/18 12:31	07/11/18 18:07	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			06/21/18 17:00	1

Definitions/Glossary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Qualifiers

HPLC/IC

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.

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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-1

Date Collected: 06/13/18 15:43

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403291	07/03/18 11:18	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 17:33	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:39	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401798	06/20/18 17:23	RRC	TAL PEN

Client Sample ID: WGWA-2

Date Collected: 06/14/18 10:16

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403291	07/03/18 11:41	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 17:37	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:40	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWA-3

Date Collected: 06/14/18 11:40

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403291	07/03/18 12:03	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 17:42	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:42	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWA-4

Date Collected: 06/14/18 10:45

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403291	07/03/18 12:26	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:04	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:44	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-155198-5

Date Collected: 06/13/18 16:30

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403291	07/03/18 12:49	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:09	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:46	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401798	06/20/18 17:23	RRC	TAL PEN

Client Sample ID: WGWA-6

Lab Sample ID: 400-155198-6

Date Collected: 06/13/18 15:05

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/03/18 15:38	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:13	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 17:58	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401798	06/20/18 17:23	RRC	TAL PEN

Client Sample ID: WGWA-7

Lab Sample ID: 400-155198-7

Date Collected: 06/14/18 12:55

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/03/18 20:58	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:18	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 18:00	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWA-18

Lab Sample ID: 400-155198-8

Date Collected: 06/13/18 13:05

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/03/18 23:37	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:22	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 18:02	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401798	06/20/18 17:23	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-155198-9

Date Collected: 06/14/18 12:10

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/04/18 00:00	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:27	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 18:04	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWC-11

Lab Sample ID: 400-155198-10

Date Collected: 06/14/18 11:54

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/04/18 00:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			403475	07/05/18 09:32	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:31	DRE	TAL PEN
Total/NA	Prep	7470A			403766	07/09/18 12:13	DN1	TAL PEN
Total/NA	Analysis	7470A		1	403896	07/09/18 18:06	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWC-15

Lab Sample ID: 400-155198-11

Date Collected: 06/14/18 13:15

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403427	07/04/18 00:46	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 18:54	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:22	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWC-16

Lab Sample ID: 400-155198-12

Date Collected: 06/14/18 11:10

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	403464	07/04/18 04:57	JAW	TAL PEN
Total/NA	Analysis	300.0	DL	20	403546	07/05/18 20:57	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:35	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	50	403822	07/06/18 16:17	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-155198-12

Date Collected: 06/14/18 11:10

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:30	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: WGWC-19

Lab Sample ID: 400-155198-13

Date Collected: 06/14/18 11:00

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403464	07/04/18 03:48	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:39	DRE	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403822	07/06/18 16:21	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:38	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: EB-1-6-13-18

Lab Sample ID: 400-155198-14

Date Collected: 06/13/18 14:55

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403464	07/04/18 05:19	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:43	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:40	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401798	06/20/18 17:23	RRC	TAL PEN

Client Sample ID: EB-2-6-14-18

Lab Sample ID: 400-155198-15

Date Collected: 06/14/18 13:30

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403464	07/04/18 05:42	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:48	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:42	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: DUP-1

Lab Sample ID: 400-155198-16

Date Collected: 06/14/18 00:00

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	403464	07/04/18 06:05	JAW	TAL PEN
Total/NA	Analysis	300.0	DL	20	403546	07/05/18 21:19	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:52	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	50	403911	07/09/18 13:30	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:43	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401953	06/21/18 14:06	RRC	TAL PEN

Client Sample ID: FB-1-6-14-18

Lab Sample ID: 400-155198-17

Date Collected: 06/14/18 11:45

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 20:34	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 19:57	DRE	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403822	07/06/18 16:26	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:45	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: WGWC-8

Lab Sample ID: 400-155198-18

Date Collected: 06/14/18 13:40

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 16:00	JAW	TAL PEN
Total/NA	Analysis	300.0	DL	5	403836	07/09/18 13:45	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:19	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:47	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-155198-19

Date Collected: 06/14/18 17:30

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 17:08	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:24	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:55	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: WGWC-12

Lab Sample ID: 400-155198-20

Date Collected: 06/14/18 14:36

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 17:31	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:29	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:57	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: WGWC-13

Lab Sample ID: 400-155198-21

Date Collected: 06/14/18 16:13

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 17:54	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:33	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 17:59	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: WGWC-14A

Lab Sample ID: 400-155198-22

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 18:17	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:37	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 18:01	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-155198-23

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 19:25	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:42	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 18:03	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: DUP-2

Lab Sample ID: 400-155198-24

Date Collected: 06/14/18 00:00

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 19:48	JAW	TAL PEN
Total/NA	Analysis	300.0	DL	5	403836	07/09/18 14:08	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:46	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	25	403911	07/09/18 15:41	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 18:05	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	RRC	TAL PEN

Client Sample ID: FB-2-6-14-18

Lab Sample ID: 400-155198-25

Date Collected: 06/14/18 14:55

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	403546	07/05/18 20:11	JAW	TAL PEN
Total Recoverable	Prep	3005A			403476	07/05/18 09:36	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	403649	07/05/18 20:51	DRE	TAL PEN
Total/NA	Prep	7470A			403767	07/09/18 12:31	DN1	TAL PEN
Total/NA	Analysis	7470A		1	404209	07/11/18 18:07	DN1	TAL PEN
Total/NA	Analysis	SM 2540C		1	401954	06/21/18 17:00	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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

HPLC/IC

Analysis Batch: 403291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	300.0	
400-155198-2	WGWA-2	Total/NA	Water	300.0	
400-155198-3	WGWA-3	Total/NA	Water	300.0	
400-155198-4	WGWA-4	Total/NA	Water	300.0	
400-155198-5	WGWA-5	Total/NA	Water	300.0	
MB 400-403291/36	Method Blank	Total/NA	Water	300.0	
LCS 400-403291/37	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-403291/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-155121-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
400-155121-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 403427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-6	WGWA-6	Total/NA	Water	300.0	
400-155198-7	WGWA-7	Total/NA	Water	300.0	
400-155198-8	WGWA-18	Total/NA	Water	300.0	
400-155198-9	WGWC-9	Total/NA	Water	300.0	
400-155198-10	WGWC-11	Total/NA	Water	300.0	
400-155198-11	WGWC-15	Total/NA	Water	300.0	
MB 400-403427/4	Method Blank	Total/NA	Water	300.0	
LCS 400-403427/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-403427/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-155198-6 MS	WGWA-6	Total/NA	Water	300.0	
400-155198-6 MSD	WGWA-6	Total/NA	Water	300.0	

Analysis Batch: 403464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-12	WGWC-16	Total/NA	Water	300.0	
400-155198-13	WGWC-19	Total/NA	Water	300.0	
400-155198-14	EB-1-6-13-18	Total/NA	Water	300.0	
400-155198-15	EB-2-6-14-18	Total/NA	Water	300.0	
400-155198-16	DUP-1	Total/NA	Water	300.0	
MB 400-403464/97	Method Blank	Total/NA	Water	300.0	
LCS 400-403464/98	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-403464/99	Lab Control Sample Dup	Total/NA	Water	300.0	
400-155198-13 MS	WGWC-19	Total/NA	Water	300.0	
400-155198-13 MSD	WGWC-19	Total/NA	Water	300.0	

Analysis Batch: 403546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-12 - DL	WGWC-16	Total/NA	Water	300.0	
400-155198-16 - DL	DUP-1	Total/NA	Water	300.0	
400-155198-17	FB-1-6-14-18	Total/NA	Water	300.0	
400-155198-18	WGWC-8	Total/NA	Water	300.0	
400-155198-19	WGWC-10	Total/NA	Water	300.0	
400-155198-20	WGWC-12	Total/NA	Water	300.0	
400-155198-21	WGWC-13	Total/NA	Water	300.0	
400-155198-22	WGWC-14A	Total/NA	Water	300.0	
400-155198-23	WGWC-17	Total/NA	Water	300.0	
400-155198-24	DUP-2	Total/NA	Water	300.0	
400-155198-25	FB-2-6-14-18	Total/NA	Water	300.0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

HPLC/IC (Continued)

Analysis Batch: 403546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-403546/4	Method Blank	Total/NA	Water	300.0	
LCS 400-403546/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-403546/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-155198-18 MS	WGWC-8	Total/NA	Water	300.0	
400-155198-18 MSD	WGWC-8	Total/NA	Water	300.0	

Analysis Batch: 403836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-18 - DL	WGWC-8	Total/NA	Water	300.0	
400-155198-24 - DL	DUP-2	Total/NA	Water	300.0	
MB 400-403836/4	Method Blank	Total/NA	Water	300.0	
LCS 400-403836/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-403836/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-155434-A-20 MS	Matrix Spike	Total/NA	Water	300.0	
400-155434-A-20 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 403475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total Recoverable	Water	3005A	
400-155198-2	WGWA-2	Total Recoverable	Water	3005A	
400-155198-3	WGWA-3	Total Recoverable	Water	3005A	
400-155198-4	WGWA-4	Total Recoverable	Water	3005A	
400-155198-5	WGWA-5	Total Recoverable	Water	3005A	
400-155198-6	WGWA-6	Total Recoverable	Water	3005A	
400-155198-7	WGWA-7	Total Recoverable	Water	3005A	
400-155198-8	WGWA-18	Total Recoverable	Water	3005A	
400-155198-9	WGWC-9	Total Recoverable	Water	3005A	
400-155198-10	WGWC-11	Total Recoverable	Water	3005A	
MB 400-403475/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-403475/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-155434-B-22-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-155434-B-22-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 403476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-11	WGWC-15	Total Recoverable	Water	3005A	
400-155198-12 - DL	WGWC-16	Total Recoverable	Water	3005A	
400-155198-12	WGWC-16	Total Recoverable	Water	3005A	
400-155198-13	WGWC-19	Total Recoverable	Water	3005A	
400-155198-14	EB-1-6-13-18	Total Recoverable	Water	3005A	
400-155198-15	EB-2-6-14-18	Total Recoverable	Water	3005A	
400-155198-16	DUP-1	Total Recoverable	Water	3005A	
400-155198-16 - DL	DUP-1	Total Recoverable	Water	3005A	
400-155198-17	FB-1-6-14-18	Total Recoverable	Water	3005A	
400-155198-18	WGWC-8	Total Recoverable	Water	3005A	
400-155198-19	WGWC-10	Total Recoverable	Water	3005A	
400-155198-20	WGWC-12	Total Recoverable	Water	3005A	
400-155198-21	WGWC-13	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Metals (Continued)

Prep Batch: 403476 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-22	WGWC-14A	Total Recoverable	Water	3005A	
400-155198-23	WGWC-17	Total Recoverable	Water	3005A	
400-155198-24 - DL	DUP-2	Total Recoverable	Water	3005A	
400-155198-24	DUP-2	Total Recoverable	Water	3005A	
400-155198-25	FB-2-6-14-18	Total Recoverable	Water	3005A	
MB 400-403476/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-403476/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-155198-11 MS	WGWC-15	Total Recoverable	Water	3005A	
400-155198-11 MSD	WGWC-15	Total Recoverable	Water	3005A	

Analysis Batch: 403649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total Recoverable	Water	6020	403475
400-155198-2	WGWA-2	Total Recoverable	Water	6020	403475
400-155198-3	WGWA-3	Total Recoverable	Water	6020	403475
400-155198-4	WGWA-4	Total Recoverable	Water	6020	403475
400-155198-5	WGWA-5	Total Recoverable	Water	6020	403475
400-155198-6	WGWA-6	Total Recoverable	Water	6020	403475
400-155198-7	WGWA-7	Total Recoverable	Water	6020	403475
400-155198-8	WGWA-18	Total Recoverable	Water	6020	403475
400-155198-9	WGWC-9	Total Recoverable	Water	6020	403475
400-155198-10	WGWC-11	Total Recoverable	Water	6020	403475
400-155198-11	WGWC-15	Total Recoverable	Water	6020	403476
400-155198-12	WGWC-16	Total Recoverable	Water	6020	403476
400-155198-13	WGWC-19	Total Recoverable	Water	6020	403476
400-155198-14	EB-1-6-13-18	Total Recoverable	Water	6020	403476
400-155198-15	EB-2-6-14-18	Total Recoverable	Water	6020	403476
400-155198-16	DUP-1	Total Recoverable	Water	6020	403476
400-155198-17	FB-1-6-14-18	Total Recoverable	Water	6020	403476
400-155198-18	WGWC-8	Total Recoverable	Water	6020	403476
400-155198-19	WGWC-10	Total Recoverable	Water	6020	403476
400-155198-20	WGWC-12	Total Recoverable	Water	6020	403476
400-155198-21	WGWC-13	Total Recoverable	Water	6020	403476
400-155198-22	WGWC-14A	Total Recoverable	Water	6020	403476
400-155198-23	WGWC-17	Total Recoverable	Water	6020	403476
400-155198-24	DUP-2	Total Recoverable	Water	6020	403476
400-155198-25	FB-2-6-14-18	Total Recoverable	Water	6020	403476
MB 400-403475/1-A ^5	Method Blank	Total Recoverable	Water	6020	403475
MB 400-403476/1-A ^5	Method Blank	Total Recoverable	Water	6020	403476
LCS 400-403475/2-A	Lab Control Sample	Total Recoverable	Water	6020	403475
LCS 400-403476/2-A	Lab Control Sample	Total Recoverable	Water	6020	403476
400-155198-11 MS	WGWC-15	Total Recoverable	Water	6020	403476
400-155198-11 MSD	WGWC-15	Total Recoverable	Water	6020	403476
400-155434-B-22-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	403475
400-155434-B-22-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	403475

Prep Batch: 403766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	7470A	
400-155198-2	WGWA-2	Total/NA	Water	7470A	
400-155198-3	WGWA-3	Total/NA	Water	7470A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Metals (Continued)

Prep Batch: 403766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-4	WGWA-4	Total/NA	Water	7470A	
400-155198-5	WGWA-5	Total/NA	Water	7470A	
400-155198-6	WGWA-6	Total/NA	Water	7470A	
400-155198-7	WGWA-7	Total/NA	Water	7470A	
400-155198-8	WGWA-18	Total/NA	Water	7470A	
400-155198-9	WGWC-9	Total/NA	Water	7470A	
400-155198-10	WGWC-11	Total/NA	Water	7470A	
MB 400-403766/13-A	Method Blank	Total/NA	Water	7470A	
LCS 400-403766/14-A	Lab Control Sample	Total/NA	Water	7470A	
400-155750-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	
400-155750-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 403767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-11	WGWC-15	Total/NA	Water	7470A	
400-155198-12	WGWC-16	Total/NA	Water	7470A	
400-155198-13	WGWC-19	Total/NA	Water	7470A	
400-155198-14	EB-1-6-13-18	Total/NA	Water	7470A	
400-155198-15	EB-2-6-14-18	Total/NA	Water	7470A	
400-155198-16	DUP-1	Total/NA	Water	7470A	
400-155198-17	FB-1-6-14-18	Total/NA	Water	7470A	
400-155198-18	WGWC-8	Total/NA	Water	7470A	
400-155198-19	WGWC-10	Total/NA	Water	7470A	
400-155198-20	WGWC-12	Total/NA	Water	7470A	
400-155198-21	WGWC-13	Total/NA	Water	7470A	
400-155198-22	WGWC-14A	Total/NA	Water	7470A	
400-155198-23	WGWC-17	Total/NA	Water	7470A	
400-155198-24	DUP-2	Total/NA	Water	7470A	
400-155198-25	FB-2-6-14-18	Total/NA	Water	7470A	
MB 400-403767/13-A	Method Blank	Total/NA	Water	7470A	
LCS 400-403767/14-A	Lab Control Sample	Total/NA	Water	7470A	
400-155198-12 MS	WGWC-16	Total/NA	Water	7470A	
400-155198-12 MSD	WGWC-16	Total/NA	Water	7470A	

Analysis Batch: 403822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-12 - DL	WGWC-16	Total Recoverable	Water	6020	403476
400-155198-13	WGWC-19	Total Recoverable	Water	6020	403476
400-155198-17	FB-1-6-14-18	Total Recoverable	Water	6020	403476

Analysis Batch: 403896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	7470A	403766
400-155198-2	WGWA-2	Total/NA	Water	7470A	403766
400-155198-3	WGWA-3	Total/NA	Water	7470A	403766
400-155198-4	WGWA-4	Total/NA	Water	7470A	403766
400-155198-5	WGWA-5	Total/NA	Water	7470A	403766
400-155198-6	WGWA-6	Total/NA	Water	7470A	403766
400-155198-7	WGWA-7	Total/NA	Water	7470A	403766
400-155198-8	WGWA-18	Total/NA	Water	7470A	403766
400-155198-9	WGWC-9	Total/NA	Water	7470A	403766

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Metals (Continued)

Analysis Batch: 403896 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-10	WGWC-11	Total/NA	Water	7470A	403766
MB 400-403766/13-A	Method Blank	Total/NA	Water	7470A	403766
LCS 400-403766/14-A	Lab Control Sample	Total/NA	Water	7470A	403766
400-155750-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	403766
400-155750-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	403766

Analysis Batch: 403911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-16 - DL	DUP-1	Total Recoverable	Water	6020	403476
400-155198-24 - DL	DUP-2	Total Recoverable	Water	6020	403476

Analysis Batch: 404209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-11	WGWC-15	Total/NA	Water	7470A	403767
400-155198-12	WGWC-16	Total/NA	Water	7470A	403767
400-155198-13	WGWC-19	Total/NA	Water	7470A	403767
400-155198-14	EB-1-6-13-18	Total/NA	Water	7470A	403767
400-155198-15	EB-2-6-14-18	Total/NA	Water	7470A	403767
400-155198-16	DUP-1	Total/NA	Water	7470A	403767
400-155198-17	FB-1-6-14-18	Total/NA	Water	7470A	403767
400-155198-18	WGWC-8	Total/NA	Water	7470A	403767
400-155198-19	WGWC-10	Total/NA	Water	7470A	403767
400-155198-20	WGWC-12	Total/NA	Water	7470A	403767
400-155198-21	WGWC-13	Total/NA	Water	7470A	403767
400-155198-22	WGWC-14A	Total/NA	Water	7470A	403767
400-155198-23	WGWC-17	Total/NA	Water	7470A	403767
400-155198-24	DUP-2	Total/NA	Water	7470A	403767
400-155198-25	FB-2-6-14-18	Total/NA	Water	7470A	403767
MB 400-403767/13-A	Method Blank	Total/NA	Water	7470A	403767
LCS 400-403767/14-A	Lab Control Sample	Total/NA	Water	7470A	403767
400-155198-12 MS	WGWC-16	Total/NA	Water	7470A	403767
400-155198-12 MSD	WGWC-16	Total/NA	Water	7470A	403767

General Chemistry

Analysis Batch: 401798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	SM 2540C	
400-155198-5	WGWA-5	Total/NA	Water	SM 2540C	
400-155198-6	WGWA-6	Total/NA	Water	SM 2540C	
400-155198-8	WGWA-18	Total/NA	Water	SM 2540C	
400-155198-14	EB-1-6-13-18	Total/NA	Water	SM 2540C	
MB 400-401798/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-401798/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-155128-J-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 401953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-2	WGWA-2	Total/NA	Water	SM 2540C	
400-155198-3	WGWA-3	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 401953 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-4	WGWA-4	Total/NA	Water	SM 2540C	
400-155198-7	WGWA-7	Total/NA	Water	SM 2540C	
400-155198-9	WGWC-9	Total/NA	Water	SM 2540C	
400-155198-10	WGWC-11	Total/NA	Water	SM 2540C	
400-155198-11	WGWC-15	Total/NA	Water	SM 2540C	
400-155198-12	WGWC-16	Total/NA	Water	SM 2540C	
400-155198-13	WGWC-19	Total/NA	Water	SM 2540C	
400-155198-15	EB-2-6-14-18	Total/NA	Water	SM 2540C	
400-155198-16	DUP-1	Total/NA	Water	SM 2540C	
MB 400-401953/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-401953/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-155198-4 DU	WGWA-4	Total/NA	Water	SM 2540C	
400-155198-7 DU	WGWA-7	Total/NA	Water	SM 2540C	

Analysis Batch: 401954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-17	FB-1-6-14-18	Total/NA	Water	SM 2540C	
400-155198-18	WGWC-8	Total/NA	Water	SM 2540C	
400-155198-19	WGWC-10	Total/NA	Water	SM 2540C	
400-155198-20	WGWC-12	Total/NA	Water	SM 2540C	
400-155198-21	WGWC-13	Total/NA	Water	SM 2540C	
400-155198-22	WGWC-14A	Total/NA	Water	SM 2540C	
400-155198-23	WGWC-17	Total/NA	Water	SM 2540C	
400-155198-24	DUP-2	Total/NA	Water	SM 2540C	
400-155198-25	FB-2-6-14-18	Total/NA	Water	SM 2540C	
MB 400-401954/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-401954/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-155198-18 DU	WGWC-8	Total/NA	Water	SM 2540C	

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-403291/36
Matrix: Water
Analysis Batch: 403291

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/03/18 01:47	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 01:47	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 01:47	1

Lab Sample ID: LCS 400-403291/37
Matrix: Water
Analysis Batch: 403291

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.36		mg/L		94	90 - 110
Fluoride	10.0	9.96		mg/L		100	90 - 110
Sulfate	10.0	9.79		mg/L		98	90 - 110

Lab Sample ID: LCSD 400-403291/38
Matrix: Water
Analysis Batch: 403291

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	10.0	9.36		mg/L		94	90 - 110	0	15
Fluoride	10.0	9.94		mg/L		99	90 - 110	0	15
Sulfate	10.0	9.87		mg/L		99	90 - 110	1	15

Lab Sample ID: 400-155121-A-1 MS
Matrix: Water
Analysis Batch: 403291

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	6.7		10.0	16.3		mg/L		96	80 - 120
Fluoride	<0.082		10.0	10.3		mg/L		103	80 - 120
Sulfate	0.82	J	10.0	11.1		mg/L		103	80 - 120

Lab Sample ID: 400-155121-A-1 MSD
Matrix: Water
Analysis Batch: 403291

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	6.7		10.0	16.3		mg/L		96	80 - 120	0	20
Fluoride	<0.082		10.0	10.3		mg/L		103	80 - 120	0	20
Sulfate	0.82	J	10.0	11.3		mg/L		104	80 - 120	1	20

Lab Sample ID: MB 400-403427/4
Matrix: Water
Analysis Batch: 403427

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/03/18 13:57	1
Fluoride	<0.082		0.20	0.082	mg/L			07/03/18 13:57	1
Sulfate	<0.70		1.0	0.70	mg/L			07/03/18 13:57	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-403427/5
Matrix: Water
Analysis Batch: 403427

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.71		mg/L		97	90 - 110
Fluoride	10.0	10.2		mg/L		102	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-403427/6
Matrix: Water
Analysis Batch: 403427

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	10.0	9.67		mg/L		97	90 - 110	0	15
Fluoride	10.0	10.2		mg/L		102	90 - 110	0	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-155198-6 MS
Matrix: Water
Analysis Batch: 403427

Client Sample ID: WGWA-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.4		10.0	11.0		mg/L		96	80 - 120
Fluoride	0.093	J	10.0	10.3		mg/L		102	80 - 120
Sulfate	8.3		10.0	18.9		mg/L		107	80 - 120

Lab Sample ID: 400-155198-6 MSD
Matrix: Water
Analysis Batch: 403427

Client Sample ID: WGWA-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.4		10.0	11.0		mg/L		96	80 - 120	0	20
Fluoride	0.093	J	10.0	10.3		mg/L		102	80 - 120	0	20
Sulfate	8.3		10.0	19.0		mg/L		108	80 - 120	1	20

Lab Sample ID: MB 400-403464/97
Matrix: Water
Analysis Batch: 403464

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/04/18 02:40	1
Fluoride	<0.082		0.20	0.082	mg/L			07/04/18 02:40	1
Sulfate	<0.70		1.0	0.70	mg/L			07/04/18 02:40	1

Lab Sample ID: LCS 400-403464/98
Matrix: Water
Analysis Batch: 403464

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.68		mg/L		97	90 - 110
Fluoride	10.0	10.2		mg/L		102	90 - 110
Sulfate	10.0	10.3		mg/L		103	90 - 110

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 400-403464/99
Matrix: Water
Analysis Batch: 403464

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	10.0	9.66		mg/L		97	90 - 110	0	15
Fluoride	10.0	10.3		mg/L		103	90 - 110	1	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-155198-13 MS
Matrix: Water
Analysis Batch: 403464

Client Sample ID: WGWC-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.4		10.0	11.9		mg/L		95	80 - 120
Fluoride	0.35		10.0	10.4		mg/L		100	80 - 120
Sulfate	3.5		10.0	14.1		mg/L		106	80 - 120

Lab Sample ID: 400-155198-13 MSD
Matrix: Water
Analysis Batch: 403464

Client Sample ID: WGWC-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2.4		10.0	11.8		mg/L		95	80 - 120	0	20
Fluoride	0.35		10.0	10.4		mg/L		100	80 - 120	0	20
Sulfate	3.5		10.0	14.1		mg/L		106	80 - 120	0	20

Lab Sample ID: MB 400-403546/4
Matrix: Water
Analysis Batch: 403546

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/05/18 14:52	1
Fluoride	<0.082		0.20	0.082	mg/L			07/05/18 14:52	1
Sulfate	<0.70		1.0	0.70	mg/L			07/05/18 14:52	1

Lab Sample ID: LCS 400-403546/5
Matrix: Water
Analysis Batch: 403546

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.44		mg/L		94	90 - 110
Fluoride	10.0	10.3		mg/L		103	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-403546/6
Matrix: Water
Analysis Batch: 403546

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	10.0	9.41		mg/L		94	90 - 110	0	15
Fluoride	10.0	10.1		mg/L		101	90 - 110	2	15
Sulfate	10.0	10.1		mg/L		101	90 - 110	0	15

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-155198-18 MS

Matrix: Water
Analysis Batch: 403546

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	56	E	10.0	64.9	E 4	mg/L		89	80 - 120
Fluoride	0.56		10.0	11.4		mg/L		109	80 - 120
Sulfate	160	E	10.0	172	E 4	mg/L		87	80 - 120

Lab Sample ID: 400-155198-18 MSD

Matrix: Water
Analysis Batch: 403546

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	56	E	10.0	64.9	E 4	mg/L		90	80 - 120	0	20
Fluoride	0.56		10.0	11.2		mg/L		106	80 - 120	2	20
Sulfate	160	E	10.0	172	E 4	mg/L		90	80 - 120	0	20

Lab Sample ID: MB 400-403836/4

Matrix: Water
Analysis Batch: 403836

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			07/09/18 12:36	1
Fluoride	<0.082		0.20	0.082	mg/L			07/09/18 12:36	1
Sulfate	<0.70		1.0	0.70	mg/L			07/09/18 12:36	1

Lab Sample ID: LCS 400-403836/5

Matrix: Water
Analysis Batch: 403836

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.36		mg/L		94	90 - 110
Fluoride	10.0	10.1		mg/L		101	90 - 110
Sulfate	10.0	9.97		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-403836/6

Matrix: Water
Analysis Batch: 403836

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	10.0	9.35		mg/L		93	90 - 110	0	15
Fluoride	10.0	10.2		mg/L		102	90 - 110	2	15
Sulfate	10.0	9.95		mg/L		100	90 - 110	0	15

Lab Sample ID: 400-155434-A-20 MS

Matrix: Water
Analysis Batch: 403836

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	1.3		10.0	10.7		mg/L		93	80 - 120
Fluoride	<0.082		10.0	10.4		mg/L		104	80 - 120
Sulfate	<0.70		10.0	10.5		mg/L		105	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-155434-A-20 MSD
Matrix: Water
Analysis Batch: 403836

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	1.3		10.0	10.7		mg/L		93	80 - 120	0	20
Fluoride	<0.082		10.0	10.4		mg/L		104	80 - 120	1	20
Sulfate	<0.70		10.0	10.4		mg/L		104	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-403475/1-A ^5
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/05/18 09:32	07/05/18 15:53	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:32	07/05/18 15:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 15:53	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:32	07/05/18 15:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:32	07/05/18 15:53	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:32	07/05/18 15:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:32	07/05/18 15:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:32	07/05/18 15:53	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:32	07/05/18 15:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:32	07/05/18 15:53	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:32	07/05/18 15:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/05/18 09:32	07/05/18 15:53	5

Lab Sample ID: LCS 400-403475/2-A
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 403475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0507		mg/L		101	80 - 120
Barium	0.0500	0.0497		mg/L		99	80 - 120
Beryllium	0.0500	0.0467		mg/L		93	80 - 120
Boron	0.100	0.110		mg/L		110	80 - 120
Cadmium	0.0500	0.0520		mg/L		104	80 - 120
Calcium	5.00	4.82		mg/L		96	80 - 120
Chromium	0.0500	0.0495		mg/L		99	80 - 120
Cobalt	0.0500	0.0515		mg/L		103	80 - 120
Lithium	0.0500	0.0509		mg/L		102	80 - 120
Molybdenum	0.0500	0.0508		mg/L		102	80 - 120
Selenium	0.0500	0.0509		mg/L		102	80 - 120
Thallium	0.0100	0.0101		mg/L		101	80 - 120

Lab Sample ID: 400-155434-B-22-C MS ^5
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 403475

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00052	J	0.0500	0.0539		mg/L		107	75 - 125

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

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

Lab Sample ID: 400-155434-B-22-C MS ^5
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 403475

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Barium	0.058		0.0500	0.104		mg/L		92		75 - 125
Beryllium	<0.00034		0.0500	0.0472		mg/L		94		75 - 125
Boron	<0.021	F1	0.100	0.130	F1	mg/L		130		75 - 125
Cadmium	<0.00034		0.0500	0.0509		mg/L		102		75 - 125
Calcium	29		5.00	32.6	4	mg/L		82		75 - 125
Chromium	<0.0011		0.0500	0.0519		mg/L		104		75 - 125
Cobalt	0.040		0.0500	0.0934		mg/L		106		75 - 125
Lithium	0.0063		0.0500	0.0537		mg/L		95		75 - 125
Molybdenum	<0.00085		0.0500	0.0510		mg/L		102		75 - 125
Selenium	0.00029	J	0.0500	0.0522		mg/L		104		75 - 125
Thallium	<0.00085		0.0100	0.0100		mg/L		100		75 - 125

Lab Sample ID: 400-155434-B-22-D MSD ^5
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 403475

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Arsenic	0.00052	J	0.0500	0.0556		mg/L		110		75 - 125	3	20
Barium	0.058		0.0500	0.110		mg/L		104		75 - 125	6	20
Beryllium	<0.00034		0.0500	0.0492		mg/L		98		75 - 125	4	20
Boron	<0.021	F1	0.100	0.132	F1	mg/L		132		75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0526		mg/L		105		75 - 125	3	20
Calcium	29		5.00	33.7	4	mg/L		102		75 - 125	3	20
Chromium	<0.0011		0.0500	0.0526		mg/L		105		75 - 125	1	20
Cobalt	0.040		0.0500	0.0932		mg/L		106		75 - 125	0	20
Lithium	0.0063		0.0500	0.0547		mg/L		97		75 - 125	2	20
Molybdenum	<0.00085		0.0500	0.0508		mg/L		102		75 - 125	0	20
Selenium	0.00029	J	0.0500	0.0527		mg/L		105		75 - 125	1	20
Thallium	<0.00085		0.0100	0.00991		mg/L		99		75 - 125	1	20

Lab Sample ID: MB 400-403476/1-A ^5
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 403476

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/05/18 09:36	07/05/18 18:41	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/05/18 09:36	07/05/18 18:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 18:41	5
Boron	<0.021		0.050	0.021	mg/L		07/05/18 09:36	07/05/18 18:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/05/18 09:36	07/05/18 18:41	5
Calcium	<0.13		0.25	0.13	mg/L		07/05/18 09:36	07/05/18 18:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/05/18 09:36	07/05/18 18:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/05/18 09:36	07/05/18 18:41	5
Lithium	<0.0011		0.0050	0.0011	mg/L		07/05/18 09:36	07/05/18 18:41	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/05/18 09:36	07/05/18 18:41	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/05/18 09:36	07/05/18 18:41	5
Thallium	<0.00085		0.00050	0.000085	mg/L		07/05/18 09:36	07/05/18 18:41	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

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

Lab Sample ID: LCS 400-403476/2-A
Matrix: Water
Analysis Batch: 403649

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 403476

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.0500	0.0503		mg/L		101	80 - 120
Barium	0.0500	0.0484		mg/L		97	80 - 120
Beryllium	0.0500	0.0472		mg/L		94	80 - 120
Boron	0.100	0.111		mg/L		111	80 - 120
Cadmium	0.0500	0.0494		mg/L		99	80 - 120
Calcium	5.00	4.75		mg/L		95	80 - 120
Chromium	0.0500	0.0486		mg/L		97	80 - 120
Cobalt	0.0500	0.0501		mg/L		100	80 - 120
Lithium	0.0500	0.0492		mg/L		98	80 - 120
Molybdenum	0.0500	0.0475		mg/L		95	80 - 120
Selenium	0.0500	0.0472		mg/L		94	80 - 120
Thallium	0.0100	0.00941		mg/L		94	80 - 120

Lab Sample ID: 400-155198-11 MS
Matrix: Water
Analysis Batch: 403649

Client Sample ID: WGWC-15
Prep Type: Total Recoverable
Prep Batch: 403476

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.0020		0.0500	0.0536		mg/L		103	75 - 125
Barium	0.022		0.0500	0.0716		mg/L		99	75 - 125
Beryllium	<0.00034		0.0500	0.0492		mg/L		98	75 - 125
Boron	<0.021	F1	0.100	0.133	F1	mg/L		133	75 - 125
Cadmium	<0.00034		0.0500	0.0502		mg/L		100	75 - 125
Calcium	29		5.00	33.1	4	mg/L		84	75 - 125
Chromium	<0.0011		0.0500	0.0503		mg/L		101	75 - 125
Cobalt	<0.00040		0.0500	0.0518		mg/L		104	75 - 125
Lithium	0.0052		0.0500	0.0528		mg/L		95	75 - 125
Molybdenum	0.0056	J	0.0500	0.0554		mg/L		100	75 - 125
Selenium	0.00050	J	0.0500	0.0528		mg/L		105	75 - 125
Thallium	<0.000085		0.0100	0.00977		mg/L		98	75 - 125

Lab Sample ID: 400-155198-11 MSD
Matrix: Water
Analysis Batch: 403649

Client Sample ID: WGWC-15
Prep Type: Total Recoverable
Prep Batch: 403476

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.0020		0.0500	0.0518		mg/L		100	75 - 125	3	20
Barium	0.022		0.0500	0.0718		mg/L		99	75 - 125	0	20
Beryllium	<0.00034		0.0500	0.0491		mg/L		98	75 - 125	0	20
Boron	<0.021	F1	0.100	0.130	F1	mg/L		130	75 - 125	2	20
Cadmium	<0.00034		0.0500	0.0522		mg/L		104	75 - 125	4	20
Calcium	29		5.00	32.2	4	mg/L		65	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0475		mg/L		95	75 - 125	6	20
Cobalt	<0.00040		0.0500	0.0505		mg/L		101	75 - 125	3	20
Lithium	0.0052		0.0500	0.0526		mg/L		95	75 - 125	0	20
Molybdenum	0.0056	J	0.0500	0.0547		mg/L		98	75 - 125	1	20
Selenium	0.00050	J	0.0500	0.0522		mg/L		103	75 - 125	1	20
Thallium	<0.000085		0.0100	0.00977		mg/L		98	75 - 125	0	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-403766/13-A
Matrix: Water
Analysis Batch: 403896

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403766

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/09/18 12:13	07/09/18 17:00	1

Lab Sample ID: LCS 400-403766/14-A
Matrix: Water
Analysis Batch: 403896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403766

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000986		mg/L		98	80 - 120

Lab Sample ID: 400-155750-E-1-C MS
Matrix: Water
Analysis Batch: 403896

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 403766

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00199		mg/L		99	80 - 120

Lab Sample ID: 400-155750-E-1-D MSD
Matrix: Water
Analysis Batch: 403896

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 403766

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00199		mg/L		99	80 - 120	0	20

Lab Sample ID: MB 400-403767/13-A
Matrix: Water
Analysis Batch: 404209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 403767

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/09/18 12:31	07/11/18 17:18	1

Lab Sample ID: LCS 400-403767/14-A
Matrix: Water
Analysis Batch: 404209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 403767

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000978		mg/L		97	80 - 120

Lab Sample ID: 400-155198-12 MS
Matrix: Water
Analysis Batch: 404209

Client Sample ID: WGWC-16
Prep Type: Total/NA
Prep Batch: 403767

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00192		mg/L		95	80 - 120

Lab Sample ID: 400-155198-12 MSD
Matrix: Water
Analysis Batch: 404209

Client Sample ID: WGWC-16
Prep Type: Total/NA
Prep Batch: 403767

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00186		mg/L		92	80 - 120	4	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
 SDG: Ash Pond

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

Lab Sample ID: MB 400-401798/1
Matrix: Water
Analysis Batch: 401798

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			06/20/18 17:23	1

Lab Sample ID: LCS 400-401798/2
Matrix: Water
Analysis Batch: 401798

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	246		mg/L		84	78 - 122

Lab Sample ID: 400-155128-J-1 DU
Matrix: Water
Analysis Batch: 401798

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	450		456		mg/L		0.9	5

Lab Sample ID: MB 400-401953/1
Matrix: Water
Analysis Batch: 401953

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			06/21/18 14:06	1

Lab Sample ID: LCS 400-401953/2
Matrix: Water
Analysis Batch: 401953

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	252		mg/L		86	78 - 122

Lab Sample ID: 400-155198-4 DU
Matrix: Water
Analysis Batch: 401953

Client Sample ID: WGWA-4
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

Lab Sample ID: 400-155198-7 DU
Matrix: Water
Analysis Batch: 401953

Client Sample ID: WGWA-7
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

QC Sample Results

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

TestAmerica Job ID: 400-155198-1
 SDG: Ash Pond

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

Lab Sample ID: MB 400-401954/1
Matrix: Water
Analysis Batch: 401954

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			06/21/18 17:00	1

Lab Sample ID: LCS 400-401954/2
Matrix: Water
Analysis Batch: 401954

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	256		mg/L		87	78 - 122

Lab Sample ID: 400-155198-18 DU
Matrix: Water
Analysis Batch: 401954

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	410		412		mg/L		0	5

Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: SCS10347656 Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley Site: Georgia		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): Acc to TA-ATL Job #: 3 of 3		COC No: 400-72601-28757.2 Page: 2 of 3	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SOW#:		Analysis Requested Perform MS/MSD (Yes or No)		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 - EDTA Other:		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=waste/oil, BT=tissue, A=air)		Field Filtered Sample (Yes or No) 300 ORGM_28D - Chloride, Fluoride & Sulfate, 2540C - 9315 Ra226, 9320 Ra228, Ra226Ra228_GPPC TDS App. III Metals plus detected App. IV		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDTA Z - other (specify)		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 checked="" 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 checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Method of Shipment:	
Empty Kit Relinquished by:		Date:		Relinquished by:		Date/Time:	
Relinquished by:		Date/Time: 6/15/18 16:00 Company: Acc		Received by:		Date/Time: 6/15/18 16:00 Company: TA	
Relinquished by:		Date/Time: 6/15/18 16:20 Company: TA		Received by:		Date/Time: 6/16/18 08:29 Company: TA	
Custody Seal No.: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Date/Time:	

* Det. App. IV: As, Ba, Be, Cd, Cr, Co, Li, Hg, Mo, Se, Tl

Chain of Custody Record

Client Information
 Client Contact: Joju Abraham
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: [Blank]
 Email: JAbraham@southernco.com
 Project Name: CCR - Plant Wansley
 Site: Georgia

Sampler: C. Parker, B. Walker
 Lab PM: Whimire, Cheyenne R
 E-Mail: cheyenne.whimire@testamericainc.com

Carrier Tracking No(s): All to TA-ATL
Page: 1 of 1
Job #: [Blank]

Due Date Requested: [Blank]
TAT Requested (days): [Blank]
PO #: SCS10347656
WO #: [Blank]
Project #: 40007709
SSOWN#: [Blank]

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Swab, On-wasteb, etc.)	Field Filtered Sample (Yes or No)	Analysis Requested				Special Instructions/Note:
						As	Se	Li	Co	
W6WA-1	6-13-18	1543	G	Water	N	N	N	N		
W6WA-2	6-14-18	1016	G	Water	N	N	N	N		
W6WA-3	6-14-18	1140	G	Water	N	N	N	N		
W6WA-4	6-14-18	1045	G	Water	N	N	N	N		
W6WA-5	6-13-18	1630	G	Water	N	N	N	N		
W6WA-6	6-13-18	1505	G	Water	N	N	N	N		
W6WA-7	6-14-18	1255	G	Water	N	N	N	N		
W6WA-8	6-13-18	1305	G	Water	N	N	N	N		
W6WA-9	6-14-18	1210	G	Water	N	N	N	N		
W6WC-11	6-14-18	1154	G	Water	N	N	N	N		extra lead here
W6WC-15	6-14-18	1315	G	Water	N	N	N	N		

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: [Blank]

Preservation Codes:
 M - Hexane
 N - None
 O - AshAO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO3
 S - H2SO4
 T - TSP Dodecylhydraie
 U - Acetone
 V - MCAA
 W - pH 4-5
 X - EDA
 Z - other (specify)

Special Instructions/Note:
 Total Number of containers: 3
 3
 3
 3
 3
 3
 3
 3
 4
 3

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

Special Instructions/QC Requirements:
 Method of Shipment: [Blank]
 Date: [Blank]
 Relinquished by: [Signature]
 Relinquished by: [Signature]
 Relinquished by: [Signature]
 Company: ACC
 Company: ACC
 Company: ACC
 Date/Time: 6/14/18 1700
 Date/Time: 6/14/18 1710
 Date/Time: 6/14/18 1720
 Date/Time: 6/15/18 03:18 AM

Custody Seals Intact: Custody Seal No. [Blank]
 A-Ys V No [Blank]

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

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

Empty Kit Relinquished by: [Signature]
 Date: [Blank]

Cooler Temperature(s) °C and Other Remarks
 *Det. App. IV: As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Ti, Mn

QUALITY-180
 Carrier Tracking No(s):
 ACC to TA-ATL

Sampler: J. Biscardi, H. Acid Lab PM: Whitmore, Cheyenne R
 Phone: _____ E-Mail: Cheyenne.whitmore@testamericainc.com
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: _____
 PO #: SCS10347656
 WO #: _____
 Email: JAbraham@southernco.com
 Project Name: CCR - Plant Wansley
 SOW#: _____
 Site: Georgia

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Veget, Sewage, On-wast, Other)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Analysis Requested	Total Number of Containers	Special Instructions/Note:
					D	N	D	N			
W6WC-16	6-14-18	1110	G	Water	N	N	N	N	App. III Metals plus detected App. IV	3	
W6WC-19	6-14-18	1100	G	Water	N	N	N	N		3	
E13-1-6-13-18	6-13-18	1455	G	Water	N	N	N	N		3	
E13-2-6-14-18	6-14-18	1330	G	Water	N	N	N	N		3	
Dup-1	6-14-18	-	G	Water	N	N	N	N		3	
F13-1-6-14-18	6-14-18	1145	G	Water	N	N	N	N		3	
				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: John Bell Date/Time: 6-11-18 / 1700 Company: AEC

Relinquished by: [Signature] Date/Time: 6-14-18 / 1710 Company: [Signature]

Relinquished by: [Signature] Date/Time: _____ Company: _____

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

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

Special Instructions/QC Requirements: _____

Method of Shipment: _____

Received by: [Signature] Date/Time: 6/14/18 17:00 Company: A

Received by: [Signature] Date/Time: 6/15/18 09:15 AM Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: _____

*Det. App. III: As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-155198-1

SDG Number: Ash Pond

Login Number: 155198

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 0.0°C IR7, 3.1°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 Wansley

TestAmerica Job ID: 400-155198-1
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18 *
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-14	09-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

* 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: 400-155198-2

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

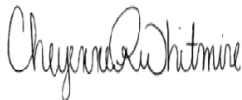
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

7/23/2018 5:36:25 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Job ID: 400-155198-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-155198-2

RAD

Method(s) 9320: Radium-228 Prep Batch: 160-372356. The relative percent difference (RPD) and replicate error ratio (RER) are outside of the acceptance limits of 40%/1 for gross radium-228; (RPD: 2050; RER: 1.60). Both the sample and duplicate activity are less than the RL. The data have been reported with this narrative. WGWC-13 (400-155198-21), WGWC-14A (400-155198-22), WGWC-17 (400-155198-23), WGWC-17 (400-155198-23[DUJ]), FB-2-6-14-18 (400-155198-25), (LCS 160-372356/1-A) and (MB 160-372356/23-A)

Method(s) 9320: Radium-228 Prep Batch 160-372356. The following sample exhibited a negative result greater in magnitude than the 3 sigma TPU. This occurrence was evaluated and determined to be random in nature. Sporadic occurrences such as this are statistically expected. No further action is required. WGWC-17 (400-155198-23)

Method(s) PrecSep_0: Radium 228 Prep Batch 160-376311: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: DUP-2 (400-155198-24). 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 160-376311: Sample aliquots reduced due to limited sample volume due to re-extract. DUP-2 (400-155198-24)

Method Summary

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-155198-1	WGWA-1	Water	06/13/18 15:43	06/15/18 09:03
400-155198-2	WGWA-2	Water	06/14/18 10:16	06/15/18 09:03
400-155198-3	WGWA-3	Water	06/14/18 11:40	06/15/18 09:03
400-155198-4	WGWA-4	Water	06/14/18 10:45	06/15/18 09:03
400-155198-5	WGWA-5	Water	06/13/18 16:30	06/15/18 09:03
400-155198-6	WGWA-6	Water	06/13/18 15:05	06/15/18 09:03
400-155198-7	WGWA-7	Water	06/14/18 12:55	06/15/18 09:03
400-155198-8	WGWA-18	Water	06/13/18 13:05	06/15/18 09:03
400-155198-9	WGWC-9	Water	06/14/18 12:10	06/15/18 09:03
400-155198-10	WGWC-11	Water	06/14/18 11:54	06/15/18 09:03
400-155198-11	WGWC-15	Water	06/14/18 13:15	06/15/18 09:03
400-155198-12	WGWC-16	Water	06/14/18 11:10	06/15/18 09:03
400-155198-13	WGWC-19	Water	06/14/18 11:00	06/15/18 09:03
400-155198-14	EB-1-6-13-18	Water	06/13/18 14:55	06/15/18 09:03
400-155198-15	EB-2-6-14-18	Water	06/14/18 13:30	06/15/18 09:03
400-155198-16	DUP-1	Water	06/14/18 00:00	06/15/18 09:03
400-155198-17	FB-1-6-14-18	Water	06/14/18 11:45	06/15/18 09:03
400-155198-18	WGWC-8	Water	06/14/18 13:40	06/16/18 08:29
400-155198-19	WGWC-10	Water	06/14/18 17:30	06/16/18 08:29
400-155198-20	WGWC-12	Water	06/14/18 14:36	06/16/18 08:29
400-155198-21	WGWC-13	Water	06/14/18 16:13	06/16/18 08:29
400-155198-22	WGWC-14A	Water	06/14/18 15:50	06/16/18 08:29
400-155198-23	WGWC-17	Water	06/14/18 15:50	06/16/18 08:29
400-155198-24	DUP-2	Water	06/14/18 00:00	06/16/18 08:29
400-155198-25	FB-2-6-14-18	Water	06/14/18 14:55	06/16/18 08:29

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 400-155198-1

Date Collected: 06/13/18 15:43

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0979	U	0.119	0.119	1.00	0.194	pCi/L	06/25/18 08:38	07/17/18 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/25/18 08:38	07/17/18 19:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.116	U	0.254	0.254	1.00	0.467	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	92.0		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0181	U	0.280	0.280	5.00	0.467	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWA-2
Date Collected: 06/14/18 10:16
Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-2
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	0.0626	U	0.110	0.110	1.00	0.197	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.340	U	0.245	0.247	1.00	0.381	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.4		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	94.2		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.402		0.269	0.270	5.00	0.381	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWA-3
Date Collected: 06/14/18 11:40
Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-3
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	0.0672	U	0.114	0.115	1.00	0.202	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.191	U	0.218	0.219	1.00	0.358	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	94.2		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.258	U	0.246	0.247	5.00	0.358	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-155198-4

Date Collected: 06/14/18 10:45

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.418		0.184	0.188	1.00	0.193	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.439		0.234	0.237	1.00	0.344	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	92.0		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.857		0.298	0.303	5.00	0.344	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-155198-5

Date Collected: 06/13/18 16:30

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.209		0.137	0.138	1.00	0.174	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0658	U	0.179	0.179	1.00	0.312	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	91.2		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.275	U	0.225	0.226	5.00	0.312	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-155198-6

Date Collected: 06/13/18 15:05

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.53		0.490	0.584	1.00	0.207	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.24		0.541	0.724	1.00	0.410	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	91.2		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.77		0.730	0.930	5.00	0.410	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWA-7

Lab Sample ID: 400-155198-7

Date Collected: 06/14/18 12:55

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0515	U	0.0997	0.0998	1.00	0.182	pCi/L	06/25/18 08:38	07/17/18 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/25/18 08:38	07/17/18 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.358	U	0.235	0.237	1.00	0.360	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	89.3		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.410		0.255	0.257	5.00	0.360	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-18

Lab Sample ID: 400-155198-8

Date Collected: 06/13/18 13:05

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0305	U	0.100	0.100	1.00	0.196	pCi/L	06/25/18 08:38	07/17/18 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					06/25/18 08:38	07/17/18 19:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.371		0.242	0.245	1.00	0.367	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	92.3		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.401		0.262	0.265	5.00	0.367	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-155198-9

Date Collected: 06/14/18 12:10

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0525	U	0.104	0.104	1.00	0.190	pCi/L	06/25/18 08:38	07/17/18 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					06/25/18 08:38	07/17/18 19:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.105	U	0.229	0.230	1.00	0.395	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	90.8		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.157	U	0.252	0.252	5.00	0.395	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-155198-10

Date Collected: 06/14/18 11:54

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0163	U	0.0629	0.0629	1.00	0.160	pCi/L	06/25/18 08:38	07/17/18 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/25/18 08:38	07/17/18 19:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.292	U	0.240	0.242	1.00	0.382	pCi/L	06/25/18 09:04	07/16/18 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/25/18 09:04	07/16/18 16:35	1
Y Carrier	91.6		40 - 110					06/25/18 09:04	07/16/18 16:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.275	U	0.248	0.250	5.00	0.382	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 400-155198-11

Date Collected: 06/14/18 13:15

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.183		0.138	0.139	1.00	0.175	pCi/L	06/25/18 08:38	07/17/18 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.5		40 - 110					06/25/18 08:38	07/17/18 19:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0123	U	0.289	0.289	1.00	0.524	pCi/L	06/25/18 09:04	07/16/18 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.5		40 - 110					06/25/18 09:04	07/16/18 16:36	1
Y Carrier	80.4		40 - 110					06/25/18 09:04	07/16/18 16:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.171	U	0.320	0.321	5.00	0.524	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-16

Date Collected: 06/14/18 11:10

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-12

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	0.377		0.178	0.182	1.00	0.184	pCi/L	06/25/18 08:38	07/17/18 19:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					06/25/18 08:38	07/17/18 19:16	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.716		0.281	0.289	1.00	0.384	pCi/L	06/25/18 09:04	07/16/18 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					06/25/18 09:04	07/16/18 16:36	1
Y Carrier	92.0		40 - 110					06/25/18 09:04	07/16/18 16:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.09		0.333	0.342	5.00	0.384	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-155198-13

Date Collected: 06/14/18 11:00

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0916	U	0.119	0.119	1.00	0.196	pCi/L	06/25/18 08:38	07/17/18 19:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.0		40 - 110					06/25/18 08:38	07/17/18 19:16	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0458	U	0.226	0.226	1.00	0.418	pCi/L	06/25/18 09:04	07/16/18 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.0		40 - 110					06/25/18 09:04	07/16/18 16:36	1
Y Carrier	96.8		40 - 110					06/25/18 09:04	07/16/18 16:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0458	U	0.255	0.255	5.00	0.418	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: EB-1-6-13-18

Lab Sample ID: 400-155198-14

Date Collected: 06/13/18 14:55

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0117	U	0.0808	0.0808	1.00	0.170	pCi/L	06/25/18 08:38	07/17/18 19:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					06/25/18 08:38	07/17/18 19:16	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.180	U	0.241	0.242	1.00	0.451	pCi/L	06/25/18 09:04	07/16/18 16:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					06/25/18 09:04	07/16/18 16:23	1
Y Carrier	93.1		40 - 110					06/25/18 09:04	07/16/18 16:23	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	-0.169	U	0.254	0.255	5.00	0.451	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: EB-2-6-14-18

Lab Sample ID: 400-155198-15

Date Collected: 06/14/18 13:30

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0667	U	0.110	0.111	1.00	0.194	pCi/L	06/25/18 08:38	07/17/18 19:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/25/18 08:38	07/17/18 19:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0276	U	0.219	0.219	1.00	0.387	pCi/L	06/25/18 09:04	07/16/18 16:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/25/18 09:04	07/16/18 16:23	1
Y Carrier	89.7		40 - 110					06/25/18 09:04	07/16/18 16:23	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	0.0943	U	0.245	0.246	5.00	0.387	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: DUP-1
Date Collected: 06/14/18 00:00
Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-16
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	0.416		0.201	0.204	1.00	0.233	pCi/L	06/25/18 08:38	07/17/18 19:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					06/25/18 08:38	07/17/18 19:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.822		0.290	0.300	1.00	0.392	pCi/L	06/25/18 09:04	07/16/18 16:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					06/25/18 09:04	07/16/18 16:33	1
Y Carrier	92.3		40 - 110					06/25/18 09:04	07/16/18 16:33	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	1.24		0.353	0.363	5.00	0.392	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: FB-1-6-14-18

Lab Sample ID: 400-155198-17

Date Collected: 06/14/18 11:45

Matrix: Water

Date Received: 06/15/18 09:03

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0641	U	0.114	0.114	1.00	0.202	pCi/L	06/25/18 08:38	07/17/18 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/25/18 08:38	07/17/18 19:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0248	U	0.227	0.227	1.00	0.401	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	90.5		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0889	U	0.254	0.254	5.00	0.401	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 400-155198-18

Date Collected: 06/14/18 13:40

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.540		0.211	0.216	1.00	0.212	pCi/L	06/25/18 08:38	07/17/18 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/25/18 08:38	07/17/18 19:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.32		0.324	0.346	1.00	0.392	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	93.5		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.86		0.387	0.408	5.00	0.392	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-155198-19

Date Collected: 06/14/18 17:30

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.190		0.131	0.133	1.00	0.167	pCi/L	06/25/18 08:38	07/17/18 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					06/25/18 08:38	07/17/18 19:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.333	U	0.228	0.230	1.00	0.351	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	91.2		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.523		0.263	0.266	5.00	0.351	pCi/L		07/20/18 11:27	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-155198-20

Date Collected: 06/14/18 14:36

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0567	U	0.128	0.129	1.00	0.236	pCi/L	06/25/18 08:38	07/17/18 19:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					06/25/18 08:38	07/17/18 19:12	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.320	U	0.264	0.265	1.00	0.514	pCi/L	06/25/18 09:04	07/16/18 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					06/25/18 09:04	07/16/18 16:34	1
Y Carrier	92.7		40 - 110					06/25/18 09:04	07/16/18 16:34	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.263	U	0.293	0.295	5.00	0.514	pCi/L		07/20/18 11:28	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-155198-21

Date Collected: 06/14/18 16:13

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.251		0.160	0.161	1.00	0.206	pCi/L	06/25/18 10:03	07/17/18 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					06/25/18 10:03	07/17/18 19:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.212	U	0.242	0.243	1.00	0.398	pCi/L	06/25/18 10:22	07/16/18 16:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					06/25/18 10:22	07/16/18 16:25	1
Y Carrier	90.1		40 - 110					06/25/18 10:22	07/16/18 16:25	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.463		0.290	0.291	5.00	0.398	pCi/L		07/20/18 11:28	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-155198-22

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.333		0.168	0.171	1.00	0.191	pCi/L	06/25/18 10:03	07/17/18 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/25/18 10:03	07/17/18 19:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.217	U	0.236	0.237	1.00	0.386	pCi/L	06/25/18 10:22	07/16/18 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/25/18 10:22	07/16/18 16:26	1
Y Carrier	92.0		40 - 110					06/25/18 10:22	07/16/18 16:26	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	0.550		0.290	0.292	5.00	0.386	pCi/L		07/20/18 11:28	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-155198-23

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0629	U	0.120	0.120	1.00	0.215	pCi/L	06/25/18 10:03	07/17/18 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					06/25/18 10:03	07/17/18 19:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.436	U	0.261	0.264	1.00	0.525	pCi/L	06/25/18 10:22	07/16/18 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					06/25/18 10:22	07/16/18 16:26	1
Y Carrier	89.3		40 - 110					06/25/18 10:22	07/16/18 16:26	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	-0.373	U	0.287	0.290	5.00	0.525	pCi/L		07/20/18 11:28	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 06/14/18 00:00

Date Received: 06/16/18 08:29

Lab Sample ID: 400-155198-24

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	0.522		0.204	0.209	1.00	0.193	pCi/L	06/25/18 10:03	07/17/18 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					06/25/18 10:03	07/17/18 19:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.264	U	0.354	0.355	1.00	0.588	pCi/L	07/17/18 14:00	07/20/18 17:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					07/17/18 14:00	07/20/18 17:23	1
Y Carrier	87.9		40 - 110					07/17/18 14:00	07/20/18 17:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.786		0.409	0.412	5.00	0.588	pCi/L		07/23/18 10:05	1

Client Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: FB-2-6-14-18

Lab Sample ID: 400-155198-25

Date Collected: 06/14/18 14:55

Matrix: Water

Date Received: 06/16/18 08:29

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00317	U	0.0816	0.0816	1.00	0.184	pCi/L	06/25/18 10:03	07/17/18 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					06/25/18 10:03	07/17/18 19:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.110	U	0.251	0.252	1.00	0.430	pCi/L	06/25/18 10:22	07/16/18 16:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					06/25/18 10:22	07/16/18 16:26	1
Y Carrier	91.6		40 - 110					06/25/18 10:22	07/16/18 16:26	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	0.107	U	0.264	0.265	5.00	0.430	pCi/L		07/20/18 11:28	1

Definitions/Glossary

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
F	Duplicate RPD exceeds the control 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	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 Wansley

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-1

Date Collected: 06/13/18 15:43

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:12	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-2

Date Collected: 06/14/18 10:16

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-3

Date Collected: 06/14/18 11:40

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-4

Date Collected: 06/14/18 10:45

Date Received: 06/15/18 09:03

Lab Sample ID: 400-155198-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-155198-5

Date Collected: 06/13/18 16:30

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-6

Lab Sample ID: 400-155198-6

Date Collected: 06/13/18 15:05

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-7

Lab Sample ID: 400-155198-7

Date Collected: 06/14/18 12:55

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:13	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWA-18

Lab Sample ID: 400-155198-8

Date Collected: 06/13/18 13:05

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:15	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-155198-9

Date Collected: 06/14/18 12:10

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:15	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-11

Lab Sample ID: 400-155198-10

Date Collected: 06/14/18 11:54

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:15	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:35	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-15

Lab Sample ID: 400-155198-11

Date Collected: 06/14/18 13:15

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:15	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-16

Lab Sample ID: 400-155198-12

Date Collected: 06/14/18 11:10

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:16	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-155198-13

Date Collected: 06/14/18 11:00

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:16	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:36	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: EB-1-6-13-18

Lab Sample ID: 400-155198-14

Date Collected: 06/13/18 14:55

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:16	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	376036	07/16/18 16:23	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: EB-2-6-14-18

Lab Sample ID: 400-155198-15

Date Collected: 06/14/18 13:30

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:15	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	376036	07/16/18 16:23	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: DUP-1

Lab Sample ID: 400-155198-16

Date Collected: 06/14/18 00:00

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:11	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:33	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: FB-1-6-14-18

Lab Sample ID: 400-155198-17

Date Collected: 06/14/18 11:45

Matrix: Water

Date Received: 06/15/18 09:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:12	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-8

Lab Sample ID: 400-155198-18

Date Collected: 06/14/18 13:40

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:12	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-10

Lab Sample ID: 400-155198-19

Date Collected: 06/14/18 17:30

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:12	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:27	ALS	TAL SL

Client Sample ID: WGWC-12

Lab Sample ID: 400-155198-20

Date Collected: 06/14/18 14:36

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372341	06/25/18 08:38	JLC	TAL SL
Total/NA	Analysis	9315		1	376324	07/17/18 19:12	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372345	06/25/18 09:04	JLC	TAL SL
Total/NA	Analysis	9320		1	375724	07/16/18 16:34	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:28	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-155198-21

Date Collected: 06/14/18 16:13

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372353	06/25/18 10:03	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372356	06/25/18 10:22	JLC	TAL SL
Total/NA	Analysis	9320		1	375896	07/16/18 16:25	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:28	ALS	TAL SL

Client Sample ID: WGWC-14A

Lab Sample ID: 400-155198-22

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372353	06/25/18 10:03	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372356	06/25/18 10:22	JLC	TAL SL
Total/NA	Analysis	9320		1	375896	07/16/18 16:26	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:28	ALS	TAL SL

Client Sample ID: WGWC-17

Lab Sample ID: 400-155198-23

Date Collected: 06/14/18 15:50

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372353	06/25/18 10:03	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372356	06/25/18 10:22	JLC	TAL SL
Total/NA	Analysis	9320		1	375896	07/16/18 16:26	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:28	ALS	TAL SL

Client Sample ID: DUP-2

Lab Sample ID: 400-155198-24

Date Collected: 06/14/18 00:00

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372353	06/25/18 10:03	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			376311	07/17/18 14:00	JLC	TAL SL
Total/NA	Analysis	9320		1	376802	07/20/18 17:23	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377251	07/23/18 10:05	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Client Sample ID: FB-2-6-14-18

Lab Sample ID: 400-155198-25

Date Collected: 06/14/18 14:55

Matrix: Water

Date Received: 06/16/18 08:29

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			372353	06/25/18 10:03	JLC	TAL SL
Total/NA	Analysis	9315		1	376328	07/17/18 19:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			372356	06/25/18 10:22	JLC	TAL SL
Total/NA	Analysis	9320		1	375896	07/16/18 16:26	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	377004	07/20/18 11:28	ALS	TAL SL

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Rad

Prep Batch: 372341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	PrecSep-21	
400-155198-2	WGWA-2	Total/NA	Water	PrecSep-21	
400-155198-3	WGWA-3	Total/NA	Water	PrecSep-21	
400-155198-4	WGWA-4	Total/NA	Water	PrecSep-21	
400-155198-5	WGWA-5	Total/NA	Water	PrecSep-21	
400-155198-6	WGWA-6	Total/NA	Water	PrecSep-21	
400-155198-7	WGWA-7	Total/NA	Water	PrecSep-21	
400-155198-8	WGWA-18	Total/NA	Water	PrecSep-21	
400-155198-9	WGWC-9	Total/NA	Water	PrecSep-21	
400-155198-10	WGWC-11	Total/NA	Water	PrecSep-21	
400-155198-11	WGWC-15	Total/NA	Water	PrecSep-21	
400-155198-12	WGWC-16	Total/NA	Water	PrecSep-21	
400-155198-13	WGWC-19	Total/NA	Water	PrecSep-21	
400-155198-14	EB-1-6-13-18	Total/NA	Water	PrecSep-21	
400-155198-15	EB-2-6-14-18	Total/NA	Water	PrecSep-21	
400-155198-16	DUP-1	Total/NA	Water	PrecSep-21	
400-155198-17	FB-1-6-14-18	Total/NA	Water	PrecSep-21	
400-155198-18	WGWC-8	Total/NA	Water	PrecSep-21	
400-155198-19	WGWC-10	Total/NA	Water	PrecSep-21	
400-155198-20	WGWC-12	Total/NA	Water	PrecSep-21	
MB 160-372341/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-372341/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-155198-10 DU	WGWC-11	Total/NA	Water	PrecSep-21	

Prep Batch: 372345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-1	WGWA-1	Total/NA	Water	PrecSep_0	
400-155198-2	WGWA-2	Total/NA	Water	PrecSep_0	
400-155198-3	WGWA-3	Total/NA	Water	PrecSep_0	
400-155198-4	WGWA-4	Total/NA	Water	PrecSep_0	
400-155198-5	WGWA-5	Total/NA	Water	PrecSep_0	
400-155198-6	WGWA-6	Total/NA	Water	PrecSep_0	
400-155198-7	WGWA-7	Total/NA	Water	PrecSep_0	
400-155198-8	WGWA-18	Total/NA	Water	PrecSep_0	
400-155198-9	WGWC-9	Total/NA	Water	PrecSep_0	
400-155198-10	WGWC-11	Total/NA	Water	PrecSep_0	
400-155198-11	WGWC-15	Total/NA	Water	PrecSep_0	
400-155198-12	WGWC-16	Total/NA	Water	PrecSep_0	
400-155198-13	WGWC-19	Total/NA	Water	PrecSep_0	
400-155198-14	EB-1-6-13-18	Total/NA	Water	PrecSep_0	
400-155198-15	EB-2-6-14-18	Total/NA	Water	PrecSep_0	
400-155198-16	DUP-1	Total/NA	Water	PrecSep_0	
400-155198-17	FB-1-6-14-18	Total/NA	Water	PrecSep_0	
400-155198-18	WGWC-8	Total/NA	Water	PrecSep_0	
400-155198-19	WGWC-10	Total/NA	Water	PrecSep_0	
400-155198-20	WGWC-12	Total/NA	Water	PrecSep_0	
MB 160-372345/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-372345/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-155198-10 DU	WGWC-11	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Rad (Continued)

Prep Batch: 372353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-21	WGWC-13	Total/NA	Water	PrecSep-21	
400-155198-22	WGWC-14A	Total/NA	Water	PrecSep-21	
400-155198-23	WGWC-17	Total/NA	Water	PrecSep-21	
400-155198-24	DUP-2	Total/NA	Water	PrecSep-21	
400-155198-25	FB-2-6-14-18	Total/NA	Water	PrecSep-21	
MB 160-372353/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-372353/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-155198-23 DU	WGWC-17	Total/NA	Water	PrecSep-21	

Prep Batch: 372356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-21	WGWC-13	Total/NA	Water	PrecSep_0	
400-155198-22	WGWC-14A	Total/NA	Water	PrecSep_0	
400-155198-23	WGWC-17	Total/NA	Water	PrecSep_0	
400-155198-25	FB-2-6-14-18	Total/NA	Water	PrecSep_0	
MB 160-372356/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-372356/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-155198-23 DU	WGWC-17	Total/NA	Water	PrecSep_0	

Prep Batch: 376311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-155198-24	DUP-2	Total/NA	Water	PrecSep_0	
MB 160-376311/5-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-376311/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-376311/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-372341/23-A
Matrix: Water
Analysis Batch: 376328

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372341

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.03066	U	0.0821	0.0822	1.00	0.196	pCi/L	06/25/18 08:38	07/17/18 19:14	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	97.1					06/25/18 08:38	07/17/18 19:14	1		

Lab Sample ID: LCS 160-372341/1-A
Matrix: Water
Analysis Batch: 376324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372341

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	10.68		1.30	1.00	0.168	pCi/L	94	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		40 - 110					
	86.7					06/25/18 08:38	07/17/18 19:14	1	

Lab Sample ID: 400-155198-10 DU
Matrix: Water
Analysis Batch: 376328

Client Sample ID: WGWC-11
Prep Type: Total/NA
Prep Batch: 372341

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	-0.0163	U	0.009154	U	0.0780	1.00	0.168	pCi/L	0.18	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	93.2					06/25/18 10:03	07/17/18 21:04	1		

Lab Sample ID: MB 160-372353/23-A
Matrix: Water
Analysis Batch: 376328

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372353

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.02221	U	0.0676	0.0676	1.00	0.175	pCi/L	06/25/18 10:03	07/17/18 21:04	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	87.6					06/25/18 10:03	07/17/18 21:04	1		

Lab Sample ID: LCS 160-372353/1-A
Matrix: Water
Analysis Batch: 376326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372353

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	8.666		1.06	1.00	0.150	pCi/L	76	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-372353/1-A
Matrix: Water
Analysis Batch: 376326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372353

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110

Lab Sample ID: 400-155198-23 DU
Matrix: Water
Analysis Batch: 376328

Client Sample ID: WGWC-17
Prep Type: Total/NA
Prep Batch: 372353

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0629	U	0.06029	U	0.101	1.00	0.177	pCi/L	0.01	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	95.9		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-372345/23-A
Matrix: Water
Analysis Batch: 376036

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372345

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3983	U	0.267	0.270	1.00	0.416	pCi/L	06/25/18 09:04	07/16/18 16:23	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110	06/25/18 09:04	07/16/18 16:23	1
Y Carrier	89.3		40 - 110	06/25/18 09:04	07/16/18 16:23	1

Lab Sample ID: LCS 160-372345/1-A
Matrix: Water
Analysis Batch: 375724

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372345

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	8.14	8.771		1.05	1.00	0.403	pCi/L	108	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	86.7		40 - 110
Y Carrier	92.3		40 - 110

Lab Sample ID: 400-155198-10 DU
Matrix: Water
Analysis Batch: 375724

Client Sample ID: WGWC-11
Prep Type: Total/NA
Prep Batch: 372345

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.292	U	-0.05203	U	0.220	1.00	0.401	pCi/L	0.74	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

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

Lab Sample ID: 400-155198-10 DU
Matrix: Water
Analysis Batch: 375724

Client Sample ID: WGWC-11
Prep Type: Total/NA
Prep Batch: 372345

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.2		40 - 110
Y Carrier	93.1		40 - 110

Lab Sample ID: MB 160-372356/23-A
Matrix: Water
Analysis Batch: 375724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372356

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.004424	U	0.192	0.192	1.00	0.351	pCi/L	06/25/18 10:22	07/16/18 16:28	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110	06/25/18 10:22	07/16/18 16:28	1
Y Carrier	92.3		40 - 110	06/25/18 10:22	07/16/18 16:28	1

Lab Sample ID: LCS 160-372356/1-A
Matrix: Water
Analysis Batch: 375896

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372356

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	8.14	8.625		1.02	1.00	0.397	pCi/L	106	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.1		40 - 110
Y Carrier	90.1		40 - 110

Lab Sample ID: 400-155198-23 DU
Matrix: Water
Analysis Batch: 375896

Client Sample ID: WGWC-17
Prep Type: Total/NA
Prep Batch: 372356

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.436	U	0.3582	F	0.233	1.00	0.353	pCi/L	1.60	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	95.9		40 - 110
Y Carrier	90.8		40 - 110

Lab Sample ID: MB 160-376311/5-A
Matrix: Water
Analysis Batch: 376802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376311

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.04866	U	0.272	0.272	1.00	0.480	pCi/L	07/17/18 14:00	07/20/18 17:23	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

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

Lab Sample ID: MB 160-376311/5-A
Matrix: Water
Analysis Batch: 376802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376311

Carrier	MB %Yield	MB Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	87.1		40 - 110

Prepared	Analyzed	Dil Fac
07/17/18 14:00	07/20/18 17:23	1
07/17/18 14:00	07/20/18 17:23	1

Lab Sample ID: LCS 160-376311/1-A
Matrix: Water
Analysis Batch: 376802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376311

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.9	14.45		1.61	1.00	0.487	pCi/L	97	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: LCSD 160-376311/2-A
Matrix: Water
Analysis Batch: 376802

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 376311

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	14.9	14.06		1.57	1.00	0.446	pCi/L	94	56 - 140	0.12	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	88.6		40 - 110

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

Lab Sample ID: 400-155198-10 DU
Matrix: Water
Analysis Batch: 377004

Client Sample ID: WGWC-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.275	U	-0.04288	U	0.233	5.00	0.401	pCi/L	0.66	

Lab Sample ID: 400-155198-23 DU
Matrix: Water
Analysis Batch: 377004

Client Sample ID: WGWC-17
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	-0.373	U	0.4185		0.254	5.00	0.353	pCi/L	1.46	

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-155198-2
 SDG: Ash Pond

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 (Continued)

Lab Sample ID: 400-155115-A-3 DU
 Matrix: Water
 Analysis Batch: 377251

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	0.773		0.3811	U	0.328	5.00	0.477	pCi/L	0.58	

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Client Information
 Client Contact: Joju Abraham
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 Birmingham
 State, Zip: AL, 35291
 Phone:
 Email: JAbraham@southernco.com
 Project Name: CCR - Plant Wansley
 Site: Georgia

Sampler: J. Biscardi, H. Acid
 Lab PM: Whitmore, Cheyenne R
 E-Mail: Cheyenne.whitmore@testamericainc.com

Carrier Tracking No(s): ACC to TA-ATL
COC No: 400-72601-28757.2
Page: 2 of 2
Job #: Zof

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Veget, Sewage, Overstain, etc.)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Analysis Requested	Special Instructions/Note:
					Yes	No	Yes	No		
W6WC-16	6-14-18	1110	G	Water	N	N	N	N	App. III Metals plus detected App. IV	
W6WC-19	6-14-18	1100	G	Water	N	N	N	N		
E13-1-6-13-18	6-13-18	1455	G	Water	N	N	N	N		
E13-2-6-14-18	6-14-18	1330	G	Water	N	N	N	N		
Dup-1	6-14-18	-	G	Water	N	N	N	N		
F13-1-6-14-18	6-14-18	1145	G	Water	N	N	N	N		
				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: 6-11-18 / 1700
 Relinquished by: [Signature] Company: Acc

Relinquished by: Date/Time: 6-14-18 1710
 Relinquished by: [Signature] Company: [Signature]

Relinquished by: Date/Time: 6-15-18 09:15
 Relinquished by: [Signature] Company: [Signature]

Custody Seal Intact: Custody Seal No. [Blank]

Method of Shipment: Date/Time: 6/14/18 17:00
 Received by: [Signature] Company: [Signature]

Special Instructions/QC Requirements: Date/Time: 6/15/18 09:15
 Received by: [Signature] Company: [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

*Det. App. III: As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-155198-2

SDG Number: Ash Pond

Login Number: 155198

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 0.0°C IR7, 3.1°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-155198-2

SDG Number: Ash Pond

Login Number: 155198

List Number: 2

Creator: Taylor, Kristene N

List Source: TestAmerica St. Louis

List Creation: 06/22/18 02:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.0,18.0,18.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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 Wansley

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-18 *
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-14	09-30-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18
Iowa	State Program	7	373	12-01-18
Kansas	NELAP	7	E-10236	10-31-18
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18
Maryland	State Program	3	310	09-30-18 *
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-18 *

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-155198-2
SDG: Ash Pond

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Nevada	State Program	9	MO000542018-1	07-31-18 *
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-18 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-18 *
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-18 *
Texas	NELAP	6	T104704193-17-11	07-31-18 *
US Fish & Wildlife	Federal		058448	07-31-18
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-18 *
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-18
West Virginia DEP	State Program	3	381	08-31-18 *

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

TestAmerica Pensacola

Product Name: Low-Flow System

Date: 2018-06-13 15:44:44

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 129 ft

Pump placement from TOC 124 ft

Well Information:

Well ID WGWA-1
Well diameter 2 in
Well Total Depth 129.60 ft
Screen Length 10 ft
Depth to Water 25.26 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 1.635202 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 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			+/- 0.5	+/- 0.1	+/- 3%	+/- 10		+/- 0.3	+/- 10
Last 5	15:22:46	3604.98	27.70	5.32	36.99	0.91	25.70	1.83	107.47
Last 5	15:27:48	3906.98	26.38	5.33	36.71	0.92	25.70	1.85	103.39
Last 5	15:32:48	4206.98	26.31	5.32	37.29	0.99	25.70	1.88	101.61
Last 5	15:37:48	4506.97	27.51	5.33	37.05	1.18	25.70	1.84	102.93
Last 5	15:42:48	4806.97	27.79	5.33	36.63	1.16	25.70	1.83	103.40
Variance 0			-0.07	-0.01	0.58			0.03	-1.78
Variance 1			1.20	0.00	-0.24			-0.04	1.32
Variance 2			0.28	0.00	-0.42			-0.01	0.48

Notes

Collected at 15:43. Sunny 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 10:17:59

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 104 ft

Pump placement from TOC 99 ft

Well Information:

Well ID WGWA-2
Well diameter 2 in
Well Total Depth 104 ft
Screen Length 10 ft
Depth to Water 9.85 ft

Pumping Information:

Final Pumping Rate 190 mL/min
Total System Volume 1.393884 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 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			+/- 0.5	+/- 0.1	+/- 3%	+/- 10		+/- 0.3	+/- 10
Last 5	09:56:53	1200.02	18.68	5.98	124.55	0.55	10.30	0.16	101.35
Last 5	10:01:53	1500.01	18.76	5.99	123.70	0.58	10.30	0.11	97.16
Last 5	10:06:53	1800.01	18.78	6.00	123.31	0.55	10.30	0.10	95.32
Last 5	10:11:53	2100.00	18.75	6.01	123.95	0.53	10.30	0.10	96.83
Last 5	10:16:53	2400.00	18.89	6.02	125.03	0.51	10.30	0.11	90.05
Variance 0			0.03	0.01	-0.39			-0.01	-1.84
Variance 1			-0.03	0.01	0.64			0.00	1.51
Variance 2			0.14	0.01	1.08			0.01	-6.79

Notes

Collected at 10:16. Sunny 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 11:40:28

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladderpump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 19 ft

Pump placement from TOC 14 ft

Well Information:

Well ID WGWA-3
Well diameter 2 in
Well Total Depth 19.0 ft
Screen Length 10 ft
Depth to Water 3.02 ft

Pumping Information:

Final Pumping Rate 350 mL/min
Total System Volume 0.5734019 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 10.5 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	11:17:24	300.02	17.80	5.96	37.63	2.26	3.10	5.12	44.57
Last 5	11:22:24	600.02	17.45	5.77	37.80	1.76	3.10	5.12	43.78
Last 5	11:27:24	900.02	17.49	5.56	37.96	1.55	3.10	5.16	50.23
Last 5	11:32:24	1200.02	17.42	5.60	37.68	1.98	3.10	5.11	47.97
Last 5	11:37:24	1500.49	17.36	5.58	37.71	2.35	3.10	5.11	47.45
Variance 0			0.04	-0.21	0.16			0.04	6.45
Variance 1			-0.07	0.04	-0.28			-0.05	-2.26
Variance 2			-0.06	-0.02	0.03			0.00	-0.53

Notes

Collected at 11:40. Cloudy 80s

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 10:43:10

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladderpump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 73 ft

Pump placement from TOC 68 ft

Well Information:

Well ID WGWA-4
Well diameter 2 in
Well Total Depth 73.1 ft
Screen Length 10 ft
Depth to Water 4.65 ft

Pumping Information:

Final Pumping Rate 140 mL/min
Total System Volume 1.094649 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 22 in
Total Volume Pumped 6.3 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	10:20:39	600.02	19.67	6.61	149.06	1.02	6.40	0.05	60.67
Last 5	10:25:39	900.02	19.81	6.63	146.22	0.92	6.40	0.05	52.81
Last 5	10:30:39	1200.02	19.54	6.59	144.74	1.03	6.50	0.06	49.78
Last 5	10:35:39	1500.02	19.47	6.64	144.63	0.88	6.50	0.08	44.10
Last 5	10:40:39	1800.02	19.26	6.67	144.23	0.74	6.50	0.09	40.62
Variance 0			-0.27	-0.03	-1.48			0.01	-3.02
Variance 1			-0.07	0.05	-0.11			0.01	-5.68
Variance 2			-0.21	0.03	-0.39			0.01	-3.49

Notes

Collected at 10:45. Cloudy 80s

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-13 16:30:48

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type peri pump
Tubing Type Poly
Tubing Diameter .17 in
Tubing Length 23 ft

Pump placement from TOC 18 ft

Well Information:

Well ID WGWA-5
Well diameter 2 in
Well Total Depth 23.19 ft
Screen Length 10 ft
Depth to Water 13.45 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.1926587 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6 in
Total Volume Pumped 25 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	16:07:10	5700.54	18.16	5.12	25.86	5.94	13.90	4.35	64.38
Last 5	16:12:10	6000.54	18.56	5.15	25.73	5.37	13.90	4.31	63.36
Last 5	16:17:10	6300.54	18.56	5.14	25.69	5.48	13.90	4.30	65.13
Last 5	16:22:10	6600.45	18.44	5.13	25.73	5.13	13.90	4.28	66.51
Last 5	16:27:10	6900.46	18.45	5.13	25.85	4.94	13.90	4.28	67.45
Variance 0			0.00	-0.01	-0.05			-0.01	1.77
Variance 1			-0.12	-0.01	0.04			-0.01	1.38
Variance 2			0.01	-0.00	0.12			-0.00	0.94

Notes

Collected at 16:30. Sunny 80s. EB 1 here at 14:55

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-13 15:10:58

Project Information:

Operator Name Hunter Auld
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463453
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 104.5 ft

Pump placement from TOC 99 ft

Well Information:

Well ID WGWA-6
Well diameter 2 in
Well Total Depth 104.5 ft
Screen Length 10 ft
Depth to Water 14.29 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.39871 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6 in
Total Volume Pumped 2.5 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			+/- 1	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 100
Last 5	14:45:32	600.02	20.60	7.49	170.66	0.68	14.60	0.52	103.12
Last 5	14:50:32	900.02	20.57	7.72	172.63	1.09	14.60	0.38	112.92
Last 5	14:55:32	1200.02	20.08	7.76	172.71	1.67	14.70	0.24	98.87
Last 5	15:00:34	1502.02	19.83	7.77	172.14	1.32	14.80	0.23	82.38
Last 5	15:05:39	1807.40	20.01	7.78	173.65	1.06	14.80	0.25	76.65
Variance 0			-0.49	0.04	0.08			-0.13	-14.05
Variance 1			-0.25	0.02	-0.57			-0.02	-16.49
Variance 2			0.18	0.01	1.51			0.02	-5.73

Notes

Sampled at 1505. Sunny, 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 12:55:22

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type peri pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID WGWA-7
Well diameter 2 in
Well Total Depth 39.60 ft
Screen Length 10 ft
Depth to Water 23.93 ft

Pumping Information:

Final Pumping Rate 250 mL/min
Total System Volume 0.2685369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	12:30:43	600.02	18.65	5.42	25.82	2.05	24.00	7.16	46.38
Last 5	12:35:43	900.02	18.50	5.41	25.65	1.43	24.00	7.12	46.17
Last 5	12:40:43	1200.02	18.42	5.40	25.49	1.08	24.00	7.15	46.70
Last 5	12:45:43	1500.02	18.63	5.41	25.33	1.64	24.00	7.09	46.96
Last 5	12:50:43	1800.02	18.60	5.39	25.30	1.82	24.00	7.10	48.82
Variance 0			-0.08	-0.01	-0.16			0.03	0.53
Variance 1			0.21	0.00	-0.17			-0.06	0.26
Variance 2			-0.03	-0.02	-0.02			0.00	1.86

Notes

Collected at 12:55. Sunny 80s

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-13 13:03:38

Project Information:

Operator Name Hunter Auld
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463453
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID WGWA-18
Well diameter 2 in
Well Total Depth 40 ft
Screen Length 10 ft
Depth to Water 18.85 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.7761093 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 27 in
Total Volume Pumped 12.5 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			+/- 1	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 100
Last 5	12:33:10	5122.32	19.24	6.40	121.82	0.50	21.00	1.63	93.70
Last 5	12:43:10	5722.32	26.30	6.30	15182.95	0.35	21.00	7.53	226.41
Last 5	12:48:25	6037.21	19.07	6.35	116.76	0.39	21.00	1.68	97.19
Last 5	12:53:45	6357.21	18.97	6.33	115.19	0.49	21.00	1.59	99.46
Last 5	12:58:53	6665.21	18.75	6.31	113.15	0.38	21.00	1.69	101.28
Variance 0			-7.22	0.05	-15066.20			-5.85	-129.22
Variance 1			-0.10	-0.02	-1.57			-0.09	2.27
Variance 2			-0.22	-0.02	-2.03			0.10	1.82

Notes

Sampled at 1305. Sunny, 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 13:42:16

Project Information:

Operator Name J Berisford
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 59 ft

Pump placement from TOC 54 ft

Well Information:

Well ID WGWC-8
Well diameter 2 in
Well Total Depth 59.40 ft
Screen Length 10 ft
Depth to Water 4.19 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.7664 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8.5 in
Total Volume Pumped 4.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	13:20:24	600.04	21.73	5.75	593.00	0.55	4.90	1.19	62.33
Last 5	13:25:24	900.03	21.84	5.71	578.86	0.72	4.90	1.07	56.95
Last 5	13:30:24	1200.03	21.95	5.76	574.39	0.32	4.90	0.97	53.82
Last 5	13:35:24	1500.04	22.09	5.78	582.90	0.27	4.90	0.96	53.27
Last 5	13:40:24	1801.00	22.22	5.76	592.30	0.31	4.90	0.96	53.80
Variance 0			0.12	0.05	-4.47			-0.10	-3.14
Variance 1			0.13	0.02	8.51			-0.01	-0.54
Variance 2			0.13	-0.02	9.41			0.00	0.53

Notes

Sunny, sample time- 1340, Dup-2 here

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 12:10:53

Project Information:

Operator Name WGWC-9
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 61 ft

Pump placement from TOC 56 ft

Well Information:

Well ID WGWC-9
Well diameter 2 in
Well Total Depth 61.42 ft
Screen Length 10 ft
Depth to Water 15.63 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.809837 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17.6 in
Total Volume Pumped 3.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	11:50:03	900.02	25.81	6.46	159.13	3.34	17.10	6.06	43.17
Last 5	11:55:03	1200.05	24.74	6.48	155.71	3.02	17.10	5.88	42.70
Last 5	12:00:03	1500.04	25.01	6.49	156.26	1.51	17.10	5.91	41.96
Last 5	12:05:03	1800.05	25.28	6.48	155.96	0.22	17.10	5.86	42.64
Last 5	12:10:03	2100.04	26.00	6.47	155.97	0.42	17.10	5.82	43.33
Variance 0			0.27	0.01	0.55			0.03	-0.74
Variance 1			0.27	-0.01	-0.30			-0.05	0.67
Variance 2			0.72	-0.01	0.02			-0.04	0.69

Notes

Sunny, sample time-1210, FB-1-6-14-18 here at 1145

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 17:32:06

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladderpump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 147 ft

Pump placement from TOC 142 ft

Well Information:

Well ID WGWC-10
Well diameter 2 in
Well Total Depth 147.16 ft
Screen Length 10 ft
Depth to Water 19.47 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.808951 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20 in
Total Volume Pumped 4.4 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	17:06:56	900.02	20.03	6.50	81.30	1.89	20.70	3.32	67.08
Last 5	17:11:56	1200.33	19.84	6.51	82.34	1.54	20.90	3.92	67.71
Last 5	17:16:56	1500.33	19.82	6.55	83.07	3.07	21.00	4.36	68.22
Last 5	17:21:56	1800.33	19.72	6.55	82.64	2.87	21.10	4.42	68.55
Last 5	17:26:56	2100.33	19.82	6.56	82.48	2.49	212.00	4.39	68.33
Variance 0			-0.02	0.04	0.73			0.44	0.51
Variance 1			-0.10	0.00	-0.42			0.06	0.33
Variance 2			0.10	0.01	-0.16			-0.03	-0.23

Notes

Collected at 17:30. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 11:56:47

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 39 ft

Pump placement from TOC 34 ft

Well Information:

Well ID WGWC-11
Well diameter 2 in
Well Total Depth 49.50 ft
Screen Length 10 ft
Depth to Water 25.22 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.7664565 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13 in
Total Volume Pumped 4.5 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			+/- 0.5	+/- 0.1	+/- 3%	+/- 10		+/- 0.3	+/- 10
Last 5	11:34:53	600.02	19.85	5.93	46.53	1.24	26.30	6.17	122.90
Last 5	11:39:53	900.02	19.68	5.91	45.67	1.15	26.60	5.98	128.53
Last 5	11:44:54	1201.02	19.61	5.91	45.62	1.19	26.70	5.89	121.30
Last 5	11:49:54	1501.01	19.40	5.90	45.38	1.47	26.80	5.84	114.95
Last 5	11:54:54	1801.01	19.22	5.89	45.31	1.54	26.80	5.83	114.84
Variance 0			-0.06	-0.01	-0.05			-0.10	-7.23
Variance 1			-0.21	-0.01	-0.24			-0.05	-6.35
Variance 2			-0.18	-0.00	-0.07			-0.01	-0.12

Notes

Collected at 11:54. Sunny 80's. Extra Rad here.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 14:37:09

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 76 ft

Pump placement from TOC 71 ft

Well Information:

Well ID WGWC-12
Well diameter 2 in
Well Total Depth 76.50 ft
Screen Length 10 ft
Depth to Water 24.75 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.123608 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 3 in
Total Volume Pumped 16.5 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			+/- 0.5	+/- 0.1	+/- 3%	+/- 10		+/- 0.3	+/- 10
Last 5	14:16:25	5399.96	18.12	6.73	128.45	5.76	25.00	0.16	-3.42
Last 5	14:21:25	5699.93	18.11	6.73	128.23	5.14	25.00	0.16	-2.77
Last 5	14:26:25	5999.95	17.98	6.73	127.99	5.83	25.00	0.16	-2.40
Last 5	14:31:29	6303.95	18.10	6.73	127.88	5.26	25.00	0.16	-2.18
Last 5	14:36:29	6603.94	18.06	6.73	127.61	4.28	25.00	0.16	-2.03
Variance 0			-0.13	0.00	-0.24			-0.00	0.37
Variance 1			0.12	0.00	-0.11			0.00	0.22
Variance 2			-0.04	0.00	-0.28			-0.00	0.15

Notes

Collected at 14:36. Sunny 80's. FB-2 here.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 16:14:19

Project Information:

Operator Name Ryan Walker
Company Name Atlantic Coast Consulting
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 96 ft

Pump placement from TOC 91 ft

Well Information:

Well ID WGWC-13
Well diameter 2 in
Well Total Depth 96.31 ft
Screen Length 10 ft
Depth to Water 17.20 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.316662 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 16 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			+/- 0.5	+/- 0.1	+/- 3%	+/- 10		+/- 0.3	+/- 10
Last 5	15:53:44	2403.01	21.72	6.40	95.16	2.47	18.60	1.51	38.42
Last 5	15:58:44	2703.00	22.16	6.39	94.57	1.77	18.70	1.42	41.30
Last 5	16:03:44	3003.00	22.10	6.39	93.79	1.28	18.70	1.37	44.20
Last 5	16:08:44	3302.99	22.03	6.39	93.40	2.41	18.70	1.28	45.67
Last 5	16:13:44	3602.99	21.87	6.39	92.58	2.15	18.70	1.13	46.41
Variance 0			-0.07	-0.00	-0.78			-0.05	2.90
Variance 1			-0.06	-0.00	-0.39			-0.09	1.47
Variance 2			-0.17	0.00	-0.82			-0.15	0.74

Notes

Collected at 16:13. Sunny 80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 15:53:20

Project Information:

Operator Name J Berisford
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type Peru pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 42 ft

Pump placement from TOC 37 ft

Well Information:

Well ID WGWC-14A
Well diameter 2 in
Well Total Depth 42.93 ft
Screen Length 10 ft
Depth to Water 18.40 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.2774638 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 12 in
Total Volume Pumped 6.87 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	15:30:36	2100.05	23.97	5.77	78.60	10.00	19.30	1.03	69.69
Last 5	15:35:36	2400.05	24.36	5.78	77.61	4.82	19.40	1.25	72.82
Last 5	15:40:36	2700.05	24.39	5.77	79.53	4.97	19.40	0.99	61.20
Last 5	15:45:36	3000.05	24.33	5.78	80.50	3.15	19.40	0.91	57.73
Last 5	15:50:37	3301.03	23.43	5.76	81.04	3.75	19.40	0.85	53.81
Variance 0			0.04	-0.01	1.92			-0.25	-11.62
Variance 1			-0.06	0.00	0.97			-0.08	-3.48
Variance 2			-0.90	-0.02	0.55			-0.06	-3.91

Notes

Sunny, sample time- 1550

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 13:22:09

Project Information:

Operator Name Hunter Auld
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463453
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 56 ft

Pump placement from TOC 51 ft

Well Information:

Well ID WGWC-15
Well diameter 2 in
Well Total Depth 56.0 ft
Screen Length 10 ft
Depth to Water 12.20 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.9305529 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 33 in
Total Volume Pumped 2.25 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			+/- 1	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 100
Last 5	12:52:15	600.02	21.68	7.57	325.91	0.79	13.90	0.96	41.51
Last 5	13:02:14	1200.02	21.86	7.52	312.52	0.61	14.45	1.79	39.21
Last 5	13:07:14	1500.02	21.56	7.51	307.52	0.65	14.80	2.13	41.38
Last 5	13:12:15	1800.02	21.57	7.50	309.24	0.50	14.90	2.12	44.01
Last 5	13:17:15	2101.02	22.94	7.50	307.06	0.57	15.00	2.26	46.20
Variance 0			-0.30	-0.01	-5.00			0.34	2.17
Variance 1			0.01	-0.01	1.72			-0.01	2.63
Variance 2			1.37	-0.00	-2.18			0.14	2.19

Notes

Sampled at 1315.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 11:16:22

Project Information:

Operator Name Hunter Auld
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 463453
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 34.7 ft

Pump placement from TOC 29 ft

Well Information:

Well ID WGWC-16
Well diameter 2 in
Well Total Depth 34.7 ft
Screen Length 10 ft
Depth to Water 11.65 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.7249498 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 3.25 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			+/- 1	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 100
Last 5	10:49:08	300.15	19.96	5.33	2086.08	1.23	11.70	0.57	108.55
Last 5	10:54:07	600.03	19.24	5.34	2087.76	2.64	11.70	0.43	110.49
Last 5	10:59:07	900.02	19.15	5.34	2090.67	2.61	11.65	0.30	112.60
Last 5	11:04:07	1200.02	19.23	5.34	2086.68	1.05	11.65	0.29	115.07
Last 5	11:09:08	1500.28	19.24	5.35	2076.76	1.20	11.65	0.21	117.39
Variance 0			-0.09	0.00	2.91			-0.13	2.11
Variance 1			0.09	-0.00	-3.99			-0.00	2.47
Variance 2			0.00	0.01	-9.92			-0.09	2.32

Notes

Sampled at 1110. overcast,80's.

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 15:50:36

Project Information:

Operator Name Chris Parker
Company Name ACC
Project Name Plant Wansley AP
Site Name Plant Wansley AP
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model Hach 2100 Q

Pump Information:

Pump Model/Type QED Bladderpump
Tubing Type Poly
Tubing Diameter .25 in
Tubing Length 96 ft

Pump placement from TOC 91 ft

Well Information:

Well ID WGWC-17
Well diameter 2 in
Well Total Depth 96.16 ft
Screen Length 10 ft
Depth to Water 22.17 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.316662 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19 in
Total Volume Pumped 9.7 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			+/- 2	+/- 0.1	+/- 5%	+/- 10%		+/- 10%	+/- 50
Last 5	15:23:32	300.08	19.90	6.16	138.14	1.67	23.80	0.39	72.44
Last 5	15:28:32	600.06	19.58	6.16	137.19	1.12	23.80	0.45	73.62
Last 5	15:33:32	900.03	19.61	6.16	135.16	1.22	23.80	0.57	71.55
Last 5	15:38:32	1200.02	19.64	6.08	133.31	1.70	23.80	0.72	74.97
Last 5	15:43:32	1500.02	19.38	6.15	131.42	1.47	23.80	0.83	71.36
Variance 0			0.02	0.00	-2.03			0.12	-2.07
Variance 1			0.03	-0.08	-1.85			0.15	3.41
Variance 2			-0.26	0.07	-1.88			0.12	-3.61

Notes

Collected at 15:50. Cloudy 80s. Extra Rad here

Grab Samples

Product Name: Low-Flow System

Date: 2018-06-14 11:00:47

Project Information:

Operator Name Jordan Berisford
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 407447
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 94 ft

Pump placement from TOC 89 ft

Well Information:

Well ID WGWC-19
Well diameter 2 in
Well Total Depth 94.8 ft
Screen Length 10 ft
Depth to Water 19.3 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 2.526553 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6 in
Total Volume Pumped 4.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	10:40:01	600.05	19.84	6.80	137.34	1.77	19.80	0.32	-6.22
Last 5	10:45:01	900.04	19.50	6.76	137.79	1.50	19.80	0.20	11.83
Last 5	10:50:01	1200.03	19.59	6.74	138.11	1.36	19.80	0.15	17.42
Last 5	10:55:01	1500.04	19.73	6.72	137.92	1.60	19.80	0.12	19.56
Last 5	11:00:01	1800.04	19.90	6.72	138.87	1.72	19.80	0.12	19.56
Variance 0			0.09	-0.02	0.31			-0.05	5.59
Variance 1			0.14	-0.01	-0.19			-0.03	2.14
Variance 2			0.17	-0.00	0.96			0.00	-0.01

Notes

Cloudy, sample time-1100

Grab Samples

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: 400-159836-1

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley


For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/26/2018 4:39:13 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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Detection Summary

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

TestAmerica Job ID: 400-159836-1
 SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-159836-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.4		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	0.79	J	1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	11		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	76		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-1

Lab Sample ID: 400-159836-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.0		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-18

Lab Sample ID: 400-159836-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.082	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	7.6		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	11		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	68		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Wansley

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-159836-1	WGWA-2	Water	09/24/18 16:25	09/28/18 09:15
400-159836-2	WGWA-1	Water	09/27/18 11:00	09/28/18 09:15
400-159836-3	WGWA-18	Water	09/28/18 12:15	09/29/18 09:20

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Client Sample Results

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

TestAmerica Job ID: 400-159836-1
 SDG: Ash Pond

Client Sample ID: WGWA-2
Date Collected: 09/24/18 16:25
Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-1
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		1.0	0.89	mg/L			10/04/18 09:52	1
Fluoride	<0.082		0.20	0.082	mg/L			10/04/18 09:52	1
Sulfate	0.79	J	1.0	0.70	mg/L			10/04/18 09:52	1

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		10/11/18 10:25	10/11/18 23:24	5
Calcium	11		0.25	0.13	mg/L		10/11/18 10:25	10/11/18 23:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	76		5.0	3.4	mg/L			09/29/18 14:50	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-1
 SDG: Ash Pond

Client Sample ID: WGWA-1
Date Collected: 09/27/18 11:00
Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0		1.0	0.89	mg/L			10/04/18 10:15	1
Fluoride	<0.082		0.20	0.082	mg/L			10/04/18 10:15	1
Sulfate	<0.70		1.0	0.70	mg/L			10/04/18 10:15	1

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		10/11/18 10:25	10/11/18 23:28	5
Calcium	1.2		0.25	0.13	mg/L		10/11/18 10:25	10/11/18 23:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		5.0	3.4	mg/L			10/02/18 11:34	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-1
 SDG: Ash Pond

Client Sample ID: WGWA-18

Lab Sample ID: 400-159836-3

Date Collected: 09/28/18 12:15

Matrix: Water

Date Received: 09/29/18 09:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		1.0	0.89	mg/L			10/04/18 10:38	1
Fluoride	0.082	J	0.20	0.082	mg/L			10/04/18 10:38	1
Sulfate	7.6		1.0	0.70	mg/L			10/04/18 10:38	1

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		10/11/18 10:25	10/11/18 23:33	5
Calcium	11		0.25	0.13	mg/L		10/11/18 10:25	10/11/18 23:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	68		5.0	3.4	mg/L			10/03/18 08:59	1

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Definitions/Glossary

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

Qualifiers

HPLC/IC

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.

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 Wansley

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

Client Sample ID: WGWA-2

Date Collected: 09/24/18 16:25

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	413781	10/04/18 09:52	BAW	TAL PEN
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:24	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	413497	09/29/18 14:50	DEK	TAL PEN

Client Sample ID: WGWA-1

Date Collected: 09/27/18 11:00

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	413781	10/04/18 10:15	BAW	TAL PEN
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:28	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	413725	10/02/18 11:34	CLB	TAL PEN

Client Sample ID: WGWA-18

Date Collected: 09/28/18 12:15

Date Received: 09/29/18 09:20

Lab Sample ID: 400-159836-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	413781	10/04/18 10:38	BAW	TAL PEN
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:33	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	413882	10/03/18 08:59	CLB	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 Wansley

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

HPLC/IC

Analysis Batch: 413781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	300.0	
400-159836-2	WGWA-1	Total/NA	Water	300.0	
400-159836-3	WGWA-18	Total/NA	Water	300.0	
MB 400-413781/19	Method Blank	Total/NA	Water	300.0	
LCS 400-413781/20	Lab Control Sample	Total/NA	Water	300.0	
LCS 400-413781/21	Lab Control Sample Dup	Total/NA	Water	300.0	
400-159637-K-4 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 414950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total Recoverable	Water	3005A	
400-159836-2	WGWA-1	Total Recoverable	Water	3005A	
400-159836-3	WGWA-18	Total Recoverable	Water	3005A	
MB 400-414950/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-414950/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-159826-J-1-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-159826-J-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 415116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total Recoverable	Water	6020	414950
400-159836-2	WGWA-1	Total Recoverable	Water	6020	414950
400-159836-3	WGWA-18	Total Recoverable	Water	6020	414950
MB 400-414950/1-A ^5	Method Blank	Total Recoverable	Water	6020	414950
LCS 400-414950/2-A	Lab Control Sample	Total Recoverable	Water	6020	414950
400-159826-J-1-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	414950
400-159826-J-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	414950

General Chemistry

Analysis Batch: 413497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	SM 2540C	
MB 400-413497/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-413497/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-159844-A-6 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 413725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-2	WGWA-1	Total/NA	Water	SM 2540C	
MB 400-413725/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-413725/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-159791-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-159844-C-17 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 413882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-3	WGWA-18	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 413882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-413882/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-413882/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-159927-C-2 DU	Duplicate	Total/NA	Water	SM 2540C	

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QC Sample Results

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-413781/19
Matrix: Water
Analysis Batch: 413781

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/03/18 23:36	1
Fluoride	<0.082		0.20	0.082	mg/L			10/03/18 23:36	1
Sulfate	<0.70		1.0	0.70	mg/L			10/03/18 23:36	1

Lab Sample ID: LCS 400-413781/20
Matrix: Water
Analysis Batch: 413781

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110
Fluoride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-413781/21
Matrix: Water
Analysis Batch: 413781

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	10.0	10.1		mg/L		101	90 - 110	0	15
Fluoride	10.0	10.6		mg/L		106	90 - 110	1	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 400-159637-K-4 MSD
Matrix: Water
Analysis Batch: 413781

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	29		10.0	38.5		mg/L		99	80 - 120	0	20
Fluoride	0.33		10.0	11.1		mg/L		108	80 - 120	1	20
Sulfate	85	E	10.0	96.3	E 4	mg/L		114	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-414950/1-A ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/11/18 10:25	10/11/18 22:30	5
Calcium	<0.13		0.25	0.13	mg/L		10/11/18 10:25	10/11/18 22:30	5

Lab Sample ID: LCS 400-414950/2-A
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0948		mg/L		95	80 - 120
Calcium	5.00	4.88		mg/L		98	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

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

Lab Sample ID: 400-159826-J-1-C MS ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	<0.021		0.100	0.0959		mg/L		96	75 - 125
Calcium	7.6		5.00	13.0		mg/L		108	75 - 125

Lab Sample ID: 400-159826-J-1-D MSD ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	<0.021		0.100	0.103		mg/L		103	75 - 125	7	20
Calcium	7.6		5.00	12.6		mg/L		100	75 - 125	3	20

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

Lab Sample ID: MB 400-413497/1
Matrix: Water
Analysis Batch: 413497

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			09/29/18 14:50	1

Lab Sample ID: LCS 400-413497/2
Matrix: Water
Analysis Batch: 413497

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	252		mg/L		86	78 - 122

Lab Sample ID: 400-159844-A-6 DU
Matrix: Water
Analysis Batch: 413497

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	130		128		mg/L		0	5

Lab Sample ID: MB 400-413725/1
Matrix: Water
Analysis Batch: 413725

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			10/02/18 11:34	1

Lab Sample ID: LCS 400-413725/2
Matrix: Water
Analysis Batch: 413725

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	244		mg/L		83	78 - 122

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-1
SDG: Ash Pond

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

Lab Sample ID: 400-159791-C-1 DU
Matrix: Water
Analysis Batch: 413725

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	160		162		mg/L		4	5

Lab Sample ID: 400-159844-C-17 DU
Matrix: Water
Analysis Batch: 413725

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	130		132		mg/L		0	5

Lab Sample ID: MB 400-413882/1
Matrix: Water
Analysis Batch: 413882

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			10/03/18 08:59	1

Lab Sample ID: LCS 400-413882/2
Matrix: Water
Analysis Batch: 413882


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: 400-159927-C-2 DU
Matrix: Water
Analysis Batch: 413882

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	74		72.0		mg/L		3	5

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Camer Tracking No(s): ACC to TA-ATL										
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSONW#:		Analysis Requested 										
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (V=water, S=solid, O=soil, BT=trace, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/70)	Cl, F, SO, & TDS (EPA 300.0 & SM 2640C)	Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo)	Radium 226 & 228 (SM 846 9315/9320)	Total Number of Containers	Special Instructions/Note:
W6WA-2	9-24-18	1625	6	Water	Y	Y	Y	Y	Y	Y	3	APP III
w6WA-1	9-27-18	1100	6	Water	Y	Y	Y	Y	Y	Y	3	
				Water								
				Water								
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Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" 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 checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months												
Special Instructions/QC Requirements:												
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 9-27-18 1640 ACC Company Relinquished by: _____ Date/Time: 9-27-18 1446 Company Relinquished by: _____ Date/Time: _____ Company												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: 2.0°C 6-16°C												



Chain of Custody Record

Client Information		Lab P/M: Whitmire, Cheyenne R		Carrier Tracking No(s):	
Client Contact: Joju Abraham		Phone: (770) 594-5998		E-Mail: cheyenne.whitmire@testamericainc.com	
Company: Southern Company		Due Date Requested:		Analysis Requested	
Address: PO BOX 2641 GSC8		TAT Requested (days):		Total Number of Containers: 2	
City: Birmingham		PO #: SCS10347656		Preservation Codes:	
State, Zip: AL, 35291		WD #:		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:	
Email: JAbraham@southernco.com		Project #: 40007709		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Site: Georgia		SSOW#:		Special Instructions/Note: APP III	
Sample Identification		Sample Date		Field Filtered Sample (Yes or No)	
WGWA-18		9-28-18 1215 G		X	
Sample Type (C=Comp, G=grab)		Sample Time		Matrix	
G		1215 G		Water	
Preservation Code:		Sample Date		Matrix	
G		9-28-18 1215 G		Water	
Sample Date		Sample Time		Matrix	
9-28-18 1215 G		1215 G		Water	
Sample Time		Sample Date		Matrix	
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Sample Date		Sample Time		Matrix	
9-28-18 1215 G		1215 G		Water	
Sample Time		Sample Date		Matrix	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-159836-1

SDG Number: Ash Pond

Login Number: 159836

List Number: 1

Creator: Hooper, Carolyn D

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 IR7, 0.0°C IR7
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 Wansley

TestAmerica Job ID: 400-159836-1
 SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19



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: 400-159836-2

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley


For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/31/2018 2:29:53 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 Wansley

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Job ID: 400-159836-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-159836-2

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-393518: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-18 (400-159836-3). 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 160-393430: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-18 (400-159836-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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Method Summary

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-159836-1	WGWA-2	Water	09/24/18 16:25	09/28/18 09:15
400-159836-2	WGWA-1	Water	09/27/18 11:00	09/28/18 09:15
400-159836-3	WGWA-18	Water	09/28/18 12:15	09/29/18 09:20

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Client Sample Results

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

TestAmerica Job ID: 400-159836-2
 SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-159836-1

Date Collected: 09/24/18 16:25

Matrix: Water

Date Received: 09/28/18 09:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.251		0.0847	0.0876	1.00	0.0833	pCi/L	10/01/18 11:09	10/23/18 07:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/01/18 11:09	10/23/18 07:41	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0676	U	0.174	0.174	1.00	0.303	pCi/L	10/01/18 11:37	10/08/18 17:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/01/18 11:37	10/08/18 17:08	1
Y Carrier	83.0		40 - 110					10/01/18 11:37	10/08/18 17:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.318		0.194	0.195	5.00	0.303	pCi/L		10/31/18 13:21	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-2
 SDG: Ash Pond

Client Sample ID: WGWA-1
Date Collected: 09/27/18 11:00
Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2
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	0.269		0.0828	0.0863	1.00	0.0655	pCi/L	10/01/18 11:09	10/23/18 07:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					10/01/18 11:09	10/23/18 07:41	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0730	U	0.165	0.165	1.00	0.285	pCi/L	10/01/18 11:37	10/08/18 17:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					10/01/18 11:37	10/08/18 17:09	1
Y Carrier	85.2		40 - 110					10/01/18 11:37	10/08/18 17:09	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.342		0.185	0.186	5.00	0.285	pCi/L		10/31/18 13:21	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-2
 SDG: Ash Pond

Client Sample ID: WGWA-18

Lab Sample ID: 400-159836-3

Date Collected: 09/28/18 12:15

Matrix: Water

Date Received: 09/29/18 09:20

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.157		0.0726	0.0740	1.00	0.0804	pCi/L	10/05/18 15:53	10/29/18 10:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					10/05/18 15:53	10/29/18 10:08	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.224	U	0.201	0.202	1.00	0.323	pCi/L	10/05/18 16:57	10/19/18 16:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					10/05/18 16:57	10/19/18 16:16	1
Y Carrier	86.0		40 - 110					10/05/18 16:57	10/19/18 16:16	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.381		0.214	0.215	5.00	0.323	pCi/L		10/31/18 13:21	1

Definitions/Glossary

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

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 Wansley

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Client Sample ID: WGWA-2

Date Collected: 09/24/18 16:25

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			392237	10/01/18 11:09	JLC	TAL SL
Total/NA	Analysis	9315		1	396712	10/23/18 07:41	CDR	TAL SL
Total/NA	Prep	PrecSep_0			392247	10/01/18 11:37	JLC	TAL SL
Total/NA	Analysis	9320		1	393580	10/08/18 17:08	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	398556	10/31/18 13:21	RTM	TAL SL

Client Sample ID: WGWA-1

Date Collected: 09/27/18 11:00

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			392237	10/01/18 11:09	JLC	TAL SL
Total/NA	Analysis	9315		1	396712	10/23/18 07:41	CDR	TAL SL
Total/NA	Prep	PrecSep_0			392247	10/01/18 11:37	JLC	TAL SL
Total/NA	Analysis	9320		1	393580	10/08/18 17:09	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	398556	10/31/18 13:21	RTM	TAL SL

Client Sample ID: WGWA-18

Date Collected: 09/28/18 12:15

Date Received: 09/29/18 09:20

Lab Sample ID: 400-159836-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			393430	10/05/18 15:53	JLC	TAL SL
Total/NA	Analysis	9315		1	397967	10/29/18 10:08	CDR	TAL SL
Total/NA	Prep	PrecSep_0			393518	10/05/18 16:57	JLC	TAL SL
Total/NA	Analysis	9320		1	396009	10/19/18 16:16	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	398556	10/31/18 13:21	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 Wansley

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Rad

Prep Batch: 392237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	PrecSep-21	
400-159836-2	WGWA-1	Total/NA	Water	PrecSep-21	
MB 160-392237/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-392237/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
310-140284-D-5-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
310-140284-D-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 392247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	PrecSep_0	
400-159836-2	WGWA-1	Total/NA	Water	PrecSep_0	
MB 160-392247/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-392247/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
310-140284-D-5-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
310-140284-D-5-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 393430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-3	WGWA-18	Total/NA	Water	PrecSep-21	
MB 160-393430/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-393430/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-393430/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 393518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-3	WGWA-18	Total/NA	Water	PrecSep_0	
MB 160-393518/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-393518/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-393518/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-392237/24-A
Matrix: Water
Analysis Batch: 396712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392237

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.2447		0.0837	0.0866	1.00	0.0735	pCi/L	10/01/18 11:09	10/23/18 07:39	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	101				10/01/18 11:09	10/23/18 07:39	1			

Lab Sample ID: LCS 160-392237/1-A
Matrix: Water
Analysis Batch: 396705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392237

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	11.46		1.16	1.00	0.0768	pCi/L	101	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	40 - 110						
	102				10/01/18 11:09	10/23/18 07:39	1		

Lab Sample ID: 310-140284-D-5-B MS
Matrix: Water
Analysis Batch: 396705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392237

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
						Uncert. (2σ+/-)					
Radium-226	0.801		15.1	15.08		1.53	1.00	0.108	pCi/L	94	75 - 138
Carrier	MS MS		Limits		Prepared	Analyzed	Dil Fac				
Ba Carrier	%Yield	Qualifier	40 - 110								
	101				10/01/18 11:09	10/23/18 07:39	1				

Lab Sample ID: 310-140284-D-5-C MSD
Matrix: Water
Analysis Batch: 396705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392237

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
						Uncert. (2σ+/-)							
Radium-226	0.801		15.1	14.13		1.44	1.00	0.0936	pCi/L	88	75 - 138	0.32	1
Carrier	MSD MSD		Limits		Prepared	Analyzed	Dil Fac						
Ba Carrier	%Yield	Qualifier	40 - 110										
	103				10/01/18 11:09	10/23/18 07:39	1						

Lab Sample ID: MB 160-393430/22-A
Matrix: Water
Analysis Batch: 397968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 393430

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.2386		0.0821	0.0848	1.00	0.0668	pCi/L	10/05/18 15:53	10/29/18 10:12	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-393430/22-A
Matrix: Water
Analysis Batch: 397968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 393430

Carrier	MB %Yield	MB Qualifier	Limits
Ba Carrier	110		40 - 110

Prepared	Analyzed	Dil Fac
10/05/18 15:53	10/29/18 10:12	1

Lab Sample ID: LCS 160-393430/1-A
Matrix: Water
Analysis Batch: 397967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 393430

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	10.18		1.04	1.00	0.0936	pCi/L	90	68 - 137

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	108		40 - 110

Lab Sample ID: LCSD 160-393430/2-A
Matrix: Water
Analysis Batch: 397967

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 393430

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.4	9.724		0.996	1.00	0.0712	pCi/L	86	68 - 137	0.23	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	110		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-392247/24-A
Matrix: Water
Analysis Batch: 393580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 392247

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1399	U	0.192	0.193	1.00	0.321	pCi/L	10/01/18 11:37	10/08/18 17:09	1

Carrier	MB %Yield	MB Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	82.2		40 - 110

Prepared	Analyzed	Dil Fac
10/01/18 11:37	10/08/18 17:09	1
10/01/18 11:37	10/08/18 17:09	1

Lab Sample ID: LCS 160-392247/1-A
Matrix: Water
Analysis Batch: 393579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392247

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	10.9	11.21		1.23	1.00	0.327	pCi/L	103	56 - 140

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

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

Lab Sample ID: LCS 160-392247/1-A
Matrix: Water
Analysis Batch: 393579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 392247

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	102		40 - 110
Y Carrier	82.6		40 - 110

Lab Sample ID: 310-140284-D-5-E MS
Matrix: Water
Analysis Batch: 393579

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 392247

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	0.827		14.5	15.88		1.73	1.00	0.431	pCi/L	103	45 - 150	

	MS	MS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	84.1		40 - 110

Lab Sample ID: 310-140284-D-5-F MSD
Matrix: Water
Analysis Batch: 393579

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 392247

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	0.827		14.5	14.33		1.59	1.00	0.460	pCi/L	93	45 - 150	0.47	1	

	MSD	MSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	103		40 - 110
Y Carrier	83.7		40 - 110

Lab Sample ID: MB 160-393518/22-A
Matrix: Water
Analysis Batch: 396009

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 393518

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac

	MB	MB		Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits			
Ba Carrier	110		40 - 110	10/05/18 16:57	10/19/18 16:18	1
Y Carrier	86.4		40 - 110	10/05/18 16:57	10/19/18 16:18	1

Lab Sample ID: LCS 160-393518/1-A
Matrix: Water
Analysis Batch: 396009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 393518

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	10.9	10.77		1.18	1.00	0.310	pCi/L	99	56 - 140	

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-2
 SDG: Ash Pond

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

Lab Sample ID: LCS 160-393518/1-A
Matrix: Water
Analysis Batch: 396009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 393518

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	108		40 - 110
Y Carrier	86.0		40 - 110

Lab Sample ID: LCSD 160-393518/2-A
Matrix: Water
Analysis Batch: 396009

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 393518

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	
											RER	Limit
Radium-228	10.9	10.15		1.13	1.00	0.293	pCi/L	93	56 - 140	0.27	1	

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	110		40 - 110
Y Carrier	85.2		40 - 110

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Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-159836-2

SDG Number: Ash Pond

Login Number: 159836

List Number: 1

Creator: Hooper, Carolyn D

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 IR7, 0.0°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-159836-2

SDG Number: Ash Pond

Login Number: 159836

List Number: 2

Creator: McKinney, Gerrod E

List Source: TestAmerica St. Louis

List Creation: 09/28/18 05:42 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.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	18.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-159836-2

SDG Number: Ash Pond

Login Number: 159836

List Number: 3

Creator: Hellm, Michael

List Source: TestAmerica St. Louis

List Creation: 10/04/18 11:12 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	False	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Accreditation/Certification Summary

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18 *
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18 *
Iowa	State Program	7	373	12-01-18 *
Kansas	NELAP	7	E-10236	10-31-18 *
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18 *
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-19

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-159836-2
SDG: Ash Pond

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-19
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-19
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-12	07-31-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-19

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: 400-159836-3

TestAmerica SDG: Ash Pond Detected Metals

Client Project/Site: CCR - Plant Wansley

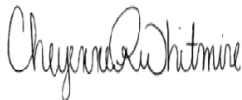
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/26/2018 4:45:00 PM

Cheyenne Whitmire, Project Manager II

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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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Detection Summary

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

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-2

Lab Sample ID: 400-159836-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.020		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0082		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Cobalt - RA	0.00085	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-1

Lab Sample ID: 400-159836-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.047		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0042	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Cobalt - RA	0.00085	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-18

Lab Sample ID: 400-159836-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.014		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0013	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Cobalt - RA	0.0024	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	SW846	TAL PEN

Protocol References:

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 Wansley

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-159836-1	WGWA-2	Water	09/24/18 16:25	09/28/18 09:15
400-159836-2	WGWA-1	Water	09/27/18 11:00	09/28/18 09:15
400-159836-3	WGWA-18	Water	09/28/18 12:15	09/29/18 09:20

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Client Sample Results

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

TestAmerica Job ID: 400-159836-3
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-2
Date Collected: 09/24/18 16:25
Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-1
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		10/11/18 10:25	10/11/18 23:24	5
Barium	0.020		0.0025	0.00049	mg/L		10/11/18 10:25	10/11/18 23:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:24	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:24	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/11/18 10:25	10/11/18 23:24	5
Lithium	0.0082		0.0050	0.0011	mg/L		10/11/18 10:25	10/11/18 23:24	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/11/18 10:25	10/11/18 23:24	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/11/18 10:25	10/11/18 23:24	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/11/18 10:25	10/11/18 23:24	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00085	J	0.0025	0.00040	mg/L		10/11/18 10:25	10/12/18 16:58	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		10/06/18 14:24	10/08/18 14:05	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-3
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-1
Date Collected: 09/27/18 11:00
Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2
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		10/11/18 10:25	10/11/18 23:28	5
Barium	0.047		0.0025	0.00049	mg/L		10/11/18 10:25	10/11/18 23:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:28	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/11/18 10:25	10/11/18 23:28	5
Lithium	0.0042	J	0.0050	0.0011	mg/L		10/11/18 10:25	10/11/18 23:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/11/18 10:25	10/11/18 23:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/11/18 10:25	10/11/18 23:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/11/18 10:25	10/11/18 23:28	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00085	J	0.0025	0.00040	mg/L		10/11/18 10:25	10/12/18 17:25	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		10/06/18 14:24	10/08/18 14:06	1

Client Sample Results

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

TestAmerica Job ID: 400-159836-3
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-18

Lab Sample ID: 400-159836-3

Date Collected: 09/28/18 12:15

Matrix: Water

Date Received: 09/29/18 09:20

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		10/11/18 10:25	10/11/18 23:33	5
Barium	0.014		0.0025	0.00049	mg/L		10/11/18 10:25	10/11/18 23:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 23:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/11/18 10:25	10/11/18 23:33	5
Lithium	0.0013	J	0.0050	0.0011	mg/L		10/11/18 10:25	10/11/18 23:33	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/11/18 10:25	10/11/18 23:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/11/18 10:25	10/11/18 23:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/11/18 10:25	10/11/18 23:33	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.0024	J	0.0025	0.00040	mg/L		10/11/18 10:25	10/12/18 17:29	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		10/06/18 14:24	10/08/18 14:08	1

Definitions/Glossary

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

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

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.

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 Wansley

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-2

Date Collected: 09/24/18 16:25

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:24	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	415292	10/12/18 16:58	DRE	TAL PEN
Total/NA	Prep	7470A			414094	10/06/18 14:24	DN1	TAL PEN
Total/NA	Analysis	7470A		1	414577	10/08/18 14:05	JAP	TAL PEN

Client Sample ID: WGWA-1

Date Collected: 09/27/18 11:00

Date Received: 09/28/18 09:15

Lab Sample ID: 400-159836-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:28	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	415292	10/12/18 17:25	DRE	TAL PEN
Total/NA	Prep	7470A			414094	10/06/18 14:24	DN1	TAL PEN
Total/NA	Analysis	7470A		1	414577	10/08/18 14:06	JAP	TAL PEN

Client Sample ID: WGWA-18

Date Collected: 09/28/18 12:15

Date Received: 09/29/18 09:20

Lab Sample ID: 400-159836-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415116	10/11/18 23:33	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		414950	10/11/18 10:25	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	415292	10/12/18 17:29	DRE	TAL PEN
Total/NA	Prep	7470A			414094	10/06/18 14:24	DN1	TAL PEN
Total/NA	Analysis	7470A		1	414577	10/08/18 14:08	JAP	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 Wansley

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Metals

Prep Batch: 414094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	7470A	
400-159836-2	WGWA-1	Total/NA	Water	7470A	
400-159836-3	WGWA-18	Total/NA	Water	7470A	
MB 400-414094/13-A	Method Blank	Total/NA	Water	7470A	
LCS 400-414094/14-A	Lab Control Sample	Total/NA	Water	7470A	
400-159860-C-2-B MS	Matrix Spike	Total/NA	Water	7470A	
400-159860-C-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 414577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total/NA	Water	7470A	414094
400-159836-2	WGWA-1	Total/NA	Water	7470A	414094
400-159836-3	WGWA-18	Total/NA	Water	7470A	414094
MB 400-414094/13-A	Method Blank	Total/NA	Water	7470A	414094
LCS 400-414094/14-A	Lab Control Sample	Total/NA	Water	7470A	414094
400-159860-C-2-B MS	Matrix Spike	Total/NA	Water	7470A	414094
400-159860-C-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	414094

Prep Batch: 414950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1 - RA	WGWA-2	Total Recoverable	Water	3005A	
400-159836-1	WGWA-2	Total Recoverable	Water	3005A	
400-159836-2	WGWA-1	Total Recoverable	Water	3005A	
400-159836-2 - RA	WGWA-1	Total Recoverable	Water	3005A	
400-159836-3	WGWA-18	Total Recoverable	Water	3005A	
400-159836-3 - RA	WGWA-18	Total Recoverable	Water	3005A	
MB 400-414950/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-414950/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-159826-J-1-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-159826-J-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 415116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1	WGWA-2	Total Recoverable	Water	6020	414950
400-159836-2	WGWA-1	Total Recoverable	Water	6020	414950
400-159836-3	WGWA-18	Total Recoverable	Water	6020	414950
MB 400-414950/1-A ^5	Method Blank	Total Recoverable	Water	6020	414950
LCS 400-414950/2-A	Lab Control Sample	Total Recoverable	Water	6020	414950
400-159826-J-1-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	414950
400-159826-J-1-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	414950

Analysis Batch: 415292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-159836-1 - RA	WGWA-2	Total Recoverable	Water	6020	414950
400-159836-2 - RA	WGWA-1	Total Recoverable	Water	6020	414950
400-159836-3 - RA	WGWA-18	Total Recoverable	Water	6020	414950
MB 400-414950/1-A ^5	Method Blank	Total Recoverable	Water	6020	414950
LCS 400-414950/2-A	Lab Control Sample	Total Recoverable	Water	6020	414950

QC Sample Results

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

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-414950/1-A ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		10/11/18 10:25	10/11/18 22:30	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/11/18 10:25	10/11/18 22:30	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/11/18 10:25	10/11/18 22:30	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/11/18 10:25	10/11/18 22:30	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/11/18 10:25	10/11/18 22:30	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/11/18 10:25	10/11/18 22:30	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/11/18 10:25	10/11/18 22:30	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/11/18 10:25	10/11/18 22:30	5

Lab Sample ID: MB 400-414950/1-A ^5
Matrix: Water
Analysis Batch: 415292

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/11/18 10:25	10/12/18 16:49	5

Lab Sample ID: LCS 400-414950/2-A
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0487		mg/L		97	80 - 120
Barium	0.0500	0.0507		mg/L		101	80 - 120
Cadmium	0.0500	0.0500		mg/L		100	80 - 120
Calcium	5.00	4.88		mg/L		98	80 - 120
Chromium	0.0500	0.0484		mg/L		97	80 - 120
Lithium	0.0500	0.0484		mg/L		97	80 - 120
Molybdenum	0.0500	0.0489		mg/L		98	80 - 120
Selenium	0.0500	0.0483		mg/L		97	80 - 120
Thallium	0.0100	0.00971		mg/L		97	80 - 120

Lab Sample ID: LCS 400-414950/2-A
Matrix: Water
Analysis Batch: 415292

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0503		mg/L		101	80 - 120
Barium	0.0500	0.0497		mg/L		99	80 - 120
Beryllium	0.0500	0.0482		mg/L		96	80 - 120
Boron	0.100	0.0950		mg/L		95	80 - 120
Cadmium	0.0500	0.0521		mg/L		104	80 - 120
Calcium	5.00	4.96		mg/L		99	80 - 120
Chromium	0.0500	0.0478		mg/L		96	80 - 120
Cobalt	0.0500	0.0522		mg/L		104	80 - 120
Lithium	0.0500	0.0538		mg/L		108	80 - 120
Molybdenum	0.0500	0.0506		mg/L		101	80 - 120
Selenium	0.0500	0.0480		mg/L		96	80 - 120
Thallium	0.0100	0.00967		mg/L		97	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-3
SDG: Ash Pond Detected Metals

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

Lab Sample ID: 400-159826-J-1-C MS ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	<0.00046		0.0500	0.0489		mg/L		98	75 - 125
Barium	0.026		0.0500	0.0764		mg/L		102	75 - 125
Beryllium	<0.00034	^	0.0500	0.0487	^	mg/L		97	75 - 125
Boron	<0.021	^	0.100	0.0959	^	mg/L		96	75 - 125
Cadmium	<0.00034		0.0500	0.0508		mg/L		102	75 - 125
Calcium	7.6		5.00	13.0		mg/L		108	75 - 125
Chromium	<0.0011		0.0500	0.0492		mg/L		98	75 - 125
Cobalt	0.00041	J ^	0.0500	0.0470	^	mg/L		93	75 - 125
Lithium	<0.0011		0.0500	0.0571		mg/L		114	75 - 125
Molybdenum	0.0011	J	0.0500	0.0509		mg/L		100	75 - 125
Selenium	0.0023		0.0500	0.0518		mg/L		99	75 - 125
Thallium	<0.000085		0.0100	0.00980		mg/L		98	75 - 125

Lab Sample ID: 400-159826-J-1-D MSD ^5
Matrix: Water
Analysis Batch: 415116

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 414950

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00046		0.0500	0.0491		mg/L		98	75 - 125	0	20
Barium	0.026		0.0500	0.0773		mg/L		103	75 - 125	1	20
Beryllium	<0.00034	^	0.0500	0.0493		mg/L		99	75 - 125	1	20
Boron	<0.021	^	0.100	0.103		mg/L		103	75 - 125	7	20
Cadmium	<0.00034		0.0500	0.0508		mg/L		102	75 - 125	0	20
Calcium	7.6		5.00	12.6		mg/L		100	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0489		mg/L		98	75 - 125	1	20
Cobalt	0.00041	J ^	0.0500	0.0472	^	mg/L		94	75 - 125	0	20
Lithium	<0.0011		0.0500	0.0572		mg/L		114	75 - 125	0	20
Molybdenum	0.0011	J	0.0500	0.0471		mg/L		92	75 - 125	8	20
Selenium	0.0023		0.0500	0.0512		mg/L		98	75 - 125	1	20
Thallium	<0.000085		0.0100	0.00998		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-414094/13-A
Matrix: Water
Analysis Batch: 414577

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 414094

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		10/06/18 14:24	10/08/18 13:30	1

Lab Sample ID: LCS 400-414094/14-A
Matrix: Water
Analysis Batch: 414577

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 414094

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.00101		mg/L		100	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-159836-3
 SDG: Ash Pond Detected Metals

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 400-159860-C-2-B MS
Matrix: Water
Analysis Batch: 414577

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 414094
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00192		mg/L		95	80 - 120

Lab Sample ID: 400-159860-C-2-C MSD
Matrix: Water
Analysis Batch: 414577

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 414094
 %Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00182		mg/L		91	80 - 120	5	20

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Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-159836-3

SDG Number: Ash Pond Detected Metals

Login Number: 159836

List Number: 1

Creator: Hooper, Carolyn D

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 IR7, 0.0°C IR7
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 Wansley

TestAmerica Job ID: 400-159836-3
 SDG: Ash Pond Detected Metals

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

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: 400-160172-1

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

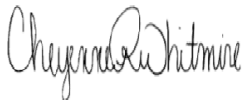
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/29/2018 5:02:13 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 Wansley

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Job ID: 400-160172-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-160172-1

HPLC/IC

Method(s) 300.0: The laboratory control sample duplicate (LCSD) for analytical batch 415375 recovered outside control limits for the following analytes: Fluoride. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 300.0: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 415427 recovered outside control limits for the following analytes: Fluoride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 300.0: The continuing calibration verification (CCV) associated with batch 415427 recovered above the upper control limit for Fluoride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: EB-2-10-4-18 (400-160172-11) and WGWC-12 (400-160172-15).

Method(s) 300.0: The matrix spike duplicate (MSD) precision for analytical batch 415427 was outside control limits. The MSD was spiked with twice the normal amount causing elevated RPD, but the associated samples are reported because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: WGWC-16 (400-160172-10). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 415449 recovered outside control limits for the following analytes: Fluoride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 300.0: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 415684 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Sulfate in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: WGWC-8 (400-160172-20). Elevated reporting limits (RLs) are provided.

Metals

Method(s) 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWC-16 (400-160172-10) and WGWC-8 (400-160172-20). Elevated reporting limits (RLs) are provided.

General Chemistry

Method(s) SM 2540C: The sample duplicate (DUP) precision for analytical batch 414386 was outside control limits. Sample non-homogeneity is suspected.

Method(s) SM 2540C: Reanalysis of the following sample was performed outside of the analytical holding time in order to confirm result. : EB-2-10-4-18 (400-160172-11).

Detection Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-160172-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.13	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	8.3		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	26		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-7

Lab Sample ID: 400-160172-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.8		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-1-10-3-18

Lab Sample ID: 400-160172-3

No Detections.

Client Sample ID: EB-1-10-3-18

Lab Sample ID: 400-160172-4

No Detections.

Client Sample ID: WGWA-4

Lab Sample ID: 400-160172-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.13	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	7.0		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	16		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	100		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-3

Lab Sample ID: 400-160172-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	0.73	J	1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	50		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-15

Lab Sample ID: 400-160172-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.8		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.79		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	49		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	31		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	260		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 Wansley

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-160172-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.8		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 400-160172-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.8	F2	1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	10		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	290		10	8.9	mg/L	10		300.0	Total/NA
Fluoride	0.85	J	2.0	0.82	mg/L	10		300.0	Total/NA
Sulfate - DL	560		20	14	mg/L	20		300.0	Total/NA
Boron - DL	5.5		0.50	0.21	mg/L	50		6020	Total Recoverable
Calcium - DL	250		2.5	1.3	mg/L	50		6020	Total Recoverable
Total Dissolved Solids	1700		10	6.8	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	4.0	J	5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-2

Lab Sample ID: 400-160172-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.6		1.0	0.70	mg/L	1		300.0	Total/NA
Boron	0.026	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	2.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	12		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.6		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	56		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-10 (Continued)

Lab Sample ID: 400-160172-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.18	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	1.9		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	8.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	60		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.12	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	14		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	15		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	1.4		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	38		1.0	0.70	mg/L	1		300.0	Total/NA
Boron	0.37		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	8.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	140		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.5		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.11	J	0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	15		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	6.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	98		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.23		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	4.3		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	5.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	100		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-14A (Continued)

Lab Sample ID: 400-160172-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	2.8		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.27		0.20	0.082	mg/L	1		300.0	Total/NA
Chloride - DL	300		20	18	mg/L	20		300.0	Total/NA
Sulfate - DL	780		20	14	mg/L	20		300.0	Total/NA
Calcium	65		0.25	0.13	mg/L	5		6020	Total Recoverable
Boron - DL	1.9		0.25	0.11	mg/L	25		6020	Total Recoverable
Total Dissolved Solids	520		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.35		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	4.6		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	10		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	100		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Wansley

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160172-1	WGWA-6	Water	10/02/18 14:30	10/05/18 08:46
400-160172-2	WGWA-7	Water	10/03/18 11:30	10/05/18 08:46
400-160172-3	FB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-4	EB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-5	WGWA-4	Water	10/03/18 13:30	10/05/18 08:46
400-160172-6	WGWA-3	Water	10/03/18 14:20	10/05/18 08:46
400-160172-7	WGWC-15	Water	10/03/18 15:30	10/05/18 08:46
400-160172-8	WGWA-5	Water	10/03/18 12:50	10/05/18 08:46
400-160172-9	DUP-1	Water	10/03/18 00:00	10/05/18 08:46
400-160172-10	WGWC-16	Water	10/04/18 10:10	10/05/18 08:46
400-160172-11	EB-2-10-4-18	Water	10/04/18 11:15	10/05/18 08:46
400-160172-12	DUP-2	Water	10/04/18 00:00	10/05/18 08:46
400-160172-13	WGWC-11	Water	10/04/18 10:30	10/05/18 08:46
400-160172-14	WGWC-10	Water	10/04/18 10:45	10/05/18 08:46
400-160172-15	WGWC-12	Water	10/04/18 13:05	10/05/18 08:46
400-160172-16	WGWC-9	Water	10/04/18 11:40	10/05/18 08:46
400-160172-17	WGWC-17	Water	10/04/18 12:25	10/05/18 08:46
400-160172-18	WGWC-13	Water	10/04/18 14:20	10/05/18 08:46
400-160172-19	WGWC-14A	Water	10/04/18 15:20	10/05/18 08:46
400-160172-20	WGWC-8	Water	10/04/18 15:15	10/05/18 08:46
400-160172-21	WGWC-19	Water	10/04/18 13:50	10/05/18 08:46
400-160172-22	FB-2-10-4-18	Water	10/04/18 13:30	10/05/18 08:46

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWA-6
Date Collected: 10/02/18 14:30
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-1
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.89	mg/L			10/14/18 04:16	1
Fluoride	0.13	J	0.20	0.082	mg/L			10/14/18 04:16	1
Sulfate	8.3		1.0	0.70	mg/L			10/14/18 04:16	1

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		10/15/18 12:22	10/15/18 17:09	5
Calcium	26		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 17:09	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	130		5.0	3.4	mg/L			10/06/18 18:12	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWA-7
Date Collected: 10/03/18 11:30
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.89	mg/L			10/14/18 13:47	1
Fluoride	<0.082		0.20	0.082	mg/L			10/14/18 13:47	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 13:47	1

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		10/15/18 12:22	10/15/18 17:32	5
Calcium	1.2		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 17:32	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6.0		5.0	3.4	mg/L			10/09/18 17:44	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: FB-1-10-3-18

Lab Sample ID: 400-160172-3

Date Collected: 10/03/18 14:00

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/14/18 14:10	1
Fluoride	<0.082		0.20	0.082	mg/L			10/14/18 14:10	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 14:10	1

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		10/15/18 12:22	10/15/18 17:36	5
Calcium	<0.13		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 17:36	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			10/09/18 17:44	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: EB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/14/18 17:36	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 09:18	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 17:36	1

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		10/15/18 12:22	10/15/18 17:41	5
Calcium	<0.13		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 17:41	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			10/09/18 17:44	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-160172-5

Date Collected: 10/03/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			10/14/18 09:36	1
Fluoride	0.13	J	0.20	0.082	mg/L			10/14/18 09:36	1
Sulfate	7.0		1.0	0.70	mg/L			10/14/18 09:36	1

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		10/15/18 12:22	10/15/18 18:08	5
Calcium	16		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:08	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		5.0	3.4	mg/L			10/10/18 11:10	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWA-3
Date Collected: 10/03/18 14:20
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-6
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.89	mg/L			10/14/18 17:59	1
Fluoride	<0.082		0.20	0.082	mg/L			10/27/18 19:36	1
Sulfate	0.73	J	1.0	0.70	mg/L			10/14/18 17:59	1

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		10/15/18 12:22	10/15/18 18:12	5
Calcium	1.8		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:12	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	50		5.0	3.4	mg/L			10/10/18 11:10	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-15

Date Collected: 10/03/18 15:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8		1.0	0.89	mg/L			10/14/18 00:05	1
Fluoride	0.79		0.20	0.082	mg/L			10/17/18 23:46	1
Sulfate	49		1.0	0.70	mg/L			10/14/18 00:05	1

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		10/15/18 12:22	10/15/18 18:17	5
Calcium	31		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:17	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	260		5.0	3.4	mg/L			10/10/18 15:30	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWA-5
Date Collected: 10/03/18 12:50
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-8
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.89	mg/L			10/14/18 00:28	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 00:55	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 00:28	1

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		10/15/18 12:22	10/15/18 18:21	5
Calcium	1.4		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:21	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			10/09/18 17:44	1



Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: DUP-1
Date Collected: 10/03/18 00:00
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-9
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8	F2	1.0	0.89	mg/L			10/14/18 16:27	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 07:46	1
Sulfate	<0.70	F2	1.0	0.70	mg/L			10/14/18 16:27	1

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		10/15/18 12:22	10/15/18 18:26	5
Calcium	1.2		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:26	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10		5.0	3.4	mg/L			10/09/18 12:50	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

Date Collected: 10/04/18 10:10

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		10	8.9	mg/L			10/14/18 00:51	10
Fluoride	0.85	J	2.0	0.82	mg/L			10/28/18 13:51	10

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	560		20	14	mg/L			10/15/18 14:54	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	5.5		0.50	0.21	mg/L		10/15/18 12:22	10/16/18 11:55	50
Calcium	250		2.5	1.3	mg/L		10/15/18 12:22	10/16/18 11:55	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1700		10	6.8	mg/L			10/11/18 14:37	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Date Collected: 10/04/18 11:15

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/15/18 01:35	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 09:40	1
Sulfate	<0.70		1.0	0.70	mg/L			10/15/18 01:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:35	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/15/18 12:22	10/16/18 11:59	5

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			10/11/18 14:37	1
Total Dissolved Solids	<3.4	H	5.0	3.4	mg/L			10/16/18 18:01	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 10/04/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.89	mg/L			10/14/18 01:14	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 13:06	1
Sulfate	1.6		1.0	0.70	mg/L			10/14/18 01:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.026	J	0.050	0.021	mg/L		10/15/18 12:22	10/15/18 18:39	5
Calcium	2.1		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:39	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	12		5.0	3.4	mg/L			10/10/18 11:10	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.89	mg/L			10/14/18 01:37	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 10:03	1
Sulfate	1.6		1.0	0.70	mg/L			10/14/18 01:37	1

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		10/15/18 12:22	10/15/18 18:44	5
Calcium	2.0		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:44	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	56		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-10

Date Collected: 10/04/18 10:45

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			10/14/18 21:47	1
Fluoride	0.18	J	0.20	0.082	mg/L			10/28/18 11:12	1
Sulfate	1.9		1.0	0.70	mg/L			10/14/18 21:47	1

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		10/15/18 12:22	10/15/18 18:48	5
Calcium	8.5		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 18:48	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-12

Date Collected: 10/04/18 13:05

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-15

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.89	mg/L			10/15/18 01:58	1
Fluoride	0.12	J	0.20	0.082	mg/L			10/28/18 11:34	1
Sulfate	14		1.0	0.70	mg/L			10/15/18 01:58	1

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		10/15/18 12:22	10/15/18 19:15	5
Calcium	15		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		5.0	3.4	mg/L			10/11/18 15:48	1



Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-9
Date Collected: 10/04/18 11:40
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-16
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			10/15/18 02:21	1
Fluoride	1.4		0.20	0.082	mg/L			10/16/18 23:24	1
Sulfate	38		1.0	0.70	mg/L			10/15/18 02:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.37		0.050	0.021	mg/L		10/15/18 12:22	10/15/18 19:19	5
Calcium	8.0		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:19	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Date Collected: 10/04/18 12:25

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.89	mg/L			10/14/18 01:59	1
Fluoride	0.11	J	0.20	0.082	mg/L			10/28/18 11:57	1
Sulfate	15		1.0	0.70	mg/L			10/14/18 01:59	1

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		10/15/18 12:22	10/15/18 19:24	5
Calcium	6.4		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	98		5.0	3.4	mg/L			10/11/18 14:37	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Date Collected: 10/04/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			10/15/18 11:28	1
Fluoride	0.23		0.20	0.082	mg/L			10/16/18 23:47	1
Sulfate	4.3		1.0	0.70	mg/L			10/15/18 11:28	1

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		10/15/18 12:22	10/15/18 19:28	5
Calcium	5.9		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		5.0	3.4	mg/L			10/11/18 14:37	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0	0.89	mg/L			10/15/18 11:51	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 12:20	1
Sulfate	2.8		1.0	0.70	mg/L			10/15/18 11:51	1

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		10/15/18 12:22	10/15/18 19:33	5
Calcium	2.0		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	130		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20	0.082	mg/L			10/17/18 00:10	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		20	18	mg/L			10/17/18 15:24	20
Sulfate	780		20	14	mg/L			10/17/18 15:24	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	65		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 19:37	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.9		0.25	0.11	mg/L		10/15/18 12:22	10/16/18 12:04	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Date Collected: 10/04/18 13:50

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.89	mg/L			10/15/18 12:37	1
Fluoride	0.35		0.20	0.082	mg/L			10/17/18 01:19	1
Sulfate	4.6		1.0	0.70	mg/L			10/15/18 12:37	1

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		10/13/18 09:59	10/14/18 00:32	5
Calcium	10		0.25	0.13	mg/L		10/13/18 09:59	10/14/18 00:32	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		5.0	3.4	mg/L			10/11/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/15/18 13:00	1
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 12:43	1
Sulfate	<0.70		1.0	0.70	mg/L			10/15/18 13:00	1

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		10/13/18 09:59	10/14/18 00:36	5
Calcium	<0.13		0.25	0.13	mg/L		10/13/18 09:59	10/14/18 00:36	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			10/11/18 15:48	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Qualifiers

HPLC/IC

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
F4	MS/MSD RPD exceeds control limits due to sample size difference.
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.
*	LCS or LCSD is outside acceptance limits.

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.
H	Sample was prepped or analyzed beyond the specified holding time
F3	Duplicate RPD exceeds the control 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	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 Wansley

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWA-6

Date Collected: 10/02/18 14:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415353	10/14/18 04:16	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:09	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414386	10/06/18 18:12	DEK	TAL PEN

Client Sample ID: WGWA-7

Date Collected: 10/03/18 11:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415353	10/14/18 13:47	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:32	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414797	10/09/18 17:44	DEK	TAL PEN

Client Sample ID: FB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415353	10/14/18 14:10	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:36	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414797	10/09/18 17:44	DEK	TAL PEN

Client Sample ID: EB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/14/18 17:36	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 09:18	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:41	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414797	10/09/18 17:44	DEK	TAL PEN

Client Sample ID: WGWA-4

Date Collected: 10/03/18 13:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415353	10/14/18 09:36	BAW	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:08	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414852	10/10/18 11:10	CLB	TAL PEN

Client Sample ID: WGWA-3

Lab Sample ID: 400-160172-6

Date Collected: 10/03/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/14/18 17:59	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417351	10/27/18 19:36	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:12	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414852	10/10/18 11:10	CLB	TAL PEN

Client Sample ID: WGWC-15

Lab Sample ID: 400-160172-7

Date Collected: 10/03/18 15:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415375	10/14/18 00:05	BAW	TAL PEN
Total/NA	Analysis	300.0		1	415848	10/17/18 23:46	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:17	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414852	10/10/18 15:30	CLB	TAL PEN

Client Sample ID: WGWA-5

Lab Sample ID: 400-160172-8

Date Collected: 10/03/18 12:50

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415375	10/14/18 00:28	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417351	10/28/18 00:55	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:21	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414797	10/09/18 17:44	DEK	TAL PEN

Client Sample ID: DUP-1

Lab Sample ID: 400-160172-9

Date Collected: 10/03/18 00:00

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/14/18 16:27	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 07:46	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:26	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: DUP-1

Lab Sample ID: 400-160172-9

Date Collected: 10/03/18 00:00

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	414715	10/09/18 12:50	DEK	TAL PEN

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

Date Collected: 10/04/18 10:10

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		10	415375	10/14/18 00:51	BAW	TAL PEN
Total/NA	Analysis	300.0	DL	20	415449	10/15/18 14:54	BAW	TAL PEN
Total/NA	Analysis	300.0		10	417376	10/28/18 13:51	BAW	TAL PEN
Total Recoverable	Prep	3005A	DL		415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	50	415796	10/16/18 11:55	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	415029	10/11/18 14:37	CLB	TAL PEN

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Date Collected: 10/04/18 11:15

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/15/18 01:35	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 09:40	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:35	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	415796	10/16/18 11:59	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	415029	10/11/18 14:37	CLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	415701	10/16/18 18:01	CLB	TAL PEN

Client Sample ID: DUP-2

Lab Sample ID: 400-160172-12

Date Collected: 10/04/18 00:00

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415375	10/14/18 01:14	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 13:06	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:39	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414852	10/10/18 11:10	CLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415375	10/14/18 01:37	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 10:03	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:44	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/14/18 21:47	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 11:12	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:48	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Date Collected: 10/04/18 13:05

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/15/18 01:58	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 11:34	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:15	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Date Collected: 10/04/18 11:40

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415427	10/15/18 02:21	BAW	TAL PEN
Total/NA	Analysis	300.0		1	415684	10/16/18 23:24	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:19	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Date Collected: 10/04/18 12:25

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415375	10/14/18 01:59	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 11:57	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:24	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	415029	10/11/18 14:37	CLB	TAL PEN

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Date Collected: 10/04/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415449	10/15/18 11:28	BAW	TAL PEN
Total/NA	Analysis	300.0		1	415684	10/16/18 23:47	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:28	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	415029	10/11/18 14:37	CLB	TAL PEN

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415449	10/15/18 11:51	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 12:20	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:33	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415684	10/17/18 00:10	BAW	TAL PEN
Total/NA	Analysis	300.0	DL	20	415749	10/17/18 15:24	BAW	TAL PEN
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:37	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	25	415796	10/16/18 12:04	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Date Collected: 10/04/18 13:50

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415449	10/15/18 12:37	BAW	TAL PEN
Total/NA	Analysis	300.0		1	415684	10/17/18 01:19	BAW	TAL PEN
Total Recoverable	Prep	3005A			415279	10/13/18 09:59	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415414	10/14/18 00:32	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	TAL PEN

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	415449	10/15/18 13:00	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417376	10/28/18 12:43	BAW	TAL PEN
Total Recoverable	Prep	3005A			415279	10/13/18 09:59	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415414	10/14/18 00:36	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	414960	10/11/18 15:48	CLB	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 Wansley

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

HPLC/IC

Analysis Batch: 415353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	300.0	
400-160172-2	WGWA-7	Total/NA	Water	300.0	
400-160172-3	FB-1-10-3-18	Total/NA	Water	300.0	
400-160172-5	WGWA-4	Total/NA	Water	300.0	
MB 400-415353/4	Method Blank	Total/NA	Water	300.0	
LCS 400-415353/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415353/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160172-1 MS	WGWA-6	Total/NA	Water	300.0	
400-160172-1 MSD	WGWA-6	Total/NA	Water	300.0	

Analysis Batch: 415375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-7	WGWC-15	Total/NA	Water	300.0	
400-160172-8	WGWA-5	Total/NA	Water	300.0	
400-160172-10	WGWC-16	Total/NA	Water	300.0	
400-160172-12	DUP-2	Total/NA	Water	300.0	
400-160172-13	WGWC-11	Total/NA	Water	300.0	
400-160172-17	WGWC-17	Total/NA	Water	300.0	
MB 400-415375/36	Method Blank	Total/NA	Water	300.0	
LCS 400-415375/37	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415375/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-159951-A-29 MS	Matrix Spike	Total/NA	Water	300.0	
400-159951-A-29 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 415427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-4	EB-1-10-3-18	Total/NA	Water	300.0	
400-160172-6	WGWA-3	Total/NA	Water	300.0	
400-160172-9	DUP-1	Total/NA	Water	300.0	
400-160172-11	EB-2-10-4-18	Total/NA	Water	300.0	
400-160172-14	WGWC-10	Total/NA	Water	300.0	
400-160172-15	WGWC-12	Total/NA	Water	300.0	
400-160172-16	WGWC-9	Total/NA	Water	300.0	
MB 400-415427/36	Method Blank	Total/NA	Water	300.0	
LCS 400-415427/37	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415427/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160172-9 MS	DUP-1	Total/NA	Water	300.0	
400-160172-9 MSD	DUP-1	Total/NA	Water	300.0	

Analysis Batch: 415449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-10 - DL	WGWC-16	Total/NA	Water	300.0	
400-160172-18	WGWC-13	Total/NA	Water	300.0	
400-160172-19	WGWC-14A	Total/NA	Water	300.0	
400-160172-21	WGWC-19	Total/NA	Water	300.0	
400-160172-22	FB-2-10-4-18	Total/NA	Water	300.0	
MB 400-415449/4	Method Blank	Total/NA	Water	300.0	
LCS 400-415449/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415449/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160196-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
400-160196-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Analysis Batch: 415684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-16	WGWC-9	Total/NA	Water	300.0	
400-160172-18	WGWC-13	Total/NA	Water	300.0	
400-160172-20	WGWC-8	Total/NA	Water	300.0	
400-160172-21	WGWC-19	Total/NA	Water	300.0	
MB 400-415684/21	Method Blank	Total/NA	Water	300.0	
LCS 400-415684/22	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415684/23	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160284-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
400-160284-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 415749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-20 - DL	WGWC-8	Total/NA	Water	300.0	
MB 400-415749/4	Method Blank	Total/NA	Water	300.0	
LCS 400-415749/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415749/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160302-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
400-160302-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 415848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-7	WGWC-15	Total/NA	Water	300.0	
MB 400-415848/36	Method Blank	Total/NA	Water	300.0	
LCS 400-415848/38	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-415848/39	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160302-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
400-160302-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 417351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-6	WGWA-3	Total/NA	Water	300.0	
400-160172-8	WGWA-5	Total/NA	Water	300.0	
MB 400-417351/4	Method Blank	Total/NA	Water	300.0	
LCS 400-417351/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-417351/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160172-6 MS	WGWA-3	Total/NA	Water	300.0	
400-160172-6 MSD	WGWA-3	Total/NA	Water	300.0	

Analysis Batch: 417376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-4	EB-1-10-3-18	Total/NA	Water	300.0	
400-160172-9	DUP-1	Total/NA	Water	300.0	
400-160172-10	WGWC-16	Total/NA	Water	300.0	
400-160172-11	EB-2-10-4-18	Total/NA	Water	300.0	
400-160172-12	DUP-2	Total/NA	Water	300.0	
400-160172-13	WGWC-11	Total/NA	Water	300.0	
400-160172-14	WGWC-10	Total/NA	Water	300.0	
400-160172-15	WGWC-12	Total/NA	Water	300.0	
400-160172-17	WGWC-17	Total/NA	Water	300.0	
400-160172-19	WGWC-14A	Total/NA	Water	300.0	
400-160172-22	FB-2-10-4-18	Total/NA	Water	300.0	
MB 400-417376/36	Method Blank	Total/NA	Water	300.0	
LCS 400-417376/37	Lab Control Sample	Total/NA	Water	300.0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

HPLC/IC (Continued)

Analysis Batch: 417376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-417376/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160172-9 MS	DUP-1	Total/NA	Water	300.0	
400-160172-9 MSD	DUP-1	Total/NA	Water	300.0	

Metals

Prep Batch: 415279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total Recoverable	Water	3005A	
400-160172-22	FB-2-10-4-18	Total Recoverable	Water	3005A	
MB 400-415279/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-415279/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-159951-B-19-D MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-159951-B-19-E MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 415414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total Recoverable	Water	6020	415279
400-160172-22	FB-2-10-4-18	Total Recoverable	Water	6020	415279
MB 400-415279/1-A ^5	Method Blank	Total Recoverable	Water	6020	415279
LCS 400-415279/2-A	Lab Control Sample	Total Recoverable	Water	6020	415279
400-159951-B-19-D MS ^5	Matrix Spike	Total Recoverable	Water	6020	415279
400-159951-B-19-E MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	415279

Prep Batch: 415441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total Recoverable	Water	3005A	
400-160172-2	WGWA-7	Total Recoverable	Water	3005A	
400-160172-3	FB-1-10-3-18	Total Recoverable	Water	3005A	
400-160172-4	EB-1-10-3-18	Total Recoverable	Water	3005A	
400-160172-5	WGWA-4	Total Recoverable	Water	3005A	
400-160172-6	WGWA-3	Total Recoverable	Water	3005A	
400-160172-7	WGWC-15	Total Recoverable	Water	3005A	
400-160172-8	WGWA-5	Total Recoverable	Water	3005A	
400-160172-9	DUP-1	Total Recoverable	Water	3005A	
400-160172-10 - DL	WGWC-16	Total Recoverable	Water	3005A	
400-160172-11 - RA	EB-2-10-4-18	Total Recoverable	Water	3005A	
400-160172-11	EB-2-10-4-18	Total Recoverable	Water	3005A	
400-160172-12	DUP-2	Total Recoverable	Water	3005A	
400-160172-13	WGWC-11	Total Recoverable	Water	3005A	
400-160172-14	WGWC-10	Total Recoverable	Water	3005A	
400-160172-15	WGWC-12	Total Recoverable	Water	3005A	
400-160172-16	WGWC-9	Total Recoverable	Water	3005A	
400-160172-17	WGWC-17	Total Recoverable	Water	3005A	
400-160172-18	WGWC-13	Total Recoverable	Water	3005A	
400-160172-19	WGWC-14A	Total Recoverable	Water	3005A	
400-160172-20	WGWC-8	Total Recoverable	Water	3005A	
400-160172-20 - DL	WGWC-8	Total Recoverable	Water	3005A	
MB 400-415441/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-415441/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Metals (Continued)

Prep Batch: 415441 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1 MS	WGWA-6	Total Recoverable	Water	3005A	
400-160172-1 MSD	WGWA-6	Total Recoverable	Water	3005A	

Analysis Batch: 415604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total Recoverable	Water	6020	415441
400-160172-2	WGWA-7	Total Recoverable	Water	6020	415441
400-160172-3	FB-1-10-3-18	Total Recoverable	Water	6020	415441
400-160172-4	EB-1-10-3-18	Total Recoverable	Water	6020	415441
400-160172-5	WGWA-4	Total Recoverable	Water	6020	415441
400-160172-6	WGWA-3	Total Recoverable	Water	6020	415441
400-160172-7	WGWC-15	Total Recoverable	Water	6020	415441
400-160172-8	WGWA-5	Total Recoverable	Water	6020	415441
400-160172-9	DUP-1	Total Recoverable	Water	6020	415441
400-160172-11	EB-2-10-4-18	Total Recoverable	Water	6020	415441
400-160172-12	DUP-2	Total Recoverable	Water	6020	415441
400-160172-13	WGWC-11	Total Recoverable	Water	6020	415441
400-160172-14	WGWC-10	Total Recoverable	Water	6020	415441
400-160172-15	WGWC-12	Total Recoverable	Water	6020	415441
400-160172-16	WGWC-9	Total Recoverable	Water	6020	415441
400-160172-17	WGWC-17	Total Recoverable	Water	6020	415441
400-160172-18	WGWC-13	Total Recoverable	Water	6020	415441
400-160172-19	WGWC-14A	Total Recoverable	Water	6020	415441
400-160172-20	WGWC-8	Total Recoverable	Water	6020	415441
MB 400-415441/1-A ^5	Method Blank	Total Recoverable	Water	6020	415441
LCS 400-415441/2-A	Lab Control Sample	Total Recoverable	Water	6020	415441
400-160172-1 MS	WGWA-6	Total Recoverable	Water	6020	415441
400-160172-1 MSD	WGWA-6	Total Recoverable	Water	6020	415441

Analysis Batch: 415796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-10 - DL	WGWC-16	Total Recoverable	Water	6020	415441
400-160172-11 - RA	EB-2-10-4-18	Total Recoverable	Water	6020	415441
400-160172-20 - DL	WGWC-8	Total Recoverable	Water	6020	415441

General Chemistry

Analysis Batch: 414386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	SM 2540C	
MB 400-414386/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-414386/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160175-A-14 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 414715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-9	DUP-1	Total/NA	Water	SM 2540C	
MB 400-414715/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-414715/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-159951-A-20 DU	Duplicate	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 414797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-2	WGWA-7	Total/NA	Water	SM 2540C	
400-160172-3	FB-1-10-3-18	Total/NA	Water	SM 2540C	
400-160172-4	EB-1-10-3-18	Total/NA	Water	SM 2540C	
400-160172-8	WGWA-5	Total/NA	Water	SM 2540C	
MB 400-414797/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-414797/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160175-A-18 DU	Duplicate	Total/NA	Water	SM 2540C	
400-160316-D-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 414852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-5	WGWA-4	Total/NA	Water	SM 2540C	
400-160172-6	WGWA-3	Total/NA	Water	SM 2540C	
400-160172-7	WGWC-15	Total/NA	Water	SM 2540C	
400-160172-12	DUP-2	Total/NA	Water	SM 2540C	
MB 400-414852/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-414852/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160176-J-5 DU	Duplicate	Total/NA	Water	SM 2540C	
400-160176-J-8 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 414960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-13	WGWC-11	Total/NA	Water	SM 2540C	
400-160172-14	WGWC-10	Total/NA	Water	SM 2540C	
400-160172-15	WGWC-12	Total/NA	Water	SM 2540C	
400-160172-16	WGWC-9	Total/NA	Water	SM 2540C	
400-160172-19	WGWC-14A	Total/NA	Water	SM 2540C	
400-160172-20	WGWC-8	Total/NA	Water	SM 2540C	
400-160172-21	WGWC-19	Total/NA	Water	SM 2540C	
400-160172-22	FB-2-10-4-18	Total/NA	Water	SM 2540C	
MB 400-414960/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-414960/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160172-15 DU	WGWC-12	Total/NA	Water	SM 2540C	
400-160172-16 DU	WGWC-9	Total/NA	Water	SM 2540C	

Analysis Batch: 415029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-10	WGWC-16	Total/NA	Water	SM 2540C	
400-160172-11	EB-2-10-4-18	Total/NA	Water	SM 2540C	
400-160172-17	WGWC-17	Total/NA	Water	SM 2540C	
400-160172-18	WGWC-13	Total/NA	Water	SM 2540C	
MB 400-415029/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-415029/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160146-E-2 DU	Duplicate	Total/NA	Water	SM 2540C	
400-160152-D-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 415701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-11	EB-2-10-4-18	Total/NA	Water	SM 2540C	
MB 400-415701/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-415701/2	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 415701 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160186-D-1 DU	Duplicate	Total/NA	Water	SM 2540C	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-415353/4
Matrix: Water
Analysis Batch: 415353

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/14/18 03:08	1
Fluoride	<0.082		0.20	0.082	mg/L			10/14/18 03:08	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 03:08	1

Lab Sample ID: LCS 400-415353/5
Matrix: Water
Analysis Batch: 415353

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.95		mg/L		99	90 - 110
Fluoride	10.0	11.0		mg/L		110	90 - 110
Sulfate	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 400-415353/6
Matrix: Water
Analysis Batch: 415353

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	10.0	9.98		mg/L		100	90 - 110	0	15
Fluoride	10.0	10.9		mg/L		109	90 - 110	1	15
Sulfate	10.0	10.5		mg/L		105	90 - 110	2	15

Lab Sample ID: 400-160172-1 MS
Matrix: Water
Analysis Batch: 415353

Client Sample ID: WGWA-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.4		10.0	11.3		mg/L		99	80 - 120
Fluoride	0.13	J	10.0	10.7		mg/L		106	80 - 120
Sulfate	8.3		10.0	18.9		mg/L		106	80 - 120

Lab Sample ID: 400-160172-1 MSD
Matrix: Water
Analysis Batch: 415353

Client Sample ID: WGWA-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.4		10.0	11.5		mg/L		101	80 - 120	2	20
Fluoride	0.13	J	10.0	10.6		mg/L		105	80 - 120	1	20
Sulfate	8.3		10.0	19.2		mg/L		109	80 - 120	2	20

Lab Sample ID: MB 400-415375/36
Matrix: Water
Analysis Batch: 415375

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/13/18 14:56	1
Fluoride	<0.082		0.20	0.082	mg/L			10/13/18 14:56	1
Sulfate	<0.70		1.0	0.70	mg/L			10/13/18 14:56	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-415375/37
Matrix: Water
Analysis Batch: 415375

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110
Fluoride	10.0	10.8		mg/L		108	90 - 110
Sulfate	10.0	10.6		mg/L		106	90 - 110

Lab Sample ID: LCSD 400-415375/38
Matrix: Water
Analysis Batch: 415375

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	10.0	10.1		mg/L		101	90 - 110	0	15
Fluoride	10.0	11.2	*	mg/L		112	90 - 110	3	15
Sulfate	10.0	10.5		mg/L		105	90 - 110	1	15

Lab Sample ID: 400-159951-A-29 MS
Matrix: Water
Analysis Batch: 415375

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	10		10.0	20.3		mg/L		99	80 - 120
Fluoride	<0.082	*	10.0	10.9		mg/L		109	80 - 120

Lab Sample ID: 400-159951-A-29 MSD
Matrix: Water
Analysis Batch: 415375

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	10		10.0	20.4		mg/L		101	80 - 120	1	20
Fluoride	<0.082	*	10.0	11.2		mg/L		112	80 - 120	3	20

Lab Sample ID: MB 400-415427/36
Matrix: Water
Analysis Batch: 415427

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/14/18 15:19	1
Fluoride	<0.082		0.20	0.082	mg/L			10/14/18 15:19	1
Sulfate	<0.70		1.0	0.70	mg/L			10/14/18 15:19	1

Lab Sample ID: LCS 400-415427/37
Matrix: Water
Analysis Batch: 415427

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.99		mg/L		100	90 - 110
Fluoride	10.0	11.1	*	mg/L		111	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 400-415427/38

Matrix: Water

Analysis Batch: 415427

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	10.0	9.95		mg/L		100	90 - 110	0	15
Fluoride	10.0	11.3	*	mg/L		113	90 - 110	1	15
Sulfate	10.0	10.4		mg/L		104	90 - 110	1	15

Lab Sample ID: 400-160172-9 MS

Matrix: Water

Analysis Batch: 415427

Client Sample ID: DUP-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.8	F2	10.0	11.9		mg/L		101	80 - 120		
Fluoride	<0.082	F2 *	10.0	10.8		mg/L		108	80 - 120		
Sulfate	<0.70	F2	10.0	10.9		mg/L		109	80 - 120		

Lab Sample ID: 400-160172-9 MSD

Matrix: Water

Analysis Batch: 415427

Client Sample ID: DUP-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.8	F2	20.0	22.3	F4	mg/L		102	80 - 120	61	20
Fluoride	<0.082	F2 *	20.0	21.3	F4	mg/L		107	80 - 120	65	20
Sulfate	<0.70	F2	20.0	22.1	F4	mg/L		110	80 - 120	68	20

Lab Sample ID: MB 400-415449/4

Matrix: Water

Analysis Batch: 415449

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/15/18 03:52	1
Fluoride	<0.082		0.20	0.082	mg/L			10/15/18 03:52	1
Sulfate	<0.70		1.0	0.70	mg/L			10/15/18 03:52	1

Lab Sample ID: LCS 400-415449/5

Matrix: Water

Analysis Batch: 415449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.69		mg/L		97	90 - 110		
Fluoride	10.0	11.1	*	mg/L		111	90 - 110		
Sulfate	10.0	9.82		mg/L		98	90 - 110		

Lab Sample ID: LCSD 400-415449/6

Matrix: Water

Analysis Batch: 415449

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	10.0	9.74		mg/L		97	90 - 110	1	15
Fluoride	10.0	11.3	*	mg/L		113	90 - 110	1	15
Sulfate	10.0	10.0		mg/L		100	90 - 110	2	15

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-160196-A-1 MS

Matrix: Water
Analysis Batch: 415449

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	18		10.0	27.8		mg/L		95	80 - 120
Fluoride	0.38	*	10.0	11.1		mg/L		107	80 - 120
Sulfate	5.0		10.0	15.7		mg/L		107	80 - 120

Lab Sample ID: 400-160196-A-1 MSD

Matrix: Water
Analysis Batch: 415449

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	18		10.0	27.8		mg/L		95	80 - 120	0	20
Fluoride	0.38	*	10.0	11.1		mg/L		108	80 - 120	0	20
Sulfate	5.0		10.0	15.6		mg/L		106	80 - 120	1	20

Lab Sample ID: MB 400-415684/21

Matrix: Water
Analysis Batch: 415684

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/16/18 15:47	1
Fluoride	<0.082		0.20	0.082	mg/L			10/16/18 15:47	1
Sulfate	<0.70		1.0	0.70	mg/L			10/16/18 15:47	1

Lab Sample ID: LCS 400-415684/22

Matrix: Water
Analysis Batch: 415684

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.72		mg/L		97	90 - 110
Fluoride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	11.5	*	mg/L		115	90 - 110

Lab Sample ID: LCSD 400-415684/23

Matrix: Water
Analysis Batch: 415684

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	10.0	9.80		mg/L		98	90 - 110	1	15
Fluoride	10.0	10.7		mg/L		107	90 - 110	2	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	11	15

Lab Sample ID: 400-160284-B-2 MS

Matrix: Water
Analysis Batch: 415684

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.9		10.0	13.1		mg/L		102	80 - 120
Fluoride	<0.082		10.0	11.0		mg/L		110	80 - 120
Sulfate	39	*	10.0	49.4		mg/L		102	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-160284-B-3 MSD

Matrix: Water
Analysis Batch: 415684

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	2.6		10.0	13.0		mg/L		104	80 - 120	2	20
Fluoride	<0.082		10.0	11.5		mg/L		115	80 - 120	3	20
Sulfate	110	E *	10.0	117	E 4	mg/L		103	80 - 120	1	20

Lab Sample ID: MB 400-415749/4

Matrix: Water
Analysis Batch: 415749

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/17/18 04:21	1
Fluoride	<0.082		0.20	0.082	mg/L			10/17/18 04:21	1
Sulfate	<0.70		1.0	0.70	mg/L			10/17/18 04:21	1

Lab Sample ID: LCS 400-415749/5

Matrix: Water
Analysis Batch: 415749

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.88		mg/L		99	90 - 110
Fluoride	10.0	10.6		mg/L		106	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-415749/6

Matrix: Water
Analysis Batch: 415749

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	10.0	9.87		mg/L		99	90 - 110	0	15
Fluoride	10.0	10.7		mg/L		107	90 - 110	1	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-160302-A-1 MS

Matrix: Water
Analysis Batch: 415749

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	20		10.0	29.1		mg/L		95	80 - 120
Fluoride	0.34		10.0	11.0		mg/L		107	80 - 120
Sulfate	5.9		10.0	16.7		mg/L		108	80 - 120

Lab Sample ID: 400-160302-A-1 MSD

Matrix: Water
Analysis Batch: 415749

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	20		10.0	29.3		mg/L		97	80 - 120	1	20
Fluoride	0.34		10.0	11.3		mg/L		110	80 - 120	3	20
Sulfate	5.9		10.0	17.0		mg/L		111	80 - 120	2	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 400-415848/36
Matrix: Water
Analysis Batch: 415848

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/17/18 16:32	1
Fluoride	<0.082		0.20	0.082	mg/L			10/17/18 16:32	1
Sulfate	<0.70		1.0	0.70	mg/L			10/17/18 16:32	1

Lab Sample ID: LCS 400-415848/38
Matrix: Water
Analysis Batch: 415848

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.90		mg/L		99	90 - 110
Fluoride	10.0	10.4		mg/L		104	90 - 110
Sulfate	10.0	10.5		mg/L		105	90 - 110

Lab Sample ID: LCSD 400-415848/39
Matrix: Water
Analysis Batch: 415848

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	10.0	9.87		mg/L		99	90 - 110	0	15
Fluoride	10.0	10.7		mg/L		107	90 - 110	3	15
Sulfate	10.0	10.4		mg/L		104	90 - 110	2	15

Lab Sample ID: 400-160302-A-2 MS
Matrix: Water
Analysis Batch: 415848

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	74	E	10.0	82.0	E 4	mg/L		78	80 - 120
Fluoride	0.32		10.0	11.2		mg/L		109	80 - 120
Sulfate	30		10.0	39.7		mg/L		99	80 - 120

Lab Sample ID: 400-160302-A-2 MSD
Matrix: Water
Analysis Batch: 415848

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	74	E	10.0	82.0	E 4	mg/L		78	80 - 120	0	20
Fluoride	0.32		10.0	11.3		mg/L		110	80 - 120	1	20
Sulfate	30		10.0	39.8		mg/L		101	80 - 120	0	20

Lab Sample ID: MB 400-417351/4
Matrix: Water
Analysis Batch: 417351

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			10/27/18 18:27	1

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-417351/5
Matrix: Water
Analysis Batch: 417351

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 400-417351/6
Matrix: Water
Analysis Batch: 417351

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
Fluoride	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-160172-6 MS
Matrix: Water
Analysis Batch: 417351

Client Sample ID: WGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.082		10.0	10.3		mg/L		103	80 - 120

Lab Sample ID: 400-160172-6 MSD
Matrix: Water
Analysis Batch: 417351

Client Sample ID: WGWA-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.082		10.0	10.6		mg/L		106	80 - 120	2	20

Lab Sample ID: MB 400-417376/36
Matrix: Water
Analysis Batch: 417376

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.082		0.20	0.082	mg/L			10/28/18 06:38	1

Lab Sample ID: LCS 400-417376/37
Matrix: Water
Analysis Batch: 417376

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-417376/38
Matrix: Water
Analysis Batch: 417376

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
Fluoride	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 400-160172-9 MS
Matrix: Water
Analysis Batch: 417376

Client Sample ID: DUP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.082		10.0	10.1		mg/L		101	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Lab Sample ID: 400-160172-9 MSD
Matrix: Water
Analysis Batch: 417376

Client Sample ID: DUP-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	<0.082		10.0	10.4		mg/L		104	80 - 120	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-415279/1-A ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/13/18 09:59	10/13/18 22:17	5
Calcium	<0.13		0.25	0.13	mg/L		10/13/18 09:59	10/13/18 22:17	5

Lab Sample ID: LCS 400-415279/2-A
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0975		mg/L		97	80 - 120
Calcium	5.00	4.78		mg/L		96	80 - 120

Lab Sample ID: 400-159951-B-19-D MS ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.47		0.100	0.573	4	mg/L		105	75 - 125
Calcium	88		5.00	100	4	mg/L		251	75 - 125

Lab Sample ID: 400-159951-B-19-E MSD ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.47		0.100	0.559	4	mg/L		91	75 - 125	2	20
Calcium	88		5.00	90.9	4	mg/L		63	75 - 125	10	20

Lab Sample ID: MB 400-415441/1-A ^5
Matrix: Water
Analysis Batch: 415604

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/15/18 12:22	10/15/18 16:56	5
Calcium	<0.13		0.25	0.13	mg/L		10/15/18 12:22	10/15/18 16:56	5

Lab Sample ID: LCS 400-415441/2-A
Matrix: Water
Analysis Batch: 415604

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.102		mg/L		102	80 - 120
Calcium	5.00	5.18		mg/L		104	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

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

Lab Sample ID: 400-160172-1 MS
Matrix: Water
Analysis Batch: 415604

Client Sample ID: WGWA-6
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	<0.021		0.100	0.107		mg/L		107	75 - 125
Calcium	26		5.00	31.3	4	mg/L		102	75 - 125

Lab Sample ID: 400-160172-1 MSD
Matrix: Water
Analysis Batch: 415604

Client Sample ID: WGWA-6
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	<0.021		0.100	0.107		mg/L		107	75 - 125	0	20
Calcium	26		5.00	31.6	4	mg/L		108	75 - 125	1	20

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

Lab Sample ID: MB 400-414386/1
Matrix: Water
Analysis Batch: 414386

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			10/06/18 18:12	1

Lab Sample ID: LCS 400-414386/2
Matrix: Water
Analysis Batch: 414386

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	308		mg/L		105	78 - 122

Lab Sample ID: 400-160175-A-14 DU
Matrix: Water
Analysis Batch: 414386

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	72		84.0	F3	mg/L		15	5

Lab Sample ID: MB 400-414715/1
Matrix: Water
Analysis Batch: 414715

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			10/09/18 12:50	1

Lab Sample ID: LCS 400-414715/2
Matrix: Water
Analysis Batch: 414715

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	258		mg/L		88	78 - 122

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

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

Lab Sample ID: 400-159951-A-20 DU
Matrix: Water
Analysis Batch: 414715

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	120		120		mg/L		0	5

Lab Sample ID: MB 400-414797/1
Matrix: Water
Analysis Batch: 414797

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			10/09/18 17:44	1

Lab Sample ID: LCS 400-414797/2
Matrix: Water
Analysis Batch: 414797

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

Lab Sample ID: 400-160175-A-18 DU
Matrix: Water
Analysis Batch: 414797

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	86		90.0		mg/L		5	5

Lab Sample ID: 400-160316-D-1 DU
Matrix: Water
Analysis Batch: 414797

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	9600		9540		mg/L		0.6	5

Lab Sample ID: MB 400-414852/1
Matrix: Water
Analysis Batch: 414852

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			10/10/18 11:10	1

Lab Sample ID: LCS 400-414852/2
Matrix: Water
Analysis Batch: 414852

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

Lab Sample ID: 400-160176-J-5 DU
Matrix: Water
Analysis Batch: 414852

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	480		486		mg/L		2	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
SDG: Ash Pond

Lab Sample ID: 400-160176-J-8 DU
Matrix: Water
Analysis Batch: 414852

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	450		450		mg/L		0.9	5

Lab Sample ID: MB 400-414960/1
Matrix: Water
Analysis Batch: 414960

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			10/11/18 15:48	1

Lab Sample ID: LCS 400-414960/2
Matrix: Water
Analysis Batch: 414960

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	280		mg/L		96	78 - 122

Lab Sample ID: 400-160172-15 DU
Matrix: Water
Analysis Batch: 414960

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	110		108		mg/L		2	5

Lab Sample ID: 400-160172-16 DU
Matrix: Water
Analysis Batch: 414960

Client Sample ID: WGWC-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	140		140		mg/L		0	5

Lab Sample ID: MB 400-415029/1
Matrix: Water
Analysis Batch: 415029

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			10/11/18 14:37	1

Lab Sample ID: LCS 400-415029/2
Matrix: Water
Analysis Batch: 415029

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: 400-160146-E-2 DU
Matrix: Water
Analysis Batch: 415029

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	150		146		mg/L		1	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

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

Lab Sample ID: 400-160152-D-3 DU
Matrix: Water
Analysis Batch: 415029

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	130		132		mg/L		0	5

Lab Sample ID: MB 400-415701/1
Matrix: Water
Analysis Batch: 415701

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			10/16/18 18:01	1

Lab Sample ID: LCS 400-415701/2
Matrix: Water
Analysis Batch: 415701

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: 400-160186-D-1 DU
Matrix: Water
Analysis Batch: 415701

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

Chain of Custody Record


Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State: AL, Zip: 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Carrier Tracking No(s): 400-160172 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 - AshAcO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Analysis Requested Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) Cl, F, SO ₄ & SM 2640C Metals App. III (EPA 6020/470) DORMMSD (Yes or No) Field Filtered Sample (Yes or No)		Total Number of Containers: 3 Special Instructions/Note: APP III		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1430 Sample Date: 10-2-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1130 Sample Date: 10-3-18	
WGWA-6 WGA-7 FB-1-10-3-18 FB-1-10-3-18 WGA-4 WGA-3 WGC-15 WGA-5 Dup-1 WGC-16 EB-2-10-4-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1400 Sample Date: 10-3-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1330 Sample Date: 10-3-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1420 Sample Date: 10-3-18	
Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1530 Sample Date: 10-3-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1250 Sample Date: 10-3-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1010 Sample Date: 10-4-18		Matrix: Water Sample Type (C=Comp, G=Grab, P=Pres): G Sample Time: 1115 Sample Date: 10-4-18	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" 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 Reinquished by: _____ Date: _____ Reinquished by: _____ Date/Time: 10/4/18 Reinquished by: _____ Date/Time: 15:15 Reinquished by: _____ Date/Time: 10-5-18 08:46 Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:	



Chain of Custody Record

Client Information Client Contact: J. Abraham Company: Southern Company Address: PO BOX 2641 GSC8 Birmingham State: AL, Zip: 35291 Phone: SCS10347666 Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Analysis Requested:	
Due Date Requested: TAT Requested (days): PO #: SCS10347666 WO #: Project #: 40007709 SSON#:		Deleted App IV Metals (As, Ba, Be, Cd, Cr, Cu, Hg, Mn, Ni, Mo) (SW-846 9316/9320) Metals App. III (EPA 8207/470) G, P, SO ₄ & TDS (EPA 300.0 & SM 2640C) Radium 226 & 228 (SW-846 9316/9320)	
Sample Identification WGWC-13 WGWC-14A WGWC-8 WGWC-19 FB-2-10-4-18	Matrix (Inorganic, Organic, Composite) Water Water Water Water Water Water Water Water Water	Sample Type (C=Comp, G=grab) (EPA Method, Other) G G G G G G G G G	Sample Date 10-4-18 10-4-18 10-4-18 10-4-18 10-4-18
Sample Time 1420 1520 1515 1350 1330		Field Filtered Sample (Yes or No) Yes Yes Yes Yes Yes Yes Yes Yes Yes	
Total Number of Containers APP III 3 3 3 3		Special Instructions/Note: APP III	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty KIT Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Date: 10-5-18 Date/Time: 1100 Date/Time: 0846 Date/Time: 11-5-18	
Custody Seal Intact: A Yes Δ No		Cooler Temperature(s) °C and Other Remarks:	



Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab P/N: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Job #: 100172	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Analysis Requested  400-160172 COC	
Sample Identification Sample ID: WGWC-13 WGWC-14A WGWC-8 WGWC-19 FB-2-10-4-18		Total Number of Containers: 3 Special Instructions/Note: APP III	
Sample Date: 10-4-18 Sample Time: 1420 Sample Type (C=comp, G=grab): G Matrix (Water, Solid, Other): Water		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes Metals App. III (EPA 6020/740): <input checked="" type="checkbox"/> Yes CI, F, SO, & TDS (EPA 300.0 & SM 2540C): <input checked="" type="checkbox"/> Yes Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo): <input checked="" type="checkbox"/> Yes Radium 226 & 228 (SW-846 9315/9320): <input checked="" type="checkbox"/> Yes	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Date: 10-5-18 Date: 10-5-18 Date: 10-5-18	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Date: 10-5-18 Date: 10-5-18 Date: 10-5-18	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements:			
Method of Shipment:			
Cooler Temperature(s) and Other Remarks: [Handwritten notes]			



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160172-1

SDG Number: Ash Pond

Login Number: 160172

List Number: 1

Creator: Conrady, Hank W

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, 1.5°C, 2.8°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 Wansley

TestAmerica Job ID: 400-160172-1
 SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

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: 400-160172-2

TestAmerica SDG: Ash Pond Detected Metals

Client Project/Site: CCR - Plant Wansley

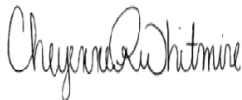
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/26/2018 5:01:15 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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Job ID: 400-160172-2

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-160172-2**

Metals

Method(s) 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWC-16 (400-160172-10) and WGWC-8 (400-160172-20). Elevated reporting limits (RLs) are provided.

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Detection Summary

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-6

Lab Sample ID: 400-160172-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0066		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0038	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-7

Lab Sample ID: 400-160172-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.011		0.0025	0.00049	mg/L	5		6020	Total Recoverable

Client Sample ID: FB-1-10-3-18

Lab Sample ID: 400-160172-3

No Detections.

Client Sample ID: EB-1-10-3-18

Lab Sample ID: 400-160172-4

No Detections.

Client Sample ID: WGWA-4

Lab Sample ID: 400-160172-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0054		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0050		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-3

Lab Sample ID: 400-160172-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00069	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.014		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0012	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-15

Lab Sample ID: 400-160172-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0024		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.024		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0060		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0041	J	0.015	0.00085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWA-5

Lab Sample ID: 400-160172-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00085	J	0.0013	0.00046	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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-5 (Continued)

Lab Sample ID: 400-160172-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.016		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable

Client Sample ID: DUP-1

Lab Sample ID: 400-160172-9

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	0.011		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0012	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

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	0.046		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00065	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Cobalt	0.0078		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.012		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.013		0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.00015	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

No Detections.

Client Sample ID: DUP-2

Lab Sample ID: 400-160172-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00058	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.034		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0015	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

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	0.035		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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-11 (Continued)

Lab Sample ID: 400-160172-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.0014	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00089	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.040		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Chromium	0.0031		0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.00086	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0085		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.017		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.00079	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0066		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.00076	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00036	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Lithium	0.039		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0030	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.0020		0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00088	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.00041	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0050		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.00085	J	0.015	0.00085	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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0015		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.046		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.0025	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0017		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.036		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cobalt	0.0055		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0016	J	0.0050	0.0011	mg/L	5		6020	Total Recoverable
Thallium	0.00013	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0015		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0017	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.0019	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Lithium	0.013		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Selenium	0.0033		0.0013	0.00024	mg/L	5		6020	Total Recoverable

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.0012	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.062		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	SW846	TAL PEN

Protocol References:

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

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- 13
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Sample Summary

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160172-1	WGWA-6	Water	10/02/18 14:30	10/05/18 08:46
400-160172-2	WGWA-7	Water	10/03/18 11:30	10/05/18 08:46
400-160172-3	FB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-4	EB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-5	WGWA-4	Water	10/03/18 13:30	10/05/18 08:46
400-160172-6	WGWA-3	Water	10/03/18 14:20	10/05/18 08:46
400-160172-7	WGWC-15	Water	10/03/18 15:30	10/05/18 08:46
400-160172-8	WGWA-5	Water	10/03/18 12:50	10/05/18 08:46
400-160172-9	DUP-1	Water	10/03/18 00:00	10/05/18 08:46
400-160172-10	WGWC-16	Water	10/04/18 10:10	10/05/18 08:46
400-160172-11	EB-2-10-4-18	Water	10/04/18 11:15	10/05/18 08:46
400-160172-12	DUP-2	Water	10/04/18 00:00	10/05/18 08:46
400-160172-13	WGWC-11	Water	10/04/18 10:30	10/05/18 08:46
400-160172-14	WGWC-10	Water	10/04/18 10:45	10/05/18 08:46
400-160172-15	WGWC-12	Water	10/04/18 13:05	10/05/18 08:46
400-160172-16	WGWC-9	Water	10/04/18 11:40	10/05/18 08:46
400-160172-17	WGWC-17	Water	10/04/18 12:25	10/05/18 08:46
400-160172-18	WGWC-13	Water	10/04/18 14:20	10/05/18 08:46
400-160172-19	WGWC-14A	Water	10/04/18 15:20	10/05/18 08:46
400-160172-20	WGWC-8	Water	10/04/18 15:15	10/05/18 08:46
400-160172-21	WGWC-19	Water	10/04/18 13:50	10/05/18 08:46
400-160172-22	FB-2-10-4-18	Water	10/04/18 13:30	10/05/18 08:46

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-6
Date Collected: 10/02/18 14:30
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-1
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		10/15/18 12:22	10/15/18 17:09	5
Barium	0.0066		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 17:09	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 17:09	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 17:09	5
Lithium	0.0038	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 17:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 17:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 17:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 17:09	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		10/17/18 12:35	10/18/18 15:37	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-7

Date Collected: 10/03/18 11:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2

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		10/15/18 12:22	10/15/18 17:32	5
Barium	0.011		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 17:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:32	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 17:32	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 17:32	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 17:32	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 17:32	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 17:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 15:39	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: FB-1-10-3-18

Lab Sample ID: 400-160172-3

Date Collected: 10/03/18 14:00

Matrix: Water

Date Received: 10/05/18 08:46

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		10/15/18 12:22	10/15/18 17:36	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 17:36	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:36	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:36	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 17:36	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 17:36	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 17:36	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 17:36	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 17:36	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 17:36	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		10/17/18 12:35	10/18/18 15:46	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: EB-1-10-3-18

Lab Sample ID: 400-160172-4

Date Collected: 10/03/18 14:00

Matrix: Water

Date Received: 10/05/18 08:46

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		10/15/18 12:22	10/15/18 17:41	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 17:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 17:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 17:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 17:41	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 17:41	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 17:41	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 17:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 15:48	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-4

Date Collected: 10/03/18 13:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-5

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		10/15/18 12:22	10/15/18 18:08	5
Barium	0.0054		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:08	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:08	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:08	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:08	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:08	5
Lithium	0.0050		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:08	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:08	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:08	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 15:50	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-3
Date Collected: 10/03/18 14:20
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00069	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:12	5
Barium	0.014		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:12	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:12	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:12	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:12	5
Lithium	0.0012	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 15:52	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-15

Date Collected: 10/03/18 15:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0024		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:17	5
Barium	0.024		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:17	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:17	5
Lithium	0.0060		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:17	5
Molybdenum	0.0041	J	0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 15:54	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-5
Date Collected: 10/03/18 12:50
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00085	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:21	5
Barium	0.016		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:21	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:21	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 16:09	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: DUP-1
Date Collected: 10/03/18 00:00
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:26	5
Barium	0.011		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:26	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:26	5
Lithium	0.0012	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:26	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 16:10	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-16

Date Collected: 10/04/18 10:10

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0013		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:30	5
Barium	0.046		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:30	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:30	5
Cadmium	0.00065	J	0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:30	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:30	5
Cobalt	0.0078		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:30	5
Lithium	0.012		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:30	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:30	5
Selenium	0.013		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:30	5
Thallium	0.00015	J	0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 18:30	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		10/17/18 12:35	10/18/18 16:12	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Date Collected: 10/04/18 11:15

Matrix: Water

Date Received: 10/05/18 08:46

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		10/15/18 12:22	10/15/18 18:35	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:35	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:35	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:35	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:35	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:35	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 18:35	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		10/17/18 12:35	10/18/18 16:14	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: DUP-2

Date Collected: 10/04/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00058	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:39	5
Barium	0.034		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:39	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:39	5
Lithium	0.0015	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:39	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 18:39	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		10/17/18 12:35	10/18/18 16:16	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00054	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:44	5
Barium	0.035		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:44	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:44	5
Lithium	0.0014	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 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		10/17/18 12:35	10/18/18 16:18	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00089	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 18:48	5
Barium	0.040		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 18:48	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:48	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 18:48	5
Chromium	0.0031		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 18:48	5
Cobalt	0.00086	J	0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 18:48	5
Lithium	0.0085		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 18:48	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 18:48	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 18:48	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 18:48	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		10/17/18 12:35	10/18/18 16:20	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-12

Date Collected: 10/04/18 13:05

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-15

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		10/15/18 12:22	10/15/18 19:15	5
Barium	0.017		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:15	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:15	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:15	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:15	5
Cobalt	0.00079	J	0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:15	5
Lithium	0.0066		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:15	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:15	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:15	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:15	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		10/17/18 12:35	10/18/18 16:22	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-9
Date Collected: 10/04/18 11:40
Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-16
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		10/15/18 12:22	10/15/18 19:19	5
Barium	0.00076	J	0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:19	5
Beryllium	0.00036	J	0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:19	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:19	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:19	5
Lithium	0.039		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:19	5
Molybdenum	0.0030	J	0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:19	5
Selenium	0.0020		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:19	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		10/17/18 12:35	10/18/18 16:23	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-17

Date Collected: 10/04/18 12:25

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-17

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00088	J	0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 19:24	5
Barium	0.013		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:24	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:24	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:24	5
Cobalt	0.00041	J	0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:24	5
Lithium	0.0050		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:24	5
Molybdenum	0.00085	J	0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:24	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:24	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:24	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		10/17/18 12:35	10/18/18 16:25	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-13

Date Collected: 10/04/18 14:20

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-18

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0015		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 19:28	5
Barium	0.046		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:28	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:28	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:28	5
Lithium	0.0025	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:28	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		10/17/18 12:35	10/18/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0017		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 19:33	5
Barium	0.036		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:33	5
Cobalt	0.0055		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:33	5
Lithium	0.0016	J	0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:33	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:33	5
Thallium	0.00013	J	0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:33	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		10/17/18 12:35	10/18/18 16:35	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0015		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 19:37	5
Barium	0.0017	J	0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 19:37	5
Beryllium	0.0019	J	0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 19:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 19:37	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 19:37	5
Lithium	0.013		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 19:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 19:37	5
Selenium	0.0033		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 19:37	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 19:37	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		10/17/18 12:35	10/18/18 16:36	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-19

Date Collected: 10/04/18 13:50

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-21

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		10/13/18 09:59	10/14/18 00:32	5
Barium	0.0012	J	0.0025	0.00049	mg/L		10/13/18 09:59	10/14/18 00:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/14/18 00:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/14/18 00:32	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/13/18 09:59	10/14/18 00:32	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/13/18 09:59	10/14/18 00:32	5
Lithium	0.062		0.0050	0.0011	mg/L		10/13/18 09:59	10/14/18 00:32	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/13/18 09:59	10/14/18 00:32	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/13/18 09:59	10/14/18 00:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/13/18 09:59	10/14/18 00:32	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		10/17/18 12:47	10/18/18 15:05	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

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		10/13/18 09:59	10/14/18 00:36	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/13/18 09:59	10/14/18 00:36	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/14/18 00:36	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/14/18 00:36	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/13/18 09:59	10/14/18 00:36	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/13/18 09:59	10/14/18 00:36	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/13/18 09:59	10/14/18 00:36	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/13/18 09:59	10/14/18 00:36	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/13/18 09:59	10/14/18 00:36	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/13/18 09:59	10/14/18 00:36	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		10/17/18 12:47	10/18/18 15:07	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

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.

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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-6

Date Collected: 10/02/18 14:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:09	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:37	JAP	TAL PEN

Client Sample ID: WGWA-7

Date Collected: 10/03/18 11:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:32	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:39	JAP	TAL PEN

Client Sample ID: FB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:36	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:46	JAP	TAL PEN

Client Sample ID: EB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 17:41	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:48	JAP	TAL PEN

Client Sample ID: WGWA-4

Date Collected: 10/03/18 13:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:08	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWA-4

Date Collected: 10/03/18 13:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	416025	10/18/18 15:50	JAP	TAL PEN

Client Sample ID: WGWA-3

Date Collected: 10/03/18 14:20

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:12	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:52	JAP	TAL PEN

Client Sample ID: WGWC-15

Date Collected: 10/03/18 15:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:17	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:54	JAP	TAL PEN

Client Sample ID: WGWA-5

Date Collected: 10/03/18 12:50

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:21	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:09	JAP	TAL PEN

Client Sample ID: DUP-1

Date Collected: 10/03/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:26	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:10	JAP	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

Date Collected: 10/04/18 10:10

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:30	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:12	JAP	TAL PEN

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Date Collected: 10/04/18 11:15

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:35	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:14	JAP	TAL PEN

Client Sample ID: DUP-2

Lab Sample ID: 400-160172-12

Date Collected: 10/04/18 00:00

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:39	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:16	JAP	TAL PEN

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:44	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:18	JAP	TAL PEN

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 18:48	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	416025	10/18/18 16:20	JAP	TAL PEN

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Date Collected: 10/04/18 13:05

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:15	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:22	JAP	TAL PEN

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Date Collected: 10/04/18 11:40

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:19	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:23	JAP	TAL PEN

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Date Collected: 10/04/18 12:25

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:24	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:25	JAP	TAL PEN

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Date Collected: 10/04/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:28	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:33	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:33	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:35	JAP	TAL PEN

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415441	10/15/18 12:22	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415604	10/15/18 19:37	DRE	TAL PEN
Total/NA	Prep	7470A			415786	10/17/18 12:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 16:36	JAP	TAL PEN

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Date Collected: 10/04/18 13:50

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415279	10/13/18 09:59	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415414	10/14/18 00:32	DRE	TAL PEN
Total/NA	Prep	7470A			415665	10/17/18 12:47	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:05	JAP	TAL PEN

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			415279	10/13/18 09:59	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	415414	10/14/18 00:36	DRE	TAL PEN
Total/NA	Prep	7470A			415665	10/17/18 12:47	JAP	TAL PEN
Total/NA	Analysis	7470A		1	416025	10/18/18 15:07	JAP	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 Wansley

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Metals

Prep Batch: 415279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total Recoverable	Water	3005A	
400-160172-22	FB-2-10-4-18	Total Recoverable	Water	3005A	
MB 400-415279/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-415279/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-159951-B-19-D MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-159951-B-19-E MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 415414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total Recoverable	Water	6020	415279
400-160172-22	FB-2-10-4-18	Total Recoverable	Water	6020	415279
MB 400-415279/1-A ^5	Method Blank	Total Recoverable	Water	6020	415279
LCS 400-415279/2-A	Lab Control Sample	Total Recoverable	Water	6020	415279
400-159951-B-19-D MS ^5	Matrix Spike	Total Recoverable	Water	6020	415279
400-159951-B-19-E MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	415279

Prep Batch: 415441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total Recoverable	Water	3005A	
400-160172-2	WGWA-7	Total Recoverable	Water	3005A	
400-160172-3	FB-1-10-3-18	Total Recoverable	Water	3005A	
400-160172-4	EB-1-10-3-18	Total Recoverable	Water	3005A	
400-160172-5	WGWA-4	Total Recoverable	Water	3005A	
400-160172-6	WGWA-3	Total Recoverable	Water	3005A	
400-160172-7	WGWC-15	Total Recoverable	Water	3005A	
400-160172-8	WGWA-5	Total Recoverable	Water	3005A	
400-160172-9	DUP-1	Total Recoverable	Water	3005A	
400-160172-10	WGWC-16	Total Recoverable	Water	3005A	
400-160172-11	EB-2-10-4-18	Total Recoverable	Water	3005A	
400-160172-12	DUP-2	Total Recoverable	Water	3005A	
400-160172-13	WGWC-11	Total Recoverable	Water	3005A	
400-160172-14	WGWC-10	Total Recoverable	Water	3005A	
400-160172-15	WGWC-12	Total Recoverable	Water	3005A	
400-160172-16	WGWC-9	Total Recoverable	Water	3005A	
400-160172-17	WGWC-17	Total Recoverable	Water	3005A	
400-160172-18	WGWC-13	Total Recoverable	Water	3005A	
400-160172-19	WGWC-14A	Total Recoverable	Water	3005A	
400-160172-20	WGWC-8	Total Recoverable	Water	3005A	
MB 400-415441/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-415441/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-160172-1 MS	WGWA-6	Total Recoverable	Water	3005A	
400-160172-1 MSD	WGWA-6	Total Recoverable	Water	3005A	

Analysis Batch: 415604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total Recoverable	Water	6020	415441
400-160172-2	WGWA-7	Total Recoverable	Water	6020	415441
400-160172-3	FB-1-10-3-18	Total Recoverable	Water	6020	415441
400-160172-4	EB-1-10-3-18	Total Recoverable	Water	6020	415441
400-160172-5	WGWA-4	Total Recoverable	Water	6020	415441
400-160172-6	WGWA-3	Total Recoverable	Water	6020	415441

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Metals (Continued)

Analysis Batch: 415604 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-7	WGWC-15	Total Recoverable	Water	6020	415441
400-160172-8	WGWA-5	Total Recoverable	Water	6020	415441
400-160172-9	DUP-1	Total Recoverable	Water	6020	415441
400-160172-10	WGWC-16	Total Recoverable	Water	6020	415441
400-160172-11	EB-2-10-4-18	Total Recoverable	Water	6020	415441
400-160172-12	DUP-2	Total Recoverable	Water	6020	415441
400-160172-13	WGWC-11	Total Recoverable	Water	6020	415441
400-160172-14	WGWC-10	Total Recoverable	Water	6020	415441
400-160172-15	WGWC-12	Total Recoverable	Water	6020	415441
400-160172-16	WGWC-9	Total Recoverable	Water	6020	415441
400-160172-17	WGWC-17	Total Recoverable	Water	6020	415441
400-160172-18	WGWC-13	Total Recoverable	Water	6020	415441
400-160172-19	WGWC-14A	Total Recoverable	Water	6020	415441
400-160172-20	WGWC-8	Total Recoverable	Water	6020	415441
MB 400-415441/1-A ^5	Method Blank	Total Recoverable	Water	6020	415441
LCS 400-415441/2-A	Lab Control Sample	Total Recoverable	Water	6020	415441
400-160172-1 MS	WGWA-6	Total Recoverable	Water	6020	415441
400-160172-1 MSD	WGWA-6	Total Recoverable	Water	6020	415441

Prep Batch: 415665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total/NA	Water	7470A	
400-160172-22	FB-2-10-4-18	Total/NA	Water	7470A	
MB 400-415665/13-A	Method Blank	Total/NA	Water	7470A	
LCS 400-415665/14-A	Lab Control Sample	Total/NA	Water	7470A	
400-160171-J-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-160171-J-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 415786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	7470A	
400-160172-2	WGWA-7	Total/NA	Water	7470A	
400-160172-3	FB-1-10-3-18	Total/NA	Water	7470A	
400-160172-4	EB-1-10-3-18	Total/NA	Water	7470A	
400-160172-5	WGWA-4	Total/NA	Water	7470A	
400-160172-6	WGWA-3	Total/NA	Water	7470A	
400-160172-7	WGWC-15	Total/NA	Water	7470A	
400-160172-8	WGWA-5	Total/NA	Water	7470A	
400-160172-9	DUP-1	Total/NA	Water	7470A	
400-160172-10	WGWC-16	Total/NA	Water	7470A	
400-160172-11	EB-2-10-4-18	Total/NA	Water	7470A	
400-160172-12	DUP-2	Total/NA	Water	7470A	
400-160172-13	WGWC-11	Total/NA	Water	7470A	
400-160172-14	WGWC-10	Total/NA	Water	7470A	
400-160172-15	WGWC-12	Total/NA	Water	7470A	
400-160172-16	WGWC-9	Total/NA	Water	7470A	
400-160172-17	WGWC-17	Total/NA	Water	7470A	
400-160172-18	WGWC-13	Total/NA	Water	7470A	
400-160172-19	WGWC-14A	Total/NA	Water	7470A	
400-160172-20	WGWC-8	Total/NA	Water	7470A	
MB 400-415786/13-A	Method Blank	Total/NA	Water	7470A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Metals (Continued)

Prep Batch: 415786 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-415786/14-A	Lab Control Sample	Total/NA	Water	7470A	
400-160172-2 MS	WGWA-7	Total/NA	Water	7470A	
400-160172-2 MSD	WGWA-7	Total/NA	Water	7470A	

Analysis Batch: 416025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	7470A	415786
400-160172-2	WGWA-7	Total/NA	Water	7470A	415786
400-160172-3	FB-1-10-3-18	Total/NA	Water	7470A	415786
400-160172-4	EB-1-10-3-18	Total/NA	Water	7470A	415786
400-160172-5	WGWA-4	Total/NA	Water	7470A	415786
400-160172-6	WGWA-3	Total/NA	Water	7470A	415786
400-160172-7	WGWC-15	Total/NA	Water	7470A	415786
400-160172-8	WGWA-5	Total/NA	Water	7470A	415786
400-160172-9	DUP-1	Total/NA	Water	7470A	415786
400-160172-10	WGWC-16	Total/NA	Water	7470A	415786
400-160172-11	EB-2-10-4-18	Total/NA	Water	7470A	415786
400-160172-12	DUP-2	Total/NA	Water	7470A	415786
400-160172-13	WGWC-11	Total/NA	Water	7470A	415786
400-160172-14	WGWC-10	Total/NA	Water	7470A	415786
400-160172-15	WGWC-12	Total/NA	Water	7470A	415786
400-160172-16	WGWC-9	Total/NA	Water	7470A	415786
400-160172-17	WGWC-17	Total/NA	Water	7470A	415786
400-160172-18	WGWC-13	Total/NA	Water	7470A	415786
400-160172-19	WGWC-14A	Total/NA	Water	7470A	415786
400-160172-20	WGWC-8	Total/NA	Water	7470A	415786
400-160172-21	WGWC-19	Total/NA	Water	7470A	415665
400-160172-22	FB-2-10-4-18	Total/NA	Water	7470A	415665
MB 400-415665/13-A	Method Blank	Total/NA	Water	7470A	415665
MB 400-415786/13-A	Method Blank	Total/NA	Water	7470A	415786
LCS 400-415665/14-A	Lab Control Sample	Total/NA	Water	7470A	415665
LCS 400-415786/14-A	Lab Control Sample	Total/NA	Water	7470A	415786
400-160171-J-1-B MS	Matrix Spike	Total/NA	Water	7470A	415665
400-160171-J-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	415665
400-160172-2 MS	WGWA-7	Total/NA	Water	7470A	415786
400-160172-2 MSD	WGWA-7	Total/NA	Water	7470A	415786

QC Sample Results

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-415279/1-A ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		10/13/18 09:59	10/13/18 22:17	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/13/18 09:59	10/13/18 22:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/13/18 22:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/13/18 09:59	10/13/18 22:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/13/18 09:59	10/13/18 22:17	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/13/18 09:59	10/13/18 22:17	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/13/18 09:59	10/13/18 22:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/13/18 09:59	10/13/18 22:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/13/18 09:59	10/13/18 22:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/13/18 09:59	10/13/18 22:17	5

Lab Sample ID: LCS 400-415279/2-A
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.0500	0.0471		mg/L		94	80 - 120
Barium	0.0500	0.0466		mg/L		93	80 - 120
Beryllium	0.0500	0.0474		mg/L		95	80 - 120
Cadmium	0.0500	0.0471		mg/L		94	80 - 120
Chromium	0.0500	0.0467		mg/L		93	80 - 120
Cobalt	0.0500	0.0494		mg/L		99	80 - 120
Lithium	0.0500	0.0491		mg/L		98	80 - 120
Molybdenum	0.0500	0.0472		mg/L		94	80 - 120
Selenium	0.0500	0.0454		mg/L		91	80 - 120
Thallium	0.0100	0.00896		mg/L		90	80 - 120

Lab Sample ID: 400-159951-B-19-D MS ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	<0.00046		0.0500	0.0540		mg/L		108	75 - 125
Barium	0.035		0.0500	0.0893		mg/L		108	75 - 125
Beryllium	<0.00034		0.0500	0.0496		mg/L		99	75 - 125
Cadmium	<0.00034		0.0500	0.0522		mg/L		104	75 - 125
Chromium	0.0029		0.0500	0.0571		mg/L		108	75 - 125
Cobalt	<0.00040		0.0500	0.0542		mg/L		108	75 - 125
Lithium	<0.0011		0.0500	0.0574		mg/L		115	75 - 125
Molybdenum	<0.00085		0.0500	0.0532		mg/L		106	75 - 125
Selenium	0.022		0.0500	0.0708		mg/L		98	75 - 125
Thallium	<0.000085		0.0100	0.00934		mg/L		93	75 - 125

Lab Sample ID: 400-159951-B-19-E MSD ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00046		0.0500	0.0473		mg/L		95	75 - 125	13	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

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

Lab Sample ID: 400-159951-B-19-E MSD ^5
Matrix: Water
Analysis Batch: 415414

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 415279

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit	
Barium	0.035		0.0500	0.0828		mg/L		95	75 - 125	8	20
Beryllium	<0.00034		0.0500	0.0490		mg/L		98	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0457		mg/L		91	75 - 125	13	20
Chromium	0.0029		0.0500	0.0525		mg/L		99	75 - 125	8	20
Cobalt	<0.00040		0.0500	0.0490		mg/L		98	75 - 125	10	20
Lithium	<0.0011		0.0500	0.0570		mg/L		114	75 - 125	1	20
Molybdenum	<0.00085		0.0500	0.0458		mg/L		92	75 - 125	15	20
Selenium	0.022		0.0500	0.0689		mg/L		95	75 - 125	3	20
Thallium	<0.00085		0.0100	0.00922		mg/L		92	75 - 125	1	20

Lab Sample ID: MB 400-415441/1-A ^5
Matrix: Water
Analysis Batch: 415604

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.00046		0.0013	0.00046	mg/L		10/15/18 12:22	10/15/18 16:56	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/15/18 12:22	10/15/18 16:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 16:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/15/18 12:22	10/15/18 16:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/15/18 12:22	10/15/18 16:56	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/15/18 12:22	10/15/18 16:56	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/15/18 12:22	10/15/18 16:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		10/15/18 12:22	10/15/18 16:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		10/15/18 12:22	10/15/18 16:56	5
Thallium	<0.00085		0.00050	0.000085	mg/L		10/15/18 12:22	10/15/18 16:56	5

Lab Sample ID: LCS 400-415441/2-A
Matrix: Water
Analysis Batch: 415604

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Arsenic	0.0500	0.0518		mg/L		104	80 - 120
Barium	0.0500	0.0504		mg/L		101	80 - 120
Beryllium	0.0500	0.0511		mg/L		102	80 - 120
Cadmium	0.0500	0.0522		mg/L		104	80 - 120
Chromium	0.0500	0.0524		mg/L		105	80 - 120
Cobalt	0.0500	0.0539		mg/L		108	80 - 120
Lithium	0.0500	0.0531		mg/L		106	80 - 120
Molybdenum	0.0500	0.0505		mg/L		101	80 - 120
Selenium	0.0500	0.0496		mg/L		99	80 - 120
Thallium	0.0100	0.00956		mg/L		96	80 - 120

Lab Sample ID: 400-160172-1 MS
Matrix: Water
Analysis Batch: 415604

Client Sample ID: WGWA-6
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Arsenic	<0.00046		0.0500	0.0522		mg/L		104	75 - 125
Barium	0.0066		0.0500	0.0560		mg/L		99	75 - 125

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-2
SDG: Ash Pond Detected Metals

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

Lab Sample ID: 400-160172-1 MS
Matrix: Water
Analysis Batch: 415604

Client Sample ID: WGWA-6
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Beryllium	<0.00034		0.0500	0.0512		mg/L		102		75 - 125
Cadmium	<0.00034		0.0500	0.0537		mg/L		107		75 - 125
Chromium	<0.0011		0.0500	0.0550		mg/L		110		75 - 125
Cobalt	<0.00040		0.0500	0.0540		mg/L		108		75 - 125
Lithium	0.0038	J	0.0500	0.0568		mg/L		106		75 - 125
Molybdenum	<0.00085		0.0500	0.0511		mg/L		102		75 - 125
Selenium	<0.00024		0.0500	0.0511		mg/L		102		75 - 125
Thallium	<0.00085		0.0100	0.00950		mg/L		95		75 - 125

Lab Sample ID: 400-160172-1 MSD
Matrix: Water
Analysis Batch: 415604

Client Sample ID: WGWA-6
Prep Type: Total Recoverable
Prep Batch: 415441

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Arsenic	<0.00046		0.0500	0.0510		mg/L		102		75 - 125	2	20
Barium	0.0066		0.0500	0.0561		mg/L		99		75 - 125	0	20
Beryllium	<0.00034		0.0500	0.0511		mg/L		102		75 - 125	0	20
Cadmium	<0.00034		0.0500	0.0517		mg/L		103		75 - 125	4	20
Chromium	<0.0011		0.0500	0.0545		mg/L		109		75 - 125	1	20
Cobalt	<0.00040		0.0500	0.0532		mg/L		106		75 - 125	1	20
Lithium	0.0038	J	0.0500	0.0551		mg/L		102		75 - 125	3	20
Molybdenum	<0.00085		0.0500	0.0493		mg/L		99		75 - 125	4	20
Selenium	<0.00024		0.0500	0.0488		mg/L		98		75 - 125	5	20
Thallium	<0.00085		0.0100	0.00941		mg/L		94		75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-415665/13-A
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 415665

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000070		0.00020	0.000070	mg/L		10/16/18 14:15	10/18/18 13:54	1

Lab Sample ID: LCS 400-415665/14-A
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 415665

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

Lab Sample ID: 400-160171-J-1-B MS
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 415665

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Mercury	0.00012	J	0.00201	0.00213		mg/L		100		80 - 120

QC Sample Results

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

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 400-160171-J-1-C MSD
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 415665

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	0.00012	J	0.00201	0.00214		mg/L		100	80 - 120	0	20

Lab Sample ID: MB 400-415786/13-A
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 415786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		10/17/18 12:35	10/18/18 15:08	1

Lab Sample ID: LCS 400-415786/14-A
Matrix: Water
Analysis Batch: 416025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 415786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.00102		mg/L		101	80 - 120

Lab Sample ID: 400-160172-2 MS
Matrix: Water
Analysis Batch: 416025

Client Sample ID: WGWA-7
Prep Type: Total/NA
Prep Batch: 415786


Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00194		mg/L		96	80 - 120

Lab Sample ID: 400-160172-2 MSD
Matrix: Water
Analysis Batch: 416025


Client Sample ID: WGWA-7
Prep Type: Total/NA
Prep Batch: 415786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00192		mg/L		95	80 - 120	1	20

Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State: AL, Zip: 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Carrier Tracking No(s): 400-160172 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 - AshAcO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)													
Analysis Requested Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) (EPA 300.6 & SM 2640C) Cl, F, SO ₄ & SM 2640C Metals App. III (EPA 6020/470) DORMMSD (Yes or No) Field Filtered Sample (Yes or No)		Total Number of Containers: 3 Special Instructions/Note: APP III		Matrix (Inorganic, Organic, Semisolid, Other): Water		Sample Type (C=Comp, G=Grab, P=Pres): G		Sample Time: 1430, 1130, 1400, 1330, 1420, 1530, 1250, 1010, 1115		Sample Date: 10-2-18, 10-3-18, 10-3-18, 10-3-18, 10-3-18, 10-3-18, 10-3-18, 10-3-18, 10-4-18, 10-4-18		Preservation Code: G		Field Filtered Sample (Yes or No): N		Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) (EPA 300.6 & SM 2640C) Cl, F, SO ₄ & SM 2640C Metals App. III (EPA 6020/470) DORMMSD (Yes or No) Field Filtered Sample (Yes or No)		Total Number of Containers: 3 Special Instructions/Note: APP III	
Sample Identification WGWA-6 WGWA-7 FB-1-10-3-18 FB-1-10-3-18 WGWA-4 WGWA-3 WGWA-5 Dup-1 WGWC-16 EB-2-10-4-18		Date: 10/4/18		Date: 15:15		Date/Time: 10-5-18 08:46		Date/Time: 17:00, 1:50c 18-7		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Date: 10/4/18		Date: 15:15		Date/Time: 10-5-18 08:46		Date/Time: 17:00, 1:50c 18-7		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15			
Empty Kit Requisitioned by: Requisitioned by: [Signature] Requisitioned by: [Signature] Requisitioned by: [Signature]		Date: 10/4/18		Date: 15:15		Date/Time: 10-5-18 08:46		Date/Time: 17:00, 1:50c 18-7		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15			
Custody Seals Intact Yes <input type="checkbox"/> No <input type="checkbox"/>		Date: 10/4/18		Date: 15:15		Date/Time: 10-5-18 08:46		Date/Time: 17:00, 1:50c 18-7		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15		Date/Time: 15:15			



Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab P/N: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Job #: 100172	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Analysis Requested  400-160172 COC	
Sample Identification Sample ID: WGWC-13 WGWC-14A WGWC-8 WGWC-19 FB-2-10-4-18		Total Number of Containers: 3 Special Instructions/Note: APP III	
Sample Date: 10-4-18 Sample Time: 1420 Sample Type (C=comp, G=grab): G Matrix (Water, Solid, Other): Water		Field Filtered Sample (Yes or No): <input checked="" type="checkbox"/> Yes Perform MS/MSD (Yes or No): <input checked="" type="checkbox"/> Yes Metals App. III (EPA 6020/740): <input checked="" type="checkbox"/> Yes CI, F, SO, & TDS (EPA 300.0 & SM 2540C): <input checked="" type="checkbox"/> Yes Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo): <input checked="" type="checkbox"/> Yes Radium 226 & 228 (SW-846 9315/9320): <input checked="" type="checkbox"/> Yes	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature]		Date: 10-5-18 Date: 10-5-18 Date: 10-5-18	
Relinquished by: [Signature]		Date: 10-5-18 Date: 10-5-18 Date: 10-5-18	
Relinquished by: [Signature]		Date: 10-5-18 Date: 10-5-18 Date: 10-5-18	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160172-2
SDG Number: Ash Pond Detected Metals

Login Number: 160172

List Number: 1

Creator: Conrady, Hank W

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, 1.5°C, 2.8°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 Wansley

TestAmerica Job ID: 400-160172-2
 SDG: Ash Pond Detected Metals

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19



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: 400-160172-3

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

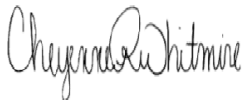
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

11/8/2018 5:28:48 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

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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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Method Summary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160172-1	WGWA-6	Water	10/02/18 14:30	10/05/18 08:46
400-160172-2	WGWA-7	Water	10/03/18 11:30	10/05/18 08:46
400-160172-3	FB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-4	EB-1-10-3-18	Water	10/03/18 14:00	10/05/18 08:46
400-160172-5	WGWA-4	Water	10/03/18 13:30	10/05/18 08:46
400-160172-6	WGWA-3	Water	10/03/18 14:20	10/05/18 08:46
400-160172-7	WGWC-15	Water	10/03/18 15:30	10/05/18 08:46
400-160172-8	WGWA-5	Water	10/03/18 12:50	10/05/18 08:46
400-160172-9	DUP-1	Water	10/03/18 00:00	10/05/18 08:46
400-160172-10	WGWC-16	Water	10/04/18 10:10	10/05/18 08:46
400-160172-11	EB-2-10-4-18	Water	10/04/18 11:15	10/05/18 08:46
400-160172-12	DUP-2	Water	10/04/18 00:00	10/05/18 08:46
400-160172-13	WGWC-11	Water	10/04/18 10:30	10/05/18 08:46
400-160172-14	WGWC-10	Water	10/04/18 10:45	10/05/18 08:46
400-160172-15	WGWC-12	Water	10/04/18 13:05	10/05/18 08:46
400-160172-16	WGWC-9	Water	10/04/18 11:40	10/05/18 08:46
400-160172-17	WGWC-17	Water	10/04/18 12:25	10/05/18 08:46
400-160172-18	WGWC-13	Water	10/04/18 14:20	10/05/18 08:46
400-160172-19	WGWC-14A	Water	10/04/18 15:20	10/05/18 08:46
400-160172-20	WGWC-8	Water	10/04/18 15:15	10/05/18 08:46
400-160172-21	WGWC-19	Water	10/04/18 13:50	10/05/18 08:46
400-160172-22	FB-2-10-4-18	Water	10/04/18 13:30	10/05/18 08:46

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-160172-1

Date Collected: 10/02/18 14:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.18		0.329	0.436	1.00	0.113	pCi/L	10/10/18 10:29	11/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					10/10/18 10:29	11/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.54		0.557	0.755	1.00	0.387	pCi/L	10/10/18 10:51	10/25/18 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					10/10/18 10:51	10/25/18 09:50	1
Y Carrier	76.3		40 - 110					10/10/18 10:51	10/25/18 09:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.72		0.647	0.872	5.00	0.387	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-7

Date Collected: 10/03/18 11:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2

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	0.268		0.100	0.103	1.00	0.0979	pCi/L	10/10/18 10:29	11/01/18 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:29	11/01/18 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.383		0.215	0.217	1.00	0.318	pCi/L	10/10/18 10:51	10/25/18 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:51	10/25/18 09:50	1
Y Carrier	80.7		40 - 110					10/10/18 10:51	10/25/18 09:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.650		0.237	0.240	5.00	0.318	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: FB-1-10-3-18

Lab Sample ID: 400-160172-3

Date Collected: 10/03/18 14:00

Matrix: Water

Date Received: 10/05/18 08:46

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		0.0900	0.0918	1.00	0.0964	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.764		0.266	0.275	1.00	0.355	pCi/L	10/10/18 10:51	10/25/18 09:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					10/10/18 10:51	10/25/18 09:50	1
Y Carrier	81.9		40 - 110					10/10/18 10:51	10/25/18 09:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.964		0.281	0.290	5.00	0.355	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: EB-1-10-3-18

Lab Sample ID: 400-160172-4

Date Collected: 10/03/18 14:00

Matrix: Water

Date Received: 10/05/18 08:46

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		0.0899	0.0917	1.00	0.100	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.343		0.215	0.217	1.00	0.326	pCi/L	10/10/18 10:51	10/25/18 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					10/10/18 10:51	10/25/18 09:51	1
Y Carrier	82.2		40 - 110					10/10/18 10:51	10/25/18 09:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.542		0.233	0.236	5.00	0.326	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-160172-5

Date Collected: 10/03/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.515		0.129	0.137	1.00	0.0897	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428		0.245	0.249	1.00	0.372	pCi/L	10/10/18 10:51	10/25/18 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					10/10/18 10:51	10/25/18 09:51	1
Y Carrier	81.9		40 - 110					10/10/18 10:51	10/25/18 09:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.943		0.277	0.284	5.00	0.372	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-3

Date Collected: 10/03/18 14:20

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-6

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	0.0973	U	0.0757	0.0762	1.00	0.109	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0810	U	0.186	0.186	1.00	0.322	pCi/L	10/10/18 10:51	10/25/18 09:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					10/10/18 10:51	10/25/18 09:51	1
Y Carrier	84.5		40 - 110					10/10/18 10:51	10/25/18 09:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.178	U	0.201	0.201	5.00	0.322	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-15

Date Collected: 10/03/18 15:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-7

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	0.252		0.0958	0.0985	1.00	0.0900	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.513		0.302	0.306	1.00	0.465	pCi/L	10/10/18 10:51	10/25/18 09:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/10/18 10:51	10/25/18 09:54	1
Y Carrier	79.6		40 - 110					10/10/18 10:51	10/25/18 09:54	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.766		0.317	0.321	5.00	0.465	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 400-160172-8

Date Collected: 10/03/18 12:50

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.202		0.0958	0.0975	1.00	0.114	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.518		0.269	0.273	1.00	0.401	pCi/L	10/10/18 10:51	10/25/18 09:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:51	10/25/18 09:54	1
Y Carrier	80.4		40 - 110					10/10/18 10:51	10/25/18 09:54	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.720		0.286	0.290	5.00	0.401	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: DUP-1

Date Collected: 10/03/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-9

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	0.101	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.162	U	0.317	0.317	1.00	0.538	pCi/L	10/10/18 10:51	10/25/18 09:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					10/10/18 10:51	10/25/18 09:54	1
Y Carrier	74.4		40 - 110					10/10/18 10:51	10/25/18 09:54	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.442	U	0.335	0.336	5.00	0.538	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-160172-10

Date Collected: 10/04/18 10:10

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.458		0.127	0.133	1.00	0.101	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.53		0.359	0.386	1.00	0.449	pCi/L	10/10/18 10:51	10/25/18 09:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					10/10/18 10:51	10/25/18 09:54	1
Y Carrier	82.2		40 - 110					10/10/18 10:51	10/25/18 09:54	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.99		0.381	0.408	5.00	0.449	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: EB-2-10-4-18

Lab Sample ID: 400-160172-11

Date Collected: 10/04/18 11:15

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.143		0.0773	0.0783	1.00	0.0890	pCi/L	10/10/18 10:29	11/01/18 05:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					10/10/18 10:29	11/01/18 05:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.281	U	0.242	0.244	1.00	0.387	pCi/L	10/10/18 10:51	10/25/18 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					10/10/18 10:51	10/25/18 09:55	1
Y Carrier	78.9		40 - 110					10/10/18 10:51	10/25/18 09:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.424		0.254	0.256	5.00	0.387	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 10/04/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-12

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	0.250		0.100	0.103	1.00	0.106	pCi/L	10/10/18 10:29	11/01/18 05:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					10/10/18 10:29	11/01/18 05:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.240	U	0.233	0.234	1.00	0.378	pCi/L	10/10/18 10:51	10/25/18 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					10/10/18 10:51	10/25/18 09:55	1
Y Carrier	83.7		40 - 110					10/10/18 10:51	10/25/18 09:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.491		0.254	0.256	5.00	0.378	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.169		0.0836	0.0850	1.00	0.0931	pCi/L	10/10/18 10:29	11/01/18 05:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:29	11/01/18 05:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.02		0.281	0.296	1.00	0.347	pCi/L	10/10/18 10:51	10/25/18 09:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:51	10/25/18 09:55	1
Y Carrier	81.5		40 - 110					10/10/18 10:51	10/25/18 09:55	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.18		0.293	0.308	5.00	0.347	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.296		0.107	0.110	1.00	0.112	pCi/L	10/10/18 10:29	11/01/18 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					10/10/18 10:29	11/01/18 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.543		0.287	0.291	1.00	0.433	pCi/L	10/10/18 10:51	10/25/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					10/10/18 10:51	10/25/18 09:58	1
Y Carrier	83.0		40 - 110					10/10/18 10:51	10/25/18 09:58	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.840		0.306	0.311	5.00	0.433	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Date Collected: 10/04/18 13:05

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.186		0.0840	0.0857	1.00	0.0892	pCi/L	10/10/18 10:29	11/01/18 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					10/10/18 10:29	11/01/18 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.10		0.315	0.331	1.00	0.398	pCi/L	10/10/18 10:51	10/25/18 09:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					10/10/18 10:51	10/25/18 09:58	1
Y Carrier	80.0		40 - 110					10/10/18 10:51	10/25/18 09:58	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.29		0.326	0.342	5.00	0.398	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Date Collected: 10/04/18 11:40

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.165		0.0751	0.0765	1.00	0.0732	pCi/L	10/10/18 10:29	11/01/18 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:29	11/01/18 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.315	U	0.264	0.265	1.00	0.421	pCi/L	10/10/18 10:51	10/25/18 09:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:51	10/25/18 09:59	1
Y Carrier	77.4		40 - 110					10/10/18 10:51	10/25/18 09:59	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.480		0.274	0.276	5.00	0.421	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Date Collected: 10/04/18 12:25

Matrix: Water

Date Received: 10/05/18 08:46

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		0.0777	0.0789	1.00	0.0875	pCi/L	10/10/18 10:29	11/01/18 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/10/18 10:29	11/01/18 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.622		0.262	0.268	1.00	0.370	pCi/L	10/10/18 10:51	10/25/18 10:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/10/18 10:51	10/25/18 10:26	1
Y Carrier	83.4		40 - 110					10/10/18 10:51	10/25/18 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	0.775		0.273	0.279	5.00	0.370	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Date Collected: 10/04/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.319		0.103	0.107	1.00	0.0772	pCi/L	10/10/18 10:29	11/01/18 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:29	11/01/18 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.671		0.265	0.272	1.00	0.363	pCi/L	10/10/18 10:51	10/25/18 10:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:51	10/25/18 10:47	1
Y Carrier	81.9		40 - 110					10/10/18 10:51	10/25/18 10:47	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	0.990		0.284	0.292	5.00	0.363	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.357		0.111	0.115	1.00	0.0930	pCi/L	10/10/18 10:29	11/01/18 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:29	11/01/18 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.206	U	0.238	0.238	1.00	0.391	pCi/L	10/10/18 10:51	10/25/18 10:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/10/18 10:51	10/25/18 10:47	1
Y Carrier	78.1		40 - 110					10/10/18 10:51	10/25/18 10:47	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	0.563		0.263	0.264	5.00	0.391	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.511		0.128	0.136	1.00	0.0842	pCi/L	10/10/18 10:29	11/01/18 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:29	11/01/18 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.93		0.368	0.409	1.00	0.399	pCi/L	10/10/18 10:51	10/25/18 10:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					10/10/18 10:51	10/25/18 10:47	1
Y Carrier	82.6		40 - 110					10/10/18 10:51	10/25/18 10:47	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	2.44		0.390	0.431	5.00	0.399	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Date Collected: 10/04/18 13:50

Matrix: Water

Date Received: 10/05/18 08:46

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.186		0.0834	0.0851	1.00	0.0826	pCi/L	10/10/18 11:51	11/01/18 05:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					10/10/18 11:51	11/01/18 05:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.195	U	0.203	0.204	1.00	0.331	pCi/L	10/10/18 13:30	10/25/18 09:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					10/10/18 13:30	10/25/18 09:44	1
Y Carrier	86.7		40 - 110					10/10/18 13:30	10/25/18 09:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.381		0.219	0.221	5.00	0.331	pCi/L		11/08/18 16:41	1

Client Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

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		0.0892	0.0911	1.00	0.0947	pCi/L	10/10/18 11:51	11/01/18 05:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					10/10/18 11:51	11/01/18 05:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.325	U	0.227	0.229	1.00	0.353	pCi/L	10/10/18 13:30	10/25/18 09:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					10/10/18 13:30	10/25/18 09:44	1
Y Carrier	81.9		40 - 110					10/10/18 13:30	10/25/18 09:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.532		0.244	0.246	5.00	0.353	pCi/L		11/08/18 16:41	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

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 Wansley

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-6

Date Collected: 10/02/18 14:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:48	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:50	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWA-7

Date Collected: 10/03/18 11:30

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:48	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:50	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: FB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:50	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: EB-1-10-3-18

Date Collected: 10/03/18 14:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-160172-5

Date Collected: 10/03/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWA-3

Lab Sample ID: 400-160172-6

Date Collected: 10/03/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397303	10/25/18 09:51	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-15

Lab Sample ID: 400-160172-7

Date Collected: 10/03/18 15:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:54	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWA-5

Lab Sample ID: 400-160172-8

Date Collected: 10/03/18 12:50

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:54	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: DUP-1

Date Collected: 10/03/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:54	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-16

Date Collected: 10/04/18 10:10

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:54	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: EB-2-10-4-18

Date Collected: 10/04/18 11:15

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:49	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:55	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: DUP-2

Date Collected: 10/04/18 00:00

Date Received: 10/05/18 08:46

Lab Sample ID: 400-160172-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:50	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:55	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-160172-13

Date Collected: 10/04/18 10:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398695	11/01/18 05:50	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:55	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-10

Lab Sample ID: 400-160172-14

Date Collected: 10/04/18 10:45

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397302	10/25/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-12

Lab Sample ID: 400-160172-15

Date Collected: 10/04/18 13:05

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397302	10/25/18 09:58	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-9

Lab Sample ID: 400-160172-16

Date Collected: 10/04/18 11:40

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397293	10/25/18 09:59	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-160172-17

Date Collected: 10/04/18 12:25

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397304	10/25/18 10:26	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-13

Lab Sample ID: 400-160172-18

Date Collected: 10/04/18 14:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:51	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397304	10/25/18 10:47	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-14A

Lab Sample ID: 400-160172-19

Date Collected: 10/04/18 15:20

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:52	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397304	10/25/18 10:47	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: WGWC-8

Lab Sample ID: 400-160172-20

Date Collected: 10/04/18 15:15

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394186	10/10/18 10:29	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:52	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394193	10/10/18 10:51	JLC	TAL SL
Total/NA	Analysis	9320		1	397304	10/25/18 10:47	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-160172-21

Date Collected: 10/04/18 13:50

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394199	10/10/18 11:51	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:56	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394218	10/10/18 13:30	JLC	TAL SL
Total/NA	Analysis	9320		1	397302	10/25/18 09:44	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	RTM	TAL SL

Client Sample ID: FB-2-10-4-18

Lab Sample ID: 400-160172-22

Date Collected: 10/04/18 13:30

Matrix: Water

Date Received: 10/05/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			394199	10/10/18 11:51	JLC	TAL SL
Total/NA	Analysis	9315		1	398697	11/01/18 05:56	CDR	TAL SL
Total/NA	Prep	PrecSep_0			394218	10/10/18 13:30	JLC	TAL SL
Total/NA	Analysis	9320		1	397302	10/25/18 09:44	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	400041	11/08/18 16:41	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 Wansley

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Rad

Prep Batch: 394186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	PrecSep-21	
400-160172-2	WGWA-7	Total/NA	Water	PrecSep-21	
400-160172-3	FB-1-10-3-18	Total/NA	Water	PrecSep-21	
400-160172-4	EB-1-10-3-18	Total/NA	Water	PrecSep-21	
400-160172-5	WGWA-4	Total/NA	Water	PrecSep-21	
400-160172-6	WGWA-3	Total/NA	Water	PrecSep-21	
400-160172-7	WGWC-15	Total/NA	Water	PrecSep-21	
400-160172-8	WGWA-5	Total/NA	Water	PrecSep-21	
400-160172-9	DUP-1	Total/NA	Water	PrecSep-21	
400-160172-10	WGWC-16	Total/NA	Water	PrecSep-21	
400-160172-11	EB-2-10-4-18	Total/NA	Water	PrecSep-21	
400-160172-12	DUP-2	Total/NA	Water	PrecSep-21	
400-160172-13	WGWC-11	Total/NA	Water	PrecSep-21	
400-160172-14	WGWC-10	Total/NA	Water	PrecSep-21	
400-160172-15	WGWC-12	Total/NA	Water	PrecSep-21	
400-160172-16	WGWC-9	Total/NA	Water	PrecSep-21	
400-160172-17	WGWC-17	Total/NA	Water	PrecSep-21	
400-160172-18	WGWC-13	Total/NA	Water	PrecSep-21	
400-160172-19	WGWC-14A	Total/NA	Water	PrecSep-21	
400-160172-20	WGWC-8	Total/NA	Water	PrecSep-21	
MB 160-394186/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-394186/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-160172-10 DU	WGWC-16	Total/NA	Water	PrecSep-21	

Prep Batch: 394193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-1	WGWA-6	Total/NA	Water	PrecSep_0	
400-160172-2	WGWA-7	Total/NA	Water	PrecSep_0	
400-160172-3	FB-1-10-3-18	Total/NA	Water	PrecSep_0	
400-160172-4	EB-1-10-3-18	Total/NA	Water	PrecSep_0	
400-160172-5	WGWA-4	Total/NA	Water	PrecSep_0	
400-160172-6	WGWA-3	Total/NA	Water	PrecSep_0	
400-160172-7	WGWC-15	Total/NA	Water	PrecSep_0	
400-160172-8	WGWA-5	Total/NA	Water	PrecSep_0	
400-160172-9	DUP-1	Total/NA	Water	PrecSep_0	
400-160172-10	WGWC-16	Total/NA	Water	PrecSep_0	
400-160172-11	EB-2-10-4-18	Total/NA	Water	PrecSep_0	
400-160172-12	DUP-2	Total/NA	Water	PrecSep_0	
400-160172-13	WGWC-11	Total/NA	Water	PrecSep_0	
400-160172-14	WGWC-10	Total/NA	Water	PrecSep_0	
400-160172-15	WGWC-12	Total/NA	Water	PrecSep_0	
400-160172-16	WGWC-9	Total/NA	Water	PrecSep_0	
400-160172-17	WGWC-17	Total/NA	Water	PrecSep_0	
400-160172-18	WGWC-13	Total/NA	Water	PrecSep_0	
400-160172-19	WGWC-14A	Total/NA	Water	PrecSep_0	
400-160172-20	WGWC-8	Total/NA	Water	PrecSep_0	
MB 160-394193/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-394193/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-160172-10 DU	WGWC-16	Total/NA	Water	PrecSep_0	

QC Association Summary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Rad (Continued)

Prep Batch: 394199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total/NA	Water	PrecSep-21	
400-160172-22	FB-2-10-4-18	Total/NA	Water	PrecSep-21	
MB 160-394199/21-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-394199/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-160240-A-6-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 394218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160172-21	WGWC-19	Total/NA	Water	PrecSep_0	
400-160172-22	FB-2-10-4-18	Total/NA	Water	PrecSep_0	
MB 160-394218/21-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-394218/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-160240-A-6-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-394186/23-A
Matrix: Water
Analysis Batch: 398697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394186

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1082		0.0707	0.0713	1.00	0.0942	pCi/L	10/10/18 10:29	11/01/18 05:52	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					10/10/18 10:29	11/01/18 05:52	1

Lab Sample ID: LCS 160-394186/1-A
Matrix: Water
Analysis Batch: 398695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394186

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	10.68		1.12	1.00	0.0839	pCi/L	94	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	104		40 - 110						

Lab Sample ID: 400-160172-10 DU
Matrix: Water
Analysis Batch: 398695

Client Sample ID: WGWC-16
Prep Type: Total/NA
Prep Batch: 394186

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.458		0.4943		0.138	1.00	0.0991	pCi/L	0.14	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	98.8		40 - 110							

Lab Sample ID: MB 160-394199/21-A
Matrix: Water
Analysis Batch: 398696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394199

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1722		0.0772	0.0787	1.00	0.0729	pCi/L	10/10/18 11:51	11/01/18 06:00	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					10/10/18 11:51	11/01/18 06:00	1

Lab Sample ID: LCS 160-394199/1-A
Matrix: Water
Analysis Batch: 398697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394199

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	11.75		1.23	1.00	0.105	pCi/L	103	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCS 160-394199/1-A
Matrix: Water
Analysis Batch: 398697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394199

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.8		40 - 110

Lab Sample ID: 400-160240-A-6-A DU
Matrix: Water
Analysis Batch: 398697

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 394199

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.133		0.2229		0.0923	1.00	0.0887	pCi/L	0.54	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	101		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-394193/23-A
Matrix: Water
Analysis Batch: 397304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394193

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5705		0.288	0.293	1.00	0.423	pCi/L	10/10/18 10:51	10/25/18 10:47	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110	10/10/18 10:51	10/25/18 10:47	1
Y Carrier	74.4		40 - 110	10/10/18 10:51	10/25/18 10:47	1

Lab Sample ID: LCS 160-394193/1-A
Matrix: Water
Analysis Batch: 397303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394193

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	10.9	11.54		1.28	1.00	0.386	pCi/L	106	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	77.0		40 - 110

Lab Sample ID: 400-160172-10 DU
Matrix: Water
Analysis Batch: 397293

Client Sample ID: WGWC-16
Prep Type: Total/NA
Prep Batch: 394193

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	1.53		1.583		0.383	1.00	0.420	pCi/L	0.07	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

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

Lab Sample ID: 400-160172-10 DU
Matrix: Water
Analysis Batch: 397293

Client Sample ID: WGWC-16
Prep Type: Total/NA
Prep Batch: 394193

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	98.8		40 - 110
Y Carrier	78.5		40 - 110

Lab Sample ID: MB 160-394218/21-A
Matrix: Water
Analysis Batch: 397303

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 394218

Analyte	<i>MB</i> Result	<i>MB</i> Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3833	U	0.279	0.282	1.00	0.439	pCi/L	10/10/18 13:30	10/25/18 09:48	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110	10/10/18 13:30	10/25/18 09:48	1
Y Carrier	72.5		40 - 110	10/10/18 13:30	10/25/18 09:48	1

Lab Sample ID: LCS 160-394218/1-A
Matrix: Water
Analysis Batch: 397302

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 394218

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	10.9	13.06		1.43	1.00	0.378	pCi/L	120	56 - 140

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	85.8		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 400-160240-A-6-B DU
Matrix: Water
Analysis Batch: 397302

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 394218

Analyte	Sample Result	Sample Qual	<i>DU</i> Result	<i>DU</i> Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.435		0.3733		0.233	1.00	0.351	pCi/L	0.13	1

Carrier	<i>DU</i> %Yield	<i>DU</i> Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	78.9		40 - 110

QC Sample Results

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

TestAmerica Job ID: 400-160172-3
 SDG: Ash Pond

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


Lab Sample ID: 400-160172-10 DU
 Matrix: Water
 Analysis Batch: 400041

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

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	1.99		2.077		0.407	5.00	0.420	pCi/L	0.11	

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Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State: AL, Zip: 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Carrier Tracking No(s): 400-160172 COC 		Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - MeOH F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AshAcO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Analysis Requested Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) Cl, F, SO ₄ & SM 2640C Metals App. III (EPA 6020/470) Radium 226 & 228 (SW-846 9316/9320)		Field Filtered Sample (Yes or No)		Total Number of Containers: 3		Special Instructions/Note: APP III			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Inorganic, Organic, Composite)	Field Filtered Sample (Yes or No)	Cl, F, SO ₄ & SM 2640C	Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo)	Radium 226 & 228 (SW-846 9316/9320)	
WGWA-6	10-2-18	1430	G	Water	N	✓	✓	✓	
WGWA-7	10-3-18	1130	G	Water	N	✓	✓	✓	
FB-1-10-3-18	10-3-18	1400	G	Water	N	✓	✓	✓	
FB-1-10-3-18	10-3-18	1400	G	Water	N	✓	✓	✓	
WGWA-4	10-3-18	1330	G	Water	N	✓	✓	✓	
WGWA-3	10-3-18	1420	G	Water	N	✓	✓	✓	
WGWC-15	10-3-18	1530	G	Water	N	✓	✓	✓	
WGWA-5	10-3-18	1250	G	Water	N	✓	✓	✓	
Dup-1	10-3-18		G	Water	N	✓	✓	✓	
WGWC-16	10-4-18	1010	G	Water	N	✓	✓	✓	
EB-2-10-4-18	10-4-18	1115	G	Water	N	✓	✓	✓	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological 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 Reinquished by:		Date:		Time:		Method of Shipment:		Special Instructions/QC Requirements:	
Reinquished by:		Date/Time: 10/4/18		Date/Time: 15:15		Date/Time: 10-5-18 08:46		Date/Time: 1.70c, 1.50c 18-7	
Reinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Custody Seals Intact Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: ACC Company:		Company: TIA Company: TA-PEN	



Chain of Custody Record

Client Information Client Contact: J. Abraham Company: Southern Company Address: PO BOX 2641 GSC8 Birmingham State, Zip: AL, 35291 Phone: Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347666 W/O #: Project #: 40007709 SSO/W#:		Analysis Requested Deleted App IV Metals (As, Ba, Be, Cd, Cr, Cu, Hg, Pb, Mn, Ni, Mo) (SW-846 9316/9320) (EPA 300.0 & SM 2640C) Metals App. III (EPA 60207470) (As, Ba, Be, Cd, Cr, Cu, Hg, Pb, Mn, Ni, Mo) Radium 226 & 228 (SW-846 9316/9320)	
Sample Identification WGWC-13 WGWC-14A WGWC-8 WGWC-19 FB-2-10-4-18	Matrix (Hexavalent Chromium, Cyanide, Organohalides) Water Water Water Water Water Water Water Water Water	Sample Type (C=Comp, G=grab) G G G G G G G G G	Sample Time 1420 1520 1515 1350 1330
Sample Date 10-4-18 10-4-18 10-4-18 10-4-18 10-4-18	Field Filtered Sample (Yes or No) Yes Yes Yes Yes Yes Yes Yes Yes Yes	Total Number of Containers 3 3 3 3 3	Special Instructions/Note: APP III
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" 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 checked="" 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: <i>[Signature]</i> Date: 10-5-18 Relinquished by: <i>[Signature]</i> Date: 10-5-18 Relinquished by: <i>[Signature]</i> Date: 10-5-18		Method of Shipment:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Received by: <i>[Signature]</i> Date/Time: 10-5-18 1100 Received by: <i>[Signature]</i> Date/Time: 10-5-18 0846 Received by: <i>[Signature]</i> Date/Time: 10-5-18 0846 Cooler Temperature(s) °C and Other Remarks:	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160172-3

SDG Number: Ash Pond

Login Number: 160172

List Number: 1

Creator: Conrady, Hank W

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, 1.5°C, 2.8°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160172-3

SDG Number: Ash Pond

Login Number: 160172

List Number: 3

Creator: McKinney, Gerrod E

List Source: TestAmerica St. Louis

List Creation: 10/08/18 06:17 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.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	20.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA180023	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18 *
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18 *
Iowa	State Program	7	373	12-01-18 *
Kansas	NELAP	7	E-10236	10-31-18 *
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18 *
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-19

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-160172-3
SDG: Ash Pond

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-19
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-19
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-12	07-31-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-19
West Virginia DEP	State Program	3	381	08-31-19

Product Name: Low-Flow System

Date: 2018-09-27 11:02:35

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 129 ft

Pump placement from TOC 124 ft

Well Information:

Well ID WGWA-1
Well diameter 2 in
Well Total Depth 129.69 ft
Screen Length 10 ft
Depth to Water 28.50 ft

Pumping Information:

Final Pumping Rate 50 mL/min
Total System Volume 3.286705 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1.2 in
Total Volume Pumped 3.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:40:15	3000.96	21.72	5.34	38.79	0.43	28.60	1.13	102.27
Last 5	10:45:15	3300.95	21.90	5.34	38.65	0.35	28.60	1.30	104.43
Last 5	10:50:15	3600.95	21.77	5.33	38.86	0.38	28.60	1.41	107.26
Last 5	10:55:15	3900.94	21.87	5.33	38.62	0.74	28.60	1.49	109.71
Last 5	11:00:15	4200.93	21.94	5.33	38.82	0.43	28.60	1.55	111.83
Variance 0			-0.13	-0.01	0.21			0.11	2.83
Variance 1			0.10	0.00	-0.23			0.08	2.46
Variance 2			0.08	-0.01	0.20			0.06	2.12

Notes

Cloudy , sample Time: 1100

Grab Samples

Product Name: Low-Flow System

Date: 2018-09-24 16:27:46

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name Plant wansley -Ash Ponds
Site Name Default Site
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder
Tubing Type poly
Tubing Diameter .375 in
Tubing Length 104 ft

Pump placement from TOC 100 ft

Well Information:

Well ID WGWA-2
Well diameter 2 in
Well Total Depth 104.9 ft
Screen Length 10 ft
Depth to Water 12.52 ft

Pumping Information:

Final Pumping Rate 190 mL/min
Total System Volume 2.723739 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 4.5 in
Total Volume Pumped 7.6 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	16:05:05	1200.00	20.90	6.16	127.75	0.61	12.90	1.34	46.39
Last 5	16:10:05	1500.00	21.15	6.13	126.57	0.42	12.90	1.25	44.30
Last 5	16:15:05	1799.97	20.89	6.11	126.29	0.55	12.90	1.06	43.63
Last 5	16:20:05	2099.98	20.75	6.11	126.51	0.82	12.90	0.97	42.26
Last 5	16:25:05	2399.97	20.58	6.10	126.28	0.66	12.90	0.94	41.31
Variance 0			-0.26	-0.02	-0.28			-0.19	-0.67
Variance 1			-0.14	-0.00	0.23			-0.09	-1.37
Variance 2			-0.17	-0.00	-0.23			-0.04	-0.95

Notes

Sunny, sample Time- 1425

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-03 14:22:09

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 19 ft

Pump placement from TOC 14 ft

Well Information:

Well ID WGWA-3
Well diameter 2 in
Well Total Depth 19 ft
Screen Length 10 ft
Depth to Water 3.84 ft

Pumping Information:

Final Pumping Rate 350 mL/min
Total System Volume 0.569805 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.7 in
Total Volume Pumped 10.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:00:35	600.03	19.85	5.43	38.63	1.04	3.90	5.49	150.82
Last 5	14:05:35	900.02	19.79	5.45	38.62	0.97	3.90	5.45	147.66
Last 5	14:10:35	1200.01	19.79	5.45	38.62	0.75	3.90	5.47	146.37
Last 5	14:15:35	1500.01	19.59	5.46	38.61	0.69	3.90	5.46	144.84
Last 5	14:20:35	1799.99	19.34	5.45	38.75	0.55	3.90	5.46	144.29
Variance 0			-0.01	0.00	-0.00			0.02	-1.30
Variance 1			-0.20	0.01	-0.01			-0.01	-1.53
Variance 2			-0.25	-0.01	0.14			-0.00	-0.54

Notes

Sunny, sample Time :1420, FB-1-3-10-18 here at 1400

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-03 13:35:56

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 74 ft

Pump placement from TOC 68 ft

Well Information:

Well ID WGWA-4
Well diameter 2 in
Well Total Depth 73.1 ft
Screen Length 10 ft
Depth to Water 6.2 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.8043022 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 6.9 in
Total Volume Pumped 4.5 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	13:13:32	600.03	21.02	6.80	138.80	1.32	6.60	0.06	-53.34
Last 5	13:18:32	900.02	20.79	6.86	138.49	1.23	6.70	0.05	-61.68
Last 5	13:23:32	1200.01	20.75	6.90	137.29	1.22	6.80	0.05	-69.43
Last 5	13:28:32	1500.01	20.48	6.92	135.71	1.14	6.90	0.06	-75.15
Last 5	13:33:32	1800.01	20.34	6.92	134.64	1.27	6.90	0.06	-80.87
Variance 0			-0.04	0.03	-1.21			0.00	-7.74
Variance 1			-0.26	0.02	-1.57			0.01	-5.72
Variance 2			-0.14	0.01	-1.07			0.01	-5.72

Notes

Sampled at 1330 on 10-3-18. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2018-09-27 15:22:13

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 23 ft

Pump placement from TOC 18 ft

Well Information:

Well ID WGWA-5
Well diameter 2 in
Well Total Depth 23.19 ft
Screen Length 10 ft
Depth to Water 15.93 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.5876587 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 0 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:00:10	6003.87	19.88	5.19	28.39	64.00	16.40	3.47	125.60
Last 5	15:05:10	6303.87	19.89	5.22	28.25	70.00	16.40	3.65	125.85
Last 5	15:10:10	6603.86	19.82	5.21	28.15	77.00	16.40	3.76	125.45
Last 5	15:15:10	6903.85	20.03	5.21	28.02	78.00	16.40	3.84	125.78
Last 5	15:20:10	7203.85	19.89	5.21	28.09	74.00	16.40	3.87	126.07
Variance 0			-0.07	-0.00	-0.10			0.11	-0.39
Variance 1			0.21	-0.00	-0.12			0.08	0.33
Variance 2			-0.14	-0.00	0.07			0.03	0.28

Notes

Turbidity rising, redevelopment needed

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-03 12:51:12

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peri Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 23 ft

Pump placement from TOC 18 ft

Well Information:

Well ID WGWA-5
Well diameter 2 in
Well Total Depth 23.19 ft
Screen Length 10 ft
Depth to Water 16.23 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.1926587 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:30:03	9600.78	21.83	5.22	29.95	8.77	16.50	4.26	147.37
Last 5	12:35:03	9900.77	22.96	5.22	30.29	8.93	16.50	4.20	147.87
Last 5	12:40:03	10200.76	22.99	5.21	29.56	8.21	16.50	4.09	148.33
Last 5	12:45:03	10500.74	22.13	5.21	30.11	8.66	16.50	4.23	148.11
Last 5	12:50:03	10800.75	23.18	5.22	30.43	8.52	16.50	4.18	148.02
Variance 0			0.02	-0.00	-0.73			-0.11	0.46
Variance 1			-0.86	0.00	0.55			0.13	-0.22
Variance 2			1.06	0.01	0.32			-0.05	-0.09

Notes

Sunny, sample Time: 1250

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-02 14:33:12

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 104 ft

Pump placement from TOC 99 ft

Well Information:

Well ID WGWA-6
Well diameter 2 in
Well Total Depth 104.5 ft
Screen Length 10 ft
Depth to Water 16.13 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.949196 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 8 in
Total Volume Pumped 4.5 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:10:07	1500.00	19.76	7.30	189.95	1.52	16.80	0.74	39.21
Last 5	14:15:07	1799.99	19.64	7.37	190.15	1.84	16.80	0.64	37.57
Last 5	14:20:07	2099.99	19.67	7.43	190.20	1.19	16.80	0.58	35.47
Last 5	14:25:07	2399.98	19.68	7.48	190.10	0.63	16.80	0.51	33.35
Last 5	14:30:07	2699.97	19.76	7.52	189.86	0.55	16.80	0.45	31.19
Variance 0			0.03	0.06	0.05			-0.06	-2.11
Variance 1			0.00	0.05	-0.10			-0.06	-2.12
Variance 2			0.08	0.04	-0.24			-0.07	-2.16

Notes

Sunny, sample Time: 1430

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-03 11:31:22

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type peri Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 40 ft

Pump placement from TOC ft

Well Information:

Well ID WGWA-7
Well diameter 2 in
Well Total Depth 39.6 ft
Screen Length 10 ft
Depth to Water 27.11 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.4761093 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1 in
Total Volume Pumped 9 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	11:09:06	1501.00	18.12	5.53	27.26	1.64	27.20	6.96	139.86
Last 5	11:14:08	1802.99	18.03	5.42	26.11	1.45	27.20	7.17	148.51
Last 5	11:19:22	2116.99	18.08	5.39	25.54	1.64	27.20	7.36	151.73
Last 5	11:24:22	2416.98	18.08	5.37	25.24	1.88	27.20	7.45	155.98
Last 5	11:29:22	2716.97	18.26	5.33	24.74	1.47	27.20	7.11	160.11
Variance 0			0.05	-0.03	-0.57			0.19	3.22
Variance 1			0.01	-0.03	-0.31			0.09	4.25
Variance 2			0.17	-0.03	-0.50			-0.34	4.13

Notes

Sampled at 1130 on 10-3-18. Sunny 80. Dup-1 collected here.

Grab Samples

Product Name: Low-Flow System

Date: 2018-09-28 12:16:27

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 40 ft

Pump placement from TOC 35 ft

Well Information:

Well ID WGWA-18
Well diameter 2 in
Well Total Depth 40 ft
Screen Length 10 ft
Depth to Water 21.18 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.6635369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20.6 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:55:31	6000.88	19.76	6.38	125.58	0.51	22.90	1.10	22.79
Last 5	12:00:31	6300.86	19.77	6.36	121.63	0.62	22.90	1.21	21.88
Last 5	12:05:31	6600.86	19.80	6.32	118.71	0.44	22.90	1.36	22.21
Last 5	12:10:31	6900.85	19.81	6.30	116.08	0.34	22.90	1.43	21.58
Last 5	12:15:33	7202.84	20.37	6.26	113.88	0.39	22.90	1.41	21.08
Variance 0			0.03	-0.04	-2.92			0.14	0.33
Variance 1			0.01	-0.02	-2.62			0.07	-0.62
Variance 2			0.56	-0.03	-2.20			-0.02	-0.50

Notes

Cloudy. Sample Time - 1215

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 15:20:50

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type peri Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length ft

Pump placement from TOC ft

Well Information:

Well ID WGWC-8
Well diameter 2 in
Well Total Depth 59.40 ft
Screen Length 10 ft
Depth to Water 4.49 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.09 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 27.72 in
Total Volume Pumped 4.5 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	14:55:54	600.03	22.87	5.49	629.70	1.90	5.80	1.18	156.96
Last 5	15:00:55	901.02	22.89	5.43	630.34	2.12	6.10	1.09	144.28
Last 5	15:05:56	1202.03	22.76	5.38	637.28	2.19	6.40	1.04	135.58
Last 5	15:10:56	1502.03	22.83	5.37	638.72	0.00	6.60	1.04	130.01
Last 5	15:15:58	1804.03	22.72	5.39	636.82	2.51	6.80	1.05	126.02
Variance 0			-0.13	-0.04	6.94			-0.05	-8.70
Variance 1			0.07	-0.02	1.45			0.01	-5.57
Variance 2			-0.12	0.03	-1.91			0.00	-3.98

Notes

Sampled at 1515 on 10-4-18. Sunny 90.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 11:42:43

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Peri Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 61 ft

Pump placement from TOC 56 ft

Well Information:

Well ID WGWC-9
Well diameter 2 in
Well Total Depth 61.42 ft
Screen Length 10 ft
Depth to Water 16.07 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.3622688 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 23 in
Total Volume Pumped 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:20:11	1200.00	21.81	6.22	167.60	1.82	18.10	4.90	96.15
Last 5	11:25:11	1499.99	21.93	6.20	168.97	1.75	18.20	4.63	96.14
Last 5	11:30:11	1799.98	22.09	6.20	168.21	2.62	18.20	4.21	95.47
Last 5	11:35:11	2099.97	22.09	6.19	167.79	1.84	18.20	4.05	95.29
Last 5	11:40:11	2399.96	21.92	6.17	167.77	1.22	18.20	3.98	96.07
Variance 0			0.16	-0.01	-0.76			-0.43	-0.67
Variance 1			0.01	-0.01	-0.42			-0.16	-0.18
Variance 2			-0.17	-0.02	-0.03			-0.07	0.78

Notes

Sunny, sample Time 1140.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 10:49:52

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 148 ft

Pump placement from TOC 141 ft

Well Information:

Well ID WGWC-10
Well diameter 2 in
Well Total Depth 147.16 ft
Screen Length 10 ft
Depth to Water 20.93 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 1.518604 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 20.04 in
Total Volume Pumped 3.5 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	10:27:54	900.01	19.24	6.27	75.75	2.36	22.30	4.12	158.18
Last 5	10:32:54	1200.05	19.35	6.28	76.74	2.04	22.40	4.26	151.76
Last 5	10:37:54	1500.02	19.34	6.37	77.35	1.99	22.45	4.61	143.17
Last 5	10:42:58	1803.99	19.33	6.39	77.35	2.83	22.50	4.76	139.13
Last 5	10:47:58	2103.99	19.10	6.40	77.01	2.78	22.60	4.86	133.47
Variance 0			-0.01	0.09	0.62			0.34	-8.59
Variance 1			-0.01	0.02	-0.00			0.15	-4.05
Variance 2			-0.22	0.01	-0.34			0.10	-5.65

Notes

Sampled at 1045 on 10-4-18. Sunny 80.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 10:28:11

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Landfill
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 588863
Turbidity Make/Model Hatch 2100Q

Pump Information:

Pump Model/Type QED Bladder Pro
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 53 ft

Pump placement from TOC 44.5 ft

Well Information:

Well ID WGWC-11
Well diameter 2 in
Well Total Depth 49.80 ft
Screen Length 10 ft
Depth to Water 28.56 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 0.6265614 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17 in
Total Volume Pumped 4.75 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:05:14	600.04	21.99	6.34	56.23	9.50	28.80	6.90	151.80
Last 5	10:10:14	900.04	19.16	5.79	36.13	4.32	28.80	6.76	117.79
Last 5	10:15:14	1200.04	18.96	5.78	36.82	1.13	28.90	6.80	113.37
Last 5	10:20:14	1500.03	18.97	5.81	37.18	1.21	30.00	6.69	109.14
Last 5	10:25:16	1802.04	19.27	5.81	37.68	0.92	30.00	6.64	109.68
Variance 0			-0.20	-0.02	0.69			0.03	-4.42
Variance 1			0.01	0.03	0.36			-0.10	-4.23
Variance 2			0.30	0.00	0.50			-0.05	0.54

Notes

Sampled at 1030 on 10-4-18. 77F sunny.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 13:06:53

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 588863
Turbidity Make/Model Hatch 2100Q

Pump Information:

Pump Model/Type QED Bladder Pro
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 80 ft

Pump placement from TOC 71.5 ft

Well Information:

Well ID WGWC-12
Well diameter 2 in
Well Total Depth 76.5 ft
Screen Length 10 ft
Depth to Water 28.01 ft

Pumping Information:

Final Pumping Rate 165 mL/min
Total System Volume 0.7470738 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 17 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:45:22	4802.03	18.05	6.77	117.99	9.11	28.50	0.67	31.51
Last 5	12:50:22	5102.03	18.12	6.77	118.10	8.88	28.50	0.64	30.12
Last 5	12:55:29	5409.04	18.15	6.77	117.93	8.27	28.50	0.50	29.56
Last 5	13:00:29	5709.04	18.20	6.78	117.63	6.40	28.50	0.50	27.25
Last 5	13:05:30	6010.04	18.25	6.79	117.70	4.72	28.50	0.39	26.51
Variance 0			0.03	0.00	-0.17			-0.14	-0.57
Variance 1			0.05	0.01	-0.30			-0.00	-2.30
Variance 2			0.05	0.01	0.08			-0.11	-0.75

Notes

Sampled at 1305 on 10-4-18. 87F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 14:24:13

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 588863
Turbidity Make/Model Hatch 2100Q

Pump Information:

Pump Model/Type QED Bladder Pro
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 100 ft

Pump placement from TOC 91.31 ft

Well Information:

Well ID WGWC-13
Well diameter 2 in
Well Total Depth 96.31 ft
Screen Length 10 ft
Depth to Water 19.7 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.8363423 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19 in
Total Volume Pumped 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:00:00	600.04	20.34	6.55	81.54	6.63	20.40	0.71	40.57
Last 5	14:05:00	900.04	19.93	6.53	81.96	5.63	20.90	0.51	48.62
Last 5	14:10:00	1200.04	19.99	6.51	81.83	3.07	21.40	0.34	52.27
Last 5	14:15:01	1501.04	21.01	6.51	81.99	3.77	21.40	0.34	52.54
Last 5	14:20:04	1804.04	21.77	6.50	81.61	3.71	21.40	0.33	54.86
Variance 0			0.06	-0.02	-0.13			-0.18	3.65
Variance 1			1.02	0.00	0.17			-0.00	0.26
Variance 2			0.76	-0.02	-0.38			-0.01	2.32

Notes

Sampled at 1420 on 10-4-18. 87F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 15:22:20

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name CCR - Plant Wansley - Ash Pond
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 588863
Turbidity Make/Model Hatch 2100Q

Pump Information:

Pump Model/Type QED Bladder Pro
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 37.98 ft

Well Information:

Well ID GWC-14A
Well diameter 2 in
Well Total Depth 42.98 ft
Screen Length 10 ft
Depth to Water 20.43 ft

Pumping Information:

Final Pumping Rate 125 mL/min
Total System Volume 0.590854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 10 in
Total Volume Pumped 5.25 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:00:18	1200.04	21.28	5.97	69.69	7.22	21.10	0.20	55.16
Last 5	15:05:18	1500.04	21.82	5.97	69.28	6.56	21.10	0.18	56.42
Last 5	15:10:20	1802.04	21.73	5.96	69.61	5.82	21.10	0.17	57.46
Last 5	15:15:20	2102.05	21.38	5.97	69.09	5.30	21.20	0.16	59.00
Last 5	15:20:23	2405.04	21.12	5.97	69.30	2.73	21.20	0.15	60.20
Variance 0			-0.09	-0.00	0.33			-0.00	1.05
Variance 1			-0.35	0.00	-0.52			-0.01	1.53
Variance 2			-0.26	0.00	0.20			-0.01	1.20

Notes

Sampled at 1320 on 10-4-18. 87F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-03 15:31:57

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 56 ft

Pump placement from TOC 51 ft

Well Information:

Well ID WGWC-15
Well diameter 2 in
Well Total Depth 56 ft
Screen Length 10 ft
Depth to Water 13.32 ft

Pumping Information:

Final Pumping Rate 100 mL/min
Total System Volume 0.7349517 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 35.7 in
Total Volume Pumped 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:05:14	900.02	21.78	6.98	347.12	2.18	15.70	0.18	67.98
Last 5	15:10:14	1200.01	21.96	7.08	346.81	4.21	16.00	0.14	65.67
Last 5	15:15:14	1500.01	21.96	7.11	342.98	1.78	16.20	0.14	64.51
Last 5	15:25:14	2099.99	22.53	7.11	338.78	1.55	16.30	0.14	63.05
Last 5	15:30:16	2401.98	22.72	7.11	338.28	1.21	16.30	0.14	62.70
Variance 0			-0.00	0.04	-3.83			-0.00	-1.16
Variance 1			0.58	0.00	-4.20			0.00	-1.45
Variance 2			0.18	0.00	-0.50			-0.01	-0.36

Notes

Sunny, sample Time 1530

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 10:11:15

Project Information:

Operator Name J Berisford
Company Name Atlantic Coast Consulting
Project Name CCR - Plant Wansley
Site Name Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 501336
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type Ded QED Bladder Pump
Tubing Type poly
Tubing Diameter 0.17 in
Tubing Length 34 ft

Pump placement from TOC 29 ft

Well Information:

Well ID WGWC-16
Well diameter 2 in
Well Total Depth 34.70 ft
Screen Length 10 ft
Depth to Water 13.07 ft

Pumping Information:

Final Pumping Rate 130 mL/min
Total System Volume 0.6367564 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 1.6 in
Total Volume Pumped 3.9 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			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:50:09	600.02	20.03	5.59	2031.19	1.92	13.20	1.18	119.52
Last 5	09:55:09	900.02	19.67	5.42	2024.97	2.66	13.20	0.71	119.28
Last 5	10:00:09	1200.01	19.66	5.35	2021.32	2.98	13.20	0.54	119.89
Last 5	10:05:09	1499.99	19.63	5.31	2016.92	1.73	13.20	0.44	120.45
Last 5	10:10:09	1799.98	19.58	5.28	2016.26	1.52	13.20	0.36	121.08
Variance 0			-0.01	-0.08	-3.66			-0.17	0.61
Variance 1			-0.03	-0.04	-4.40			-0.10	0.57
Variance 2			-0.04	-0.03	-0.65			-0.08	0.63

Notes

Sunny, sample Time: 1010

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 12:29:39

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type peri Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 97 ft

Pump placement from TOC 91 ft

Well Information:

Well ID WGWC-17
Well diameter 2 in
Well Total Depth 96.16 ft
Screen Length 10 ft
Depth to Water 23.54 ft

Pumping Information:

Final Pumping Rate 150 mL/min
Total System Volume 1.026315 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 18.72 in
Total Volume Pumped 4.5 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	12:06:32	600.02	19.14	6.20	116.75	--	24.85	0.63	98.33
Last 5	12:11:32	900.01	18.92	6.18	116.91	1.72	25.00	0.52	105.94
Last 5	12:16:32	1200.01	19.06	6.16	118.92	--	25.10	0.45	107.76
Last 5	12:21:32	1500.00	19.45	6.14	119.16	1.83	25.10	0.41	109.15
Last 5	12:26:32	1800.00	19.64	6.14	119.97	1.90	25.10	0.45	115.99
Variance 0			0.14	-0.02	2.02			-0.06	1.82
Variance 1			0.39	-0.02	0.24			-0.04	1.39
Variance 2			0.19	-0.00	0.81			0.04	6.84

Notes

Sampled at 1225 on 10-4-18. Sunny 80s.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-04 13:52:54

Project Information:

Operator Name H Auld
Company Name ACC
Project Name Wansley
Site Name Wansley-Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 466058
Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type QED Bladder Pump
Tubing Type poly
Tubing Diameter .25 in
Tubing Length 95 ft

Pump placement from TOC 88 ft

Well Information:

Well ID WGWC-19
Well diameter 2 in
Well Total Depth 94.80 ft
Screen Length 10 ft
Depth to Water 20.98 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 1.00701 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17.04 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	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	13:30:27	600.02	19.42	6.68	133.82	4.95	22.20	0.21	84.67
Last 5	13:35:27	900.03	19.15	6.66	132.83	4.37	22.30	0.11	47.42
Last 5	13:40:29	1202.02	19.15	6.66	134.14	3.88	22.40	0.10	39.30
Last 5	13:45:32	1505.01	19.10	6.66	135.65	3.96	22.40	0.09	41.53
Last 5	13:50:32	1805.01	18.88	6.67	137.62	3.69	22.40	0.10	47.87
Variance 0			0.00	-0.01	1.31			-0.02	-8.12
Variance 1			-0.05	-0.00	1.50			-0.01	2.23
Variance 2			-0.22	0.02	1.97			0.01	6.34

Notes

Sampled at 1350 on 10-4-18. Cloudy 80s. FB-2-10-4-18 poured here at 1330.

Grab Samples

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: 400-160830-1

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

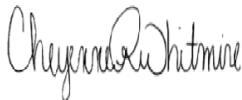
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

10/31/2018 2:36:23 PM

Cheyenne Whitmire, Project Manager II

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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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Detection Summary

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Client Sample ID: WAMW-2

Lab Sample ID: 400-160830-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.5		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.47		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	9.5		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	18		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WAMW-1

Lab Sample ID: 400-160830-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.6		1.0	0.89	mg/L	1		300.0	Total/NA
Fluoride	0.60		0.20	0.082	mg/L	1		300.0	Total/NA
Sulfate	3.7		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	19		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Wansley

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160830-1	WAMW-2	Water	10/16/18 14:45	10/19/18 09:04
400-160830-2	WAMW-1	Water	10/18/18 10:20	10/19/18 09:04

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Client Sample Results

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

TestAmerica Job ID: 400-160830-1
 SDG: Ash Pond

Client Sample ID: WAMW-2

Date Collected: 10/16/18 14:45

Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.5		1.0	0.89	mg/L			10/29/18 23:21	1
Fluoride	0.47		0.20	0.082	mg/L			10/31/18 05:03	1
Sulfate	9.5		1.0	0.70	mg/L			10/31/18 05:03	1

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		10/23/18 12:12	10/23/18 20:58	5
Calcium	18		0.25	0.13	mg/L		10/23/18 12:12	10/23/18 20:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		5.0	3.4	mg/L			10/22/18 17:15	1

Client Sample Results

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Client Sample ID: WAMW-1
Date Collected: 10/18/18 10:20
Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-2
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.89	mg/L			10/29/18 23:44	1
Fluoride	0.60		0.20	0.082	mg/L			10/31/18 05:26	1
Sulfate	3.7		1.0	0.70	mg/L			10/31/18 05:26	1

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		10/23/18 12:12	10/23/18 21:03	5
Calcium	19		0.25	0.13	mg/L		10/23/18 12:12	10/23/18 21:03	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120		5.0	3.4	mg/L			10/25/18 12:27	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Qualifiers

HPLC/IC

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.

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 Wansley

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Client Sample ID: WAMW-2

Date Collected: 10/16/18 14:45

Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	417404	10/29/18 23:21	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417671	10/31/18 05:03	BAW	TAL PEN
Total Recoverable	Prep	3005A			416586	10/23/18 12:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	416741	10/23/18 20:58	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	416491	10/22/18 17:15	CLB	TAL PEN

Client Sample ID: WAMW-1

Date Collected: 10/18/18 10:20

Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	417404	10/29/18 23:44	BAW	TAL PEN
Total/NA	Analysis	300.0		1	417671	10/31/18 05:26	BAW	TAL PEN
Total Recoverable	Prep	3005A			416586	10/23/18 12:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	416741	10/23/18 21:03	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	416940	10/25/18 12:27	CLB	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 Wansley

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

HPLC/IC

Analysis Batch: 417404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	300.0	
400-160830-2	WAMW-1	Total/NA	Water	300.0	
MB 400-417404/22	Method Blank	Total/NA	Water	300.0	
LCS 400-417404/23	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-417404/24	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160841-W-1 MS	Matrix Spike	Total/NA	Water	300.0	
400-160841-W-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 417671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	300.0	
400-160830-2	WAMW-1	Total/NA	Water	300.0	
MB 400-417671/37	Method Blank	Total/NA	Water	300.0	
LCS 400-417671/38	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-417671/39	Lab Control Sample Dup	Total/NA	Water	300.0	
400-160832-A-6 MS	Matrix Spike	Total/NA	Water	300.0	
400-160832-A-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 416586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total Recoverable	Water	3005A	
400-160830-2	WAMW-1	Total Recoverable	Water	3005A	
MB 400-416586/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-416586/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-160832-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-160832-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 416741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total Recoverable	Water	6020	416586
400-160830-2	WAMW-1	Total Recoverable	Water	6020	416586
MB 400-416586/1-A ^5	Method Blank	Total Recoverable	Water	6020	416586
LCS 400-416586/2-A	Lab Control Sample	Total Recoverable	Water	6020	416586
400-160832-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	416586
400-160832-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	416586

General Chemistry

Analysis Batch: 416491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	SM 2540C	
MB 400-416491/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-416491/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160790-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 416940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-2	WAMW-1	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 416940 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-416940/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-416940/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-160240-A-54 DU	Duplicate	Total/NA	Water	SM 2540C	

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QC Sample Results

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-417404/22
Matrix: Water
Analysis Batch: 417404

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/29/18 13:27	1
Fluoride	<0.082		0.20	0.082	mg/L			10/29/18 13:27	1
Sulfate	<0.70		1.0	0.70	mg/L			10/29/18 13:27	1

Lab Sample ID: LCS 400-417404/23
Matrix: Water
Analysis Batch: 417404

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.90		mg/L		99	90 - 110
Fluoride	10.0	10.0		mg/L		100	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCSD 400-417404/24
Matrix: Water
Analysis Batch: 417404

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	10.0	9.93		mg/L		99	90 - 110	0	15
Fluoride	10.0	10.1		mg/L		101	90 - 110	1	15
Sulfate	10.0	10.7		mg/L		107	90 - 110	3	15

Lab Sample ID: 400-160841-W-1 MS
Matrix: Water
Analysis Batch: 417404

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	29		10.0	38.6		mg/L		92	80 - 120
Fluoride	0.15	J	10.0	10.3		mg/L		101	80 - 120
Sulfate	24		10.0	35.2		mg/L		110	80 - 120

Lab Sample ID: 400-160841-W-1 MSD
Matrix: Water
Analysis Batch: 417404

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	29		10.0	38.6		mg/L		92	80 - 120	0	20
Fluoride	0.15	J	10.0	10.3		mg/L		101	80 - 120	0	20
Sulfate	24		10.0	35.3		mg/L		112	80 - 120	1	20

Lab Sample ID: MB 400-417671/37
Matrix: Water
Analysis Batch: 417671

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			10/30/18 16:51	1
Fluoride	<0.082		0.20	0.082	mg/L			10/30/18 16:51	1
Sulfate	<0.70		1.0	0.70	mg/L			10/30/18 16:51	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-417671/38
Matrix: Water
Analysis Batch: 417671

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.0		mg/L		100	90 - 110
Fluoride	10.0	10.0		mg/L		100	90 - 110
Sulfate	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: LCSD 400-417671/39
Matrix: Water
Analysis Batch: 417671

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	10.0	10.0		mg/L		100	90 - 110	0	15
Fluoride	10.0	10.1		mg/L		101	90 - 110	0	15
Sulfate	10.0	11.0		mg/L		110	90 - 110	1	15

Lab Sample ID: 400-160832-A-6 MS
Matrix: Water
Analysis Batch: 417671

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	4.5		10.0	14.4		mg/L		99	80 - 120
Fluoride	<0.082		10.0	10.5		mg/L		105	80 - 120
Sulfate	82	E	10.0	91.2	E 4	mg/L		92	80 - 120

Lab Sample ID: 400-160832-A-6 MSD
Matrix: Water
Analysis Batch: 417671

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	4.5		10.0	14.7		mg/L		102	80 - 120	2	20
Fluoride	<0.082		10.0	10.7		mg/L		107	80 - 120	2	20
Sulfate	82	E	10.0	91.8	E 4	mg/L		98	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-416586/1-A ^5
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/23/18 12:12	10/23/18 18:39	5
Calcium	<0.13		0.25	0.13	mg/L		10/23/18 12:12	10/23/18 18:39	5

Lab Sample ID: LCS 400-416586/2-A
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0989		mg/L		99	80 - 120
Calcium	5.00	4.92		mg/L		98	80 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

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

Lab Sample ID: 400-160832-B-1-B MS ^5

Matrix: Water
Analysis Batch: 416741

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	<0.021		0.100	0.0984		mg/L		98	75 - 125
Calcium	5.8		5.00	10.7		mg/L		98	75 - 125

Lab Sample ID: 400-160832-B-1-C MSD ^5

Matrix: Water
Analysis Batch: 416741

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	<0.021		0.100	0.105		mg/L		105	75 - 125	7	20
Calcium	5.8		5.00	10.8		mg/L		100	75 - 125	1	20

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

Lab Sample ID: MB 400-416491/1

Matrix: Water
Analysis Batch: 416491

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			10/22/18 17:15	1

Lab Sample ID: LCS 400-416491/2

Matrix: Water
Analysis Batch: 416491

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	274		mg/L		94	78 - 122

Lab Sample ID: 400-160790-A-3 DU

Matrix: Water
Analysis Batch: 416491

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	6.0		6.00		mg/L		0	5

Lab Sample ID: MB 400-416940/1

Matrix: Water
Analysis Batch: 416940

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			10/25/18 12:27	1

Lab Sample ID: LCS 400-416940/2

Matrix: Water
Analysis Batch: 416940

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	234		mg/L		80	78 - 122

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160830-1
 SDG: Ash Pond

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


Lab Sample ID: 400-160240-A-54 DU
Matrix: Water
Analysis Batch: 416940

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	840		842		mg/L		0.2	5

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Chain of Custody Record

Client Information Client Contact: Joju Abraham Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: (770) 594-5998 Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com		Carrier Tracking No(s): Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Analysis Requested  400-160830 COC	
Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Total Number of containers:	
Other:		Special Instructions/Note: APP III	
Sample Identification WAMW-2 WAMW-2 WAMW-1		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air) Water Water Water Water Water Water Water Water Water Water	
Sample Date: 10-17 Sample Time: 07:17-18 Sample Type (C=comp, G=grab): G Preservation Code:		Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): Metals App. III (EPA 6020/470): CI, F, SO, & TDS (EPA 300.0 & SM 2540C): Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) (SW-846 9315/9320): Radium 226 & 228 (SW-846 9315/9320)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" 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 checked="" 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: [Signature]		Date/Time: 10-18-18 1750 Company: ACC	
Relinquished by: [Signature]		Date/Time: 10-18-18 16:10 Company: [Signature]	
Relinquished by: [Signature]		Date/Time: 10-19-18 0904 Company: [Signature]	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 4.2°C [Signature]	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160830-1

SDG Number: Ash Pond

Login Number: 160830

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°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 Wansley

TestAmerica Job ID: 400-160830-1
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-160830-2

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

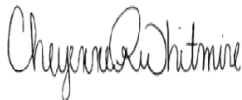
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

11/15/2018 5:42:45 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 Wansley

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Job ID: 400-160830-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-160830-2

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-396851: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WAMW-2 (400-160830-1) and WAMW-1 (400-160830-2). 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 160-396711: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WAMW-2 (400-160830-1) and WAMW-1 (400-160830-2). 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 Wansley

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160830-1	WAMW-2	Water	10/16/18 14:45	10/19/18 09:04
400-160830-2	WAMW-1	Water	10/18/18 10:20	10/19/18 09:04

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Client Sample Results

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Client Sample ID: WAMW-2

Lab Sample ID: 400-160830-1

Date Collected: 10/16/18 14:45

Matrix: Water

Date Received: 10/19/18 09:04

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.402		0.176	0.180	1.00	0.179	pCi/L	10/23/18 09:42	11/14/18 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/23/18 09:42	11/14/18 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0741	U	0.229	0.229	1.00	0.398	pCi/L	10/23/18 13:44	11/13/18 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					10/23/18 13:44	11/13/18 09:10	1
Y Carrier	80.0		40 - 110					10/23/18 13:44	11/13/18 09:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.476		0.289	0.291	5.00	0.398	pCi/L		11/15/18 17:02	1

Client Sample Results

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

TestAmerica Job ID: 400-160830-2
 SDG: Ash Pond

Client Sample ID: WAMW-1

Lab Sample ID: 400-160830-2

Date Collected: 10/18/18 10:20

Matrix: Water

Date Received: 10/19/18 09:04

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	U	0.136	0.137	1.00	0.211	pCi/L	10/23/18 09:42	11/14/18 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					10/23/18 09:42	11/14/18 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.177	U	0.260	0.261	1.00	0.436	pCi/L	10/23/18 13:44	11/13/18 09:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					10/23/18 13:44	11/13/18 09:10	1
Y Carrier	71.0		40 - 110					10/23/18 13:44	11/13/18 09:10	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.314	U	0.293	0.295	5.00	0.436	pCi/L		11/15/18 17:02	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

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 Wansley

TestAmerica Job ID: 400-160830-2
 SDG: Ash Pond

Client Sample ID: WAMW-2

Lab Sample ID: 400-160830-1

Date Collected: 10/16/18 14:45

Matrix: Water

Date Received: 10/19/18 09:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			396711	10/23/18 09:42	JLC	TAL SL
Total/NA	Analysis	9315		1	400865	11/14/18 05:57	CDR	TAL SL
Total/NA	Prep	PrecSep_0			396851	10/23/18 13:44	JLC	TAL SL
Total/NA	Analysis	9320		1	400704	11/13/18 09:10	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	401115	11/15/18 17:02	RTM	TAL SL

Client Sample ID: WAMW-1

Lab Sample ID: 400-160830-2

Date Collected: 10/18/18 10:20

Matrix: Water

Date Received: 10/19/18 09:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			396711	10/23/18 09:42	JLC	TAL SL
Total/NA	Analysis	9315		1	400865	11/14/18 05:57	CDR	TAL SL
Total/NA	Prep	PrecSep_0			396851	10/23/18 13:44	JLC	TAL SL
Total/NA	Analysis	9320		1	400704	11/13/18 09:10	CDR	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	401115	11/15/18 17:02	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 Wansley

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Rad

Prep Batch: 396711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	PrecSep-21	
400-160830-2	WAMW-1	Total/NA	Water	PrecSep-21	
MB 160-396711/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-396711/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-396711/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 396851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	PrecSep_0	
400-160830-2	WAMW-1	Total/NA	Water	PrecSep_0	
MB 160-396851/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-396851/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-396851/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-396711/23-A
Matrix: Water
Analysis Batch: 400866

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396711

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1444	U	0.127	0.127	1.00	0.185	pCi/L	10/23/18 09:42	11/14/18 05:58	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	102		40 - 110		10/23/18 09:42	11/14/18 05:58	1			

Lab Sample ID: LCS 160-396711/1-A
Matrix: Water
Analysis Batch: 400864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396711

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.4	10.41		1.26	1.00	0.198	pCi/L	92	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	Limits						
Ba Carrier	101		40 - 110		10/23/18 09:42	11/14/18 05:58	1		

Lab Sample ID: LCSD 160-396711/2-A
Matrix: Water
Analysis Batch: 400864

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396711

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
				Uncert. (2σ+/-)							
Radium-226	11.4	11.42		1.34	1.00	0.202	pCi/L	101	68 - 137	0.39	1
Carrier	LCSD LCSD		Limits		Prepared	Analyzed	Dil Fac				
Ba Carrier	%Yield	Qualifier	Limits								
Ba Carrier	101		40 - 110		10/23/18 13:44	11/13/18 09:10	1				

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-396851/23-A
Matrix: Water
Analysis Batch: 400704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396851

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.2303	U	0.244	0.245	1.00	0.399	pCi/L	10/23/18 13:44	11/13/18 09:10	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	102		40 - 110		10/23/18 13:44	11/13/18 09:10	1			
Y Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Y Carrier	%Yield	Qualifier	Limits							
Y Carrier	77.4		40 - 110		10/23/18 13:44	11/13/18 09:10	1			

QC Sample Results

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

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

Lab Sample ID: LCS 160-396851/1-A
Matrix: Water
Analysis Batch: 400714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396851

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	9.22	9.156		1.09	1.00	0.496	pCi/L	99	56 - 140
Carrier		LCS %Yield	LCS Qualifier	Limits					
Ba Carrier		101		40 - 110					
Y Carrier		77.4		40 - 110					

Lab Sample ID: LCSD 160-396851/2-A
Matrix: Water
Analysis Batch: 400714

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 396851

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	9.22	8.826		1.05	1.00	0.418	pCi/L	96	56 - 140	0.15	1
Carrier		LCSD %Yield	LCSD Qualifier	Limits							
Ba Carrier		101		40 - 110							
Y Carrier		80.4		40 - 110							


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

Lab Sample ID: 400-160630-A-17 DU
Matrix: Water
Analysis Batch: 401115

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	0.612		0.3910	U	0.298	5.00	0.450	pCi/L	0.36	

Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: (770) 594-5998 Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com Carrier Tracking No(s):		COC No: Page: Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Analysis Requested  400-160830 COC	
Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:		Special Instructions/Note: APP III	
Sample Identification WAMW-2 WAMW-2 WAMW-1		Total Number of containers 3 3	
Sample Date: 10-17 Sample Time: 07:17-18 Sample Date: 10-16-18 Sample Time: 1445 Sample Date: 10-18-18 Sample Time: 1020		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air) Water Water Water Water Water Water Water Water Water	
Sample Type (C=comp, G=grab) G G		Preservation Code: Water Water Water Water Water Water Water Water Water	
Field Filtered Sample (Yes or No) Yes Yes		Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) (SW-846 9315/9320) Radium 226 & 228 (EPA 300.0 & SM 2540C) CI, F, SO4 & TDS Metals App. III (EPA 6020/470)	
Perform MS/MSD (Yes or No) Yes Yes		D N	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Date: 10-18-18 1750 Date Time: 16:10 Date Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 4.2°C 107	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Special Instructions/QC Requirements:			



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160830-2

SDG Number: Ash Pond

Login Number: 160830

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°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 Wansley

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA180023	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-19
ANAB	DoD ELAP		L2305	04-06-19
Arizona	State Program	9	AZ0813	12-08-18 *
California	State Program	9	2886	06-30-19
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-19
Illinois	NELAP	5	200023	11-30-18 *
Iowa	State Program	7	373	12-01-18 *
Kansas	NELAP	7	E-10236	10-31-18 *
Kentucky (DW)	State Program	4	90125	12-31-18
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA180017	12-31-18 *
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-18 *
Missouri	State Program	7	780	06-30-19

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

TestAmerica Pensacola

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-160830-2
SDG: Ash Pond

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19
New York	NELAP	2	11616	03-31-19
North Dakota	State Program	8	R207	06-30-19
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-19
Pennsylvania	NELAP	3	68-00540	02-28-19
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-12	07-31-19
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542018-10	07-31-19
Virginia	NELAP	3	460230	06-14-19
Washington	State Program	10	C592	08-30-19
West Virginia DEP	State Program	3	381	08-31-19

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: 400-160830-3

TestAmerica SDG: Ash Pond Detected Metals

Client Project/Site: CCR - Plant Wansley

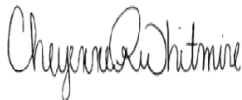
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Joju Abraham



Authorized for release by:

11/1/2018 5:15:51 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

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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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Detection Summary

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

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Client Sample ID: WAMW-2

Lab Sample ID: 400-160830-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00066	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0069		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.023		0.0050	0.0011	mg/L	5		6020	Total Recoverable

Client Sample ID: WAMW-1

Lab Sample ID: 400-160830-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00052	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.0050		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Lithium	0.026		0.0050	0.0011	mg/L	5		6020	Total Recoverable
Molybdenum	0.0028	J	0.015	0.0020	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PEN
7470A	Preparation, Mercury	SW846	TAL PEN

Protocol References:

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 Wansley

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-160830-1	WAMW-2	Water	10/16/18 14:45	10/19/18 09:04
400-160830-2	WAMW-1	Water	10/18/18 10:20	10/19/18 09:04

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Client Sample Results

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

TestAmerica Job ID: 400-160830-3
 SDG: Ash Pond Detected Metals

Client Sample ID: WAMW-2
Date Collected: 10/16/18 14:45
Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00066	J	0.0013	0.00046	mg/L		10/23/18 12:12	10/23/18 20:58	5
Barium	0.0069		0.0025	0.00049	mg/L		10/23/18 12:12	10/23/18 20:58	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 20:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 20:58	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/23/18 12:12	10/23/18 20:58	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/23/18 12:12	10/23/18 20:58	5
Lithium	0.023		0.0050	0.0011	mg/L		10/23/18 12:12	10/23/18 20:58	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		10/23/18 12:12	10/23/18 20:58	5
Selenium	<0.00071		0.0013	0.00071	mg/L		10/23/18 12:12	10/23/18 20:58	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/23/18 12:12	10/23/18 20:58	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		10/31/18 09:58	11/01/18 14:10	1

Client Sample Results

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

TestAmerica Job ID: 400-160830-3
 SDG: Ash Pond Detected Metals

Client Sample ID: WAMW-1
Date Collected: 10/18/18 10:20
Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00052	J	0.0013	0.00046	mg/L		10/23/18 12:12	10/23/18 21:03	5
Barium	0.0050		0.0025	0.00049	mg/L		10/23/18 12:12	10/23/18 21:03	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 21:03	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 21:03	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/23/18 12:12	10/23/18 21:03	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/23/18 12:12	10/23/18 21:03	5
Lithium	0.026		0.0050	0.0011	mg/L		10/23/18 12:12	10/23/18 21:03	5
Molybdenum	0.0028	J	0.015	0.0020	mg/L		10/23/18 12:12	10/23/18 21:03	5
Selenium	<0.00071		0.0013	0.00071	mg/L		10/23/18 12:12	10/23/18 21:03	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/23/18 12:12	10/23/18 21:03	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		10/31/18 09:58	11/01/18 14:20	1

Definitions/Glossary

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

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

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.

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 Wansley

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Client Sample ID: WAMW-2

Date Collected: 10/16/18 14:45

Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			416586	10/23/18 12:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	416741	10/23/18 20:58	DRE	TAL PEN
Total/NA	Prep	7470A			417773	10/31/18 09:58	JAP	TAL PEN
Total/NA	Analysis	7470A		1	418016	11/01/18 14:10	JAP	TAL PEN

Client Sample ID: WAMW-1

Date Collected: 10/18/18 10:20

Date Received: 10/19/18 09:04

Lab Sample ID: 400-160830-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			416586	10/23/18 12:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	416741	10/23/18 21:03	DRE	TAL PEN
Total/NA	Prep	7470A			417773	10/31/18 09:58	JAP	TAL PEN
Total/NA	Analysis	7470A		1	418016	11/01/18 14:20	JAP	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 Wansley

TestAmerica Job ID: 400-160830-3
 SDG: Ash Pond Detected Metals

Metals

Prep Batch: 416586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total Recoverable	Water	3005A	
400-160830-2	WAMW-1	Total Recoverable	Water	3005A	
MB 400-416586/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-416586/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-160832-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-160832-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 416741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total Recoverable	Water	6020	416586
400-160830-2	WAMW-1	Total Recoverable	Water	6020	416586
MB 400-416586/1-A ^5	Method Blank	Total Recoverable	Water	6020	416586
LCS 400-416586/2-A	Lab Control Sample	Total Recoverable	Water	6020	416586
400-160832-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	416586
400-160832-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	416586

Prep Batch: 417773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	7470A	
400-160830-2	WAMW-1	Total/NA	Water	7470A	
MB 400-417773/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-417773/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-161164-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	
400-161164-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 418016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-160830-1	WAMW-2	Total/NA	Water	7470A	417773
400-160830-2	WAMW-1	Total/NA	Water	7470A	417773
MB 400-417773/14-A	Method Blank	Total/NA	Water	7470A	417773
LCS 400-417773/15-A	Lab Control Sample	Total/NA	Water	7470A	417773
400-161164-E-1-C MS	Matrix Spike	Total/NA	Water	7470A	417773
400-161164-E-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	417773

QC Sample Results

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

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-416586/1-A ^5
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		10/23/18 12:12	10/23/18 18:39	5
Barium	<0.00049		0.0025	0.00049	mg/L		10/23/18 12:12	10/23/18 18:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 18:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		10/23/18 12:12	10/23/18 18:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		10/23/18 12:12	10/23/18 18:39	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		10/23/18 12:12	10/23/18 18:39	5
Lithium	<0.0011		0.0050	0.0011	mg/L		10/23/18 12:12	10/23/18 18:39	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		10/23/18 12:12	10/23/18 18:39	5
Selenium	<0.00071		0.0013	0.00071	mg/L		10/23/18 12:12	10/23/18 18:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		10/23/18 12:12	10/23/18 18:39	5

Lab Sample ID: LCS 400-416586/2-A
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.0500	0.0506		mg/L		101	80 - 120
Barium	0.0500	0.0484		mg/L		97	80 - 120
Beryllium	0.0500	0.0499		mg/L		100	80 - 120
Cadmium	0.0500	0.0541		mg/L		108	80 - 120
Chromium	0.0500	0.0501		mg/L		100	80 - 120
Cobalt	0.0500	0.0509		mg/L		102	80 - 120
Lithium	0.0500	0.0530		mg/L		106	80 - 120
Molybdenum	0.0500	0.0490		mg/L		98	80 - 120
Selenium	0.0500	0.0486		mg/L		97	80 - 120
Thallium	0.0100	0.0103		mg/L		103	80 - 120

Lab Sample ID: 400-160832-B-1-B MS ^5
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	<0.00046		0.0500	0.0505		mg/L		101	75 - 125
Barium	0.018		0.0500	0.0692		mg/L		103	75 - 125
Beryllium	<0.00034		0.0500	0.0502		mg/L		100	75 - 125
Cadmium	<0.00034		0.0500	0.0556		mg/L		111	75 - 125
Chromium	0.0035		0.0500	0.0581		mg/L		109	75 - 125
Cobalt	<0.00040		0.0500	0.0517		mg/L		103	75 - 125
Lithium	0.0017	J	0.0500	0.0552		mg/L		107	75 - 125
Molybdenum	<0.0020		0.0500	0.0470		mg/L		94	75 - 125
Selenium	<0.00071		0.0500	0.0495		mg/L		99	75 - 125
Thallium	<0.000085		0.0100	0.0105		mg/L		105	75 - 125

Lab Sample ID: 400-160832-B-1-C MSD ^5
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00046		0.0500	0.0505		mg/L		101	75 - 125	0	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

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

Lab Sample ID: 400-160832-B-1-C MSD ^5
Matrix: Water
Analysis Batch: 416741

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 416586

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Barium	0.018		0.0500	0.0661		mg/L		97	75 - 125	5	20
Beryllium	<0.00034		0.0500	0.0507		mg/L		101	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0549		mg/L		110	75 - 125	1	20
Chromium	0.0035		0.0500	0.0594		mg/L		112	75 - 125	2	20
Cobalt	<0.00040		0.0500	0.0516		mg/L		103	75 - 125	0	20
Lithium	0.0017	J	0.0500	0.0548		mg/L		106	75 - 125	1	20
Molybdenum	<0.0020		0.0500	0.0478		mg/L		96	75 - 125	2	20
Selenium	<0.00071		0.0500	0.0487		mg/L		97	75 - 125	2	20
Thallium	<0.000085		0.0100	0.0106		mg/L		106	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-417773/14-A
Matrix: Water
Analysis Batch: 418016

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417773

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000070		0.00020	0.000070	mg/L		10/31/18 09:42	11/01/18 13:33	1

Lab Sample ID: LCS 400-417773/15-A
Matrix: Water
Analysis Batch: 418016

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits

Lab Sample ID: 400-161164-E-1-C MS
Matrix: Water
Analysis Batch: 418016

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 417773

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				Limits	
Mercury	<0.000070	F1	0.00201	0.00151	F1	mg/L		75	80 - 120	

Lab Sample ID: 400-161164-E-1-D MSD
Matrix: Water
Analysis Batch: 418016

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 417773

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Mercury	<0.000070	F1	0.00201	0.00141	F1	mg/L		70	80 - 120	7	20

Chain of Custody Record

Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: (770) 594-5998 Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com Carrier Tracking No(s):		Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40007709 SSOW#:		Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia	
Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		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: APP III	
Total Number of containers		Total Number of containers		Total Number of containers	
Detected App IV Metals (As, Ba, Be, Cd, Cr, Co, Li, Hg, Se, Tl, Mo) (SW-846 9315/9320)		Detected App IV Metals (EPA 300.6 & SM 2540C) CI, F, SO4 & TDS Metals App. III (EPA 6020/470)		Detected App IV Metals (EPA 300.6 & SM 2540C) CI, F, SO4 & TDS Metals App. III (EPA 6020/470)	
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)	
Sample Identification WAMW-2 WAMW-2 WAMW-1		Sample Type (C=comp, G=grab) G G G		Sample Time 10-17 OF 10-17-18 1445 1020	
Sample Date 10-17 10-16-18 10-18-18		Preservation Code: Water Water Water Water Water Water Water Water Water Water		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air) 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 checked="" 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 checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by:		Date/Time: 10-18-18 1750		Date/Time: 10-18-18 1750	
Relinquished by:		Date/Time: 10-18-18 16:10		Date/Time: 10/19/18 0904	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 4.2°C 107	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-160830-3
SDG Number: Ash Pond Detected Metals

Login Number: 160830

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°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 Wansley

TestAmerica Job ID: 400-160830-3
SDG: Ash Pond Detected Metals

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-19
ANAB	ISO/IEC 17025		L2471	02-22-20
Arizona	State Program	9	AZ0710	01-12-19
Arkansas DEQ	State Program	6	88-0689	09-01-19
California	State Program	9	2510	06-30-19
Florida	NELAP	4	E81010	06-30-19
Georgia	State Program	4	E81010 (FL)	06-30-19
Illinois	NELAP	5	200041	10-09-19
Iowa	State Program	7	367	08-01-20
Kansas	NELAP	7	E-10253	10-31-18 *
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-18
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA170005	12-31-18
Maryland	State Program	3	233	09-30-19
Massachusetts	State Program	1	M-FL094	06-30-19
Michigan	State Program	5	9912	06-30-19
New Jersey	NELAP	2	FL006	06-30-19
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-19
Rhode Island	State Program	1	LAO00307	12-30-18
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-16	09-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-18-00148	05-17-21
Virginia	NELAP	3	460166	06-14-19
Washington	State Program	10	C915	05-15-19
West Virginia DEP	State Program	3	136	06-30-19

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

Product Name: Low-Flow System

Date: 2018-10-18 10:21:42

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peri pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 130 ft

Pump placement from TOC 119 ft

Well Information:

Well ID WAMW-1
Well diameter 2 in
Well Total Depth 124.14 ft
Screen Length 10 ft
Depth to Water 22.95 ft

Pumping Information:

Final Pumping Rate 110 mL/min
Total System Volume 0.670245 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.1 in
Total Volume Pumped 3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Stabilization									
Last 5	10:00:14	300.07	16.46	7.36	174.49	3.29	23.00	0.14	-0.42
Last 5	10:05:14	600.03	16.58	7.47	173.76	3.11	23.00	0.13	-23.00
Last 5	10:10:14	900.03	16.74	7.53	173.13	2.56	23.00	0.11	-32.57
Last 5	10:15:14	1200.02	16.81	7.58	172.55	4.01	23.00	0.10	-35.44
Last 5	10:20:14	1500.01	16.84	7.61	172.34	3.61	23.00	0.10	-37.37
Variance 0			0.16	0.07	-0.62			-0.01	-9.57
Variance 1			0.07	0.05	-0.58			-0.01	-2.88
Variance 2			0.03	0.02	-0.21			-0.01	-1.92

Notes

Began purge at 1254 on 10-17-18.
Sampled on 10-18-18 @ 1020.

Grab Samples

Product Name: Low-Flow System

Date: 2018-10-16 14:47:10

Project Information:

Operator Name O. Fuquea
Company Name ACC
Project Name Plant Wansley
Site Name Plant Wansley - Ash Pond
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 573204
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peri pump
Tubing Type poly
Tubing Diameter .17 in
Tubing Length 90 ft

Pump placement from TOC 81.14 ft

Well Information:

Well ID WAMW-2
Well diameter 2 in
Well Total Depth 86.14 ft
Screen Length 10 ft
Depth to Water 13.85 ft

Pumping Information:

Final Pumping Rate 160 mL/min
Total System Volume 0.491708 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 5 in
Total Volume Pumped 13.6 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			+/- 100	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 100
Last 5	14:25:02	3301.01	22.52	7.21	168.38	15.40	14.30	0.21	-105.62
Last 5	14:30:04	3603.01	23.66	7.16	174.01	8.96	14.30	0.12	-110.99
Last 5	14:35:06	3905.01	23.93	7.15	174.32	9.03	14.30	0.12	-113.13
Last 5	14:40:06	4205.01	23.92	7.16	175.06	5.48	14.30	0.10	-114.65
Last 5	14:45:06	4505.00	23.82	7.17	175.12	4.68	14.30	0.10	-115.90
Variance 0			0.27	-0.01	0.31			-0.01	-2.14
Variance 1			-0.01	0.01	0.74			-0.01	-1.52
Variance 2			-0.09	0.01	0.06			-0.00	-1.25

Notes

Sampled at 1445 on 10-16-18

Grab Samples

APPENDIX B

Statistical Analyses

100% ND

Date: 12/14/2018 1:58 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Arsenic (mg/L)

WGWC-19

Beryllium (mg/L)

WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19

Boron (mg/L)

WGWC-14A, WGWC-15, WGWC-17

Cadmium (mg/L)

WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Chromium (mg/L)

WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Cobalt (mg/L)

WGWC-15

Fluoride (mg/L)

WGWC-14A

Molybdenum (mg/L)

WGWC-16, WGWC-8

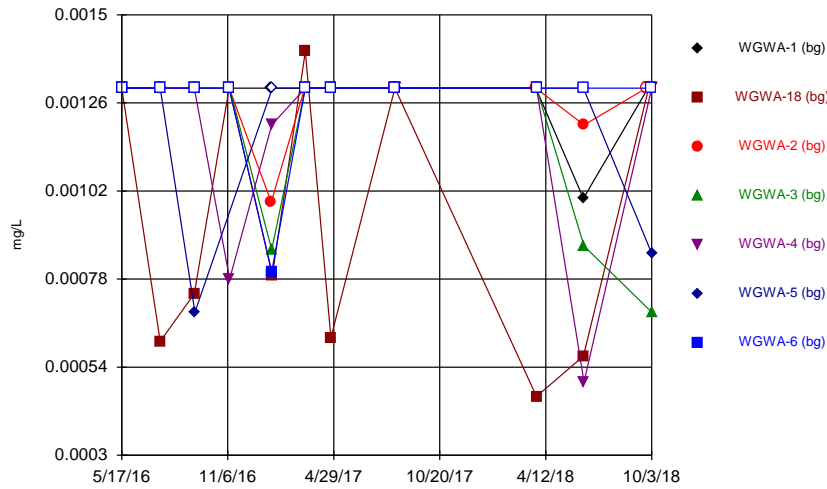
Selenium (mg/L)

WGWC-13, WGWC-17

Thallium (mg/L)

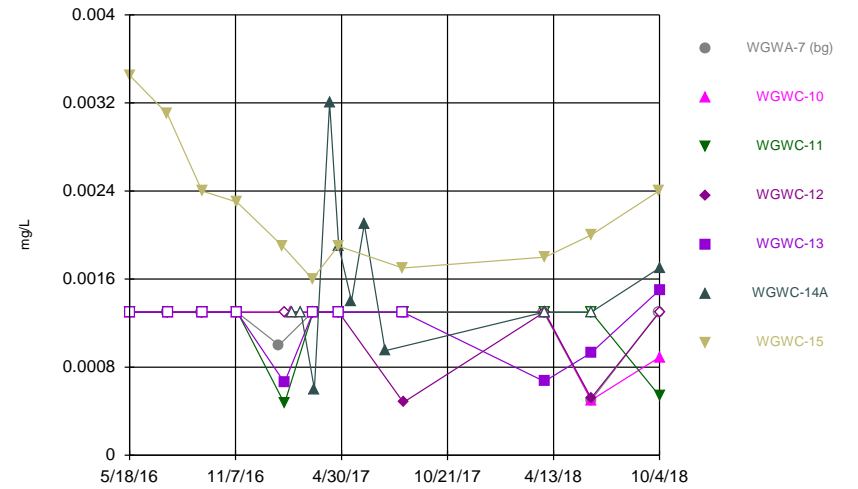
WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Arsenic



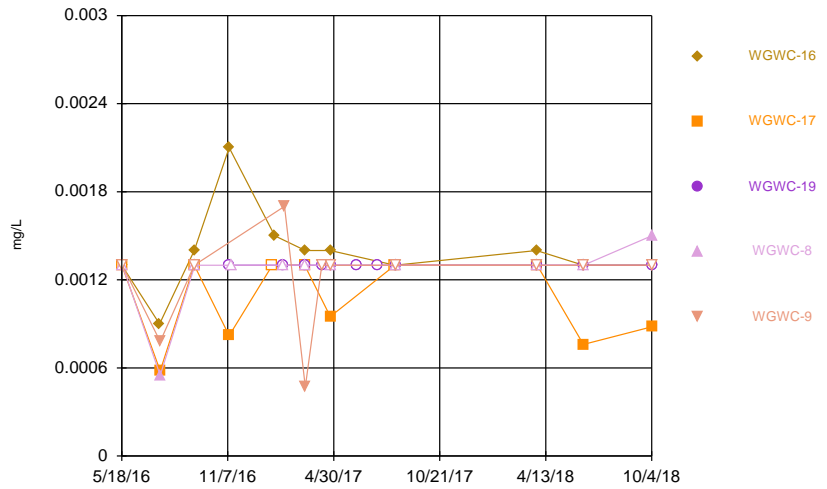
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Arsenic



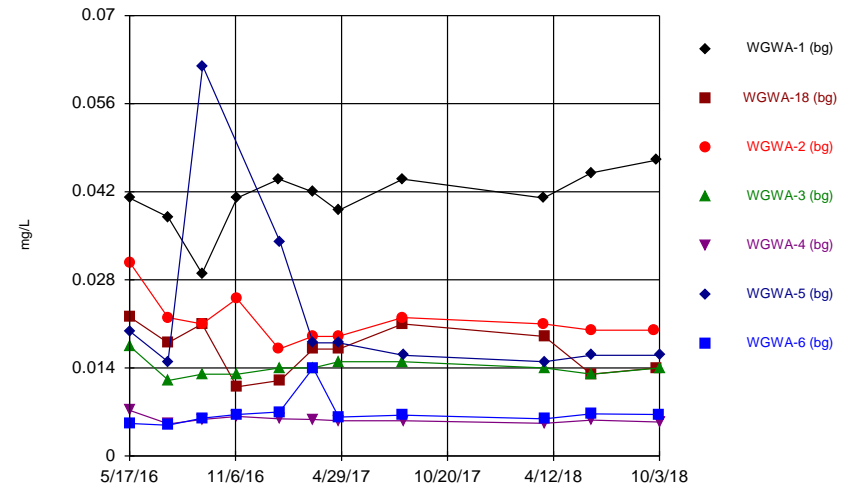
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Arsenic



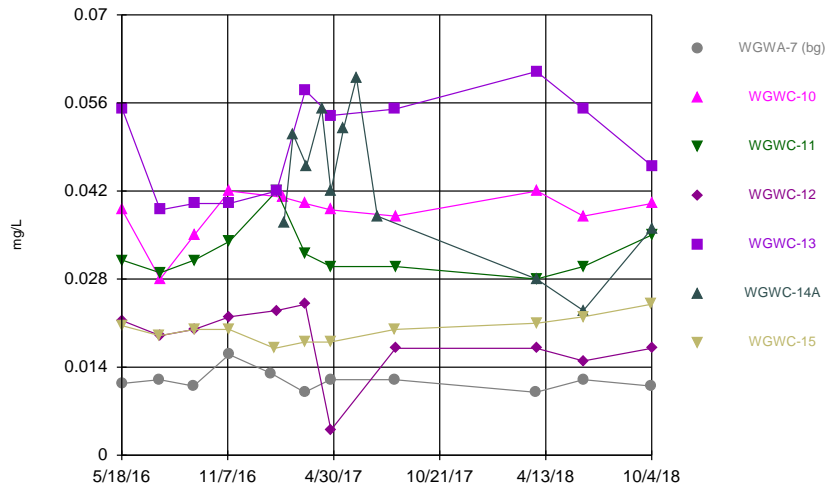
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Barium



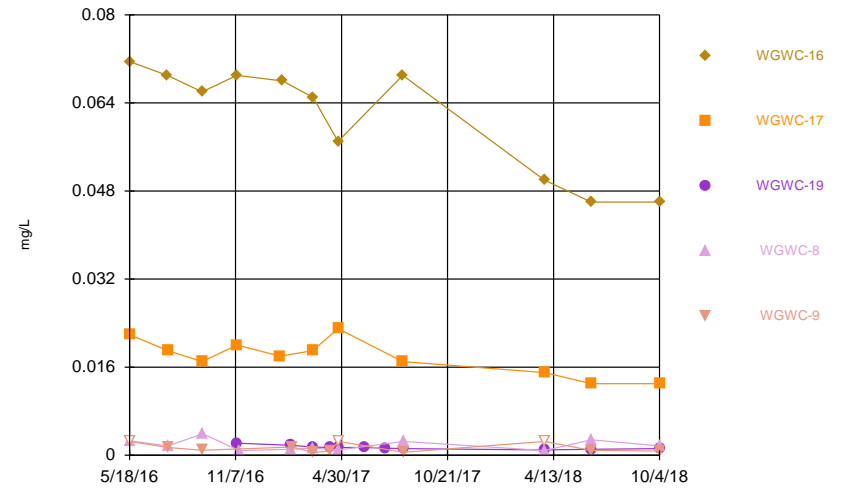
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Barium



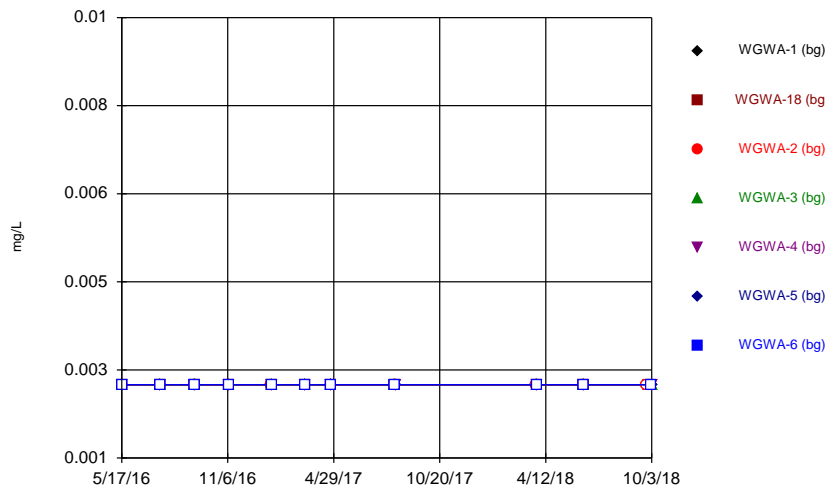
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Barium



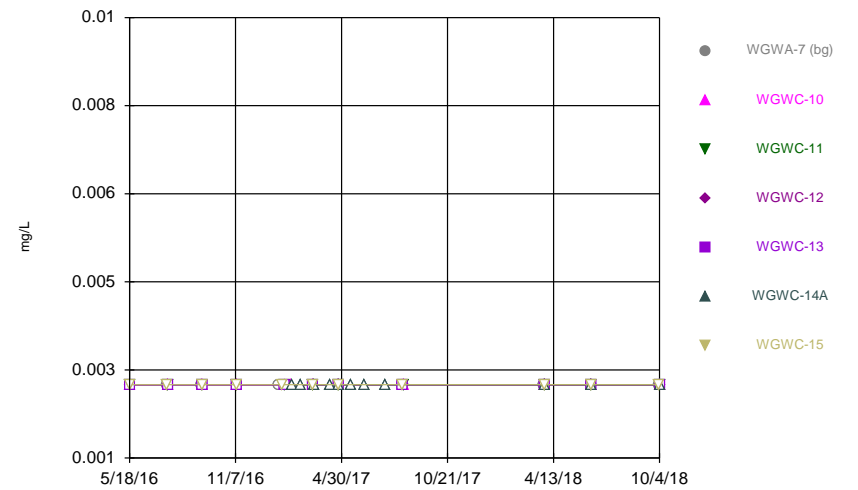
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Beryllium



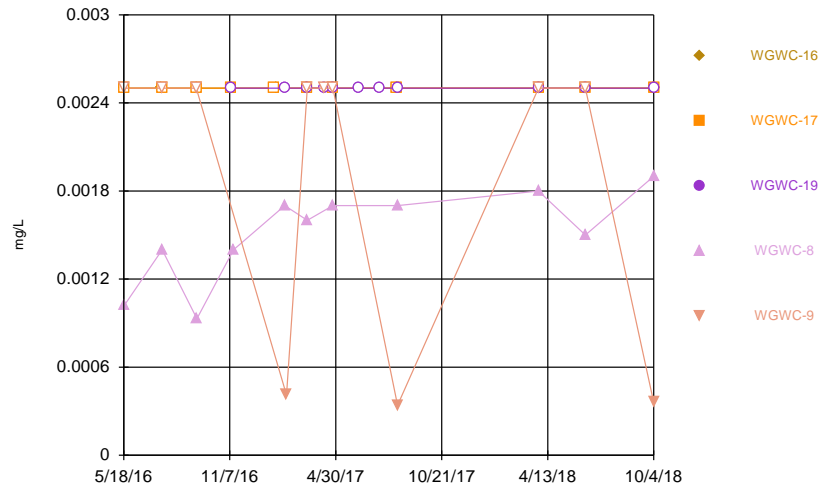
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Beryllium



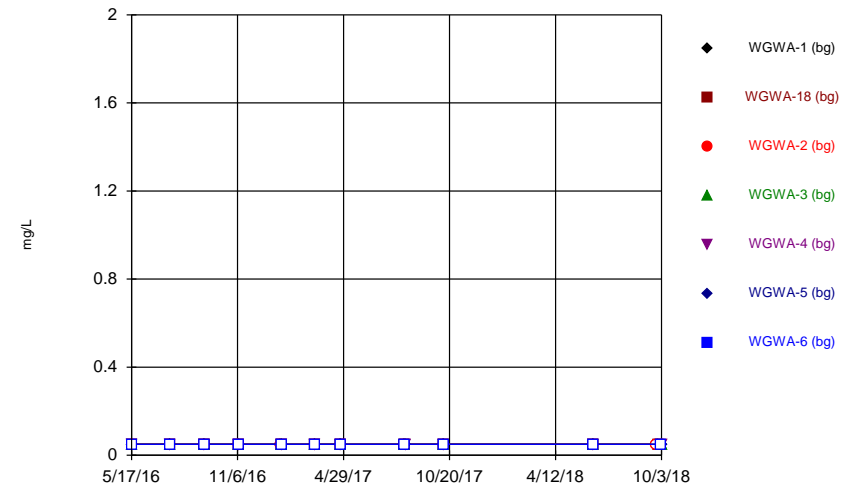
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 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Beryllium



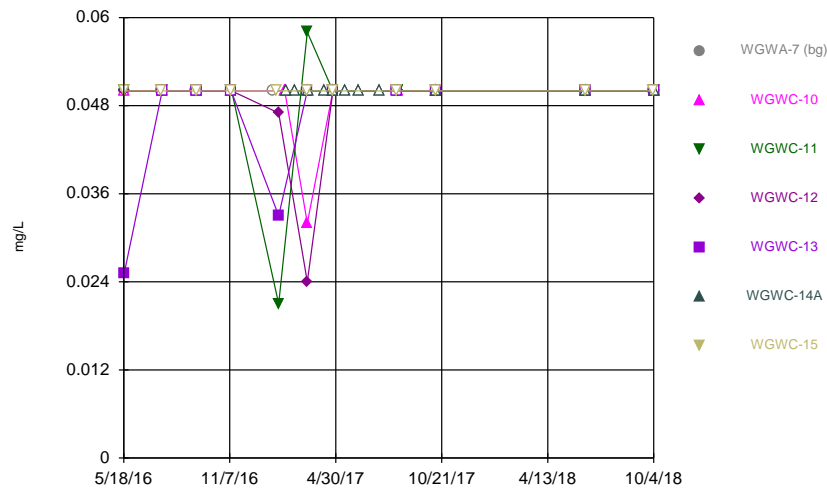
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Boron



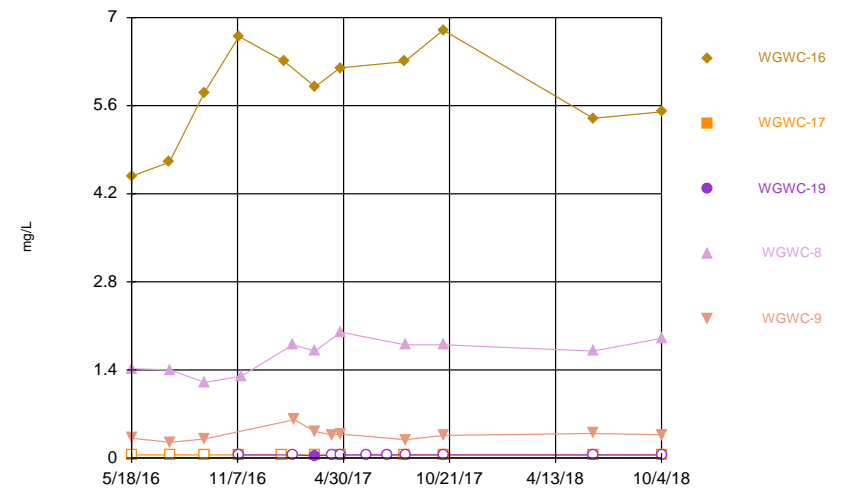
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Boron



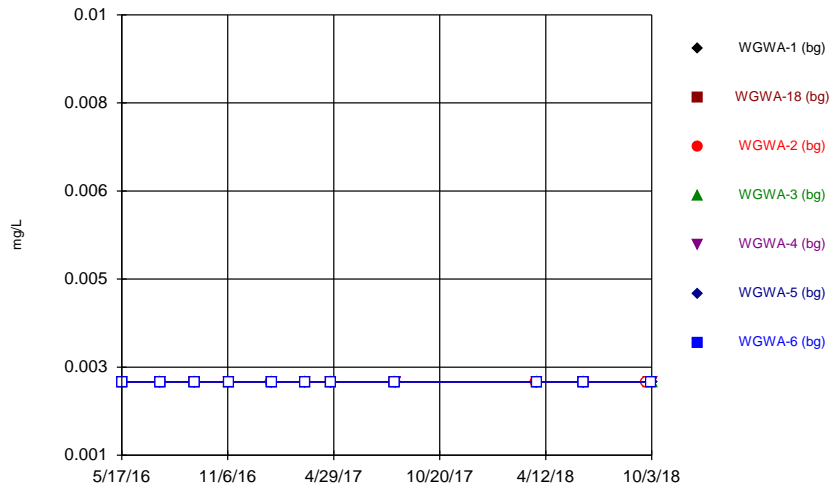
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Boron



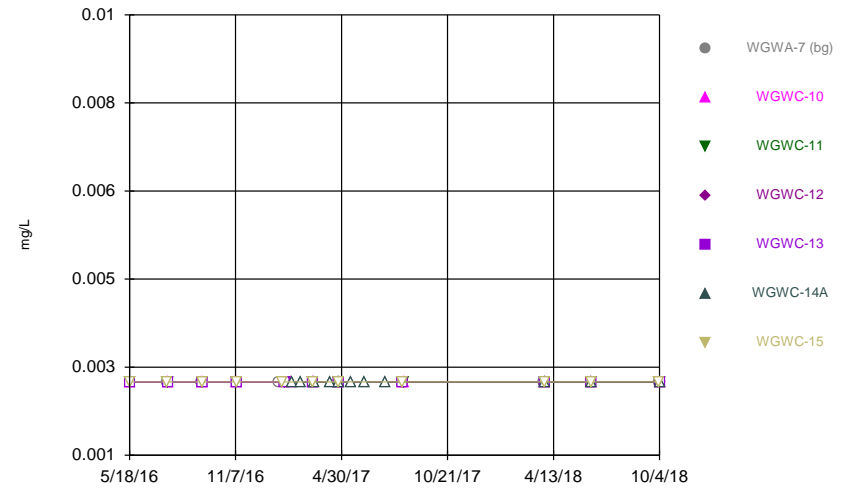
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cadmium



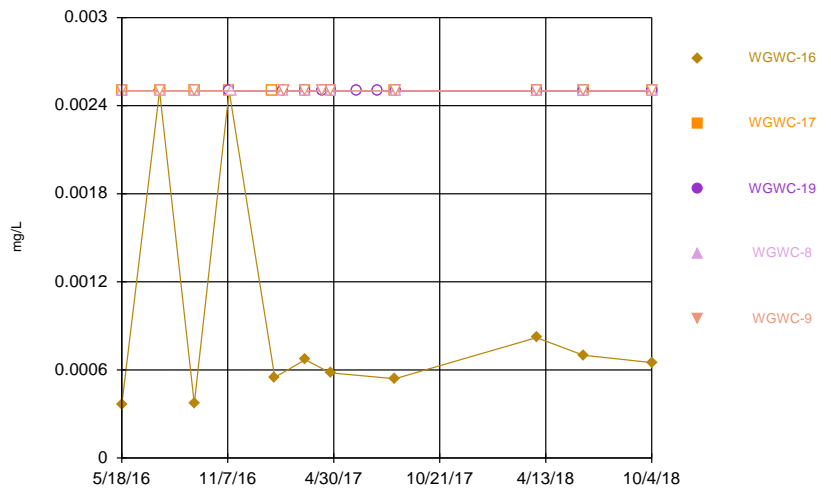
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cadmium



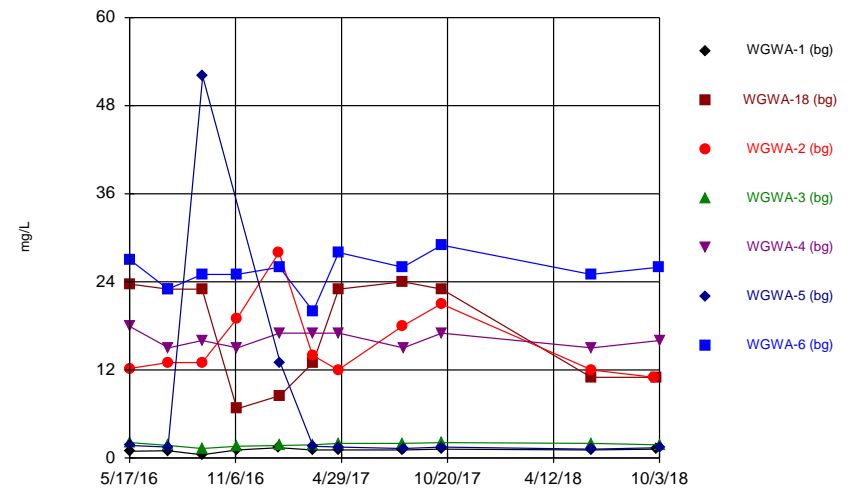
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cadmium



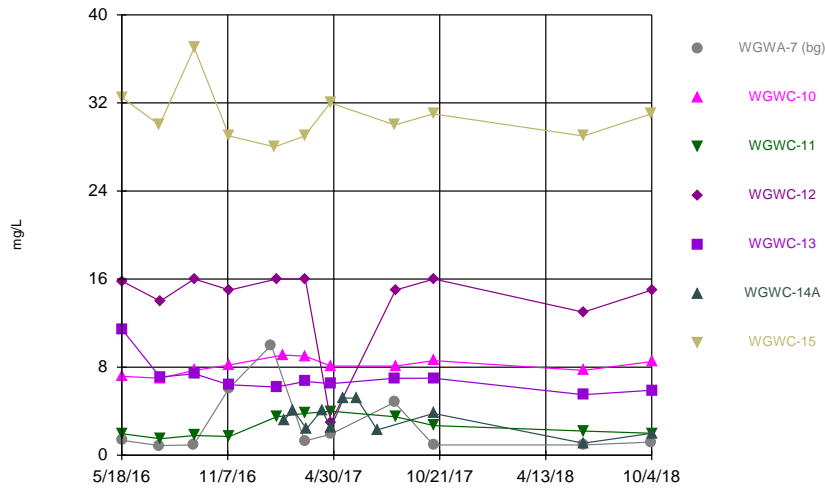
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Calcium



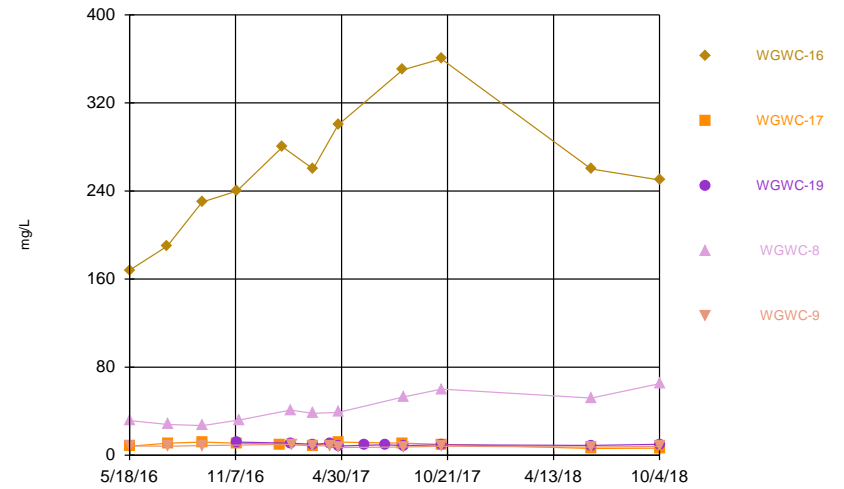
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Calcium



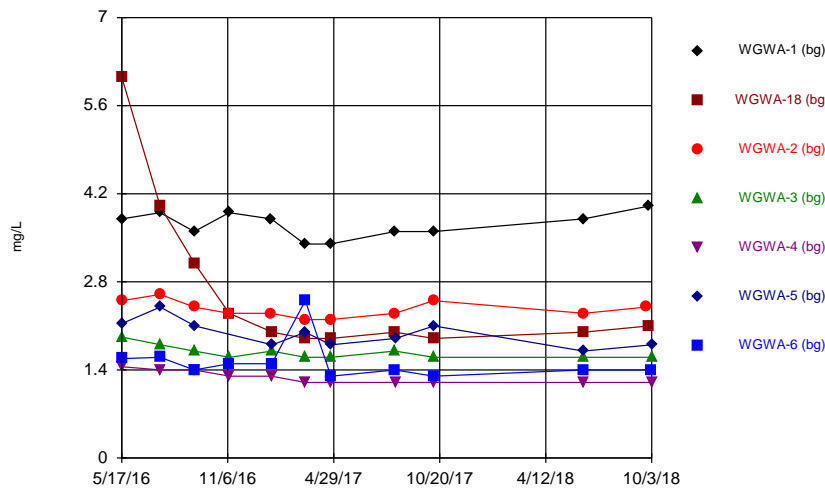
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Calcium



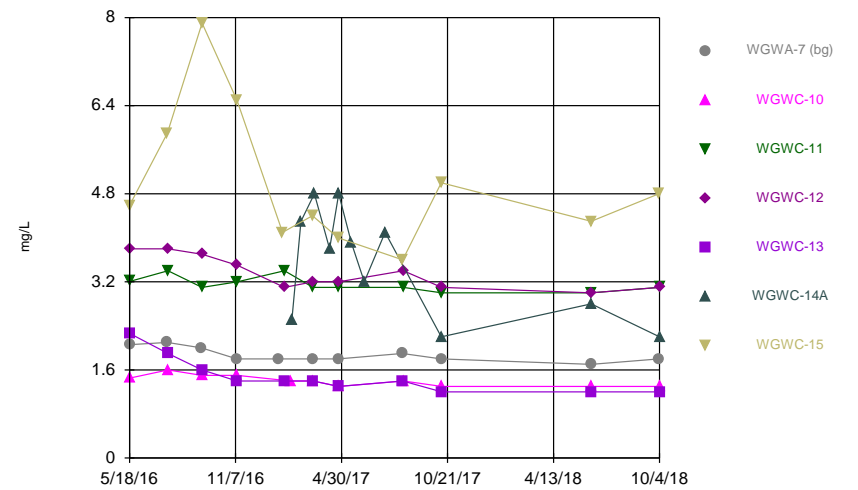
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chloride



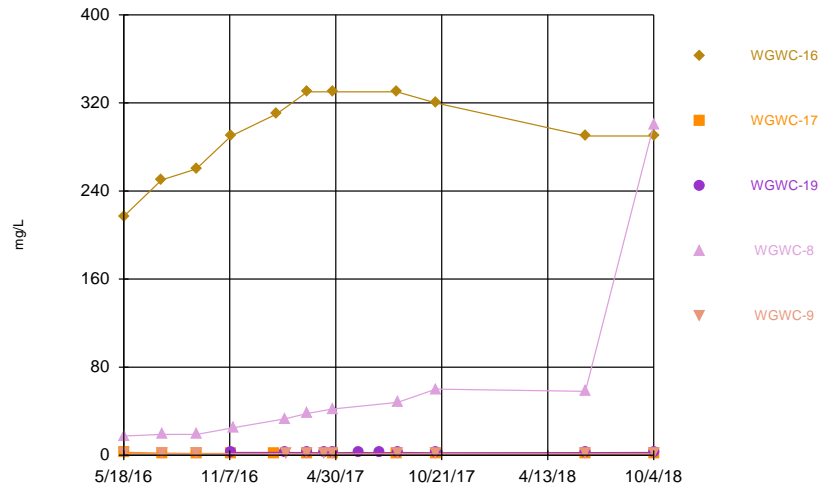
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chloride



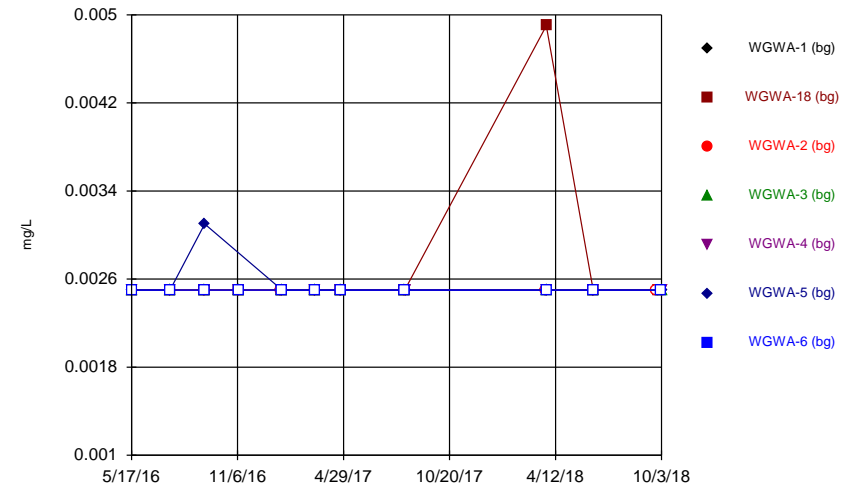
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chloride



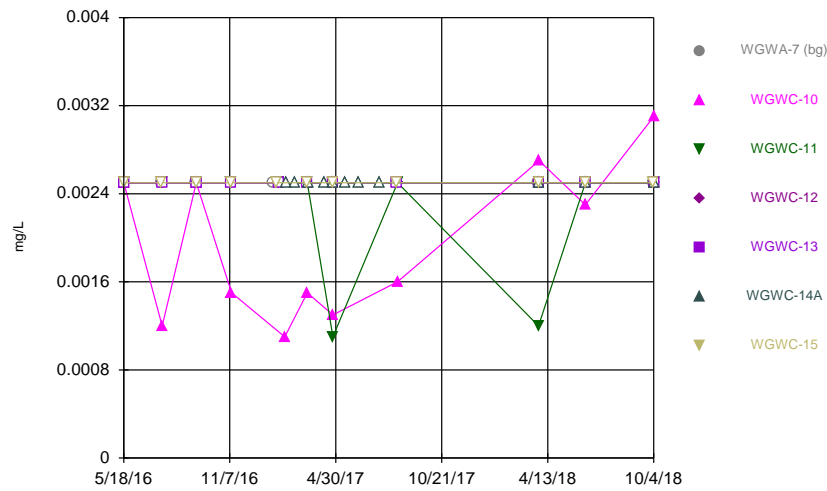
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chromium



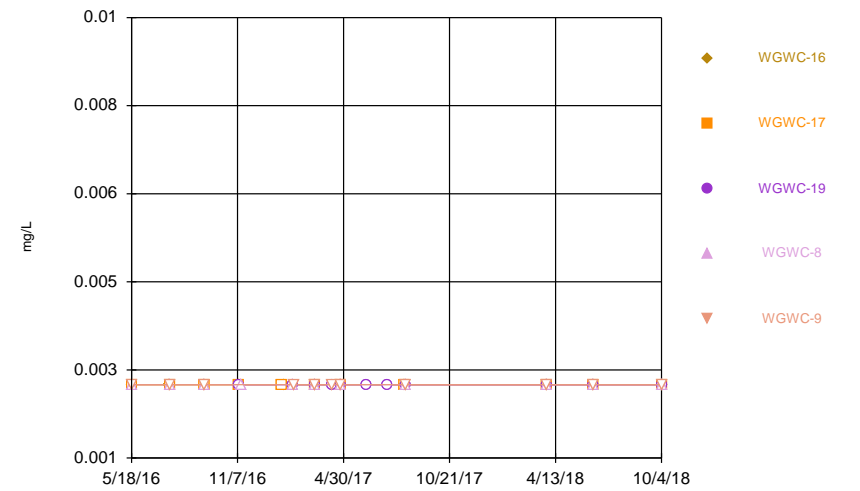
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chromium



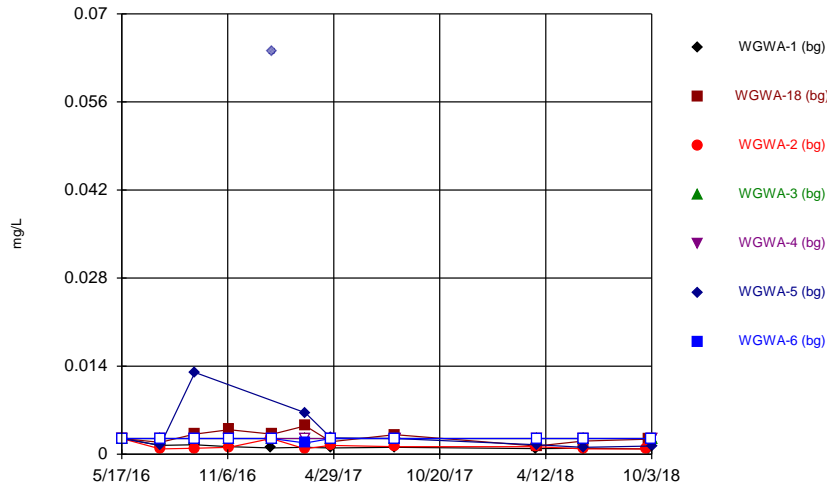
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Chromium



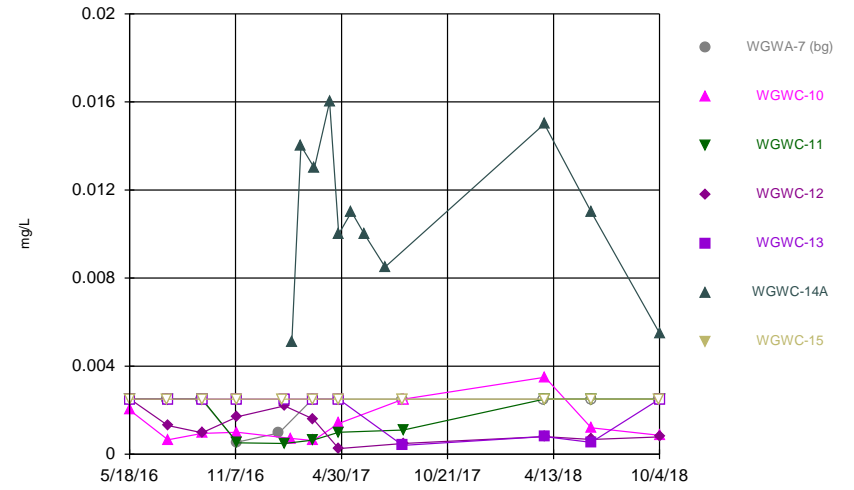
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cobalt



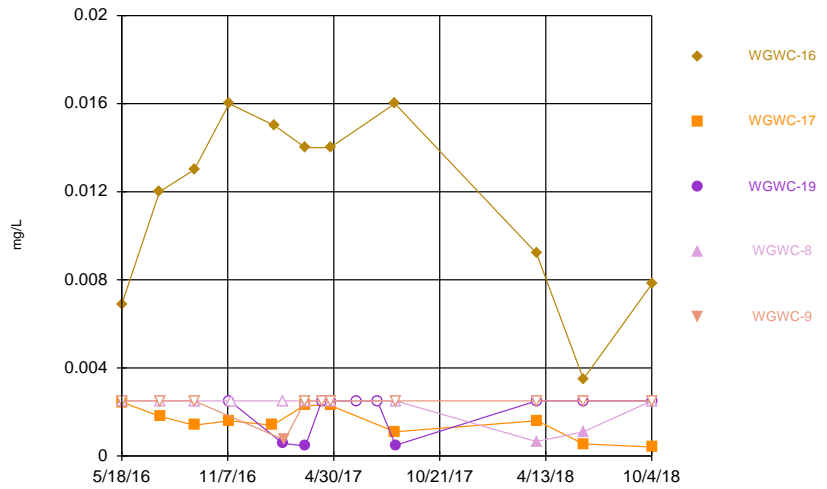
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cobalt



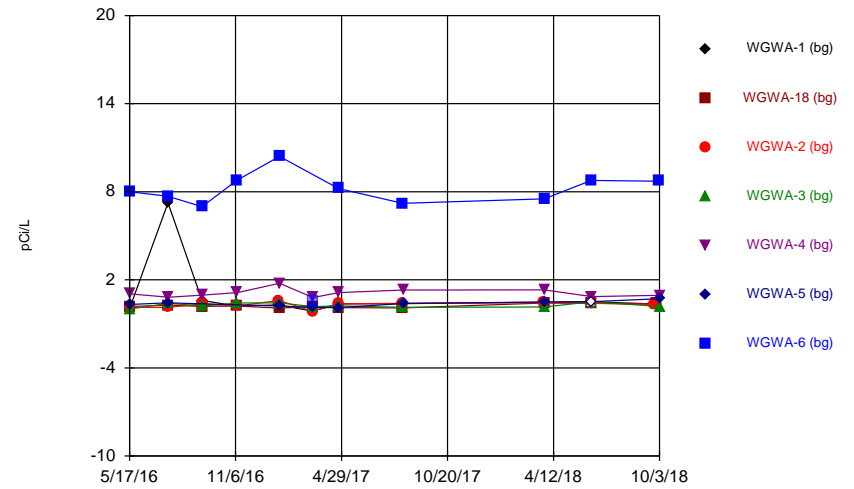
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Cobalt



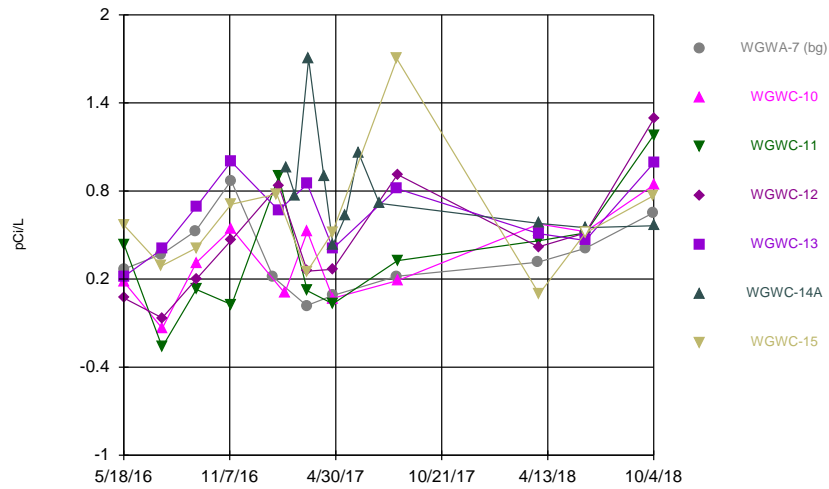
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Combined Radium 226 + 228



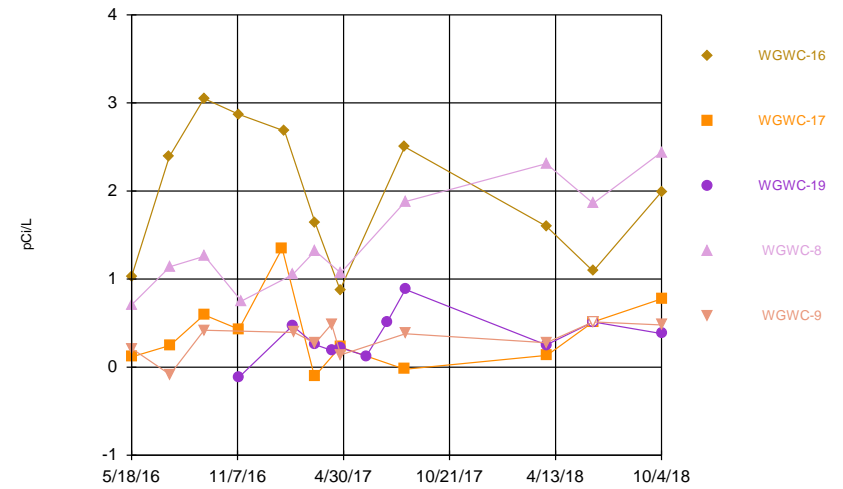
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Combined Radium 226 + 228



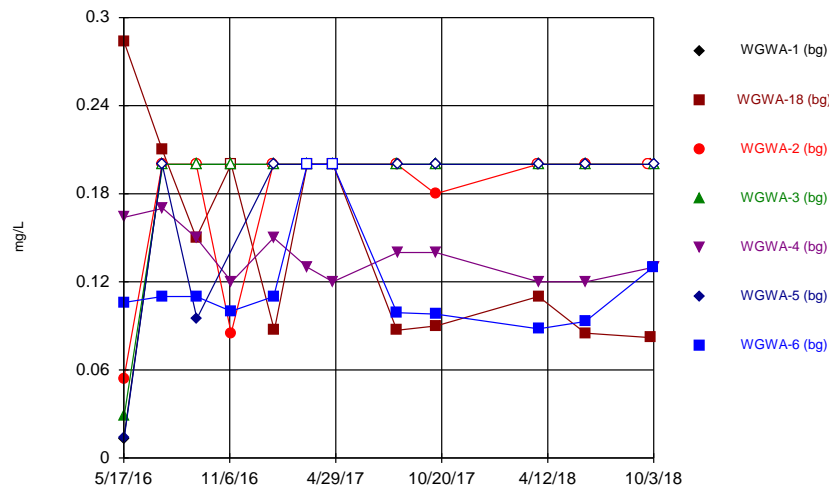
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Combined Radium 226 + 228



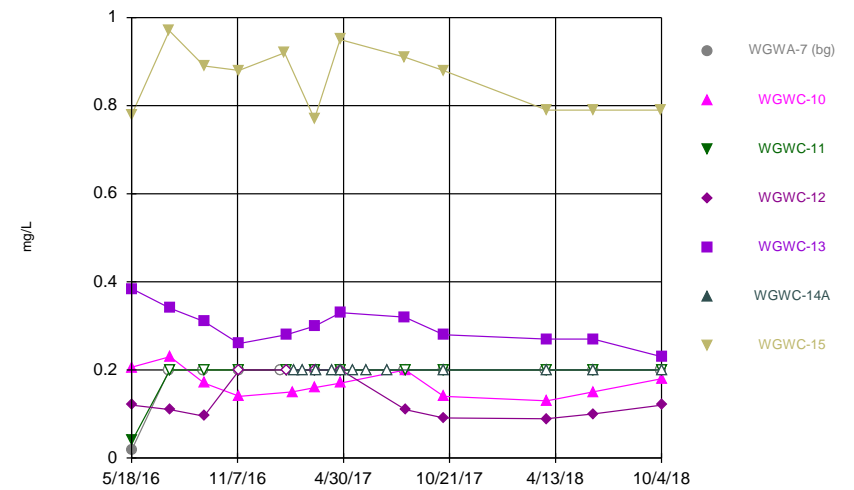
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Fluoride



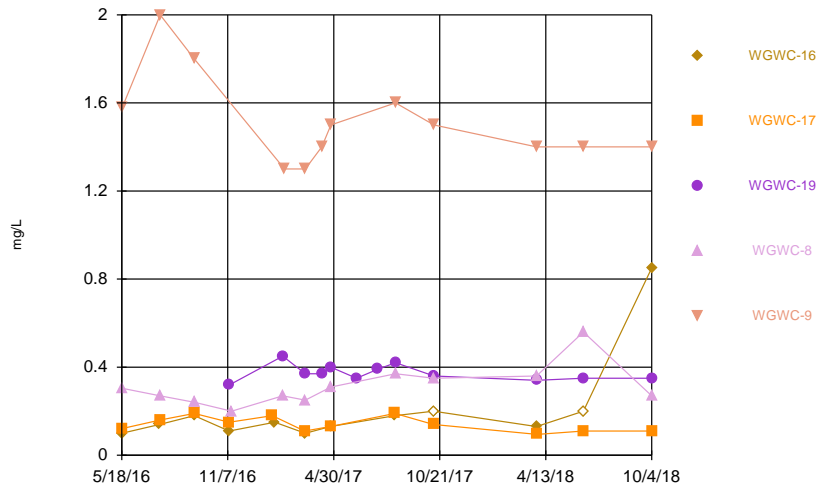
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Fluoride



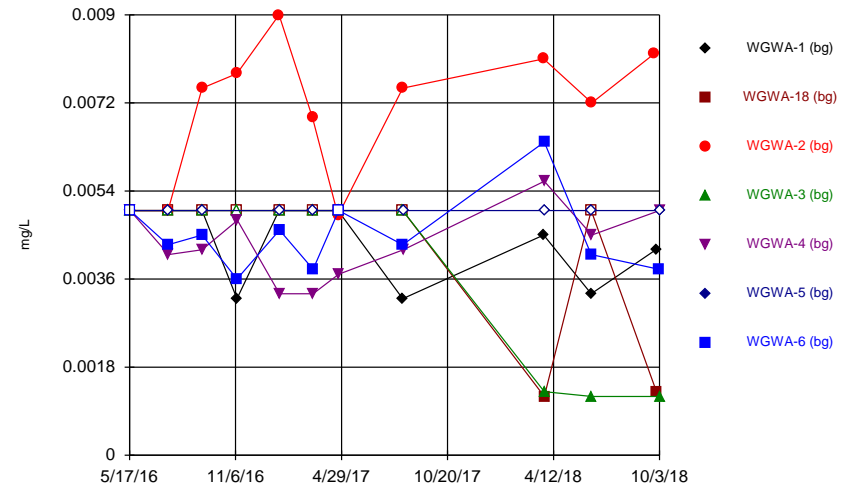
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Fluoride



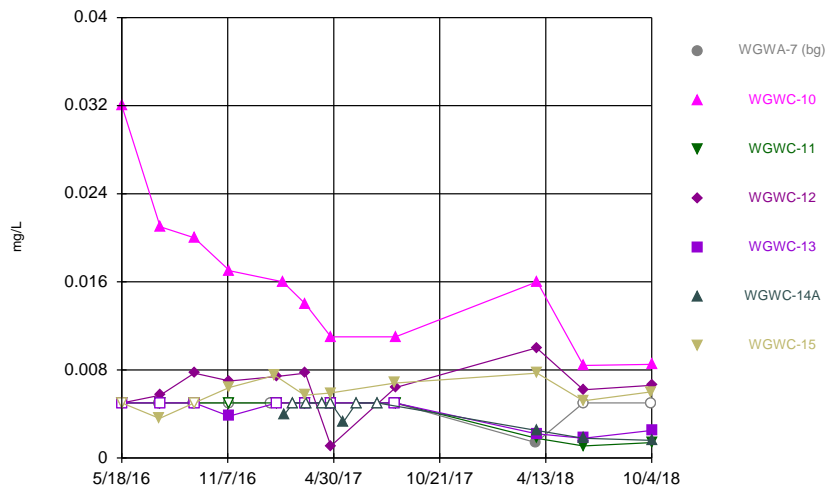
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Lithium



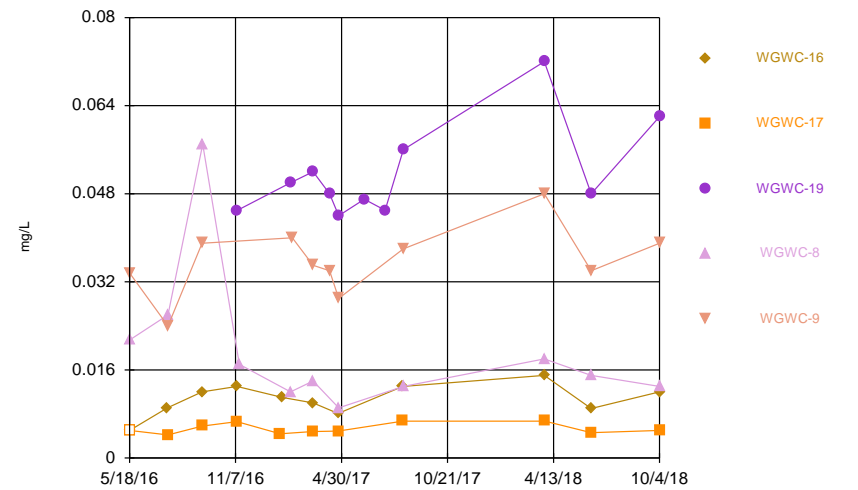
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Lithium



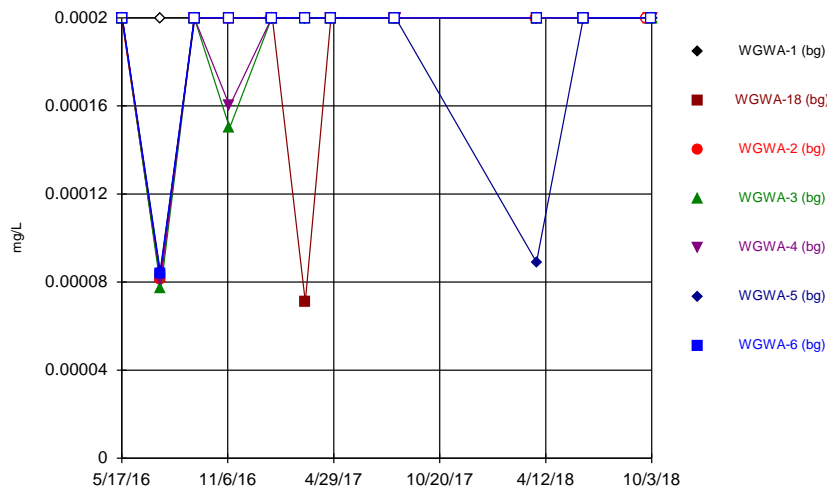
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Lithium



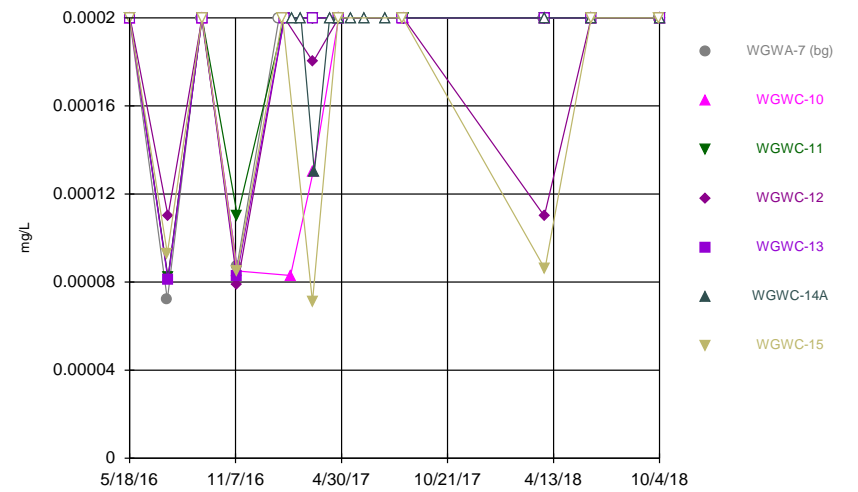
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Mercury



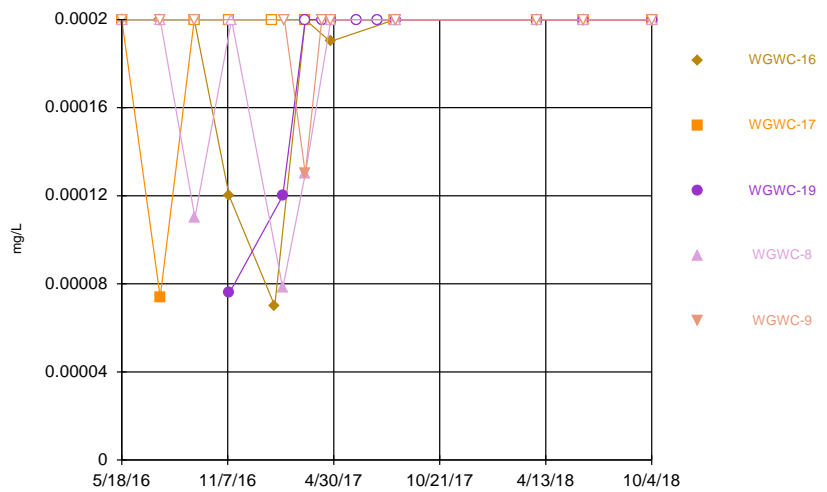
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Mercury



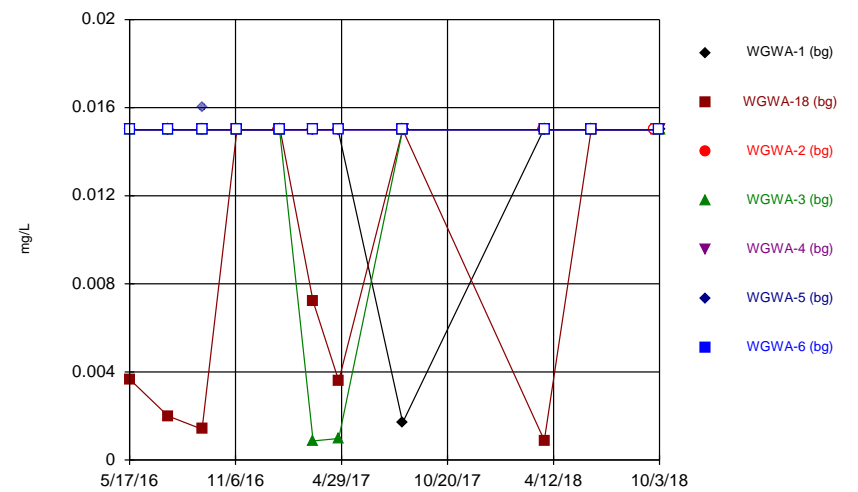
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Mercury



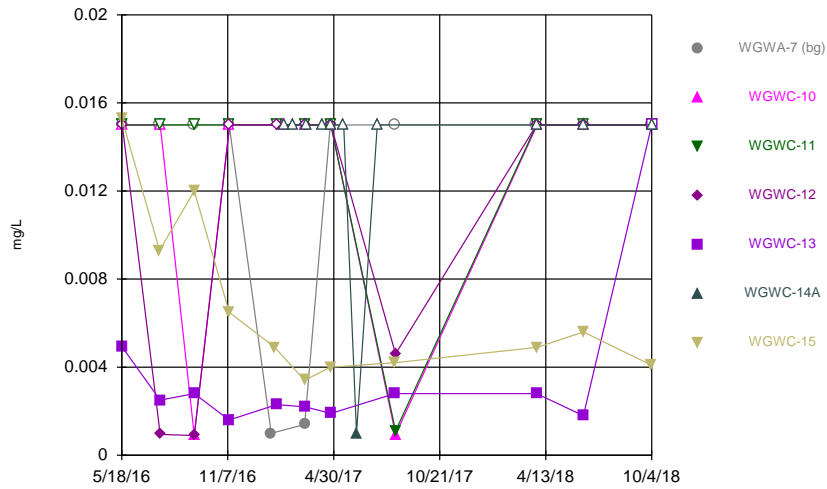
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Molybdenum



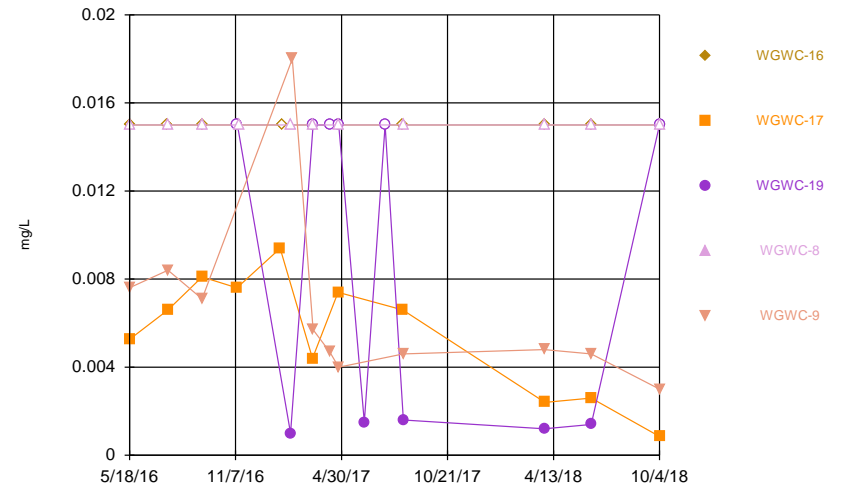
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Molybdenum



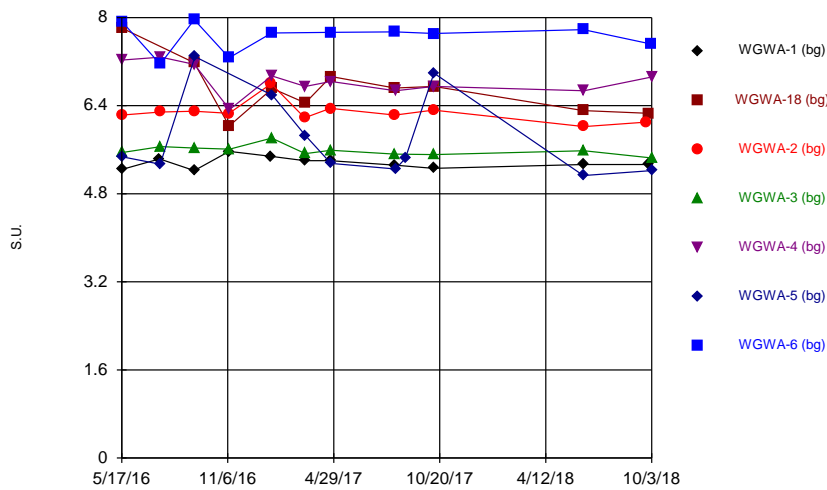
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Molybdenum



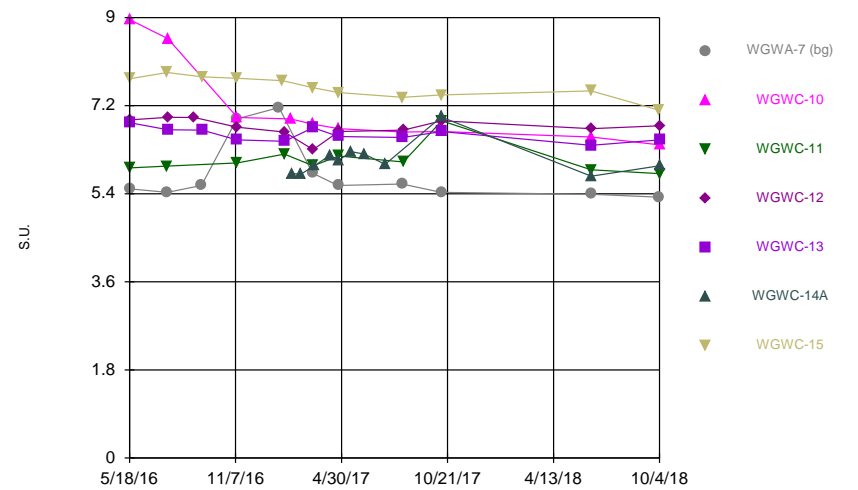
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

pH



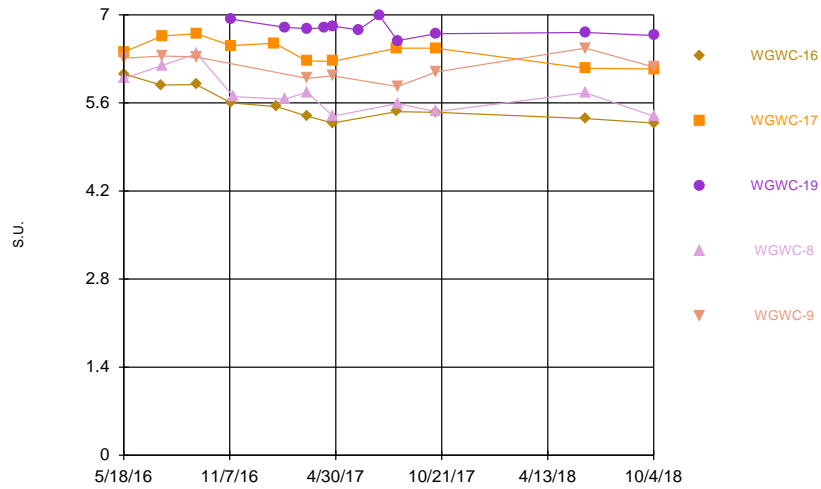
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

pH



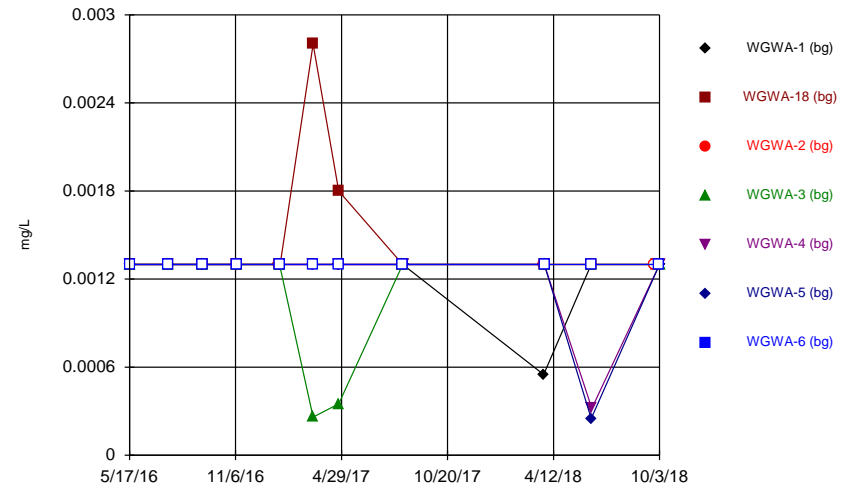
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

pH



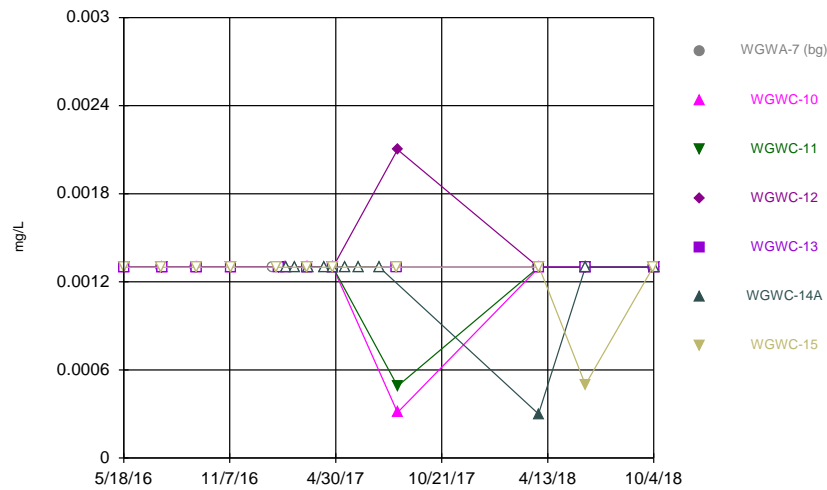
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Selenium



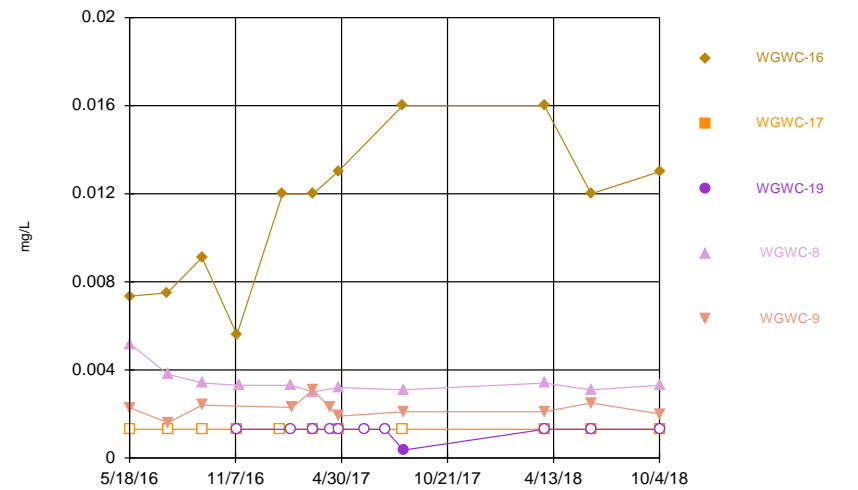
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Selenium



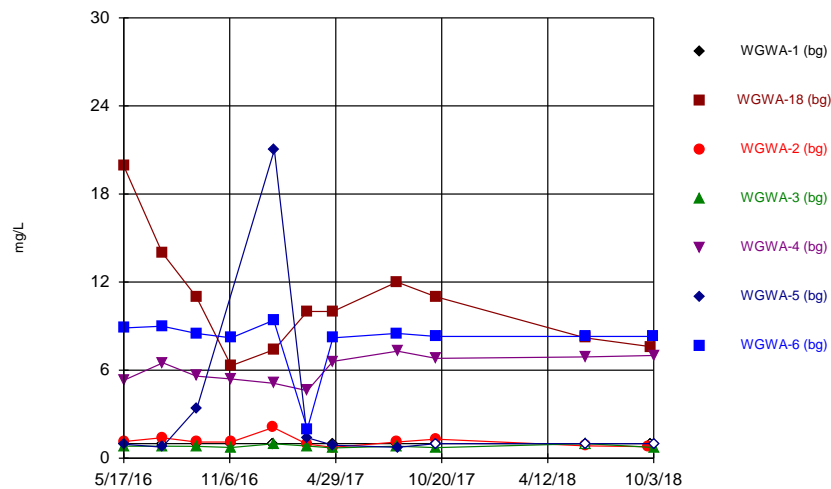
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Selenium



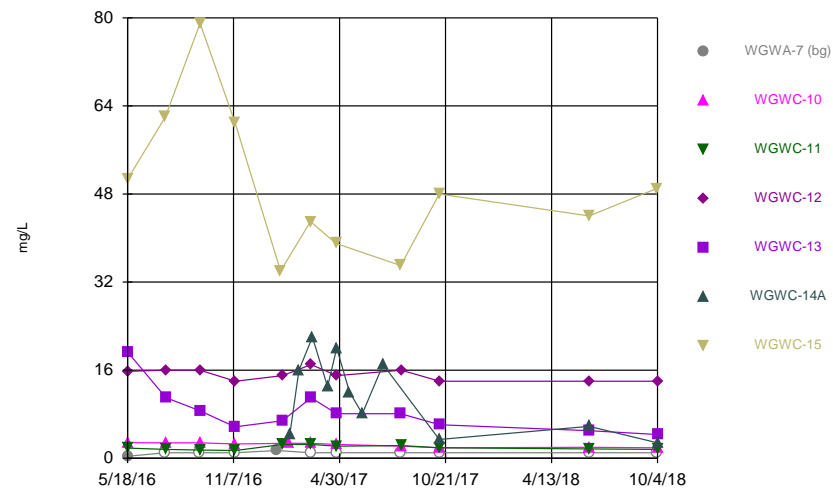
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sulfate



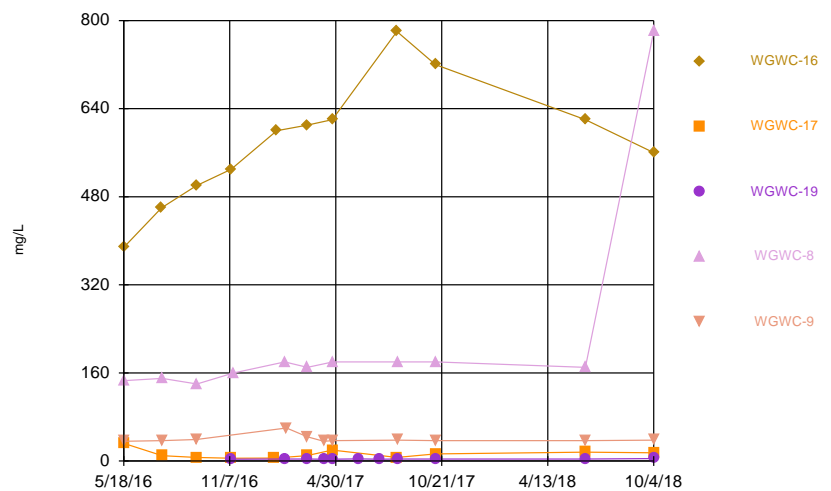
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sulfate



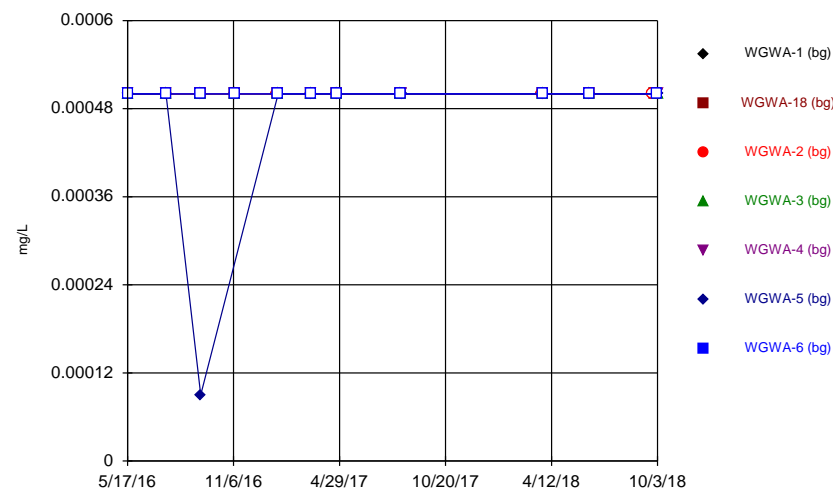
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sulfate



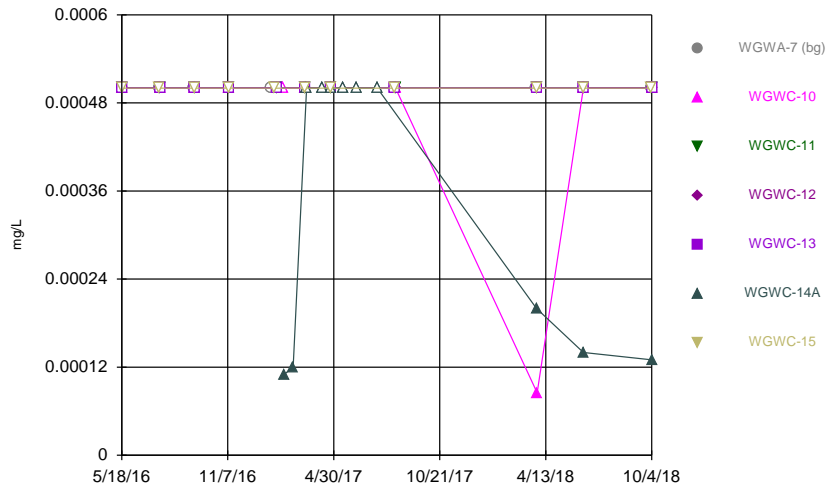
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Thallium



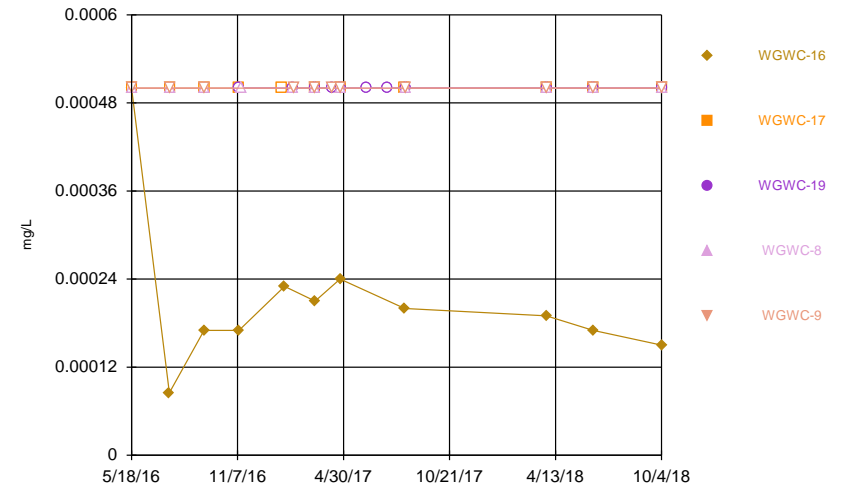
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Thallium



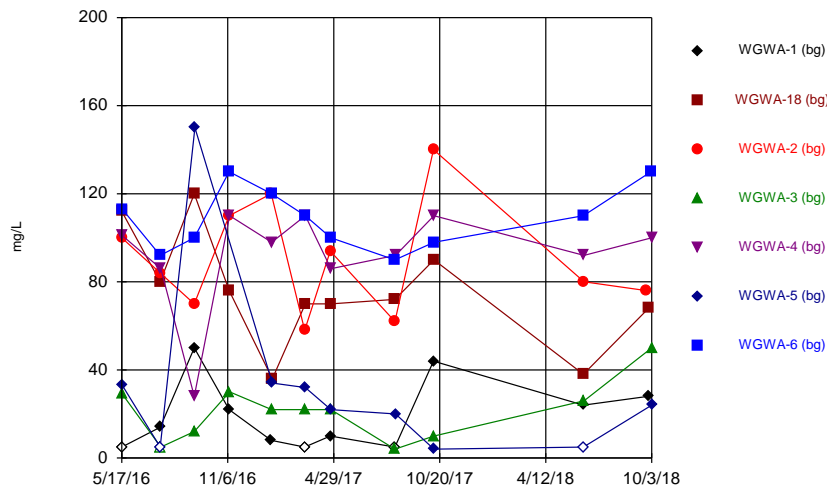
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Thallium



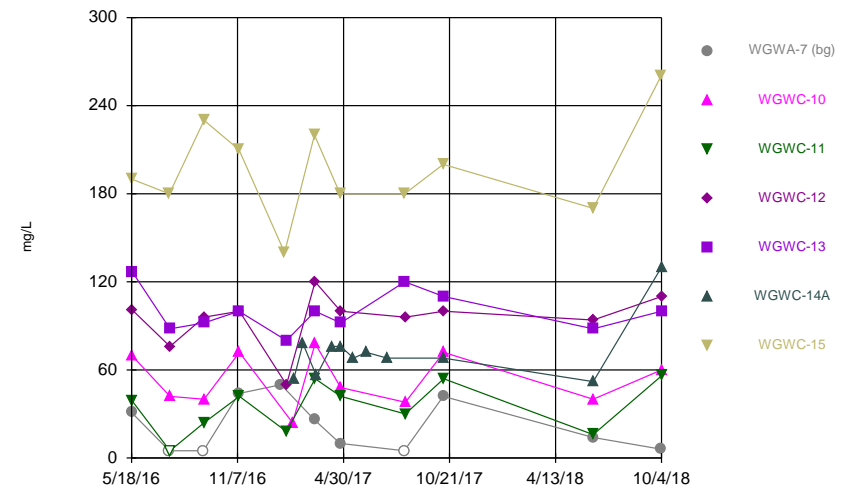
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Total Dissolved Solids



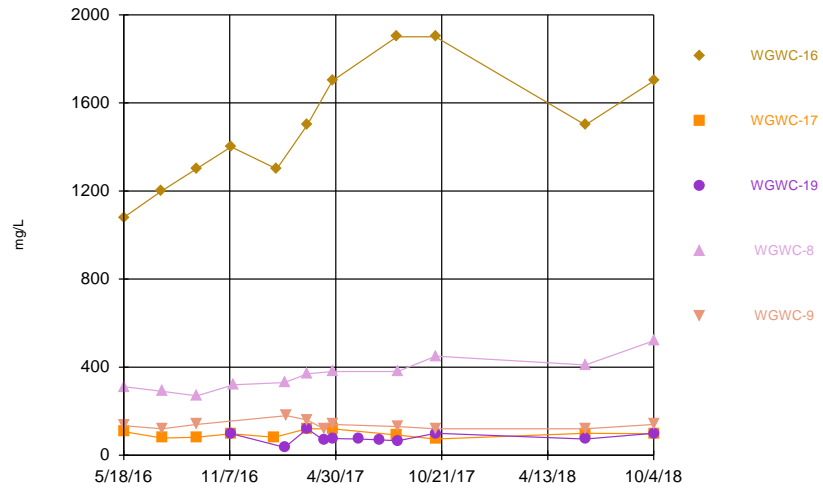
Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Total Dissolved Solids



Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Total Dissolved Solids



Time Series Analysis Run 12/14/2018 2:03 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Tolerance Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:13 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	n/a	0.0025	n/a	n/a	n/a	79	75.95	n/a	0.01738	NP Inter(NDs)
Barium (mg/L)	n/a	0.05077	n/a	n/a	n/a	79	0	ln(x)	0.05	Inter
Beryllium (mg/L)	n/a	0.00125	n/a	n/a	n/a	79	100	n/a	0.01738	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00125	n/a	n/a	n/a	79	100	n/a	0.01738	NP Inter(NDs)
Chromium (mg/L)	n/a	0.005	n/a	n/a	n/a	79	97.47	n/a	0.01738	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	n/a	n/a	78	53.85	n/a	0.0183	NP Inter(normal...
Combined Radium 226 + 228 (pCi/L)	n/a	10.4	n/a	n/a	n/a	77	3.896	n/a	0.01926	NP Inter(normal...
Fluoride (mg/L)	n/a	0.284	n/a	n/a	n/a	87	58.62	n/a	0.01153	NP Inter(normal...
Lithium (mg/L)	n/a	0.009	n/a	n/a	n/a	71	52.11	n/a	0.0262	NP Inter(normal...
Mercury (mg/L)	n/a	0.00025	n/a	n/a	n/a	79	84.81	n/a	0.01738	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.0075	n/a	n/a	n/a	78	85.9	n/a	0.0183	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	79	89.87	n/a	0.01738	NP Inter(NDs)
Thallium (mg/L)	n/a	0.0005	n/a	n/a	n/a	79	98.73	n/a	0.01738	NP Inter(NDs)

Summary Report

Constituent: Boron Analysis Run 1/23/2019 5:27 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 6/14/2018, a summary of the selected data set:

Observations = 194
 ND/Trace = 151
 Wells = 20
 Minimum Value = 0.005
 Maximum Value = 6.8
 Mean Value = 0.4291
 Median Value = 0.025
 Standard Deviation = 1.33
 Coefficient of Variation = 3.099
 Skewness = 3.748

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-18 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-2 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-3 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-4 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-5 (bg)	9	9	0.025	0.05	0.02778	0.025	0.008333	0.3	2.475
WGWA-6 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-7 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWC-10	10	9	0.025	0.05	0.0282	0.025	0.007969	0.2826	2.349
WGWC-11	10	8	0.021	0.058	0.0304	0.025	0.01264	0.4159	1.543
WGWC-12	10	8	0.005	0.05	0.0276	0.025	0.01266	0.4587	0.3952
WGWC-13	10	8	0.025	0.033	0.02582	0.025	0.002524	0.09774	2.664
WGWC-14	5	0	0.029	0.21	0.1	0.067	0.07829	0.7829	0.5129
WGWC-14A	10	10	0.025	0.025	0.025	0.025	0	0	NaN
WGWC-15	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWC-16	10	0	4.48	6.8	5.858	6.05	0.7859	0.1342	-0.6322
WGWC-17	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWC-19	10	9	0.025	0.034	0.0259	0.025	0.002846	0.1099	2.667
WGWC-8	10	0	1.2	2	1.612	1.7	0.2627	0.1629	-0.2404
WGWC-9	10	0	0.25	0.61	0.3684	0.365	0.09973	0.2707	1.373

Summary Report

Constituent: Boron (mg/L) Analysis Run 1/23/2019 5:27 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10
5/17/2016	<0.1	<0.1	<0.1						
5/18/2016				<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
5/19/2016									
7/19/2016	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	
7/20/2016				<0.05	<0.05				<0.05
9/13/2016	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	
9/14/2016						<0.05			<0.05
9/15/2016									
11/9/2016	<0.05	<0.05	<0.05				<0.05		
11/10/2016				<0.05	<0.05			<0.05	
11/11/2016									<0.05
11/14/2016									
1/17/2017	<0.05		<0.05						
1/18/2017				<0.05	<0.05		<0.05	<0.05	
1/19/2017		<0.05				<0.05			
1/20/2017									
1/24/2017									
1/27/2017									
2/6/2017									<0.05
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<0.05		<0.05						
3/14/2017		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	
3/15/2017									0.032 (J)
3/17/2017									
4/11/2017									
4/24/2017	<0.05		<0.05						
4/25/2017		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	
4/26/2017									<0.05
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	
8/9/2017					<0.05	<0.05			
8/10/2017									<0.05
10/10/2017	<0.05		<0.05						
10/11/2017		<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	
10/12/2017									<0.05
6/13/2018	<0.05	<0.05				<0.05	<0.05		
6/14/2018			<0.05	<0.05	<0.05			<0.05	<0.05

Summary Report

Constituent: Boron (mg/L) Analysis Run 1/23/2019 5:27 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-11	WGWC-12	WGWC-13	WGWC-14	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/17/2016									
5/18/2016						<0.1	4.48	<0.1	
5/19/2016	<0.1	<0.1	0.0252 (J)	0.153					
7/19/2016						<0.05	4.7		
7/20/2016	<0.05	<0.05	<0.05	0.067				<0.05	
9/13/2016									
9/14/2016	<0.05	<0.05	<0.05	0.041 (J)		<0.05	5.8	<0.05	
9/15/2016									
11/9/2016									
11/10/2016			<0.05	0.029 (J)		<0.05	6.7	<0.05	
11/11/2016	<0.05	<0.05							<0.05
11/14/2016									
1/17/2017									
1/18/2017									
1/19/2017									
1/20/2017								<0.05	
1/24/2017						<0.05	6.3		
1/27/2017	0.021 (J)	0.047 (J)	0.033 (J)	0.21					
2/6/2017									<0.05
2/8/2017					<0.05				
2/9/2017									
2/23/2017					<0.05				
3/13/2017									
3/14/2017						<0.05		<0.05	
3/15/2017	0.058	0.024 (J)	<0.05				5.9		0.034 (J)
3/17/2017					<0.05				
4/11/2017					<0.05				<0.05
4/24/2017									
4/25/2017						<0.05	6.2	<0.05	
4/26/2017	<0.05	<0.01	<0.05		<0.05				<0.05
5/17/2017					<0.05				
6/7/2017					<0.05				<0.05
7/11/2017					<0.05				<0.05
8/8/2017									
8/9/2017			<0.05			<0.05	6.3	<0.05	
8/10/2017	<0.05	<0.05							<0.05
10/10/2017									
10/11/2017					<0.05	<0.05	6.8	<0.05	
10/12/2017	<0.05	<0.05	<0.05						<0.05
6/13/2018									
6/14/2018	<0.05	<0.05	<0.05		<0.05	<0.05	5.4	<0.05	<0.05

Summary Report

Constituent: Boron (mg/L) Analysis Run 1/23/2019 5:27 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-8	WGWC-9
5/17/2016		
5/18/2016		
5/19/2016	1.42	0.314
7/19/2016		
7/20/2016	1.4	0.25
9/13/2016		
9/14/2016		0.3
9/15/2016	1.2	
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016	1.3	
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	1.8	
2/8/2017		
2/9/2017		0.61
2/23/2017		
3/13/2017		
3/14/2017		
3/15/2017	1.7	0.42
3/17/2017		
4/11/2017		0.37
4/24/2017		
4/25/2017		
4/26/2017	2	0.38
5/17/2017		
6/7/2017		
7/11/2017		
8/8/2017		
8/9/2017		
8/10/2017	1.8	0.29
10/10/2017		
10/11/2017		
10/12/2017	1.8	0.36
6/13/2018		
6/14/2018	1.7	0.39

Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:32 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	WGWC-10	52	n/a	6/14/2018	7.7	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-11	52	n/a	6/14/2018	2.2	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-12	52	n/a	6/14/2018	13	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-13	52	n/a	6/14/2018	5.5	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14	52	n/a	1/27/2017	6.8	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14A	52	n/a	6/14/2018	1.1	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-15	52	n/a	6/14/2018	29	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-16	52	n/a	6/14/2018	260	Yes	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-17	52	n/a	6/14/2018	6.2	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-19	52	n/a	6/14/2018	8.9	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-8	52	n/a	6/14/2018	52	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Calcium (mg/L)	WGWC-9	52	n/a	6/14/2018	7.5	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-10	6.05	n/a	6/14/2018	1.3	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-11	6.05	n/a	6/14/2018	3	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-12	6.05	n/a	6/14/2018	3	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-13	6.05	n/a	6/14/2018	1.2	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14	6.05	n/a	1/27/2017	8	Yes	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14A	6.05	n/a	6/14/2018	2.8	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-15	6.05	n/a	6/14/2018	4.3	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-16	6.05	n/a	6/14/2018	290	Yes	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-17	6.05	n/a	6/14/2018	1.5	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-19	6.05	n/a	6/14/2018	2.4	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-8	6.05	n/a	6/14/2018	58	Yes	79	0	n/a	0.0003028	NP Inter (normality) ...
Chloride (mg/L)	WGWC-9	6.05	n/a	6/14/2018	1.2	No	79	0	n/a	0.0003028	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-10	0.284	n/a	6/14/2018	0.15	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-11	0.284	n/a	6/14/2018	0.1ND	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-12	0.284	n/a	6/14/2018	0.1	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-13	0.284	n/a	6/14/2018	0.27	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-14	0.284	n/a	1/27/2017	0.1ND	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-14A	0.284	n/a	6/14/2018	0.1ND	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	6/14/2018	0.79	Yes	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-16	0.284	n/a	6/14/2018	1ND	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-17	0.284	n/a	6/14/2018	0.11	No	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-19	0.284	n/a	6/14/2018	0.35	Yes	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-8	0.284	n/a	6/14/2018	0.56	Yes	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	6/14/2018	1.4	Yes	87	58.62	n/a	0.0002524	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	WGWC-10	21	n/a	6/14/2018	2	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-11	21	n/a	6/14/2018	1.7	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-12	21	n/a	6/14/2018	14	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-13	21	n/a	6/14/2018	5	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14	21	n/a	1/27/2017	10	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14A	21	n/a	6/14/2018	5.8	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-15	21	n/a	6/14/2018	44	Yes	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-16	21	n/a	6/14/2018	620	Yes	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-17	21	n/a	6/14/2018	16	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-19	21	n/a	6/14/2018	3.5	No	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-8	21	n/a	6/14/2018	170	Yes	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-9	21	n/a	6/14/2018	37	Yes	79	26.58	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-10	150	n/a	6/14/2018	40	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-11	150	n/a	6/14/2018	16	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...

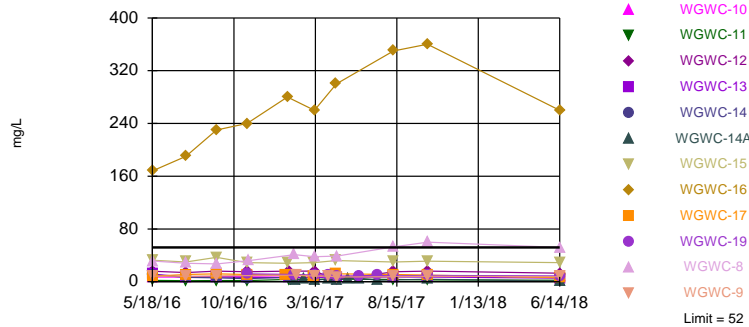
Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:32 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>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	WGWC-12	150	n/a	6/14/2018	94	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-13	150	n/a	6/14/2018	88	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14	150	n/a	1/27/2017	68	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14A	150	n/a	6/14/2018	52	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-15	150	n/a	6/14/2018	170	Yes	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-16	150	n/a	6/14/2018	1500	Yes	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-17	150	n/a	6/14/2018	100	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-19	150	n/a	6/14/2018	74	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-8	150	n/a	6/14/2018	410	Yes	79	11.39	n/a	0.0003028	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-9	150	n/a	6/14/2018	120	No	79	11.39	n/a	0.0003028	NP Inter (normality) ...

Exceeds Limit: WGWC-16

Calcium Interwell Non-parametric



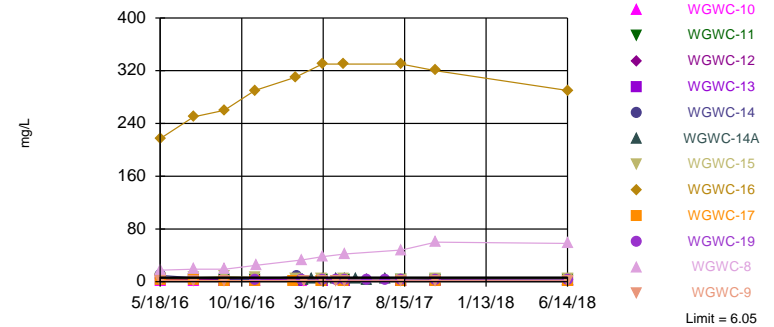
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. Annual per-constituent alpha = 0.01024. Individual comparison alpha = 0.0003028 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:31 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-14, WGWC-16, WGWC-8

Chloride Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. Annual per-constituent alpha = 0.01024. Individual comparison alpha = 0.0003028 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

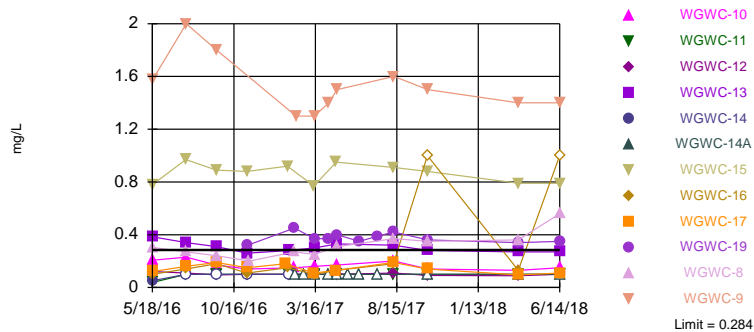
Prediction Limit Analysis Run 1/23/2019 5:31 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-19, WGWC-8, WGWC-9

Fluoride Interwell Non-parametric



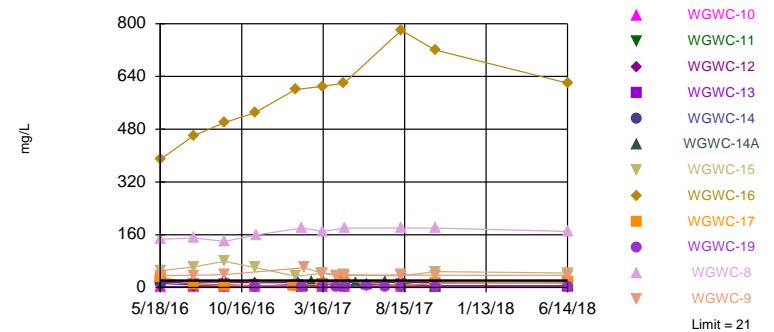
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 87 background values. 58.62% NDs. Annual per-constituent alpha = 0.008547. Individual comparison alpha = 0.0002524 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-15, WGWC-16, WGWC-8, WGWC-9

Sulfate Interwell Non-parametric



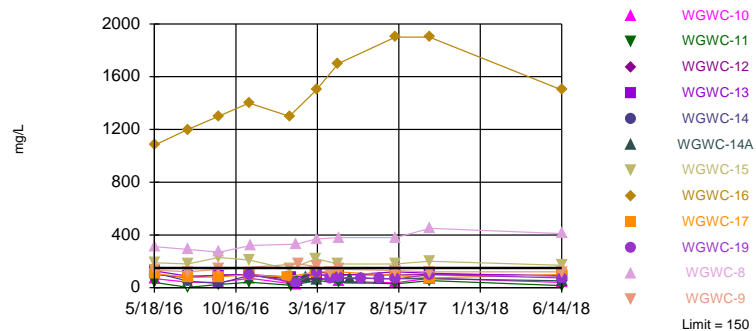
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 26.58% NDs. Annual per-constituent alpha = 0.01024. Individual comparison alpha = 0.0003028 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-15, WGWC-16,
WGWC-8

Total Dissolved Solids Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 79 background values. 11.39% NDs. Annual per-constituent alpha = 0.01024. Individual comparison alpha = 0.0003028 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-1 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-7 (bg)	WGWA-3 (bg)	WGWC-10	WGWC-15
5/17/2016	12.2	23.7	0.927						
5/18/2016				17.9	1.7	1.36	2.1	7.17	32.5
5/19/2016									
7/19/2016	13	23	1		1.5	0.88			30
7/20/2016				15			1.7	7	
9/13/2016	13	23	0.44	16		0.93	1.3		
9/14/2016					52			7.7	37
9/15/2016									
11/9/2016	19	6.7	1.1						
11/10/2016				15		6.1	1.6		29
11/11/2016								8.2	
11/14/2016									
1/17/2017	28		1.4						
1/18/2017				17		10	1.7		
1/19/2017		8.5			13				
1/20/2017									
1/24/2017									28
1/27/2017									
2/6/2017								9.1	
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	14		1.1						
3/14/2017		13		17	1.6	1.3	1.8		29
3/15/2017								9	
3/17/2017									
4/11/2017									
4/24/2017	12		1.1						
4/25/2017		23		17	1.5	1.9	2		32
4/26/2017								8.1	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	18	24	1.1			4.8	2		
8/9/2017				15	1.3				30
8/10/2017								8.1	
10/10/2017	21		1.2						
10/11/2017		23		17	1.5	0.93	2.1		31
10/12/2017								8.6	
6/13/2018		11	1.1		1.2				
6/14/2018	12			15		0.94	2	7.7	29

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWA-6 (bg)	WGWC-16	WGWC-8	WGWC-12	WGWC-11	WGWC-9	WGWC-14	WGWC-13
5/17/2016									
5/18/2016	8.24	27	168						
5/19/2016				31.4	15.8	1.95	8.53	10.5	11.4
7/19/2016		23	190						
7/20/2016	11			28	14	1.5	8.2	6.6	7.1
9/13/2016		25							
9/14/2016	12		230		16	1.8	8.8	5.8	7.4
9/15/2016				27					
11/9/2016		25							
11/10/2016	11		240					4.7	6.4
11/11/2016					15	1.7			
11/14/2016				32					
1/17/2017									
1/18/2017		26							
1/19/2017									
1/20/2017	10								
1/24/2017			280						
1/27/2017					16	3.5		6.8	6.2
2/6/2017				41					
2/8/2017									
2/9/2017							10		
2/23/2017									
3/13/2017									
3/14/2017	8.8	20							
3/15/2017			260	38	16	3.8	8.6		6.7
3/17/2017									
4/11/2017							8.6		
4/24/2017									
4/25/2017	12	28	300						
4/26/2017				39	3	4	7.1		6.5
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017		26							
8/9/2017	11		350						7
8/10/2017				53	15	3.5	7.5		
10/10/2017									
10/11/2017	10	29	360						
10/12/2017				60	16	2.7	8.2		7
6/13/2018		25							
6/14/2018	6.2		260	52	13	2.2	7.5		5.5

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	12	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	11	
2/8/2017		3.2
2/9/2017		
2/23/2017		4.1
3/13/2017		
3/14/2017		
3/15/2017	10	
3/17/2017		2.4
4/11/2017	11	4.1
4/24/2017		
4/25/2017		
4/26/2017	8.4	2.5
5/17/2017		5.2
6/7/2017	9	5.2
7/11/2017	9.5	2.3
8/8/2017		
8/9/2017		
8/10/2017	8.8	
10/10/2017		
10/11/2017		3.8
10/12/2017	9.5	
6/13/2018		
6/14/2018	8.9	1.1

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-1 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-7 (bg)	WGWA-3 (bg)	WGWC-10	WGWC-15
5/17/2016	2.5	6.05	3.8						
5/18/2016				1.45	2.14	2.06	1.92	1.45	4.59
5/19/2016									
7/19/2016	2.6	4	3.9		2.4	2.1			5.9
7/20/2016				1.4			1.8	1.6	
9/13/2016	2.4	3.1	3.6	1.4		2	1.7		
9/14/2016					2.1			1.5	7.9
9/15/2016									
11/9/2016	2.3	2.3	3.9						
11/10/2016				1.3		1.8	1.6		6.5
11/11/2016								1.5	
11/14/2016									
1/17/2017	2.3		3.8						
1/18/2017				1.3		1.8	1.7		
1/19/2017		2			1.8				
1/20/2017									
1/24/2017									4.1
1/27/2017									
2/6/2017								1.4	
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	2.2		3.4						
3/14/2017		1.9		1.2	2	1.8	1.6		4.4
3/15/2017								1.4	
3/17/2017									
4/11/2017									
4/24/2017	2.2		3.4						
4/25/2017		1.9		1.2	1.8	1.8	1.6		4
4/26/2017								1.3	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	2.3	2	3.6			1.9	1.7		
8/9/2017				1.2	1.9				3.6
8/10/2017								1.4	
10/10/2017	2.5		3.6						
10/11/2017		1.9		1.2	2.1	1.8	1.6		5
10/12/2017								1.3	
6/13/2018		2	3.8		1.7				
6/14/2018	2.3			1.2		1.7	1.6	1.3	4.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWA-6 (bg)	WGWC-16	WGWC-8	WGWC-12	WGWC-11	WGWC-9	WGWC-14	WGWC-13
5/17/2016									
5/18/2016	2.72	1.58	217						
5/19/2016				17.5	3.8	3.21	1.46	9.44	2.26
7/19/2016		1.6	250						
7/20/2016	1.9			19	3.8	3.4	1.5	5.8	1.9
9/13/2016		1.4							
9/14/2016	1.6		260		3.7	3.1	1.4	4.1	1.6
9/15/2016				19					
11/9/2016		1.5							
11/10/2016	1.6		290					3.2	1.4
11/11/2016					3.5	3.2			
11/14/2016				25					
1/17/2017									
1/18/2017		1.5							
1/19/2017									
1/20/2017	1.5								
1/24/2017			310						
1/27/2017					3.1	3.4		8	1.4
2/6/2017				33					
2/8/2017									
2/9/2017							1.5		
2/23/2017									
3/13/2017									
3/14/2017	1.5	2.5							
3/15/2017			330	38	3.2	3.1	1.3		1.4
3/17/2017									
4/11/2017							1.2		
4/24/2017									
4/25/2017	1.8	1.3	330						
4/26/2017				42	3.2	3.1	1.2		1.3
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017		1.4							
8/9/2017	1.4		330						1.4
8/10/2017				48	3.4	3.1	1.3		
10/10/2017									
10/11/2017	1.5	1.3	320						
10/12/2017				60	3.1	3	1.4		1.2
6/13/2018		1.4							
6/14/2018	1.5		290	58	3	3	1.2		1.2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	2.6	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	2.6	
2/8/2017		2.5
2/9/2017		
2/23/2017		4.3
3/13/2017		
3/14/2017		
3/15/2017	2.4	
3/17/2017		4.8
4/11/2017	2.3	3.8
4/24/2017		
4/25/2017		
4/26/2017	2.3	4.8
5/17/2017		3.9
6/7/2017	2.5	3.2
7/11/2017	2.3	4.1
8/8/2017		
8/9/2017		
8/10/2017	2.5	
10/10/2017		
10/11/2017		2.2
10/12/2017	2.3	
6/13/2018		
6/14/2018	2.4	2.8

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-4 (bg)	WGWC-17
5/17/2016	0.284 (J)	0.0538 (J)	0.0131 (J)						
5/18/2016				0.106 (J)	0.014 (J)	0.206	0.018 (J)	0.164 (J)	0.121 (J)
5/19/2016									
7/19/2016	0.21	<0.2	<0.2	0.11 (J)	<0.2		<0.2		
7/20/2016						0.23		0.17 (J)	0.16 (J)
9/13/2016	0.15 (J)	<0.2	<0.2	0.11 (J)			<0.2	0.15 (J)	
9/14/2016					0.095 (J)	0.17 (J)			0.19 (J)
9/15/2016									
11/9/2016	<0.2	0.085 (J)	<0.2	0.1 (J)					
11/10/2016							<0.2	0.12 (J)	0.15 (J)
11/11/2016						0.14 (J)			
11/14/2016									
1/17/2017		<0.2	<0.2						
1/18/2017				0.11 (J)			<0.2	0.15 (J)	
1/19/2017	0.087 (J)				<0.2				
1/20/2017									0.18 (J)
1/24/2017									
1/27/2017									
2/6/2017						0.15 (J)			
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		<0.2	<0.2						
3/14/2017	<0.2			<0.2	<0.2		<0.2	0.13 (J)	0.11 (J)
3/15/2017						0.16 (J)			
3/17/2017									
4/11/2017									
4/24/2017		<0.2	<0.2						
4/25/2017	<0.2			<0.2	<0.2		<0.2	0.12 (J)	0.13 (J)
4/26/2017						0.17 (J)			
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	0.087 (J)	<0.2	<0.2	0.099 (J)			<0.2		
8/9/2017					<0.2			0.14 (J)	0.19 (J)
8/10/2017						0.2			
10/10/2017		0.18 (J)	<0.2						
10/11/2017	0.09 (J)			0.098 (J)	<0.2		<0.2	0.14 (J)	0.14 (J)
10/12/2017						0.14 (J)			
3/27/2018		<0.2	<0.2						
3/28/2018	0.11 (J)			0.088 (J)	<0.2		<0.2	0.12 (J)	
3/29/2018									
3/30/2018						0.13 (J)			0.095 (J)
6/13/2018	0.085 (J)		<0.2	0.093 (J)	<0.2				
6/14/2018		<0.2				0.15 (J)	<0.2	0.12 (J)	0.11 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-3 (bg)	WGWC-15	WGWC-16	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-14
5/17/2016									
5/18/2016	0.029 (J)	0.779	0.1 (J)						
5/19/2016				0.039 (J)	0.304	1.58	0.384	0.12 (J)	0.052 (J)
7/19/2016		0.97	0.14 (J)						
7/20/2016	<0.2			<0.2	0.27	2	0.34	0.11 (J)	<0.2
9/13/2016	<0.2								
9/14/2016		0.89	0.18 (J)	<0.2		1.8	0.31	0.095 (J)	<0.2
9/15/2016					0.24				
11/9/2016									
11/10/2016	<0.2	0.88	0.11 (J)				0.26		<0.2
11/11/2016				<0.2				<0.2	
11/14/2016					0.2				
1/17/2017									
1/18/2017	<0.2								
1/19/2017									
1/20/2017									
1/24/2017		0.92	0.15 (J)						
1/27/2017				<0.2			0.28	<0.2	<0.2
2/6/2017					0.27				
2/8/2017									
2/9/2017						1.3			
2/23/2017									
3/13/2017									
3/14/2017	<0.2	0.77							
3/15/2017			0.1 (J)	<0.2	0.25	1.3	0.3	<0.2	
3/17/2017									
4/11/2017						1.4			
4/24/2017									
4/25/2017	<0.2	0.95	0.13 (J)						
4/26/2017				<0.2	0.31	1.5	0.33	<0.2	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.2								
8/9/2017		0.91	0.18 (J)				0.32		
8/10/2017				<0.2	0.37	1.6		0.11 (J)	
10/10/2017									
10/11/2017	<0.2	0.88	<2						
10/12/2017				<0.2	0.35	1.5	0.28	0.091 (J)	
3/27/2018									
3/28/2018	<0.2								
3/29/2018			0.13 (J)	<0.2	0.36	1.4	0.27	0.089 (J)	
3/30/2018		0.79							
6/13/2018									
6/14/2018	<0.2	0.79	<2	<0.2	0.56	1.4	0.27	0.1 (J)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	0.32	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	0.45	
2/8/2017		<0.2
2/9/2017		
2/23/2017		<0.2
3/13/2017		
3/14/2017		
3/15/2017	0.37	
3/17/2017		<0.2
4/11/2017	0.37	<0.2
4/24/2017		
4/25/2017		
4/26/2017	0.4	<0.2
5/17/2017		<0.2
6/7/2017	0.35	<0.2
7/11/2017	0.39	<0.2
8/8/2017		
8/9/2017		
8/10/2017	0.42	
10/10/2017		
10/11/2017		<0.2
10/12/2017	0.36	
3/27/2018		
3/28/2018		
3/29/2018	0.34	<0.2
3/30/2018		
6/13/2018		
6/14/2018	0.35	<0.2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-1 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-7 (bg)	WGWA-3 (bg)	WGWC-10	WGWC-15
5/17/2016	1.14	19.9	<1						
5/18/2016				5.32	0.955 (J)	0.368 (J)	0.821 (J)	2.84	50.7
5/19/2016									
7/19/2016	1.4	14	<1		0.76 (J)	<1			62
7/20/2016				6.5			0.82 (J)	2.8	
9/13/2016	1.1	11	<1	5.6		<1	0.81 (J)		
9/14/2016					3.4			2.8	79
9/15/2016									
11/9/2016	1.1	6.3	<1						
11/10/2016				5.4		<1	0.73 (J)		61
11/11/2016								2.6	
11/14/2016									
1/17/2017	2.1		<1						
1/18/2017				5.1		1.4	0.99 (J)		
1/19/2017		7.4			21				
1/20/2017									
1/24/2017									34
1/27/2017									
2/6/2017								2.7	
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	0.97 (J)		<1						
3/14/2017		10		4.6	1.4	<1	0.83 (J)		43
3/15/2017								2.7	
3/17/2017									
4/11/2017									
4/24/2017	0.75 (J)		<1						
4/25/2017		10		6.6	0.89 (J)	<1	0.7 (J)		39
4/26/2017								2.5	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.1	12	<1			<1	0.82 (J)		
8/9/2017				7.3	0.75 (J)				35
8/10/2017								2.2	
10/10/2017	1.3		<1						
10/11/2017		11		6.8	<1	<1	0.72 (J)		48
10/12/2017								1.9	
6/13/2018		8.2	<1		<1				
6/14/2018	0.84 (J)			6.9		<1	<1	2	44

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:32 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWA-6 (bg)	WGWC-16	WGWC-8	WGWC-12	WGWC-11	WGWC-9	WGWC-14	WGWC-13
5/17/2016									
5/18/2016	32.1	8.88	388						
5/19/2016				146	15.8	1.83	35.9	12.4	19.2
7/19/2016		9	460						
7/20/2016	9.7			150	16	1.6	37	7.2	11
9/13/2016		8.5							
9/14/2016	6.6		500		16	1.5	39	4.3	8.6
9/15/2016				140					
11/9/2016		8.2							
11/10/2016	5.2		530					2.6	5.7
11/11/2016					14	1.4			
11/14/2016				160					
1/17/2017									
1/18/2017		9.4							
1/19/2017									
1/20/2017	5.3								
1/24/2017			600						
1/27/2017					15	2.5		10	6.8
2/6/2017				180					
2/8/2017									
2/9/2017							60		
2/23/2017									
3/13/2017									
3/14/2017	9.6	2							
3/15/2017			610	170	17	2.5	44		11
3/17/2017									
4/11/2017							36		
4/24/2017									
4/25/2017	20	8.2	620						
4/26/2017				180	15	2.2	37		8.1
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017		8.5							
8/9/2017	6.5		780						8.1
8/10/2017				180	16	2.3	38		
10/10/2017									
10/11/2017	13	8.3	720						
10/12/2017				180	14	1.9	37		6.1
6/13/2018		8.3							
6/14/2018	16		620	170	14	1.7	37		5

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	3.4	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	3.7	
2/8/2017		4.3
2/9/2017		
2/23/2017		16
3/13/2017		
3/14/2017		
3/15/2017	3.6	
3/17/2017		22
4/11/2017	3.2	13
4/24/2017		
4/25/2017		
4/26/2017	3.3	20
5/17/2017		12
6/7/2017	3.8	8.1
7/11/2017	3.3	17
8/8/2017		
8/9/2017		
8/10/2017	3.7	
10/10/2017		
10/11/2017		3.4
10/12/2017	3.6	
6/13/2018		
6/14/2018	3.5	5.8

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-1 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-7 (bg)	WGWA-3 (bg)	WGWC-10	WGWC-15
5/17/2016	100	112	<25						
5/18/2016				101	33	31	29	70	190
5/19/2016									
7/19/2016	84	80	14		<5	<5			180
7/20/2016				86			<5	42	
9/13/2016	70	120	50	28		<5	12		
9/14/2016					150			40	230
9/15/2016									
11/9/2016	110	76	22						
11/10/2016				110		44	30		210
11/11/2016								72	
11/14/2016									
1/17/2017	120		8						
1/18/2017				98		50	22		
1/19/2017		36			34				
1/20/2017									
1/24/2017									140
1/27/2017									
2/6/2017								24	
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	58		<5						
3/14/2017		70		110	32	26	22		220
3/15/2017								78	
3/17/2017									
4/11/2017									
4/24/2017	94		10						
4/25/2017		70		86	22	10	22		180
4/26/2017								48	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	62	72	<5			<5	4 (J)		
8/9/2017				92	20				180
8/10/2017								38	
10/10/2017	140		44						
10/11/2017		90		110	4 (J)	42	10		200
10/12/2017								72	
6/13/2018		38	24		<5				
6/14/2018	80			92		14	26	40	170

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:32 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWA-6 (bg)	WGWC-16	WGWC-8	WGWC-12	WGWC-11	WGWC-9	WGWC-14	WGWC-13
5/17/2016									
5/18/2016	107	113	1080						
5/19/2016				311	101	39	134	112	127
7/19/2016		92	1200						
7/20/2016	78			290	76	<5	120	50	88
9/13/2016		100							
9/14/2016	82		1300		96	24	140	32	92
9/15/2016				270					
11/9/2016		130							
11/10/2016	98		1400					92	100
11/11/2016					100	42			
11/14/2016				320					
1/17/2017									
1/18/2017		120							
1/19/2017									
1/20/2017	82								
1/24/2017			1300						
1/27/2017					50	18		68	80
2/6/2017				330					
2/8/2017									
2/9/2017							180		
2/23/2017									
3/13/2017									
3/14/2017	120	110							
3/15/2017			1500	370	120	54	160		100
3/17/2017									
4/11/2017							120		
4/24/2017									
4/25/2017	120	100	1700						
4/26/2017				380	100	42	140		92
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017		90							
8/9/2017	92		1900						120
8/10/2017				380	96	30	130		
10/10/2017									
10/11/2017	74	98	1900						
10/12/2017				450	100	54	120		110
6/13/2018		110							
6/14/2018	100		1500	410	94	16	120		88

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:32 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	98	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	36	
2/8/2017		54
2/9/2017		
2/23/2017		78
3/13/2017		
3/14/2017		
3/15/2017	120	
3/17/2017		56
4/11/2017	68	76
4/24/2017		
4/25/2017		
4/26/2017	76	76
5/17/2017		68
6/7/2017	74	72
7/11/2017	70	68
8/8/2017		
8/9/2017		
8/10/2017	66	
10/10/2017		
10/11/2017		68
10/12/2017	100	
6/13/2018		
6/14/2018	74	52

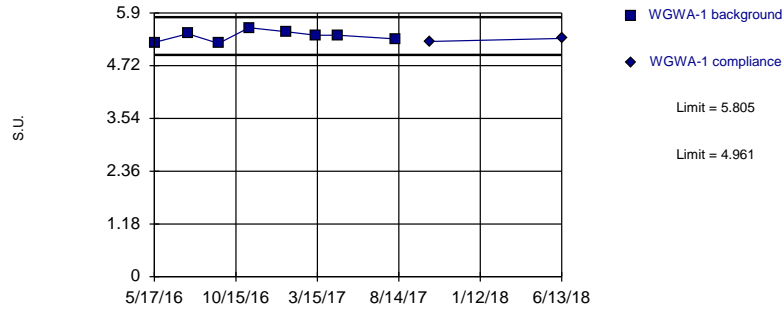
Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:35 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>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (S.U.)	WGWA-1	5.805	4.961	6/13/2018	5.33	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-18	9.117	4.548	6/13/2018	6.31	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-2	6.8	6.18	6/14/2018	6.02	Yes	8	0	n/a	0.04288	NP Intra (normality) ...
pH (S.U.)	WGWA-3	5.945	5.28	6/14/2018	5.58	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-4	8.043	5.755	6/14/2018	6.67	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-5	8.447	3.199	6/13/2018	5.13	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-6	8.901	6.383	6/13/2018	7.78	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-7	7.16	5.43	6/14/2018	5.39	Yes	8	0	n/a	0.04288	NP Intra (normality) ...
pH (S.U.)	WGWC-10	11.63	4.047	6/14/2018	6.56	No	7	0	sqrt(x)	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-11	6.479	5.614	6/14/2018	5.89	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-12	7.518	5.963	6/14/2018	6.73	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-13	7.114	6.16	6/14/2018	6.39	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-14	7.43	4.852	n/a	1 future	n/a	5	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-14A	6.666	5.414	6/14/2018	5.76	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-15	8.282	7.042	6/14/2018	7.5	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-16	6.622	4.654	6/14/2018	5.35	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-17	7.058	5.9	6/14/2018	6.15	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-19	7.231	6.384	6/14/2018	6.72	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-8	7.008	4.66	6/14/2018	5.76	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-9	7.099	5.19	6/14/2018	6.47	No	6	0	No	0.0001936	Param Intra 1 of 2

Within Limits

pH
Intrawell Parametric



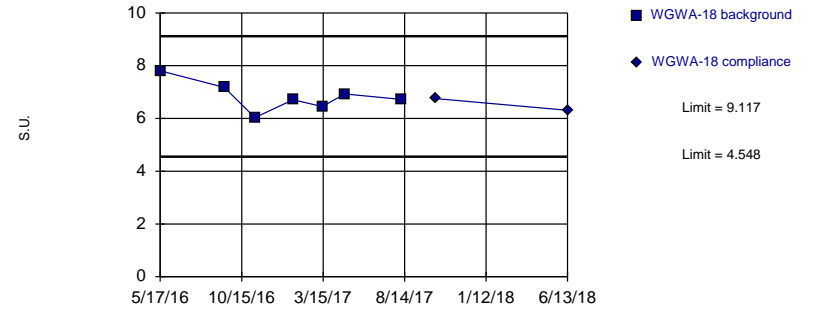
Background Data Summary: Mean=5.383, Std. Dev.=0.1187, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9603, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



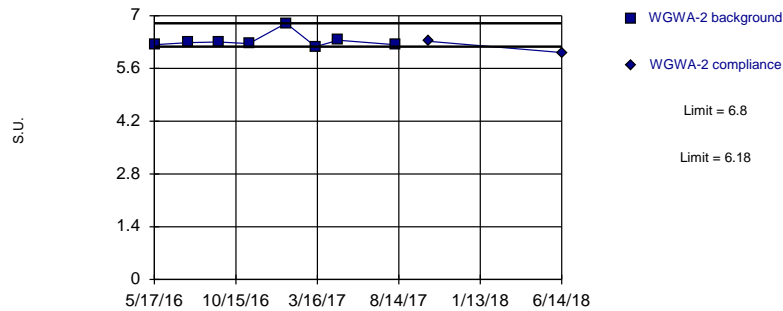
Background Data Summary: Mean=6.833, Std. Dev.=0.5633, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limits

pH
Intrawell Non-parametric



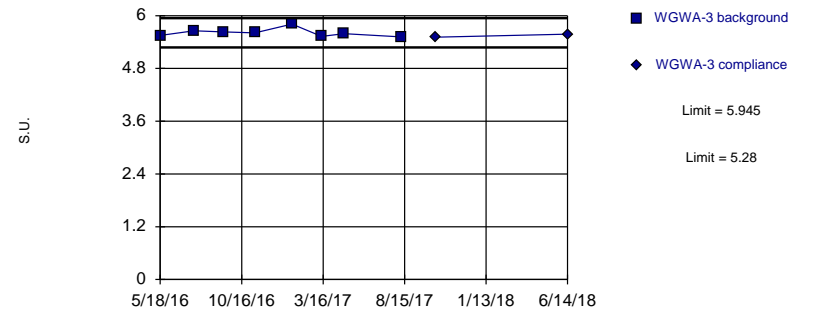
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.08484. Individual comparison alpha = 0.04288 (1 of 2).

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



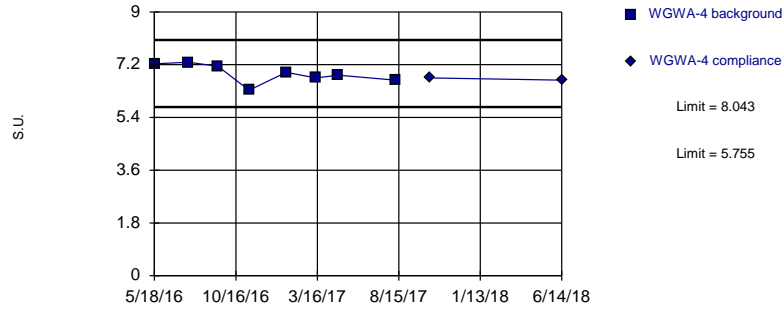
Background Data Summary: Mean=5.612, Std. Dev.=0.09338, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8715, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



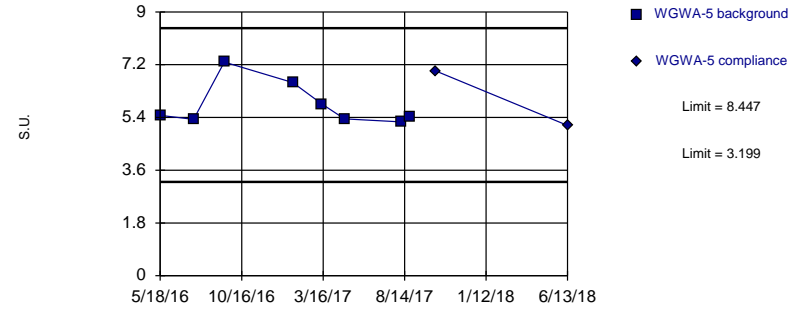
Background Data Summary: Mean=6.899, Std. Dev.=0.3213, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9498, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



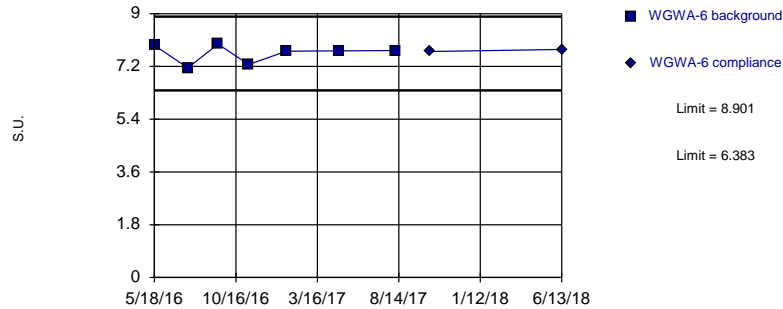
Background Data Summary: Mean=5.823, Std. Dev.=0.7369, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7798, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



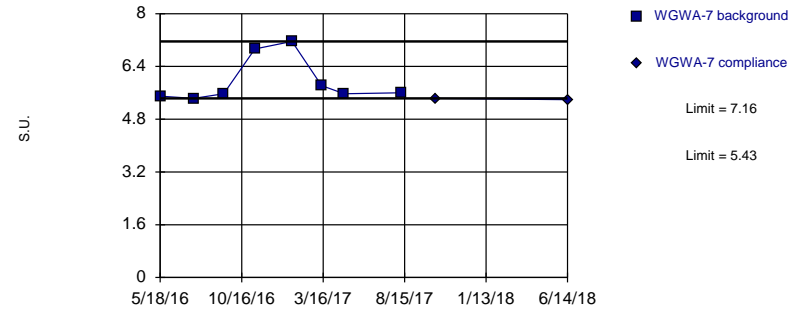
Background Data Summary: Mean=7.642, Std. Dev.=0.3103, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8525, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limits

pH
Intrawell Non-parametric



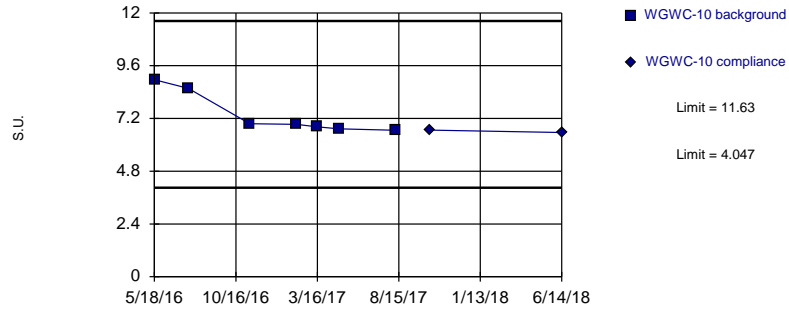
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.08484. Individual comparison alpha = 0.04288 (1 of 2).

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



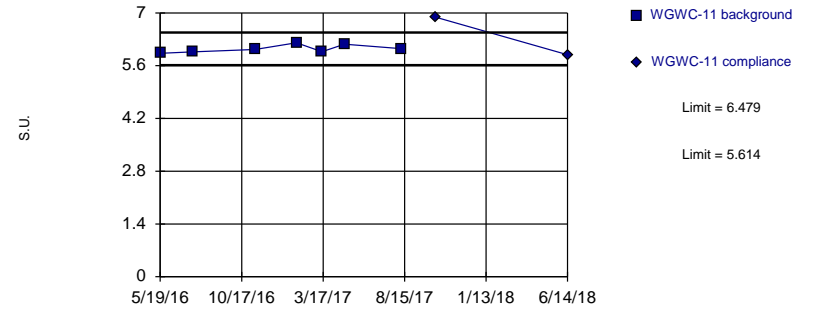
Background Data Summary (based on square root transformation): Mean=2.711, Std. Dev.=0.1724, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7339, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



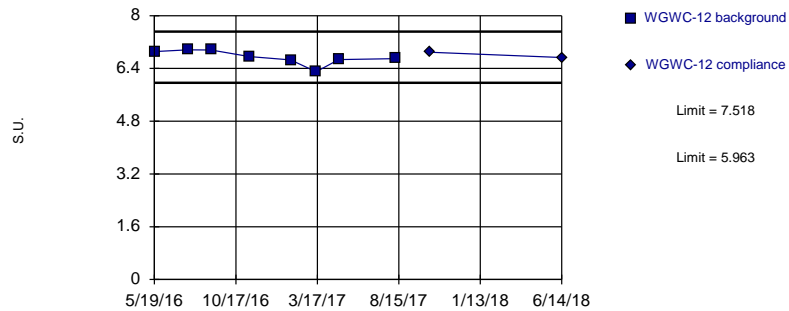
Background Data Summary: Mean=6.047, Std. Dev.=0.1066, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.899, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



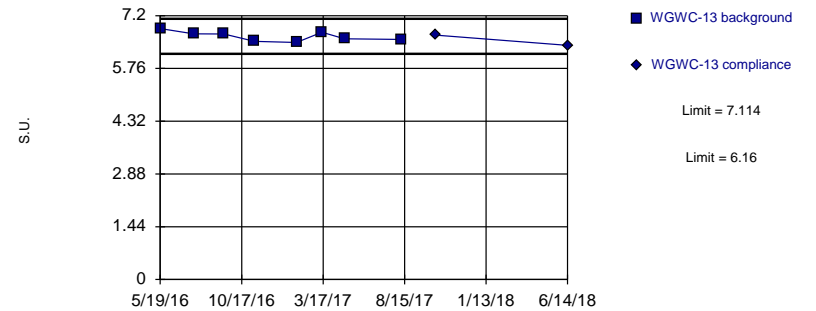
Background Data Summary: Mean=6.74, Std. Dev.=0.2184, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8774, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric

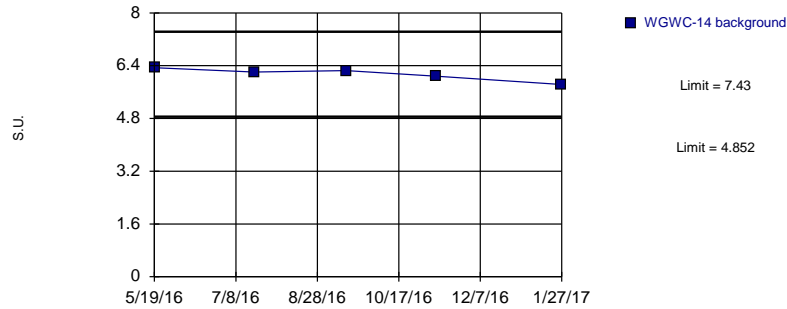


Background Data Summary: Mean=6.637, Std. Dev.=0.1339, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

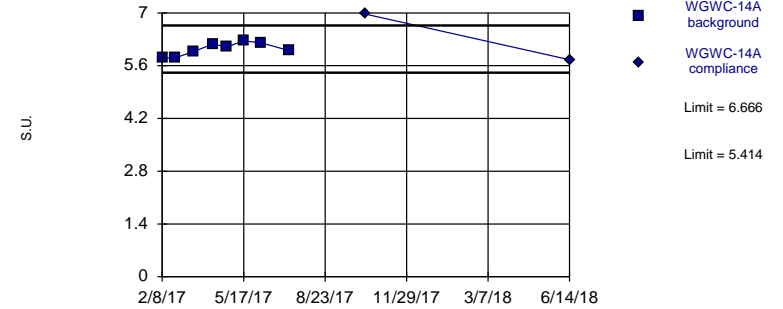
pH
Intrawell Parametric, WGWC-14



Background Data Summary: Mean=6.141, Std. Dev.=0.1976, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9243, critical = 0.686. Kappa = 6.523 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Assumes 1 future value.

Prediction Limit Analysis Run 1/23/2019 5:34 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

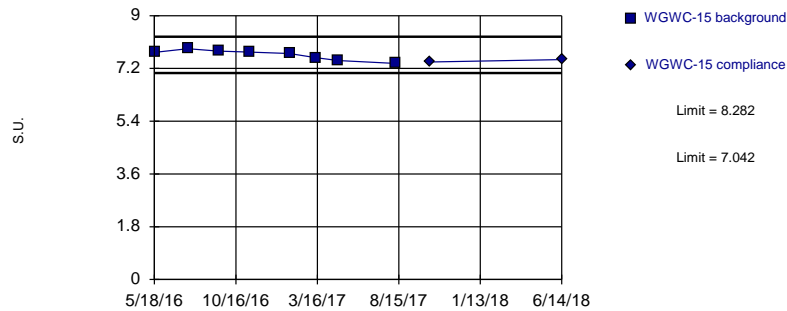
Within Limits
pH
Intrawell Parametric



Background Data Summary: Mean=6.04, Std. Dev.=0.1758, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9217, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

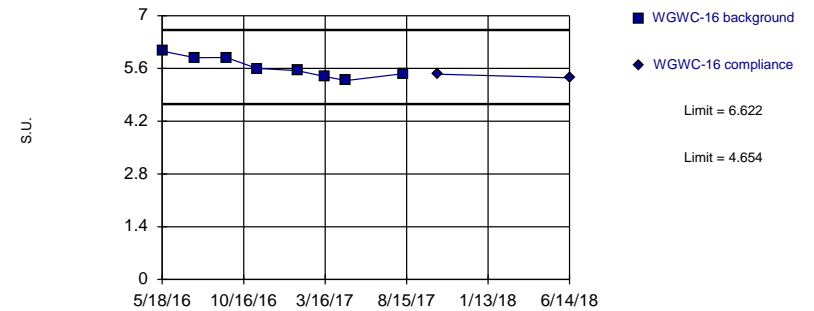
Within Limits
pH
Intrawell Parametric



Background Data Summary: Mean=7.662, Std. Dev.=0.1742, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9232, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits
pH
Intrawell Parametric

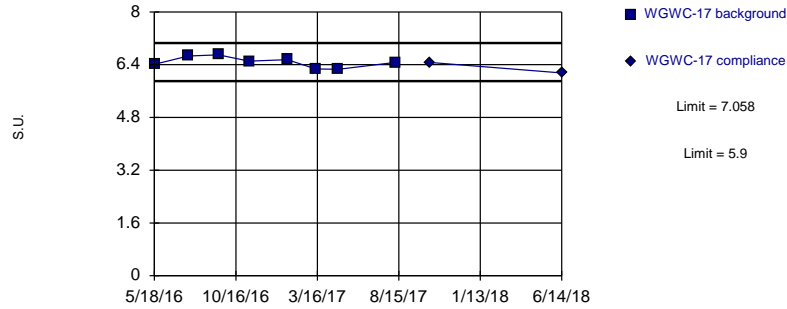


Background Data Summary: Mean=5.638, Std. Dev.=0.2764, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



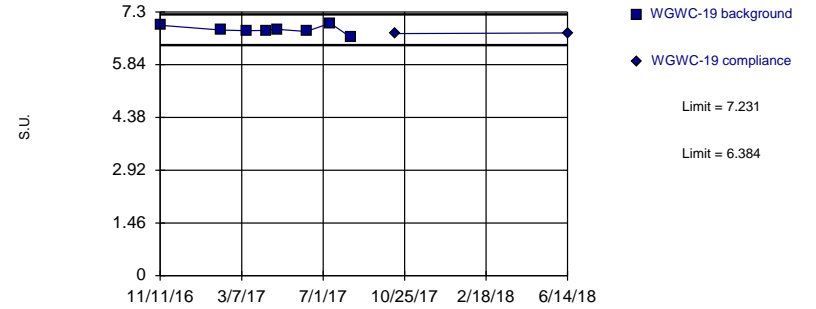
Background Data Summary: Mean=6.479, Std. Dev.=0.1626, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



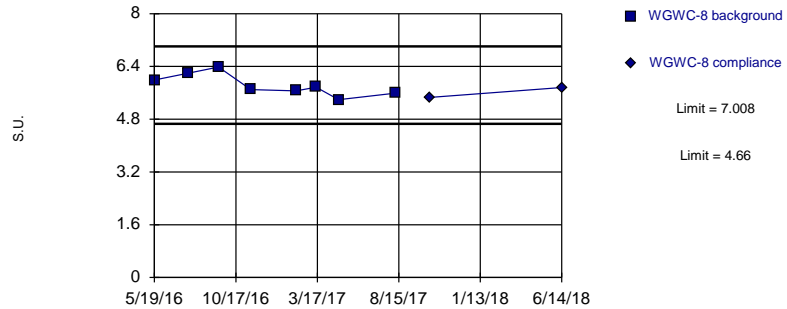
Background Data Summary: Mean=6.808, Std. Dev.=0.119, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9284, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



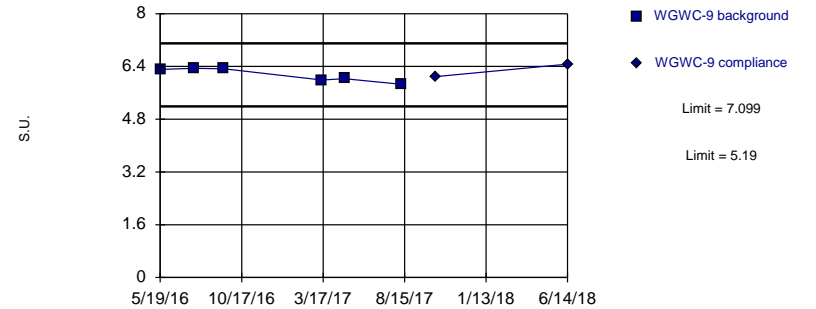
Background Data Summary: Mean=5.834, Std. Dev.=0.3298, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9531, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



Background Data Summary: Mean=6.144, Std. Dev.=0.2097, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8479, critical = 0.713. Kappa = 4.551 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:34 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1	WGWA-1	WGWA-18	WGWA-18	WGWA-2	WGWA-2	WGWA-3	WGWA-3
5/17/2016	5.24		7.81		6.23			
5/18/2016							5.55	
7/18/2016	5.434038							
7/19/2016					6.285413			
7/20/2016							5.656628	
9/13/2016	5.22		7.18		6.3		5.63	
11/9/2016	5.57		6.03		6.26			
11/10/2016							5.61	
1/17/2017	5.48				6.8			
1/18/2017							5.81	
1/19/2017			6.71					
3/13/2017	5.4				6.18			
3/14/2017			6.45				5.53	
4/24/2017	5.4				6.35			
4/25/2017			6.93				5.59	
8/8/2017	5.32		6.72		6.23		5.52	
10/10/2017		5.26				6.32		
10/11/2017				6.75				5.51
6/13/2018		5.33		6.31				
6/14/2018						6.02		5.58

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-4	WGWA-4	WGWA-5	WGWA-5	WGWA-6	WGWA-6	WGWA-7	WGWA-7
5/18/2016	7.23		5.47		7.92		5.5	
7/19/2016			5.336672		7.154587		5.43	
7/20/2016	7.281557							
9/13/2016	7.15				7.96		5.57	
9/14/2016			7.29					
11/9/2016					7.27			
11/10/2016	6.33						6.93	
1/18/2017	6.94				7.72		7.16	
1/19/2017			6.59					
3/14/2017	6.75		5.86				5.82	
4/25/2017	6.84		5.35		7.73		5.57	
8/8/2017					7.74		5.6	
8/9/2017	6.67		5.25					
8/25/2017			5.44					
10/11/2017		6.75		6.99		7.71		5.43
6/13/2018				5.13		7.78		
6/14/2018		6.67						5.39

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-10	WGWC-11	WGWC-11	WGWC-12	WGWC-12	WGWC-13	WGWC-13
5/18/2016	8.96							
5/19/2016			5.93		6.91		6.85	
7/18/2016			5.9661					
7/20/2016	8.56774				6.962608		6.705264	
9/1/2016					6.96			
9/14/2016							6.7	
11/10/2016							6.5	
11/11/2016	6.96		6.03		6.76			
1/27/2017			6.21		6.66		6.47	
2/6/2017	6.93							
3/15/2017	6.82		5.97		6.3		6.75	
4/26/2017	6.73		6.17		6.67		6.57	
8/9/2017							6.55	
8/10/2017	6.66		6.05		6.7			
10/12/2017		6.67		6.89		6.89		6.67
6/14/2018		6.56		5.89		6.73		6.39

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14	WGWC-14A	WGWC-14A	WGWC-15	WGWC-15	WGWC-16	WGWC-16
5/18/2016				7.75		6.06	
5/19/2016	6.34						
7/18/2016						5.884339	
7/19/2016				7.876073			
7/20/2016	6.206347						
9/14/2016				7.79		5.89	
9/15/2016	6.25						
11/10/2016	6.08			7.76		5.6	
1/24/2017				7.71		5.54	
1/27/2017	5.83						
2/8/2017		5.81					
2/23/2017		5.8					
3/14/2017				7.57			
3/15/2017						5.39	
3/17/2017		5.97					
4/11/2017		6.18					
4/25/2017				7.47		5.28	
4/26/2017		6.09					
5/17/2017		6.26					
6/7/2017		6.21					
7/11/2017		6					
8/9/2017				7.37		5.46	
10/11/2017			6.97		7.42		5.45
6/14/2018			5.76		7.5		5.35

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWC-17	WGWC-19	WGWC-19	WGWC-8	WGWC-8	WGWC-9	WGWC-9
5/18/2016	6.41							
5/19/2016					5.99		6.31	
7/20/2016	6.662463				6.194334		6.345061	
9/14/2016	6.7						6.33	
9/15/2016					6.38			
11/10/2016	6.51							
11/11/2016			6.93					
11/14/2016					5.7			
1/20/2017	6.55							
2/6/2017			6.8		5.66			
3/14/2017	6.27							
3/15/2017			6.78		5.77		5.99	
4/11/2017			6.79					
4/25/2017	6.26							
4/26/2017			6.82		5.39		6.03	
6/7/2017			6.76					
7/11/2017			6.99					
8/9/2017	6.47							
8/10/2017			6.59		5.59		5.86	
10/11/2017		6.47						
10/12/2017				6.7		5.46		6.09
6/14/2018		6.15		6.72		5.76		6.47

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	WGWC-10	0.00065	0.0005	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.00065	0.00047	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.00065	0.000125	0.01	No	10	80	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.00093	0.00065	0.01	No	10	70	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0021	0.0006	0.01	No	10	40	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002764	0.001666	0.01	No	10	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.003909	0.0006952	0.01	No	10	20	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.00095	0.00058	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-19	0.00065	0.00065	0.01	No	10	100	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-8	0.00065	0.00055	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.0017	0.00047	0.01	No	10	70	No	0.011	NP (normality)
Barium (mg/L)	WGWC-10	0.04168	0.03485	2	No	10	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-11	0.034	0.028	2	No	10	0	No	0.011	NP (normality)
Barium (mg/L)	WGWC-12	0.0226	0.01465	2	No	10	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05746	0.04279	2	No	10	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05381	0.03259	2	No	10	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02094	0.01818	2	No	10	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.07029	0.05644	2	No	10	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-17	0.02097	0.01561	2	No	10	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.001743	0.001111	2	No	10	0	No	0.01	Param.
Barium (mg/L)	WGWC-8	0.002786	0.0009301	2	No	10	0	No	0.01	Param.
Barium (mg/L)	WGWC-9	0.0015	0.00053	2	No	10	30	No	0.011	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-10	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-11	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-12	0.00125	0.00025	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-13	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-14A	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-15	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-17	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-19	0.00125	0.00125	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.001739	0.001211	0.004	No	10	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.00125	0.00034	0.004	No	10	80	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-10	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-11	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-12	0.00125	0.00025	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-13	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-14A	0.00125	0.00125	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-15	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.001908	0.0001838	0.005	No	10	20	No	0.01	Param.
Cadmium (mg/L)	WGWC-17	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-19	0.00125	0.00125	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-8	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-9	0.00125	0.0005	0.005	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-10	0.0027	0.0011	0.1	No	10	20	No	0.011	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-11	0.00125	0.0011	0.1	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-12	0.00125	0.00025	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-13	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-15	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:28 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	WGWC-16	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-17	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-19	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-8	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-9	0.00125	0.00125	0.1	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001971	0.0006688	0.013	No	10	10	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00049	0.013	No	10	40	No	0.011	NP (Cohens/xfrm)
Cobalt (mg/L)	WGWC-12	0.002462	0.0004889	0.013	No	10	10	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.00125	0.0004	0.013	No	10	70	No	0.011	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01427	0.00845	0.013	No	10	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.00125	0.00125	0.013	No	10	100	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.01568	0.008244	0.013	No	10	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-17	0.002178	0.001122	0.013	No	10	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.00125	0.00045	0.013	No	10	70	No	0.011	NP (normality)
Cobalt (mg/L)	WGWC-8	0.00125	0.00066	0.013	No	10	80	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.00125	0.00073	0.013	No	10	90	No	0.011	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.5068	0.06982	10.4	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5168	-0.04648	10.4	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.6386	0.08468	10.4	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8188	0.3866	10.4	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	1.154	0.5065	10.4	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.893	0.2077	10.4	No	10	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.703	1.242	10.4	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.7772	0.0008271	10.4	No	10	10	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.5389	0.06231	10.4	No	10	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.801	0.8694	10.4	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4173	0.121	10.4	No	10	10	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1942	0.1414	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.039	4	No	11	90.91	No	0.006	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.2137	0.09376	4	No	11	36.36	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.3353	0.2727	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.1	4	No	11	100	No	0.006	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.9264	0.8062	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	1	0.1	4	No	11	18.18	No	0.006	NP (normality)
Fluoride (mg/L)	WGWC-17	0.1712	0.1153	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.406	0.3431	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3973	0.2361	4	No	11	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.704	1.347	4	No	11	0	No	0.01	Param.
Lithium (mg/L)	WGWC-10	0.02263	0.01065	0.04	No	10	0	No	0.01	Param.
Lithium (mg/L)	WGWC-11	0.0025	0.0011	0.04	No	10	80	No	0.011	NP (NDs)
Lithium (mg/L)	WGWC-12	0.01	0.0011	0.04	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-13	0.0038	0.0018	0.04	No	10	70	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-14A	0.0033	0.0018	0.04	No	10	60	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-15	0.0077	0.0025	0.04	No	10	20	No	0.011	NP (Cohens/xfrm)
Lithium (mg/L)	WGWC-16	0.01635	0.008614	0.04	No	10	10	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-17	0.0067	0.0042	0.04	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-19	0.056	0.044	0.04	Yes	10	0	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-8	0.02776	0.0112	0.04	No	10	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.04123	0.02967	0.04	No	10	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.00013	0.000082	0.002	No	10	60	No	0.011	NP (normality)

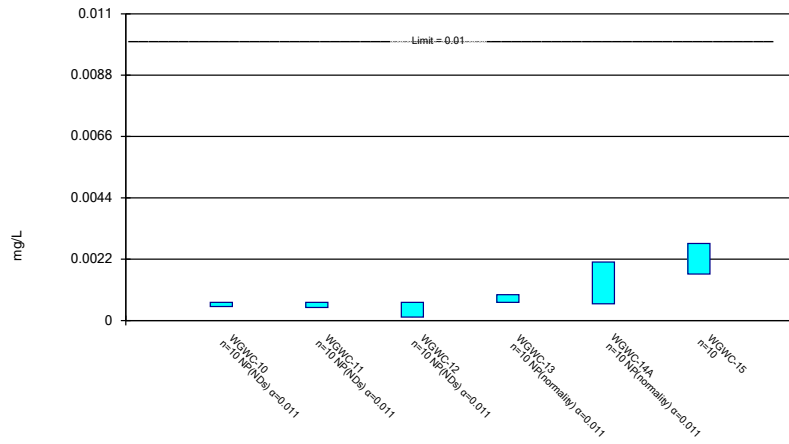
Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:28 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	WGWC-11	0.00011	0.000082	0.002	No	10	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-12	0.00018	0.000079	0.002	No	10	60	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-13	0.0001	0.000081	0.002	No	10	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0001	0.0001	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0001	0.000071	0.002	No	10	60	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-16	0.00019	0.00007	0.002	No	10	70	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-17	0.0001	0.000074	0.002	No	10	90	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0001	0.000076	0.002	No	10	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-8	0.00013	0.000078	0.002	No	10	70	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-9	0.00013	0.0001	0.002	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.0075	0.00091	0.1	No	10	80	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.0075	0.0011	0.1	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.0075	0.0009	0.1	No	10	70	No	0.011	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.003306	0.001801	0.1	No	10	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-14A	0.0075	0.001	0.1	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.01011	0.003815	0.1	No	10	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-16	0.0075	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-17	0.008114	0.003958	0.1	No	10	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.0075	0.001	0.1	No	10	50	No	0.011	NP (normality)
Molybdenum (mg/L)	WGWC-8	0.0075	0.005	0.1	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-9	0.0084	0.004	0.1	No	10	0	No	0.011	NP (normality)
Selenium (mg/L)	WGWC-10	0.00065	0.00031	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-11	0.00065	0.00049	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-12	0.0021	0.000125	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-13	0.00065	0.00065	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.00065	0.0003	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-15	0.00065	0.0005	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01425	0.007861	0.05	No	10	0	No	0.01	Param.
Selenium (mg/L)	WGWC-17	0.00065	0.00065	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-19	0.00065	0.00036	0.05	No	10	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.003	0.05	No	10	0	No	0.011	NP (normality)
Selenium (mg/L)	WGWC-9	0.00261	0.001906	0.05	No	10	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.00025	0.000085	0.002	No	10	90	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-11	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-12	0.00025	0.00005	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-13	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.00025	0.00011	0.002	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	WGWC-15	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-16	0.0002966	0.0001325	0.002	No	10	10	x^(1/3)	0.01	Param.
Thallium (mg/L)	WGWC-17	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-19	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-8	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-9	0.00025	0.00025	0.002	No	10	100	No	0.011	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

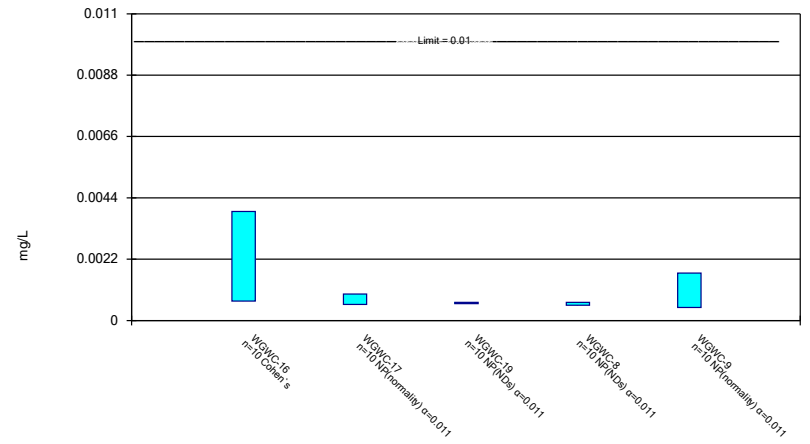
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

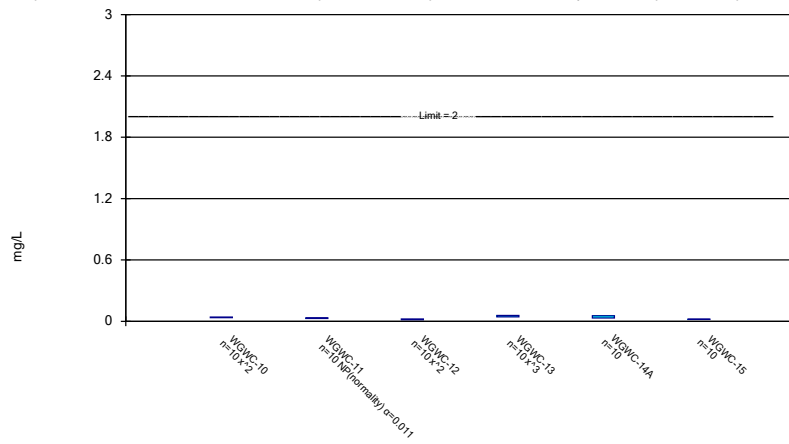
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Constituent: Arsenic Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

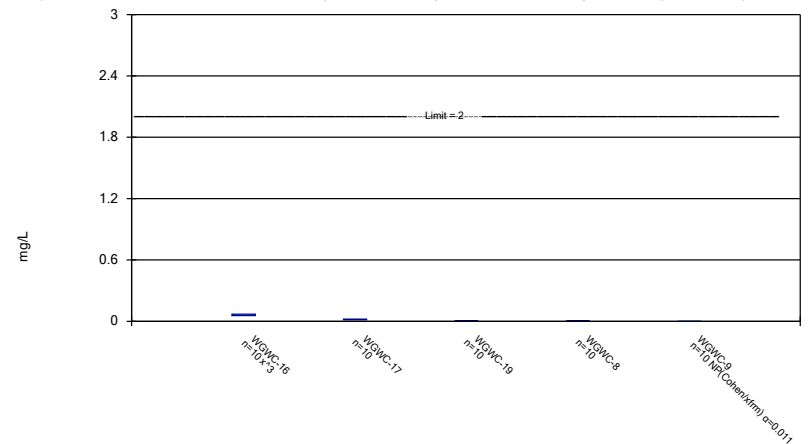
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Constituent: Barium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

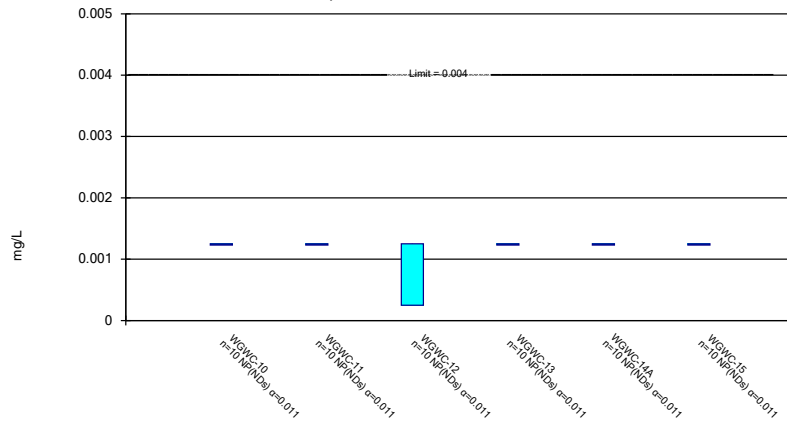
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Constituent: Barium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

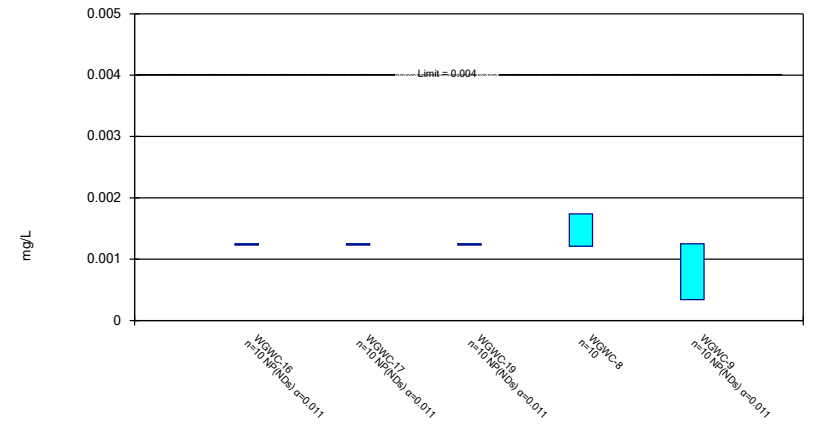
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Constituent: Beryllium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

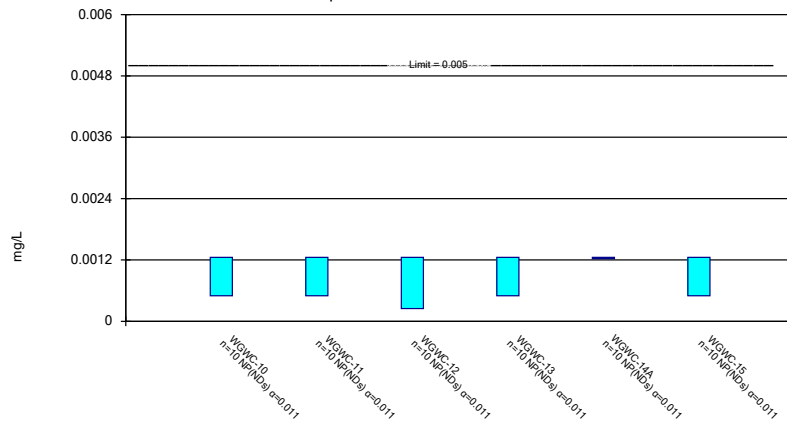
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Constituent: Beryllium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

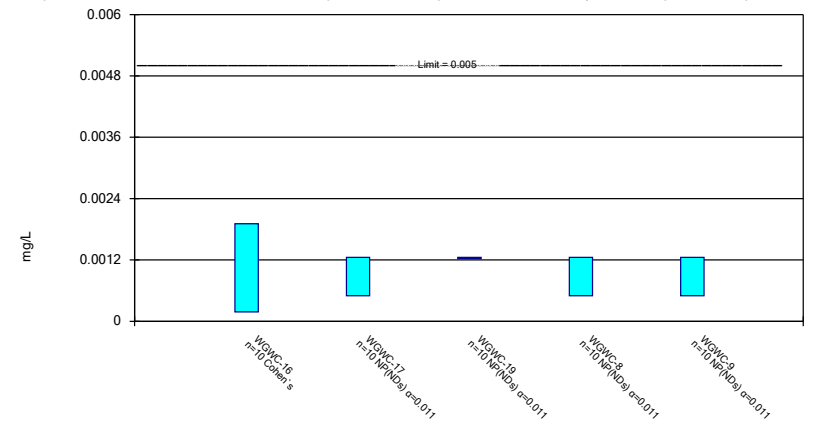
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Constituent: Cadmium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

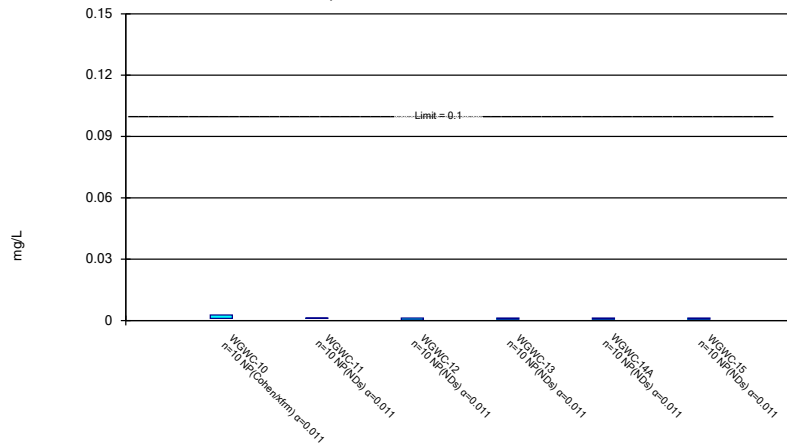
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

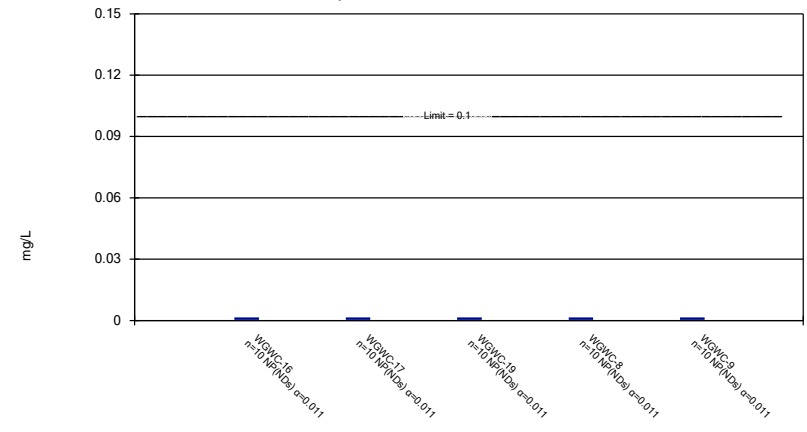
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

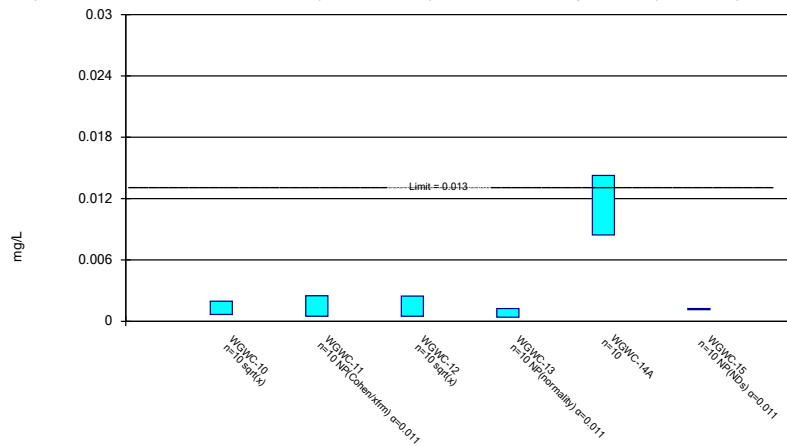
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

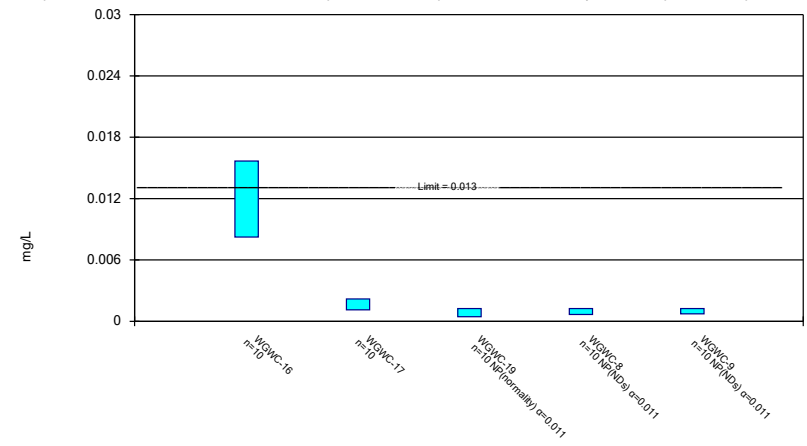
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

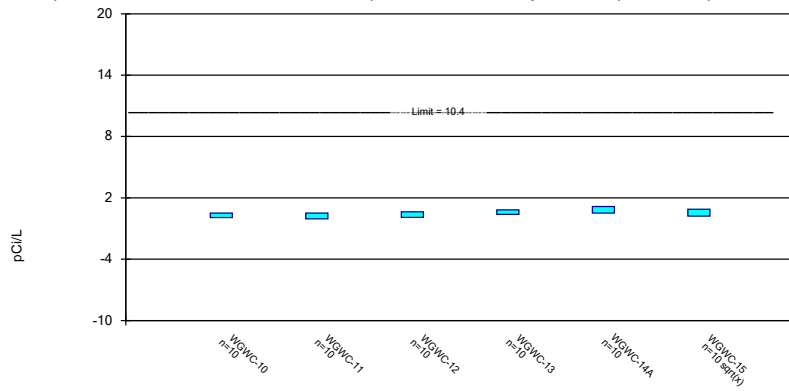
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

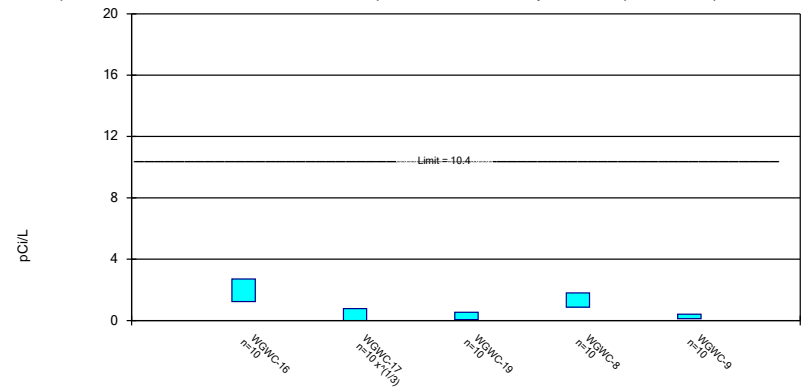
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

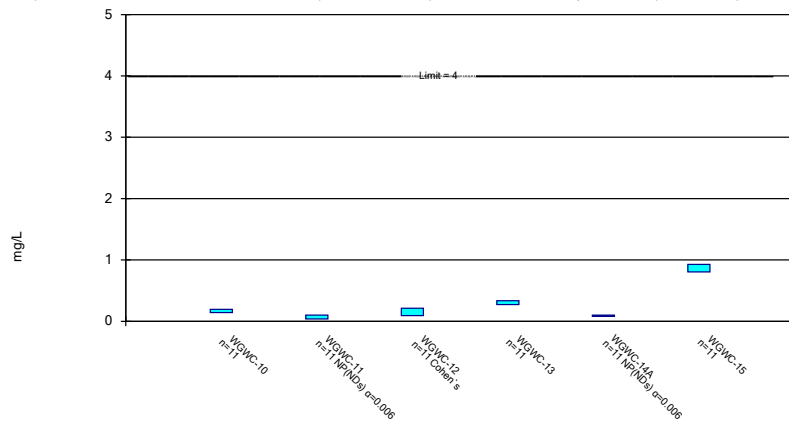
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

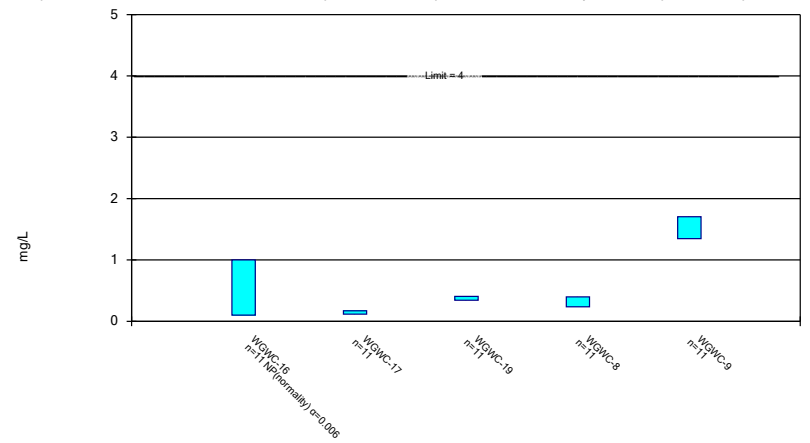
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

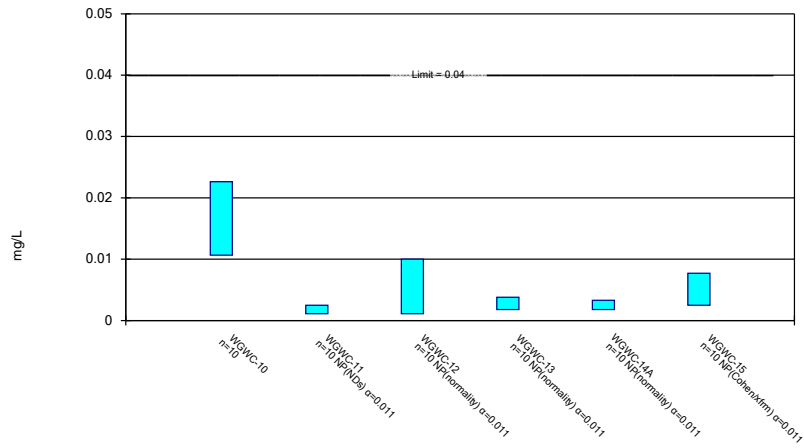
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

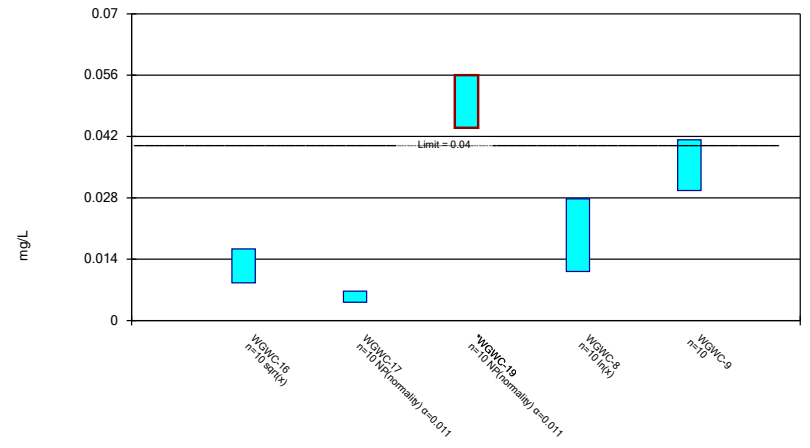
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

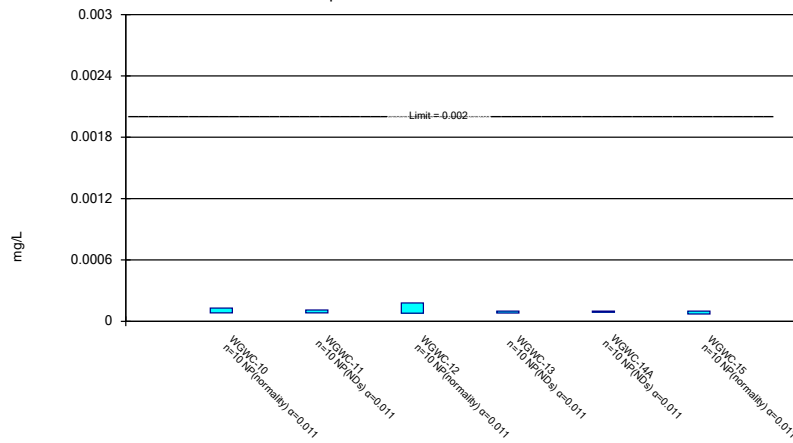
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

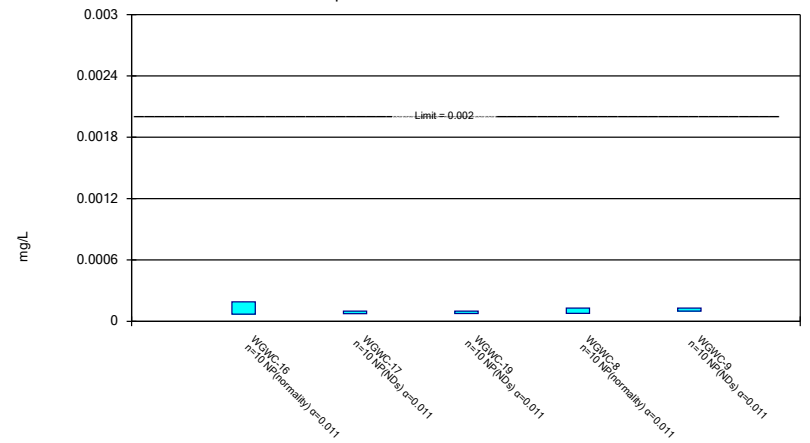
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

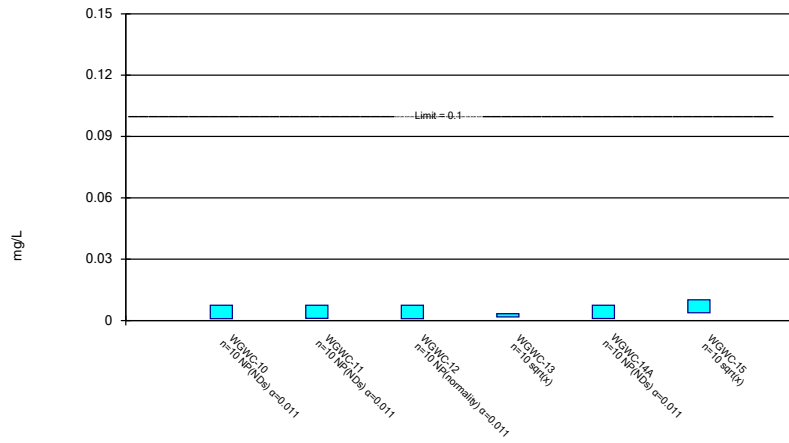
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

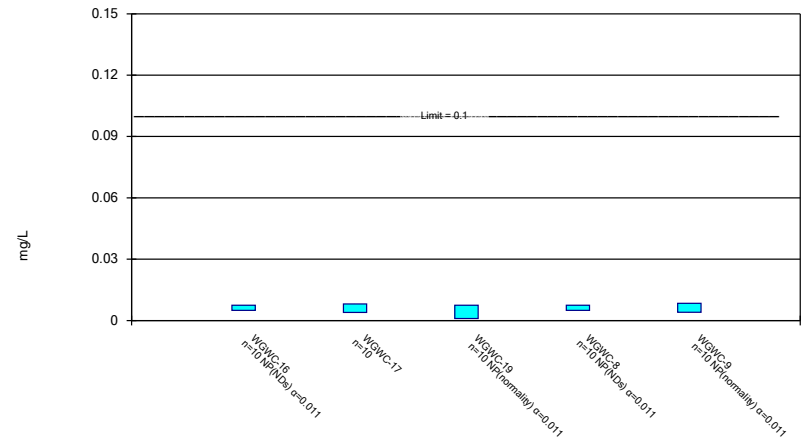
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

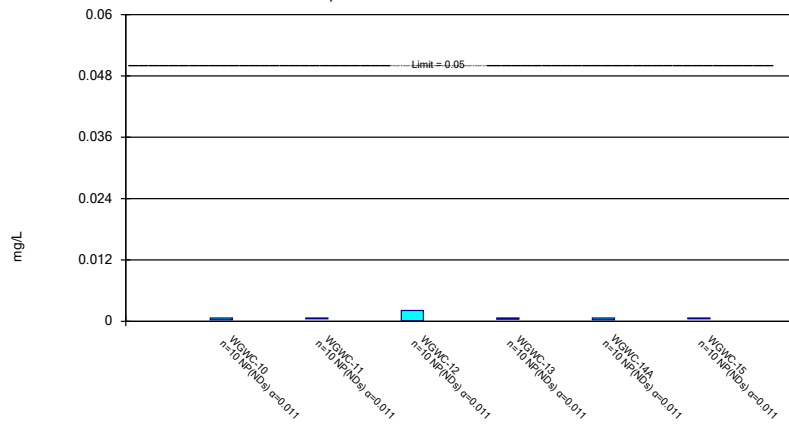
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

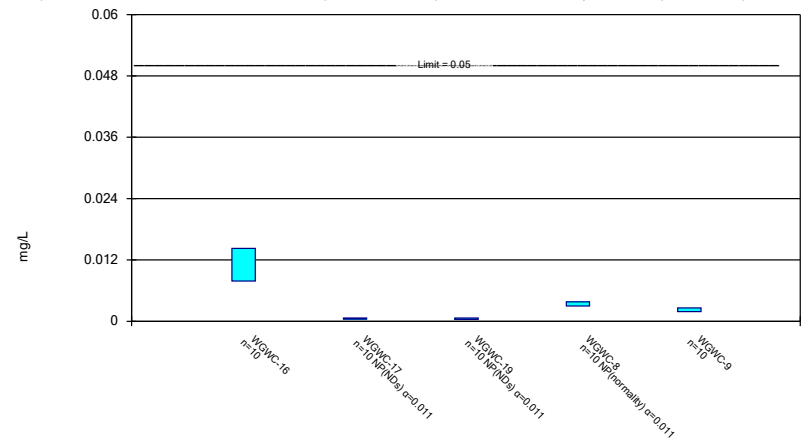
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

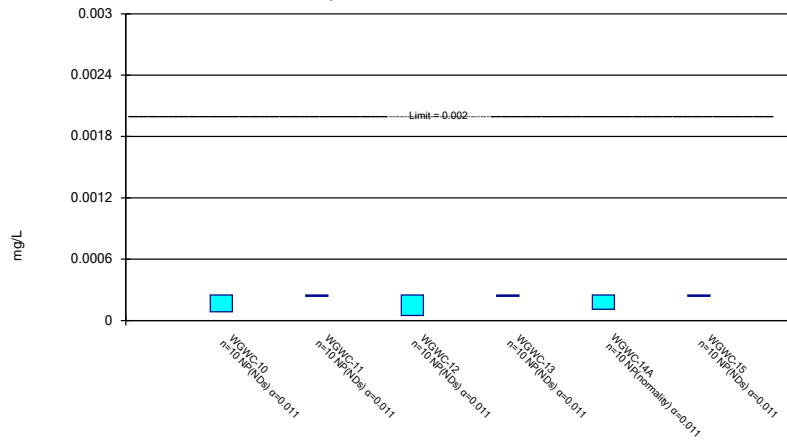
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/11/2019 3:26 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

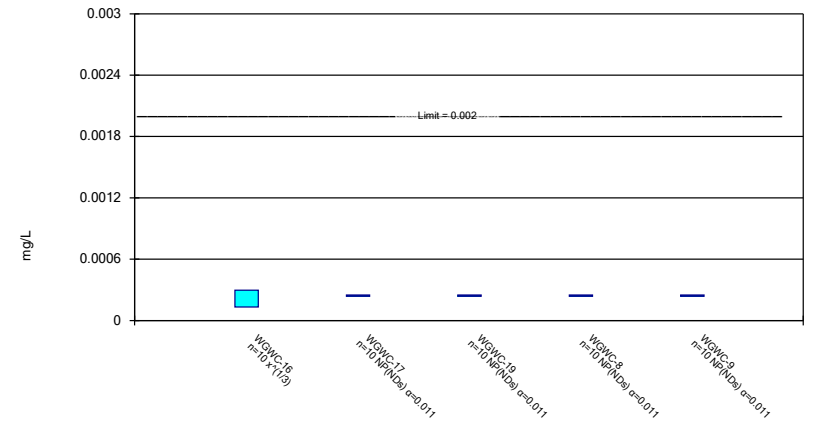
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 1/11/2019 3:26 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.005					0.00345
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0031
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		0.0024
11/10/2016				<0.0013		0.0023
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						0.0019
1/27/2017		0.00047 (J)	<0.0013	0.00066 (J)		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						0.0016
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					0.0006 (J)	
4/11/2017					0.0032	
4/25/2017						0.0019
4/26/2017	<0.0013	<0.0013	<0.00025	<0.0013	0.0019	
5/17/2017					0.0014	
6/7/2017					0.0021	
7/11/2017					0.00095 (J)	
8/9/2017				<0.0013		0.0017
8/10/2017	<0.0013	<0.0013	0.00048 (J)			
3/29/2018		<0.0013	<0.0013	0.00067 (J)	<0.0013	
3/30/2018	<0.0013					0.0018
6/14/2018	0.0005 (J)	<0.0013	0.00052 (J)	0.00093 (J)	<0.0013	0.002
Mean	0.00082	0.000817	0.0007525	0.000866	0.001275	0.002215
Std. Dev.	0.0005922	0.000594	0.0006359	0.0005807	0.0008766	0.0006156
Upper Lim.	0.00065	0.00065	0.00065	0.00093	0.0021	0.002764
Lower Lim.	0.0005	0.00047	0.000125	0.00065	0.0006	0.001666

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				<0.005	<0.005
7/19/2016	0.0009 (J)				
7/20/2016		0.00058 (J)		0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.0013			<0.0013
9/15/2016				<0.0013	
11/10/2016	0.0021	0.00082 (J)			
11/11/2016			<0.0013		
11/14/2016				<0.0013	
1/20/2017		<0.0013			
1/24/2017	0.0015				
2/6/2017			<0.0013	<0.0013	
2/9/2017					0.0017
3/14/2017		<0.0013			
3/15/2017	0.0014		<0.0013	<0.0013	0.00047 (J)
4/11/2017			<0.0013		<0.0013
4/25/2017	0.0014	0.00095 (J)			
4/26/2017			<0.0013	<0.0013	<0.0013
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.0013	<0.0013			
8/10/2017			<0.0013	<0.0013	<0.0013
3/29/2018	0.0014		<0.0013	<0.0013	<0.0013
3/30/2018		<0.0013			
6/14/2018	<0.0013	0.00076 (J)	<0.0013	<0.0013	<0.0013
Mean	0.001455	0.000886	0.00065	0.000825	0.000935
Std. Dev.	0.0005273	0.0005775	0	0.0005894	0.0006465
Upper Lim.	0.003909	0.00095	0.00065	0.00065	0.0017
Lower Lim.	0.0006952	0.00058	0.00065	0.00055	0.00047

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2019 3:28 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0391					0.0206
5/19/2016		0.031	0.0214	0.055		
7/19/2016						0.019
7/20/2016	0.028	0.029	0.019	0.039		
9/14/2016	0.035	0.031	0.02	0.04		0.02
11/10/2016				0.04		0.02
11/11/2016	0.042	0.034	0.022			
1/24/2017						0.017
1/27/2017		0.042	0.023	0.042		
2/6/2017	0.041					
2/8/2017					0.037	
2/23/2017					0.051	
3/14/2017						0.018
3/15/2017	0.04	0.032	0.024	0.058		
3/17/2017					0.046	
4/11/2017					0.055	
4/25/2017						0.018
4/26/2017	0.039	0.03	0.004	0.054	0.042	
5/17/2017					0.052	
6/7/2017					0.06	
7/11/2017					0.038	
8/9/2017				0.055		0.02
8/10/2017	0.038	0.03	0.017			
3/29/2018		0.028	0.017	0.061	0.028	
3/30/2018	0.042					0.021
6/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
Mean	0.03821	0.0317	0.01824	0.0499	0.0432	0.01956
Std. Dev.	0.00416	0.003974	0.005773	0.008569	0.0119	0.001543
Upper Lim.	0.04168	0.034	0.0226	0.05746	0.05381	0.02094
Lower Lim.	0.03485	0.028	0.01465	0.04279	0.03259	0.01818

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2019 3:28 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.01
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.0025
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.0025
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
Mean	0.06305	0.01829	0.001427	0.001858	0.001397
Std. Dev.	0.008896	0.003007	0.000354	0.00104	0.001312
Upper Lim.	0.07029	0.02097	0.001743	0.002786	0.0015
Lower Lim.	0.05644	0.01561	0.001111	0.0009301	0.00053

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.003					<0.003
5/19/2016		<0.003	<0.003	<0.003		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.001275	0.001275	0.001175	0.001275	0.00125	0.001275
Std. Dev.	7.906E-05	7.906E-05	0.0003344	7.906E-05	0	7.906E-05
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00025	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.003	<0.003			
5/19/2016				0.00102 (J)	<0.003
7/19/2016	<0.0025				
7/20/2016		<0.0025		0.0014 (J)	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				0.00093 (J)	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				0.0014 (J)	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	0.0017 (J)	
2/9/2017					0.00041 (J)
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	0.0016 (J)	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	0.0017 (J)	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	0.0017 (J)	0.00034 (J)
3/29/2018	<0.0025		<0.0025	0.0018 (J)	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	0.0015 (J)	<0.0025
Mean	0.001275	0.001275	0.00125	0.001475	0.0011
Std. Dev.	7.906E-05	7.906E-05	0	0.0002961	0.0003903
Upper Lim.	0.00125	0.00125	0.00125	0.001739	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.001211	0.00034

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001					<0.001
5/19/2016		<0.001	<0.001	<0.001		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.001175	0.001175	0.001075	0.001175	0.00125	0.001175
Std. Dev.	0.0002372	0.0002372	0.0003736	0.0002372	0	0.0002372
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0005	0.0005	0.00025	0.0005	0.00125	0.0005

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.000362 (J)	<0.001			
5/19/2016				<0.001	<0.001
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	0.00037 (J)	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	0.00055 (J)				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	0.00067 (J)		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.00058 (J)	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.00054 (J)	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	0.00082 (J)		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	0.0007 (J)	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.0007092	0.001175	0.00125	0.001175	0.001175
Std. Dev.	0.0003171	0.0002372	0	0.0002372	0.0002372
Upper Lim.	0.001908	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0001838	0.0005	0.00125	0.0005	0.0005

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0025
7/20/2016	0.0012 (J)	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.0015 (J)	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	0.0011 (J)					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	0.0015 (J)	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	0.0013 (J)	0.0011 (J)	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	0.0016 (J)	<0.0025	<0.0025			
3/29/2018		0.0012 (J)	<0.0025	<0.0025	<0.0025	
3/30/2018	0.0027					<0.0025
6/14/2018	0.0023 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.001945	0.001605	0.001525	0.001625	0.00125	0.001625
Std. Dev.	0.001188	0.001194	0.001261	0.001186	0	0.001186
Upper Lim.	0.0027	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0011	0.0011	0.00025	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2019 3:28 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.01	<0.01			
5/19/2016				<0.01	<0.01
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	<0.0025		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.001625	0.001625	0.00125	0.001625	0.001625
Std. Dev.	0.001186	0.001186	0	0.001186	0.001186
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
Mean	0.001331	0.0015	0.0015	0.001424	0.01136	0.001625
Std. Dev.	0.0008678	0.001357	0.001368	0.001299	0.003262	0.001186
Upper Lim.	0.001971	0.0025	0.002462	0.00125	0.01427	0.00125
Lower Lim.	0.0006688	0.00049	0.0004889	0.0004	0.00845	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0069	0.00245 (J)			
5/19/2016				<0.01	<0.01
7/19/2016	0.012				
7/20/2016		0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.013	0.0014 (J)			<0.0025
9/15/2016				<0.0025	
11/10/2016	0.016	0.0016 (J)			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		0.0014 (J)			
1/24/2017	0.015				
2/6/2017			0.00058 (J)	<0.0025	
2/9/2017					0.00073 (J)
3/14/2017		0.0023 (J)			
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.014	0.0023 (J)			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.016	0.0011 (J)			
8/10/2017			0.00049 (J)	<0.0025	<0.0025
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025
3/30/2018		0.0016 (J)			
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
Mean	0.01196	0.00165	0.001027	0.001551	0.001573
Std. Dev.	0.004164	0.0005916	0.0003604	0.001226	0.001215
Upper Lim.	0.01568	0.002178	0.00125	0.00125	0.00125
Lower Lim.	0.008244	0.001122	0.00045	0.00066	0.00073

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)					0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		
7/19/2016						0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016				1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			
1/24/2017						0.779
1/27/2017		0.898	0.836	0.668		
2/6/2017	0.104 (U)					
2/8/2017					0.958	
2/23/2017					0.771	
3/14/2017						0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847		
3/17/2017					1.7	
4/11/2017					0.901	
4/25/2017						0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912			
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	<0.382	<0.514	0.463	0.55	<0.524
Mean	0.2883	0.2352	0.3616	0.6027	0.8302	0.5581
Std. Dev.	0.2449	0.3157	0.3104	0.2422	0.3628	0.4554
Upper Lim.	0.5068	0.5168	0.6386	0.8188	1.154	0.893
Lower Lim.	0.06982	-0.04648	0.08468	0.3866	0.5065	0.2077

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	<0.525	<0.418	1.86	<0.395
Mean	1.973	0.3232	0.3006	1.335	0.2692
Std. Dev.	0.8188	0.414	0.2671	0.5219	0.1661
Upper Lim.	2.703	0.7772	0.5389	1.801	0.4173
Lower Lim.	1.242	8.271E-05	0.06231	0.8694	0.121

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206					0.779
5/19/2016		0.039 (J)	0.12 (J)	0.384		
7/19/2016						0.97
7/20/2016	0.23	<0.2	0.11 (J)	0.34		
9/14/2016	0.17 (J)	<0.2	0.095 (J)	0.31		0.89
11/10/2016				0.26		0.88
11/11/2016	0.14 (J)	<0.2	<0.2			
1/24/2017						0.92
1/27/2017		<0.2	<0.2	0.28		
2/6/2017	0.15 (J)					
2/8/2017					<0.2	
2/23/2017					<0.2	
3/14/2017						0.77
3/15/2017	0.16 (J)	<0.2	<0.2	0.3		
3/17/2017					<0.2	
4/11/2017					<0.2	
4/25/2017						0.95
4/26/2017	0.17 (J)	<0.2	<0.2	0.33	<0.2	
5/17/2017					<0.2	
6/7/2017					<0.2	
7/11/2017					<0.2	
8/9/2017				0.32		0.91
8/10/2017	0.2	<0.2	0.11 (J)			
10/11/2017					<0.2	0.88
10/12/2017	0.14 (J)	<0.2	0.091 (J)	0.28		
3/29/2018		<0.2	0.089 (J)	0.27	<0.2	
3/30/2018	0.13 (J)					0.79
6/14/2018	0.15 (J)	<0.2	0.1 (J)	0.27	<0.2	0.79
Mean	0.1678	0.09445	0.1014	0.304	0.1	0.8663
Std. Dev.	0.03169	0.01839	0.008981	0.03752	0	0.07213
Upper Lim.	0.1942	0.1	0.2137	0.3353	0.1	0.9264
Lower Lim.	0.1414	0.039	0.09376	0.2727	0.1	0.8062

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.1 (J)	0.121 (J)			
5/19/2016				0.304	1.58
7/19/2016	0.14 (J)				
7/20/2016		0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)			1.8
9/15/2016				0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)				
2/6/2017			0.45	0.27	
2/9/2017					1.3
3/14/2017		0.11 (J)			
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017			0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)			
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<2	0.14 (J)			
10/12/2017			0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018		0.095 (J)			
6/14/2018	<2	0.11 (J)	0.35	0.56	1.4
Mean	0.2927	0.1433	0.3745	0.3167	1.525
Std. Dev.	0.3507	0.03357	0.03778	0.09672	0.2143
Upper Lim.	1	0.1712	0.406	0.3973	1.704
Lower Lim.	0.1	0.1153	0.3431	0.2361	1.347

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.05
5/19/2016		<0.05	<0.05	<0.05		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
Mean	0.01664	0.00454	0.00842	0.00478	0.00265	0.00763
Std. Dev.	0.006714	0.007204	0.006249	0.007122	0.0005642	0.006317
Upper Lim.	0.02263	0.0025	0.01	0.0038	0.0033	0.0077
Lower Lim.	0.01065	0.0011	0.0011	0.0018	0.0018	0.0025

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/11/2019 3:28 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.05	<0.05			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
Mean	0.01252	0.00737	0.0507	0.02026	0.03545
Std. Dev.	0.004887	0.006272	0.008314	0.01379	0.006483
Upper Lim.	0.01635	0.0067	0.056	0.02776	0.04123
Lower Lim.	0.008614	0.0042	0.044	0.0112	0.02967

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0005					<0.0005
5/19/2016		<0.0005	<0.0005	<0.0005		
7/19/2016						9.3E-05 (J)
7/20/2016	8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)		
9/14/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/10/2016				8.3E-05 (J)		8.5E-05 (J)
11/11/2016	8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)			
1/24/2017						<0.0002
1/27/2017		<0.0002	<0.0002	<0.0002		
2/6/2017	8.3E-05 (J)					
2/8/2017					<0.0002	
2/23/2017					<0.0002	
3/14/2017						7.1E-05 (J)
3/15/2017	0.00013 (J)	<0.0002	0.00018 (J)	<0.0002		
3/17/2017					0.00013 (J)	
4/11/2017					<0.0002	
4/25/2017						<0.0002
4/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2017					<0.0002	
6/7/2017					<0.0002	
7/11/2017					<0.0002	
8/9/2017				<0.0002		<0.0002
8/10/2017	<0.0002	<0.0002	<0.0002			
3/29/2018		<0.0002	0.00011 (J)	<0.0002	<0.0002	
3/30/2018	<0.0002					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.000113	0.0001142	0.0001229	0.0001114	0.000103	0.0001085
Std. Dev.	5.005E-05	4.82E-05	5.196E-05	4.927E-05	9.487E-06	5.065E-05
Upper Lim.	0.00013	0.00011	0.00018	0.0001	0.0001	0.0001
Lower Lim.	8.2E-05	8.2E-05	7.9E-05	8.1E-05	0.0001	7.1E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0005	<0.0005			
5/19/2016				<0.0005	<0.0005
7/19/2016	<0.0002				
7/20/2016		7.4E-05 (J)		<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002			<0.0002
9/15/2016				0.00011 (J)	
11/10/2016	0.00012 (J)	<0.0002			
11/11/2016			7.6E-05 (J)		
11/14/2016				<0.0002	
1/20/2017		<0.0002			
1/24/2017	7E-05 (J)				
2/6/2017			0.00012 (J)	7.8E-05 (J)	
2/9/2017					<0.0002
3/14/2017		<0.0002			
3/15/2017	<0.0002		<0.0002	0.00013 (J)	0.00013 (J)
4/11/2017			<0.0002		<0.0002
4/25/2017	0.00019 (J)	<0.0002			
4/26/2017			<0.0002	<0.0002	<0.0002
6/7/2017			<0.0002		
7/11/2017			<0.0002		
8/9/2017	<0.0002	<0.0002			
8/10/2017			<0.0002	<0.0002	<0.0002
3/29/2018	<0.0002		<0.0002	<0.0002	<0.0002
3/30/2018		<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.000123	0.0001124	9.96E-05	0.0001168	0.000118
Std. Dev.	5.438E-05	4.903E-05	1.041E-05	4.849E-05	4.733E-05
Upper Lim.	0.00019	0.0001	0.0001	0.00013	0.00013
Lower Lim.	7E-05	7.4E-05	7.6E-05	7.8E-05	0.0001

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					0.0153
5/19/2016		<0.01	<0.01	0.00491 (J)		
7/19/2016						0.0093 (J)
7/20/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/14/2016	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016				0.0016 (J)		0.0065 (J)
11/11/2016	<0.015	<0.015	<0.015			
1/24/2017						0.0049 (J)
1/27/2017		<0.015	<0.015	0.0023 (J)		
2/6/2017	<0.015					
2/8/2017					<0.015	
2/23/2017					<0.015	
3/14/2017						0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017					<0.015	
4/11/2017					<0.015	
4/25/2017						0.004 (J)
4/26/2017	<0.015	<0.015	<0.003	0.0019 (J)	<0.015	
5/17/2017					<0.015	
6/7/2017					0.001 (J)	
7/11/2017					<0.015	
8/9/2017				0.0028 (J)		0.0042 (J)
8/10/2017	0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/29/2018		<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018	<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
Mean	0.005934	0.00661	0.005045	0.002561	0.00685	0.00701
Std. Dev.	0.002755	0.002089	0.002922	0.0009328	0.002055	0.003944
Upper Lim.	0.0075	0.0075	0.0075	0.003306	0.0075	0.01011
Lower Lim.	0.00091	0.0011	0.0009	0.001801	0.001	0.003815

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.01	0.00526 (J)			
5/19/2016				<0.01	0.00762 (J)
7/19/2016	<0.015				
7/20/2016		0.0066 (J)		<0.015	0.0084 (J)
9/14/2016	<0.015	0.0081 (J)			0.0071 (J)
9/15/2016				<0.015	
11/10/2016	<0.015	0.0076 (J)			
11/11/2016			<0.015		
11/14/2016				<0.015	
1/20/2017		0.0094 (J)			
1/24/2017	<0.015				
2/6/2017			0.001 (J)	<0.015	
2/9/2017					0.018
3/14/2017		0.0044 (J)			
3/15/2017	<0.015		<0.015	<0.015	0.0057 (J)
4/11/2017			<0.015		0.0047 (J)
4/25/2017	<0.015	0.0074 (J)			
4/26/2017			<0.015	<0.015	0.004 (J)
6/7/2017			0.0015 (J)		
7/11/2017			<0.015		
8/9/2017	<0.015	0.0066 (J)			
8/10/2017			0.0016 (J)	<0.015	0.0046 (J)
3/29/2018	<0.015		0.0012 (J)	<0.015	0.0048 (J)
3/30/2018		0.0024 (J)			
6/14/2018	<0.015	0.0026 (J)	0.0014 (J)	<0.015	0.0046 (J)
Mean	0.00725	0.006036	0.00442	0.00725	0.006952
Std. Dev.	0.0007906	0.002329	0.003251	0.0007906	0.004159
Upper Lim.	0.0075	0.008114	0.0075	0.0075	0.0084
Lower Lim.	0.005	0.003958	0.001	0.005	0.004

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0013
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		<0.0013
11/10/2016				<0.0013		<0.0013
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						<0.0013
1/27/2017		<0.0013	<0.0013	<0.0013		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						<0.0013
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					<0.0013	
4/11/2017					<0.0013	
4/25/2017						<0.0013
4/26/2017	<0.0013	<0.0013	<0.00025	<0.0013	<0.0013	
5/17/2017					<0.0013	
6/7/2017					<0.0013	
7/11/2017					<0.0013	
8/9/2017				<0.0013		<0.0013
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.0013	<0.0013	<0.0013	0.0003 (J)	
3/30/2018	<0.0013					<0.0013
6/14/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0005 (J)
Mean	0.001051	0.001069	0.001177	0.001085	0.000615	0.00107
Std. Dev.	0.001392	0.001382	0.001434	0.001376	0.0001107	0.001382
Upper Lim.	0.00065	0.00065	0.0021	0.00065	0.00065	0.00065
Lower Lim.	0.00031	0.00049	0.000125	0.00065	0.0003	0.0005

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/11/2019 3:28 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00735	<0.01			
5/19/2016				0.00518	0.00228
7/19/2016	0.0075				
7/20/2016		<0.0013		0.0038	0.0016
9/14/2016	0.0091	<0.0013			0.0024
9/15/2016				0.0034	
11/10/2016	0.0056	<0.0013			
11/11/2016			<0.0013		
11/14/2016				0.0033	
1/20/2017		<0.0013			
1/24/2017	0.012				
2/6/2017			<0.0013	0.0033	
2/9/2017					0.0023
3/14/2017		<0.0013			
3/15/2017	0.012		<0.0013	0.003	0.0031
4/11/2017			<0.0013		0.0023
4/25/2017	0.013	<0.0013			
4/26/2017			<0.0013	0.0032	0.0019
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.016	<0.0013			
8/10/2017			0.00036 (J)	0.0031	0.0021
3/29/2018	0.016		<0.0013	0.0034	0.0021
3/30/2018		<0.0013			
6/14/2018	0.012	<0.0013	<0.0013	0.0031	0.0025
Mean	0.01106	0.001085	0.000621	0.003478	0.002258
Std. Dev.	0.003579	0.001376	9.171E-05	0.0006384	0.0003948
Upper Lim.	0.01425	0.00065	0.00065	0.0038	0.00261
Lower Lim.	0.007861	0.00065	0.00036	0.003	0.001906

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/11/2019 3:28 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001					<0.001
5/19/2016		<0.001	<0.001	<0.001		
7/19/2016						<0.0005
7/20/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/14/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/10/2016				<0.0005		<0.0005
11/11/2016	<0.0005	<0.0005	<0.0005			
1/24/2017						<0.0005
1/27/2017		<0.0005	<0.0005	<0.0005		
2/6/2017	<0.0005					
2/8/2017					0.00011 (J)	
2/23/2017					0.00012 (J)	
3/14/2017						<0.0005
3/15/2017	<0.0005	<0.0005	<0.0005	<0.0005		
3/17/2017					<0.0005	
4/11/2017					<0.0005	
4/25/2017						<0.0005
4/26/2017	<0.0005	<0.0005	<0.0001	<0.0005	<0.0005	
5/17/2017					<0.0005	
6/7/2017					<0.0005	
7/11/2017					<0.0005	
8/9/2017				<0.0005		<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005	0.0002 (J)	
3/30/2018	8.5E-05 (J)					<0.0005
6/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00014 (J)	<0.0005
Mean	0.0002585	0.000275	0.000255	0.000275	0.000207	0.000275
Std. Dev.	9.944E-05	7.906E-05	0.0001066	7.906E-05	6.019E-05	7.906E-05
Upper Lim.	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Lower Lim.	8.5E-05	0.00025	5E-05	0.00025	0.00011	0.00025

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/11/2019 3:28 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001	<0.001			
5/19/2016				<0.001	<0.001
7/19/2016	8.5E-05 (J)				
7/20/2016		<0.0005		<0.0005	<0.0005
9/14/2016	0.00017 (J)	<0.0005			<0.0005
9/15/2016				<0.0005	
11/10/2016	0.00017 (J)	<0.0005			
11/11/2016			<0.0005		
11/14/2016				<0.0005	
1/20/2017		<0.0005			
1/24/2017	0.00023 (J)				
2/6/2017			<0.0005	<0.0005	
2/9/2017					<0.0005
3/14/2017		<0.0005			
3/15/2017	0.00021 (J)		<0.0005	<0.0005	<0.0005
4/11/2017			<0.0005		<0.0005
4/25/2017	0.00024 (J)	<0.0005			
4/26/2017			<0.0005	<0.0005	<0.0005
6/7/2017			<0.0005		
7/11/2017			<0.0005		
8/9/2017	0.0002 (J)	<0.0005			
8/10/2017			<0.0005	<0.0005	<0.0005
3/29/2018	0.00019 (J)		<0.0005	<0.0005	<0.0005
3/30/2018		<0.0005			
6/14/2018	0.00017 (J)	<0.0005	<0.0005	<0.0005	<0.0005
Mean	0.0002165	0.000275	0.00025	0.000275	0.000275
Std. Dev.	0.0001085	7.906E-05	0	7.906E-05	7.906E-05
Upper Lim.	0.0002966	0.00025	0.00025	0.00025	0.00025
Lower Lim.	0.0001325	0.00025	0.00025	0.00025	0.00025

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 5:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	WGWC-10	0.00065	0.0005	0.01	No	10	0.000635	0.00004743	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.00065	0.00047	0.01	No	10	0.000632	0.00005692	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.00065	0.00048	0.01	No	10	0.00062	0.00006394	80	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.00067	0.00065	0.01	No	10	0.000681	0.00008774	70	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0021	0.0006	0.01	No	10	0.001275	0.0008766	40	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002764	0.001666	0.01	No	10	0.002215	0.0006156	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.00166	0.0008804	0.01	No	10	0.00127	0.0004367	20	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.00082	0.00058	0.01	No	10	0.000701	0.0001105	60	No	0.011	NP (normality)
Arsenic (mg/L)	WGWC-19	0.00065	0.00065	0.01	No	10	0.00065	0	100	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-8	0.00065	0.00055	0.01	No	10	0.00064	0.00003162	90	No	0.011	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.00078	0.00047	0.01	No	10	0.00075	0.0003419	70	No	0.011	NP (normality)
Barium (mg/L)	WGWC-10	0.04168	0.03485	2	No	10	0.03821	0.00416	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-11	0.034	0.028	2	No	10	0.0317	0.003974	0	No	0.011	NP (normality)
Barium (mg/L)	WGWC-12	0.0226	0.01465	2	No	10	0.01824	0.005773	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05746	0.04279	2	No	10	0.0499	0.008569	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05381	0.03259	2	No	10	0.0432	0.0119	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02094	0.01818	2	No	10	0.01956	0.001543	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.07029	0.05644	2	No	10	0.06305	0.008896	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-17	0.02097	0.01561	2	No	10	0.01829	0.003007	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.001743	0.001111	2	No	10	0.001427	0.000354	0	No	0.01	Param.
Barium (mg/L)	WGWC-8	0.002786	0.0009301	2	No	10	0.001858	0.00104	0	No	0.01	Param.
Barium (mg/L)	WGWC-9	0.002549	0.0006081	2	No	10	0.001022	0.0003553	30	No	0.01	Param.
Beryllium (mg/L)	WGWC-10	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-11	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-12	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-13	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-14A	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-15	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-17	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-19	0.00125	0.00125	0.004	No	10	0.00125	0	100	No	0.011	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.001739	0.001211	0.004	No	10	0.001475	0.0002961	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.00125	0.00034	0.004	No	10	0.001075	0.0003693	80	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-10	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-11	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-12	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-13	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-14A	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-15	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.001908	0.0001838	0.005	No	10	0.0007092	0.0003171	20	No	0.01	Param.
Cadmium (mg/L)	WGWC-17	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-19	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-8	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cadmium (mg/L)	WGWC-9	0.00125	0.00125	0.005	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-10	0.0023	0.0011	0.1	No	10	0.00157	0.0005224	20	No	0.011	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-11	0.00125	0.0011	0.1	No	10	0.00123	0.0000483	80	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-12	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-13	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-15	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 5:00 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Chromium (mg/L)	WGWC-16	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-17	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-19	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-8	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Chromium (mg/L)	WGWC-9	0.00125	0.00125	0.1	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001971	0.0006688	0.013	No	10	0.001331	0.0008678	10	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.00125	0.00049	0.013	No	10	0.001125	0.0005748	40	No	0.011	NP (Cohens/xfrm)
Cobalt (mg/L)	WGWC-12	0.001661	0.0005894	0.013	No	10	0.001125	0.0006003	10	No	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.00125	0.0004	0.013	No	10	0.001049	0.0003375	70	No	0.011	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01427	0.00845	0.013	No	10	0.01136	0.003262	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.00125	0.00125	0.013	No	10	0.00125	0	100	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.01568	0.008244	0.013	No	10	0.01196	0.004164	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-17	0.002178	0.001122	0.013	No	10	0.00165	0.0005916	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.00125	0.00045	0.013	No	10	0.001027	0.0003604	70	No	0.011	NP (normality)
Cobalt (mg/L)	WGWC-8	0.00125	0.00066	0.013	No	10	0.001176	0.0001873	80	No	0.011	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.00125	0.00073	0.013	No	10	0.001198	0.0001644	90	No	0.011	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.5068	0.06982	10.4	No	10	0.2883	0.2449	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5236	-0.03911	10.4	No	10	0.2423	0.3154	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.6389	0.08534	10.4	No	10	0.3621	0.3102	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8188	0.3866	10.4	No	10	0.6027	0.2422	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	1.154	0.5065	10.4	No	10	0.8302	0.3628	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.893	0.2077	10.4	No	10	0.5581	0.4554	10	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.703	1.242	10.4	No	10	1.973	0.8188	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.7771	0.00008256	10.4	No	10	0.3231	0.414	10	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.5429	0.06895	10.4	No	10	0.3059	0.2656	10	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.801	0.8694	10.4	No	10	1.335	0.5219	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4221	0.1291	10.4	No	10	0.2756	0.1642	10	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1942	0.1414	4	No	11	0.1678	0.03169	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.039	4	No	11	0.09445	0.01839	90.91	No	0.006	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.2137	0.09376	4	No	11	0.1014	0.008981	36.36	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.3353	0.2727	4	No	11	0.304	0.03752	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.1	4	No	11	0.1	0	100	No	0.006	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.9264	0.8062	4	No	11	0.8663	0.07213	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.1	4	No	11	0.1291	0.03081	18.18	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-17	0.1712	0.1153	4	No	11	0.1433	0.03357	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.406	0.3431	4	No	11	0.3745	0.03778	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3973	0.2361	4	No	11	0.3167	0.09672	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.704	1.347	4	No	11	1.525	0.2143	0	No	0.01	Param.
Lithium (mg/L)	WGWC-10	0.02263	0.01065	0.009	Yes	10	0.01664	0.006714	0	No	0.01	Param.
Lithium (mg/L)	WGWC-11	0.0025	0.0011	0.009	No	10	0.00229	0.0004725	80	No	0.011	NP (NDs)
Lithium (mg/L)	WGWC-12	0.008493	0.003847	0.009	No	10	0.00617	0.002603	10	No	0.01	Param.
Lithium (mg/L)	WGWC-13	0.0025	0.0018	0.009	No	10	0.00253	0.0005012	70	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-14A	0.0033	0.0018	0.009	No	10	0.00265	0.0005642	60	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-15	0.007015	0.004356	0.009	No	10	0.00538	0.001918	20	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01337	0.007166	0.009	No	10	0.01027	0.003479	10	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.006321	0.003919	0.009	No	10	0.00512	0.001346	10	No	0.01	Param.
Lithium (mg/L)	WGWC-19	0.056	0.044	0.009	Yes	10	0.0507	0.008314	0	No	0.011	NP (normality)
Lithium (mg/L)	WGWC-8	0.02776	0.0112	0.009	Yes	10	0.02026	0.01379	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.04123	0.02967	0.009	Yes	10	0.03545	0.006483	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.0001	0.000082	0.002	No	10	0.000098	0.00001374	60	No	0.011	NP (normality)

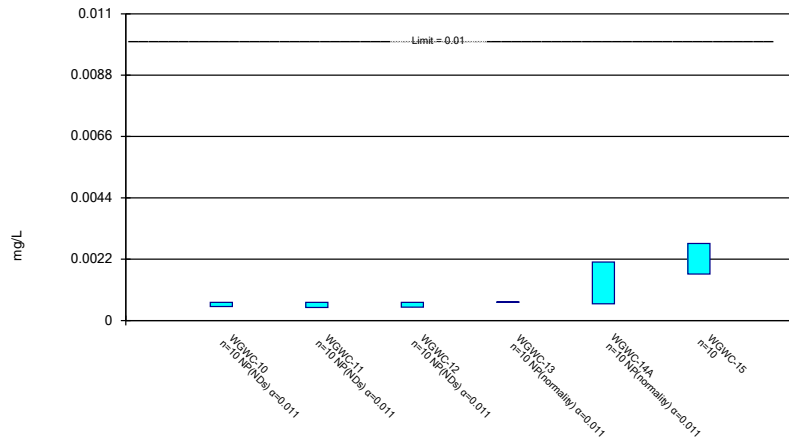
Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 5:00 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	WGWC-11	0.0001	0.000082	0.002	No	10	0.0000992	0.000006812	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-12	0.00011	0.000079	0.002	No	10	0.0001079	0.0000267	60	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-13	0.0001	0.000081	0.002	No	10	0.0000964	0.000007604	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0001	0.0001	0.002	No	10	0.000103	0.000009487	90	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0001	0.000071	0.002	No	10	0.0000935	0.000009936	60	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-16	0.00012	0.00007	0.002	No	10	0.000108	0.0000312	70	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-17	0.0001	0.000074	0.002	No	10	0.0000974	0.000008222	90	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0001	0.000076	0.002	No	10	0.0000996	0.00001041	80	No	0.011	NP (NDs)
Mercury (mg/L)	WGWC-8	0.00011	0.000078	0.002	No	10	0.0001018	0.0000127	70	No	0.011	NP (normality)
Mercury (mg/L)	WGWC-9	0.0001	0.0001	0.002	No	10	0.000103	0.000009487	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.0075	0.00091	0.0075	No	10	0.006184	0.002774	80	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.0075	0.0011	0.0075	No	10	0.00686	0.002024	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.0075	0.0009	0.0075	No	10	0.005895	0.002771	70	No	0.011	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.003306	0.001801	0.0075	No	10	0.002561	0.0009328	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-14A	0.0075	0.001	0.0075	No	10	0.00685	0.002055	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.01011	0.003815	0.0075	No	10	0.00701	0.003944	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-16	0.0075	0.0075	0.0075	No	10	0.0075	0	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-17	0.008114	0.003958	0.0075	No	10	0.006036	0.002329	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.0075	0.001	0.0075	No	10	0.00442	0.003251	50	No	0.011	NP (normality)
Molybdenum (mg/L)	WGWC-8	0.0075	0.0075	0.0075	No	10	0.0075	0	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	WGWC-9	0.0084	0.004	0.0075	No	10	0.006952	0.004159	0	No	0.011	NP (normality)
Selenium (mg/L)	WGWC-10	0.00065	0.00031	0.05	No	10	0.000616	0.0001075	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-11	0.00065	0.00049	0.05	No	10	0.000634	0.0000506	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-12	0.00065	0.00065	0.05	No	10	0.000795	0.0004585	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-13	0.00065	0.00065	0.05	No	10	0.00065	0	100	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.00065	0.0003	0.05	No	10	0.000615	0.0001107	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-15	0.00065	0.0005	0.05	No	10	0.000635	0.00004743	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01425	0.007861	0.05	No	10	0.01106	0.003579	0	No	0.01	Param.
Selenium (mg/L)	WGWC-17	0.00065	0.00065	0.05	No	10	0.00065	0	100	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-19	0.00065	0.00036	0.05	No	10	0.000621	0.00009171	90	No	0.011	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.003	0.05	No	10	0.003478	0.0006384	0	No	0.011	NP (normality)
Selenium (mg/L)	WGWC-9	0.00261	0.001906	0.05	No	10	0.002258	0.0003948	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.00025	0.000085	0.002	No	10	0.0002335	0.00005218	90	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-11	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-12	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-13	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.00025	0.00011	0.002	No	10	0.000207	0.00006019	60	No	0.011	NP (normality)
Thallium (mg/L)	WGWC-15	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-16	0.000234	0.000149	0.002	No	10	0.0001915	0.00004761	10	No	0.01	Param.
Thallium (mg/L)	WGWC-17	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-19	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-8	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)
Thallium (mg/L)	WGWC-9	0.00025	0.00025	0.002	No	10	0.00025	0	100	No	0.011	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

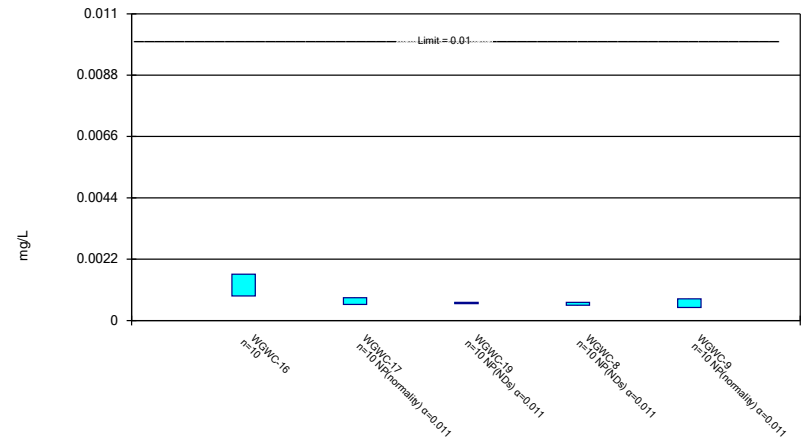
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

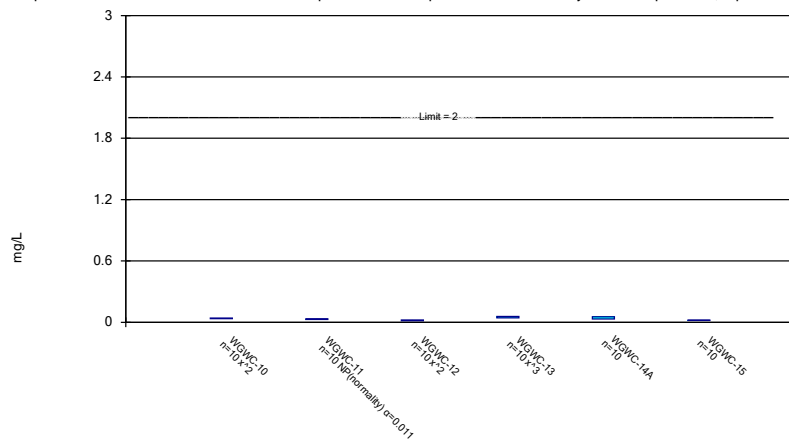
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Constituent: Arsenic Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

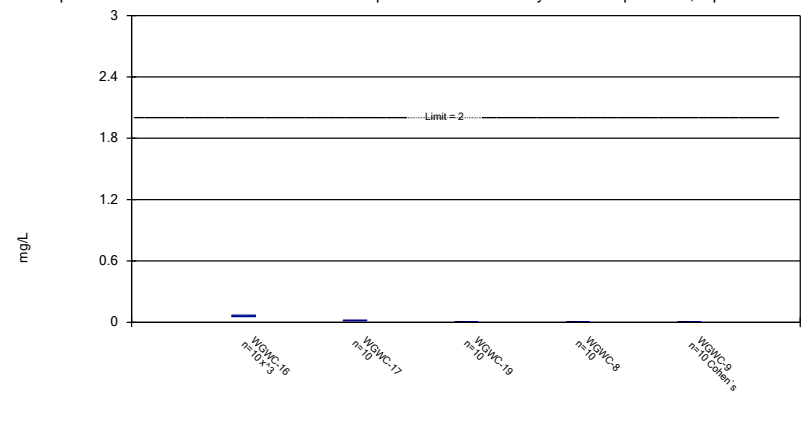
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Constituent: Barium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

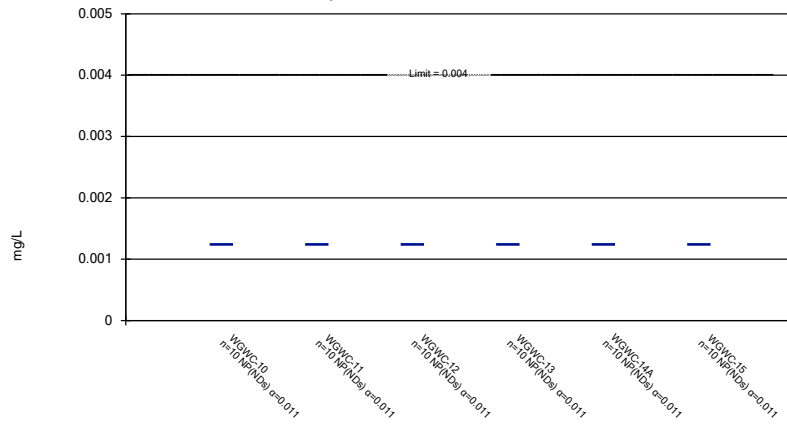
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Constituent: Barium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

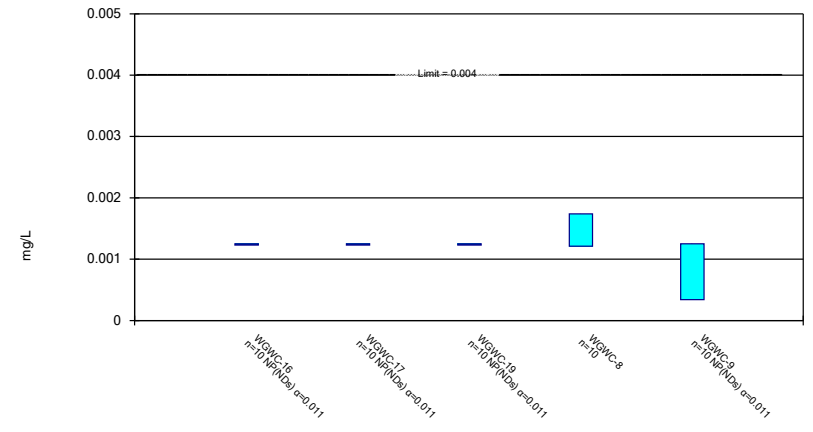
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Constituent: Beryllium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

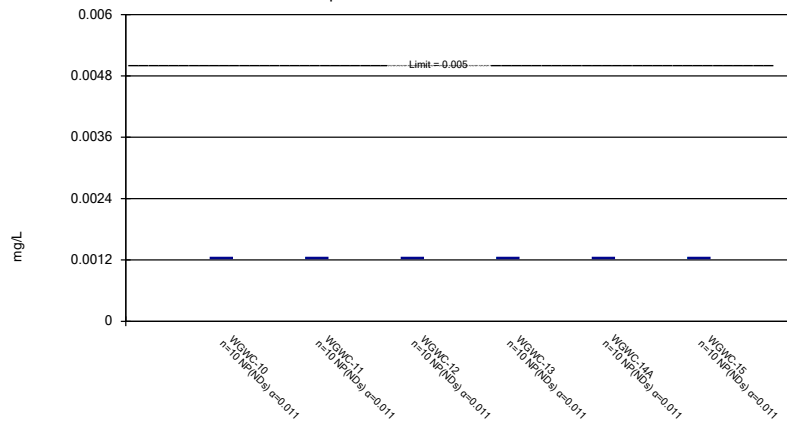
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Constituent: Beryllium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

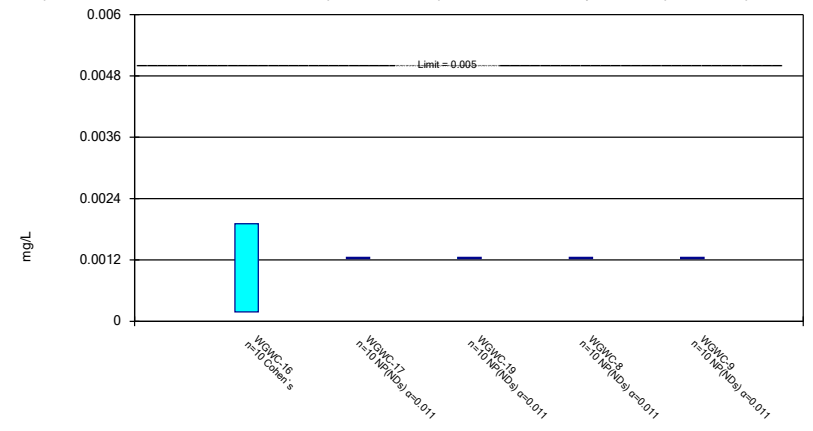
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

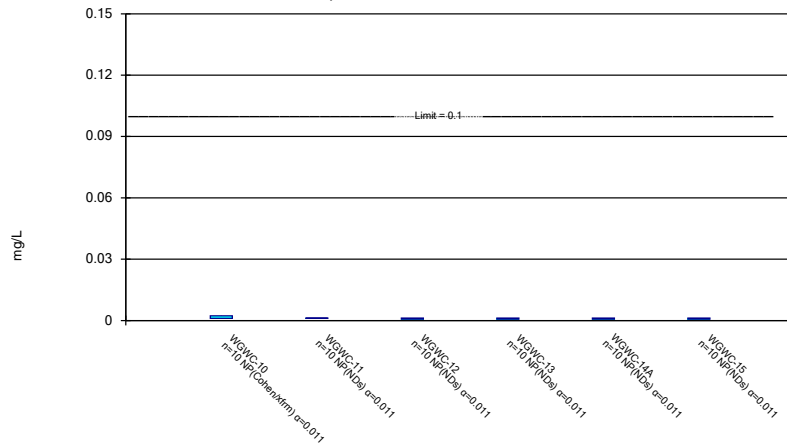
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



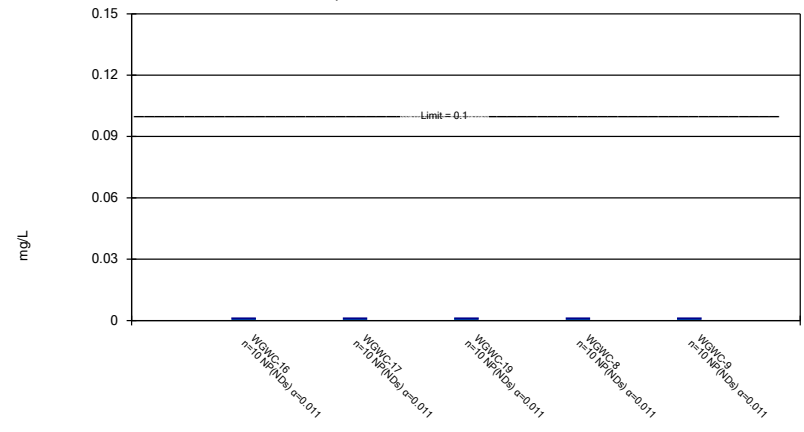
Constituent: Cadmium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

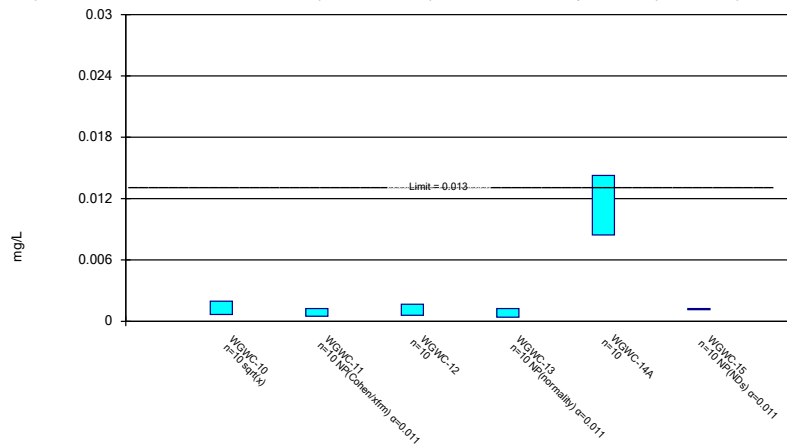
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

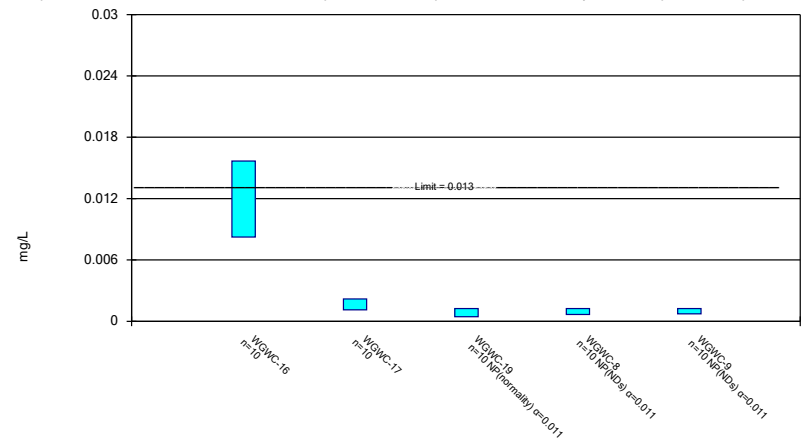
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Constituent: Cobalt Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

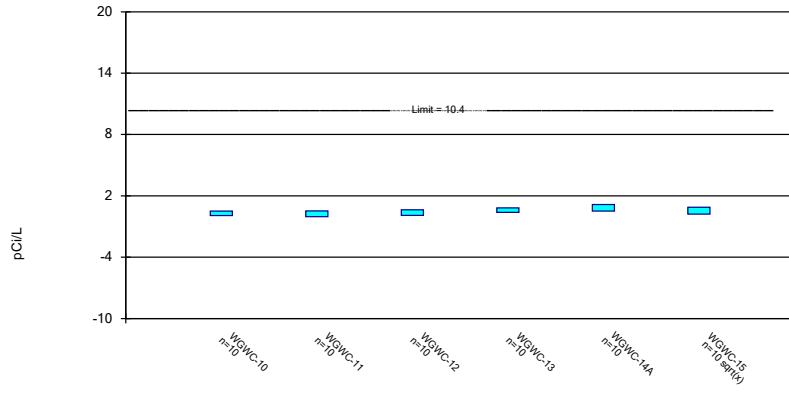
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Constituent: Cobalt Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

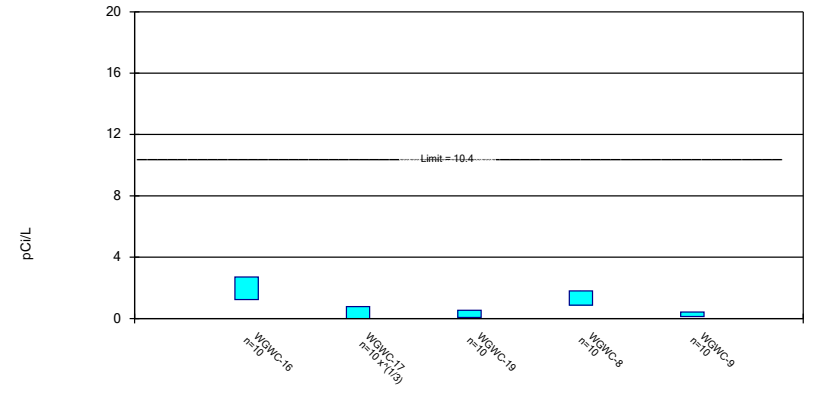
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

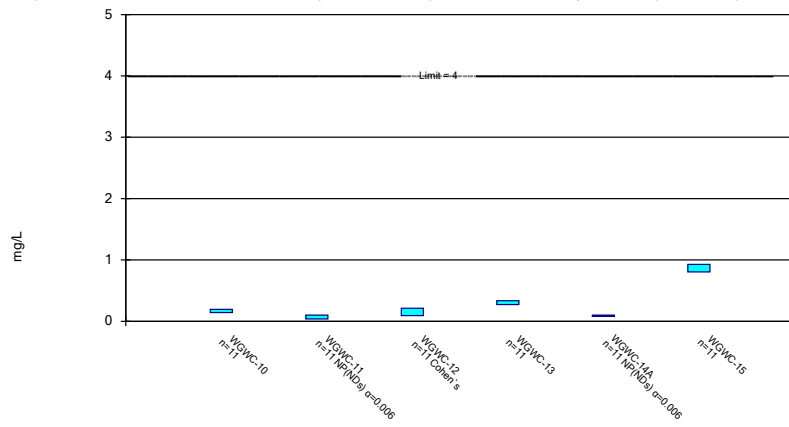
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Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

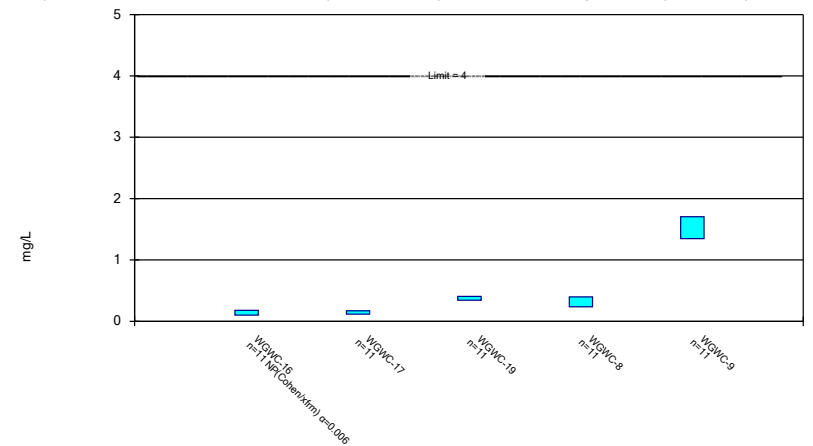
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

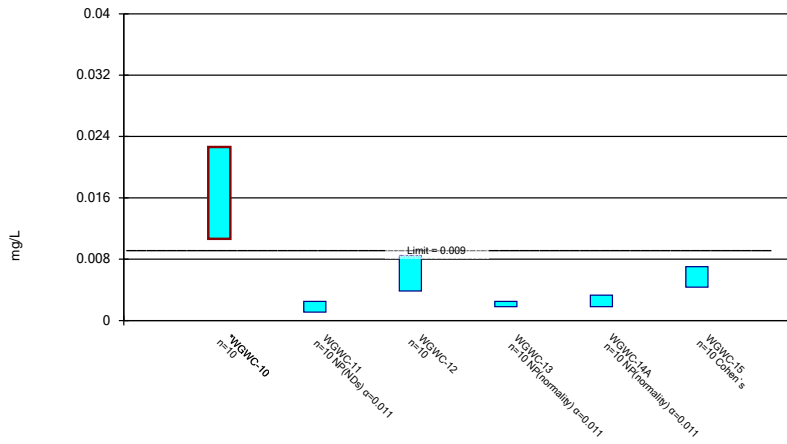
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

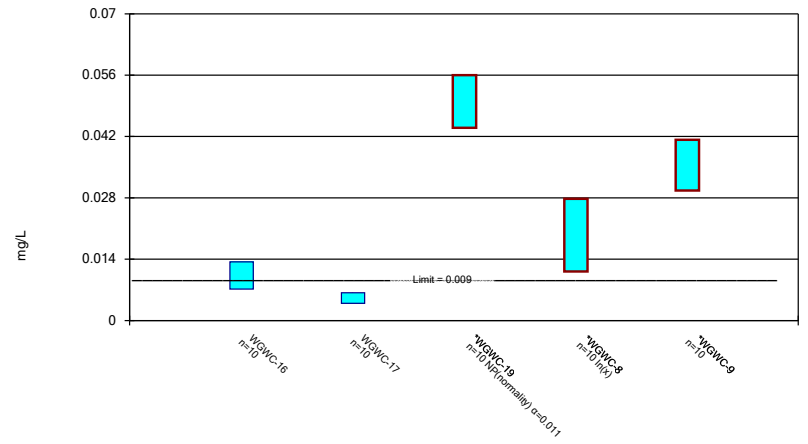
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

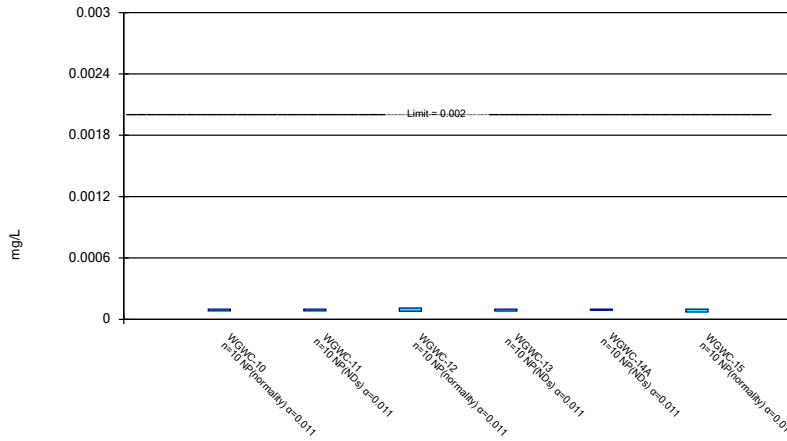
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

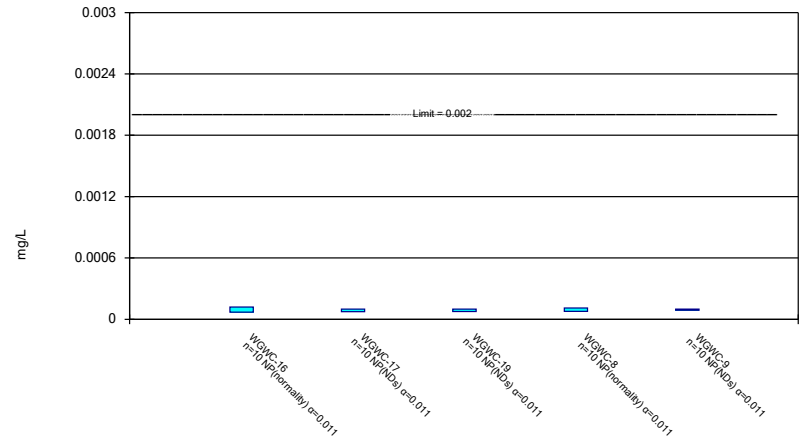
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

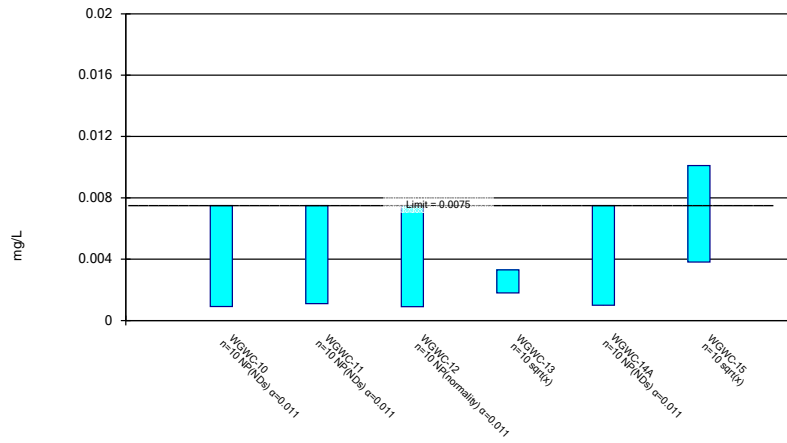
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

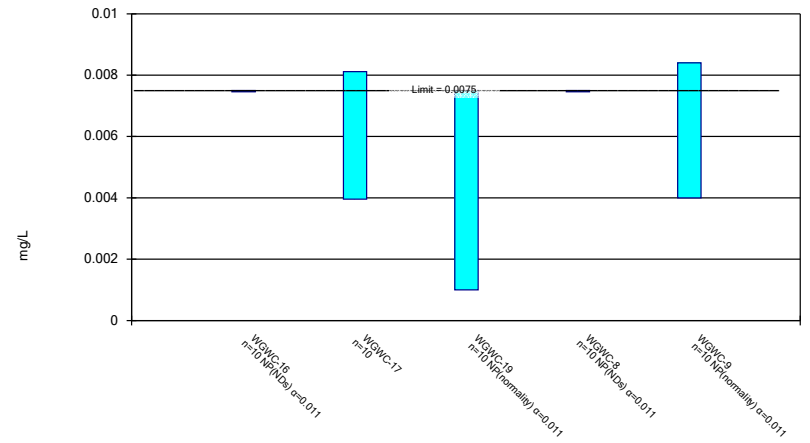
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

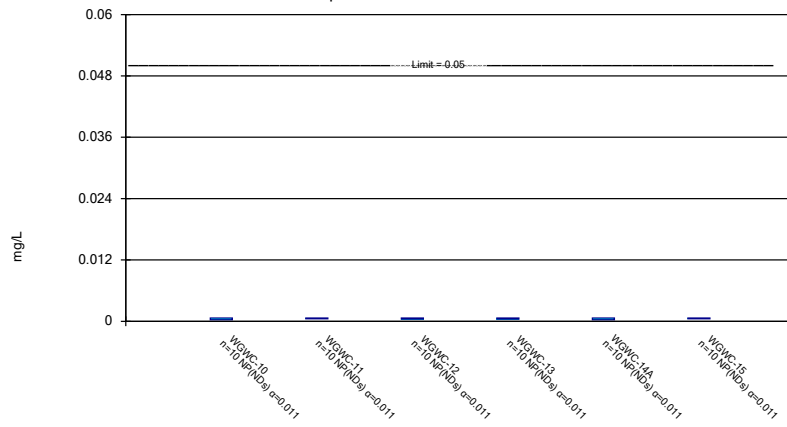
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

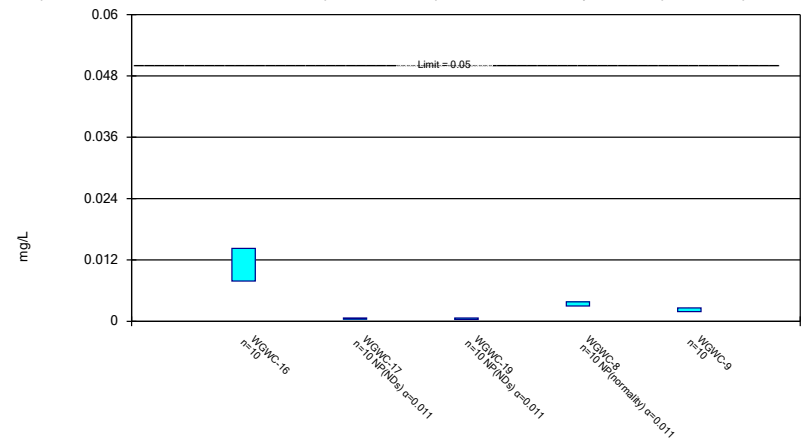
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

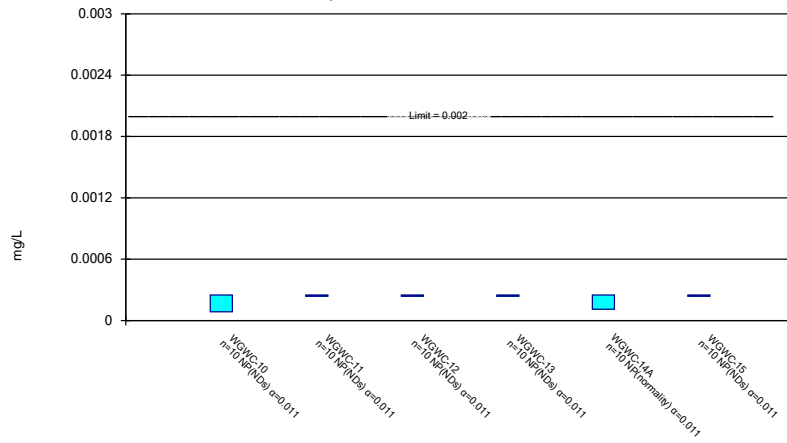
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

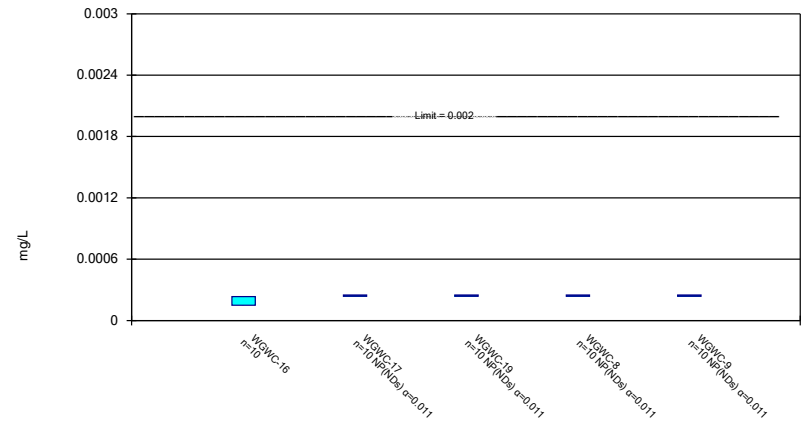
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 1/8/2019 4:58 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0013					0.00345
5/19/2016		<0.0013	<0.0013	<0.0013		
7/19/2016						0.0031
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		0.0024
11/10/2016				<0.0013		0.0023
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						0.0019
1/27/2017		0.00047 (J)	<0.0013	0.00066 (J)		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						0.0016
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					0.0006 (J)	
4/11/2017					0.0032	
4/25/2017						0.0019
4/26/2017	<0.0013	<0.0013	<0.0013	<0.0013	0.0019	
5/17/2017					0.0014	
6/7/2017					0.0021	
7/11/2017					0.00095 (J)	
8/9/2017				<0.0013		0.0017
8/10/2017	<0.0013	<0.0013	0.00048 (J)			
3/29/2018		<0.0013	<0.0013	0.00067 (J)	<0.0013	
3/30/2018	<0.0013					0.0018
6/14/2018	0.0005 (J)	<0.0013	0.00052 (J)	0.00093 (J)	<0.0013	0.002
Mean	0.000635	0.000632	0.00062	0.000681	0.001275	0.002215
Std. Dev.	4.743E-05	5.692E-05	6.394E-05	8.774E-05	0.0008766	0.0006156
Upper Lim.	0.00065	0.00065	0.00065	0.00067	0.0021	0.002764
Lower Lim.	0.0005	0.00047	0.00048	0.00065	0.0006	0.001666

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0013	<0.0013			
5/19/2016				<0.0013	<0.0013
7/19/2016	0.0009 (J)				
7/20/2016		0.00058 (J)		0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.0013			<0.0013
9/15/2016				<0.0013	
11/10/2016	0.0021	0.00082 (J)			
11/11/2016			<0.0013		
11/14/2016				<0.0013	
1/20/2017		<0.0013			
1/24/2017	0.0015				
2/6/2017			<0.0013	<0.0013	
2/9/2017					0.0017
3/14/2017		<0.0013			
3/15/2017	0.0014		<0.0013	<0.0013	0.00047 (J)
4/11/2017			<0.0013		<0.0013
4/25/2017	0.0014	0.00095 (J)			
4/26/2017			<0.0013	<0.0013	<0.0013
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.0013	<0.0013			
8/10/2017			<0.0013	<0.0013	<0.0013
3/29/2018	0.0014		<0.0013	<0.0013	<0.0013
3/30/2018		<0.0013			
6/14/2018	<0.0013	0.00076 (J)	<0.0013	<0.0013	<0.0013
Mean	0.00127	0.000701	0.00065	0.00064	0.00075
Std. Dev.	0.0004367	0.0001105	0	3.162E-05	0.0003419
Upper Lim.	0.00166	0.00082	0.00065	0.00065	0.00078
Lower Lim.	0.0008804	0.00058	0.00065	0.00055	0.00047

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0391					0.0206
5/19/2016		0.031	0.0214	0.055		
7/19/2016						0.019
7/20/2016	0.028	0.029	0.019	0.039		
9/14/2016	0.035	0.031	0.02	0.04		0.02
11/10/2016				0.04		0.02
11/11/2016	0.042	0.034	0.022			
1/24/2017						0.017
1/27/2017		0.042	0.023	0.042		
2/6/2017	0.041					
2/8/2017					0.037	
2/23/2017					0.051	
3/14/2017						0.018
3/15/2017	0.04	0.032	0.024	0.058		
3/17/2017					0.046	
4/11/2017					0.055	
4/25/2017						0.018
4/26/2017	0.039	0.03	0.004	0.054	0.042	
5/17/2017					0.052	
6/7/2017					0.06	
7/11/2017					0.038	
8/9/2017				0.055		0.02
8/10/2017	0.038	0.03	0.017			
3/29/2018		0.028	0.017	0.061	0.028	
3/30/2018	0.042					0.021
6/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
Mean	0.03821	0.0317	0.01824	0.0499	0.0432	0.01956
Std. Dev.	0.00416	0.003974	0.005773	0.008569	0.0119	0.001543
Upper Lim.	0.04168	0.034	0.0226	0.05746	0.05381	0.02094
Lower Lim.	0.03485	0.028	0.01465	0.04279	0.03259	0.01818

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.0025
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.0025
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.0025
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
Mean	0.06305	0.01829	0.001427	0.001858	0.001022
Std. Dev.	0.008896	0.003007	0.000354	0.00104	0.0003553
Upper Lim.	0.07029	0.02097	0.001743	0.002786	0.002549
Lower Lim.	0.05644	0.01561	0.001111	0.0009301	0.0006081

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0	0	0	0	0	0
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0025	<0.0025			
5/19/2016				0.00102 (J)	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		0.0014 (J)	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				0.00093 (J)	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				0.0014 (J)	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	0.0017 (J)	
2/9/2017					0.00041 (J)
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	0.0016 (J)	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	0.0017 (J)	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	0.0017 (J)	0.00034 (J)
3/29/2018	<0.0025		<0.0025	0.0018 (J)	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	0.0015 (J)	<0.0025
Mean	0.00125	0.00125	0.00125	0.001475	0.001075
Std. Dev.	0	0	0	0.0002961	0.0003693
Upper Lim.	0.00125	0.00125	0.00125	0.001739	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.001211	0.00034

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0	0	0	0	0	0
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.000362 (J)	<0.0025			
5/19/2016				<0.0025	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	0.00037 (J)	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	0.00055 (J)				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	0.00067 (J)		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.00058 (J)	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.00054 (J)	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	0.00082 (J)		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	0.0007 (J)	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.0007092	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0.0003171	0	0	0	0
Upper Lim.	0.001908	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0001838	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.0012 (J)	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.0015 (J)	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	0.0011 (J)					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	0.0015 (J)	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	0.0013 (J)	0.0011 (J)	<0.0025	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	0.0016 (J)	<0.0025	<0.0025			
3/29/2018		0.0012 (J)	<0.0025	<0.0025	<0.0025	
3/30/2018	0.0027					<0.0025
6/14/2018	0.0023 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.00157	0.00123	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0.0005224	4.83E-05	0	0	0	0
Upper Lim.	0.0023	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0011	0.0011	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0025	<0.0025			
5/19/2016				<0.0025	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	<0.0025		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.00125	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0	0	0	0	0
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
Mean	0.001331	0.001125	0.001125	0.001049	0.01136	0.00125
Std. Dev.	0.0008678	0.0005748	0.0006003	0.0003375	0.003262	0
Upper Lim.	0.001971	0.00125	0.001661	0.00125	0.01427	0.00125
Lower Lim.	0.0006688	0.00049	0.0005894	0.0004	0.00845	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0069	0.00245 (J)			
5/19/2016				<0.0025	<0.0025
7/19/2016	0.012				
7/20/2016		0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.013	0.0014 (J)			<0.0025
9/15/2016				<0.0025	
11/10/2016	0.016	0.0016 (J)			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		0.0014 (J)			
1/24/2017	0.015				
2/6/2017			0.00058 (J)	<0.0025	
2/9/2017					0.00073 (J)
3/14/2017		0.0023 (J)			
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.014	0.0023 (J)			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.016	0.0011 (J)			
8/10/2017			0.00049 (J)	<0.0025	<0.0025
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025
3/30/2018		0.0016 (J)			
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
Mean	0.01196	0.00165	0.001027	0.001176	0.001198
Std. Dev.	0.004164	0.0005916	0.0003604	0.0001873	0.0001644
Upper Lim.	0.01568	0.002178	0.00125	0.00125	0.00125
Lower Lim.	0.008244	0.001122	0.00045	0.00066	0.00073

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)					0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		
7/19/2016						0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016				1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			
1/24/2017						0.779
1/27/2017		0.898	0.836	0.668		
2/6/2017	0.104 (U)					
2/8/2017					0.958	
2/23/2017					0.771	
3/14/2017						0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847		
3/17/2017					1.7	
4/11/2017					0.901	
4/25/2017						0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912			
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	<0.524	<0.524	0.463	0.55	<0.524
Mean	0.2883	0.2423	0.3621	0.6027	0.8302	0.5581
Std. Dev.	0.2449	0.3154	0.3102	0.2422	0.3628	0.4554
Upper Lim.	0.5068	0.5236	0.6389	0.8188	1.154	0.893
Lower Lim.	0.06982	-0.03911	0.08534	0.3866	0.5065	0.2077

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	<0.524	<0.524	1.86	<0.524
Mean	1.973	0.3231	0.3059	1.335	0.2756
Std. Dev.	0.8188	0.414	0.2656	0.5219	0.1642
Upper Lim.	2.703	0.7771	0.5429	1.801	0.4221
Lower Lim.	1.242	8.256E-05	0.06895	0.8694	0.1291

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206					0.779
5/19/2016		0.039 (J)	0.12 (J)	0.384		
7/19/2016						0.97
7/20/2016	0.23	<0.2	0.11 (J)	0.34		
9/14/2016	0.17 (J)	<0.2	0.095 (J)	0.31		0.89
11/10/2016				0.26		0.88
11/11/2016	0.14 (J)	<0.2	<0.2			
1/24/2017						0.92
1/27/2017		<0.2	<0.2	0.28		
2/6/2017	0.15 (J)					
2/8/2017					<0.2	
2/23/2017					<0.2	
3/14/2017						0.77
3/15/2017	0.16 (J)	<0.2	<0.2	0.3		
3/17/2017					<0.2	
4/11/2017					<0.2	
4/25/2017						0.95
4/26/2017	0.17 (J)	<0.2	<0.2	0.33	<0.2	
5/17/2017					<0.2	
6/7/2017					<0.2	
7/11/2017					<0.2	
8/9/2017				0.32		0.91
8/10/2017	0.2	<0.2	0.11 (J)			
10/11/2017					<0.2	0.88
10/12/2017	0.14 (J)	<0.2	0.091 (J)	0.28		
3/29/2018		<0.2	0.089 (J)	0.27	<0.2	
3/30/2018	0.13 (J)					0.79
6/14/2018	0.15 (J)	<0.2	0.1 (J)	0.27	<0.2	0.79
Mean	0.1678	0.09445	0.1014	0.304	0.1	0.8663
Std. Dev.	0.03169	0.01839	0.008981	0.03752	0	0.07213
Upper Lim.	0.1942	0.1	0.2137	0.3353	0.1	0.9264
Lower Lim.	0.1414	0.039	0.09376	0.2727	0.1	0.8062

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.1 (J)	0.121 (J)			
5/19/2016				0.304	1.58
7/19/2016	0.14 (J)				
7/20/2016		0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)			1.8
9/15/2016				0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)				
2/6/2017			0.45	0.27	
2/9/2017					1.3
3/14/2017		0.11 (J)			
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017			0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)			
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<0.2	0.14 (J)			
10/12/2017			0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018		0.095 (J)			
6/14/2018	<0.2	0.11 (J)	0.35	0.56	1.4
Mean	0.1291	0.1433	0.3745	0.3167	1.525
Std. Dev.	0.03081	0.03357	0.03778	0.09672	0.2143
Upper Lim.	0.18	0.1712	0.406	0.3973	1.704
Lower Lim.	0.1	0.1153	0.3431	0.2361	1.347

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.005
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
Mean	0.01664	0.00229	0.00617	0.00253	0.00265	0.00538
Std. Dev.	0.006714	0.0004725	0.002603	0.0005012	0.0005642	0.001918
Upper Lim.	0.02263	0.0025	0.008493	0.0025	0.0033	0.007015
Lower Lim.	0.01065	0.0011	0.003847	0.0018	0.0018	0.004356

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
Mean	0.01027	0.00512	0.0507	0.02026	0.03545
Std. Dev.	0.003479	0.001346	0.008314	0.01379	0.006483
Upper Lim.	0.01337	0.006321	0.056	0.02776	0.04123
Lower Lim.	0.007166	0.003919	0.044	0.0112	0.02967

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0002					<0.0002
5/19/2016		<0.0002	<0.0002	<0.0002		
7/19/2016						9.3E-05 (J)
7/20/2016	8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)		
9/14/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/10/2016				8.3E-05 (J)		8.5E-05 (J)
11/11/2016	8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)			
1/24/2017						<0.0002
1/27/2017		<0.0002	<0.0002	<0.0002		
2/6/2017	8.3E-05 (J)					
2/8/2017					<0.0002	
2/23/2017					<0.0002	
3/14/2017						7.1E-05 (J)
3/15/2017	0.00013 (J)	<0.0002	0.00018 (J)	<0.0002		
3/17/2017					0.00013 (J)	
4/11/2017					<0.0002	
4/25/2017						<0.0002
4/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2017					<0.0002	
6/7/2017					<0.0002	
7/11/2017					<0.0002	
8/9/2017				<0.0002		<0.0002
8/10/2017	<0.0002	<0.0002	<0.0002			
3/29/2018		<0.0002	0.00011 (J)	<0.0002	<0.0002	
3/30/2018	<0.0002					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	9.8E-05	9.92E-05	0.0001079	9.64E-05	0.000103	9.35E-05
Std. Dev.	1.374E-05	6.812E-06	2.67E-05	7.604E-06	9.487E-06	9.936E-06
Upper Lim.	0.0001	0.0001	0.00011	0.0001	0.0001	0.0001
Lower Lim.	8.2E-05	8.2E-05	7.9E-05	8.1E-05	0.0001	7.1E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0002	<0.0002			
5/19/2016				<0.0002	<0.0002
7/19/2016	<0.0002				
7/20/2016		7.4E-05 (J)		<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002			<0.0002
9/15/2016				0.00011 (J)	
11/10/2016	0.00012 (J)	<0.0002			
11/11/2016			7.6E-05 (J)		
11/14/2016				<0.0002	
1/20/2017		<0.0002			
1/24/2017	7E-05 (J)				
2/6/2017			0.00012 (J)	7.8E-05 (J)	
2/9/2017					<0.0002
3/14/2017		<0.0002			
3/15/2017	<0.0002		<0.0002	0.00013 (J)	0.00013 (J)
4/11/2017			<0.0002		<0.0002
4/25/2017	0.00019 (J)	<0.0002			
4/26/2017			<0.0002	<0.0002	<0.0002
6/7/2017			<0.0002		
7/11/2017			<0.0002		
8/9/2017	<0.0002	<0.0002			
8/10/2017			<0.0002	<0.0002	<0.0002
3/29/2018	<0.0002		<0.0002	<0.0002	<0.0002
3/30/2018		<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.000108	9.74E-05	9.96E-05	0.0001018	0.000103
Std. Dev.	3.12E-05	8.222E-06	1.041E-05	1.27E-05	9.487E-06
Upper Lim.	0.00012	0.0001	0.0001	0.00011	0.0001
Lower Lim.	7E-05	7.4E-05	7.6E-05	7.8E-05	0.0001

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.015					0.0153
5/19/2016		<0.015	<0.015	0.00491 (J)		
7/19/2016						0.0093 (J)
7/20/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/14/2016	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016				0.0016 (J)		0.0065 (J)
11/11/2016	<0.015	<0.015	<0.015			
1/24/2017						0.0049 (J)
1/27/2017		<0.015	<0.015	0.0023 (J)		
2/6/2017	<0.015					
2/8/2017					<0.015	
2/23/2017					<0.015	
3/14/2017						0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017					<0.015	
4/11/2017					<0.015	
4/25/2017						0.004 (J)
4/26/2017	<0.015	<0.015	<0.015	0.0019 (J)	<0.015	
5/17/2017					<0.015	
6/7/2017					0.001 (J)	
7/11/2017					<0.015	
8/9/2017				0.0028 (J)		0.0042 (J)
8/10/2017	0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/29/2018		<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018	<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
Mean	0.006184	0.00686	0.005895	0.002561	0.00685	0.00701
Std. Dev.	0.002774	0.002024	0.002771	0.0009328	0.002055	0.003944
Upper Lim.	0.0075	0.0075	0.0075	0.003306	0.0075	0.01011
Lower Lim.	0.00091	0.0011	0.0009	0.001801	0.001	0.003815

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.015	0.00526 (J)			
5/19/2016				<0.015	0.00762 (J)
7/19/2016	<0.015				
7/20/2016		0.0066 (J)		<0.015	0.0084 (J)
9/14/2016	<0.015	0.0081 (J)			0.0071 (J)
9/15/2016				<0.015	
11/10/2016	<0.015	0.0076 (J)			
11/11/2016			<0.015		
11/14/2016				<0.015	
1/20/2017		0.0094 (J)			
1/24/2017	<0.015				
2/6/2017			0.001 (J)	<0.015	
2/9/2017					0.018
3/14/2017		0.0044 (J)			
3/15/2017	<0.015		<0.015	<0.015	0.0057 (J)
4/11/2017			<0.015		0.0047 (J)
4/25/2017	<0.015	0.0074 (J)			
4/26/2017			<0.015	<0.015	0.004 (J)
6/7/2017			0.0015 (J)		
7/11/2017			<0.015		
8/9/2017	<0.015	0.0066 (J)			
8/10/2017			0.0016 (J)	<0.015	0.0046 (J)
3/29/2018	<0.015		0.0012 (J)	<0.015	0.0048 (J)
3/30/2018		0.0024 (J)			
6/14/2018	<0.015	0.0026 (J)	0.0014 (J)	<0.015	0.0046 (J)
Mean	0.0075	0.006036	0.00442	0.0075	0.006952
Std. Dev.	0	0.002329	0.003251	0	0.004159
Upper Lim.	0.0075	0.008114	0.0075	0.0075	0.0084
Lower Lim.	0.0075	0.003958	0.001	0.0075	0.004

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0013					<0.0013
5/19/2016		<0.0013	<0.0013	<0.0013		
7/19/2016						<0.0013
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		<0.0013
11/10/2016				<0.0013		<0.0013
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						<0.0013
1/27/2017		<0.0013	<0.0013	<0.0013		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						<0.0013
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					<0.0013	
4/11/2017					<0.0013	
4/25/2017						<0.0013
4/26/2017	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	
5/17/2017					<0.0013	
6/7/2017					<0.0013	
7/11/2017					<0.0013	
8/9/2017				<0.0013		<0.0013
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.0013	<0.0013	<0.0013	0.0003 (J)	
3/30/2018	<0.0013					<0.0013
6/14/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0005 (J)
Mean	0.000616	0.000634	0.000795	0.00065	0.000615	0.000635
Std. Dev.	0.0001075	5.06E-05	0.0004585	0	0.0001107	4.743E-05
Upper Lim.	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065
Lower Lim.	0.00031	0.00049	0.00065	0.00065	0.0003	0.0005

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00735	<0.0013			
5/19/2016				0.00518	0.00228
7/19/2016	0.0075				
7/20/2016		<0.0013		0.0038	0.0016
9/14/2016	0.0091	<0.0013			0.0024
9/15/2016				0.0034	
11/10/2016	0.0056	<0.0013			
11/11/2016			<0.0013		
11/14/2016				0.0033	
1/20/2017		<0.0013			
1/24/2017	0.012				
2/6/2017			<0.0013	0.0033	
2/9/2017					0.0023
3/14/2017		<0.0013			
3/15/2017	0.012		<0.0013	0.003	0.0031
4/11/2017			<0.0013		0.0023
4/25/2017	0.013	<0.0013			
4/26/2017			<0.0013	0.0032	0.0019
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.016	<0.0013			
8/10/2017			0.00036 (J)	0.0031	0.0021
3/29/2018	0.016		<0.0013	0.0034	0.0021
3/30/2018		<0.0013			
6/14/2018	0.012	<0.0013	<0.0013	0.0031	0.0025
Mean	0.01106	0.00065	0.000621	0.003478	0.002258
Std. Dev.	0.003579	0	9.171E-05	0.0006384	0.0003948
Upper Lim.	0.01425	0.00065	0.00065	0.0038	0.00261
Lower Lim.	0.007861	0.00065	0.00036	0.003	0.001906

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0005					<0.0005
5/19/2016		<0.0005	<0.0005	<0.0005		
7/19/2016						<0.0005
7/20/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/14/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/10/2016				<0.0005		<0.0005
11/11/2016	<0.0005	<0.0005	<0.0005			
1/24/2017						<0.0005
1/27/2017		<0.0005	<0.0005	<0.0005		
2/6/2017	<0.0005					
2/8/2017					0.00011 (J)	
2/23/2017					0.00012 (J)	
3/14/2017						<0.0005
3/15/2017	<0.0005	<0.0005	<0.0005	<0.0005		
3/17/2017					<0.0005	
4/11/2017					<0.0005	
4/25/2017						<0.0005
4/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
5/17/2017					<0.0005	
6/7/2017					<0.0005	
7/11/2017					<0.0005	
8/9/2017				<0.0005		<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005	0.0002 (J)	
3/30/2018	8.5E-05 (J)					<0.0005
6/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00014 (J)	<0.0005
Mean	0.0002335	0.00025	0.00025	0.00025	0.000207	0.00025
Std. Dev.	5.218E-05	0	0	0	6.019E-05	0
Upper Lim.	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Lower Lim.	8.5E-05	0.00025	0.00025	0.00025	0.00011	0.00025

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/8/2019 5:00 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0005	<0.0005			
5/19/2016				<0.0005	<0.0005
7/19/2016	8.5E-05 (J)				
7/20/2016		<0.0005		<0.0005	<0.0005
9/14/2016	0.00017 (J)	<0.0005			<0.0005
9/15/2016				<0.0005	
11/10/2016	0.00017 (J)	<0.0005			
11/11/2016			<0.0005		
11/14/2016				<0.0005	
1/20/2017		<0.0005			
1/24/2017	0.00023 (J)				
2/6/2017			<0.0005	<0.0005	
2/9/2017					<0.0005
3/14/2017		<0.0005			
3/15/2017	0.00021 (J)		<0.0005	<0.0005	<0.0005
4/11/2017			<0.0005		<0.0005
4/25/2017	0.00024 (J)	<0.0005			
4/26/2017			<0.0005	<0.0005	<0.0005
6/7/2017			<0.0005		
7/11/2017			<0.0005		
8/9/2017	0.0002 (J)	<0.0005			
8/10/2017			<0.0005	<0.0005	<0.0005
3/29/2018	0.00019 (J)		<0.0005	<0.0005	<0.0005
3/30/2018		<0.0005			
6/14/2018	0.00017 (J)	<0.0005	<0.0005	<0.0005	<0.0005
Mean	0.0001915	0.00025	0.00025	0.00025	0.00025
Std. Dev.	4.761E-05	0	0	0	0
Upper Lim.	0.000234	0.00025	0.00025	0.00025	0.00025
Lower Lim.	0.000149	0.00025	0.00025	0.00025	0.00025

Summary Report

Constituent: Boron Analysis Run 1/23/2019 5:27 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/4/2018, a summary of the selected data set:

Observations = 213
 ND/Trace = 167
 Wells = 20
 Minimum Value = 0.005
 Maximum Value = 6.8
 Mean Value = 0.4291
 Median Value = 0.025
 Standard Deviation = 1.324
 Coefficient of Variation = 3.086
 Skewness = 3.723

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-18 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-2 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-3 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-4 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-5 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-6 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-7 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWC-10	11	10	0.025	0.05	0.02791	0.025	0.007622	0.2731	2.517
WGWC-11	11	9	0.021	0.058	0.02991	0.025	0.0121	0.4047	1.693
WGWC-12	11	9	0.005	0.05	0.02736	0.025	0.01204	0.4398	0.4726
WGWC-13	11	9	0.025	0.033	0.02575	0.025	0.002407	0.09348	2.843
WGWC-14	5	0	0.029	0.21	0.1	0.067	0.07829	0.7829	0.5129
WGWC-14A	11	11	0.025	0.025	0.025	0.025	0	0	NaN
WGWC-15	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWC-16	11	0	4.48	6.8	5.825	5.9	0.7533	0.1293	-0.518
WGWC-17	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWC-19	11	10	0.025	0.034	0.02582	0.025	0.002714	0.1051	2.846
WGWC-8	11	0	1.2	2	1.638	1.7	0.2639	0.1611	-0.3893
WGWC-9	11	0	0.25	0.61	0.3685	0.37	0.09461	0.2567	1.435

Summary Report

Constituent: Boron (mg/L) Analysis Run 1/23/2019 5:27 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-11	WGWC-12	WGWC-13	WGWC-14	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/17/2016									
5/18/2016						<0.1	4.48	<0.1	
5/19/2016	<0.1	<0.1	0.0252 (J)	0.153		<0.05	4.7		
7/19/2016						<0.05	4.7		
7/20/2016	<0.05	<0.05	<0.05	0.067				<0.05	
9/13/2016									
9/14/2016	<0.05	<0.05	<0.05	0.041 (J)		<0.05	5.8	<0.05	
9/15/2016									
11/9/2016									
11/10/2016			<0.05	0.029 (J)		<0.05	6.7	<0.05	
11/11/2016	<0.05	<0.05							<0.05
11/14/2016									
1/17/2017									
1/18/2017									
1/19/2017									
1/20/2017								<0.05	
1/24/2017						<0.05	6.3		
1/27/2017	0.021 (J)	0.047 (J)	0.033 (J)	0.21					
2/6/2017									<0.05
2/8/2017					<0.05				
2/9/2017									
2/23/2017					<0.05				
3/13/2017									
3/14/2017						<0.05		<0.05	
3/15/2017	0.058	0.024 (J)	<0.05				5.9		0.034 (J)
3/17/2017					<0.05				
4/11/2017					<0.05				<0.05
4/24/2017									
4/25/2017						<0.05	6.2	<0.05	
4/26/2017	<0.05	<0.01	<0.05		<0.05				<0.05
5/17/2017					<0.05				
6/7/2017					<0.05				<0.05
7/11/2017					<0.05				<0.05
8/8/2017									
8/9/2017			<0.05			<0.05	6.3	<0.05	
8/10/2017	<0.05	<0.05							<0.05
10/10/2017									
10/11/2017					<0.05	<0.05	6.8	<0.05	
10/12/2017	<0.05	<0.05	<0.05						<0.05
6/13/2018									
6/14/2018	<0.05	<0.05	<0.05		<0.05	<0.05	5.4	<0.05	<0.05
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018						<0.05			
10/4/2018	<0.05	<0.05	<0.05		<0.05		5.5	<0.05	<0.05

Summary Report

Constituent: Boron (mg/L) Analysis Run 1/23/2019 5:27 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-8	WGWC-9
5/17/2016		
5/18/2016		
5/19/2016	1.42	0.314
7/19/2016		
7/20/2016	1.4	0.25
9/13/2016		
9/14/2016		0.3
9/15/2016	1.2	
11/9/2016		
11/10/2016		
11/11/2016		
11/14/2016	1.3	
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	1.8	
2/8/2017		
2/9/2017		0.61
2/23/2017		
3/13/2017		
3/14/2017		
3/15/2017	1.7	0.42
3/17/2017		
4/11/2017		0.37
4/24/2017		
4/25/2017		
4/26/2017	2	0.38
5/17/2017		
6/7/2017		
7/11/2017		
8/8/2017		
8/9/2017		
8/10/2017	1.8	0.29
10/10/2017		
10/11/2017		
10/12/2017	1.8	0.36
6/13/2018		
6/14/2018	1.7	0.39
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	1.9	0.37

Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:30 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Calcium (mg/L)	WGWC-10	52	n/a	10/4/2018	8.5	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-11	52	n/a	10/4/2018	2	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-12	52	n/a	10/4/2018	15	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-13	52	n/a	10/4/2018	5.9	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14	52	n/a	1/27/2017	6.8	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14A	52	n/a	10/4/2018	2	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-15	52	n/a	10/3/2018	31	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-16	52	n/a	10/4/2018	250	Yes	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-17	52	n/a	10/4/2018	6.4	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-19	52	n/a	10/4/2018	10	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-8	52	n/a	10/4/2018	65	Yes	87	0	n/a	0.0002524	NP Inter (normality) ...
Calcium (mg/L)	WGWC-9	52	n/a	10/4/2018	8	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-10	6.05	n/a	10/4/2018	1.3	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-11	6.05	n/a	10/4/2018	3.1	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-12	6.05	n/a	10/4/2018	3.1	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-13	6.05	n/a	10/4/2018	1.2	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14	6.05	n/a	1/27/2017	8	Yes	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14A	6.05	n/a	10/4/2018	2.2	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-15	6.05	n/a	10/3/2018	4.8	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-16	6.05	n/a	10/4/2018	290	Yes	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-17	6.05	n/a	10/4/2018	1.5	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-19	6.05	n/a	10/4/2018	2.6	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-8	6.05	n/a	10/4/2018	300	Yes	87	0	n/a	0.0002524	NP Inter (normality) ...
Chloride (mg/L)	WGWC-9	6.05	n/a	10/4/2018	1.2	No	87	0	n/a	0.0002524	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-10	0.284	n/a	10/4/2018	0.18	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-11	0.284	n/a	10/4/2018	0.1ND	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-12	0.284	n/a	10/4/2018	0.12	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-13	0.284	n/a	10/4/2018	0.23	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-14	0.284	n/a	1/27/2017	0.1ND	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-14A	0.284	n/a	10/4/2018	0.1ND	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	10/3/2018	0.79	Yes	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-16	0.284	n/a	10/4/2018	0.85	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-17	0.284	n/a	10/4/2018	0.11	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-19	0.284	n/a	10/4/2018	0.35	Yes	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-8	0.284	n/a	10/4/2018	0.27	No	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	10/4/2018	1.4	Yes	95	58.95	n/a	0.0002129	NP Inter (NDs) 1 of 2
Sulfate (mg/L)	WGWC-10	21	n/a	10/4/2018	1.9	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-11	21	n/a	10/4/2018	1.6	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-12	21	n/a	10/4/2018	14	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-13	21	n/a	10/4/2018	4.3	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14	21	n/a	1/27/2017	10	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14A	21	n/a	10/4/2018	2.8	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-15	21	n/a	10/3/2018	49	Yes	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-16	21	n/a	10/4/2018	560	Yes	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-17	21	n/a	10/4/2018	15	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-19	21	n/a	10/4/2018	4.6	No	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-8	21	n/a	10/4/2018	780	Yes	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-9	21	n/a	10/4/2018	38	Yes	87	27.59	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-10	150	n/a	10/4/2018	60	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-11	150	n/a	10/4/2018	56	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...

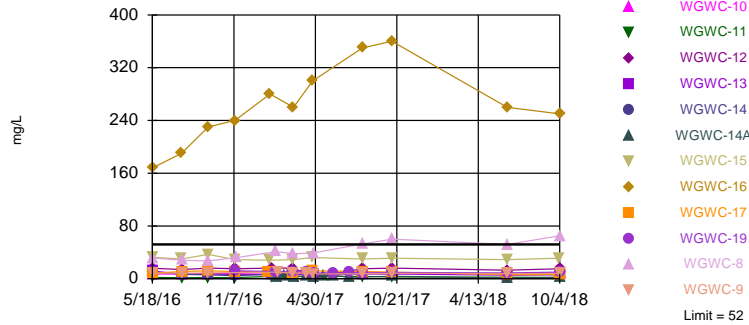
Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:30 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>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	WGWC-12	150	n/a	10/4/2018	110	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-13	150	n/a	10/4/2018	100	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14	150	n/a	1/27/2017	68	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14A	150	n/a	10/4/2018	130	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-15	150	n/a	10/3/2018	260	Yes	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-16	150	n/a	10/4/2018	1700	Yes	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-17	150	n/a	10/4/2018	98	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-19	150	n/a	10/4/2018	100	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-8	150	n/a	10/4/2018	520	Yes	87	10.34	n/a	0.0002524	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-9	150	n/a	10/4/2018	140	No	87	10.34	n/a	0.0002524	NP Inter (normality) ...

Exceeds Limit: WGWC-16, WGWC-8

Calcium Interwell Non-parametric



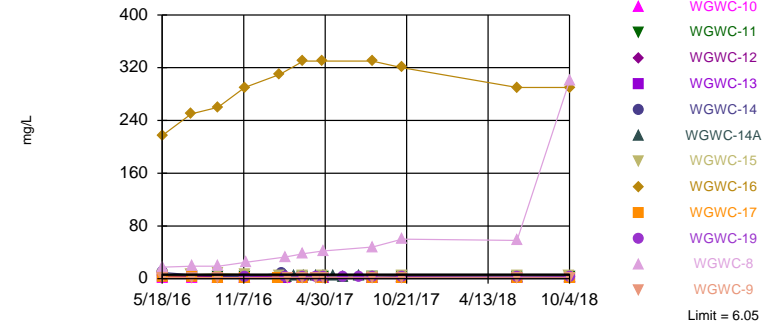
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. Annual per-constituent alpha = 0.008547. Individual comparison alpha = 0.0002524 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:29 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-14, WGWC-16, WGWC-8

Chloride Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. Annual per-constituent alpha = 0.008547. Individual comparison alpha = 0.0002524 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

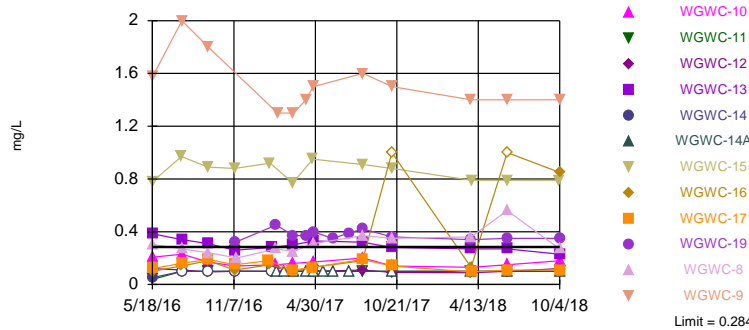
Prediction Limit Analysis Run 1/23/2019 5:29 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-19, WGWC-9

Fluoride Interwell Non-parametric



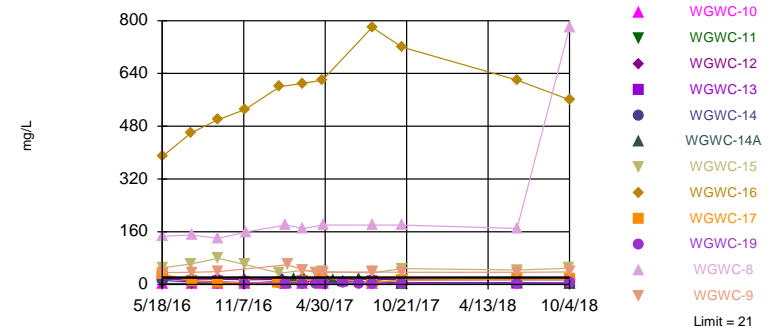
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 95 background values. 58.95% NDs. Annual per-constituent alpha = 0.007213. Individual comparison alpha = 0.0002129 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:29 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-15, WGWC-16, WGWC-8, WGWC-9

Sulfate Interwell Non-parametric



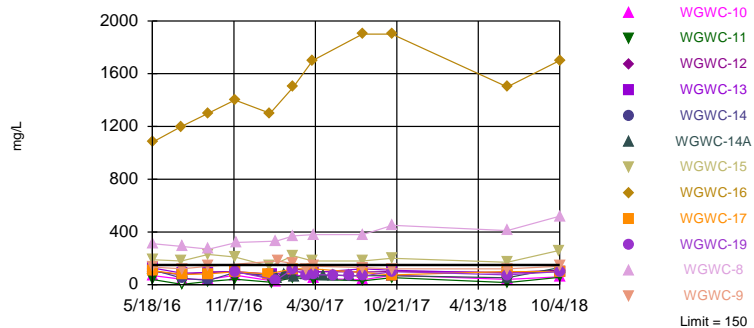
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 27.59% NDs. Annual per-constituent alpha = 0.008547. Individual comparison alpha = 0.0002524 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:30 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limit: WGWC-15, WGWC-16,
WGWC-8

Total Dissolved Solids Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 87 background values. 10.34% NDs. Annual per-constituent alpha = 0.008547. Individual comparison alpha = 0.0002524 (1 of 2). Comparing 12 points to limit. Assumes 5 future values.

Prediction Limit Analysis Run 1/23/2019 5:30 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-4 (bg)	WGWC-17
5/17/2016	23.7	12.2	0.927						
5/18/2016				27	1.7	7.17	1.36	17.9	8.24
5/19/2016									
7/19/2016	23	13	1	23	1.5		0.88		
7/20/2016						7		15	11
9/13/2016	23	13	0.44	25			0.93	16	
9/14/2016					52	7.7			12
9/15/2016									
11/9/2016	6.7	19	1.1	25					
11/10/2016							6.1	15	11
11/11/2016						8.2			
11/14/2016									
1/17/2017		28	1.4						
1/18/2017				26			10	17	
1/19/2017	8.5				13				
1/20/2017									10
1/24/2017									
1/27/2017									
2/6/2017						9.1			
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		14	1.1						
3/14/2017	13			20	1.6		1.3	17	8.8
3/15/2017						9			
3/17/2017									
4/11/2017									
4/24/2017		12	1.1						
4/25/2017	23			28	1.5		1.9	17	12
4/26/2017						8.1			
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	24	18	1.1	26			4.8		
8/9/2017					1.3			15	11
8/10/2017						8.1			
10/10/2017		21	1.2						
10/11/2017	23			29	1.5		0.93	17	10
10/12/2017						8.6			
6/13/2018	11		1.1	25	1.2				
6/14/2018		12				7.7	0.94	15	6.2
9/24/2018		11							
9/27/2018			1.2						
9/28/2018	11								
10/2/2018				26					
10/3/2018					1.4		1.2	16	
10/4/2018						8.5			6.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-3 (bg)	WGWC-15	WGWC-16	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-14
5/17/2016									
5/18/2016	2.1	32.5	168						
5/19/2016				1.95	31.4	8.53	11.4	15.8	10.5
7/19/2016		30	190						
7/20/2016	1.7			1.5	28	8.2	7.1	14	6.6
9/13/2016	1.3								
9/14/2016		37	230	1.8		8.8	7.4	16	5.8
9/15/2016					27				
11/9/2016									
11/10/2016	1.6	29	240				6.4		4.7
11/11/2016				1.7				15	
11/14/2016					32				
1/17/2017									
1/18/2017	1.7								
1/19/2017									
1/20/2017									
1/24/2017		28	280						
1/27/2017				3.5			6.2	16	6.8
2/6/2017					41				
2/8/2017									
2/9/2017						10			
2/23/2017									
3/13/2017									
3/14/2017	1.8	29							
3/15/2017			260	3.8	38	8.6	6.7	16	
3/17/2017									
4/11/2017						8.6			
4/24/2017									
4/25/2017	2	32	300						
4/26/2017				4	39	7.1	6.5	3	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	2								
8/9/2017		30	350				7		
8/10/2017				3.5	53	7.5		15	
10/10/2017									
10/11/2017	2.1	31	360						
10/12/2017				2.7	60	8.2	7	16	
6/13/2018									
6/14/2018	2	29	260	2.2	52	7.5	5.5	13	
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	1.8	31							
10/4/2018			250	2	65	8	5.9	15	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 1/23/2019 5:30 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	12	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	11	
2/8/2017		3.2
2/9/2017		
2/23/2017		4.1
3/13/2017		
3/14/2017		
3/15/2017	10	
3/17/2017		2.4
4/11/2017	11	4.1
4/24/2017		
4/25/2017		
4/26/2017	8.4	2.5
5/17/2017		5.2
6/7/2017	9	5.2
7/11/2017	9.5	2.3
8/8/2017		
8/9/2017		
8/10/2017	8.8	
10/10/2017		
10/11/2017		3.8
10/12/2017	9.5	
6/13/2018		
6/14/2018	8.9	1.1
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	10	2

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-4 (bg)	WGWC-17
5/17/2016	6.05	2.5	3.8						
5/18/2016				1.58	2.14	1.45	2.06	1.45	2.72
5/19/2016									
7/19/2016	4	2.6	3.9	1.6	2.4		2.1		
7/20/2016						1.6		1.4	1.9
9/13/2016	3.1	2.4	3.6	1.4			2	1.4	
9/14/2016					2.1	1.5			1.6
9/15/2016									
11/9/2016	2.3	2.3	3.9	1.5					
11/10/2016							1.8	1.3	1.6
11/11/2016						1.5			
11/14/2016									
1/17/2017		2.3	3.8						
1/18/2017				1.5			1.8	1.3	
1/19/2017	2				1.8				
1/20/2017									1.5
1/24/2017									
1/27/2017									
2/6/2017						1.4			
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		2.2	3.4						
3/14/2017	1.9			2.5	2		1.8	1.2	1.5
3/15/2017						1.4			
3/17/2017									
4/11/2017									
4/24/2017		2.2	3.4						
4/25/2017	1.9			1.3	1.8		1.8	1.2	1.8
4/26/2017						1.3			
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	2	2.3	3.6	1.4			1.9		
8/9/2017					1.9			1.2	1.4
8/10/2017						1.4			
10/10/2017		2.5	3.6						
10/11/2017	1.9			1.3	2.1		1.8	1.2	1.5
10/12/2017						1.3			
6/13/2018	2		3.8	1.4	1.7				
6/14/2018		2.3				1.3	1.7	1.2	1.5
9/24/2018		2.4							
9/27/2018			4						
9/28/2018	2.1								
10/2/2018				1.4					
10/3/2018					1.8		1.8	1.2	
10/4/2018						1.3			1.5

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-3 (bg)	WGWC-15	WGWC-16	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-14
5/17/2016									
5/18/2016	1.92	4.59	217						
5/19/2016				3.21	17.5	1.46	2.26	3.8	9.44
7/19/2016		5.9	250						
7/20/2016	1.8			3.4	19	1.5	1.9	3.8	5.8
9/13/2016	1.7								
9/14/2016		7.9	260	3.1		1.4	1.6	3.7	4.1
9/15/2016					19				
11/9/2016									
11/10/2016	1.6	6.5	290				1.4		3.2
11/11/2016				3.2				3.5	
11/14/2016					25				
1/17/2017									
1/18/2017	1.7								
1/19/2017									
1/20/2017									
1/24/2017		4.1	310						
1/27/2017				3.4			1.4	3.1	8
2/6/2017					33				
2/8/2017									
2/9/2017						1.5			
2/23/2017									
3/13/2017									
3/14/2017	1.6	4.4							
3/15/2017			330	3.1	38	1.3	1.4	3.2	
3/17/2017									
4/11/2017						1.2			
4/24/2017									
4/25/2017	1.6	4	330						
4/26/2017				3.1	42	1.2	1.3	3.2	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.7								
8/9/2017		3.6	330				1.4		
8/10/2017				3.1	48	1.3		3.4	
10/10/2017									
10/11/2017	1.6	5	320						
10/12/2017				3	60	1.4	1.2	3.1	
6/13/2018									
6/14/2018	1.6	4.3	290	3	58	1.2	1.2	3	
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	1.6	4.8							
10/4/2018			290	3.1	300	1.2	1.2	3.1	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 1/23/2019 5:30 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	2.6	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	2.6	
2/8/2017		2.5
2/9/2017		
2/23/2017		4.3
3/13/2017		
3/14/2017		
3/15/2017	2.4	
3/17/2017		4.8
4/11/2017	2.3	3.8
4/24/2017		
4/25/2017		
4/26/2017	2.3	4.8
5/17/2017		3.9
6/7/2017	2.5	3.2
7/11/2017	2.3	4.1
8/8/2017		
8/9/2017		
8/10/2017	2.5	
10/10/2017		
10/11/2017		2.2
10/12/2017	2.3	
6/13/2018		
6/14/2018	2.4	2.8
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	2.6	2.2

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-7 (bg)	WGWA-3 (bg)	WGWC-10	WGWC-17
5/17/2016	0.284 (J)	0.0538 (J)	0.0131 (J)						
5/18/2016				0.164 (J)	0.014 (J)	0.018 (J)	0.029 (J)	0.206	0.121 (J)
5/19/2016									
7/19/2016	0.21	<0.2	<0.2		<0.2	<0.2			
7/20/2016				0.17 (J)			<0.2	0.23	0.16 (J)
9/13/2016	0.15 (J)	<0.2	<0.2	0.15 (J)		<0.2	<0.2		
9/14/2016					0.095 (J)			0.17 (J)	0.19 (J)
9/15/2016									
11/9/2016	<0.2	0.085 (J)	<0.2						
11/10/2016				0.12 (J)		<0.2	<0.2		0.15 (J)
11/11/2016								0.14 (J)	
11/14/2016									
1/17/2017		<0.2	<0.2						
1/18/2017				0.15 (J)		<0.2	<0.2		
1/19/2017	0.087 (J)				<0.2				
1/20/2017									0.18 (J)
1/24/2017									
1/27/2017									
2/6/2017								0.15 (J)	
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		<0.2	<0.2						
3/14/2017	<0.2			0.13 (J)	<0.2	<0.2	<0.2		0.11 (J)
3/15/2017								0.16 (J)	
3/17/2017									
4/11/2017									
4/24/2017		<0.2	<0.2						
4/25/2017	<0.2			0.12 (J)	<0.2	<0.2	<0.2		0.13 (J)
4/26/2017								0.17 (J)	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	0.087 (J)	<0.2	<0.2			<0.2	<0.2		
8/9/2017				0.14 (J)	<0.2				0.19 (J)
8/10/2017								0.2	
10/10/2017		0.18 (J)	<0.2						
10/11/2017	0.09 (J)			0.14 (J)	<0.2	<0.2	<0.2		0.14 (J)
10/12/2017								0.14 (J)	
3/27/2018		<0.2	<0.2						
3/28/2018	0.11 (J)			0.12 (J)	<0.2	<0.2	<0.2		
3/29/2018									
3/30/2018								0.13 (J)	0.095 (J)
6/13/2018	0.085 (J)		<0.2		<0.2				
6/14/2018		<0.2		0.12 (J)		<0.2	<0.2	0.15 (J)	0.11 (J)
9/24/2018		<0.2							
9/27/2018			<0.2						
9/28/2018	0.082 (J)								
10/2/2018									
10/3/2018				0.13 (J)	<0.2	<0.2	<0.2		
10/4/2018								0.18 (J)	0.11 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWA-6 (bg)	WGWC-15	WGWC-14	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11
5/17/2016									
5/18/2016	0.1 (J)	0.106 (J)	0.779						
5/19/2016				0.052 (J)	0.304	0.384	0.12 (J)	1.58	0.039 (J)
7/19/2016	0.14 (J)	0.11 (J)	0.97						
7/20/2016				<0.2	0.27	0.34	0.11 (J)	2	<0.2
9/13/2016		0.11 (J)							
9/14/2016	0.18 (J)		0.89	<0.2		0.31	0.095 (J)	1.8	<0.2
9/15/2016					0.24				
11/9/2016		0.1 (J)							
11/10/2016	0.11 (J)		0.88	<0.2		0.26			
11/11/2016							<0.2		<0.2
11/14/2016					0.2				
1/17/2017									
1/18/2017		0.11 (J)							
1/19/2017									
1/20/2017									
1/24/2017	0.15 (J)		0.92						
1/27/2017				<0.2		0.28	<0.2		<0.2
2/6/2017					0.27				
2/8/2017									
2/9/2017								1.3	
2/23/2017									
3/13/2017									
3/14/2017		<0.2	0.77						
3/15/2017	0.1 (J)				0.25	0.3	<0.2	1.3	<0.2
3/17/2017									
4/11/2017								1.4	
4/24/2017									
4/25/2017	0.13 (J)	<0.2	0.95						
4/26/2017					0.31	0.33	<0.2	1.5	<0.2
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017		0.099 (J)							
8/9/2017	0.18 (J)		0.91			0.32			
8/10/2017					0.37		0.11 (J)	1.6	<0.2
10/10/2017									
10/11/2017	<2	0.098 (J)	0.88						
10/12/2017					0.35	0.28	0.091 (J)	1.5	<0.2
3/27/2018									
3/28/2018		0.088 (J)							
3/29/2018	0.13 (J)				0.36	0.27	0.089 (J)	1.4	<0.2
3/30/2018			0.79						
6/13/2018		0.093 (J)							
6/14/2018	<2		0.79		0.56	0.27	0.1 (J)	1.4	<0.2
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018		0.13 (J)							
10/3/2018			0.79						
10/4/2018	0.85 (J)				0.27	0.23	0.12 (J)	1.4	<0.2

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/23/2019 5:30 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	0.32	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	0.45	
2/8/2017		<0.2
2/9/2017		
2/23/2017		<0.2
3/13/2017		
3/14/2017		
3/15/2017	0.37	
3/17/2017		<0.2
4/11/2017	0.37	<0.2
4/24/2017		
4/25/2017		
4/26/2017	0.4	<0.2
5/17/2017		<0.2
6/7/2017	0.35	<0.2
7/11/2017	0.39	<0.2
8/8/2017		
8/9/2017		
8/10/2017	0.42	
10/10/2017		
10/11/2017		<0.2
10/12/2017	0.36	
3/27/2018		
3/28/2018		
3/29/2018	0.34	<0.2
3/30/2018		
6/13/2018		
6/14/2018	0.35	<0.2
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	0.35	<0.2

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-4 (bg)	WGWC-17
5/17/2016	19.9	1.14	<1						
5/18/2016				8.88	0.955 (J)	2.84	0.368 (J)	5.32	32.1
5/19/2016									
7/19/2016	14	1.4	<1	9	0.76 (J)		<1		
7/20/2016						2.8		6.5	9.7
9/13/2016	11	1.1	<1	8.5			<1	5.6	
9/14/2016					3.4	2.8			6.6
9/15/2016									
11/9/2016	6.3	1.1	<1	8.2					
11/10/2016							<1	5.4	5.2
11/11/2016						2.6			
11/14/2016									
1/17/2017		2.1	<1						
1/18/2017				9.4			1.4	5.1	
1/19/2017	7.4				21				
1/20/2017									5.3
1/24/2017									
1/27/2017									
2/6/2017						2.7			
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		0.97 (J)	<1						
3/14/2017	10			2	1.4		<1	4.6	9.6
3/15/2017						2.7			
3/17/2017									
4/11/2017									
4/24/2017		0.75 (J)	<1						
4/25/2017	10			8.2	0.89 (J)		<1	6.6	20
4/26/2017						2.5			
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	12	1.1	<1	8.5			<1		
8/9/2017					0.75 (J)			7.3	6.5
8/10/2017						2.2			
10/10/2017		1.3	<1						
10/11/2017	11			8.3	<1		<1	6.8	13
10/12/2017						1.9			
6/13/2018	8.2		<1	8.3	<1				
6/14/2018		0.84 (J)				2	<1	6.9	16
9/24/2018		0.79 (J)							
9/27/2018			<1						
9/28/2018	7.6								
10/2/2018				8.3					
10/3/2018					<1		<1	7	
10/4/2018						1.9			15

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:30 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-3 (bg)	WGWC-15	WGWC-16	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-14
5/17/2016									
5/18/2016	0.821 (J)	50.7	388						
5/19/2016				1.83	146	35.9	19.2	15.8	12.4
7/19/2016		62	460						
7/20/2016	0.82 (J)			1.6	150	37	11	16	7.2
9/13/2016	0.81 (J)								
9/14/2016		79	500	1.5		39	8.6	16	4.3
9/15/2016					140				
11/9/2016									
11/10/2016	0.73 (J)	61	530				5.7		2.6
11/11/2016				1.4				14	
11/14/2016					160				
1/17/2017									
1/18/2017	0.99 (J)								
1/19/2017									
1/20/2017									
1/24/2017		34	600						
1/27/2017				2.5			6.8	15	10
2/6/2017					180				
2/8/2017									
2/9/2017						60			
2/23/2017									
3/13/2017									
3/14/2017	0.83 (J)	43							
3/15/2017			610	2.5	170	44	11	17	
3/17/2017									
4/11/2017						36			
4/24/2017									
4/25/2017	0.7 (J)	39	620						
4/26/2017				2.2	180	37	8.1	15	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	0.82 (J)								
8/9/2017		35	780				8.1		
8/10/2017				2.3	180	38		16	
10/10/2017									
10/11/2017	0.72 (J)	48	720						
10/12/2017				1.9	180	37	6.1	14	
6/13/2018									
6/14/2018	<1	44	620	1.7	170	37	5	14	
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	0.73 (J)	49							
10/4/2018			560	1.6	780	38	4.3	14	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 1/23/2019 5:30 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	3.4	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	3.7	
2/8/2017		4.3
2/9/2017		
2/23/2017		16
3/13/2017		
3/14/2017		
3/15/2017	3.6	
3/17/2017		22
4/11/2017	3.2	13
4/24/2017		
4/25/2017		
4/26/2017	3.3	20
5/17/2017		12
6/7/2017	3.8	8.1
7/11/2017	3.3	17
8/8/2017		
8/9/2017		
8/10/2017	3.7	
10/10/2017		
10/11/2017		3.4
10/12/2017	3.6	
6/13/2018		
6/14/2018	3.5	5.8
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	4.6	2.8

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:30 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-1 (bg)	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-4 (bg)	WGWC-17
5/17/2016	112	100	<25						
5/18/2016				113	33	70	31	101	107
5/19/2016									
7/19/2016	80	84	14	92	<5		<5		
7/20/2016						42		86	78
9/13/2016	120	70	50	100			<5	28	
9/14/2016					150	40			82
9/15/2016									
11/9/2016	76	110	22	130					
11/10/2016							44	110	98
11/11/2016						72			
11/14/2016									
1/17/2017		120	8						
1/18/2017				120			50	98	
1/19/2017	36				34				
1/20/2017									82
1/24/2017									
1/27/2017									
2/6/2017						24			
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017		58	<5						
3/14/2017	70			110	32		26	110	120
3/15/2017						78			
3/17/2017									
4/11/2017									
4/24/2017		94	10						
4/25/2017	70			100	22		10	86	120
4/26/2017						48			
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	72	62	<5	90			<5		
8/9/2017					20			92	92
8/10/2017						38			
10/10/2017		140	44						
10/11/2017	90			98	4 (J)		42	110	74
10/12/2017						72			
6/13/2018	38		24	110	<5				
6/14/2018		80				40	14	92	100
9/24/2018		76							
9/27/2018			28						
9/28/2018	68								
10/2/2018				130					
10/3/2018					24		6	100	
10/4/2018						60			98

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:30 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-3 (bg)	WGWC-15	WGWC-16	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-14
5/17/2016									
5/18/2016	29	190	1080						
5/19/2016				39	311	134	127	101	112
7/19/2016		180	1200						
7/20/2016	<5			<5	290	120	88	76	50
9/13/2016	12								
9/14/2016		230	1300	24		140	92	96	32
9/15/2016					270				
11/9/2016									
11/10/2016	30	210	1400				100		92
11/11/2016				42				100	
11/14/2016					320				
1/17/2017									
1/18/2017	22								
1/19/2017									
1/20/2017									
1/24/2017		140	1300						
1/27/2017				18			80	50	68
2/6/2017					330				
2/8/2017									
2/9/2017						180			
2/23/2017									
3/13/2017									
3/14/2017	22	220							
3/15/2017			1500	54	370	160	100	120	
3/17/2017									
4/11/2017						120			
4/24/2017									
4/25/2017	22	180	1700						
4/26/2017				42	380	140	92	100	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	4 (J)								
8/9/2017		180	1900				120		
8/10/2017				30	380	130		96	
10/10/2017									
10/11/2017	10	200	1900						
10/12/2017				54	450	120	110	100	
6/13/2018									
6/14/2018	26	170	1500	16	410	120	88	94	
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	50	260							
10/4/2018			1700	56	520	140	100	110	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/23/2019 5:30 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-14A
5/17/2016		
5/18/2016		
5/19/2016		
7/19/2016		
7/20/2016		
9/13/2016		
9/14/2016		
9/15/2016		
11/9/2016		
11/10/2016		
11/11/2016	98	
11/14/2016		
1/17/2017		
1/18/2017		
1/19/2017		
1/20/2017		
1/24/2017		
1/27/2017		
2/6/2017	36	
2/8/2017		54
2/9/2017		
2/23/2017		78
3/13/2017		
3/14/2017		
3/15/2017	120	
3/17/2017		56
4/11/2017	68	76
4/24/2017		
4/25/2017		
4/26/2017	76	76
5/17/2017		68
6/7/2017	74	72
7/11/2017	70	68
8/8/2017		
8/9/2017		
8/10/2017	66	
10/10/2017		
10/11/2017		68
10/12/2017	100	
6/13/2018		
6/14/2018	74	52
9/24/2018		
9/27/2018		
9/28/2018		
10/2/2018		
10/3/2018		
10/4/2018	100	130

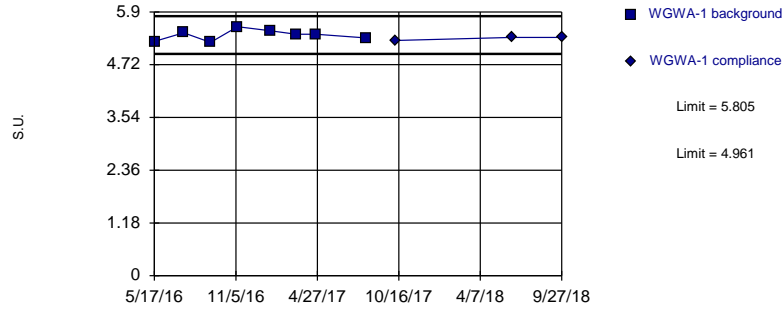
Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/23/2019, 5:36 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>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (S.U.)	WGWA-1	5.805	4.961	9/27/2018	5.33	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-18	9.117	4.548	9/28/2018	6.26	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-2	6.8	6.18	9/24/2018	6.1	Yes	8	0	n/a	0.04288	NP Intra (normality) ...
pH (S.U.)	WGWA-3	5.945	5.28	10/3/2018	5.45	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-4	8.043	5.755	10/3/2018	6.92	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-5	8.447	3.199	10/3/2018	5.22	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-6	8.901	6.383	10/2/2018	7.52	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWA-7	7.16	5.43	10/3/2018	5.33	Yes	8	0	n/a	0.04288	NP Intra (normality) ...
pH (S.U.)	WGWC-10	11.63	4.047	10/4/2018	6.4	No	7	0	sqrt(x)	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-11	6.479	5.614	10/4/2018	5.81	No	7	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-12	7.518	5.963	10/4/2018	6.79	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-13	7.114	6.16	10/4/2018	6.5	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-14	7.43	4.852	n/a	1 future	n/a	5	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-14A	6.666	5.414	10/4/2018	5.97	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-15	8.282	7.042	10/3/2018	7.11	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-16	6.622	4.654	10/4/2018	5.28	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-17	7.058	5.9	10/4/2018	6.14	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-19	7.231	6.384	10/4/2018	6.67	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-8	7.008	4.66	10/4/2018	5.39	No	8	0	No	0.0001936	Param Intra 1 of 2
pH (S.U.)	WGWC-9	7.099	5.19	10/4/2018	6.17	No	6	0	No	0.0001936	Param Intra 1 of 2

Within Limits

pH
Intrawell Parametric



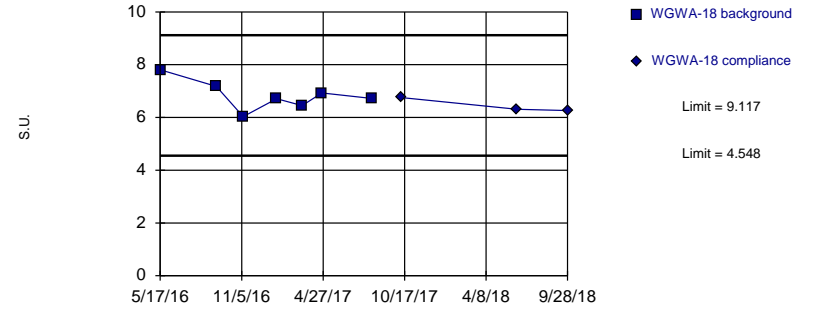
Background Data Summary: Mean=5.383, Std. Dev.=0.1187, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9603, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



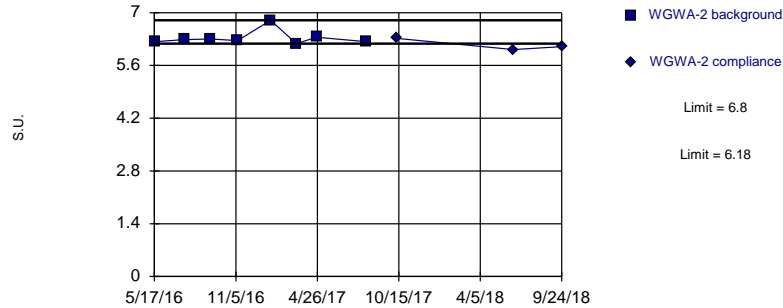
Background Data Summary: Mean=6.833, Std. Dev.=0.5633, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9738, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limits

pH
Intrawell Non-parametric



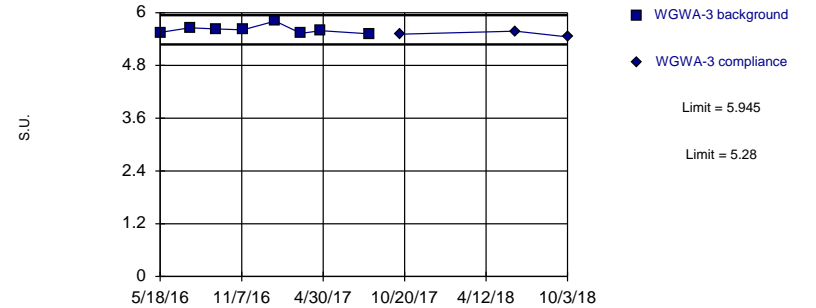
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.08484. Individual comparison alpha = 0.04288 (1 of 2).

Prediction Limit Analysis Run 1/23/2019 5:35 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



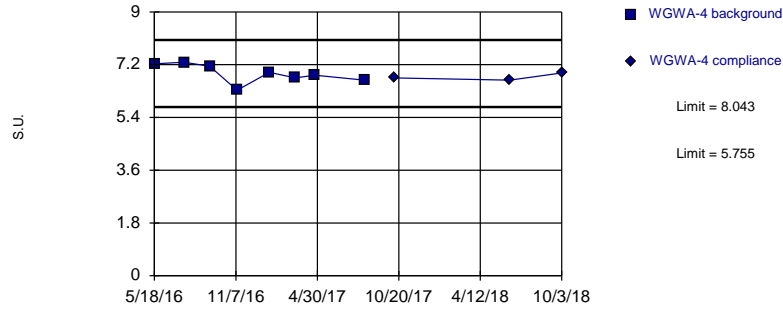
Background Data Summary: Mean=5.612, Std. Dev.=0.09338, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8715, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



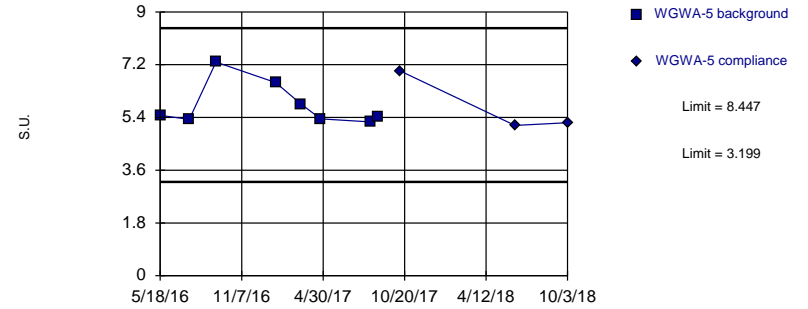
Background Data Summary: Mean=6.899, Std. Dev.=0.3213, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9498, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



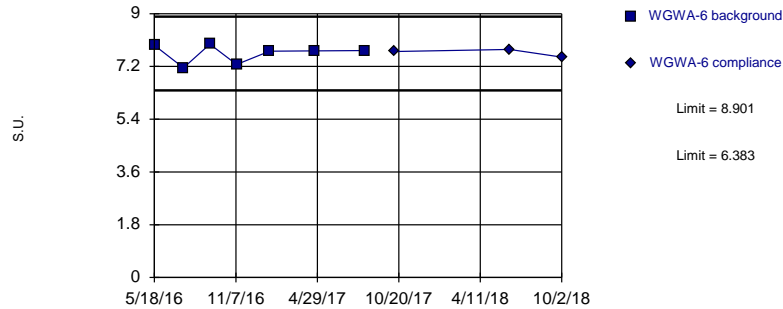
Background Data Summary: Mean=5.823, Std. Dev.=0.7369, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7798, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



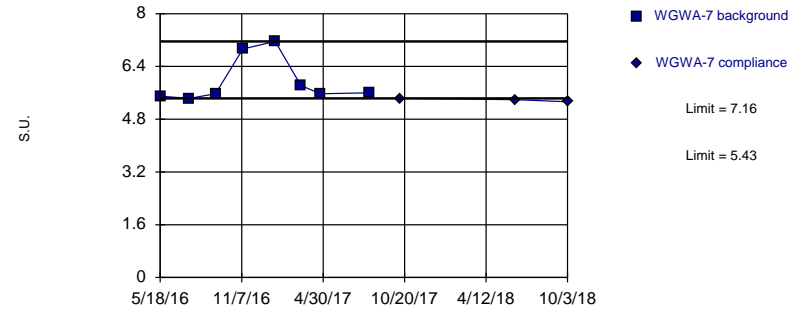
Background Data Summary: Mean=7.642, Std. Dev.=0.3103, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8525, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Exceeds Limits

pH
Intrawell Non-parametric



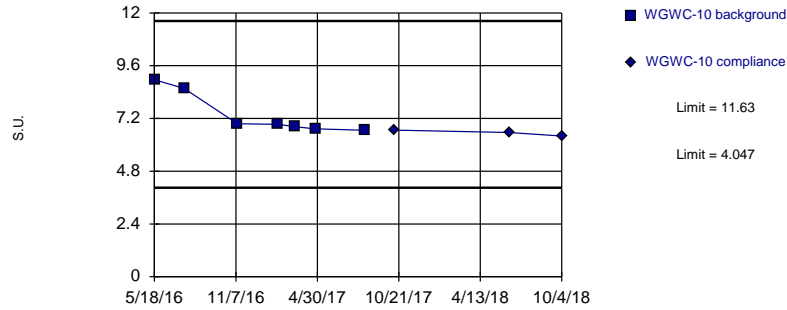
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 8 background values. Well-constituent pair annual alpha = 0.08484. Individual comparison alpha = 0.04288 (1 of 2).

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



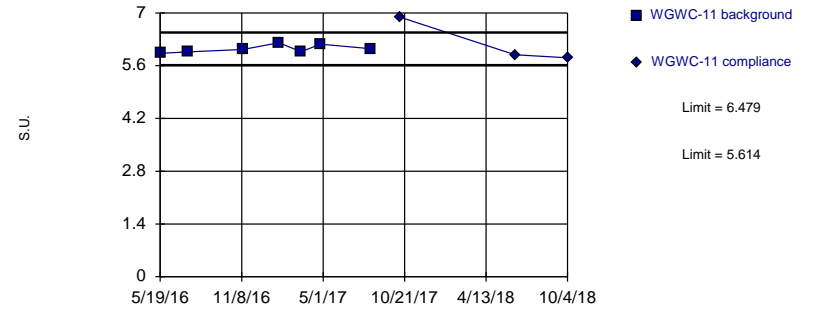
Background Data Summary (based on square root transformation): Mean=2.711, Std. Dev.=0.1724, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7339, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



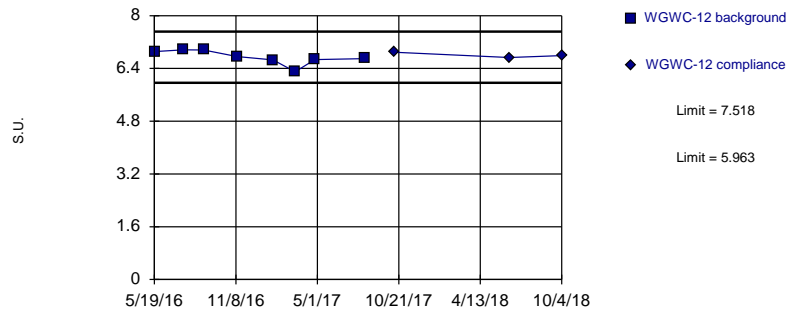
Background Data Summary: Mean=6.047, Std. Dev.=0.1066, n=7. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.899, critical = 0.73. Kappa = 4.056 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric



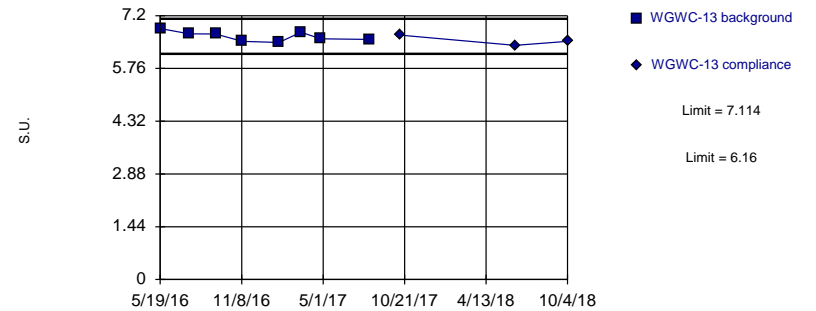
Background Data Summary: Mean=6.74, Std. Dev.=0.2184, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8774, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH Intrawell Parametric

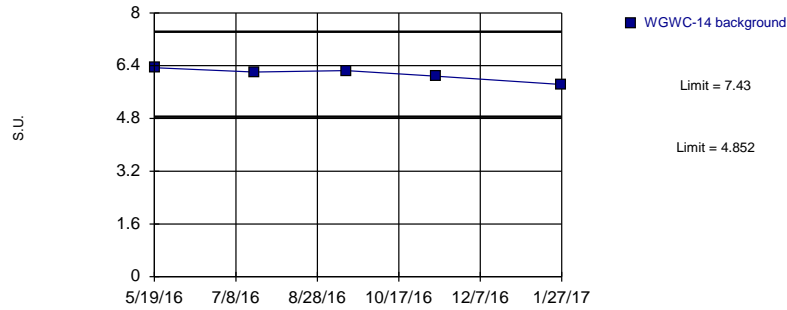


Background Data Summary: Mean=6.637, Std. Dev.=0.1339, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9399, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

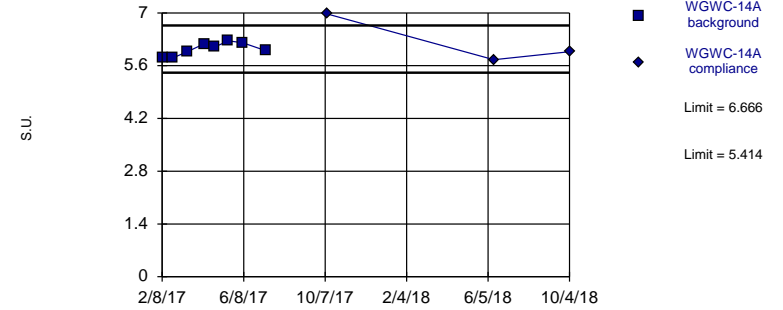
pH
Intrawell Parametric, WGWC-14



Background Data Summary: Mean=6.141, Std. Dev.=0.1976, n=5. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9243, critical = 0.686. Kappa = 6.523 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873. Assumes 1 future value.

Prediction Limit Analysis Run 1/23/2019 5:36 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

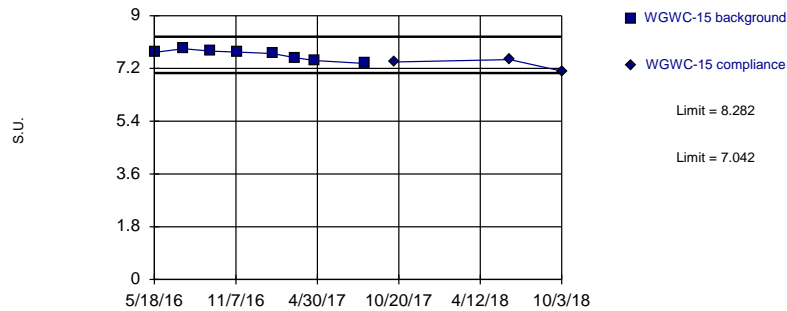
Within Limits
pH
Intrawell Parametric



Background Data Summary: Mean=6.04, Std. Dev.=0.1758, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9217, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

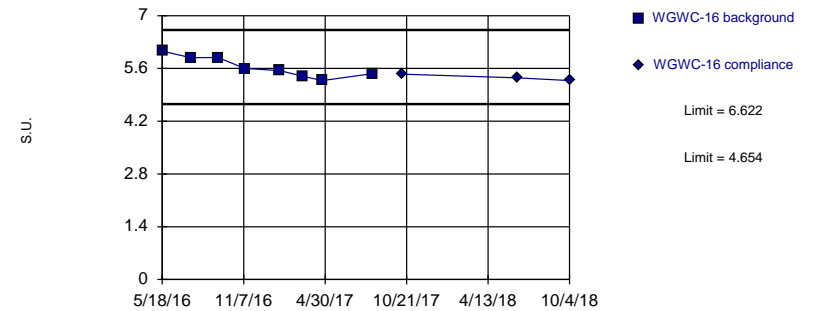
Within Limits
pH
Intrawell Parametric



Background Data Summary: Mean=7.662, Std. Dev.=0.1742, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9232, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits
pH
Intrawell Parametric

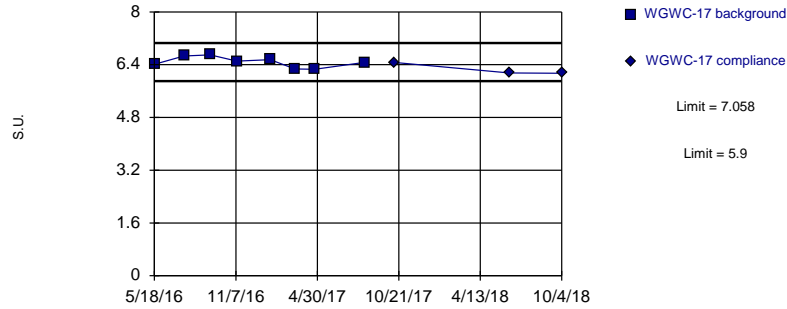


Background Data Summary: Mean=5.638, Std. Dev.=0.2764, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



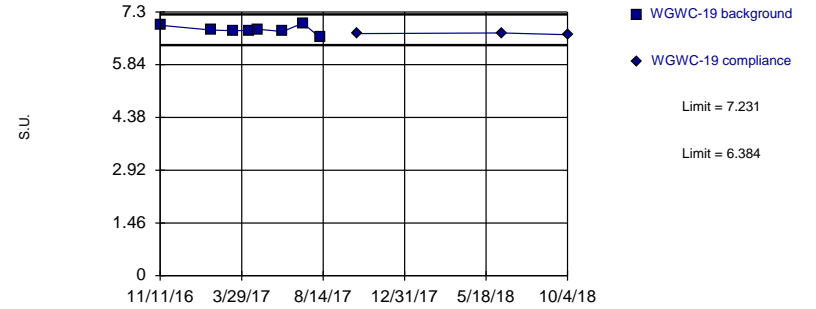
Background Data Summary: Mean=6.479, Std. Dev.=0.1626, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9405, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



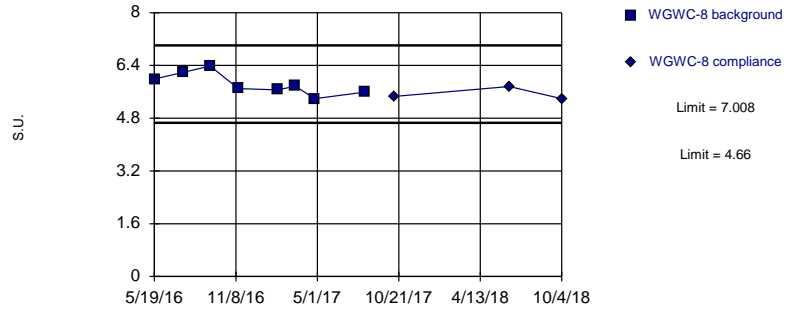
Background Data Summary: Mean=6.808, Std. Dev.=0.119, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9284, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



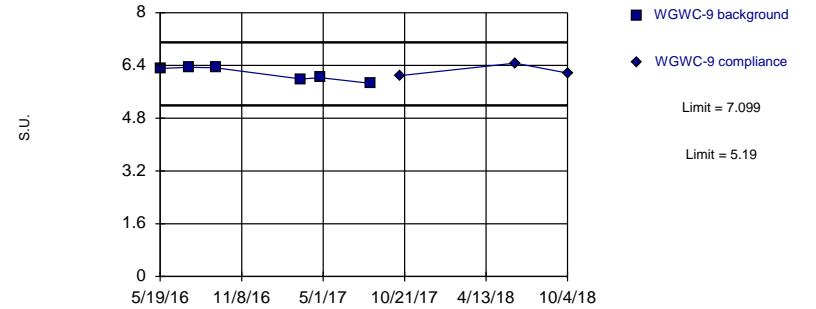
Background Data Summary: Mean=5.834, Std. Dev.=0.3298, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9531, critical = 0.749. Kappa = 3.561 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Within Limits

pH
Intrawell Parametric



Background Data Summary: Mean=6.144, Std. Dev.=0.2097, n=6. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8479, critical = 0.713. Kappa = 4.551 (c=8, w=17, 1 of 2, event alpha = 0.05132). Report alpha = 0.0003873.

Prediction Limit Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-4	WGWA-4	WGWA-5	WGWA-5	WGWA-6	WGWA-6	WGWA-7	WGWA-7
5/18/2016	7.23		5.47		7.92		5.5	
7/19/2016			5.336672		7.154587		5.43	
7/20/2016	7.281557							
9/13/2016	7.15				7.96		5.57	
9/14/2016			7.29					
11/9/2016					7.27			
11/10/2016	6.33						6.93	
1/18/2017	6.94				7.72		7.16	
1/19/2017			6.59					
3/14/2017	6.75		5.86				5.82	
4/25/2017	6.84		5.35		7.73		5.57	
8/8/2017					7.74		5.6	
8/9/2017	6.67		5.25					
8/25/2017			5.44					
10/11/2017		6.75		6.99		7.71		5.43
6/13/2018				5.13		7.78		
6/14/2018		6.67						5.39
10/2/2018						7.52		
10/3/2018		6.92		5.22				5.33

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-10	WGWC-11	WGWC-11	WGWC-12	WGWC-12	WGWC-13	WGWC-13
5/18/2016	8.96							
5/19/2016			5.93		6.91		6.85	
7/18/2016			5.9661					
7/20/2016	8.56774				6.962608		6.705264	
9/1/2016					6.96			
9/14/2016							6.7	
11/10/2016							6.5	
11/11/2016	6.96		6.03		6.76			
1/27/2017			6.21		6.66		6.47	
2/6/2017	6.93							
3/15/2017	6.82		5.97		6.3		6.75	
4/26/2017	6.73		6.17		6.67		6.57	
8/9/2017							6.55	
8/10/2017	6.66		6.05		6.7			
10/12/2017		6.67		6.89		6.89		6.67
6/14/2018		6.56		5.89		6.73		6.39
10/4/2018		6.4		5.81		6.79		6.5

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14	WGWC-14A	WGWC-14A	WGWC-15	WGWC-15	WGWC-16	WGWC-16
5/18/2016				7.75		6.06	
5/19/2016	6.34						
7/18/2016						5.884339	
7/19/2016				7.876073			
7/20/2016	6.206347						
9/14/2016				7.79		5.89	
9/15/2016	6.25						
11/10/2016	6.08			7.76		5.6	
1/24/2017				7.71		5.54	
1/27/2017	5.83						
2/8/2017		5.81					
2/23/2017		5.8					
3/14/2017				7.57			
3/15/2017						5.39	
3/17/2017		5.97					
4/11/2017		6.18					
4/25/2017				7.47		5.28	
4/26/2017		6.09					
5/17/2017		6.26					
6/7/2017		6.21					
7/11/2017		6					
8/9/2017				7.37		5.46	
10/11/2017			6.97		7.42		5.45
6/14/2018			5.76		7.5		5.35
10/3/2018					7.11		
10/4/2018			5.97				5.28

Prediction Limit

Constituent: pH Analysis Run 1/23/2019 5:36 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWC-17	WGWC-19	WGWC-19	WGWC-8	WGWC-8	WGWC-9	WGWC-9
5/18/2016	6.41							
5/19/2016					5.99		6.31	
7/20/2016	6.662463				6.194334		6.345061	
9/14/2016	6.7						6.33	
9/15/2016					6.38			
11/10/2016	6.51							
11/11/2016			6.93					
11/14/2016					5.7			
1/20/2017	6.55							
2/6/2017			6.8		5.66			
3/14/2017	6.27							
3/15/2017			6.78		5.77		5.99	
4/11/2017			6.79					
4/25/2017	6.26							
4/26/2017			6.82		5.39		6.03	
6/7/2017			6.76					
7/11/2017			6.99					
8/9/2017	6.47							
8/10/2017			6.59		5.59		5.86	
10/11/2017		6.47						
10/12/2017				6.7		5.46		6.09
6/14/2018		6.15		6.72		5.76		6.47
10/4/2018		6.14		6.67		5.39		6.17

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:21 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Arsenic (mg/L)	WGWC-10	0.00089	0.0005	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.00065	0.00047	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.00065	0.000125	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.0015	0.00065	0.01	No	11	63.64	No	0.006	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0021	0.0006	0.01	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Arsenic (mg/L)	WGWC-15	0.002721	0.001743	0.01	No	11	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.003626	0.0007742	0.01	No	11	18.18	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.00095	0.00058	0.01	No	11	54.55	No	0.006	NP (normality)
Arsenic (mg/L)	WGWC-19	0.00065	0.00065	0.01	No	11	100	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-8	0.0015	0.00055	0.01	No	11	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.0017	0.00047	0.01	No	11	72.73	No	0.006	NP (normality)
Barium (mg/L)	WGWC-10	0.04133	0.03571	2	No	11	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-11	0.03494	0.02895	2	No	11	0	ln(x)	0.01	Param.
Barium (mg/L)	WGWC-12	0.0221	0.01495	2	No	11	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05639	0.0427	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05212	0.03297	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02162	0.01831	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.06925	0.05535	2	No	11	0	x^4	0.01	Param.
Barium (mg/L)	WGWC-17	0.02053	0.01509	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.001692	0.001121	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-8	0.002667	0.001021	2	No	11	0	No	0.01	Param.
Barium (mg/L)	WGWC-9	0.0015	0.00053	2	No	11	27.27	No	0.006	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-10	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-11	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-12	0.00125	0.00025	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-13	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-14A	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-15	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-17	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-19	0.00125	0.00125	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.001771	0.001256	0.004	No	11	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.00125	0.00034	0.004	No	11	72.73	No	0.006	NP (normality)
Cadmium (mg/L)	WGWC-10	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-11	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-12	0.00125	0.00025	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-13	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-14A	0.00125	0.00125	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-15	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.001763	0.0002444	0.005	No	11	18.18	No	0.01	Param.
Cadmium (mg/L)	WGWC-17	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-19	0.00125	0.00125	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-8	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-9	0.00125	0.0005	0.005	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-10	0.0031	0.0011	0.1	No	11	18.18	No	0.006	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-11	0.00125	0.0011	0.1	No	11	81.82	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-12	0.00125	0.00025	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-13	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-15	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	WGWC-16	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-17	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-19	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-8	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-9	0.00125	0.00125	0.1	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001801	0.0007077	0.013	No	11	9.091	x^(1/3)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00049	0.013	No	11	45.45	No	0.006	NP (Cohens/xfrm)
Cobalt (mg/L)	WGWC-12	0.002256	0.0005207	0.013	No	11	9.091	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.00125	0.0004	0.013	No	11	72.73	No	0.006	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.0138	0.007858	0.013	No	11	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.00125	0.00125	0.013	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.01504	0.008128	0.013	No	11	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-17	0.002099	0.0009753	0.013	No	11	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.00125	0.00045	0.013	No	11	72.73	No	0.006	NP (normality)
Cobalt (mg/L)	WGWC-8	0.00125	0.00066	0.013	No	11	81.82	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.00125	0.00073	0.013	No	11	90.91	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.5765	0.1004	10.4	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6655	-0.02337	10.4	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.7846	0.1075	10.4	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8527	0.4231	10.4	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	1.063	0.5347	10.4	No	11	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.8787	0.2451	10.4	No	11	9.091	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.622	1.327	10.4	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.7106	0.01788	10.4	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.52	0.09581	10.4	No	11	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.933	0.9382	10.4	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4299	0.1467	10.4	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1927	0.145	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.039	4	No	12	91.67	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.2015	0.09693	4	No	12	33.33	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.3305	0.2651	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.1	4	No	12	100	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.9166	0.8033	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	1	0.1	4	No	12	16.67	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.1667	0.1143	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.4013	0.3437	4	No	12	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3785	0.2435	4	No	12	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.67	1.356	4	No	12	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-10	0.02159	0.01021	0.04	No	11	0	No	0.01	Param.
Lithium (mg/L)	WGWC-11	0.0025	0.0011	0.04	No	11	72.73	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-12	0.01	0.0011	0.04	No	11	9.091	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-13	0.0038	0.0018	0.04	No	11	63.64	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-14A	0.0033	0.0016	0.04	No	11	54.55	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-15	0.0077	0.0025	0.04	No	11	18.18	No	0.006	NP (Cohens/xfrm)
Lithium (mg/L)	WGWC-16	0.01566	0.009058	0.04	No	11	9.091	x^(1/3)	0.01	Param.
Lithium (mg/L)	WGWC-17	0.0067	0.0042	0.04	No	11	9.091	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-19	0.0581	0.04503	0.04	Yes	11	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.02582	0.01139	0.04	No	11	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.04097	0.03057	0.04	No	11	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.00013	0.000082	0.002	No	11	63.64	No	0.006	NP (normality)

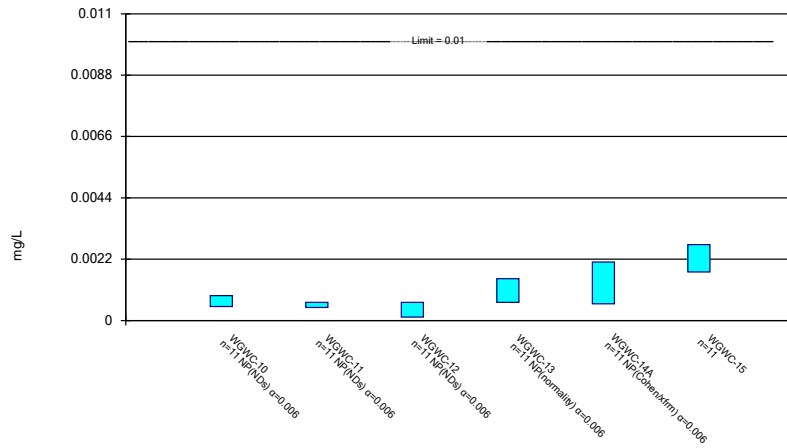
Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/11/2019, 3:21 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Mercury (mg/L)	WGWC-11	0.00011	0.000082	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-12	0.00018	0.000079	0.002	No	11	63.64	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-13	0.0001	0.000081	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0001	0.0001	0.002	No	11	90.91	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0001	0.000071	0.002	No	11	63.64	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-16	0.00019	0.00007	0.002	No	11	72.73	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-17	0.0001	0.000074	0.002	No	11	90.91	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0001	0.000076	0.002	No	11	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-8	0.00013	0.000078	0.002	No	11	72.73	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-9	0.00013	0.0001	0.002	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.0075	0.00091	0.1	No	11	81.82	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.0075	0.0011	0.1	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.0075	0.0009	0.1	No	11	72.73	No	0.006	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.003936	0.001854	0.1	No	11	9.091	ln(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-14A	0.0075	0.001	0.1	No	11	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.009307	0.00389	0.1	No	11	0	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	WGWC-16	0.0075	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-17	0.00782	0.003309	0.1	No	11	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.0075	0.001	0.1	No	11	54.55	No	0.006	NP (normality)
Molybdenum (mg/L)	WGWC-8	0.0075	0.005	0.1	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-9	0.008698	0.003915	0.1	No	11	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.00065	0.00031	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-11	0.00065	0.00049	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-12	0.0021	0.000125	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-13	0.00065	0.00065	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.00065	0.0003	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-15	0.00065	0.0005	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-16	0.0141	0.00836	0.05	No	11	0	No	0.01	Param.
Selenium (mg/L)	WGWC-17	0.00065	0.00065	0.05	No	11	100	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-19	0.00065	0.00036	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.003	0.05	No	11	0	No	0.006	NP (normality)
Selenium (mg/L)	WGWC-9	0.002553	0.001916	0.05	No	11	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.00025	0.000085	0.002	No	11	90.91	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-11	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-12	0.00025	0.00005	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-13	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.00025	0.00011	0.002	No	11	54.55	No	0.006	NP (normality)
Thallium (mg/L)	WGWC-15	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-16	0.00028	0.0001343	0.002	No	11	9.091	x^(1/3)	0.01	Param.
Thallium (mg/L)	WGWC-17	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-19	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-8	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-9	0.00025	0.00025	0.002	No	11	100	No	0.006	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

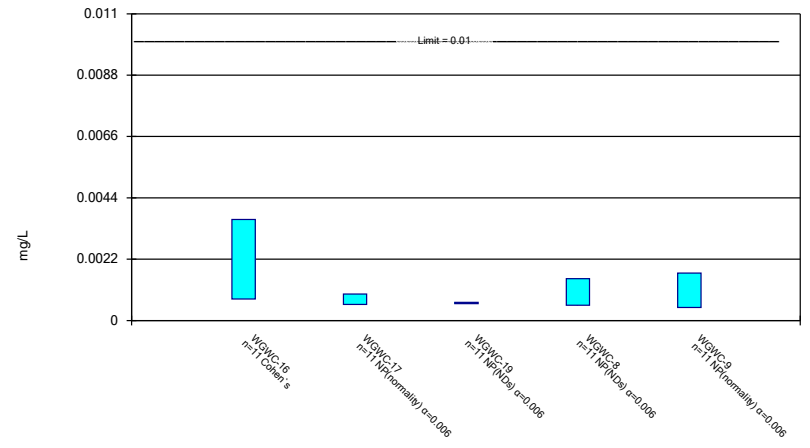
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

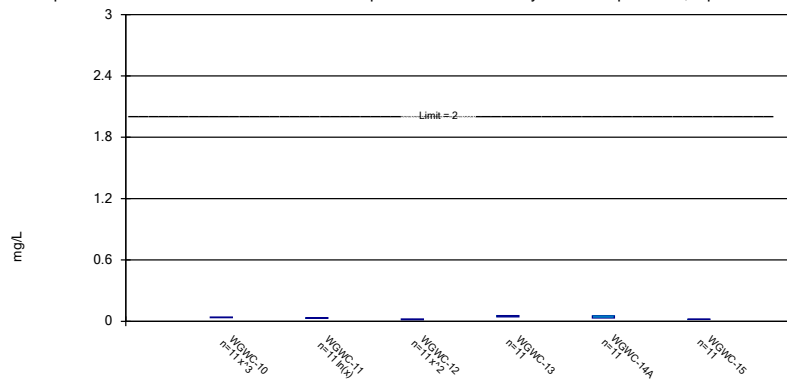
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Constituent: Arsenic Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

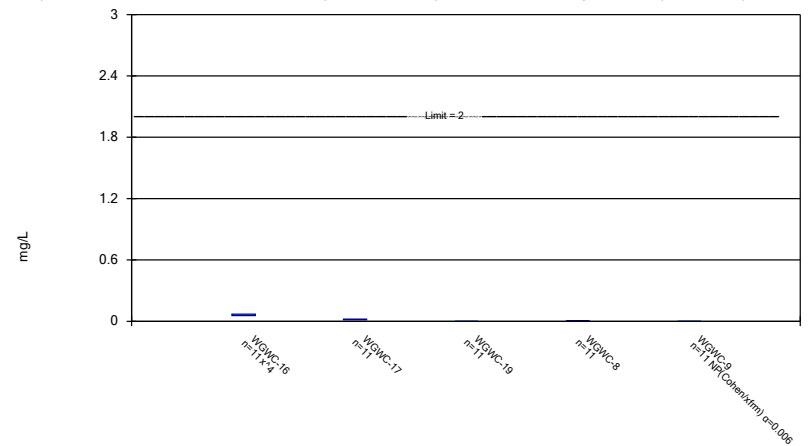
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Constituent: Barium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

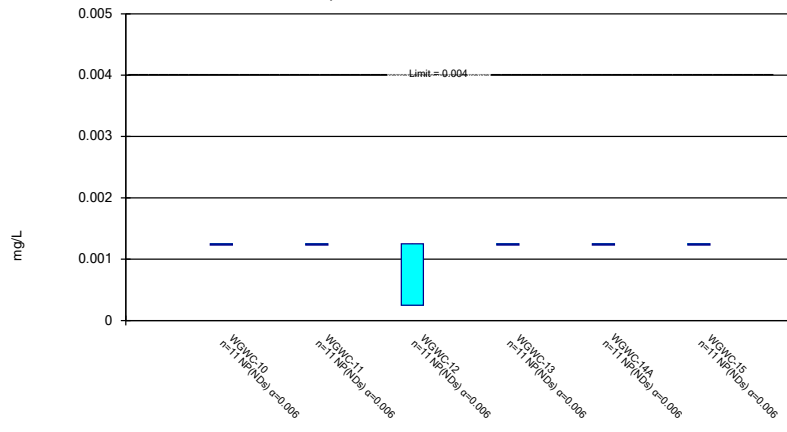
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Constituent: Barium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

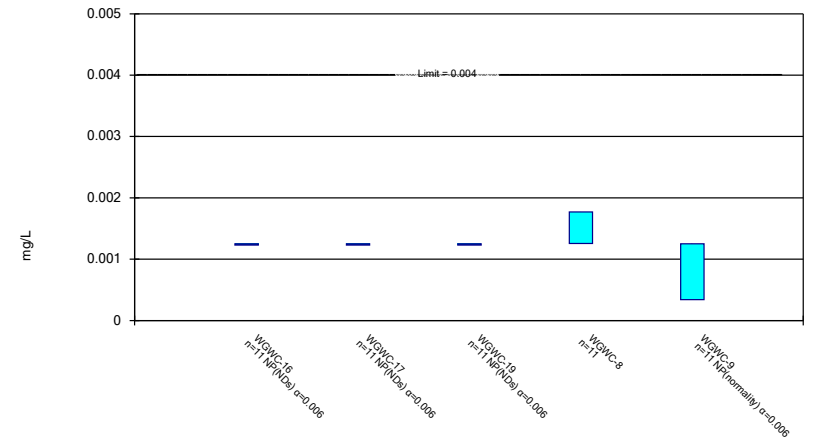
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

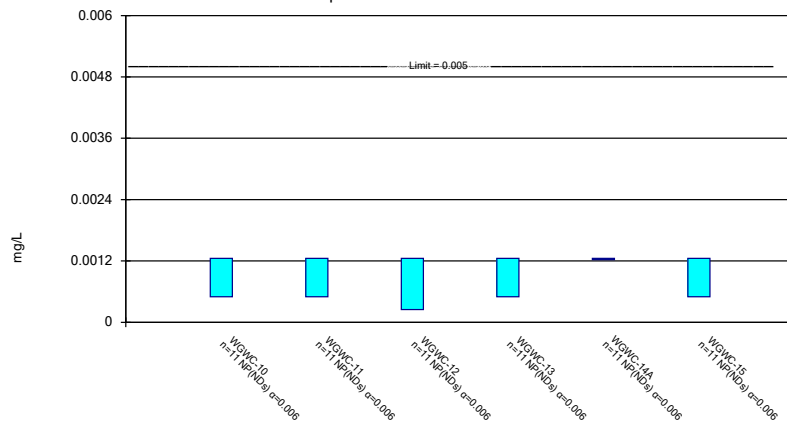
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

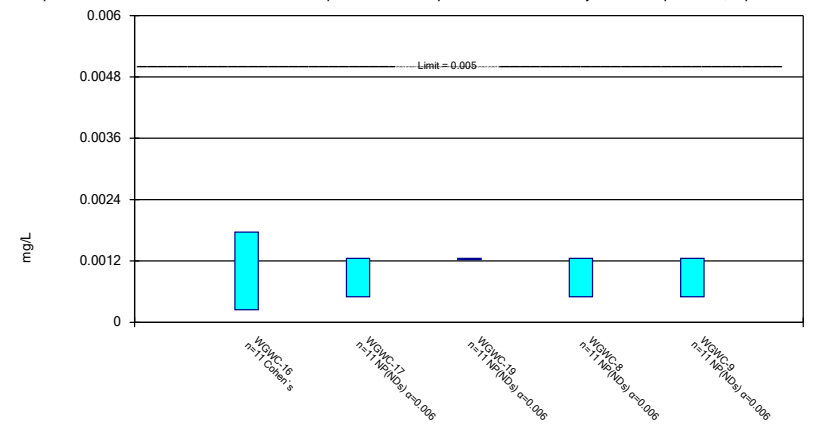
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

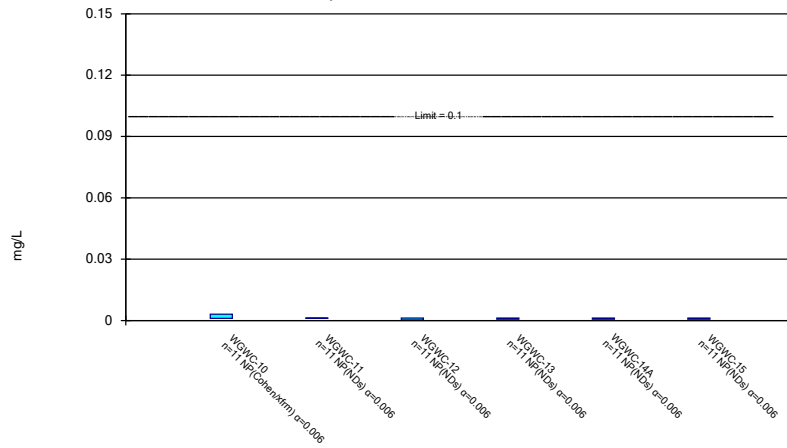
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



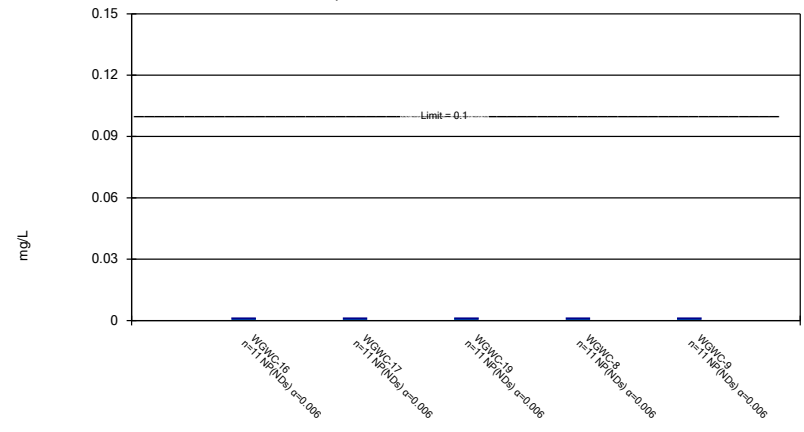
Constituent: Cadmium Analysis Run 1/11/2019 3:14 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/11/2019 3:14 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

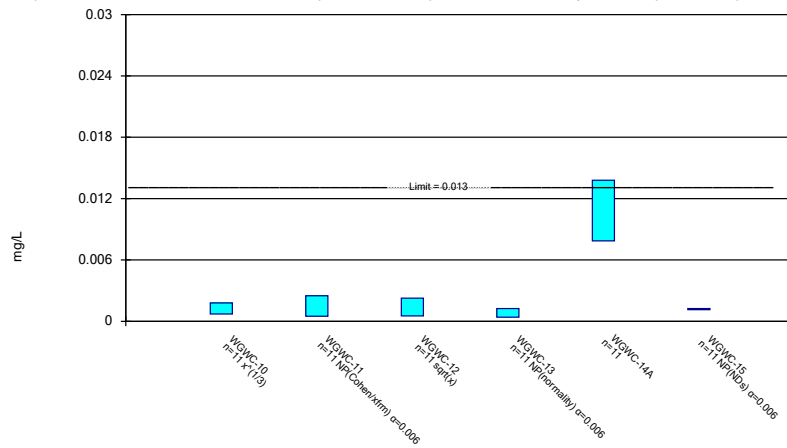
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/11/2019 3:14 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

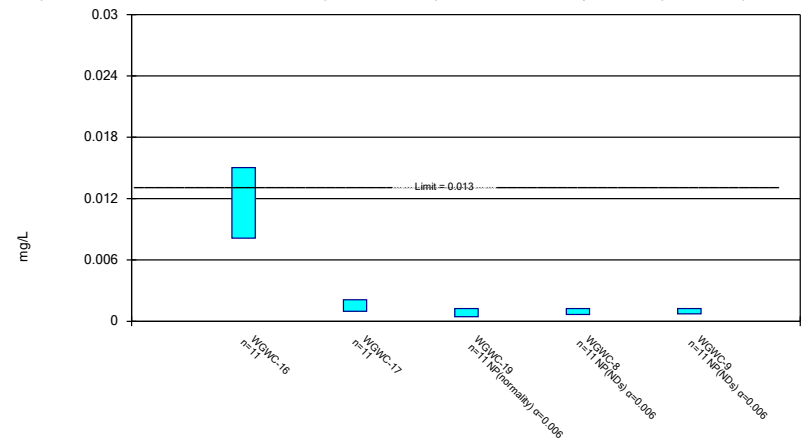
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/11/2019 3:14 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

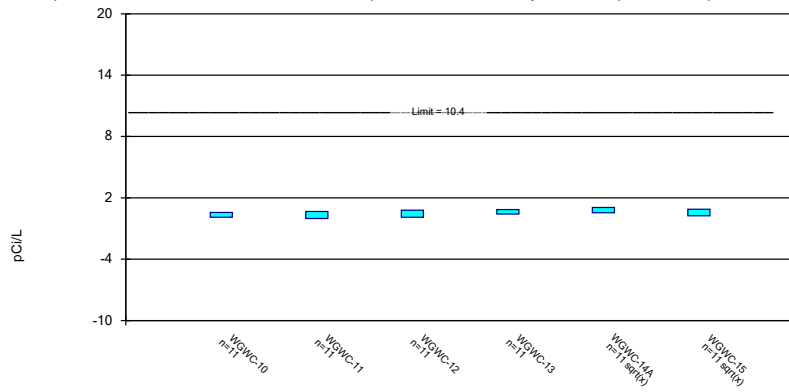
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/11/2019 3:14 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

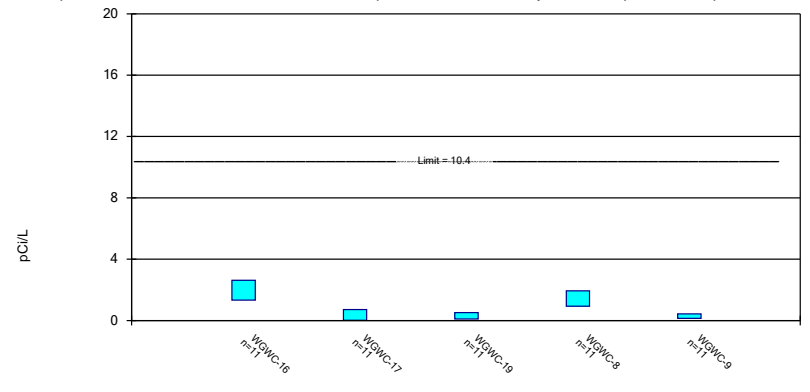
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

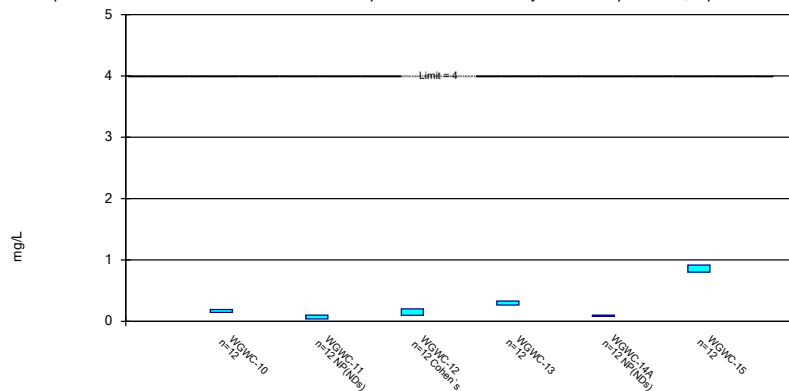
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

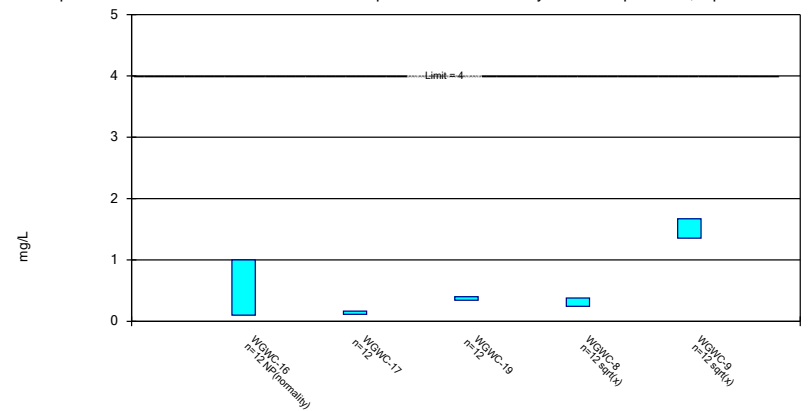
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

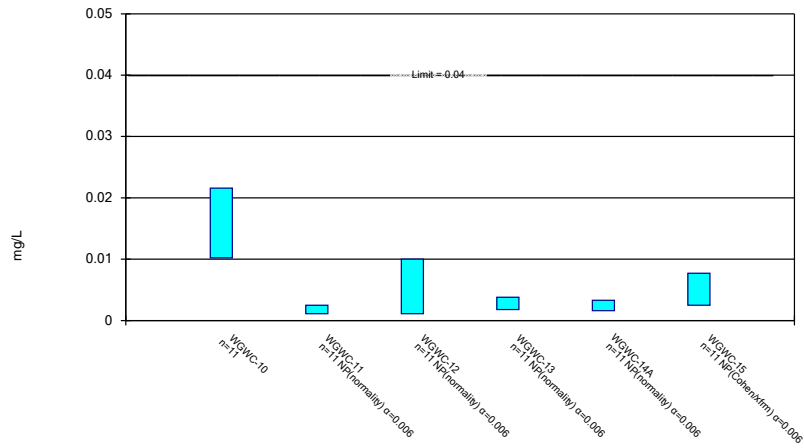
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

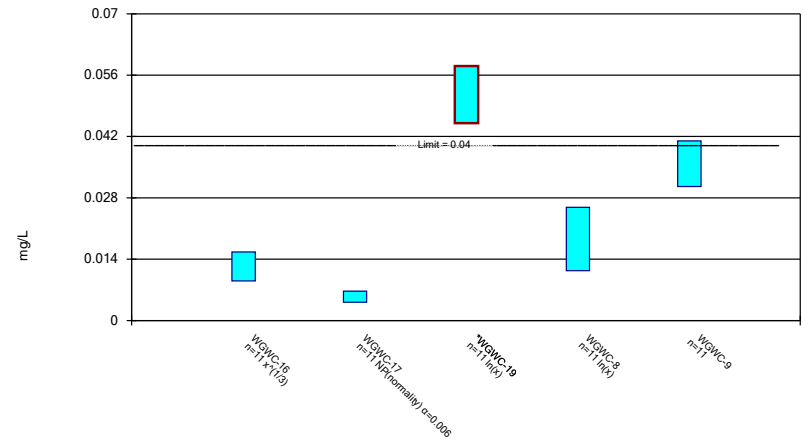
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

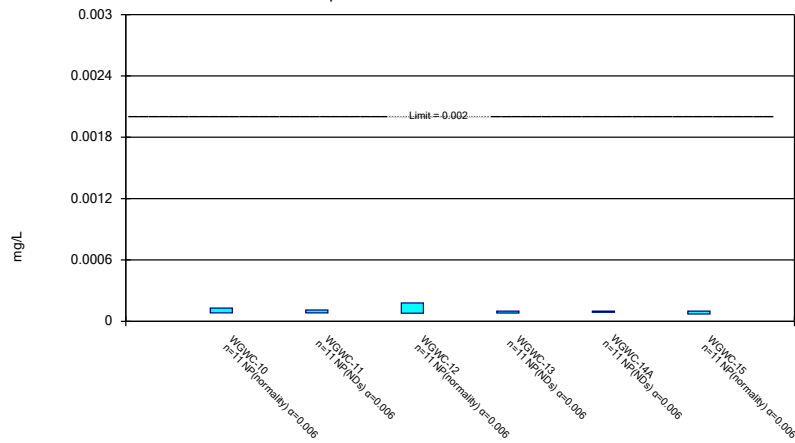
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

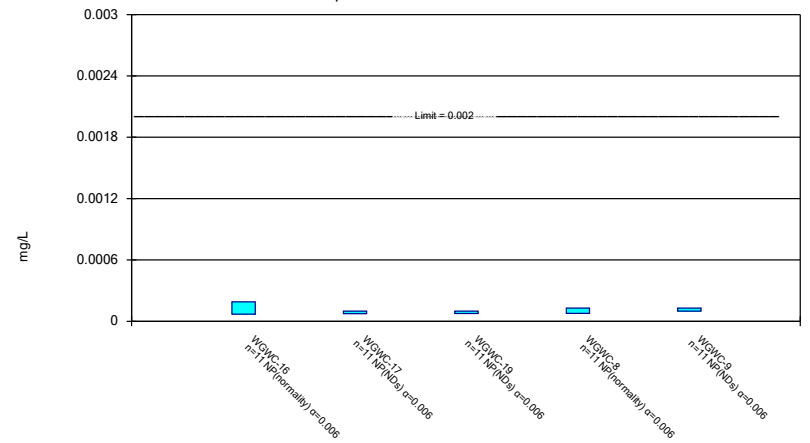
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

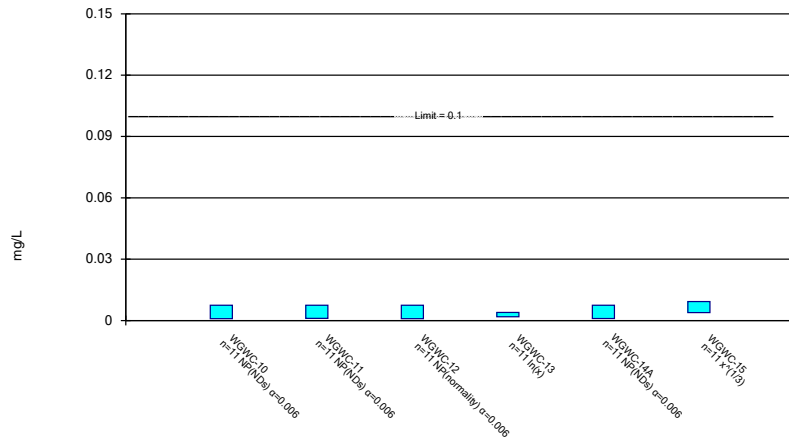
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

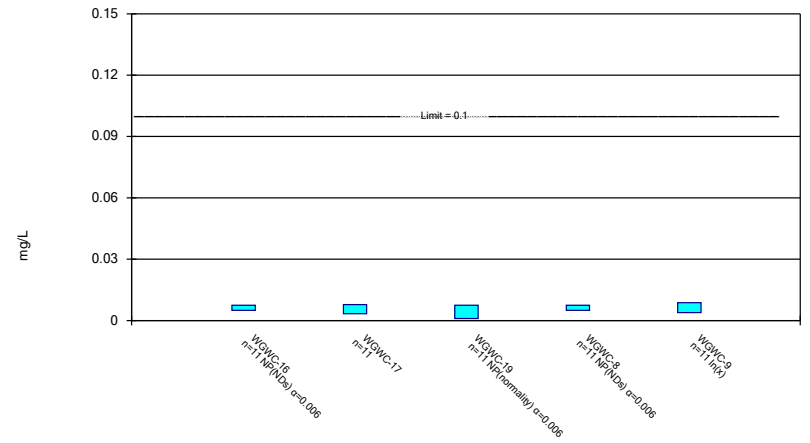
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

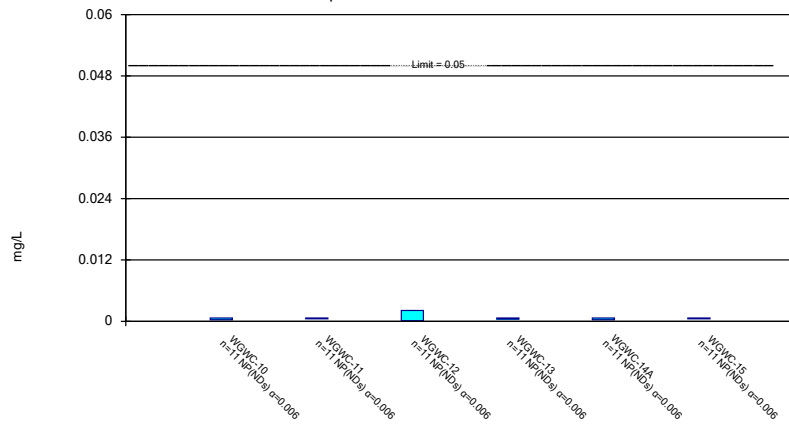
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

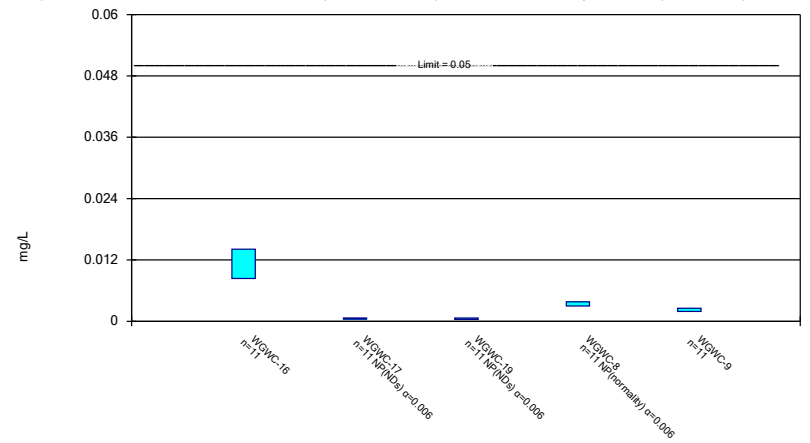
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

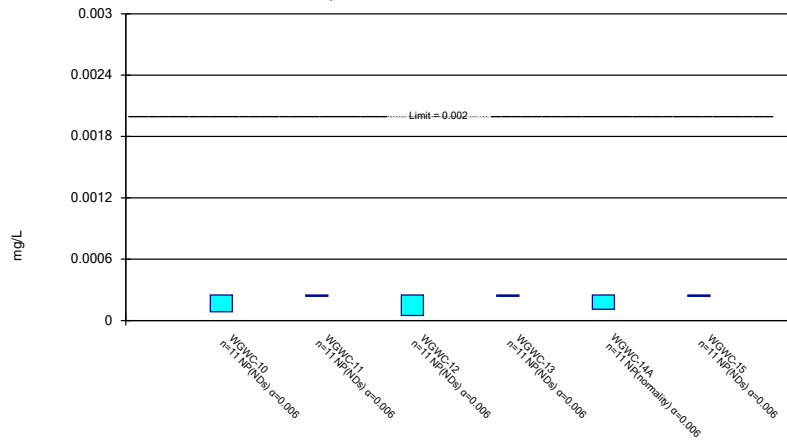
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/11/2019 3:15 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

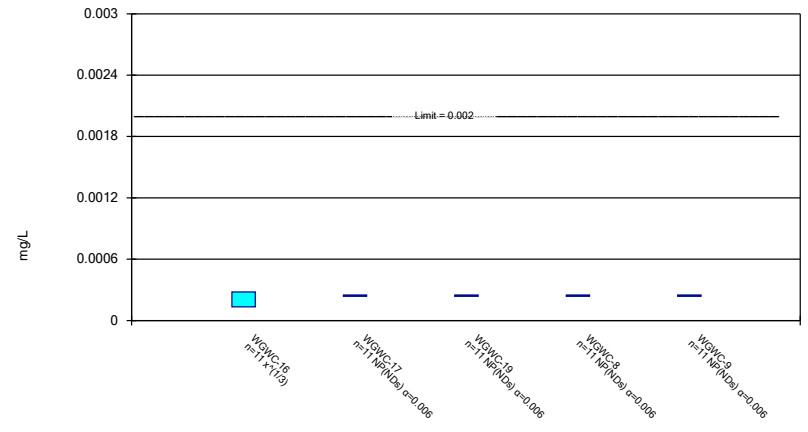
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 1/11/2019 3:15 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.005					0.00345
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0031
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		0.0024
11/10/2016				<0.0013		0.0023
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						0.0019
1/27/2017		0.00047 (J)	<0.0013	0.00066 (J)		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						0.0016
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					0.0006 (J)	
4/11/2017					0.0032	
4/25/2017						0.0019
4/26/2017	<0.0013	<0.0013	<0.00025	<0.0013	0.0019	
5/17/2017					0.0014	
6/7/2017					0.0021	
7/11/2017					0.00095 (J)	
8/9/2017				<0.0013		0.0017
8/10/2017	<0.0013	<0.0013	0.00048 (J)			
3/29/2018		<0.0013	<0.0013	0.00067 (J)	<0.0013	
3/30/2018	<0.0013					0.0018
6/14/2018	0.0005 (J)	<0.0013	0.00052 (J)	0.00093 (J)	<0.0013	0.002
10/3/2018						0.0024
10/4/2018	0.00089 (J)	0.00054 (J)	<0.0013	0.0015	0.0017	
Mean	0.0008264	0.0007918	0.0007432	0.0009236	0.001314	0.002232
Std. Dev.	0.0005622	0.0005697	0.000604	0.0005831	0.0008415	0.0005866
Upper Lim.	0.00089	0.00065	0.00065	0.0015	0.0021	0.002721
Lower Lim.	0.0005	0.00047	0.000125	0.00065	0.0006	0.001743

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				<0.005	<0.005
7/19/2016	0.0009 (J)				
7/20/2016		0.00058 (J)		0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.0013			<0.0013
9/15/2016				<0.0013	
11/10/2016	0.0021	0.00082 (J)			
11/11/2016			<0.0013		
11/14/2016				<0.0013	
1/20/2017		<0.0013			
1/24/2017	0.0015				
2/6/2017			<0.0013	<0.0013	
2/9/2017					0.0017
3/14/2017		<0.0013			
3/15/2017	0.0014		<0.0013	<0.0013	0.00047 (J)
4/11/2017			<0.0013		<0.0013
4/25/2017	0.0014	0.00095 (J)			
4/26/2017			<0.0013	<0.0013	<0.0013
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.0013	<0.0013			
8/10/2017			<0.0013	<0.0013	<0.0013
3/29/2018	0.0014		<0.0013	<0.0013	<0.0013
3/30/2018		<0.0013			
6/14/2018	<0.0013	0.00076 (J)	<0.0013	<0.0013	<0.0013
10/4/2018	0.0013	0.00088 (J)	<0.0013	0.0015	<0.0013
Mean	0.001441	0.0008855	0.00065	0.0008864	0.0009091
Std. Dev.	0.0005024	0.0005479	0	0.000595	0.0006193
Upper Lim.	0.003626	0.00095	0.00065	0.0015	0.0017
Lower Lim.	0.0007742	0.00058	0.00065	0.00055	0.00047

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0391					0.0206
5/19/2016		0.031	0.0214	0.055		
7/19/2016						0.019
7/20/2016	0.028	0.029	0.019	0.039		
9/14/2016	0.035	0.031	0.02	0.04		0.02
11/10/2016				0.04		0.02
11/11/2016	0.042	0.034	0.022			
1/24/2017						0.017
1/27/2017		0.042	0.023	0.042		
2/6/2017	0.041					
2/8/2017					0.037	
2/23/2017					0.051	
3/14/2017						0.018
3/15/2017	0.04	0.032	0.024	0.058		
3/17/2017					0.046	
4/11/2017					0.055	
4/25/2017						0.018
4/26/2017	0.039	0.03	0.004	0.054	0.042	
5/17/2017					0.052	
6/7/2017					0.06	
7/11/2017					0.038	
8/9/2017				0.055		0.02
8/10/2017	0.038	0.03	0.017			
3/29/2018		0.028	0.017	0.061	0.028	
3/30/2018	0.042					0.021
6/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
10/3/2018						0.024
10/4/2018	0.04	0.035	0.017	0.046	0.036	
Mean	0.03837	0.032	0.01813	0.04955	0.04255	0.01996
Std. Dev.	0.003983	0.003899	0.00549	0.008214	0.01149	0.001984
Upper Lim.	0.04133	0.03494	0.0221	0.05639	0.05212	0.02162
Lower Lim.	0.03571	0.02895	0.01495	0.0427	0.03297	0.01831

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.01
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.0025
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.0025
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
10/4/2018	0.046	0.013	0.0012 (J)	0.0017 (J)	0.00076 (J)
Mean	0.0615	0.01781	0.001406	0.001844	0.001339
Std. Dev.	0.009882	0.003268	0.0003427	0.0009877	0.00126
Upper Lim.	0.06925	0.02053	0.001692	0.002667	0.0015
Lower Lim.	0.05535	0.01509	0.001121	0.001021	0.00053

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.003					<0.003
5/19/2016		<0.003	<0.003	<0.003		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018						<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
Mean	0.001273	0.001273	0.001182	0.001273	0.00125	0.001273
Std. Dev.	7.538E-05	7.538E-05	0.000318	7.538E-05	0	7.538E-05
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00025	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.003	<0.003			
5/19/2016				0.00102 (J)	<0.003
7/19/2016	<0.0025				
7/20/2016		<0.0025		0.0014 (J)	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				0.00093 (J)	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				0.0014 (J)	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	0.0017 (J)	
2/9/2017					0.00041 (J)
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	0.0016 (J)	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	0.0017 (J)	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	0.0017 (J)	0.00034 (J)
3/29/2018	<0.0025		<0.0025	0.0018 (J)	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	0.0015 (J)	<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	0.0019 (J)	0.00036 (J)
Mean	0.001273	0.001273	0.00125	0.001514	0.001033
Std. Dev.	7.538E-05	7.538E-05	0	0.0003087	0.0004323
Upper Lim.	0.00125	0.00125	0.00125	0.001771	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.001256	0.00034

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001					<0.001
5/19/2016		<0.001	<0.001	<0.001		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018						<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
Mean	0.001182	0.001182	0.001091	0.001182	0.00125	0.001182
Std. Dev.	0.0002261	0.0002261	0.0003583	0.0002261	0	0.0002261
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0005	0.0005	0.00025	0.0005	0.00125	0.0005

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.000362 (J)	<0.001			
5/19/2016				<0.001	<0.001
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	0.00037 (J)	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	0.00055 (J)				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	0.00067 (J)		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.00058 (J)	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.00054 (J)	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	0.00082 (J)		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	0.0007 (J)	<0.0025	<0.0025	<0.0025	<0.0025
10/4/2018	0.00065 (J)	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.0007038	0.001182	0.00125	0.001182	0.001182
Std. Dev.	0.0003014	0.0002261	0	0.0002261	0.0002261
Upper Lim.	0.001763	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0002444	0.0005	0.00125	0.0005	0.0005

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0025
7/20/2016	0.0012 (J)	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.0015 (J)	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	0.0011 (J)					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	0.0015 (J)	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	0.0013 (J)	0.0011 (J)	<0.0005	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	0.0016 (J)	<0.0025	<0.0025			
3/29/2018		0.0012 (J)	<0.0025	<0.0025	<0.0025	
3/30/2018	0.0027					<0.0025
6/14/2018	0.0023 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018						<0.0025
10/4/2018	0.0031	<0.0025	<0.0025	<0.0025	<0.0025	
Mean	0.00205	0.001573	0.0015	0.001591	0.00125	0.001591
Std. Dev.	0.00118	0.001138	0.001199	0.001131	0	0.001131
Upper Lim.	0.0031	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0011	0.0011	0.00025	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.01	<0.01			
5/19/2016				<0.01	<0.01
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	<0.0025		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.001591	0.001591	0.00125	0.001591	0.001591
Std. Dev.	0.001131	0.001131	0	0.001131	0.001131
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
10/3/2018						<0.0025
10/4/2018	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025	0.0055	
Mean	0.001288	0.001477	0.001435	0.001408	0.01083	0.001591
Std. Dev.	0.0008354	0.001289	0.001315	0.001234	0.003563	0.001131
Upper Lim.	0.001801	0.0025	0.002256	0.00125	0.0138	0.00125
Lower Lim.	0.0007077	0.00049	0.0005207	0.0004	0.007858	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0069	0.00245 (J)			
5/19/2016				<0.01	<0.01
7/19/2016	0.012				
7/20/2016		0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.013	0.0014 (J)			<0.0025
9/15/2016				<0.0025	
11/10/2016	0.016	0.0016 (J)			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		0.0014 (J)			
1/24/2017	0.015				
2/6/2017			0.00058 (J)	<0.0025	
2/9/2017					0.00073 (J)
3/14/2017		0.0023 (J)			
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.014	0.0023 (J)			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.016	0.0011 (J)			
8/10/2017			0.00049 (J)	<0.0025	<0.0025
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025
3/30/2018		0.0016 (J)			
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
10/4/2018	0.0078	0.00041 (J)	<0.0025	<0.0025	<0.0025
Mean	0.01158	0.001537	0.001047	0.001524	0.001544
Std. Dev.	0.004145	0.0006744	0.0003485	0.001167	0.001157
Upper Lim.	0.01504	0.002099	0.00125	0.00125	0.00125
Lower Lim.	0.008128	0.0009753	0.00045	0.00066	0.00073

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)					0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		
7/19/2016						0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016				1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			
1/24/2017						0.779
1/27/2017		0.898	0.836	0.668		
2/6/2017	0.104 (U)					
2/8/2017					0.958	
2/23/2017					0.771	
3/14/2017						0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847		
3/17/2017					1.7	
4/11/2017					0.901	
4/25/2017						0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912			
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	<0.382	<0.514	0.463	0.55	<0.524
10/3/2018						0.766
10/4/2018	0.84	1.18	1.29	0.99	0.563	
Mean	0.3385	0.3211	0.446	0.6379	0.8059	0.577
Std. Dev.	0.2857	0.4133	0.4063	0.2578	0.3535	0.4365
Upper Lim.	0.5765	0.6655	0.7846	0.8527	1.063	0.8787
Lower Lim.	0.1004	-0.02337	0.1075	0.4231	0.5347	0.2451

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	<0.525	<0.418	1.86	<0.395
10/4/2018	1.99	0.775	0.381	2.44	0.48
Mean	1.974	0.3643	0.3079	1.435	0.2883
Std. Dev.	0.7768	0.4157	0.2545	0.5968	0.1699
Upper Lim.	2.622	0.7106	0.52	1.933	0.4299
Lower Lim.	1.327	0.01788	0.09581	0.9382	0.1467

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206					0.779
5/19/2016		0.039 (J)	0.12 (J)	0.384		
7/19/2016						0.97
7/20/2016	0.23	<0.2	0.11 (J)	0.34		
9/14/2016	0.17 (J)	<0.2	0.095 (J)	0.31		0.89
11/10/2016				0.26		0.88
11/11/2016	0.14 (J)	<0.2	<0.2			
1/24/2017						0.92
1/27/2017		<0.2	<0.2	0.28		
2/6/2017	0.15 (J)					
2/8/2017					<0.2	
2/23/2017					<0.2	
3/14/2017						0.77
3/15/2017	0.16 (J)	<0.2	<0.2	0.3		
3/17/2017					<0.2	
4/11/2017					<0.2	
4/25/2017						0.95
4/26/2017	0.17 (J)	<0.2	<0.2	0.33	<0.2	
5/17/2017					<0.2	
6/7/2017					<0.2	
7/11/2017					<0.2	
8/9/2017				0.32		0.91
8/10/2017	0.2	<0.2	0.11 (J)			
10/11/2017					<0.2	0.88
10/12/2017	0.14 (J)	<0.2	0.091 (J)	0.28		
3/29/2018		<0.2	0.089 (J)	0.27	<0.2	
3/30/2018	0.13 (J)					0.79
6/14/2018	0.15 (J)	<0.2	0.1 (J)	0.27	<0.2	0.79
10/3/2018						0.79
10/4/2018	0.18 (J)	<0.2	0.12 (J)	0.23	<0.2	
Mean	0.1688	0.09492	0.1029	0.2978	0.1	0.8599
Std. Dev.	0.03042	0.01761	0.01011	0.04167	0	0.07221
Upper Lim.	0.1927	0.1	0.2015	0.3305	0.1	0.9166
Lower Lim.	0.145	0.039	0.09693	0.2651	0.1	0.8033

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.1 (J)	0.121 (J)			
5/19/2016				0.304	1.58
7/19/2016	0.14 (J)				
7/20/2016		0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)			1.8
9/15/2016				0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)				
2/6/2017			0.45	0.27	
2/9/2017					1.3
3/14/2017		0.11 (J)			
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017			0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)			
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<2	0.14 (J)			
10/12/2017			0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018		0.095 (J)			
6/14/2018	<2	0.11 (J)	0.35	0.56	1.4
10/4/2018	0.85 (J)	0.11 (J)	0.35	0.27	1.4
Mean	0.3392	0.1405	0.3725	0.3128	1.515
Std. Dev.	0.3711	0.03342	0.03671	0.0932	0.2075
Upper Lim.	1	0.1667	0.4013	0.3785	1.67
Lower Lim.	0.1	0.1143	0.3437	0.2435	1.356

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.05
5/19/2016		<0.05	<0.05	<0.05		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
10/3/2018						0.006
10/4/2018	0.0085	0.0014 (J)	0.0066	0.0025 (J)	0.0016 (J)	
Mean	0.0159	0.004255	0.008255	0.004573	0.002555	0.007482
Std. Dev.	0.006826	0.0069	0.005954	0.006792	0.0006219	0.006013
Upper Lim.	0.02159	0.0025	0.01	0.0038	0.0033	0.0077
Lower Lim.	0.01021	0.0011	0.0011	0.0018	0.0016	0.0025

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.05	<0.05			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
10/4/2018	0.012	0.005	0.062	0.013	0.039
Mean	0.01247	0.007155	0.05173	0.0196	0.03577
Std. Dev.	0.004639	0.005993	0.008592	0.01327	0.006242
Upper Lim.	0.01566	0.0067	0.0581	0.02582	0.04097
Lower Lim.	0.009058	0.0042	0.04503	0.01139	0.03057

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0005					<0.0005
5/19/2016		<0.0005	<0.0005	<0.0005		
7/19/2016						9.3E-05 (J)
7/20/2016	8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)		
9/14/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/10/2016				8.3E-05 (J)		8.5E-05 (J)
11/11/2016	8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)			
1/24/2017						<0.0002
1/27/2017		<0.0002	<0.0002	<0.0002		
2/6/2017	8.3E-05 (J)					
2/8/2017					<0.0002	
2/23/2017					<0.0002	
3/14/2017						7.1E-05 (J)
3/15/2017	0.00013 (J)	<0.0002	0.00018 (J)	<0.0002		
3/17/2017					0.00013 (J)	
4/11/2017					<0.0002	
4/25/2017						<0.0002
4/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2017					<0.0002	
6/7/2017					<0.0002	
7/11/2017					<0.0002	
8/9/2017				<0.0002		<0.0002
8/10/2017	<0.0002	<0.0002	<0.0002			
3/29/2018		<0.0002	0.00011 (J)	<0.0002	<0.0002	
3/30/2018	<0.0002					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/3/2018						<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Mean	0.0001118	0.0001129	0.0001208	0.0001104	0.0001027	0.0001077
Std. Dev.	4.765E-05	4.592E-05	4.977E-05	4.687E-05	9.045E-06	4.812E-05
Upper Lim.	0.00013	0.00011	0.00018	0.0001	0.0001	0.0001
Lower Lim.	8.2E-05	8.2E-05	7.9E-05	8.1E-05	0.0001	7.1E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0005	<0.0005			
5/19/2016				<0.0005	<0.0005
7/19/2016	<0.0002				
7/20/2016		7.4E-05 (J)		<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002			<0.0002
9/15/2016				0.00011 (J)	
11/10/2016	0.00012 (J)	<0.0002			
11/11/2016			7.6E-05 (J)		
11/14/2016				<0.0002	
1/20/2017		<0.0002			
1/24/2017	7E-05 (J)				
2/6/2017			0.00012 (J)	7.8E-05 (J)	
2/9/2017					<0.0002
3/14/2017		<0.0002			
3/15/2017	<0.0002		<0.0002	0.00013 (J)	0.00013 (J)
4/11/2017			<0.0002		<0.0002
4/25/2017	0.00019 (J)	<0.0002			
4/26/2017			<0.0002	<0.0002	<0.0002
6/7/2017			<0.0002		
7/11/2017			<0.0002		
8/9/2017	<0.0002	<0.0002			
8/10/2017			<0.0002	<0.0002	<0.0002
3/29/2018	<0.0002		<0.0002	<0.0002	<0.0002
3/30/2018		<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.0001209	0.0001113	9.964E-05	0.0001153	0.0001164
Std. Dev.	5.205E-05	4.667E-05	9.872E-06	4.628E-05	4.523E-05
Upper Lim.	0.00019	0.0001	0.0001	0.00013	0.00013
Lower Lim.	7E-05	7.4E-05	7.6E-05	7.8E-05	0.0001

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					0.0153
5/19/2016		<0.01	<0.01	0.00491 (J)		
7/19/2016						0.0093 (J)
7/20/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/14/2016	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016				0.0016 (J)		0.0065 (J)
11/11/2016	<0.015	<0.015	<0.015			
1/24/2017						0.0049 (J)
1/27/2017		<0.015	<0.015	0.0023 (J)		
2/6/2017	<0.015					
2/8/2017					<0.015	
2/23/2017					<0.015	
3/14/2017						0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017					<0.015	
4/11/2017					<0.015	
4/25/2017						0.004 (J)
4/26/2017	<0.015	<0.015	<0.003	0.0019 (J)	<0.015	
5/17/2017					<0.015	
6/7/2017					0.001 (J)	
7/11/2017					<0.015	
8/9/2017				0.0028 (J)		0.0042 (J)
8/10/2017	0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/29/2018		<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018	<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
10/3/2018						0.0041 (J)
10/4/2018	<0.015	<0.015	<0.015	<0.015	<0.015	
Mean	0.006076	0.006691	0.005268	0.00301	0.006909	0.006745
Std. Dev.	0.002656	0.002	0.002869	0.001732	0.00196	0.003843
Upper Lim.	0.0075	0.0075	0.0075	0.003936	0.0075	0.009307
Lower Lim.	0.00091	0.0011	0.0009	0.001854	0.001	0.00389

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.01	0.00526 (J)			
5/19/2016				<0.01	0.00762 (J)
7/19/2016	<0.015				
7/20/2016		0.0066 (J)		<0.015	0.0084 (J)
9/14/2016	<0.015	0.0081 (J)			0.0071 (J)
9/15/2016				<0.015	
11/10/2016	<0.015	0.0076 (J)			
11/11/2016			<0.015		
11/14/2016				<0.015	
1/20/2017		0.0094 (J)			
1/24/2017	<0.015				
2/6/2017			0.001 (J)	<0.015	
2/9/2017					0.018
3/14/2017		0.0044 (J)			
3/15/2017	<0.015		<0.015	<0.015	0.0057 (J)
4/11/2017			<0.015		0.0047 (J)
4/25/2017	<0.015	0.0074 (J)			
4/26/2017			<0.015	<0.015	0.004 (J)
6/7/2017			0.0015 (J)		
7/11/2017			<0.015		
8/9/2017	<0.015	0.0066 (J)			
8/10/2017			0.0016 (J)	<0.015	0.0046 (J)
3/29/2018	<0.015		0.0012 (J)	<0.015	0.0048 (J)
3/30/2018		0.0024 (J)			
6/14/2018	<0.015	0.0026 (J)	0.0014 (J)	<0.015	0.0046 (J)
10/4/2018	<0.015	0.00085 (J)	<0.015	<0.015	0.003 (J)
Mean	0.007273	0.005565	0.0047	0.007273	0.006593
Std. Dev.	0.0007538	0.002707	0.003221	0.0007538	0.004122
Upper Lim.	0.0075	0.00782	0.0075	0.0075	0.008698
Lower Lim.	0.005	0.003309	0.001	0.005	0.003915

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/11/2019 3:16 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.01					<0.01
5/19/2016		<0.01	<0.01	<0.01		
7/19/2016						<0.0013
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		<0.0013
11/10/2016				<0.0013		<0.0013
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						<0.0013
1/27/2017		<0.0013	<0.0013	<0.0013		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						<0.0013
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					<0.0013	
4/11/2017					<0.0013	
4/25/2017						<0.0013
4/26/2017	<0.0013	<0.0013	<0.00025	<0.0013	<0.0013	
5/17/2017					<0.0013	
6/7/2017					<0.0013	
7/11/2017					<0.0013	
8/9/2017				<0.0013		<0.0013
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.0013	<0.0013	<0.0013	0.0003 (J)	
3/30/2018	<0.0013					<0.0013
6/14/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0005 (J)
10/3/2018						<0.0013
10/4/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	
Mean	0.001015	0.001031	0.00113	0.001045	0.0006182	0.001032
Std. Dev.	0.001326	0.001317	0.00137	0.001312	0.0001055	0.001317
Upper Lim.	0.00065	0.00065	0.0021	0.00065	0.00065	0.00065
Lower Lim.	0.00031	0.00049	0.000125	0.00065	0.0003	0.0005

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00735	<0.01			
5/19/2016				0.00518	0.00228
7/19/2016	0.0075				
7/20/2016		<0.0013		0.0038	0.0016
9/14/2016	0.0091	<0.0013			0.0024
9/15/2016				0.0034	
11/10/2016	0.0056	<0.0013			
11/11/2016			<0.0013		
11/14/2016				0.0033	
1/20/2017		<0.0013			
1/24/2017	0.012				
2/6/2017			<0.0013	0.0033	
2/9/2017					0.0023
3/14/2017		<0.0013			
3/15/2017	0.012		<0.0013	0.003	0.0031
4/11/2017			<0.0013		0.0023
4/25/2017	0.013	<0.0013			
4/26/2017			<0.0013	0.0032	0.0019
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.016	<0.0013			
8/10/2017			0.00036 (J)	0.0031	0.0021
3/29/2018	0.016		<0.0013	0.0034	0.0021
3/30/2018		<0.0013			
6/14/2018	0.012	<0.0013	<0.0013	0.0031	0.0025
10/4/2018	0.013	<0.0013	<0.0013	0.0033	0.002
Mean	0.01123	0.001045	0.0006236	0.003462	0.002235
Std. Dev.	0.003446	0.001312	8.744E-05	0.000608	0.0003825
Upper Lim.	0.0141	0.00065	0.00065	0.0038	0.002553
Lower Lim.	0.00836	0.00065	0.00036	0.003	0.001916

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/11/2019 3:16 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001					<0.001
5/19/2016		<0.001	<0.001	<0.001		
7/19/2016						<0.0005
7/20/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/14/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/10/2016				<0.0005		<0.0005
11/11/2016	<0.0005	<0.0005	<0.0005			
1/24/2017						<0.0005
1/27/2017		<0.0005	<0.0005	<0.0005		
2/6/2017	<0.0005					
2/8/2017					0.00011 (J)	
2/23/2017					0.00012 (J)	
3/14/2017						<0.0005
3/15/2017	<0.0005	<0.0005	<0.0005	<0.0005		
3/17/2017					<0.0005	
4/11/2017					<0.0005	
4/25/2017						<0.0005
4/26/2017	<0.0005	<0.0005	<0.0001	<0.0005	<0.0005	
5/17/2017					<0.0005	
6/7/2017					<0.0005	
7/11/2017					<0.0005	
8/9/2017				<0.0005		<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005	0.0002 (J)	
3/30/2018	8.5E-05 (J)					<0.0005
6/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00014 (J)	<0.0005
10/3/2018						<0.0005
10/4/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00013 (J)	
Mean	0.0002577	0.0002727	0.0002545	0.0002727	0.0002	0.0002727
Std. Dev.	9.438E-05	7.538E-05	0.0001011	7.538E-05	6.164E-05	7.538E-05
Upper Lim.	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Lower Lim.	8.5E-05	0.00025	5E-05	0.00025	0.00011	0.00025

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/11/2019 3:16 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001	<0.001			
5/19/2016				<0.001	<0.001
7/19/2016	8.5E-05 (J)				
7/20/2016		<0.0005		<0.0005	<0.0005
9/14/2016	0.00017 (J)	<0.0005			<0.0005
9/15/2016				<0.0005	
11/10/2016	0.00017 (J)	<0.0005			
11/11/2016			<0.0005		
11/14/2016				<0.0005	
1/20/2017		<0.0005			
1/24/2017	0.00023 (J)				
2/6/2017			<0.0005	<0.0005	
2/9/2017					<0.0005
3/14/2017		<0.0005			
3/15/2017	0.00021 (J)		<0.0005	<0.0005	<0.0005
4/11/2017			<0.0005		<0.0005
4/25/2017	0.00024 (J)	<0.0005			
4/26/2017			<0.0005	<0.0005	<0.0005
6/7/2017			<0.0005		
7/11/2017			<0.0005		
8/9/2017	0.0002 (J)	<0.0005			
8/10/2017			<0.0005	<0.0005	<0.0005
3/29/2018	0.00019 (J)		<0.0005	<0.0005	<0.0005
3/30/2018		<0.0005			
6/14/2018	0.00017 (J)	<0.0005	<0.0005	<0.0005	<0.0005
10/4/2018	0.00015 (J)	<0.0005	<0.0005	<0.0005	<0.0005
Mean	0.0002105	0.0002727	0.00025	0.0002727	0.0002727
Std. Dev.	0.0001048	7.538E-05	0	7.538E-05	7.538E-05
Upper Lim.	0.00028	0.00025	0.00025	0.00025	0.00025
Lower Lim.	0.0001343	0.00025	0.00025	0.00025	0.00025

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 4:56 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	WGWC-10	0.00065	0.0005	0.01	No	11	0.0006582	0.00008909	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.00065	0.00047	0.01	No	11	0.0006236	0.00006071	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.00065	0.00048	0.01	No	11	0.0006227	0.00006133	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.00093	0.00065	0.01	No	11	0.0007555	0.0002606	63.64	No	0.006	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0021	0.0006	0.01	No	11	0.001314	0.0008415	36.36	No	0.006	NP (Cohens/xfrm)
Arsenic (mg/L)	WGWC-15	0.002721	0.001743	0.01	No	11	0.002232	0.0005866	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001618	0.0009274	0.01	No	11	0.001273	0.0004143	18.18	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.00088	0.00058	0.01	No	11	0.0007173	0.0001179	54.55	No	0.006	NP (normality)
Arsenic (mg/L)	WGWC-19	0.00065	0.00065	0.01	No	11	0.00065	0	100	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-8	0.00065	0.00055	0.01	No	11	0.0007182	0.000261	81.82	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.00078	0.00047	0.01	No	11	0.0007409	0.0003257	72.73	No	0.006	NP (normality)
Barium (mg/L)	WGWC-10	0.04133	0.03571	2	No	11	0.03837	0.003983	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-11	0.03494	0.02895	2	No	11	0.032	0.003899	0	ln(x)	0.01	Param.
Barium (mg/L)	WGWC-12	0.0221	0.01495	2	No	11	0.01813	0.00549	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05639	0.0427	2	No	11	0.04955	0.008214	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05212	0.03297	2	No	11	0.04255	0.01149	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02162	0.01831	2	No	11	0.01996	0.001984	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.06925	0.05535	2	No	11	0.0615	0.009882	0	x^4	0.01	Param.
Barium (mg/L)	WGWC-17	0.02053	0.01509	2	No	11	0.01781	0.003268	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.001692	0.001121	2	No	11	0.001406	0.0003427	0	No	0.01	Param.
Barium (mg/L)	WGWC-8	0.002667	0.001021	2	No	11	0.001844	0.0009877	0	No	0.01	Param.
Barium (mg/L)	WGWC-9	0.002351	0.000628	2	No	11	0.0009982	0.0003462	27.27	No	0.01	Param.
Beryllium (mg/L)	WGWC-10	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-11	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-12	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-13	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-14A	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-15	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-17	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-19	0.00125	0.00125	0.004	No	11	0.00125	0	100	No	0.006	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.001771	0.001256	0.004	No	11	0.001514	0.0003087	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.00125	0.00034	0.004	No	11	0.00101	0.0004114	72.73	No	0.006	NP (normality)
Cadmium (mg/L)	WGWC-10	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-11	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-12	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-13	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-14A	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-15	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.001763	0.0002444	0.005	No	11	0.0007038	0.0003014	18.18	No	0.01	Param.
Cadmium (mg/L)	WGWC-17	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-19	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-8	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cadmium (mg/L)	WGWC-9	0.00125	0.00125	0.005	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-10	0.0027	0.0011	0.1	No	11	0.001709	0.0006771	18.18	No	0.006	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-11	0.00125	0.0011	0.1	No	11	0.001232	0.00004622	81.82	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-12	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-13	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-15	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 4:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Chromium (mg/L)	WGWC-16	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-17	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-19	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-8	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Chromium (mg/L)	WGWC-9	0.00125	0.00125	0.1	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001801	0.0007077	0.013	No	11	0.001288	0.0008354	9.091	x^(1/3)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.00125	0.00049	0.013	No	11	0.001136	0.0005466	45.45	No	0.006	NP (Cohens/xfrm)
Cobalt (mg/L)	WGWC-12	0.001577	0.0006126	0.013	No	11	0.001095	0.0005784	9.091	No	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.00125	0.0004	0.013	No	11	0.001067	0.0003259	72.73	No	0.006	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.0138	0.007858	0.013	No	11	0.01083	0.003563	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.00125	0.00125	0.013	No	11	0.00125	0	100	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.01504	0.008128	0.013	No	11	0.01158	0.004145	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-17	0.002099	0.0009753	0.013	No	11	0.001537	0.0006744	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.00125	0.00045	0.013	No	11	0.001047	0.0003485	72.73	No	0.006	NP (normality)
Cobalt (mg/L)	WGWC-8	0.00125	0.00066	0.013	No	11	0.001183	0.0001791	81.82	No	0.006	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.00125	0.00073	0.013	No	11	0.001203	0.0001568	90.91	No	0.006	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.5765	0.1004	10.4	No	11	0.3385	0.2857	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6705	-0.01551	10.4	No	11	0.3275	0.4116	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.7848	0.1081	10.4	No	11	0.4465	0.4061	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8527	0.4231	10.4	No	11	0.6379	0.2578	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	1.063	0.5347	10.4	No	11	0.8059	0.3535	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.8787	0.2451	10.4	No	11	0.577	0.4365	9.091	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.622	1.327	10.4	No	11	1.974	0.7768	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.7106	0.01783	10.4	No	11	0.3642	0.4157	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.5235	0.1019	10.4	No	11	0.3127	0.253	9.091	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.933	0.9382	10.4	No	11	1.435	0.5968	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4338	0.1546	10.4	No	11	0.2942	0.1676	9.091	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1927	0.145	4	No	12	0.1688	0.03042	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.039	4	No	12	0.09492	0.01761	91.67	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.2015	0.09693	4	No	12	0.1029	0.01011	33.33	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.3305	0.2651	4	No	12	0.2978	0.04167	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.1	4	No	12	0.1	0	100	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.9166	0.8033	4	No	12	0.8599	0.07221	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.1	4	No	12	0.1892	0.2102	16.67	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.1667	0.1143	4	No	12	0.1405	0.03342	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.4013	0.3437	4	No	12	0.3725	0.03671	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3785	0.2435	4	No	12	0.3128	0.0932	0	sqrt(x)	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.67	1.356	4	No	12	1.515	0.2075	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-10	0.02159	0.01021	0.009	Yes	11	0.0159	0.006826	0	No	0.01	Param.
Lithium (mg/L)	WGWC-11	0.0025	0.0011	0.009	No	11	0.002209	0.0005224	72.73	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-12	0.00827	0.004148	0.009	No	11	0.006209	0.002473	9.091	No	0.01	Param.
Lithium (mg/L)	WGWC-13	0.0025	0.0018	0.009	No	11	0.002527	0.0004756	63.64	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-14A	0.0033	0.0016	0.009	No	11	0.002555	0.0006219	54.55	No	0.006	NP (normality)
Lithium (mg/L)	WGWC-15	0.006889	0.00457	0.009	No	11	0.005436	0.001829	18.18	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01321	0.007643	0.009	No	11	0.01043	0.003342	9.091	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.006173	0.004045	0.009	No	11	0.005109	0.001277	9.091	No	0.01	Param.
Lithium (mg/L)	WGWC-19	0.0581	0.04503	0.009	Yes	11	0.05173	0.008592	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.02582	0.01139	0.009	Yes	11	0.0196	0.01327	0	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.04097	0.03057	0.009	Yes	11	0.03577	0.006242	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.0001	0.000082	0.002	No	11	0.00009818	0.00001304	63.64	No	0.006	NP (normality)

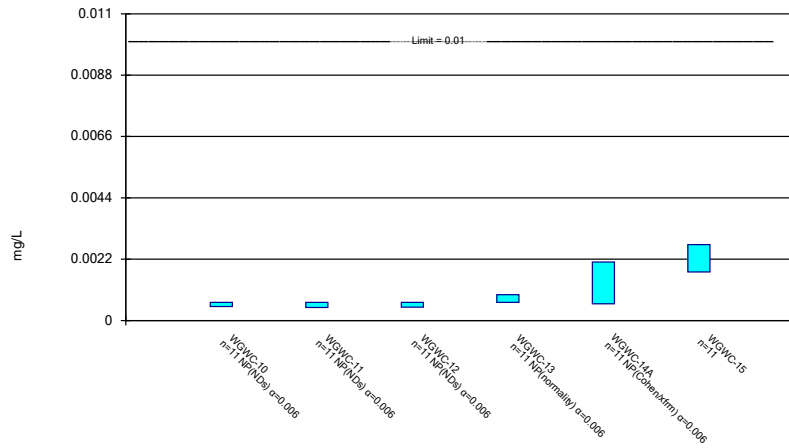
Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2019, 4:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	Transform	Alpha	Method
Mercury (mg/L)	WGWC-11	0.0001	0.000082	0.002	No	11	0.00009927	0.000006467	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-12	0.00011	0.000079	0.002	No	11	0.0001072	0.00002544	63.64	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-13	0.0001	0.000081	0.002	No	11	0.00009673	0.000007295	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0001	0.0001	0.002	No	11	0.0001027	0.000009045	90.91	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0001	0.000071	0.002	No	11	0.00009409	0.000009628	63.64	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-16	0.00012	0.00007	0.002	No	11	0.0001073	0.0000297	72.73	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-17	0.0001	0.000074	0.002	No	11	0.00009764	0.000007839	90.91	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0001	0.000076	0.002	No	11	0.00009964	0.000009872	81.82	No	0.006	NP (NDs)
Mercury (mg/L)	WGWC-8	0.00011	0.000078	0.002	No	11	0.0001016	0.00001206	72.73	No	0.006	NP (normality)
Mercury (mg/L)	WGWC-9	0.0001	0.0001	0.002	No	11	0.0001027	0.000009045	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.0075	0.00091	0.0075	No	11	0.006304	0.002662	81.82	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.0075	0.0011	0.0075	No	11	0.006918	0.00193	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.0075	0.0009	0.0075	No	11	0.006041	0.002673	72.73	No	0.006	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.003936	0.001854	0.0075	No	11	0.00301	0.001732	9.091	ln(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-14A	0.0075	0.001	0.0075	No	11	0.006909	0.00196	90.91	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.009307	0.00389	0.0075	No	11	0.006745	0.003843	0	x^(1/3)	0.01	Param.
Molybdenum (mg/L)	WGWC-16	0.0075	0.0075	0.0075	No	11	0.0075	0	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-17	0.00782	0.003309	0.0075	No	11	0.005565	0.002707	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.0075	0.001	0.0075	No	11	0.0047	0.003221	54.55	No	0.006	NP (normality)
Molybdenum (mg/L)	WGWC-8	0.0075	0.0075	0.0075	No	11	0.0075	0	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	WGWC-9	0.008698	0.003915	0.0075	No	11	0.006593	0.004122	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.00065	0.00031	0.05	No	11	0.0006191	0.0001025	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-11	0.00065	0.00049	0.05	No	11	0.0006355	0.00004824	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-12	0.00065	0.00065	0.05	No	11	0.0007818	0.0004372	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-13	0.00065	0.00065	0.05	No	11	0.00065	0	100	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.00065	0.0003	0.05	No	11	0.0006182	0.0001055	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-15	0.00065	0.0005	0.05	No	11	0.0006364	0.00004523	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-16	0.0141	0.00836	0.05	No	11	0.01123	0.003446	0	No	0.01	Param.
Selenium (mg/L)	WGWC-17	0.00065	0.00065	0.05	No	11	0.00065	0	100	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-19	0.00065	0.00036	0.05	No	11	0.0006236	0.00008744	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.003	0.05	No	11	0.003462	0.000608	0	No	0.006	NP (normality)
Selenium (mg/L)	WGWC-9	0.002553	0.001916	0.05	No	11	0.002235	0.0003825	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.00025	0.000085	0.002	No	11	0.000235	0.00004975	90.91	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-11	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-12	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-13	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.00025	0.00011	0.002	No	11	0.0002	0.00006164	54.55	No	0.006	NP (normality)
Thallium (mg/L)	WGWC-15	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-16	0.0002268	0.0001487	0.002	No	11	0.0001877	0.00004687	9.091	No	0.01	Param.
Thallium (mg/L)	WGWC-17	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-19	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-8	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)
Thallium (mg/L)	WGWC-9	0.00025	0.00025	0.002	No	11	0.00025	0	100	No	0.006	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

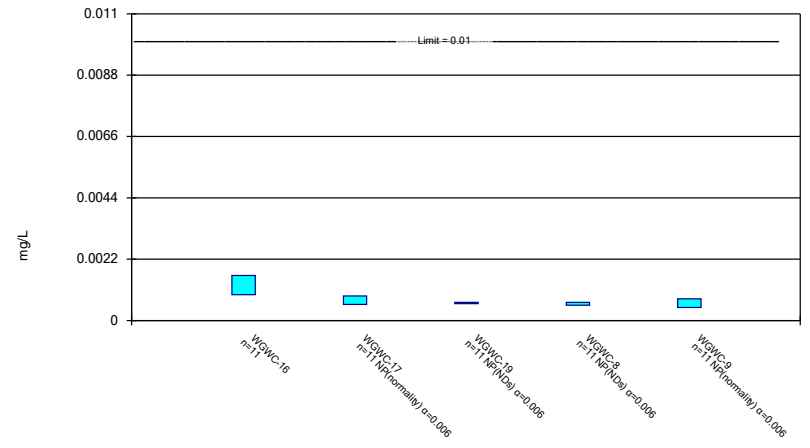
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

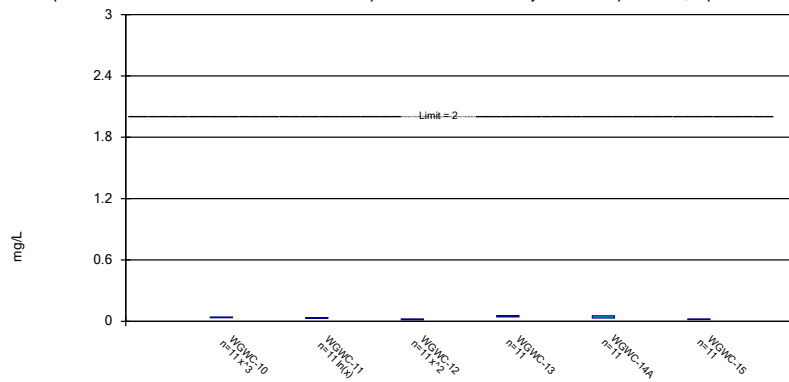
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Constituent: Arsenic Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

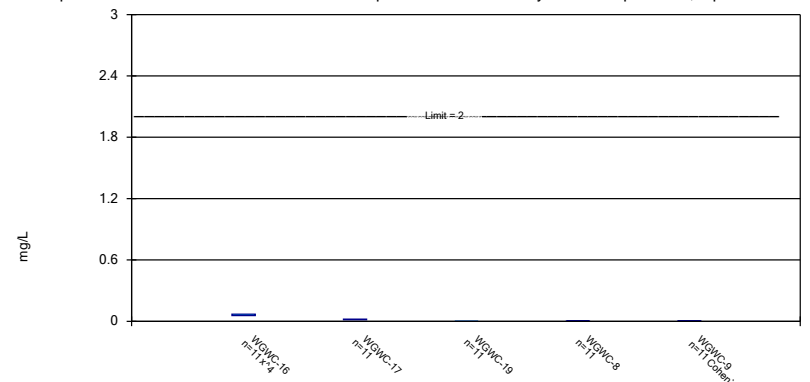
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Constituent: Barium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

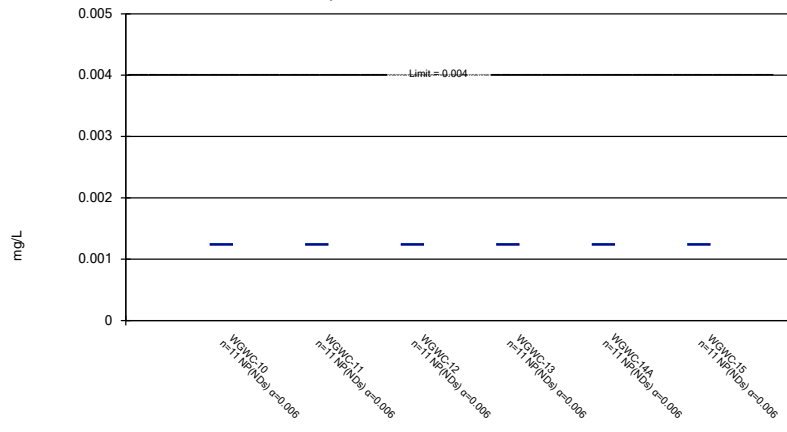
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Constituent: Barium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

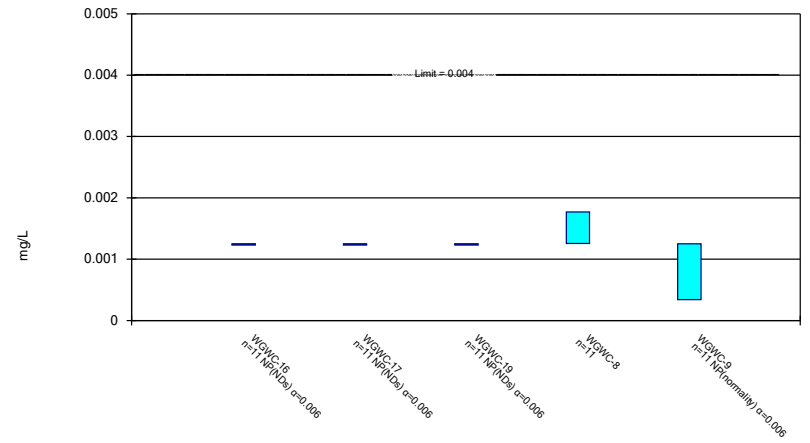
Compliance Limit is not exceeded.



Constituent: Beryllium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

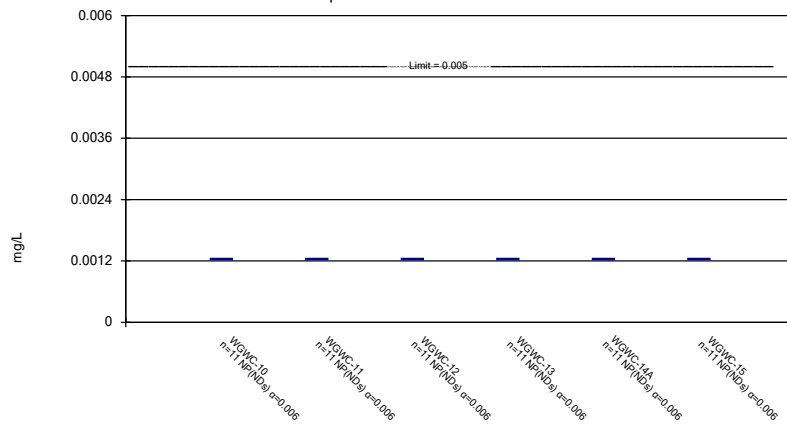
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Constituent: Beryllium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

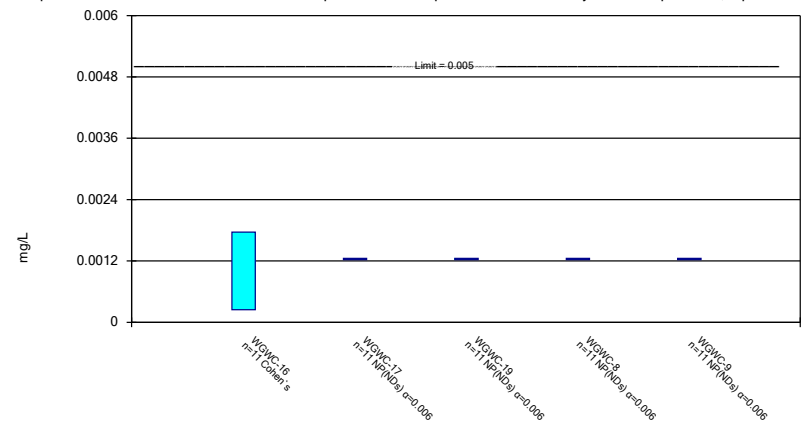
Compliance Limit is not exceeded.



Constituent: Cadmium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

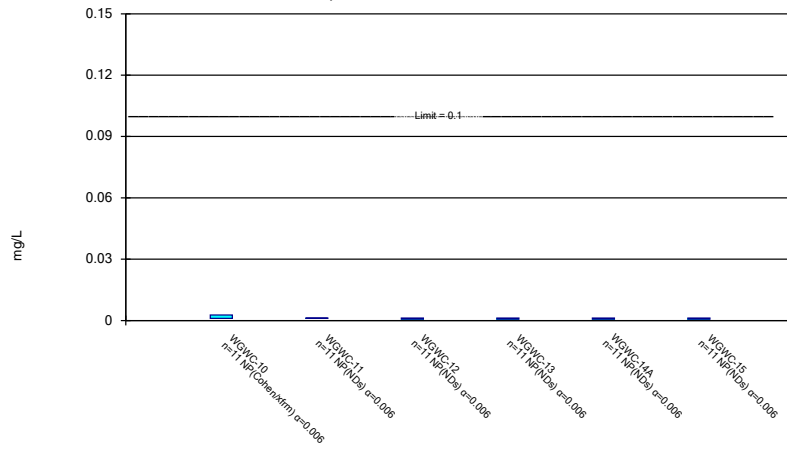
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



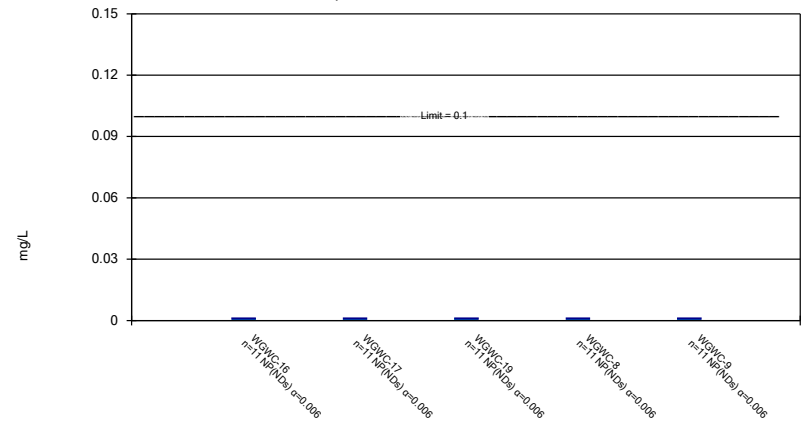
Constituent: Cadmium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

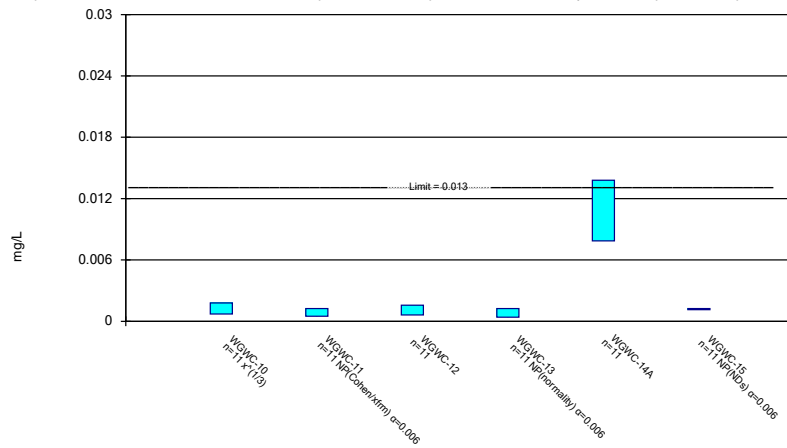
Non-Parametric Confidence Interval Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

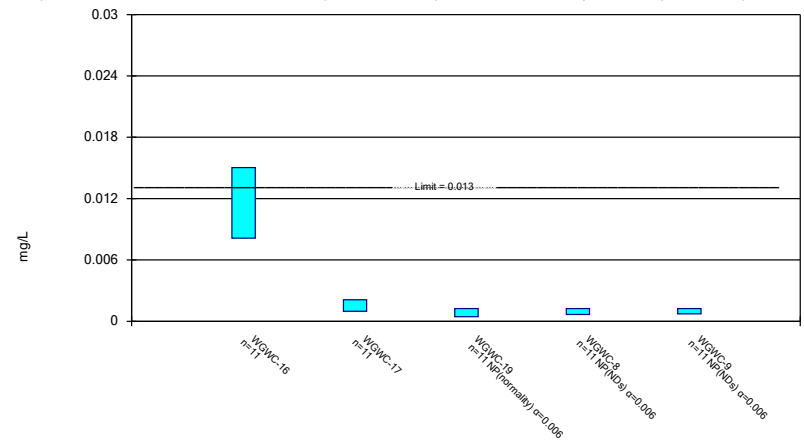
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Constituent: Cobalt Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

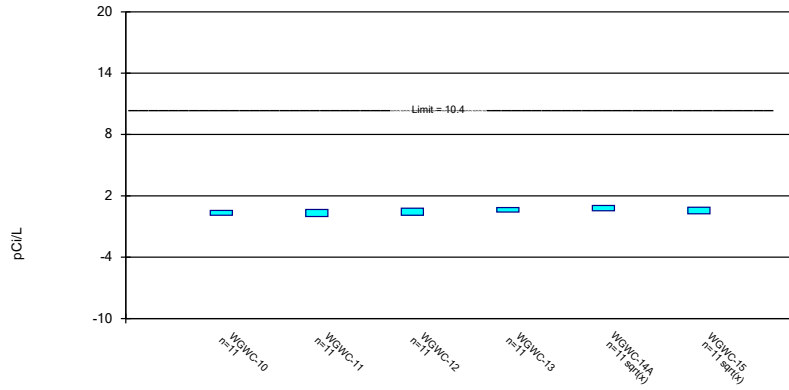
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

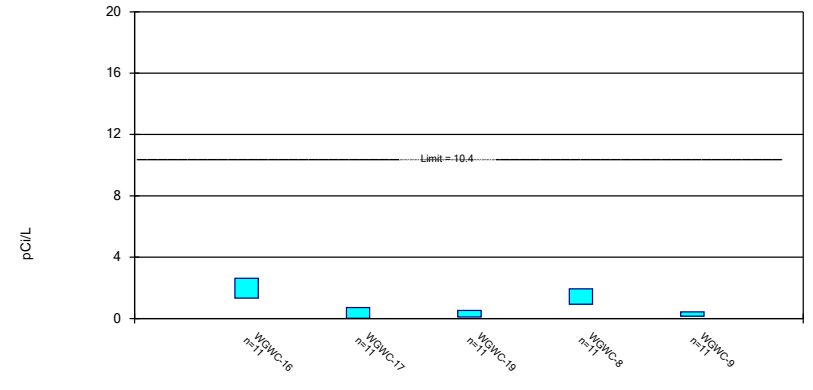
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

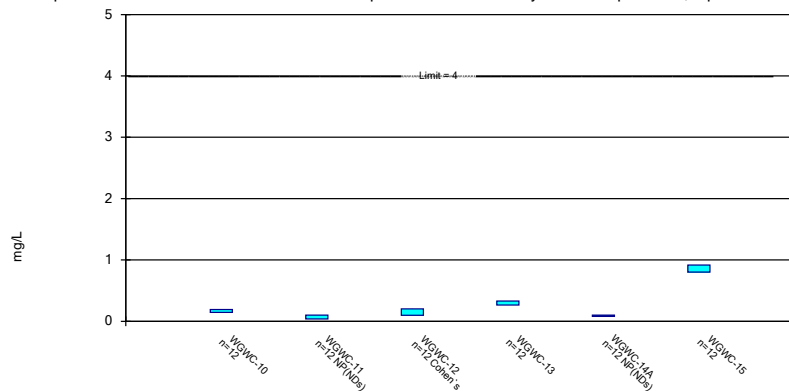
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

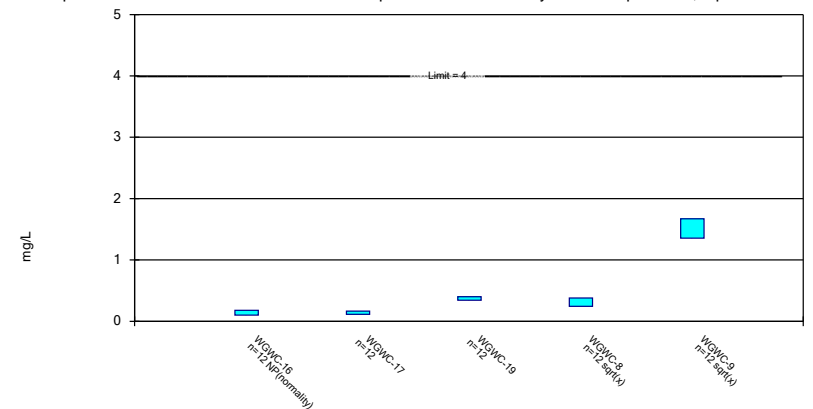
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

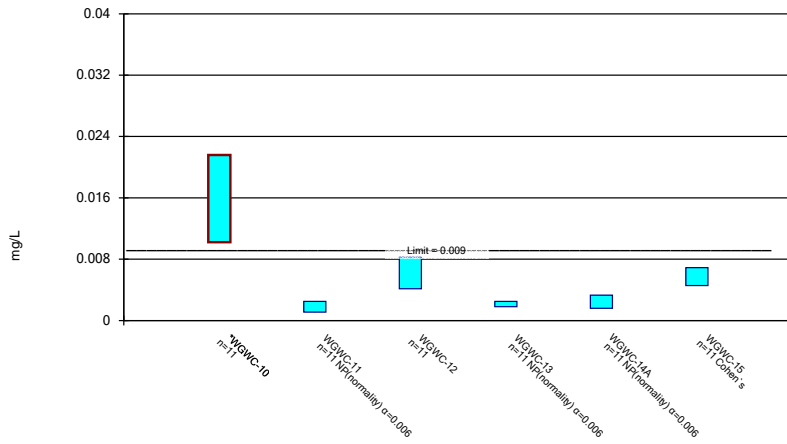
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

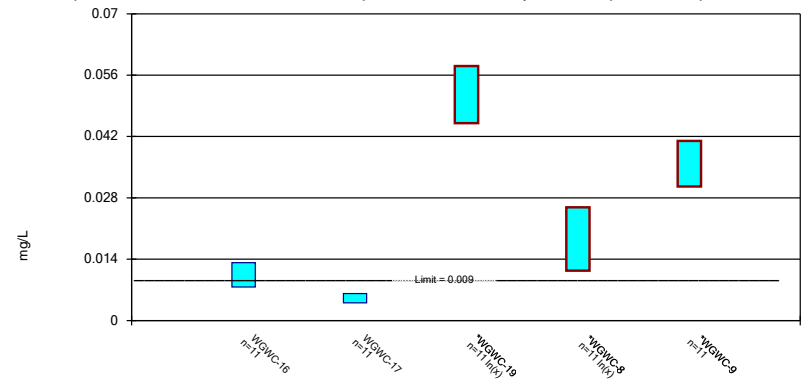
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

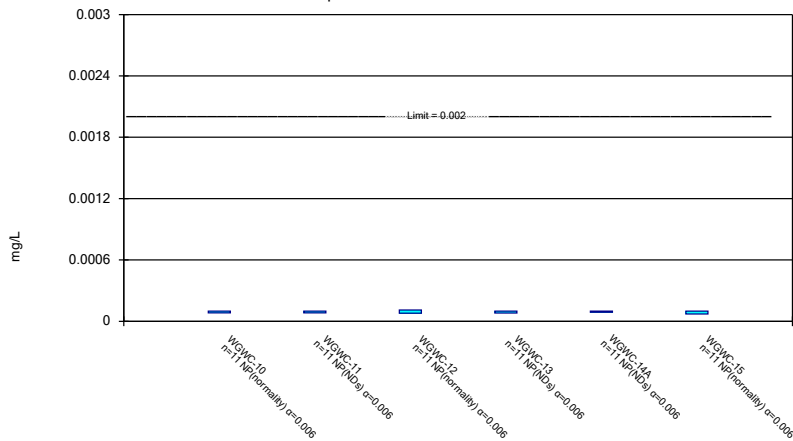
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

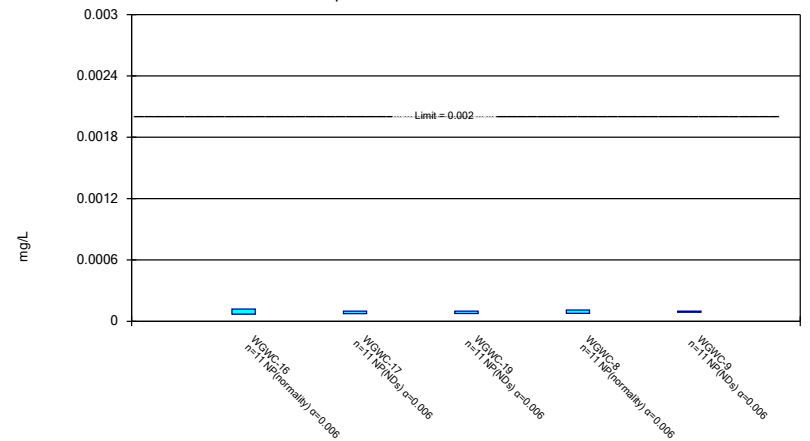
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

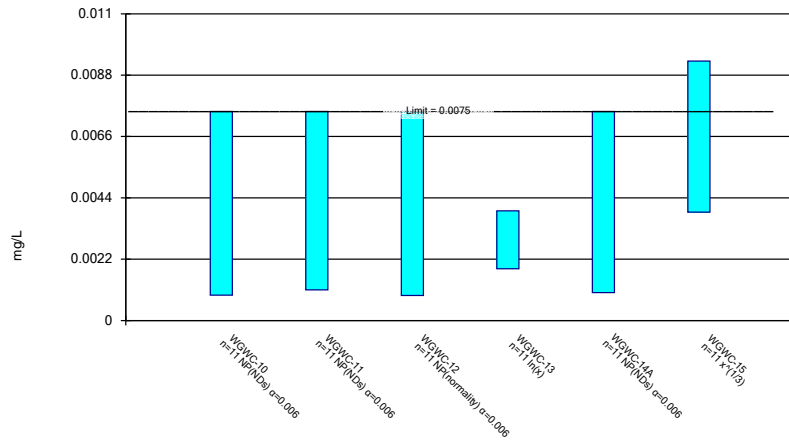
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

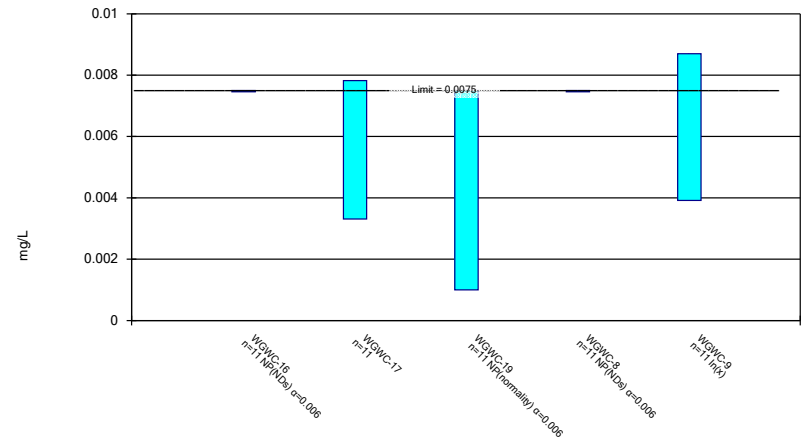
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

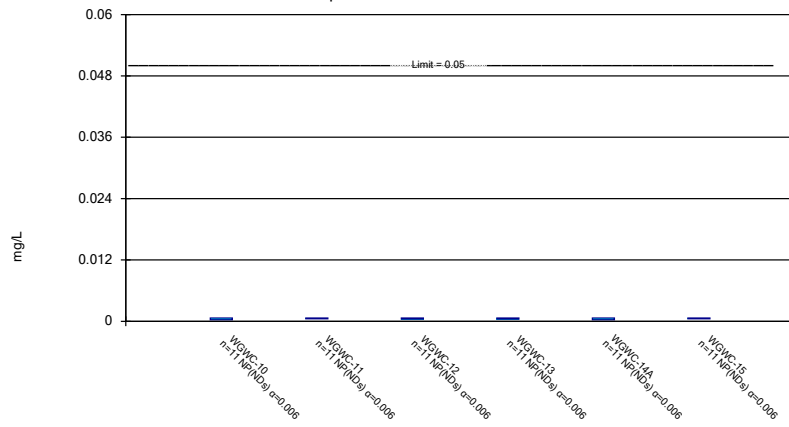
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

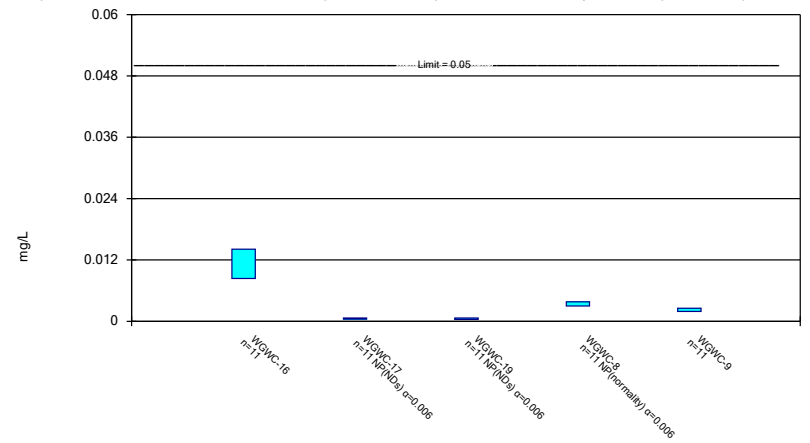
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

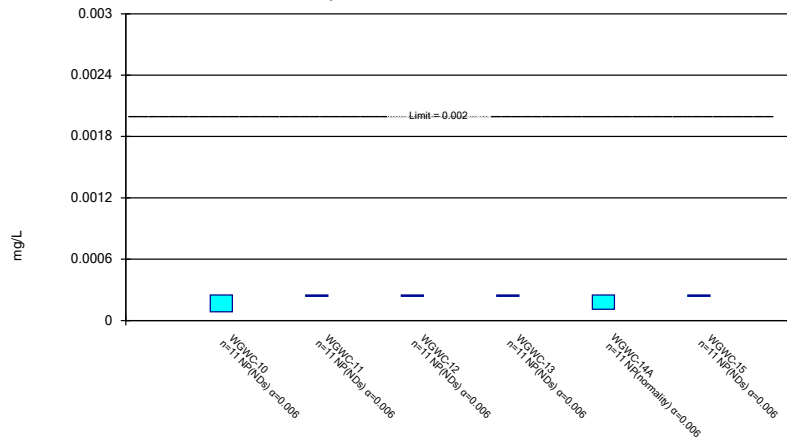
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

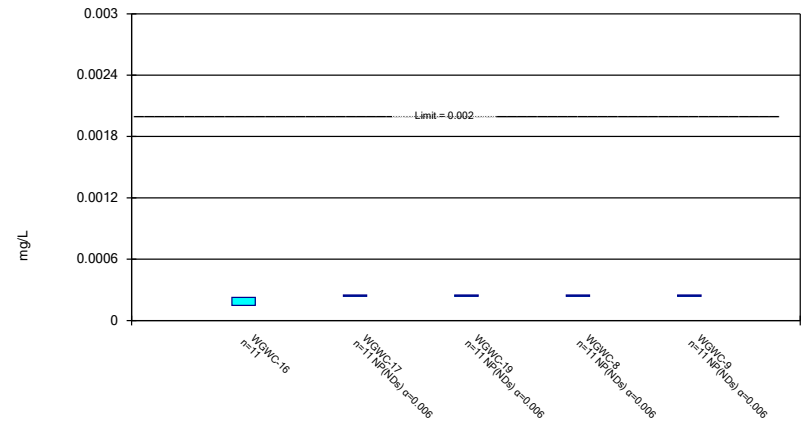
Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 1/8/2019 4:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0013					0.00345
5/19/2016		<0.0013	<0.0013	<0.0013		
7/19/2016						0.0031
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		0.0024
11/10/2016				<0.0013		0.0023
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						0.0019
1/27/2017		0.00047 (J)	<0.0013	0.00066 (J)		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						0.0016
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					0.0006 (J)	
4/11/2017					0.0032	
4/25/2017						0.0019
4/26/2017	<0.0013	<0.0013	<0.0013	<0.0013	0.0019	
5/17/2017					0.0014	
6/7/2017					0.0021	
7/11/2017					0.00095 (J)	
8/9/2017				<0.0013		0.0017
8/10/2017	<0.0013	<0.0013	0.00048 (J)			
3/29/2018		<0.0013	<0.0013	0.00067 (J)	<0.0013	
3/30/2018	<0.0013					0.0018
6/14/2018	0.0005 (J)	<0.0013	0.00052 (J)	0.00093 (J)	<0.0013	0.002
10/3/2018						0.0024
10/4/2018	0.00089 (J)	0.00054 (J)	<0.0013	0.0015	0.0017	
Mean	0.0006582	0.0006236	0.0006227	0.0007555	0.001314	0.002232
Std. Dev.	8.909E-05	6.071E-05	6.133E-05	0.0002606	0.0008415	0.0005866
Upper Lim.	0.00065	0.00065	0.00065	0.00093	0.0021	0.002721
Lower Lim.	0.0005	0.00047	0.00048	0.00065	0.0006	0.001743

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0013	<0.0013			
5/19/2016				<0.0013	<0.0013
7/19/2016	0.0009 (J)				
7/20/2016		0.00058 (J)		0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.0013			<0.0013
9/15/2016				<0.0013	
11/10/2016	0.0021	0.00082 (J)			
11/11/2016			<0.0013		
11/14/2016				<0.0013	
1/20/2017		<0.0013			
1/24/2017	0.0015				
2/6/2017			<0.0013	<0.0013	
2/9/2017					0.0017
3/14/2017		<0.0013			
3/15/2017	0.0014		<0.0013	<0.0013	0.00047 (J)
4/11/2017			<0.0013		<0.0013
4/25/2017	0.0014	0.00095 (J)			
4/26/2017			<0.0013	<0.0013	<0.0013
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.0013	<0.0013			
8/10/2017			<0.0013	<0.0013	<0.0013
3/29/2018	0.0014		<0.0013	<0.0013	<0.0013
3/30/2018		<0.0013			
6/14/2018	<0.0013	0.00076 (J)	<0.0013	<0.0013	<0.0013
10/4/2018	0.0013	0.00088 (J)	<0.0013	0.0015	<0.0013
Mean	0.001273	0.0007173	0.00065	0.0007182	0.0007409
Std. Dev.	0.0004143	0.0001179	0	0.000261	0.0003257
Upper Lim.	0.001618	0.00088	0.00065	0.00065	0.00078
Lower Lim.	0.0009274	0.00058	0.00065	0.00055	0.00047

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0391					0.0206
5/19/2016		0.031	0.0214	0.055		
7/19/2016						0.019
7/20/2016	0.028	0.029	0.019	0.039		
9/14/2016	0.035	0.031	0.02	0.04		0.02
11/10/2016				0.04		0.02
11/11/2016	0.042	0.034	0.022			
1/24/2017						0.017
1/27/2017		0.042	0.023	0.042		
2/6/2017	0.041					
2/8/2017					0.037	
2/23/2017					0.051	
3/14/2017						0.018
3/15/2017	0.04	0.032	0.024	0.058		
3/17/2017					0.046	
4/11/2017					0.055	
4/25/2017						0.018
4/26/2017	0.039	0.03	0.004	0.054	0.042	
5/17/2017					0.052	
6/7/2017					0.06	
7/11/2017					0.038	
8/9/2017				0.055		0.02
8/10/2017	0.038	0.03	0.017			
3/29/2018		0.028	0.017	0.061	0.028	
3/30/2018	0.042					0.021
6/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
10/3/2018						0.024
10/4/2018	0.04	0.035	0.017	0.046	0.036	
Mean	0.03837	0.032	0.01813	0.04955	0.04255	0.01996
Std. Dev.	0.003983	0.003899	0.00549	0.008214	0.01149	0.001984
Upper Lim.	0.04133	0.03494	0.0221	0.05639	0.05212	0.02162
Lower Lim.	0.03571	0.02895	0.01495	0.0427	0.03297	0.01831

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.0025
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.0025
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.0025
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
10/4/2018	0.046	0.013	0.0012 (J)	0.0017 (J)	0.00076 (J)
Mean	0.0615	0.01781	0.001406	0.001844	0.0009982
Std. Dev.	0.009882	0.003268	0.0003427	0.0009877	0.0003462
Upper Lim.	0.06925	0.02053	0.001692	0.002667	0.002351
Lower Lim.	0.05535	0.01509	0.001121	0.001021	0.000628

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0025	<0.0025			
5/19/2016				0.00102 (J)	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		0.0014 (J)	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				0.00093 (J)	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				0.0014 (J)	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	0.0017 (J)	
2/9/2017					0.00041 (J)
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	0.0016 (J)	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	0.0017 (J)	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	0.0017 (J)	0.00034 (J)
3/29/2018	<0.0025		<0.0025	0.0018 (J)	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	0.0015 (J)	<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	0.0019 (J)	0.00036 (J)
Mean	0.00125	0.00125	0.00125	0.001514	0.00101
Std. Dev.	0	0	0	0.0003087	0.0004114
Upper Lim.	0.00125	0.00125	0.00125	0.001771	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.001256	0.00034

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	<0.0025	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	<0.0025	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	<0.0025					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	<0.0025	<0.0025	<0.0025			
3/29/2018		<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018						<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
Mean	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0	0	0	0	0	0
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.000362 (J)	<0.0025			
5/19/2016				<0.0025	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	0.00037 (J)	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	0.00055 (J)				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	0.00067 (J)		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.00058 (J)	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.00054 (J)	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	0.00082 (J)		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	0.0007 (J)	<0.0025	<0.0025	<0.0025	<0.0025
10/4/2018	0.00065 (J)	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.0007038	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0.0003014	0	0	0	0
Upper Lim.	0.001763	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0002444	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.0012 (J)	<0.0025	<0.0025	<0.0025		
9/14/2016	<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.0015 (J)	<0.0025	<0.0025			
1/24/2017						<0.0025
1/27/2017		<0.0025	<0.0025	<0.0025		
2/6/2017	0.0011 (J)					
2/8/2017					<0.0025	
2/23/2017					<0.0025	
3/14/2017						<0.0025
3/15/2017	0.0015 (J)	<0.0025	<0.0025	<0.0025		
3/17/2017					<0.0025	
4/11/2017					<0.0025	
4/25/2017						<0.0025
4/26/2017	0.0013 (J)	0.0011 (J)	<0.0025	<0.0025	<0.0025	
5/17/2017					<0.0025	
6/7/2017					<0.0025	
7/11/2017					<0.0025	
8/9/2017				<0.0025		<0.0025
8/10/2017	0.0016 (J)	<0.0025	<0.0025			
3/29/2018		0.0012 (J)	<0.0025	<0.0025	<0.0025	
3/30/2018	0.0027					<0.0025
6/14/2018	0.0023 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018						<0.0025
10/4/2018	0.0031	<0.0025	<0.0025	<0.0025	<0.0025	
Mean	0.001709	0.001232	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0.0006771	4.622E-05	0	0	0	0
Upper Lim.	0.0027	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.0011	0.0011	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0025	<0.0025			
5/19/2016				<0.0025	<0.0025
7/19/2016	<0.0025				
7/20/2016		<0.0025		<0.0025	<0.0025
9/14/2016	<0.0025	<0.0025			<0.0025
9/15/2016				<0.0025	
11/10/2016	<0.0025	<0.0025			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		<0.0025			
1/24/2017	<0.0025				
2/6/2017			<0.0025	<0.0025	
2/9/2017					<0.0025
3/14/2017		<0.0025			
3/15/2017	<0.0025		<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	<0.0025	<0.0025			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	<0.0025	<0.0025			
8/10/2017			<0.0025	<0.0025	<0.0025
3/29/2018	<0.0025		<0.0025	<0.0025	<0.0025
3/30/2018		<0.0025			
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Mean	0.00125	0.00125	0.00125	0.00125	0.00125
Std. Dev.	0	0	0	0	0
Upper Lim.	0.00125	0.00125	0.00125	0.00125	0.00125
Lower Lim.	0.00125	0.00125	0.00125	0.00125	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
10/3/2018						<0.0025
10/4/2018	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025	0.0055	
Mean	0.001288	0.001136	0.001095	0.001067	0.01083	0.00125
Std. Dev.	0.0008354	0.0005466	0.0005784	0.0003259	0.003563	0
Upper Lim.	0.001801	0.00125	0.001577	0.00125	0.0138	0.00125
Lower Lim.	0.0007077	0.00049	0.0006126	0.0004	0.007858	0.00125

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0069	0.00245 (J)			
5/19/2016				<0.0025	<0.0025
7/19/2016	0.012				
7/20/2016		0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.013	0.0014 (J)			<0.0025
9/15/2016				<0.0025	
11/10/2016	0.016	0.0016 (J)			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		0.0014 (J)			
1/24/2017	0.015				
2/6/2017			0.00058 (J)	<0.0025	
2/9/2017					0.00073 (J)
3/14/2017		0.0023 (J)			
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.014	0.0023 (J)			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.016	0.0011 (J)			
8/10/2017			0.00049 (J)	<0.0025	<0.0025
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025
3/30/2018		0.0016 (J)			
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
10/4/2018	0.0078	0.00041 (J)	<0.0025	<0.0025	<0.0025
Mean	0.01158	0.001537	0.001047	0.001183	0.001203
Std. Dev.	0.004145	0.0006744	0.0003485	0.0001791	0.0001568
Upper Lim.	0.01504	0.002099	0.00125	0.00125	0.00125
Lower Lim.	0.008128	0.0009753	0.00045	0.00066	0.00073

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)					0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		
7/19/2016						0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016				1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			
1/24/2017						0.779
1/27/2017		0.898	0.836	0.668		
2/6/2017	0.104 (U)					
2/8/2017					0.958	
2/23/2017					0.771	
3/14/2017						0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847		
3/17/2017					1.7	
4/11/2017					0.901	
4/25/2017						0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912			
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	<0.524	<0.524	0.463	0.55	<0.524
10/3/2018						0.766
10/4/2018	0.84	1.18	1.29	0.99	0.563	
Mean	0.3385	0.3275	0.4465	0.6379	0.8059	0.577
Std. Dev.	0.2857	0.4116	0.4061	0.2578	0.3535	0.4365
Upper Lim.	0.5765	0.6705	0.7848	0.8527	1.063	0.8787
Lower Lim.	0.1004	-0.01551	0.1081	0.4231	0.5347	0.2451

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	<0.524	<0.524	1.86	<0.524
10/4/2018	1.99	0.775	0.381	2.44	0.48
Mean	1.974	0.3642	0.3127	1.435	0.2942
Std. Dev.	0.7768	0.4157	0.253	0.5968	0.1676
Upper Lim.	2.622	0.7106	0.5235	1.933	0.4338
Lower Lim.	1.327	0.01783	0.1019	0.9382	0.1546

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206					0.779
5/19/2016		0.039 (J)	0.12 (J)	0.384		
7/19/2016						0.97
7/20/2016	0.23	<0.2	0.11 (J)	0.34		
9/14/2016	0.17 (J)	<0.2	0.095 (J)	0.31		0.89
11/10/2016				0.26		0.88
11/11/2016	0.14 (J)	<0.2	<0.2			
1/24/2017						0.92
1/27/2017		<0.2	<0.2	0.28		
2/6/2017	0.15 (J)					
2/8/2017					<0.2	
2/23/2017					<0.2	
3/14/2017						0.77
3/15/2017	0.16 (J)	<0.2	<0.2	0.3		
3/17/2017					<0.2	
4/11/2017					<0.2	
4/25/2017						0.95
4/26/2017	0.17 (J)	<0.2	<0.2	0.33	<0.2	
5/17/2017					<0.2	
6/7/2017					<0.2	
7/11/2017					<0.2	
8/9/2017				0.32		0.91
8/10/2017	0.2	<0.2	0.11 (J)			
10/11/2017					<0.2	0.88
10/12/2017	0.14 (J)	<0.2	0.091 (J)	0.28		
3/29/2018		<0.2	0.089 (J)	0.27	<0.2	
3/30/2018	0.13 (J)					0.79
6/14/2018	0.15 (J)	<0.2	0.1 (J)	0.27	<0.2	0.79
10/3/2018						0.79
10/4/2018	0.18 (J)	<0.2	0.12 (J)	0.23	<0.2	
Mean	0.1688	0.09492	0.1029	0.2978	0.1	0.8599
Std. Dev.	0.03042	0.01761	0.01011	0.04167	0	0.07221
Upper Lim.	0.1927	0.1	0.2015	0.3305	0.1	0.9166
Lower Lim.	0.145	0.039	0.09693	0.2651	0.1	0.8033

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.1 (J)	0.121 (J)			
5/19/2016				0.304	1.58
7/19/2016	0.14 (J)				
7/20/2016		0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)			1.8
9/15/2016				0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)				
2/6/2017			0.45	0.27	
2/9/2017					1.3
3/14/2017		0.11 (J)			
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017			0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)			
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<0.2	0.14 (J)			
10/12/2017			0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018		0.095 (J)			
6/14/2018	<0.2	0.11 (J)	0.35	0.56	1.4
10/4/2018	0.85 (J)	0.11 (J)	0.35	0.27	1.4
Mean	0.1892	0.1405	0.3725	0.3128	1.515
Std. Dev.	0.2102	0.03342	0.03671	0.0932	0.2075
Upper Lim.	0.18	0.1667	0.4013	0.3785	1.67
Lower Lim.	0.1	0.1143	0.3437	0.2435	1.356

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.005
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
10/3/2018						0.006
10/4/2018	0.0085	0.0014 (J)	0.0066	0.0025 (J)	0.0016 (J)	
Mean	0.0159	0.002209	0.006209	0.002527	0.002555	0.005436
Std. Dev.	0.006826	0.0005224	0.002473	0.0004756	0.0006219	0.001829
Upper Lim.	0.02159	0.0025	0.00827	0.0025	0.0033	0.006889
Lower Lim.	0.01021	0.0011	0.004148	0.0018	0.0016	0.00457

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
10/4/2018	0.012	0.005	0.062	0.013	0.039
Mean	0.01043	0.005109	0.05173	0.0196	0.03577
Std. Dev.	0.003342	0.001277	0.008592	0.01327	0.006242
Upper Lim.	0.01321	0.006173	0.0581	0.02582	0.04097
Lower Lim.	0.007643	0.004045	0.04503	0.01139	0.03057

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0002					<0.0002
5/19/2016		<0.0002	<0.0002	<0.0002		
7/19/2016						9.3E-05 (J)
7/20/2016	8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)		
9/14/2016	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/10/2016				8.3E-05 (J)		8.5E-05 (J)
11/11/2016	8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)			
1/24/2017						<0.0002
1/27/2017		<0.0002	<0.0002	<0.0002		
2/6/2017	8.3E-05 (J)					
2/8/2017					<0.0002	
2/23/2017					<0.0002	
3/14/2017						7.1E-05 (J)
3/15/2017	0.00013 (J)	<0.0002	0.00018 (J)	<0.0002		
3/17/2017					0.00013 (J)	
4/11/2017					<0.0002	
4/25/2017						<0.0002
4/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2017					<0.0002	
6/7/2017					<0.0002	
7/11/2017					<0.0002	
8/9/2017				<0.0002		<0.0002
8/10/2017	<0.0002	<0.0002	<0.0002			
3/29/2018		<0.0002	0.00011 (J)	<0.0002	<0.0002	
3/30/2018	<0.0002					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/3/2018						<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Mean	9.818E-05	9.927E-05	0.0001072	9.673E-05	0.0001027	9.409E-05
Std. Dev.	1.304E-05	6.467E-06	2.544E-05	7.295E-06	9.045E-06	9.628E-06
Upper Lim.	0.0001	0.0001	0.00011	0.0001	0.0001	0.0001
Lower Lim.	8.2E-05	8.2E-05	7.9E-05	8.1E-05	0.0001	7.1E-05

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0002	<0.0002			
5/19/2016				<0.0002	<0.0002
7/19/2016	<0.0002				
7/20/2016		7.4E-05 (J)		<0.0002	<0.0002
9/14/2016	<0.0002	<0.0002			<0.0002
9/15/2016				0.00011 (J)	
11/10/2016	0.00012 (J)	<0.0002			
11/11/2016			7.6E-05 (J)		
11/14/2016				<0.0002	
1/20/2017		<0.0002			
1/24/2017	7E-05 (J)				
2/6/2017			0.00012 (J)	7.8E-05 (J)	
2/9/2017					<0.0002
3/14/2017		<0.0002			
3/15/2017	<0.0002		<0.0002	0.00013 (J)	0.00013 (J)
4/11/2017			<0.0002		<0.0002
4/25/2017	0.00019 (J)	<0.0002			
4/26/2017			<0.0002	<0.0002	<0.0002
6/7/2017			<0.0002		
7/11/2017			<0.0002		
8/9/2017	<0.0002	<0.0002			
8/10/2017			<0.0002	<0.0002	<0.0002
3/29/2018	<0.0002		<0.0002	<0.0002	<0.0002
3/30/2018		<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Mean	0.0001073	9.764E-05	9.964E-05	0.0001016	0.0001027
Std. Dev.	2.97E-05	7.839E-06	9.872E-06	1.206E-05	9.045E-06
Upper Lim.	0.00012	0.0001	0.0001	0.00011	0.0001
Lower Lim.	7E-05	7.4E-05	7.6E-05	7.8E-05	0.0001

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.015					0.0153
5/19/2016		<0.015	<0.015	0.00491 (J)		
7/19/2016						0.0093 (J)
7/20/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/14/2016	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016				0.0016 (J)		0.0065 (J)
11/11/2016	<0.015	<0.015	<0.015			
1/24/2017						0.0049 (J)
1/27/2017		<0.015	<0.015	0.0023 (J)		
2/6/2017	<0.015					
2/8/2017					<0.015	
2/23/2017					<0.015	
3/14/2017						0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017					<0.015	
4/11/2017					<0.015	
4/25/2017						0.004 (J)
4/26/2017	<0.015	<0.015	<0.015	0.0019 (J)	<0.015	
5/17/2017					<0.015	
6/7/2017					0.001 (J)	
7/11/2017					<0.015	
8/9/2017				0.0028 (J)		0.0042 (J)
8/10/2017	0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/29/2018		<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018	<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
10/3/2018						0.0041 (J)
10/4/2018	<0.015	<0.015	<0.015	<0.015	<0.015	
Mean	0.006304	0.006918	0.006041	0.00301	0.006909	0.006745
Std. Dev.	0.002662	0.00193	0.002673	0.001732	0.00196	0.003843
Upper Lim.	0.0075	0.0075	0.0075	0.003936	0.0075	0.009307
Lower Lim.	0.00091	0.0011	0.0009	0.001854	0.001	0.00389

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.015	0.00526 (J)			
5/19/2016				<0.015	0.00762 (J)
7/19/2016	<0.015				
7/20/2016		0.0066 (J)		<0.015	0.0084 (J)
9/14/2016	<0.015	0.0081 (J)			0.0071 (J)
9/15/2016				<0.015	
11/10/2016	<0.015	0.0076 (J)			
11/11/2016			<0.015		
11/14/2016				<0.015	
1/20/2017		0.0094 (J)			
1/24/2017	<0.015				
2/6/2017			0.001 (J)	<0.015	
2/9/2017					0.018
3/14/2017		0.0044 (J)			
3/15/2017	<0.015		<0.015	<0.015	0.0057 (J)
4/11/2017			<0.015		0.0047 (J)
4/25/2017	<0.015	0.0074 (J)			
4/26/2017			<0.015	<0.015	0.004 (J)
6/7/2017			0.0015 (J)		
7/11/2017			<0.015		
8/9/2017	<0.015	0.0066 (J)			
8/10/2017			0.0016 (J)	<0.015	0.0046 (J)
3/29/2018	<0.015		0.0012 (J)	<0.015	0.0048 (J)
3/30/2018		0.0024 (J)			
6/14/2018	<0.015	0.0026 (J)	0.0014 (J)	<0.015	0.0046 (J)
10/4/2018	<0.015	0.00085 (J)	<0.015	<0.015	0.003 (J)
Mean	0.0075	0.005565	0.0047	0.0075	0.006593
Std. Dev.	0	0.002707	0.003221	0	0.004122
Upper Lim.	0.0075	0.00782	0.0075	0.0075	0.008698
Lower Lim.	0.0075	0.003309	0.001	0.0075	0.003915

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0013					<0.0013
5/19/2016		<0.0013	<0.0013	<0.0013		
7/19/2016						<0.0013
7/20/2016	<0.0013	<0.0013	<0.0013	<0.0013		
9/14/2016	<0.0013	<0.0013	<0.0013	<0.0013		<0.0013
11/10/2016				<0.0013		<0.0013
11/11/2016	<0.0013	<0.0013	<0.0013			
1/24/2017						<0.0013
1/27/2017		<0.0013	<0.0013	<0.0013		
2/6/2017	<0.0013					
2/8/2017					<0.0013	
2/23/2017					<0.0013	
3/14/2017						<0.0013
3/15/2017	<0.0013	<0.0013	<0.0013	<0.0013		
3/17/2017					<0.0013	
4/11/2017					<0.0013	
4/25/2017						<0.0013
4/26/2017	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	
5/17/2017					<0.0013	
6/7/2017					<0.0013	
7/11/2017					<0.0013	
8/9/2017				<0.0013		<0.0013
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.0013	<0.0013	<0.0013	0.0003 (J)	
3/30/2018	<0.0013					<0.0013
6/14/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	0.0005 (J)
10/3/2018						<0.0013
10/4/2018	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	
Mean	0.0006191	0.0006355	0.0007818	0.00065	0.0006182	0.0006364
Std. Dev.	0.0001025	4.824E-05	0.0004372	0	0.0001055	4.523E-05
Upper Lim.	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065
Lower Lim.	0.00031	0.00049	0.00065	0.00065	0.0003	0.0005

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00735	<0.0013			
5/19/2016				0.00518	0.00228
7/19/2016	0.0075				
7/20/2016		<0.0013		0.0038	0.0016
9/14/2016	0.0091	<0.0013			0.0024
9/15/2016				0.0034	
11/10/2016	0.0056	<0.0013			
11/11/2016			<0.0013		
11/14/2016				0.0033	
1/20/2017		<0.0013			
1/24/2017	0.012				
2/6/2017			<0.0013	0.0033	
2/9/2017					0.0023
3/14/2017		<0.0013			
3/15/2017	0.012		<0.0013	0.003	0.0031
4/11/2017			<0.0013		0.0023
4/25/2017	0.013	<0.0013			
4/26/2017			<0.0013	0.0032	0.0019
6/7/2017			<0.0013		
7/11/2017			<0.0013		
8/9/2017	0.016	<0.0013			
8/10/2017			0.00036 (J)	0.0031	0.0021
3/29/2018	0.016		<0.0013	0.0034	0.0021
3/30/2018		<0.0013			
6/14/2018	0.012	<0.0013	<0.0013	0.0031	0.0025
10/4/2018	0.013	<0.0013	<0.0013	0.0033	0.002
Mean	0.01123	0.00065	0.0006236	0.003462	0.002235
Std. Dev.	0.003446	0	8.744E-05	0.000608	0.0003825
Upper Lim.	0.0141	0.00065	0.00065	0.0038	0.002553
Lower Lim.	0.00836	0.00065	0.00036	0.003	0.001916

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0005					<0.0005
5/19/2016		<0.0005	<0.0005	<0.0005		
7/19/2016						<0.0005
7/20/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/14/2016	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005
11/10/2016				<0.0005		<0.0005
11/11/2016	<0.0005	<0.0005	<0.0005			
1/24/2017						<0.0005
1/27/2017		<0.0005	<0.0005	<0.0005		
2/6/2017	<0.0005					
2/8/2017					0.00011 (J)	
2/23/2017					0.00012 (J)	
3/14/2017						<0.0005
3/15/2017	<0.0005	<0.0005	<0.0005	<0.0005		
3/17/2017					<0.0005	
4/11/2017					<0.0005	
4/25/2017						<0.0005
4/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
5/17/2017					<0.0005	
6/7/2017					<0.0005	
7/11/2017					<0.0005	
8/9/2017				<0.0005		<0.0005
8/10/2017	<0.0005	<0.0005	<0.0005			
3/29/2018		<0.0005	<0.0005	<0.0005	0.0002 (J)	
3/30/2018	8.5E-05 (J)					<0.0005
6/14/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00014 (J)	<0.0005
10/3/2018						<0.0005
10/4/2018	<0.0005	<0.0005	<0.0005	<0.0005	0.00013 (J)	
Mean	0.000235	0.00025	0.00025	0.00025	0.0002	0.00025
Std. Dev.	4.975E-05	0	0	0	6.164E-05	0
Upper Lim.	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Lower Lim.	8.5E-05	0.00025	0.00025	0.00025	0.00011	0.00025

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/8/2019 4:57 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0005	<0.0005			
5/19/2016				<0.0005	<0.0005
7/19/2016	8.5E-05 (J)				
7/20/2016		<0.0005		<0.0005	<0.0005
9/14/2016	0.00017 (J)	<0.0005			<0.0005
9/15/2016				<0.0005	
11/10/2016	0.00017 (J)	<0.0005			
11/11/2016			<0.0005		
11/14/2016				<0.0005	
1/20/2017		<0.0005			
1/24/2017	0.00023 (J)				
2/6/2017			<0.0005	<0.0005	
2/9/2017					<0.0005
3/14/2017		<0.0005			
3/15/2017	0.00021 (J)		<0.0005	<0.0005	<0.0005
4/11/2017			<0.0005		<0.0005
4/25/2017	0.00024 (J)	<0.0005			
4/26/2017			<0.0005	<0.0005	<0.0005
6/7/2017			<0.0005		
7/11/2017			<0.0005		
8/9/2017	0.0002 (J)	<0.0005			
8/10/2017			<0.0005	<0.0005	<0.0005
3/29/2018	0.00019 (J)		<0.0005	<0.0005	<0.0005
3/30/2018		<0.0005			
6/14/2018	0.00017 (J)	<0.0005	<0.0005	<0.0005	<0.0005
10/4/2018	0.00015 (J)	<0.0005	<0.0005	<0.0005	<0.0005
Mean	0.0001877	0.00025	0.00025	0.00025	0.00025
Std. Dev.	4.687E-05	0	0	0	0
Upper Lim.	0.0002268	0.00025	0.00025	0.00025	0.00025
Lower Lim.	0.0001487	0.00025	0.00025	0.00025	0.00025

APPENDIX C

ALTERNATE SOURCE DEMONSTRATION

Georgia Power Company
Plant Wansley Ash Pond
Carrollton, Georgia 30116
Heard County

Alternate Source Demonstration

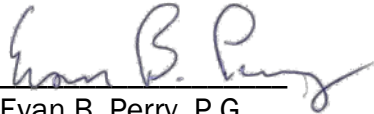


ACC

ATLANTIC COAST
CONSULTING, INC.

Certification Statement

I hereby certify that this alternate source demonstration for the CCR Unit located at Georgia Power's Plant Wansley located at 1371 Liberty Church Road, Carrollton, Georgia, and designated as the Coal Combustion By-Product Disposal Facility has been prepared to meet the requirements of 40 CFR §257.95(g)(3)(ii).



Evan B. Perry, P.G.
Georgia Registered Professional
Geologist No. 1744
Originator



Richard T. Deason, P.E.
Georgia Registered Professional
Engineer No. 2213
Reviewer

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Cover Sheet

Certification Statement

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SECTION 1

Introduction

Georgia Power Company (GPC) – Plant Wansley Ash Pond (the site) is located in northeast Heard County and southeast Carroll County on Liberty Church Road, approximately 12 miles southeast of the City of Carrollton. Figure 1, Plant Wansley Ash Pond Site Location Map, depicts the site location referenced to regional landmarks.

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR21302-21501, April 17, 2015), the facility prepared the *2017 Annual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at the site and satisfy the requirements of §257.90(e). In that report, statistically significant increases (SSI) over background were identified for Appendix III parameters. In accordance with §257.94(e)(3) a notification for the establishment of assessment monitoring was placed in the facility’s operating record on May 15, 2018. Following completion of statistical analysis of Appendix IV data, a statistically significant level above the groundwater protection standard was reported for lithium in the sample from well WGWC-19. A notification was placed in the operating record pursuant to §257.95(g) on October 15, 2018.

The facility has completed the actions required by §257.95(g)(1)(i – iv), including the installation of vertical and horizontal delineation wells (WAMW-1 and WAMW-2). This document provides an alternate source demonstration described in §257.95(g)(3). Based on this demonstration, the facility does not need to initiate an assessment of corrective measures.

SECTION 2

Alternate Source Demonstration

As allowed by §257.94(g)(3), the site may demonstrate that a source other than the CCR unit caused the SSI for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. This document includes a review of data collected since 2016 to demonstrate that the statistical exceedance of the GWPS of lithium at WGWC-19 is due to a natural variation in groundwater quality and not due to a release from the ash pond. A recent potentiometric surface map is provided for reference as Figure 2, Plant Wansley Ash Pond September 2018 Potentiometric Surface Map.

2.1 Geologic Mapping

Prior to the installation of the groundwater monitoring network required by §257.91, GPC contracted Golder Associates Inc. to perform detailed geologic mapping onsite and develop a hydrogeologic site conceptual model. A site-specific geologic map is presented in the “Geologic and Hydrogeologic Report” by Golder (2018). The geologic mapping by Golder identified nine different rock units (Table 1, Plant Wansley Lithologic Units). The locations of the units are shown in Figure 3, Plant Wansley Lithologic Unit Map.

Table 1. Plant Wansley Lithologic Units.

Identification	Rock Type
OZmu	Interlayered graphitic schist
OZsg	Muscovite schist
OZsau	Schist-amphibolite
OZq	Quartzite
OZgs	Garnet schist
OZli	Granitic gneiss
OZbs	Button schist
OZbg	Biotite gneiss
OZa	Amphibolite

Plant Wansley is located along a regional zone of rock deformation known as the Brevard Zone. Lithologic contacts typically trend northeast-to southwest in the Brevard Zone; this trend is the same at Plant Wansley. As shown in Figure 3, the upgradient groundwater monitoring network (i.e. wells prefixed “GWA”) is located in the muscovite schist unit (OZsg). This differs from the downgradient network (i.e. wells prefixed “GWC”), which is located in variable units [schist-amphibolite (OZsau), quartzite (OZq), garnet schist (OZgs), granitic schist (OZli), and biotite gneiss (OZbs)]. Geologic units presented on Figure 3 dip primarily to the southeast; therefore, multiple units may be encountered at depth at a given location,

and the uppermost aquifer may occur in different lithologic units in the upgradient and downgradient wells.

Lithium bearing minerals are documented in similar geologic units located in the Piedmont Physiographic Province (group contiguous northeast trending belts present from Alabama to New Jersey). These lithium bearing minerals are associated with pegmatites (i.e. subsequent igneous rock intrusions into metamorphic rock). The State of Georgia publication, *Geochemistry and Origin of Pegmatites Cherokee-Pickens District, Georgia* references the occurrence of the mineral spodumene ($\text{LiAlSi}_2\text{O}_6$) as a common accessory mineral in pegmatites (Gunow and Bonn 1989). Most notably, the Kings Mountain sequence located in the vicinity of Gaston County, North Carolina contains economically viable deposits of lithium (i.e. the Foote Mineral Company mine) present in the mineral form of spodumene (Horton 2008). In addition to spodumene the lithium bearing amphibole mineral holmquistite [$\text{Li}_2\text{Mg}_3\text{Al}_2\text{Si}_8\text{O}_{22}(\text{OH})_2$] occurs in this Piedmont geology (Anthony, et al 2003). Based on the descriptions of site rock units provided by Golder (2018), pegmatite was identified in several of the units (OZmu, OZsau, and OZgs) present at Plant Wansley. These pegmatites are likely to host lithium-bearing minerals and provide a natural source of lithium into groundwater through weathering at the Site.

2.2 Rock Sample Analysis Results

Rock core samples from recent drilling investigations are temporarily stored at Plant Wansley before being catalogued and stored by Southern Company Services (SCS). Samples of rock from a range of lithologies were selected from site and SCS storage for analysis of total metals. Rock samples from within or just above the screened interval of WGWC-19 were analyzed for concentrations of lithium. Locations were selected in order to evaluate the variability of lithium throughout the site (i.e. assess lithium variability in rock units).

Sample preparation and analysis of site-wide samples was performed by the ALS Environmental laboratory in Tucson, Arizona (ALS). Core samples were initially prepared by grinding until a grain size of less than 1 millimeter (mm) was achieved. ALS then performed a total digestion on the sample grindings with nitric, hydrochloric and hydrofluoric acids. The samples were then analyzed for metals by inductively coupled optical emission spectrometry (ICP-OES). In order to further confirm the presence of lithium concentrations in the schist-amphibolite material at WGWC-19, core was obtained from SCS storage and sent to Geochemical Testing of Somerset, Pennsylvania for analysis. Samples were acid digested in accordance with EPA method 3050, then analyzed for lithium by EPA method 6010. A summary of the sample lithology and lithium concentrations is provided in Table 2, Plant Wansley Rock Sample Lithium Analysis Results. The laboratory analytical report is provided in Appendix A, Laboratory Analytical Results – Rock Samples.

Lithium is present in schist-amphibolite samples from PB-8 and PB-9 at concentrations of 116 mg/kg and 63 mg/kg, respectively (Table 2), and 30 mg/kg in quartzite at APC-5D (WGWC-13). Groundwater wells consistently producing levels of lithium background monitoring (WGWC-8, WGWC-9, WGWC-10, WGWC-16, and WGWC-19) are located within or adjacent to the schist-amphibolite unit. A summary of the frequency of detection for lithium

is provided in Appendix B, Plant Wansley Ash Pond Summary of Lithium Background Sample Results.

The site-wide sample data confirm that the relative abundance of lithium in the schist-amphibolite material is elevated compared to other site lithologies. Testing of the rock (schist-amphibolite) from WGWC-19 (well with the highest groundwater concentration of lithium) identified the presence of lithium in all 5 samples. The concentration range of 39.4 to 97.0 mg/Kg was similar to the levels reported in the schist-amphibolite samples from PB-8 and PB-9. The consistent detection of lithium at all depth intervals indicates the widespread occurrence of lithium bearing silicate minerals in the schist-amphibolite unit.

Table 2. Plant Wansley Rock Sample Analysis Results Summary – Lithium.

Location	Depth (ft bgs)	Rock Type	Lithium Concentration
APC-5D (WGWC-13)	90-91	Quartzite (OZq)	30 mg/Kg
APC-6D (WGWC-15)	33-34	Schist/gneiss	<30 mg/Kg
APC-6D (WGWC-15)	47-48	Mafic gneiss	<30 mg/Kg
PB-3	56-57	Gneiss (OZi)	<30 mg/Kg
PB-4	49-50	Gneiss (OZli)	<70 mg/Kg
PB-8	123-124	Schist-Amphibolite (OZsau)	116 mg/Kg
PB-9	65-66	Schist-Amphibolite (OZsau)	63 mg/Kg
WGWC-19	77-78	Schist-Amphibolite (OZsau)	54.4 mg/Kg
WGWC-19	82-83	Schist-Amphibolite (OZsau)	60.3 mg/Kg
WGWC-19	85-86	Schist-Amphibolite (OZsau)	39.4 mg/Kg
WGWC-19	88-89	Schist-Amphibolite (OZsau)	97.0 mg/Kg
WGWC-19	91-92	Schist-Amphibolite (OZsau)	80.0 mg/Kg

Notes:

1. Data for all locations except WGWC-19 provided by laboratory on a % by weight basis. All data converted to mg/Kg for ease of comparison to WGWC-19 sample data.
2. Ft bgs = feet below ground surface
3. mg/Kg = milligrams per Kilogram

Lithium occurs naturally in the earth’s crust averaging 20 mg/kg (Taylor, 1964), and ranging from 30 mg/Kg (Taylor, 1964) to 40 mg/kg (Turekian and Wedepohl, 1961) in granitic rocks. Site-specific data presented in Table 2 suggest that lithium occurs at significantly higher than average concentrations in the schist-amphibolite lithology onsite.

Silicate minerals such spodumene or holmquistite dissolve in groundwater as a result of chemical weathering. A site-wide round of geochemical data was collected from the Wansley Ash Pond monitoring network in March 2018. Dissolved silicon was sampled as a measure of the degree of silicate mineral dissolution. Concentrations in upgradient well samples ranged from 4.1 to 17 mg/L and were at similar range of 6.7 to 22 mg/L in downgradient well samples. These data indicate that silicate mineral to groundwater interaction is

occurring. Metals such as lithium represent only a small percentage of silicate mineral composition by weight, however given that detected lithium concentrations are at levels in the low micrograms per liter ($\mu\text{g/L}$) range native mineral solubility is a viable mechanism for lithium to occur in groundwater.

Given the significantly higher lithium concentrations in the schist-amphibolite compared to site and literature background conditions, elevated groundwater concentrations are very likely derived from the native rock. The groundwater geochemical data set is provided in Appendix C, Laboratory Analytical Results – Groundwater Geochemical Samples.

2.3 Occurrence of Lithium in Background Data from Wansley Landfill

There have also been numerous lithium detections in background samples collected from wells installed around the perimeter of Cell 3 of the Plant Wansley Landfill. Cell 3 is separated from Cells 1 and 2 (i.e. not part of the same liner system) and encompassed by wells that are not hydraulically connected to Cells 1 and 2. Cell 3 has never received waste and therefore none of the samples can be said to be impacted from the CCR unit. Cell 3 is located approximately 2000 feet south of the Ash Pond. As shown in Figure 2, there is a groundwater divide just south of the Ash Pond that inhibits flow in this direction. Additionally, background data are included in Appendix D, Wansley Landfill Background Data Summary, for landfill groundwater monitoring wells GWC-25 through GWC-35 that are located in the vicinity of Cell 3. These wells show no detections of boron and low, naturally occurring levels of other Appendix III parameters (aside from naturally elevated levels of fluoride at several locations). Five of the wells along the perimeter of Cell 3 (GWA-28, GWA-29, GWC-27, GWC-31, and GWC-32) showed consistent lithium concentrations during background monitoring (Appendix B). These wells are in close proximity to the lithium bearing (OZsau) schist-amphibolite unit (Figure 3). Therefore, these locations are further indication that lithium naturally occurs in site background groundwater. A summary of the most recent lithium concentrations at Ash Pond network locations and background monitoring averages for relevant Wansley Landfill locations is provided in Table 3, Plant Wansley Groundwater Results Summary – Lithium.

The unimpacted upgradient wells at Wansley Landfill are screened in material more similar to WGWC-19 (and other downgradient Ash Pond locations) than the Ash Pond upgradient network. As would be anticipated, the upgradient Wansley Landfill monitoring wells exhibit higher levels of naturally-occurring lithium in groundwater samples than the Ash Pond upgradient network. A detailed summary of lithium concentrations reported during background monitoring at Wansley Landfill is provided in Appendix D.

As shown in the previous section, there is significant variation in lithium concentrations within schist-amphibolite samples (39.4 to 116 mg/Kg). Consistent with the rock sample data, there is variability in groundwater sample concentrations (Table 3). The maximum detected levels of lithium in groundwater are reported at WGWC-19 (where lithium was identified in all five of the rock samples tested).

In summary, based on a review of data from Ash Pond and Landfill locations, lithium is present at relatively higher concentrations in a rock type that is not present in the upgradient groundwater monitoring network. Unimpacted, upgradient locations at Wansley Landfill are in a lithology more similar to downgradient portion of the Ash Pond and produce similar levels of lithium.

Table 3. Plant Wansley Groundwater Results Summary – Lithium.

Location	Lithium Concentration
Wansley Ash Pond	
Upgradient	ND – 8.2 µg/L
WGWC-8	13 µg/L
WGWC-9	39 µg/L
WGWC-10	8.5 µg/L
WGWC-11	1.4J µg/L
WGWC-12	6.6 µg/L
WGWC-13	2.5J µg/L
WGWC-14A	1.6J µg/L
WGWC-15	6.0 µg/L
WGWC-16	12 µg/L
WGWC-17	5.0 µg/L
WGWC-19	62 µg/L
WAMW-1	26 µg/L
WAMW-2	23 µg/L
Wansley Landfill	
GWA-28	20 µg/L
GWA-29	40 µg/L
GWC-27	9.9 µg/L
GWC-31	23 µg/L
GWC-32	18 µg/L

Notes:

1. Units are micrograms per liter (µg/L)
2. ND = Not Detected
3. J = estimated trace concentration below laboratory reporting limit.
4. Upgradient data are pooled from WGWA-1, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, and WGWA-18;
5. Ash Pond network well samples collected between September 24 - October 4, 2018.
6. Samples from WAMW-1 and WAMW-2 collected October 16 – 18, 2018.
7. Landfill network well values are the average concentrations for background events completed March 22, 2016 through October 3, 2017.

2.4 Site-Wide Review of Cation/Anion Data and Appendix III SSIs Above Background

During the March 2018 assessment monitoring event, a suite of cations and anions were sampled from the entire Wansley Ash Pond groundwater monitoring network. The objective for obtaining this data was to identify any apparent geochemical differences between upgradient and downgradient monitoring wells. Additionally, five groundwater monitoring wells adjacent to Wansley Landfill Cell 3 (GWA-28, GWA-29, GWC-27, GWC-31, and GWC-32) were sampled for cations and anions earlier in March 2018 as part of an alternate source demonstration (ASD) for that unit (ACC, 2018). As previously noted, Cell 3 has never received waste and therefore conditions at these wells are representative of background conditions. Constituents released from coal ash can result in shifts in cation and anion abundances away from background conditions. These shifts may be apparent when plotted on a trilinear (Piper) diagram. The site-wide data set is depicted on Figure 4, Plant Wansley Ash Pond Tri-Linear diagram.

As shown in Figure 4, upgradient and downgradient groundwater data from both the Ash Pond and Landfill are generally comingled on the plot; the data points reflect predominantly a calcium-bicarbonate type water and to a lesser extent, a sodium-bicarbonate type water. Thus, the majority of samples indicate a natural groundwater composition (chemistry), reflecting background conditions. Two monitoring wells (WGWC-8 and WGWC-16) show some potential change from background conditions; these locations also produced SSIs for Appendix III analytes. There is no indication that the wells exhibiting the highest concentration of lithium (e.g. WGWC-19) has changed geochemically from background conditions (i.e. the source of lithium is not a site related impact). As discussed in the following section the low levels of lithium at WGWC-8 and WGWC-16 are also attributable to background conditions.

2.5 Temporal Analysis of CCR Indicators

The background data sets for each well were collected over prolonged periods where seasonal conditions potentially influence geochemical conditions. For example, periods of elevated precipitation may result in relatively dilute samples. As noted in the previous section, WGWC-8 and WGWC-16 appear to exhibit a possible shift from background conditions. Lithium is also routinely detected in samples from these locations. The potential that temporal shifts in lithium concentrations at these locations differ from the shifts in Appendix III indicator parameter data was evaluated by analysis of Pearson correlation coefficients. Highly positive correlations (i.e. correlation coefficient r near 1.0) may indicate that two parameter sets are from a common influence. Conversely, non-statistically significant low correlations or negative r values indicate that the occurrence of two parameters are unrelated or even from potentially different sources. Based on a review of upgradient data, there is virtually no boron present in upgradient background; therefore, boron was used as a point of comparison for each relevant Appendix III constituent and lithium.

As shown in Table 4, Plant Wansley WGWC-8 and WGWC-16 Correlation Coefficients, there are significantly positive correlations between boron and other Appendix III constituents. Specifically, boron has a statistically significant positive correlation with calcium and chloride at both wells; also, with sulfate and TDS at WGWC-8. Boron has a statistically

significant negative correlation with lithium at WGWC-8. This is an indication that the lithium originates from a distinctly different source (i.e. native groundwater rather than unit influenced water). Lithium does not significantly correlate with boron at WGWC-16 also indicating potentially different sources for the two analytes. Data from WGWC-19 are also included in Table 4. This location produces samples with the highest concentrations of lithium, but very low concentrations of Appendix III constituents. Boron is not detected at this location and there is therefore no correlation in the occurrences of boron and lithium.

Table 4. Plant Wansley WGWC-8 and WGWC-16 Correlation Coefficients.

WGWC-8

Background Sample Date	Boron	Lithium	Calcium	Chloride	Sulfate	TDS	Fluoride
19-May-16	1.42	0.0215	31.4	17.5	146	311	0.304
20-Jul-16	1.4	0.026	28	19	150	290	0.27
15-Sep-16	1.2	0.057	27	19	140	270	0.24
14-Nov-16	1.3	0.017	32	25	160	320	0.2
06-Feb-17	1.8	0.012	41	33	180	330	0.27
15-Mar-17	1.7	0.014	38	38	170	370	0.25
26-Apr-17	2.0	0.0091	39	42	180	380	0.31
10-Aug-17	1.8	0.013	53	48	180	380	0.37
Boron Correlation Coefficient		-0.75	0.77	0.86	0.91	0.87	0.60

WGWC-16

Background Sample Date	Boron	Lithium	Calcium	Chloride	Sulfate	TDS	Fluoride
18-May-16	4.5	0.01	168	217	388	1080	ND
19-Jul-16	4.7	0.0091	190	250	460	1200	ND
14-Sep-16	5.8	0.012	230	260	500	1300	ND
10-Nov-16	6.7	0.013	240	290	530	1400	ND
24-Jan-17	6.3	0.011	280	310	600	1300	ND
15-Mar-17	5.9	0.01	260	330	610	1500	ND
25-Apr-17	6.2	0.0081	300	330	620	1700	ND
09-Aug-17	6.3	0.013	350	330	780	1900	ND
Boron Correlation Coefficient (r)		0.49	0.77	0.79	0.70	0.65	NA

WGWC-19

Background Sample Date	Boron	Lithium	Calcium	Chloride	Sulfate	TDS	Fluoride
11-Nov-16	ND	0.045	12	2.6	3.4	98	0.32
06-Feb-17	ND	0.050	11	2.6	3.7	36	0.45
15-Mar-17	ND	0.052	10	2.4	3.6	120	0.37

WGWC-19

Background Sample Date	Boron	Lithium	Calcium	Chloride	Sulfate	TDS	Fluoride
11-Apr-17	ND	0.048	11	2.3	3.2	68	0.37
26-Apr-17	ND	0.044	8.4	2.3	3.3	76	0.40
07-Jun-17	ND	0.047	9.0	2.5	3.8	74	0.35
11-Jul-17	ND	0.045	9.5	2.3	3.3	70	0.39
10-Aug-17	ND	0.056	8.8	2.5	3.7	66	0.42
Boron Correlation Coefficient (r)		NA	NA	NA	NA	NA	NA

Notes:

1. All units are milligrams per liter (mg/L).
2. r = Pearson's correlation coefficient.
3. Bold values exceed ± 0.71 and are considered statistically significant for n = 8 at $\alpha = .05$.

2.6 Review of WGWC-19, WAMW-1, and WAMW-2 Water Quality Data

In addition to relative abundances of cations and anions, the overall concentrations of geochemical indicator parameters at WGWC-19 are within background ranges. A table comparing Appendix III constituent and lithium concentrations at WGWC-19, WAMW-1, and WAMW-2 to upgradient locations is provided in Table 5, Plant Wansley Appendix III/Lithium Data Comparison.

Table 5. Plant Wansley Appendix III/Lithium Data Comparison.

Analyte	Upgradient			WGWC-19			WAMW-1	WAMW-2
	Avg.	Min.	Max	Avg.	Min.	Max	Conc.	Conc.
Lithium	ND	ND	0.009	0.048	0.044	0.056	0.026	0.023
Boron	ND	ND	ND	ND	ND	0.034J	ND	ND
Calcium	11.0	0.44	52	9.8	8.4	12	19	18
Chloride	2.1	1.2	6.1	2.4	2.3	2.6	2.6	2.5
Fluoride	0.10	ND	0.28	0.37	0.32	0.45	0.60	0.47
Sulfate	3.9	ND	21	3.6	3.2	4.6	3.7	9.5
TDS	58	ND	150	80	36	120	120	110

Notes:

1. Units are milligrams per liter (mg/L)
2. ND = Not Detected
3. J = estimated trace concentration below laboratory reporting limit.
4. Upgradient data are pooled from WGWA-1, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, and WGWA-18; samples collected between May 2016 and October 2018.
5. WGWC-19 samples collected between May 2016 and October 2018. Single samples from WAMW-1 and WAMW-2 collected October 2018.

As shown in Table 5, boron is effectively non-detect in upgradient wells and at downgradient wells WGWC-19, WAMW-1, and WAMW-2. A trace level “J” value, that is below the reporting limit for boron (coal ash indicator), was reported in one of 11 samples collected from well WGWC-19. The non-detectable levels of boron in well WGWC-19 and low concentrations of

other indicator parameters (calcium, chloride, sulfate, and TDS) are comparable to background concentrations. Therefore, there is no indication of coal ash impact to WGWC-19. The lithium concentrations at WGWC-19, AMW-1, and AMW-2 are occurring in wells that are exhibiting unimpacted background conditions.

Concentrations of fluoride are slightly higher than background at WGWC-19, WAMW-1, and WAMW-2. As with lithium, this is attributable to natural variation that is not accounted for in the upgradient data set. A previous ASD for Wansley Landfill presented data demonstrating that fluoride is naturally occurring in groundwater in the vicinity of Cell 3 (ACC, 2018).

In summary, geochemical indicator concentrations present at WGWC-19, WAMW-1, and WAMW-2 are similar to background groundwater composition and there is no indication of coal ash influence to groundwater at these locations. A summary of Appendix III data for the upgradient monitoring network wells, WGWC-19, WAMW-1, and WAMW-2 is provided in Appendix E, Summary of Appendix III Data.

SECTION 3

Conclusions

Following completion of statistical analysis of Appendix IV data, a statistically significant level above the groundwater protection standard (GWPS) was reported for lithium in the sample from WGWC-19. There were no other statistical exceedances of the GWPS for lithium or any other Appendix IV analyte. Based on a review of available data the occurrence of lithium at WGWC-19 is solely related to natural variability that is not accounted for in the upgradient data set. This is likely the result of:

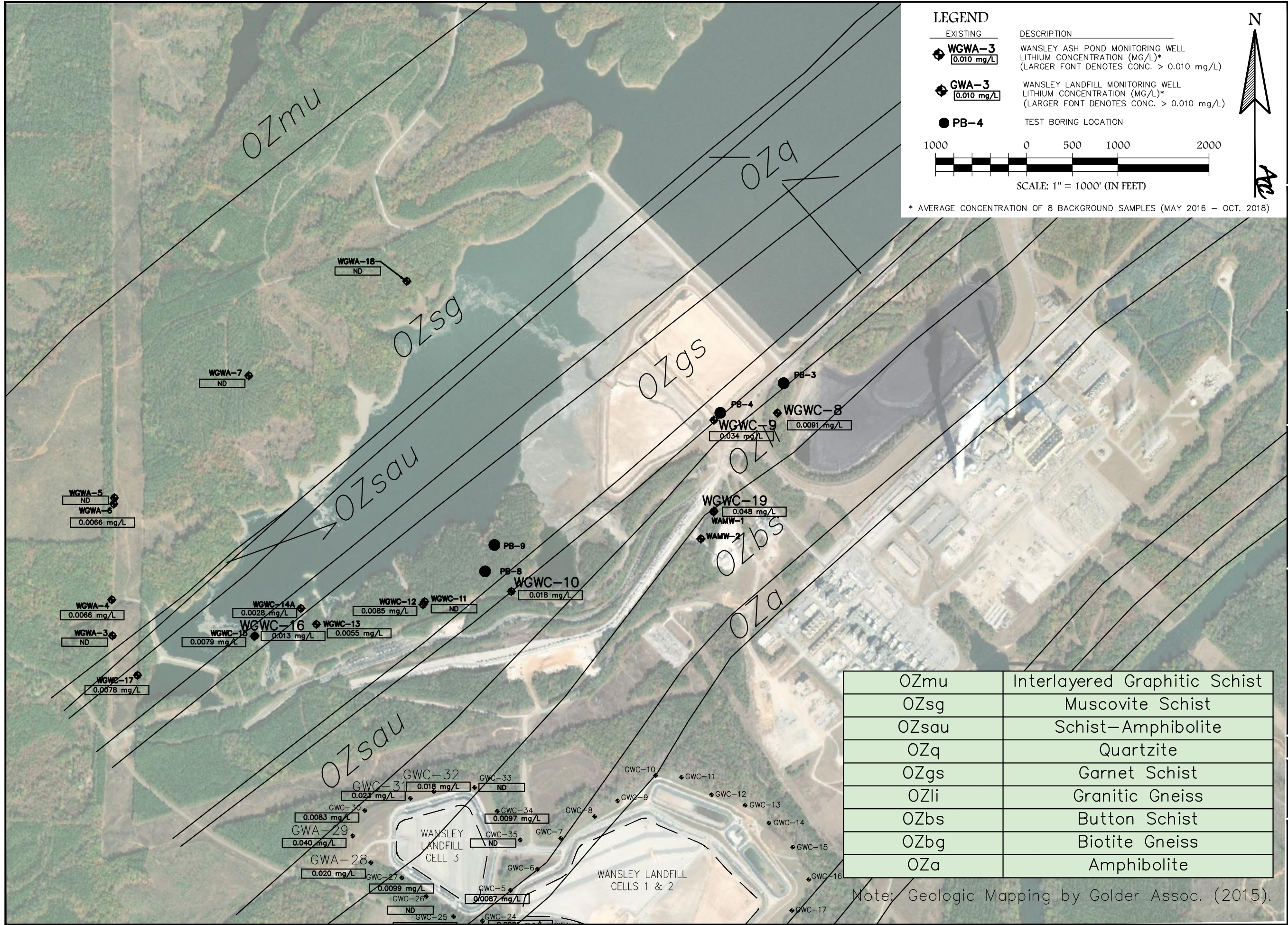
- Variable lithologies at the Site, the upgradient monitoring network wells are installed in a distinct lithologic unit that is not present downgradient. The upgradient unit contains a substantially lower abundance of lithium than units downgradient due to natural variability in rock unit composition.
- Rock core samples from WGWC-19 and other samples from the same schist-amphibolite unit contain lithium (as documented by laboratory analysis). The lithium concentrations in this unit are higher than other rock types at the Site and concentrations provided in peer reviewed literature.
- Site groundwater contains silicon levels ranging from 4.1 to 22 mg/L, indicating solubility of silicate minerals including lithium bearing minerals, and suggesting that lithium from natural rock formations have dissolved in groundwater.
- Based on absolute and relative occurrences of geochemical indicator parameters there is no indication of groundwater impact from the CCR unit at WGWC-19, WAMW-1, or WAMW-2.
- Concentrations of coal ash indicator parameters negatively correlate with lithium in samples from WGWC-8 indicating lithium is occurring independently of site influences.
- Similar levels of lithium were identified in groundwater samples collected from the perimeter network installed around Cell 3 of the Plant Wansley Landfill. This cell has never received waste and is installed in a lithology similar to WGWC-19.

As presented thru this ASD, the requirements for a demonstration that a source other than the CCR unit caused the statistically significant increase of lithium found in WGWC-19 as listed in §257.95(g)(3)(ii) have been satisfied. Therefore, an assessment of corrective measures is not required. Detection and assessment monitoring should continue and results presented in Annual Groundwater Monitoring and Corrective Action Reports.

SECTION 4 References

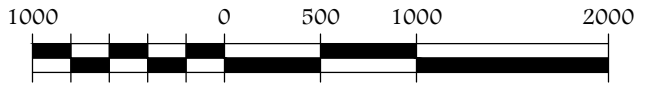
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FIGURES



LEGEND

EXISTING	DESCRIPTION
WGWA-3 0.010 mg/L	WANSLEY ASH POND MONITORING WELL LITHIUM CONCENTRATION (MG/L)* (LARGER FONT DENOTES CONC. > 0.010 mg/L)
GWA-3 0.010 mg/L	WANSLEY LANDFILL MONITORING WELL LITHIUM CONCENTRATION (MG/L)* (LARGER FONT DENOTES CONC. > 0.010 mg/L)
PB-4	TEST BORING LOCATION



* AVERAGE CONCENTRATION OF 8 BACKGROUND SAMPLES (MAY 2016 - OCT. 2018)



ACC
ATLANTIC COAST CONSULTING, INC.
 630 Colonial Park Dr.
 Suite 110
 Roswell, GA 30075
 o 770.594.5998
 www.atlcc.net

PROJECT:
PLANT WANSLEY ASH POND

1371 LIBERTY CHURCH ROAD
 CARROLLTON, GEORGIA

REVISIONS

Drawn by: **MM** Checked by: **EP**

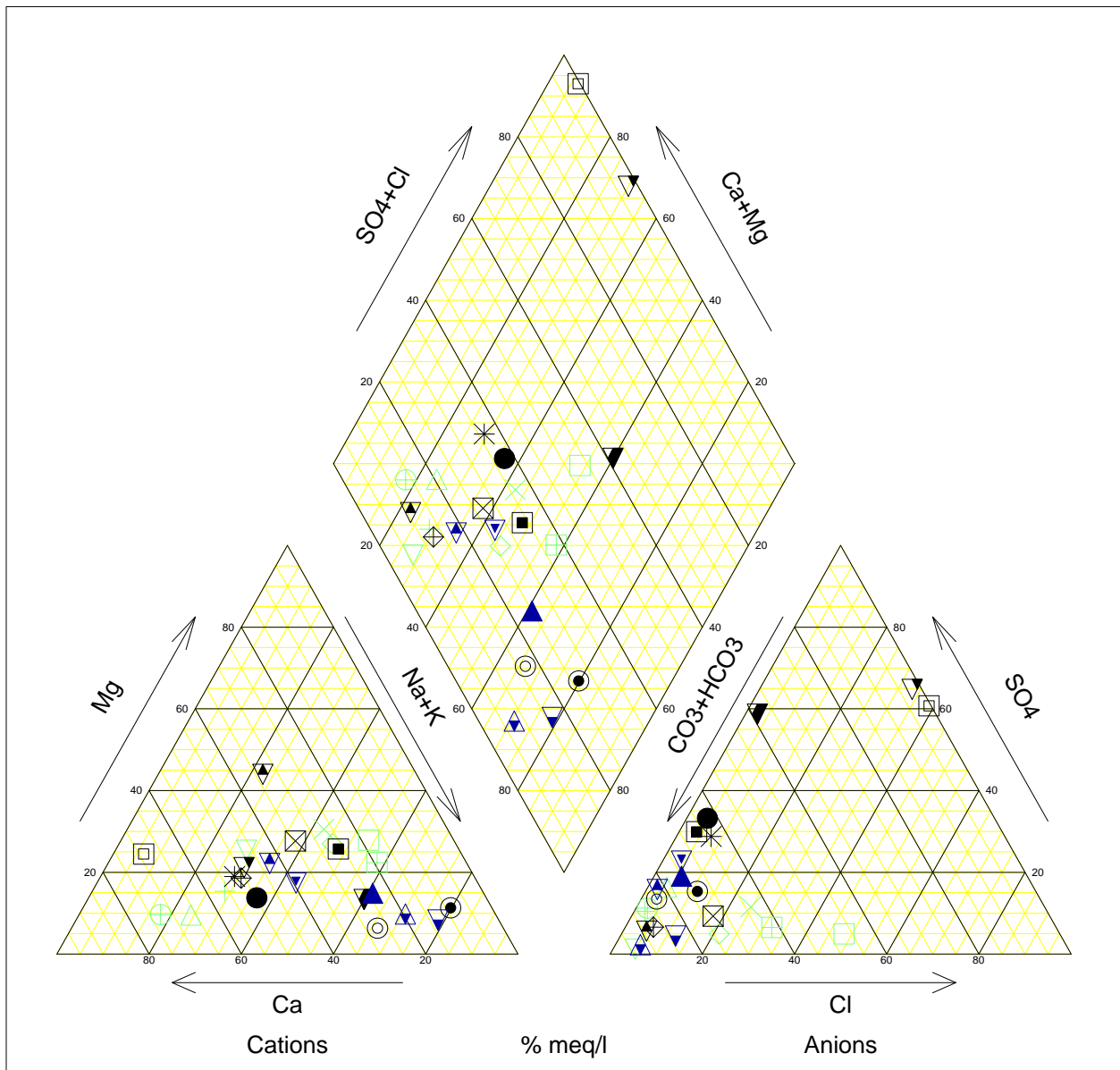
PROJECT NUMBER:
I054-110
 October 2018

OZmu	Interlayered Graphitic Schist
OZsg	Muscovite Schist
OZsau	Schist-Amphibolite
OZq	Quartzite
OZgs	Garnet Schist
OZli	Granitic Gneiss
OZbs	Button Schist
OZbg	Biotite Gneiss
OZa	Amphibolite

Note: Geologic Mapping by Golder Assoc. (2015).

Plant Wansley
 Ash Pond
 Lithologic Unit
 Map
FIGURE 3

Figure 4 - Wansley Ash Pond Tri-Linear Plot



□	WGWA-1	3/27/2018 - 3/30/2018	✱	WGWC-12	3/27/2018 - 3/30/2018
▽	WGWA-2	3/27/2018 - 3/30/2018	⊙	WGWC-13	3/27/2018 - 3/30/2018
◇	WGWA-3	3/27/2018 - 3/30/2018	⊗	WGWC-14A	3/27/2018 - 3/30/2018
+	WGWA-4	3/27/2018 - 3/30/2018	●	WGWC-15	3/27/2018 - 3/30/2018
×	WGWA-5	3/27/2018 - 3/30/2018	■	WGWC-16	3/27/2018 - 3/30/2018
⊕	WGWA-6	3/27/2018 - 3/30/2018	▣	WGWC-17	3/27/2018 - 3/30/2018
⊞	WGWA-7	3/27/2018 - 3/30/2018	▽	WGWC-19	3/15/2018 - 3/30/2018
△	WGWA-18	3/27/2018 - 3/30/2018	▽	GWC-27	3/15/2018 - 3/30/2018
▽	WGWC-8	3/15/2018 - 3/30/2018	▲	GWA-28	3/15/2018 - 3/30/2018
▼	WGWC-9	3/15/2018 - 3/30/2018	▲	GWA-29	3/15/2018 - 3/30/2018
⊕	WGWC-10	3/27/2018 - 3/30/2018	▽	GWC-31	3/15/2018 - 3/30/2018
⊞	WGWC-11	3/27/2018 - 3/30/2018	▽	GWC-32	3/15/2018 - 3/30/2018

APPENDIX A – Laboratory Analytical Results – Rock Samples



June 26, 2018

Service Request No:T1800765

Evan Perry
Atlantic Coast Consulting
630 Colonial Park Drive, Suite 100
Roswell, GA 30075

Laboratory Results for: Plant Wansley AP

Dear Evan,

Enclosed are the results of the sample(s) submitted to our laboratory May 03, 2018
For your reference, these analyses have been assigned our service request number **T1800765**.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and ALS Environmental is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Ralph Poulsen

ADDRESS 3860 S. Palo Verde Road, Suite 302, Tucson, AZ 85714
PHONE +1 520 573 1061 | FAX +1 520 573 1063
ALS Group USA, Corp.
dba ALS Environmental

Client: Atlantic Coast Consulting
Project: Plant Wansley AP/1054-110 Wansley Task 6

Service Request:T1800765

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
T1800765-001	APD-5D-Qtzite-90-91	5/1/2018	1330
T1800765-002	APC-6D-Sch/Gn-33-34	5/1/2018	1335
T1800765-003	APC-6D-Maf Gn-47-48	5/1/2018	1340
T1800765-004	PB-3-LI Gneiss-56-57	5/1/2018	1345
T1800765-005	PB-4-LI Gneiss-49-50	5/1/2018	1350
T1800765-006	PB-8-Sch/Amp-123-124	5/1/2018	1355
T1800765-007	PB-9-Sch/Amp-65-66	5/1/2018	1400



ALS Environmental - Tucson
 ADDRESS 3860 S. Palo Verde Road, Suite 302, Tucson, AZ 85714
 PHONE +1 520 573 1061 FAX +1 520 573 1063
 ALS Group

Chain of Custody

Work Order No.:

T1800765
 Atlantic Coast Consulting
 Plant Wansley AP
 5




Project Manager:		Evan Perry		Bill to:		Evan Perry	
Client Name:		Atlantic Coast Consulting, Inc.		Company:		Atlantic Coast Consulting, Inc.	
Address:		630 Colonial Park Drive		Address:		630 Colonial Park Drive	
City, State ZIP:		Roswell, GA 30075		City, State ZIP:		Roswell, GA 30075	
Email:		eperry@atlcc.net		Email:		eperry@atlcc.net	
Project Name:		Plant Wansley AP		Requested Analysis:		TAT	
Project Number:		1054-110 Wansley Task 6		TAT		<input type="checkbox"/> Routine <input type="checkbox"/> Same Day * <input type="checkbox"/> Next Day * <input type="checkbox"/> 3 Day* <input type="checkbox"/> 6 Day*	
P.O. Number:				Phone:		770-312-9899	
Sampler's Name:		Evan Perry					
SAMPLE RECEIPT							
Temperature (C):		Temp Blank Present					
Received Intact:	Yes	No	N/A	Wet Ice / Blue Ice			
Cooler Custody Seals:	Yes	No	N/A	Total Containers:			
Sample Custody Seals:	Yes	No	N/A				
Sample Identification	Matrix	Date Sampled	Time Sampled	Lab ID			
APC-5D-Qtzite-90-91	Rock	5/1/2018	1330	001	No. of Containers		
APC-6D-Sch/Gn-33-34	Rock	5/1/2018	1335	002	Prep Grind <1 mm - D346 / E829		
APC-6D-Maf Gn-47-48	Rock	5/1/2018	1340	003	Moisture. Total - D3173 / E871		
PB-3-LI Gneiss-56-57	Rock	5/1/2018	1345	004	Moisture. KF - D5530 mod		
PB-4-LI Gneiss-49-50	Rock	5/1/2018	1350	005	Ash - D3174 / D1102 / D482		
PB-8-Sch/Amp-123-124	Rock	5/1/2018	1355	006	Heating Value - D5865 / E711 / D4809		
PB-9-Sch/Amp-65-66	Rock	5/1/2018	1400	007	Black Liquor HHV & Solids - T 650 & T684		
					Prox (Moist, Ash, VM, FC) - D7582		
					Ultimate (CHNOS Ash) - D3176		
					Carbon, Total - D6316 / D5373 / E1915		
					Carbon, Combustible - D6316		
					CHN - D5373 / D5291		
					Oxygen - D5373 mod.		
					Sulfur, Total - D4239 / E1915 / D1552		
					Halogens (Br Cl F) - 5050 / 9056		
					Mercury - D6722		
					Metals - Ash Analysis - D6349 *		
					Metals - Total Dissolution **		
				Comments			
				* Please call for availability. Rush charges will apply. Due Date:			
				Additional Methods Available Upon Request			
				RELINQUISHED BY			
				RECEIVED BY			
Print Name		Signature		Date/Time		Signature	
Evan Perry		<i>[Signature]</i>		05/1/18 / 1615		<i>[Signature]</i>	
				MAY 03 2018			



3860 S. Palo Verde Road, Suite 302
 Tucson, AZ 85714
 T: +1 520 573 1061
 F: +1 520 573 1063
 www.alsglobal.com

Sample Receipt Form

T1800765 **5**
 Atlantic Coast Consulting
 Plant Wansley AP



Client/Project: **Atlantic Coast Consulting** Work Order Number: _____

Received by: **Cynthia Vroegh** Date & Time: **5/3/18 0928** Matrix: **Solid**

Samples were received via?: **FedEx** Samples were received in: **Cooler**

Were custody seals on containers? Yes No NA If yes, how many and where? _____

If present were custody seals intact? Yes No If present, were they signed and dated? Yes No

Arrival Temp C	Temp Blank C	Tracking Number
ambient	na	7721 2724 5454

Packing material used? **Bags** **cardboard**

Did all the bottles arrive in good condition (unbroken)? Yes No NA If No, record comments below

Did all sample labels and tags agree with COC? Yes No NA If No, record discrepancies below

Were all the appropriate containers and volumes received for the tests indicated? Yes No NA

Are samples received deemed acceptable? Yes No

Comments:
 7 - small ziploc bags with ROCK

Notes, discrepancies, & resolutions:

As a part of ISO 17025 protocols, ALS must notify clients that the quoted analytical methods performed by ALS may have minor modifications from the methods as published. These modifications are written into our Standard Operating Procedures and do not impact the quality of the data. Receipt of this document will be considered an acceptance of the procedures used by the laboratory for analysis unless notified by the client. Modifications may include, but are not limited to:

- The analysis of a sample matrix that differs from that stated in the published method (example - ASTM D5865 Standard Test Method for Gross Calorific Value of Coal and Coke is used for other matrices such as biomass, Tire Derived Fuel, etc.).
- Analyzing a sample mass that differs from those in the published method (example - to accommodate samples with high concentrations of analyte, samples of limited volume, or to comply with the instrument manufacturer's operating guidelines).
- Instruments used for the analysis may differ from those listed in the published method (example - using ICP-OES when the method references flame Atomic Absorption Spectroscopy)



Client: Atlantic Coast Consulting
 630 Colonial Park Drive, Suite 100
 Roswell, GA 30075

Attn: Evan Perry

Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Sample ID:	Sample Date and Time:	Lab #:		Flourine, Total 5050/9056 As Received mg/kg	Mercury, Total D6722 As Received ppb
APD-5D-Qtzite-90-91	5/1/18	1330	T1800765-001	30	<1
APC-6D-Sch/Gn-33-34	5/1/18	1335	T1800765-002	<5	<1
APC-6D-Maf Gn-47-48	5/1/18	1340	T1800765-003	<5	<1
PB-3-LI Gneiss-56-57	5/1/18	1345	T1800765-004	30	<1
PB-4-LI Gneiss-49-50	5/1/18	1350	T1800765-005	16	<1
PB-8-Sch/Amp-123-124	5/1/18	1355	T1800765-006	<5	<1
PB-9-Sch/Amp-65-66	5/1/18	1400	T1800765-007	<5	<1

Notes:

Samples were air dried then ground to < 60 mesh prior to analysis.



Client: Atlantic Coast Consulting
 630 Colonial Park Drive, Suite 100
 Roswell, GA 30075

Attn: Evan Perry
 Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Total Metals in Ash by ICP-OES ASTM D6349	ID	APD-5D-Qtzite-90-91		APC-6D-Sch/Gn-33-34		APC-6D-Maf Gn-47-48	
		Units	T1800765-001	Oxides	T1800765-002	Oxides	T1800765-003
Aluminum	wt %	7.56	Al ₂ O ₃ 14.29	10.68	Al ₂ O ₃ 20.19	8.06	Al ₂ O ₃ 15.23
Barium	wt %	0.13	BaO 0.14	0.04	BaO 0.05	0.08	BaO 0.09
Calcium	wt %	0.80	CaO 1.12	3.36	CaO 4.70	2.09	CaO 2.93
Iron	wt %	1.00	Fe ₂ O ₃ 1.43	5.71	Fe ₂ O ₃ 8.16	4.58	Fe ₂ O ₃ 6.55
Magnesium	wt %	0.18	MgO 0.30	1.55	MgO 2.57	1.13	MgO 1.88
Manganese	wt %	0.01	Mn ₃ O ₄ 0.02	0.11	Mn ₃ O ₄ 0.15	0.08	Mn ₃ O ₄ 0.12
Phosphorus	wt %	0.03	P ₂ O ₅ 0.07	0.08	P ₂ O ₅ 0.18	0.04	P ₂ O ₅ 0.10
Potassium	wt %	4.15	K ₂ O 5.00	1.50	K ₂ O 1.80	2.25	K ₂ O 2.72
Silicon	wt %	32.19	SiO ₂ 68.86	24.39	SiO ₂ 52.16	27.96	SiO ₂ 59.81
Sodium	wt %	2.58	Na ₂ O 3.48	3.55	Na ₂ O 4.78	1.39	Na ₂ O 1.88
Strontium	wt %	0.02	SrO 0.03	0.05	SrO 0.06	0.03	SrO 0.03
Titanium	wt %	0.13	TiO ₂ 0.21	0.80	TiO ₂ 1.33	0.47	TiO ₂ 0.78
Chromium	wt %	0.00	CrO ₄ 0.00	0.01	CrO ₄ 0.02	0.01	CrO ₄ 0.01
Cobalt	wt %	< 0.01	Co ₃ O ₄ 0.00	< 0.01	Co ₃ O ₄ 0.00	< 0.01	Co ₃ O ₄ 0.00
Copper	wt %	< 0.00	CuO 0.00	0.01	CuO 0.01	0.01	CuO 0.01
Zinc	wt %	0.01	ZnO 0.01	0.01	ZnO 0.02	0.01	ZnO 0.01
Vanadium	wt %	0.00	V ₂ O ₅ 0.00	0.02	V ₂ O ₅ 0.03	0.02	V ₂ O ₅ 0.03
Summation	wt %		Total 95.0		Total 96.2		Total 92.2

Note: Values reported on a moisture free wt% of ash

Samples were ashed at 950°C. Approximately 50 mg of ash was digested with HNO₃, HCl and HF acids, neutralized with Boric Acid, and analyzed by ICP-OES. Sulfur and Carbon in ash were analyzed by high-temperature combustion followed by IR detection (ASTM E1915)

Summation of Oxides may not equal 100% due to analytical error and/or elements present in sample but not analyzed. Samples with high concentrations of Carbon (in the form of carbonates) and/or Sulfur can have significant impacts on the metal to oxide calculation and summation.



Client: Atlantic Coast Consulting
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Attn: Evan Perry
 Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Total Metals in Ash by ICP-OES ASTM D6349	ID	PB-3-LI Gneiss-56-57		PB-4-LI Gneiss-49-50		PB-8-Sch/Amp-123-124	
		T1800765-004	Oxides	T1800765-005	Oxides	T1800765-006	Oxides
Aluminum	wt %	6.70	Al ₂ O ₃ 12.67	6.80	Al ₂ O ₃ 12.84	7.71	Al ₂ O ₃ 14.57
Barium	wt %	0.01	BaO 0.01	0.02	BaO 0.02	0.06	BaO 0.07
Calcium	wt %	0.51	CaO 0.71	0.26	CaO 0.37	0.88	CaO 1.23
Iron	wt %	0.83	Fe ₂ O ₃ 1.18	0.49	Fe ₂ O ₃ 0.70	4.20	Fe ₂ O ₃ 6.00
Magnesium	wt %	0.08	MgO 0.13	0.05	MgO 0.08	1.19	MgO 1.97
Manganese	wt %	0.04	Mn ₃ O ₄ 0.06	0.02	Mn ₃ O ₄ 0.02	0.05	Mn ₃ O ₄ 0.07
Phosphorus	wt %	< 0.01	P ₂ O ₅ 0.00	< 0.02	P ₂ O ₅ 0.00	0.07	P ₂ O ₅ 0.15
Potassium	wt %	4.08	K ₂ O 4.92	4.88	K ₂ O 5.87	2.61	K ₂ O 3.14
Silicon	wt %	31.67	SiO ₂ 67.74	31.64	SiO ₂ 67.68	29.18	SiO ₂ 62.43
Sodium	wt %	2.60	Na ₂ O 3.50	2.23	Na ₂ O 3.01	1.87	Na ₂ O 2.52
Strontium	wt %	0.00	SrO 0.00	0.00	SrO 0.00	0.01	SrO 0.02
Titanium	wt %	0.08	TiO ₂ 0.13	0.08	TiO ₂ 0.14	0.49	TiO ₂ 0.82
Chromium	wt %	0.00	CrO ₄ 0.00	< 0.00	CrO ₄ 0.00	0.01	CrO ₄ 0.02
Cobalt	wt %	< 0.01	Co ₃ O ₄ 0.00	< 0.01	Co ₃ O ₄ 0.00	< 0.01	Co ₃ O ₄ 0.00
Copper	wt %	< 0.00	CuO 0.00	< 0.00	CuO 0.00	0.00	CuO 0.00
Zinc	wt %	0.00	ZnO 0.00	< 0.00	ZnO 0.00	0.01	ZnO 0.01
Vanadium	wt %	< 0.00	V ₂ O ₅ 0.00	< 0.00	V ₂ O ₅ 0.00	0.01	V ₂ O ₅ 0.02
Summation	wt%		Total 91.1		Total 90.7		Total 93.1

Note: Values reported on a moisture free wt% of ash

Samples were ashed at 950°C. Approximately 50 mg of ash was digested with HNO₃, HCl and HF acids, neutralized with Boric Acid, and analyzed by ICP-OES. Sulfur and Carbon in ash were analyzed by high-temperature combustion followed by IR detection (ASTM E1915)

Summation of Oxides may not equal 100% due to analytical error and/or elements present in sample but not analyzed. Samples with high concentrations of Carbon (in the form of carbonates) and/or Sulfur can have significant impacts on the metal to oxide calculation and summation.



Client: Atlantic Coast Consulting
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Attn: Evan Perry
 Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Total Metals in Ash by ICP-OES ASTM D6349	ID	PB-9-Sch/Amp-65-66					
		T1800765-007	Oxides				
Aluminum	wt %	9.03	Al ₂ O ₃	17.06			
Barium	wt %	0.08	BaO	0.09			
Calcium	wt %	0.98	CaO	1.37			
Iron	wt %	5.18	Fe ₂ O ₃	7.41			
Magnesium	wt %	1.44	MgO	2.39			
Manganese	wt %	0.05	Mn ₃ O ₄	0.07			
Phosphorus	wt %	0.07	P ₂ O ₅	0.17			
Potassium	wt %	3.10	K ₂ O	3.74			
Silicon	wt %	29.27	SiO ₂	62.61			
Sodium	wt %	1.71	Na ₂ O	2.31			
Strontium	wt %	0.01	SrO	0.02			
Titanium	wt %	0.56	TiO ₂	0.93			
Chromium	wt %	0.01	CrO ₄	0.02			
Cobalt	wt %	< 0.01	Co ₃ O ₄	0.00			
Copper	wt %	0.01	CuO	0.01			
Zinc	wt %	0.01	ZnO	0.02			
Vanadium	wt %	0.01	V ₂ O ₅	0.02			
Summation	wt %		Total	98.2			

Note: Values reported on a moisture free wt% of ash

Samples were ashed at 950°C. Approximately 50 mg of ash was digested with HNO₃, HCl and HF acids, neutralized with Boric Acid, and analyzed by ICP-OES. Sulfur and Carbon in ash were analyzed by high-temperature combustion followed by IR detection (ASTM E1915)

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Attn: Evan Perry
 Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Total Metals by ICP-OES	ID	APD-5D-Qtzite-90-91	APC-6D-Sch/Gn-33-34	APC-6D-Maf Gn-47-48	PB-3-LI Gneiss-56-57	PB-4-LI Gneiss-49-50
		Units	T1800765-001	T1800765-002	T1800765-003	T1800765-004
Aluminum	Wt%	7.564	10.683	8.058	6.704	6.795
Antimony	Wt%	< 0.010	< 0.010	< 0.026	< 0.010	< 0.023
Arsenic	Wt%	< 0.002	< 0.002	< 0.005	< 0.002	< 0.005
Barium	Wt%	0.127	0.044	0.080	0.007	0.015
Beryllium	Wt%	< 0.000	< 0.000	< 0.001	0.001	< 0.001
Cadmium	Wt%	< 0.001	< 0.001	< 0.003	< 0.001	< 0.002
Calcium	Wt%	0.800	3.357	2.092	0.505	0.262
Chromium	Wt%	0.002	0.007	0.006	0.002	< 0.002
Cobalt	Wt%	< 0.005	< 0.005	< 0.013	< 0.005	< 0.012
Copper	Wt%	< 0.001	0.006	0.007	< 0.001	< 0.002
Iron	Wt%	0.998	5.708	4.584	0.825	0.491
Lead	Wt%	0.003	< 0.002	< 0.005	0.003	< 0.005
Lithium	Wt%	0.003	< 0.003	< 0.008	< 0.003	< 0.007
Magnesium	Wt%	0.184	1.549	1.135	0.077	0.047
Manganese	Wt%	0.014	0.111	0.084	0.044	0.017
Molybdenum	Wt%	< 0.010	< 0.010	< 0.026	< 0.010	< 0.023
Nickel	Wt%	< 0.005	< 0.005	< 0.013	< 0.005	< 0.012
Phosphorus	Wt%	0.030	0.078	0.045	< 0.010	< 0.023
Potassium	Wt%	4.154	1.498	2.255	4.081	4.877
Selenium	Wt%	< 0.005	< 0.005	< 0.013	< 0.005	< 0.012
Silicon	Wt%	32.190	24.385	27.961	31.667	31.637
Sodium	Wt%	2.583	3.549	1.392	2.597	2.233
Strontium	Wt%	0.022	0.051	0.027	0.003	0.004
Thallium	Wt%	< 0.052	< 0.052	< 0.064	< 0.054	< 0.059
Tin	Wt%	< 0.002	< 0.002	< 0.005	< 0.002	< 0.005
Titanium	Wt%	0.126	0.797	0.468	0.080	0.082
Vanadium	Wt%	0.001	0.016	0.015	< 0.001	< 0.002
Zinc	Wt%	0.007	0.012	0.010	0.003	< 0.005
Zirconium	Wt%	0.016	0.023	0.010	0.008	0.010

Note: Values reported on an as received basis.



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 630 Colonial Park Drive, Suite 100
 Roswell, GA 30075

Attn: Evan Perry
 Project: Plant Wansley AP

Date Received: May 3, 2018

Certificate of Analysis

Total Metals by ICP-OES	ID	PB-8-Sch/Amp-123-124	PB-9-Sch/Amp-65-66			
	Units	T1800765-006	T1800765-007			
Aluminum	Wt%	7.7133	9.0273			
Antimony	Wt%	< 0.0107	< 0.0106			
Arsenic	Wt%	< 0.0021	< 0.0021			
Barium	Wt%	0.0621	0.0765			
Beryllium	Wt%	< 0.0003	< 0.0003			
Cadmium	Wt%	< 0.0011	< 0.0011			
Calcium	Wt%	0.8794	0.9796			
Chromium	Wt%	0.0078	0.0076			
Cobalt	Wt%	< 0.0053	< 0.0053			
Copper	Wt%	0.0035	0.0057			
Iron	Wt%	4.1985	5.1843			
Lead	Wt%	< 0.0021	< 0.0021			
Lithium	Wt%	0.0116	0.0063			
Magnesium	Wt%	1.1887	1.4433			
Manganese	Wt%	0.0503	0.0524			
Molybdenum	Wt%	< 0.0107	< 0.0106			
Nickel	Wt%	< 0.0053	< 0.0053			
Phosphorus	Wt%	0.0675	0.0727			
Potassium	Wt%	2.6055	3.1012			
Selenium	Wt%	< 0.0053	< 0.0053			
Silicon	Wt%	29.1831	29.2699			
Sodium	Wt%	1.8700	1.7118			
Strontium	Wt%	0.0132	0.0138			
Thallium	Wt%	< 0.0517	< 0.0527			
Tin	Wt%	< 0.0021	< 0.0021			
Titanium	Wt%	0.4937	0.5585			
Vanadium	Wt%	0.0109	0.0125			
Zinc	Wt%	0.0115	0.0121			
Zirconium	Wt%	0.0170	0.0188			

Note: Values reported on an as received basis.



Subcontracted Work
ALS Environmental - Ft. Collins, Colorado



Monday, June 18, 2018

Ralph Poulsen
ALS Environmental
3860 S. Palo Verde Rd.
Tucson, AZ 85714

Re: ALS Workorder: 1805279
Project Name:
Project Number: T1800765

Dear Mr. Poulsen:

Seven solid samples were received from ALS Environmental, on 5/14/2018. The samples were scheduled for the following analysis:

Gamma Spectroscopy

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

ALS Environmental
Jeff R. Kujawa
Project Manager

ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
AIHA	214884
Alaska (AK)	UST-086
Alaska (AK)	CO01099
Arizona (AZ)	AZ0742
California (CA)	06251CA
Colorado (CO)	CO01099
Connecticut (CT)	PH-0232
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
L-A-B (DoD ELAP/ISO 170250)	L2257
Louisiana (LA)	05057
Maryland (MD)	285
Missouri (MO)	175
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO000782008A
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	2976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280



1805279

Gamma Spectroscopy:

The samples were analyzed for the presence of gamma emitting radionuclides according to the current revision of SOP 713 .

These samples were prepared according to the current revision of SOP 739. The samples were sealed in steel cans and stored for at least 21 days prior to analysis.

Activity concentrations above the calculated MDC are reported in some instances where minimum nuclide identification criteria are not met. Such tentative identifications result when the software attempts to calculate net activity concentrations for analytes where either one or both of the following criteria are not satisfied: the 'diagnostic' peak for a nuclide must be identified above the critical level, or the minimum library peak abundance must be attained. Nuclides not meeting these requirements have been flagged with a "TI" qualifier.

In cases where there are no peaks found in the peak search routine, the software performs a net quantification. This indicates that nuclides are not detected or supported at any level above the reported MDC. Consequently, these nuclides are flagged with an "NQ" qualifier on the final reports. Please refer to the Technical Bulletin Addendum at the end of this report.

All acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 1805279

Client Name: ALS Environmental

Client Project Name:

Client Project Number: T1800765

Client PO Number: 56T1800765

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
APD-5D-Qtzite-90-91	1805279-1		SOLID	01-May-18	13:30
APC-6D-Sch/Gn-33-34	1805279-2		SOLID	01-May-18	13:35
APC-6D-Maf Gn-47-48	1805279-3		SOLID	01-May-18	13:40
PB-3-LI Gnesiss-56-57	1805279-4		SOLID	01-May-18	13:45
PB-4LI Gneiss-49-50	1805279-5		SOLID	01-May-18	13:50
PB-8-Sch/Amp-123-124	1805279-6		SOLID	01-May-18	13:55
PB-9-Sch/Amp-65-66	1805279-7		SOLID	01-May-18	14:00

ALS Environmental Chain of Custody

3860 S. Palo Verde Rd. • Tucson, AZ 85714 • 520-573-1061 • FAX 520-623-9218

ALS Contact: Ralph Poulsen

18052779

Project Number: T1800765
Project Manager: Ralph Poulsen
QAP: LAB QAP

Lab Code	Sample ID	# of Cont.	Matrix	Sample			Lab ID	Gamma Spec 901.1
				Date	Time	Time		
① T1800765-001	APD-5D-Quizite-90-91		Solid	5/1/18	1330		Fort Collins ALS	X
② T1800765-002	APC-6D-Sch/Gn-33-34		Solid	5/1/18	1335		Fort Collins ALS	X
③ T1800765-003	APC-6D-Maf Gn-47-48		Solid	5/1/18	1340		Fort Collins ALS	X
④ T1800765-004	PB-3-LI Gneiss-56-57		Solid	5/1/18	1345		Fort Collins ALS	X
⑤ T1800765-005	PB-4-LI Gneiss-49-50		Solid	5/1/18	1350		Fort Collins ALS	X
⑥ T1800765-006	PB-8-Sch/Amp-123-124		Solid	5/1/18	1355		Fort Collins ALS	X
⑦ T1800765-007	PB-9-Sch/Amp-65-66		Solid	5/1/18	1400		Fort Collins ALS	X

Special Instructions/Comments Send reports and invoices to: TUC.Reporting@ALSGlobal.com	Turnaround Requirements RUSH (Surcharges Apply) PLEASE CIRCLE WORK DAYS 1 2 3 4 5 STANDARD Requested FAX Date: _____ Requested Report Date: 05/29/18	Report Requirements I. Results Only _____ II. Results + QC Summaries _____ III. Results + QC and Calibration Summaries _____ IV. Data Validation Report with Raw Data _____ PQL/MDL/ EDD <u> N </u> / <u> N </u>	Invoice Information PO# 56T1800765 Bill to _____
	Test is On Hold P - Test is Authorized for Prep Only Relinquished By: <i>Cynthia Vaughn</i> Received By: <i>Kelli-Jean Smith</i>		

Bill Number: *5-14-18 01550*
 KELLI-JEAN SMITH
 MAY 11 2018
 Page 1



ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: ALS AZ

Workorder No: 1805279

Project Manager: _____

Initials: KGL Date: 5.14.18

1. Does this project require any special handling in addition to standard ALS procedures?	<input type="radio"/>	YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	YES	NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	NO
7. Were airbills / shipping documents present and/or removable?	<input type="radio"/> DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	<input checked="" type="radio"/> N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	<input checked="" type="radio"/> N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ___ < green pea ___ > green pea	<input checked="" type="radio"/> N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ___ dusting ___ moderate ___ heavy	<input checked="" type="radio"/> N/A	YES	NO
16. Were the samples shipped on ice?		YES	<input checked="" type="radio"/> NO
17. Were cooler temperatures measured at 0.1-6.0°C?	IR gun used*:	YES	<input checked="" type="radio"/> NO
	#1	#3	#4
Cooler #: <u>1</u>			
Temperature (°C): <u>44.5</u>			
No. of custody seals on cooler: <u>0</u>			
External µR/hr reading: <u>11</u>			
Background µR/hr reading: <u>12</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO Contact: _____ Date/Time: _____

Project Manager Signature / Date: [Signature] 5.14.18

180524

ORIGIN ID: PGAA (250) 573-1061
SAMPLE MANAGEMENT
3860 S PALO VERDE RD
SUITE 302
TUCSON, AZ 85714
UNITED STATES US

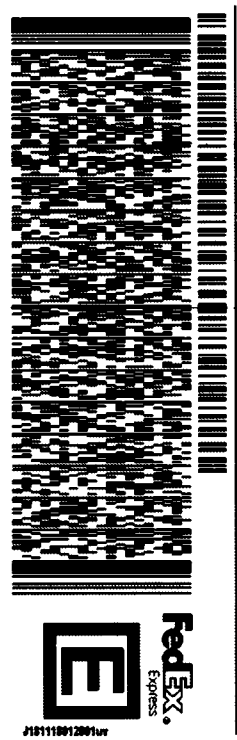
SHIP DATE: 11MAY18
ACTWGT: 8.05 LB
CUP: 104583340/NET3980
DIMS: 125X11 IN
BILL SENDER

TO SAMPLE RECEIPT
ALS FORT COLLINS
225 COMMERCE DRIVE

11-0

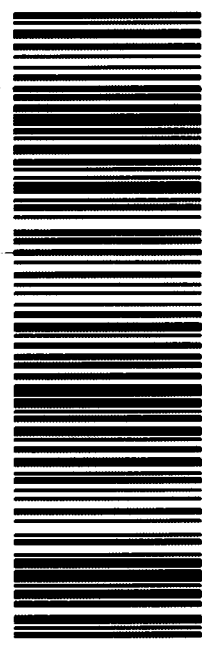
FORT COLLINS CO 80524
(800) 443-1511 REF: T1800763
NV DEPT

552J2782B/D/CA5



TRK# 7722 1809 6150
0201
TUE - 15 MAY 4:30P
** 2DAY **

ST FTCA
80524
CO-US DEN



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Client: ALS Environmental
 Project: T1800765
 Sample ID: APD-5D-Qtzite-90-91
 Legal Location:
 Collection Date: 5/1/2018 13:30

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-1
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	3.2 (+/- 0.49)	G	0.45	pCi/g	NA	6/15/2018 06:43
Ra-228	2.73 (+/- 0.59)	G	0.63	pCi/g	NA	6/15/2018 06:43

Client: ALS Environmental
 Project: T1800765
 Sample ID: APC-6D-Sch/Gn-33-34
 Legal Location:
 Collection Date: 5/1/2018 13:35

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-2
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results						
			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	1.02 (+/- 0.22)	G	0.32	pCi/g	NA	6/15/2018 08:00
Ra-228	0.95 (+/- 0.31)	LT,G	0.43	pCi/g	NA	6/15/2018 08:00

Client: ALS Environmental
 Project: T1800765
 Sample ID: APC-6D-Maf Gn-47-48
 Legal Location:
 Collection Date: 5/1/2018 13:40

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-3
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	0.53 (+/- 0.17)	LT,G	0.32	pCi/g	NA	6/15/2018 08:00
Ra-228	0.82 (+/- 0.27)	LT,G	0.39	pCi/g	NA	6/15/2018 08:00

Client: ALS Environmental
 Project: T1800765
 Sample ID: PB-3-LI Gnesiss-56-57
 Legal Location:
 Collection Date: 5/1/2018 13:45

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-4
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	4.98 (+/- 0.69)	G	0.49	pCi/g	NA	6/15/2018 08:01
Ra-228	3.38 (+/- 0.68)	G	0.73	pCi/g	NA	6/15/2018 08:01

Client: ALS Environmental
 Project: T1800765
 Sample ID: PB-4LI Gneiss-49-50
 Legal Location:
 Collection Date: 5/1/2018 13:50

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-5
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	3.49 (+/- 0.48)	G	0.34	pCi/g	NA	6/15/2018 08:01
Ra-228	3.1 (+/- 0.48)	G	0.49	pCi/g	NA	6/15/2018 08:01

Client: ALS Environmental
 Project: T1800765
 Sample ID: PB-8-Sch/Amp-123-124
 Legal Location:
 Collection Date: 5/1/2018 13:55

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-6
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results						
			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	1.45 (+/- 0.29)	G	0.37	pCi/g	NA	6/15/2018 08:41
Ra-228	ND (+/- 0.23)	U,G	0.38	pCi/g	NA	6/15/2018 08:41

Client: ALS Environmental
 Project: T1800765
 Sample ID: PB-9-Sch/Amp-65-66
 Legal Location:
 Collection Date: 5/1/2018 14:00

Date: 18-Jun-18
 Work Order: 1805279
 Lab ID: 1805279-7
 Matrix: SOLID
 Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Gamma Spectroscopy Results						
			SOP 713		Prep Date: 5/25/2018	PrepBy: MRL
Ra-226	1.29 (+/- 0.26)	G	0.4	pCi/g	NA	6/15/2018 08:41
Ra-228	1.47 (+/- 0.41)	G, TI	0.57	pCi/g	NA	6/15/2018 08:41

Client: ALS Environmental
Project: T1800765
Sample ID: PB-9-Sch/Amp-65-66
Legal Location:
Collection Date: 5/1/2018 14:00

Date: 18-Jun-18
Work Order: 1805279
Lab ID: 1805279-7
Matrix: SOLID
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
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Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC
- U or ND - Result is less than the sample specific MDC.
- Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
- Y2 - Chemical Yield outside default limits.
- W - DER is greater than Warning Limit of 1.42
- * - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.
- # - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.
- G - Sample density differs by more than 15% of LCS density.
- D - DER is greater than Control Limit
- M - Requested MDC not met.
- LT - Result is less than requested MDC but greater than achieved MDC.
- M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
- L - LCS Recovery below lower control limit.
- H - LCS Recovery above upper control limit.
- P - LCS, Matrix Spike Recovery within control limits.
- N - Matrix Spike Recovery outside control limits
- NC - Not Calculated for duplicate results less than 5 times MDC
- B - Analyte concentration greater than MDC.
- B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

- B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
- U or ND - Indicates that the compound was analyzed for but not detected.
- E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
- M - Duplicate injection precision was not met.
- N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
- Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
- * - Duplicate analysis (relative percent difference) not within control limits.
- S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

- U or ND - Indicates that the compound was analyzed for but not detected.
- B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
- E - Analyte concentration exceeds the upper level of the calibration range.
- J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
- A - A tentatively identified compound is a suspected aldol-condensation product.
- X - The analyte was diluted below an accurate quantitation level.
- * - The spike recovery is equal to or outside the control criteria used.
- + - The relative percent difference (RPD) equals or exceeds the control criteria.
- G - A pattern resembling gasoline was detected in this sample.
- D - A pattern resembling diesel was detected in this sample.
- M - A pattern resembling motor oil was detected in this sample.
- C - A pattern resembling crude oil was detected in this sample.
- 4 - A pattern resembling JP-4 was detected in this sample.
- 5 - A pattern resembling JP-5 was detected in this sample.
- H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
- L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
- Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
 - gasoline
 - JP-8
 - diesel
 - mineral spirits
 - motor oil
 - Stoddard solvent
 - bunker C

ALS -- Fort Collins

Date: 6/18/2018 2:21:

Client: ALS Environmental
 Work Order: 1805279
 Project: T1800765

QC BATCH REPORT

Batch ID: **GS180530-2-1** Instrument ID **GAMMA** Method: **Gamma Spectroscopy Results**

DUP Sample ID: **1805279-1** Units: **pCi/g** Analysis Date: **6/15/2018 08:00**
 Client ID: **APD-5D-Qtzite-90-91** Run ID: **GS180530-2A** Prep Date: **5/25/2018** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	3.13 (+/- 0.51)	0.56						3.2	0.1	2.1	G
Ra-228	3.14 (+/- 0.73)	1.06						2.73	0.4	2.1	M3,G

LCS Sample ID: **GS180530-2A** Units: **pCi/g** Analysis Date: **6/15/2018 08:42**
 Client ID: Run ID: **GS180530-2A** Prep Date: **5/25/2018** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	467 (+/- 55)	3	468.3		99.8	85-115					P,M3

LCS Sample ID: **GS180530-2** Units: **pCi/g** Analysis Date: **6/15/2018 08:41**
 Client ID: Run ID: **GS180530-2A** Prep Date: **5/25/2018** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Am-241	472 (+/- 55)	2	469.4		101	85-115					P
Co-60	198 (+/- 23)	1	199.1		99.6	85-115					P
Cs-137	180 (+/- 21)	1	179.7		100	85-115					P

MB Sample ID: **GS180530-2** Units: **pCi/g** Analysis Date: **6/15/2018 08:41**
 Client ID: Run ID: **GS180530-2A** Prep Date: **5/25/2018** DF: **NA**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	DER Ref	DER	DER Limit	Qual
Ra-226	ND	0.32									U
Ra-228	0.47 (+/- 0.33)	0.43									NQ

The following samples were analyzed in this batch:

1805279-1	1805279-2	1805279-3
1805279-4	1805279-5	1805279-6
1805279-7		

TECHNICAL BULLETIN ADDENDUM

The library used for analysis defines the gamma emission(s) to be used for analysis of each nuclide. If multiple gamma emissions are used for quantification, then a 'NET' quantification emission (or peak) must be defined in the library. This designation provides for the calculation of nuclide activity concentrations and detection limits in the case of non-presence of the nuclide. When the nuclide is not present, or the software is unable to resolve a peak at the library defined 'NET' energy, the software evaluates the 'NET' region of interest ('NET' peak energy +/- 2 keV) by performing a summation of the net counts above the background level. This 'NET' quantification can result in net negative, zero, or positive activity results, and is highly dependent on the spectral distribution in the region of interest of the 'NET' peak. In cases where only the 'NET' peak is found, and the software performs a net quantification, the nuclide result will be flagged with an 'NQ' qualifier on the final reports. This indicates that the nuclide is not detected or supported at any level above the reported MDC. Results are submitted without further qualification.

All nuclides specified in the library of analysis for gamma spectroscopy are evaluated for positive OR tentative identification on the following criteria:

- The individual abundances for the gamma emissions specified for each nuclide are summed to obtain a total nuclide abundance.
- From the total nuclide abundance, a positive identification criterion is set as 75% of this total nuclide abundance.
- For all nuclide peaks that are not net quantified, those peak abundances are summed. The total non-net quantified peak sum is compared to the calculated 75% abundance criterion. If this sum is greater than the 75% criterion, the nuclide is considered to be positively identified at the reported concentration. If the sum is less than the 75% criterion, the nuclide is tentatively identified at the reported concentration. These results will be flagged with a 'TI' qualifier on the final reports to indicate that the 75% abundance criterion was not met.

Wednesday, January 2, 2019

EVAN PERRY
ATLANTIC COAST CONSULTING
630 COLONIAL PARK DRIVE
ROSWELL, GA 30075

RE: Plant Wansley ASD

Order No.: G1812C84

Dear EVAN PERRY:

Geochemical Testing received 5 sample(s) on 12/21/2018 for the analyses presented in the following report.

There were no problems with the analyses and all QC data met NELAC, EPA, and laboratory specifications except where noted in the Case Narrative or Laboratory Results.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Timothy W. Bergstresser
Director of Technical Services

Geochemical Testing

Date: 02-Jan-19

CLIENT: ATLANTIC COAST CONSULTING
Project: Plant Wansley ASD
Lab Order: G1812C84 PWS: 9999999

CASE NARRATIVE

No problems were encountered during analysis of this workorder, except if noted in this report.

SAMPLE RECEIPT CHECKLIST

	Response
COC is present	Yes
COC is filled out in ink and legible	Yes
COC relinquished, signature, date, and time	Yes
Samples arrived within hold time	Yes
Containers properly preserved for the requested testing	Yes
Sample containers have legible labels	Yes
Sample preservation verified	Yes
Appropriate sample containers are used	Yes
Sample container(s) received at proper temperature	Yes
Zero headspace where required	Yes
Sufficient volume for all requested analyses	Yes

Comments on the above checklist: None

Legend:	ND - Not Detected	S - Spike Recovery outside accepted recovery limits
	J - Indicates an estimated value.	R - RPD outside accepted recovery limits
	U - The analyte was not detected at or above the listed concentration, which is below the laboratory quantitation limit.	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	** - Value exceeds Action Limit
	Q - Qualifier	H - Method Hold Time Exceeded
	QL - Quantitation Limit	MCL - Contaminant Limit
	DF - Dilution Factor	



Laboratory Results

Geochemical Testing

Date: 02-Jan-19

CLIENT:	ATLANTIC COAST CONSULTING	Client Sample ID:	WGWC-19-77'-78'
Lab Order:	G1812C84		
Project:	Plant Wansley ASD	Sampled By:	Atlantic Coast Consulting
Lab ID:	G1812C84-001	Collection Date:	12/20/2018 11:25:00 A
Matrix:	SOLID	Received Date:	12/21/2018 1:01:16 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS							
		Analyst: JEK				EPA 3050	EPA 6010
Lithium	54.4	1.0		mg/Kg-dry	1	12/27/18 12:30 PM	12/28/18 5:56 PM

Laboratory Results

Geochemical Testing

Date: 02-Jan-19

CLIENT:	ATLANTIC COAST CONSULTING	Client Sample ID:	WGWC-19-82'-83'
Lab Order:	G1812C84		
Project:	Plant Wansley ASD	Sampled By:	Atlantic Coast Consulting
Lab ID:	G1812C84-002	Collection Date:	12/20/2018 11:30:00 A
Matrix:	SOLID	Received Date:	12/21/2018 1:01:16 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS							
		Analyst: JEK				EPA 3050	EPA 6010
Lithium	60.3	1.0		mg/Kg-dry	1	12/27/18 12:30 PM	12/28/18 6:00 PM

Laboratory Results

Geochemical Testing

Date: 02-Jan-19

CLIENT:	ATLANTIC COAST CONSULTING	Client Sample ID:	WGWC-19-88'-89'
Lab Order:	G1812C84		
Project:	Plant Wansley ASD	Sampled By:	Atlantic Coast Consulting
Lab ID:	G1812C84-004	Collection Date:	12/20/2018 11:40:00 A
Matrix:	SOLID	Received Date:	12/21/2018 1:01:16 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS							
		Analyst: JEK				EPA 3050	EPA 6010
Lithium	97.0	1.0		mg/Kg-dry	1	12/27/18 12:30 PM	12/28/18 6:14 PM

Laboratory Results

Geochemical Testing

Date: 02-Jan-19

CLIENT:	ATLANTIC COAST CONSULTING	Client Sample ID:	WGWC-19-91'-92'
Lab Order:	G1812C84		
Project:	Plant Wansley ASD	Sampled By:	Atlantic Coast Consulting
Lab ID:	G1812C84-005	Collection Date:	12/20/2018 11:45:00 A
Matrix:	SOLID	Received Date:	12/21/2018 1:01:16 PM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS							
		Analyst: JEK				EPA 3050	EPA 6010
Lithium	80.0	1.0		mg/Kg-dry	1	12/27/18 12:30 PM	12/28/18 6:40 PM

Shuttle/Cooler ID#:

CHAIN OF CUSTODY

Geochemical Testing

Form F-5002, 04.13

Geochemical Testing • 2005 North Center Avenue • Somerset PA 15501 • (814) 443-1671 • Fax (814) 445-6729

Billing Client: Atlantic Coast Consulting
Address: 630 Colonial Park Dr.
City: Roswell **State:** GA **Zip:** 30073
WO#: G1812C84

Contact (Company): Evan Perry
e-mail: eperry@atlcoast.net
Sampled by: Ryan Walker
Project: Plant Wastley ASD

Phone: (770) 594-5998
Fax: (770) 594-5998
Preservatives by: Sampler—GT
PO/Quote#: _____

Sample Matrix: GW Ground Water SW Surface Water PW Potable Water WW Wastewater SO Soil SL Sludge nHZ Not Hazardous / HZ Hazardous PCBs

Sample Type: G Grab C Composite D Distribution/DW R Raw/DW S Special/DW O Other Client GT Lab

Sample Location/Description	Lab Number	Sample Matrix	Date	Time (Military)	Sample Type	**Analyses Requested	Remarks/Preservatives, etc	Number of Containers
WG-WC-19-77'-78'	001	nHZ / HZ	12-20-18	1125	G	Lithium	Field Filtered: Y / N	1
WG-WC-19-82'-83'	002	nHZ / HZ	12-20-18	1130	G	Lithium	Field Filtered: Y / N	1
WG-WC-19-85'-86'	003	nHZ / HZ	12-20-18	1135	G	Lithium	Field Filtered: Y / N	1
WG-WC-19-88'-89'	004	nHZ / HZ	12-20-18	1140	G	Lithium	Field Filtered: Y / N	1
WG-WC-19-91'-92'	005	nHZ / HZ	12-20-18	1145	G	Lithium	Field Filtered: Y / N	1
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	
		nHZ / HZ					Field Filtered: Y / N	

Note Deficiencies Here:
 Expedite analysis

Relinquished by (Company & Signature): ACC
Time (Military): 1300
Date: 12-20-18

Received by (Company & Signature): UPS
Time (Military): 1300
Date: 12-20-18

Time (Military): 1301
Date: 12-20-18

SAMPLES MUST BE PRESERVED ON ICE.

Ice present on receipt: Yes or No
 Cooler Temp (°C) on receipt: 15
 Sample Receiving (1st Review): JS
 Client Support (2nd Review): OK

**APPENDIX B – Plant Wansley Ash Pond Summary of Lithium Background
Sample Results**

Summary Report

Constituent: Lithium Analysis Run 12/17/2018 4:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 8/10/2017, a summary of the selected data set:

Observations = 151
 ND/Trace = 67
 Wells = 19
 Minimum Value = 0.0011
 Maximum Value = 0.057
 Mean Value = 0.01169
 Median Value = 0.0048
 Standard Deviation = 0.01344
 Coefficient of Variation = 1.15
 Skewness = 1.639

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	8	6	0.0025	0.025	0.005488	0.0025	0.007891	1.438	2.261
WGWA-18 (bg)	8	8	0.0025	0.025	0.005312	0.0025	0.007955	1.497	2.268
WGWA-2 (bg)	8	1	0.0049	0.025	0.0092	0.0075	0.006534	0.7102	2.062
WGWA-3 (bg)	8	8	0.0025	0.025	0.005312	0.0025	0.007955	1.497	2.268
WGWA-4 (bg)	8	1	0.0033	0.025	0.006575	0.00415	0.007462	1.135	2.247
WGWA-5 (bg)	7	7	0.0025	0.025	0.005714	0.0025	0.008504	1.488	2.041
WGWA-6 (bg)	8	2	0.0025	0.025	0.006575	0.0043	0.007476	1.137	2.23
WGWA-7 (bg)	8	8	0.0025	0.025	0.005312	0.0025	0.007955	1.497	2.268
WGWC-10	8	0	0.011	0.032	0.01775	0.0165	0.00684	0.3854	1.081
WGWC-11	8	8	0.0025	0.025	0.005312	0.0025	0.007955	1.497	2.268
WGWC-12	8	1	0.0011	0.025	0.0085	0.0072	0.00701	0.8247	1.795
WGWC-13	8	7	0.0025	0.025	0.005475	0.0025	0.007902	1.443	2.253
WGWC-14A	8	6	0.0025	0.0039	0.002775	0.0025	0.0005339	0.1924	1.449
WGWC-15	8	2	0.0025	0.025	0.007925	0.00615	0.007096	0.8954	2.014
WGWC-16	8	1	0.0081	0.025	0.01265	0.0115	0.005295	0.4186	1.771
WGWC-17	8	1	0.0042	0.025	0.0078	0.00535	0.007014	0.8993	2.186
WGWC-19	8	0	0.044	0.056	0.04838	0.0475	0.004104	0.08483	0.7337
WGWC-8	8	0	0.0091	0.057	0.0212	0.0155	0.01546	0.7291	1.755
WGWC-9	8	0	0.024	0.04	0.03406	0.0345	0.005388	0.1582	-0.7393

**APPENDIX C – Laboratory Analytical Results – Groundwater Geochemical
Samples**

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: 400-151568-1

TestAmerica Sample Delivery Group: Ash Pond

Client Project/Site: CCR - Plant Wansley

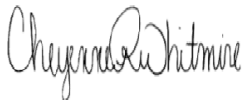
For:

Southern Company

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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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Job ID: 400-151568-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-151568-1

HPLC/IC

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWC-8 (400-151568-12), WGWC-16 (400-151568-24) and DUP-2 (400-151568-25). Elevated reporting limits (RLs) are provided.

Metals

Method(s) 6020: The serial dilution performed for the following sample associated with batch 393655 was outside control limits: (400-151568-C-1-A SD)

Method(s) 6020: The following samples were diluted to bring the concentration of target analytes within the calibration range: WGWA-2 (400-151568-1), WGWA-1 (400-151568-2), WGWA-3 (400-151568-3), WGWA-4 (400-151568-4), WGWA-7 (400-151568-6), WGWA-6 (400-151568-7), DUP-1 (400-151568-8), WGWA-5 (400-151568-9), WGWA-18 (400-151568-10), WGWC-19 (400-151568-11), WGWC-8 (400-151568-12), WGWC-9 (400-151568-13), WGWC-14A (400-151568-15), WGWC-13 (400-151568-16), WGWC-11 (400-151568-17), WGWC-12 (400-151568-18), WGWC-15 (400-151568-20), WGWC-17 (400-151568-22), WGWC-10 (400-151568-23), WGWC-16 (400-151568-24) and DUP-2 (400-151568-25). Elevated reporting limits (RLs) are provided.



Detection Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-151568-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	0.72	J	1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	15		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	5.0		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.7		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	9.0		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	17		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	73		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	73		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	92		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-1

Lab Sample ID: 400-151568-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.6		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	1.1		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	1.2		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	3.3		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	6.8		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	6.0		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.0		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-3

Lab Sample ID: 400-151568-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.6		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	1.1		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	1.3		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	2.8		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	6.4		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	9.6		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	9.6		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	34		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-4

Lab Sample ID: 400-151568-4

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWA-4 (Continued)

Lab Sample ID: 400-151568-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	6.8		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	15		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.5		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	3.0		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	7.1		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	16		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	72		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	72		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total	1.7		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	1.7		1.0	0.98	mg/L	1		SM 2320B	Total/NA

Client Sample ID: WGWA-7

Lab Sample ID: 400-151568-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.8		1.0	0.89	mg/L	1		300.0	Total/NA
Calcium	0.90		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	0.63		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	0.86		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	2.6		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	4.8		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	6.0		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.0		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	8.1		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	26		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.1		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	3.3		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	5.3		0.25	0.17	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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-6 (Continued)

Lab Sample ID: 400-151568-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silicon - DL	11		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	79		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	79		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-1

Lab Sample ID: 400-151568-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	8.1		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	26		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.2		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	3.4		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	5.3		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	12		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	79		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	79		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-5

Lab Sample ID: 400-151568-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	0.88	J	1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	0.76		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	1.2		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	1.3		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	4.1		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	620		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	620		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	12		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWA-18

Lab Sample ID: 400-151568-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	12		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	24		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.1		0.13	0.032	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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-18 (Continued)

Lab Sample ID: 400-151568-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	5.8		0.25	0.11	mg/L	5		6020	Total
Sodium	6.7		0.25	0.17	mg/L	5		6020	Total
Silicon - DL	7.3		1.0	0.59	mg/L	50		6020	Total
Alkalinity, Total	74		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	74		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	3.4		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	10		0.25	0.13	mg/L	5		6020	Total
Magnesium	8.0		0.13	0.032	mg/L	5		6020	Total
Potassium	1.2		0.25	0.11	mg/L	5		6020	Total
Sodium	7.1		0.25	0.17	mg/L	5		6020	Total
Silicon - DL	11		2.0	1.2	mg/L	100		6020	Total
Alkalinity, Total	69		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	69		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	110		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	68		5.0	4.5	mg/L	5		300.0	Total/NA
Sulfate	180		5.0	3.5	mg/L	5		300.0	Total/NA
Calcium	61		0.25	0.13	mg/L	5		6020	Total
Magnesium	16		0.13	0.032	mg/L	5		6020	Total
Potassium	8.5		0.25	0.11	mg/L	5		6020	Total
Sodium	38		0.25	0.17	mg/L	5		6020	Total
Silicon - DL	19		4.0	2.4	mg/L	200		6020	Total
Alkalinity, Total	7.4		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	7.4		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	500		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	37		1.0	0.70	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-9 (Continued)

Lab Sample ID: 400-151568-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	7.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.3		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	0.99		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	19		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	22		4.0	2.4	mg/L	200		6020	Total Recoverable
Alkalinity, Total	31		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	31		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	130		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

No Detections.

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.5		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	4.6		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	0.92		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.2		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	11		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	7.8		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	28		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	28		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	6.5		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	7.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	0.98		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.6		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	18		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	20		4.0	2.4	mg/L	200		6020	Total Recoverable
Alkalinity, Total	51		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	51		1.0	0.98	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-13 (Continued)

Lab Sample ID: 400-151568-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	2.2		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	3.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	1.9		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	1.4		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	4.1		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	8.5		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	22		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	22		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	62		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.1		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	16		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	14		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	3.1		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.5		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	7.5		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	12		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	45		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	45		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	120		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.2		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	42		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	31		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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-15 (Continued)

Lab Sample ID: 400-151568-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	5.2		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	1.8		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	25		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	8.7		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	100		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	100		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	210		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

No Detections.

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.5		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	16		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	7.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	4.3		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.1		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	14		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	15		2.0	1.2	mg/L	100		6020	Total Recoverable
Alkalinity, Total	45		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	45		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	100		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3		1.0	0.89	mg/L	1		300.0	Total/NA
Sulfate	1.9		1.0	0.70	mg/L	1		300.0	Total/NA
Calcium	9.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Magnesium	2.0		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	2.6		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	4.7		0.25	0.17	mg/L	5		6020	Total Recoverable
Silicon - DL	7.8		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	32		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	32		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	64		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 Wansley

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	330		20	18	mg/L	20		300.0	Total/NA
Sulfate	700		20	14	mg/L	20		300.0	Total/NA
Magnesium	71		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	8.6		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	31		0.25	0.17	mg/L	5		6020	Total Recoverable
Calcium - DL	330		2.5	1.3	mg/L	50		6020	Total Recoverable
Silicon - DL	6.7		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	6.5		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.5		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	2200		7.1	4.9	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	330		20	18	mg/L	20		300.0	Total/NA
Sulfate	690		20	14	mg/L	20		300.0	Total/NA
Magnesium	71		0.13	0.032	mg/L	5		6020	Total Recoverable
Potassium	8.7		0.25	0.11	mg/L	5		6020	Total Recoverable
Sodium	31		0.25	0.17	mg/L	5		6020	Total Recoverable
Calcium - DL	340		2.5	1.3	mg/L	50		6020	Total Recoverable
Silicon - DL	6.6		1.0	0.59	mg/L	50		6020	Total Recoverable
Alkalinity, Total	6.5		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	6.5		1.0	0.98	mg/L	1		SM 2320B	Total/NA
Total Dissolved Solids	1900		5.6	3.8	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2320B	Alkalinity	SM	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-151568-1	WGWA-2	Water	03/27/18 15:05	03/30/18 11:14
400-151568-2	WGWA-1	Water	03/27/18 15:55	03/30/18 11:14
400-151568-3	WGWA-3	Water	03/28/18 12:20	03/30/18 11:14
400-151568-4	WGWA-4	Water	03/28/18 11:15	03/30/18 11:14
400-151568-5	FB-1-3-28-18	Water	03/28/18 10:00	03/30/18 11:14
400-151568-6	WGWA-7	Water	03/28/18 13:25	03/30/18 11:14
400-151568-7	WGWA-6	Water	03/28/18 10:15	03/30/18 11:14
400-151568-8	DUP-1	Water	03/28/18 00:00	03/30/18 11:14
400-151568-9	WGWA-5	Water	03/28/18 14:15	03/31/18 08:46
400-151568-10	WGWA-18	Water	03/28/18 15:20	03/31/18 08:46
400-151568-11	WGWC-19	Water	03/29/18 10:45	03/31/18 08:46
400-151568-12	WGWC-8	Water	03/29/18 14:05	03/31/18 08:46
400-151568-13	WGWC-9	Water	03/29/18 12:30	03/31/18 08:46
400-151568-14	FB-2-3-29-18	Water	03/29/18 13:40	03/31/18 08:46
400-151568-15	WGWC-14A	Water	03/29/18 15:00	03/31/18 08:46
400-151568-16	WGWC-13	Water	03/29/18 13:30	03/31/18 08:46
400-151568-17	WGWC-11	Water	03/29/18 12:10	03/31/18 08:46
400-151568-18	WGWC-12	Water	03/29/18 11:05	03/31/18 08:46
400-151568-19	EB-1-3-29-18	Water	03/29/18 10:00	03/31/18 08:46
400-151568-20	WGWC-15	Water	03/30/18 10:10	04/03/18 09:32
400-151568-21	EB-2-3-30-18	Water	03/30/18 09:50	04/03/18 09:32
400-151568-22	WGWC-17	Water	03/30/18 11:20	04/03/18 09:32
400-151568-23	WGWC-10	Water	03/30/18 12:35	04/03/18 09:32
400-151568-24	WGWC-16	Water	03/29/18 15:20	04/03/18 09:32
400-151568-25	DUP-2	Water	03/29/18 00:00	04/03/18 09:32

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-2

Lab Sample ID: 400-151568-1

Date Collected: 03/27/18 15:05

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0	0.89	mg/L			04/10/18 00:52	1
Sulfate	0.72	J	1.0	0.70	mg/L			04/10/18 00:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	15		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 18:04	5
Magnesium	5.0		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 18:04	5
Potassium	2.7		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 18:04	5
Sodium	9.0		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 18:04	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	17		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 18:49	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	73		1.0	0.98	mg/L			04/02/18 10:32	1
Bicarbonate Alkalinity as CaCO3	73		1.0	0.98	mg/L			04/02/18 10:32	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:32	1
Total Dissolved Solids	92		5.0	3.4	mg/L			04/03/18 16:48	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 400-151568-2

Date Collected: 03/27/18 15:55

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		1.0	0.89	mg/L			04/10/18 02:00	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 02:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1.2		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 15:52	5
Magnesium	1.1		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 15:52	5
Potassium	1.2		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 15:52	5
Sodium	3.3		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 15:52	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	6.8		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 18:54	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	6.0		1.0	0.98	mg/L			04/02/18 10:42	1
Bicarbonate Alkalinity as CaCO3	6.0		1.0	0.98	mg/L			04/02/18 10:42	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:42	1
Total Dissolved Solids	18		5.0	3.4	mg/L			04/03/18 16:48	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-3

Lab Sample ID: 400-151568-3

Date Collected: 03/28/18 12:20

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.89	mg/L			04/10/18 02:23	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 02:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1.8		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 15:57	5
Magnesium	1.1		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 15:57	5
Potassium	1.3		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 15:57	5
Sodium	2.8		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 15:57	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	6.4		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 18:58	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	9.6		1.0	0.98	mg/L			04/02/18 10:47	1
Bicarbonate Alkalinity as CaCO3	9.6		1.0	0.98	mg/L			04/02/18 10:47	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:47	1
Total Dissolved Solids	34		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWA-4
Date Collected: 03/28/18 11:15
Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-4
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.1		1.0	0.89	mg/L			04/10/18 02:46	1
Sulfate	6.8		1.0	0.70	mg/L			04/10/18 02:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	15		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:01	5
Magnesium	2.5		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:01	5
Potassium	3.0		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:01	5
Sodium	7.1		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:01	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	16		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 19:03	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	72		1.0	0.98	mg/L			04/02/18 10:52	1
Bicarbonate Alkalinity as CaCO3	72		1.0	0.98	mg/L			04/02/18 10:52	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:52	1
Total Dissolved Solids	110		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/10/18 03:09	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 03:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:28	5
Magnesium	<0.032		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:28	5
Potassium	<0.11		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:28	5
Sodium	<0.17		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:28	5
Silicon	<0.059		0.10	0.059	mg/L		04/08/18 13:48	04/11/18 16:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	1.7		1.0	0.98	mg/L			04/02/18 10:57	1
Bicarbonate Alkalinity as CaCO3	1.7		1.0	0.98	mg/L			04/02/18 10:57	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:57	1
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-7

Date Collected: 03/28/18 13:25

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.89	mg/L			04/10/18 04:17	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 04:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.90		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:33	5
Magnesium	0.63		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:33	5
Potassium	0.86		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:33	5
Sodium	2.6		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:33	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	4.8		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 19:07	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	6.0		1.0	0.98	mg/L			04/02/18 11:01	1
Bicarbonate Alkalinity as CaCO3	6.0		1.0	0.98	mg/L			04/02/18 11:01	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 11:01	1
Total Dissolved Solids	6.0		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Date Collected: 03/28/18 10:15

Matrix: Water

Date Received: 03/30/18 11:14

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			04/10/18 04:40	1
Sulfate	8.1		1.0	0.70	mg/L			04/10/18 04:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	26		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:42	5
Magnesium	2.1		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:42	5
Potassium	3.3		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:42	5
Sodium	5.3		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:42	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	11		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 19:12	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	79		1.0	0.98	mg/L			04/02/18 11:08	1
Bicarbonate Alkalinity as CaCO3	79		1.0	0.98	mg/L			04/02/18 11:08	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 11:08	1
Total Dissolved Solids	130		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: DUP-1
Date Collected: 03/28/18 00:00
Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-8
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			04/10/18 05:03	1
Sulfate	8.1		1.0	0.70	mg/L			04/10/18 05:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	26		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:37	5
Magnesium	2.2		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:37	5
Potassium	3.4		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:37	5
Sodium	5.3		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:37	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	12		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 19:16	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	79		1.0	0.98	mg/L			04/02/18 11:14	1
Bicarbonate Alkalinity as CaCO3	79		1.0	0.98	mg/L			04/02/18 11:14	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 11:14	1
Total Dissolved Solids	110		5.0	3.4	mg/L			04/03/18 16:48	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWA-5
Date Collected: 03/28/18 14:15
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-9
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.89	mg/L			04/10/18 05:26	1
Sulfate	0.88	J	1.0	0.70	mg/L			04/10/18 05:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1.1		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:46	5
Magnesium	0.76		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:46	5
Potassium	1.2		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:46	5
Sodium	1.3		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:46	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	4.1		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 19:21	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	620		1.0	0.98	mg/L			04/02/18 11:26	1
Bicarbonate Alkalinity as CaCO3	620		1.0	0.98	mg/L			04/02/18 11:26	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 11:26	1
Total Dissolved Solids	12		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-18

Lab Sample ID: 400-151568-10

Date Collected: 03/28/18 15:20

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0	0.89	mg/L			04/10/18 05:49	1
Sulfate	12		1.0	0.70	mg/L			04/10/18 05:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:51	5
Magnesium	2.1		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:51	5
Potassium	5.8		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:51	5
Sodium	6.7		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:51	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	7.3		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 19:25	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	74		1.0	0.98	mg/L			04/02/18 11:55	1
Bicarbonate Alkalinity as CaCO3	74		1.0	0.98	mg/L			04/02/18 11:55	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 11:55	1
Total Dissolved Solids	120		5.0	3.4	mg/L			04/04/18 16:33	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		1.0	0.89	mg/L			04/10/18 06:12	1
Sulfate	3.4		1.0	0.70	mg/L			04/10/18 06:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	10		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 16:55	5
Magnesium	8.0		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 16:55	5
Potassium	1.2		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 16:55	5
Sodium	7.1		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 16:55	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	11		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 19:52	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	69		1.0	0.98	mg/L			04/04/18 10:27	1
Bicarbonate Alkalinity as CaCO3	69		1.0	0.98	mg/L			04/04/18 10:27	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 10:27	1
Total Dissolved Solids	110		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-8
Date Collected: 03/29/18 14:05
Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-12
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68		5.0	4.5	mg/L			04/10/18 21:02	5
Sulfate	180		5.0	3.5	mg/L			04/10/18 21:02	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	61		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:00	5
Magnesium	16		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:00	5
Potassium	8.5		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:00	5
Sodium	38		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:00	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	19		4.0	2.4	mg/L		04/08/18 13:48	04/11/18 19:57	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	7.4		1.0	0.98	mg/L			04/04/18 11:37	1
Bicarbonate Alkalinity as CaCO3	7.4		1.0	0.98	mg/L			04/04/18 11:37	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:37	1
Total Dissolved Solids	500		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			04/10/18 07:20	1
Sulfate	37		1.0	0.70	mg/L			04/10/18 07:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7.6		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:04	5
Magnesium	2.3		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:04	5
Potassium	0.99		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:04	5
Sodium	19		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:04	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	22		4.0	2.4	mg/L		04/08/18 13:48	04/11/18 20:01	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	31		1.0	0.98	mg/L			04/04/18 11:40	1
Bicarbonate Alkalinity as CaCO3	31		1.0	0.98	mg/L			04/04/18 11:40	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:40	1
Total Dissolved Solids	130		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/10/18 07:43	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 07:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:10	5
Magnesium	<0.032		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:10	5
Potassium	<0.11		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:10	5
Sodium	<0.17		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:10	5
Silicon	<0.059		0.10	0.059	mg/L		04/08/18 13:48	04/11/18 17:10	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/04/18 11:45	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:45	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:45	1
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.5		1.0	0.89	mg/L			04/10/18 08:51	1
Sulfate	4.6		1.0	0.70	mg/L			04/10/18 08:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1.2		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:37	5
Magnesium	0.92		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:37	5
Potassium	2.2		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:37	5
Sodium	11		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:37	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	7.8		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 20:06	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	28		1.0	0.98	mg/L			04/04/18 11:50	1
Bicarbonate Alkalinity as CaCO3	28		1.0	0.98	mg/L			04/04/18 11:50	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:50	1
Total Dissolved Solids	48		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.89	mg/L			04/10/18 09:14	1
Sulfate	6.5		1.0	0.70	mg/L			04/10/18 09:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7.0		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:42	5
Magnesium	0.98		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:42	5
Potassium	2.6		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:42	5
Sodium	18		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:42	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	20		4.0	2.4	mg/L		04/08/18 13:48	04/11/18 20:10	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	51		1.0	0.98	mg/L			04/04/18 11:56	1
Bicarbonate Alkalinity as CaCO3	51		1.0	0.98	mg/L			04/04/18 11:56	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 11:56	1
Total Dissolved Solids	120		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Date Collected: 03/29/18 12:10

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.89	mg/L			04/10/18 09:37	1
Sulfate	2.2		1.0	0.70	mg/L			04/10/18 09:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3.9		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:46	5
Magnesium	1.9		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:46	5
Potassium	1.4		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:46	5
Sodium	4.1		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:46	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	8.5		1.0	0.59	mg/L		04/08/18 13:48	04/11/18 20:15	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	22		1.0	0.98	mg/L			04/04/18 12:02	1
Bicarbonate Alkalinity as CaCO3	22		1.0	0.98	mg/L			04/04/18 12:02	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 12:02	1
Total Dissolved Solids	62		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.89	mg/L			04/10/18 10:00	1
Sulfate	16		1.0	0.70	mg/L			04/10/18 10:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	14		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:51	5
Magnesium	3.1		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:51	5
Potassium	2.5		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:51	5
Sodium	7.5		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:51	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	12		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 20:19	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	45		1.0	0.98	mg/L			04/04/18 12:07	1
Bicarbonate Alkalinity as CaCO3	45		1.0	0.98	mg/L			04/04/18 12:07	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 12:07	1
Total Dissolved Solids	120		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/10/18 10:23	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 10:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 17:55	5
Magnesium	<0.032		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 17:55	5
Potassium	<0.11		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 17:55	5
Sodium	<0.17		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 17:55	5
Silicon	<0.059		0.10	0.059	mg/L		04/08/18 13:48	04/11/18 17:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/04/18 12:12	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 12:12	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 12:12	1
Total Dissolved Solids	24		5.0	3.4	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.2		1.0	0.89	mg/L			04/10/18 10:45	1
Sulfate	42		1.0	0.70	mg/L			04/10/18 10:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	31		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 18:00	5
Magnesium	5.2		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 18:00	5
Potassium	1.8		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 18:00	5
Sodium	25		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 18:00	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	8.7		2.0	1.2	mg/L		04/08/18 13:48	04/11/18 20:24	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	100		1.0	0.98	mg/L			04/05/18 16:09	1
Bicarbonate Alkalinity as CaCO3	100		1.0	0.98	mg/L			04/05/18 16:09	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 16:09	1
Total Dissolved Solids	210		5.0	3.4	mg/L			04/06/18 16:58	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/10/18 13:05	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		04/09/18 11:52	04/11/18 14:04	5
Magnesium	<0.032		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 14:04	5
Potassium	<0.11		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 14:04	5
Sodium	<0.17		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 14:04	5
Silicon	<0.059		0.10	0.059	mg/L		04/09/18 11:52	04/11/18 14:04	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/05/18 16:26	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 16:26	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 16:26	1
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/06/18 16:58	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Date Collected: 03/30/18 11:20

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.89	mg/L			04/10/18 13:28	1
Sulfate	16		1.0	0.70	mg/L			04/10/18 13:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7.2		0.25	0.13	mg/L		04/09/18 11:52	04/11/18 14:09	5
Magnesium	4.3		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 14:09	5
Potassium	2.1		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 14:09	5
Sodium	14		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 14:09	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	15		2.0	1.2	mg/L		04/09/18 11:52	04/11/18 20:28	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	45		1.0	0.98	mg/L			04/05/18 16:14	1
Bicarbonate Alkalinity as CaCO3	45		1.0	0.98	mg/L			04/05/18 16:14	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 16:14	1
Total Dissolved Solids	100		5.0	3.4	mg/L			04/06/18 16:58	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.89	mg/L			04/10/18 14:36	1
Sulfate	1.9		1.0	0.70	mg/L			04/10/18 14:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	9.0		0.25	0.13	mg/L		04/09/18 11:52	04/11/18 14:13	5
Magnesium	2.0		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 14:13	5
Potassium	2.6		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 14:13	5
Sodium	4.7		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 14:13	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silicon	7.8		1.0	0.59	mg/L		04/09/18 11:52	04/11/18 20:33	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	32		1.0	0.98	mg/L			04/05/18 16:21	1
Bicarbonate Alkalinity as CaCO3	32		1.0	0.98	mg/L			04/05/18 16:21	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 16:21	1
Total Dissolved Solids	64		5.0	3.4	mg/L			04/06/18 16:58	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		20	18	mg/L			04/11/18 12:58	20
Sulfate	700		20	14	mg/L			04/11/18 12:58	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	71		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 14:18	5
Potassium	8.6		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 14:18	5
Sodium	31		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 14:18	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	330		2.5	1.3	mg/L		04/09/18 11:52	04/11/18 21:00	50
Silicon	6.7		1.0	0.59	mg/L		04/09/18 11:52	04/11/18 21:00	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	6.5		1.0	0.98	mg/L			04/05/18 15:56	1
Bicarbonate Alkalinity as CaCO3	6.5		1.0	0.98	mg/L			04/05/18 15:56	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 15:56	1
Total Dissolved Solids	2200		7.1	4.9	mg/L			04/05/18 16:47	1

Client Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: DUP-2

Date Collected: 03/29/18 00:00

Date Received: 04/03/18 09:32

Lab Sample ID: 400-151568-25

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	330		20	18	mg/L			04/11/18 13:21	20
Sulfate	690		20	14	mg/L			04/11/18 13:21	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	71		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 14:22	5
Potassium	8.7		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 14:22	5
Sodium	31		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 14:22	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	340		2.5	1.3	mg/L		04/09/18 11:52	04/11/18 21:04	50
Silicon	6.6		1.0	0.59	mg/L		04/09/18 11:52	04/11/18 21:04	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	6.5		1.0	0.98	mg/L			04/04/18 10:22	1
Bicarbonate Alkalinity as CaCO3	6.5		1.0	0.98	mg/L			04/04/18 10:22	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 10:22	1
Total Dissolved Solids	1900		5.6	3.8	mg/L			04/04/18 16:33	1

Definitions/Glossary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Qualifiers

HPLC/IC

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.

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.

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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-2

Date Collected: 03/27/18 15:05

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 00:52	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 18:04	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 18:49	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 10:32	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392521	04/03/18 16:48	TET	TAL PEN

Client Sample ID: WGWA-1

Date Collected: 03/27/18 15:55

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:00	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 15:52	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 18:54	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 10:42	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392521	04/03/18 16:48	TET	TAL PEN

Client Sample ID: WGWA-3

Date Collected: 03/28/18 12:20

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 15:57	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 18:58	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 10:47	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: WGWA-4

Date Collected: 03/28/18 11:15

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 02:46	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:01	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWA-4

Lab Sample ID: 400-151568-4

Date Collected: 03/28/18 11:15

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 19:03	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 10:52	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: FB-1-3-28-18

Lab Sample ID: 400-151568-5

Date Collected: 03/28/18 10:00

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 03:09	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:28	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 10:57	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: WGWA-7

Lab Sample ID: 400-151568-6

Date Collected: 03/28/18 13:25

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 04:17	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:33	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 19:07	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 11:01	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: WGWA-6

Lab Sample ID: 400-151568-7

Date Collected: 03/28/18 10:15

Matrix: Water

Date Received: 03/30/18 11:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 04:40	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:42	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 19:12	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 11:08	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: DUP-1

Date Collected: 03/28/18 00:00

Date Received: 03/30/18 11:14

Lab Sample ID: 400-151568-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:03	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:37	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 19:16	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 11:14	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392521	04/03/18 16:48	TET	TAL PEN

Client Sample ID: WGWA-5

Date Collected: 03/28/18 14:15

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:26	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:46	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 19:21	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 11:26	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: WGWA-18

Date Collected: 03/28/18 15:20

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 05:49	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:51	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 19:25	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392350	04/02/18 11:55	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	TAL PEN

Client Sample ID: WGWC-19

Date Collected: 03/29/18 10:45

Date Received: 03/31/18 08:46

Lab Sample ID: 400-151568-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 06:12	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 16:55	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 400-151568-11

Date Collected: 03/29/18 10:45

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 19:52	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 10:27	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-8

Lab Sample ID: 400-151568-12

Date Collected: 03/29/18 14:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	393353	04/10/18 21:02	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:00	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	200	393655	04/11/18 19:57	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 11:37	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-9

Lab Sample ID: 400-151568-13

Date Collected: 03/29/18 12:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 07:20	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:04	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	200	393655	04/11/18 20:01	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 11:40	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: FB-2-3-29-18

Lab Sample ID: 400-151568-14

Date Collected: 03/29/18 13:40

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 07:43	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:10	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 11:45	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 400-151568-15

Date Collected: 03/29/18 15:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 08:51	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:37	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 20:06	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 11:50	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-13

Lab Sample ID: 400-151568-16

Date Collected: 03/29/18 13:30

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 09:14	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:42	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	200	393655	04/11/18 20:10	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 11:56	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-11

Lab Sample ID: 400-151568-17

Date Collected: 03/29/18 12:10

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 09:37	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:46	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 20:15	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 12:02	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:00	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:51	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-12

Lab Sample ID: 400-151568-18

Date Collected: 03/29/18 11:05

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 20:19	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 12:07	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: EB-1-3-29-18

Lab Sample ID: 400-151568-19

Date Collected: 03/29/18 10:00

Matrix: Water

Date Received: 03/31/18 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:23	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 17:55	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 12:12	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: WGWC-15

Lab Sample ID: 400-151568-20

Date Collected: 03/30/18 10:10

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393342	04/10/18 10:45	JAW	TAL PEN
Total Recoverable	Prep	3005A			393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 18:00	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393140	04/08/18 13:48	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 20:24	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392895	04/05/18 16:09	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	393041	04/06/18 16:58	TET	TAL PEN

Client Sample ID: EB-2-3-30-18

Lab Sample ID: 400-151568-21

Date Collected: 03/30/18 09:50

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 13:05	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:04	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392895	04/05/18 16:26	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	393041	04/06/18 16:58	TET	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 400-151568-22

Date Collected: 03/30/18 11:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 13:28	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:09	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	100	393655	04/11/18 20:28	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392895	04/05/18 16:14	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	393041	04/06/18 16:58	TET	TAL PEN

Client Sample ID: WGWC-10

Lab Sample ID: 400-151568-23

Date Collected: 03/30/18 12:35

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	393353	04/10/18 14:36	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:13	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 20:33	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392895	04/05/18 16:21	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	393041	04/06/18 16:58	TET	TAL PEN

Client Sample ID: WGWC-16

Lab Sample ID: 400-151568-24

Date Collected: 03/29/18 15:20

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	393588	04/11/18 12:58	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:18	DRE	TAL PEN
Total Recoverable	Prep	3005A	DL		393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 21:00	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392895	04/05/18 15:56	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392890	04/05/18 16:47	TET	TAL PEN

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Date Collected: 03/29/18 00:00

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	393588	04/11/18 13:21	JAW	TAL PEN
Total Recoverable	Prep	3005A			393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	393655	04/11/18 14:22	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Client Sample ID: DUP-2

Lab Sample ID: 400-151568-25

Date Collected: 03/29/18 00:00

Matrix: Water

Date Received: 04/03/18 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	DL		393192	04/09/18 11:52	DN1	TAL PEN
Total Recoverable	Analysis	6020	DL	50	393655	04/11/18 21:04	DRE	TAL PEN
Total/NA	Analysis	SM 2320B		1	392679	04/04/18 10:22	BAB	TAL PEN
Total/NA	Analysis	SM 2540C		1	392677	04/04/18 16:33	TET	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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

HPLC/IC

Analysis Batch: 393342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	300.0	
400-151568-2	WGWA-1	Total/NA	Water	300.0	
400-151568-3	WGWA-3	Total/NA	Water	300.0	
400-151568-4	WGWA-4	Total/NA	Water	300.0	
400-151568-5	FB-1-3-28-18	Total/NA	Water	300.0	
400-151568-6	WGWA-7	Total/NA	Water	300.0	
400-151568-7	WGWA-6	Total/NA	Water	300.0	
400-151568-8	DUP-1	Total/NA	Water	300.0	
400-151568-9	WGWA-5	Total/NA	Water	300.0	
400-151568-10	WGWA-18	Total/NA	Water	300.0	
400-151568-11	WGWC-19	Total/NA	Water	300.0	
400-151568-13	WGWC-9	Total/NA	Water	300.0	
400-151568-14	FB-2-3-29-18	Total/NA	Water	300.0	
400-151568-15	WGWC-14A	Total/NA	Water	300.0	
400-151568-16	WGWC-13	Total/NA	Water	300.0	
400-151568-17	WGWC-11	Total/NA	Water	300.0	
400-151568-18	WGWC-12	Total/NA	Water	300.0	
400-151568-19	EB-1-3-29-18	Total/NA	Water	300.0	
400-151568-20	WGWC-15	Total/NA	Water	300.0	
MB 400-393342/36	Method Blank	Total/NA	Water	300.0	
LCS 400-393342/37	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-393342/38	Lab Control Sample Dup	Total/NA	Water	300.0	
400-151568-1 MS	WGWA-2	Total/NA	Water	300.0	
400-151568-1 MSD	WGWA-2	Total/NA	Water	300.0	

Analysis Batch: 393353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-12	WGWC-8	Total/NA	Water	300.0	
400-151568-21	EB-2-3-30-18	Total/NA	Water	300.0	
400-151568-22	WGWC-17	Total/NA	Water	300.0	
400-151568-23	WGWC-10	Total/NA	Water	300.0	
MB 400-393353/4	Method Blank	Total/NA	Water	300.0	
LCS 400-393353/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-393353/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-151568-22 MS	WGWC-17	Total/NA	Water	300.0	
400-151568-22 MSD	WGWC-17	Total/NA	Water	300.0	

Analysis Batch: 393588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-24	WGWC-16	Total/NA	Water	300.0	
400-151568-25	DUP-2	Total/NA	Water	300.0	
MB 400-393588/4	Method Blank	Total/NA	Water	300.0	
LCS 400-393588/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-393588/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-151836-D-1 MS	Matrix Spike	Total/NA	Water	300.0	
400-151836-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

QC Association Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Metals

Prep Batch: 393140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total Recoverable	Water	3005A	
400-151568-1 - DL	WGWA-2	Total Recoverable	Water	3005A	
400-151568-2 - DL	WGWA-1	Total Recoverable	Water	3005A	
400-151568-2	WGWA-1	Total Recoverable	Water	3005A	
400-151568-3 - DL	WGWA-3	Total Recoverable	Water	3005A	
400-151568-3	WGWA-3	Total Recoverable	Water	3005A	
400-151568-4	WGWA-4	Total Recoverable	Water	3005A	
400-151568-4 - DL	WGWA-4	Total Recoverable	Water	3005A	
400-151568-5	FB-1-3-28-18	Total Recoverable	Water	3005A	
400-151568-6 - DL	WGWA-7	Total Recoverable	Water	3005A	
400-151568-6	WGWA-7	Total Recoverable	Water	3005A	
400-151568-7	WGWA-6	Total Recoverable	Water	3005A	
400-151568-7 - DL	WGWA-6	Total Recoverable	Water	3005A	
400-151568-8	DUP-1	Total Recoverable	Water	3005A	
400-151568-8 - DL	DUP-1	Total Recoverable	Water	3005A	
400-151568-9	WGWA-5	Total Recoverable	Water	3005A	
400-151568-9 - DL	WGWA-5	Total Recoverable	Water	3005A	
400-151568-10 - DL	WGWA-18	Total Recoverable	Water	3005A	
400-151568-10	WGWA-18	Total Recoverable	Water	3005A	
400-151568-11 - DL	WGWC-19	Total Recoverable	Water	3005A	
400-151568-11	WGWC-19	Total Recoverable	Water	3005A	
400-151568-12 - DL	WGWC-8	Total Recoverable	Water	3005A	
400-151568-12	WGWC-8	Total Recoverable	Water	3005A	
400-151568-13 - DL	WGWC-9	Total Recoverable	Water	3005A	
400-151568-13	WGWC-9	Total Recoverable	Water	3005A	
400-151568-14	FB-2-3-29-18	Total Recoverable	Water	3005A	
400-151568-15	WGWC-14A	Total Recoverable	Water	3005A	
400-151568-15 - DL	WGWC-14A	Total Recoverable	Water	3005A	
400-151568-16 - DL	WGWC-13	Total Recoverable	Water	3005A	
400-151568-16	WGWC-13	Total Recoverable	Water	3005A	
400-151568-17	WGWC-11	Total Recoverable	Water	3005A	
400-151568-17 - DL	WGWC-11	Total Recoverable	Water	3005A	
400-151568-18	WGWC-12	Total Recoverable	Water	3005A	
400-151568-18 - DL	WGWC-12	Total Recoverable	Water	3005A	
400-151568-19	EB-1-3-29-18	Total Recoverable	Water	3005A	
400-151568-20 - DL	WGWC-15	Total Recoverable	Water	3005A	
400-151568-20	WGWC-15	Total Recoverable	Water	3005A	
MB 400-393140/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-393140/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-151568-1 MS	WGWA-2	Total Recoverable	Water	3005A	
400-151568-1 MSD	WGWA-2	Total Recoverable	Water	3005A	

Prep Batch: 393192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-21	EB-2-3-30-18	Total Recoverable	Water	3005A	
400-151568-22	WGWC-17	Total Recoverable	Water	3005A	
400-151568-22 - DL	WGWC-17	Total Recoverable	Water	3005A	
400-151568-23	WGWC-10	Total Recoverable	Water	3005A	
400-151568-23 - DL	WGWC-10	Total Recoverable	Water	3005A	
400-151568-24	WGWC-16	Total Recoverable	Water	3005A	
400-151568-24 - DL	WGWC-16	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Metals (Continued)

Prep Batch: 393192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-25	DUP-2	Total Recoverable	Water	3005A	
400-151568-25 - DL	DUP-2	Total Recoverable	Water	3005A	
MB 400-393192/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-393192/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-151567-B-11-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-151567-B-11-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 393655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total Recoverable	Water	6020	393140
400-151568-1 - DL	WGWA-2	Total Recoverable	Water	6020	393140
400-151568-2	WGWA-1	Total Recoverable	Water	6020	393140
400-151568-2 - DL	WGWA-1	Total Recoverable	Water	6020	393140
400-151568-3	WGWA-3	Total Recoverable	Water	6020	393140
400-151568-3 - DL	WGWA-3	Total Recoverable	Water	6020	393140
400-151568-4	WGWA-4	Total Recoverable	Water	6020	393140
400-151568-4 - DL	WGWA-4	Total Recoverable	Water	6020	393140
400-151568-5	FB-1-3-28-18	Total Recoverable	Water	6020	393140
400-151568-6	WGWA-7	Total Recoverable	Water	6020	393140
400-151568-6 - DL	WGWA-7	Total Recoverable	Water	6020	393140
400-151568-7	WGWA-6	Total Recoverable	Water	6020	393140
400-151568-7 - DL	WGWA-6	Total Recoverable	Water	6020	393140
400-151568-8	DUP-1	Total Recoverable	Water	6020	393140
400-151568-8 - DL	DUP-1	Total Recoverable	Water	6020	393140
400-151568-9	WGWA-5	Total Recoverable	Water	6020	393140
400-151568-9 - DL	WGWA-5	Total Recoverable	Water	6020	393140
400-151568-10	WGWA-18	Total Recoverable	Water	6020	393140
400-151568-10 - DL	WGWA-18	Total Recoverable	Water	6020	393140
400-151568-11	WGWC-19	Total Recoverable	Water	6020	393140
400-151568-11 - DL	WGWC-19	Total Recoverable	Water	6020	393140
400-151568-12	WGWC-8	Total Recoverable	Water	6020	393140
400-151568-12 - DL	WGWC-8	Total Recoverable	Water	6020	393140
400-151568-13	WGWC-9	Total Recoverable	Water	6020	393140
400-151568-13 - DL	WGWC-9	Total Recoverable	Water	6020	393140
400-151568-14	FB-2-3-29-18	Total Recoverable	Water	6020	393140
400-151568-15	WGWC-14A	Total Recoverable	Water	6020	393140
400-151568-15 - DL	WGWC-14A	Total Recoverable	Water	6020	393140
400-151568-16	WGWC-13	Total Recoverable	Water	6020	393140
400-151568-16 - DL	WGWC-13	Total Recoverable	Water	6020	393140
400-151568-17	WGWC-11	Total Recoverable	Water	6020	393140
400-151568-17 - DL	WGWC-11	Total Recoverable	Water	6020	393140
400-151568-18	WGWC-12	Total Recoverable	Water	6020	393140
400-151568-18 - DL	WGWC-12	Total Recoverable	Water	6020	393140
400-151568-19	EB-1-3-29-18	Total Recoverable	Water	6020	393140
400-151568-20	WGWC-15	Total Recoverable	Water	6020	393140
400-151568-20 - DL	WGWC-15	Total Recoverable	Water	6020	393140
400-151568-21	EB-2-3-30-18	Total Recoverable	Water	6020	393192
400-151568-22	WGWC-17	Total Recoverable	Water	6020	393192
400-151568-22 - DL	WGWC-17	Total Recoverable	Water	6020	393192
400-151568-23	WGWC-10	Total Recoverable	Water	6020	393192
400-151568-23 - DL	WGWC-10	Total Recoverable	Water	6020	393192

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Metals (Continued)

Analysis Batch: 393655 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-24	WGWC-16	Total Recoverable	Water	6020	393192
400-151568-24 - DL	WGWC-16	Total Recoverable	Water	6020	393192
400-151568-25	DUP-2	Total Recoverable	Water	6020	393192
400-151568-25 - DL	DUP-2	Total Recoverable	Water	6020	393192
MB 400-393140/1-A ^5	Method Blank	Total Recoverable	Water	6020	393140
MB 400-393192/1-A ^5	Method Blank	Total Recoverable	Water	6020	393192
LCS 400-393140/2-A	Lab Control Sample	Total Recoverable	Water	6020	393140
LCS 400-393192/2-A	Lab Control Sample	Total Recoverable	Water	6020	393192
400-151567-B-11-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	393192
400-151567-B-11-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	393192
400-151568-1 MS	WGWA-2	Total Recoverable	Water	6020	393140
400-151568-1 MSD	WGWA-2	Total Recoverable	Water	6020	393140

General Chemistry

Analysis Batch: 392350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	SM 2320B	
400-151568-2	WGWA-1	Total/NA	Water	SM 2320B	
400-151568-3	WGWA-3	Total/NA	Water	SM 2320B	
400-151568-4	WGWA-4	Total/NA	Water	SM 2320B	
400-151568-5	FB-1-3-28-18	Total/NA	Water	SM 2320B	
400-151568-6	WGWA-7	Total/NA	Water	SM 2320B	
400-151568-7	WGWA-6	Total/NA	Water	SM 2320B	
400-151568-8	DUP-1	Total/NA	Water	SM 2320B	
400-151568-9	WGWA-5	Total/NA	Water	SM 2320B	
400-151568-10	WGWA-18	Total/NA	Water	SM 2320B	
MB 400-392350/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 400-392350/5	Lab Control Sample	Total/NA	Water	SM 2320B	
400-151568-1 DU	WGWA-2	Total/NA	Water	SM 2320B	
400-151568-10 DU	WGWA-18	Total/NA	Water	SM 2320B	

Analysis Batch: 392521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-1	WGWA-2	Total/NA	Water	SM 2540C	
400-151568-2	WGWA-1	Total/NA	Water	SM 2540C	
400-151568-8	DUP-1	Total/NA	Water	SM 2540C	
MB 400-392521/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-392521/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-151514-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 392677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-3	WGWA-3	Total/NA	Water	SM 2540C	
400-151568-4	WGWA-4	Total/NA	Water	SM 2540C	
400-151568-5	FB-1-3-28-18	Total/NA	Water	SM 2540C	
400-151568-6	WGWA-7	Total/NA	Water	SM 2540C	
400-151568-7	WGWA-6	Total/NA	Water	SM 2540C	
400-151568-9	WGWA-5	Total/NA	Water	SM 2540C	
400-151568-10	WGWA-18	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 392677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-25	DUP-2	Total/NA	Water	SM 2540C	
MB 400-392677/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-392677/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-151568-7 DU	WGWA-6	Total/NA	Water	SM 2540C	

Analysis Batch: 392679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-11	WGWC-19	Total/NA	Water	SM 2320B	
400-151568-12	WGWC-8	Total/NA	Water	SM 2320B	
400-151568-13	WGWC-9	Total/NA	Water	SM 2320B	
400-151568-14	FB-2-3-29-18	Total/NA	Water	SM 2320B	
400-151568-15	WGWC-14A	Total/NA	Water	SM 2320B	
400-151568-16	WGWC-13	Total/NA	Water	SM 2320B	
400-151568-17	WGWC-11	Total/NA	Water	SM 2320B	
400-151568-18	WGWC-12	Total/NA	Water	SM 2320B	
400-151568-19	EB-1-3-29-18	Total/NA	Water	SM 2320B	
400-151568-25	DUP-2	Total/NA	Water	SM 2320B	
MB 400-392679/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 400-392679/5	Lab Control Sample	Total/NA	Water	SM 2320B	
400-151514-A-4 DU	Duplicate	Total/NA	Water	SM 2320B	
400-151668-B-2 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 392890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-11	WGWC-19	Total/NA	Water	SM 2540C	
400-151568-12	WGWC-8	Total/NA	Water	SM 2540C	
400-151568-13	WGWC-9	Total/NA	Water	SM 2540C	
400-151568-14	FB-2-3-29-18	Total/NA	Water	SM 2540C	
400-151568-15	WGWC-14A	Total/NA	Water	SM 2540C	
400-151568-16	WGWC-13	Total/NA	Water	SM 2540C	
400-151568-17	WGWC-11	Total/NA	Water	SM 2540C	
400-151568-18	WGWC-12	Total/NA	Water	SM 2540C	
400-151568-19	EB-1-3-29-18	Total/NA	Water	SM 2540C	
400-151568-24	WGWC-16	Total/NA	Water	SM 2540C	
MB 400-392890/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-392890/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-151568-15 DU	WGWC-14A	Total/NA	Water	SM 2540C	

Analysis Batch: 392895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-20	WGWC-15	Total/NA	Water	SM 2320B	
400-151568-21	EB-2-3-30-18	Total/NA	Water	SM 2320B	
400-151568-22	WGWC-17	Total/NA	Water	SM 2320B	
400-151568-23	WGWC-10	Total/NA	Water	SM 2320B	
400-151568-24	WGWC-16	Total/NA	Water	SM 2320B	
MB 400-392895/4	Method Blank	Total/NA	Water	SM 2320B	
LCS 400-392895/7	Lab Control Sample	Total/NA	Water	SM 2320B	
400-151568-24 DU	WGWC-16	Total/NA	Water	SM 2320B	

QC Association Summary

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

General Chemistry (Continued)

Analysis Batch: 393041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-151568-20	WGWC-15	Total/NA	Water	SM 2540C	
400-151568-21	EB-2-3-30-18	Total/NA	Water	SM 2540C	
400-151568-22	WGWC-17	Total/NA	Water	SM 2540C	
400-151568-23	WGWC-10	Total/NA	Water	SM 2540C	
MB 400-393041/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-393041/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-151568-20 DU	WGWC-15	Total/NA	Water	SM 2540C	

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-393342/36
Matrix: Water
Analysis Batch: 393342

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/09/18 23:43	1
Sulfate	<0.70		1.0	0.70	mg/L			04/09/18 23:43	1

Lab Sample ID: LCS 400-393342/37
Matrix: Water
Analysis Batch: 393342

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.51		mg/L		95	90 - 110
Sulfate	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-393342/38
Matrix: Water
Analysis Batch: 393342

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	10.0	9.51		mg/L		95	90 - 110	0	15
Sulfate	10.0	9.94		mg/L		99	90 - 110	1	15

Lab Sample ID: 400-151568-1 MS
Matrix: Water
Analysis Batch: 393342

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.2		10.0	11.8		mg/L		96	80 - 120
Sulfate	0.72	J	10.0	11.0		mg/L		103	80 - 120

Lab Sample ID: 400-151568-1 MSD
Matrix: Water
Analysis Batch: 393342

Client Sample ID: WGWA-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	2.2		10.0	11.9		mg/L		96	80 - 120	0	20
Sulfate	0.72	J	10.0	11.1		mg/L		103	80 - 120	0	20

Lab Sample ID: MB 400-393353/4
Matrix: Water
Analysis Batch: 393353

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/10/18 11:56	1
Sulfate	<0.70		1.0	0.70	mg/L			04/10/18 11:56	1

Lab Sample ID: LCS 400-393353/5
Matrix: Water
Analysis Batch: 393353

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.47		mg/L		95	90 - 110

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-393353/5
Matrix: Water
Analysis Batch: 393353

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.85		mg/L		99	90 - 110

Lab Sample ID: LCSD 400-393353/6
Matrix: Water
Analysis Batch: 393353

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	10.0	9.45		mg/L		95	90 - 110	0	15
Sulfate	10.0	9.87		mg/L		99	90 - 110	0	15

Lab Sample ID: 400-151568-22 MS
Matrix: Water
Analysis Batch: 393353

Client Sample ID: WGWC-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.5		10.0	11.1		mg/L		96	80 - 120
Sulfate	16		10.0	26.1		mg/L		99	80 - 120

Lab Sample ID: 400-151568-22 MSD
Matrix: Water
Analysis Batch: 393353

Client Sample ID: WGWC-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	1.5		10.0	11.1		mg/L		96	80 - 120	0	20
Sulfate	16		10.0	26.1		mg/L		100	80 - 120	0	20

Lab Sample ID: MB 400-393588/4
Matrix: Water
Analysis Batch: 393588

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.89		1.0	0.89	mg/L			04/11/18 10:41	1
Sulfate	<0.70		1.0	0.70	mg/L			04/11/18 10:41	1

Lab Sample ID: LCS 400-393588/5
Matrix: Water
Analysis Batch: 393588

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.49		mg/L		95	90 - 110
Sulfate	10.0	9.80		mg/L		98	90 - 110

Lab Sample ID: LCSD 400-393588/6
Matrix: Water
Analysis Batch: 393588

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	10.0	9.37		mg/L		94	90 - 110	1	15
Sulfate	10.0	9.70		mg/L		97	90 - 110	1	15

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-151836-D-1 MS
Matrix: Water
Analysis Batch: 393588

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	23		10.0	32.2		mg/L		93	80 - 120
Sulfate	12		10.0	22.2		mg/L		102	80 - 120

Lab Sample ID: 400-151836-D-1 MSD
Matrix: Water
Analysis Batch: 393588

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	23		10.0	32.3		mg/L		93	80 - 120	0	20
Sulfate	12		10.0	22.3		mg/L		103	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-393140/1-A ^5
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 393140

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		04/08/18 13:48	04/11/18 15:39	5
Magnesium	<0.032		0.13	0.032	mg/L		04/08/18 13:48	04/11/18 15:39	5
Potassium	<0.11		0.25	0.11	mg/L		04/08/18 13:48	04/11/18 15:39	5
Sodium	<0.17		0.25	0.17	mg/L		04/08/18 13:48	04/11/18 15:39	5
Silicon	<0.059		0.10	0.059	mg/L		04/08/18 13:48	04/11/18 15:39	5

Lab Sample ID: LCS 400-393140/2-A
Matrix: Water
Analysis Batch: 393655

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 393140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	5.00	5.08		mg/L		102	80 - 120
Magnesium	5.00	5.03		mg/L		101	80 - 120
Potassium	5.00	5.01		mg/L		100	80 - 120
Sodium	5.00	5.11		mg/L		102	80 - 120
Silicon	0.0500	0.0556		mg/L		111	80 - 120

Lab Sample ID: 400-151568-1 MS
Matrix: Water
Analysis Batch: 393655

Client Sample ID: WGWA-2
Prep Type: Total Recoverable
Prep Batch: 393140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	15		5.00	19.8		mg/L		95	75 - 125
Magnesium	5.0		5.00	10.1		mg/L		101	75 - 125
Potassium	2.7		5.00	7.87		mg/L		103	75 - 125
Sodium	9.0		5.00	14.0		mg/L		101	75 - 125
Silicon	13	E	0.0500	12.8	E 4	mg/L		-267	75 - 125

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

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

Lab Sample ID: 400-151568-1 MSD

Matrix: Water

Analysis Batch: 393655

Client Sample ID: WGWA-2

Prep Type: Total Recoverable

Prep Batch: 393140

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Calcium	15		5.00	20.1		mg/L		101	75 - 125	1	20
Magnesium	5.0		5.00	10.2		mg/L		103	75 - 125	1	20
Potassium	2.7		5.00	7.83		mg/L		102	75 - 125	1	20
Sodium	9.0		5.00	14.1		mg/L		102	75 - 125	0	20
Silicon	13	E	0.0500	13.0	E 4	mg/L		132	75 - 125	2	20

Lab Sample ID: MB 400-393192/1-A ^5

Matrix: Water

Analysis Batch: 393655

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 393192

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Calcium	<0.13		0.25	0.13	mg/L		04/09/18 11:52	04/11/18 12:52	5
Magnesium	<0.032		0.13	0.032	mg/L		04/09/18 11:52	04/11/18 12:52	5
Potassium	<0.11		0.25	0.11	mg/L		04/09/18 11:52	04/11/18 12:52	5
Sodium	<0.17		0.25	0.17	mg/L		04/09/18 11:52	04/11/18 12:52	5
Silicon	<0.059		0.10	0.059	mg/L		04/09/18 11:52	04/11/18 12:52	5

Lab Sample ID: LCS 400-393192/2-A

Matrix: Water

Analysis Batch: 393655

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 393192

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
		Added	Result				
Calcium	5.00	5.12		mg/L		102	80 - 120
Magnesium	5.00	5.05		mg/L		101	80 - 120
Potassium	5.00	5.03		mg/L		101	80 - 120
Sodium	5.00	5.13		mg/L		103	80 - 120
Silicon	0.0500	0.0577		mg/L		115	80 - 120

Lab Sample ID: 400-151567-B-11-B MS ^5

Matrix: Water

Analysis Batch: 393655

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 393192

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Calcium	120	E	5.00	121	E 4	mg/L		122	75 - 125		
Magnesium	22		5.00	26.8	4	mg/L		96	75 - 125		
Potassium	2.6		5.00	7.82		mg/L		105	75 - 125		
Sodium	38		5.00	42.7	4	mg/L		96	75 - 125		
Silicon	7.3		0.0500	7.32	4	mg/L		57	75 - 125		

Lab Sample ID: 400-151567-B-11-C MSD ^5

Matrix: Water

Analysis Batch: 393655

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 393192

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Calcium	120	E	5.00	120	E 4	mg/L		89	75 - 125	1	20
Magnesium	22		5.00	26.3	4	mg/L		87	75 - 125	2	20
Potassium	2.6		5.00	7.74		mg/L		103	75 - 125	1	20
Sodium	38		5.00	42.0	4	mg/L		81	75 - 125	2	20
Silicon	7.3		0.0500	7.25	4	mg/L		-69	75 - 125	1	20

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 400-392350/4
Matrix: Water
Analysis Batch: 392350

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/02/18 10:12	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:12	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/02/18 10:12	1

Lab Sample ID: LCS 400-392350/5
Matrix: Water
Analysis Batch: 392350

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	99.6		mg/L		100	80 - 120

Lab Sample ID: 400-151568-1 DU
Matrix: Water
Analysis Batch: 392350

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	73		76.7		mg/L		4	20
Bicarbonate Alkalinity as CaCO3	73		76.7		mg/L		4	20
Carbonate Alkalinity as CaCO3	<0.98		<0.98		mg/L		NC	20

Lab Sample ID: 400-151568-10 DU
Matrix: Water
Analysis Batch: 392350

Client Sample ID: WGWA-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	74		82.0		mg/L		10	20
Bicarbonate Alkalinity as CaCO3	74		82.0		mg/L		10	20
Carbonate Alkalinity as CaCO3	<0.98		<0.98		mg/L		NC	20

Lab Sample ID: MB 400-392679/4
Matrix: Water
Analysis Batch: 392679

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/04/18 09:22	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 09:22	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/04/18 09:22	1

Lab Sample ID: LCS 400-392679/5
Matrix: Water
Analysis Batch: 392679

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	95.9		mg/L		96	80 - 120

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 400-151514-A-4 DU
Matrix: Water
Analysis Batch: 392679

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Alkalinity, Total	100		87.3		mg/L		15	20
Bicarbonate Alkalinity as CaCO3	100		87.3		mg/L		15	20
Carbonate Alkalinity as CaCO3	<0.98		<0.98		mg/L		NC	20

Lab Sample ID: 400-151668-B-2 DU
Matrix: Water
Analysis Batch: 392679

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Alkalinity, Total	1.9		2.01		mg/L		8	20
Bicarbonate Alkalinity as CaCO3	1.9		2.01		mg/L		8	20
Carbonate Alkalinity as CaCO3	<0.98		<0.98		mg/L		NC	20

Lab Sample ID: MB 400-392895/4
Matrix: Water
Analysis Batch: 392895

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity, Total	<0.98		1.0	0.98	mg/L			04/05/18 13:53	1
Bicarbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 13:53	1
Carbonate Alkalinity as CaCO3	<0.98		1.0	0.98	mg/L			04/05/18 13:53	1

Lab Sample ID: LCS 400-392895/7
Matrix: Water
Analysis Batch: 392895

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 400-151568-24 DU
Matrix: Water
Analysis Batch: 392895

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

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Alkalinity, Total	6.5		6.55		mg/L		2	20
Bicarbonate Alkalinity as CaCO3	6.5		6.55		mg/L		2	20
Carbonate Alkalinity as CaCO3	<0.98		<0.98		mg/L		NC	20

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

Lab Sample ID: MB 400-392521/1
Matrix: Water
Analysis Batch: 392521

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/03/18 16:48	1

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

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

Lab Sample ID: LCS 400-392521/2
Matrix: Water
Analysis Batch: 392521

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	270		mg/L		92	78 - 122

Lab Sample ID: 400-151514-A-4 DU
Matrix: Water
Analysis Batch: 392521

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	180		184		mg/L		1	5

Lab Sample ID: MB 400-392677/1
Matrix: Water
Analysis Batch: 392677

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			04/04/18 16:33	1

Lab Sample ID: LCS 400-392677/2
Matrix: Water
Analysis Batch: 392677

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: 400-151568-7 DU
Matrix: Water
Analysis Batch: 392677

Client Sample ID: WGWA-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	130		126		mg/L		0	5

Lab Sample ID: MB 400-392890/1
Matrix: Water
Analysis Batch: 392890

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			04/05/18 16:47	1

Lab Sample ID: LCS 400-392890/2
Matrix: Water
Analysis Batch: 392890

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	270		mg/L		92	78 - 122

Lab Sample ID: 400-151568-15 DU
Matrix: Water
Analysis Batch: 392890

Client Sample ID: WGWC-14A
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

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-151568-1
 SDG: Ash Pond

Lab Sample ID: MB 400-393041/1
Matrix: Water
Analysis Batch: 393041

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			04/06/18 16:58	1

Lab Sample ID: LCS 400-393041/2
Matrix: Water
Analysis Batch: 393041

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: 400-151568-20 DU
Matrix: Water
Analysis Batch: 393041

Client Sample ID: WGWC-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	210		210		mg/L		0.9	5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Chain of Custody Record

Client Information Client Contact: Jolu Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: [blank] Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab P#: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Due Date Requested: [blank]		Carrier Tracking No(s): Act to - (TA-ATC) COC No: 400-72601-28757.2 Page: 1 of 5 Job #: [blank]	
Sampler: C. Pecher, O. Foyue Phone: 770 594 5998		Analysis Requested			
PO #: SCS10347656 WO #: [blank]		Total Number of Containers: [blank]			
Project #: 40007709 SSOW#: [blank]		Preservation Codes: M - Hexane N - None O - Ash/AO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 L - EDA Other: [blank]			
Sample Identification W6WA-Z W6WA-1 W6WA-3 W6WA-4 FB-1-3-28-13 W6WA-7 W6WA-6 DUP-1		Matrix (Water, Solid, Organic, Inorganic, A+B) Water Water Water Water Water Water Water Water		Special Instructions/Note: Bottles shared with App IX samples * Separate Report for these additional samples	
Sample Date 3/27/18 3/27/18 3/28/18 3/28/18 3/28/18 3/28/18 3/28/18		Sample Time 1505 1555 1220 1115 1000 1325 1015 —		Field Filtered Sample (Yes or No) N N N N N N N N	
Perform MSMSD (Yes or No) D N D N D N D N D		Ca, Mg, Na, K, Si D N D N D N D N D		EPA 300.0 & SM 2540C D N D N D N D N D	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" 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 checked="" 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: [blank] Date: [blank]		Method of Shipment: [blank]			
Relinquished by: [blank] Date: 3-29-18		Received by: [blank] Date/Time: 3/29/18 11:00 Company: ACC			
Relinquished by: [blank] Date: 3/29/18		Received by: [blank] Date/Time: 3/30/18 11:14 Company: TA			
Relinquished by: [blank] Date: [blank]		Received by: [blank] Date/Time: [blank]			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Δ		Cooler Temperature(s) °C and Other Remarks: 1.3°C JES			

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

Chain of Custody Record



Client Information Client Contact: Joju Abraham Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 770 594-5998 Email: JAbraham@southernco.com Project Name: CCR - Plant Wansley - Ash Pond Site: Georgia		Lab PM: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Carrier Tracking No(s): ACC to TA - ATL	
Sampler: B. Ferrara, C. Parker Phone: 770 594-5998		COC No: 400-72601-28757.2 Page: 2 of 3 Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WD #:		Analysis Requested	
Sample Identification		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ica J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2SO4 Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify) Other:	
Sample Date 3-28-18 3-28-18 3-29-18 3-29-18 3-29-18 3-29-18 3-29-18 3-29-18 3-29-18 3-29-18 3-29-18		Sample Time 1415 1520 1045 1405 1230 1340 1500 1730 1210 1105 1000	
Sample Type (C=Comp, G=grab) G G G G G G G G G G		Matrix (W=water, S=solid, O=other) Water Water Water Water Water Water Water Water Water Water	
Perform MS/MSD (Yes or No) N N N N N N N N N N		Field Filtered Sample (Yes or No) N N N N N N N N N N	
Ca, Mg, Na, K, Si D N D N D N D N D N D		ALK (total, bicarbonate, carbonate) D N D N D N D N D N D	
CF, SO₄ EPA 300.0 & SM 2540C D N D N D N D N D N		Total Number of containers 2 2 2 2 2 2 2 2 2 2 2	
Special Instructions/Note: Bottles shared with App		Special Instructions/Note: * Separate report + EDP	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input checked="" 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 Relinquished by: Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Method of Shipment: Date/Time: 3/30/18 Date/Time: 3/30/18 Date/Time: 3/30/18	
Custody Seal No.: Yes <input type="checkbox"/> No <input type="checkbox"/>		Cooler Temperature(s) °C and Other Remarks: 3.10, 2.30c NIS	



Chain of Custody Record

Client Information
 Client Contact: Joju Abraham
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: (770) 594-5998
 Email: JAbraham@southernco.com
 Project Name: CCR - Plant Wansley - Ash Pond
 Siter: Georgia

Sampler: O. FLIQUEA, C. PARKER
Lab Pk: Whitlire, Cheyenne R
E-Mail: cheyenne.whitlire@testamericainc.com
Phone: 770 594-5998

Carrier Tracking No(s): AC to TA-ATL
COC No: 400-72601-28757.2
Page: 3 of 3
Job #: 3

Due Date Requested:
TAT Requested (days):

PO #: PCS10347656
WO #:
Project #: 40007709
SOW #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, F=Soil, G=Gravel, C=Cement, BT=Blank, A=Air)	Field # (Sample # of 10)	Ca, Mg, Na, K, SI	Al(K total, bicarbonate, carbonate)	Cl, SO ₄ (EPA 300.0 & SM 2640C)	PH	Temperature	Preservation Codes:	Special Instructions/Note:
W6WC-15	3-30-18	1010	G	Water	N	✓	✓	✓	✓	✓	M - Hexane N - None O - AsHCO2 P - Na2CO3 Q - NaHSO4 R - Na2SO3 S - H2SO4 T - TSP Diodcalhydrate U - Acetone V - MCAA W - PH 4-5 X - EDTA Y - Other (specify)	With k's shared w/ App II set
EB-2-3-30-18	3-30-18	0950	G	Water	N	✓	✓	✓	✓	✓		
W6WC-17	3-30-18	1120	G	Water	N	✓	✓	✓	✓	✓		
W6WC-10	3-30-18	1235	G	Water	N	✓	✓	✓	✓	✓		
W6WC-16	3-29-18	1520	G	Water	N	✓	✓	✓	✓	✓		
DUP-2	3-29-18	-	G	Water	N	✓	✓	✓	✓	✓		* Separate report + EPP *
				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: [Signature] Date/Time: 4-2-2018 / 11:00
 Relinquished by: [Signature] Date/Time: 4/2/18 / 6:00

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

Special Instructions/OC Requirements:

Method of Shipment: _____
 Date/Time: 4/2/18 / 11:00
 Date/Time: 4/2/18 / 6:15
 Date/Time: _____

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-151568-1

SDG Number: Ash Pond

Login Number: 151568

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3 IR8, 3.1°C, 2.3°C IR-8, 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 Wansley

TestAmerica Job ID: 400-151568-1
SDG: Ash Pond

Laboratory: TestAmerica Pensacola

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

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

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

**APPENDIX D – Plant Wansley Landfill Background Sample
Results**

Summary Report

Constituent: Lithium Analysis Run 12/17/2018 4:43 PM
 Plant Wansley Client: Southern Company Data: Wansley Landfill

For observations made between 3/22/2016 and 10/3/2017, a summary of the selected data set:

Observations = 277
 ND/Trace = 165
 Wells = 35
 Minimum Value = 0.0025
 Maximum Value = 0.044
 Mean Value = 0.01087
 Median Value = 0.0046
 Standard Deviation = 0.01043
 Coefficient of Variation = 0.959
 Skewness = 0.9517

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
GWA-1 (bg)	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWA-2 (bg)	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWA-28 (bg)	8	0	0.016	0.023	0.02036	0.02095	0.00213	0.1046	-0.9828
GWA-29 (bg)	7	0	0.032	0.044	0.04004	0.0415	0.004051	0.1012	-1.171
GWA-3 (bg)	5	5	0.0025	0.025	0.0115	0.0025	0.01232	1.072	0.4082
GWA-4 (bg)	8	4	0.0025	0.025	0.008788	0.00375	0.01003	1.142	1.137
GWC-10	8	1	0.0078	0.025	0.0122	0.011	0.005429	0.445	1.839
GWC-11	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-12	8	3	0.0025	0.025	0.009288	0.00435	0.00973	1.048	1.132
GWC-13	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-14	8	5	0.0025	0.025	0.008788	0.0036	0.01006	1.145	1.12
GWC-15	8	2	0.0046	0.025	0.01046	0.0061	0.009004	0.8606	1.131
GWC-16	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-17	8	7	0.0025	0.025	0.008475	0.0025	0.01025	1.209	1.126
GWC-18	8	6	0.0025	0.025	0.008363	0.00295	0.01028	1.229	1.149
GWC-19	8	3	0.0025	0.025	0.00745	0.00475	0.007556	1.014	1.797
GWC-20	8	5	0.0025	0.025	0.00855	0.0034	0.01017	1.189	1.144
GWC-21	8	7	0.0025	0.025	0.009313	0.0025	0.01022	1.098	0.8807
GWC-22	8	7	0.0025	0.025	0.008338	0.0025	0.0103	1.236	1.144
GWC-23	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-24	8	6	0.0025	0.025	0.008538	0.00325	0.01019	1.193	1.138
GWC-25	8	4	0.0025	0.025	0.009313	0.0049	0.009766	1.049	1.097
GWC-26	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-27	8	4	0.0025	0.025	0.009863	0.0054	0.009598	0.9732	0.9881
GWC-30	8	7	0.0025	0.025	0.008288	0.0025	0.01032	1.246	1.148
GWC-31	8	0	0.019	0.027	0.02251	0.02245	0.002852	0.1267	0.4032
GWC-32	8	2	0.01	0.025	0.0175	0.018	0.005632	0.3218	0.1437
GWC-33	9	8	0.0025	0.025	0.007644	0.0025	0.009849	1.288	1.33
GWC-34	8	3	0.0025	0.025	0.00965	0.00515	0.009519	0.9864	1.121
GWC-35	8	8	0.0025	0.025	0.008125	0.0025	0.01042	1.282	1.155
GWC-5	8	6	0.0025	0.025	0.008625	0.00345	0.01014	1.176	1.143
GWC-6	8	2	0.0033	0.025	0.009188	0.0041	0.009776	1.064	1.13
GWC-7	8	0	0.0079	0.016	0.01303	0.01335	0.002439	0.1873	-1.057
GWC-8	8	2	0.007	0.025	0.01356	0.0105	0.007391	0.545	0.8772
GWC-9	8	2	0.0034	0.025	0.01023	0.006	0.00918	0.8978	1.109

Plant Wansley Coal Combustion By-Product Disposal Facility Analytical Data Summary

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Substance	MCL/ (SMCL)	Well ID								
		GWC-25	GWC-25	GWC-25	GWC-25	GWC-25	GWC-25	GWC-25	GWC-25	
		03/28/2016	05/25/2016	07/27/2016	09/19/2016	11/15/2016	01/24/2017	03/23/2017	05/02/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	12.3	7.2	5.4	8.4	10	14	13	41
	Chloride	(250)	5.992	8.14	6.3	5.1	3.9	3.6	3.2	3.5
	Fluoride	4	ND (0.0542 J)	ND (0.034 J)	ND	ND	ND	ND	ND	ND
	Sulfate	(250)	8.3151	4.31	6.1	11	18	26	23	27
	TDS	(500)	90	75	78	100	110	96	96	100
CCR - Appendix IV	Antimony	0.006	ND	ND (0.00151 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.00061 J)	ND	ND (0.00085 J)
	Barium	2	0.0383	0.0439	0.037	0.041	0.033	0.040	0.032	0.041
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	0.0043	ND	0.015
	Cobalt	N/R	0.0117	0.0122	0.0065	0.0071	0.029	0.033	0.022	0.036
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	0.0021
	Lithium	N/R	ND	ND	ND	ND	0.0052	ND (0.0046 J)	ND (0.0035 J)	0.0062
	Mercury	0.002	ND	ND	ND (0.000098 J)	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND (0.0017 J)	ND (0.0024 J)	ND (0.0015 J)	ND (0.0022 J)
	Radium	5	ND	ND	ND	ND	0.617	0.139 U	ND	ND
	Selenium	0.05	ND	ND	ND (0.00033 J)	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

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5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
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9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

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Substance	MCL/ (SMCL)	Well ID								
		GWC-26	GWC-26	GWC-26	GWC-26	GWC-26	GWC-26	GWC-26	GWC-26	
		03/24/2016	05/25/2016	07/26/2016	09/19/2016	11/14/2016	01/19/2017	03/16/2017	05/01/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.72	1.68	1.4	1.5	1.8	1.6	1.7	1.6
	Chloride	(250)	2.8217	2.93	3.0	2.9	2.8	2.8	2.7	2.8
	Fluoride	4	ND (0.0318 J)	ND (0.0282 J)	ND	ND	ND	ND	ND	ND
	Sulfate	(250)	ND (0.4337 J)	ND (0.3421 J)	ND	ND	ND	ND	ND	ND
	TDS	(500)	48	42	20	48	40	10	ND	10
CCR - Appendix IV	Antimony	0.006	ND (0.000653 J)	ND (0.000943 J)	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0362	0.0348	0.028	0.029	0.036	0.034	0.035	0.030
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND (0.00061 J)	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND (0.00012 J)	ND	ND	ND	ND (0.00014 J)	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND (0.0034 J)
	Radium	5	ND	ND	ND	ND	0.731	0.805 U	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	0.0018
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

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Substance	MCL/ (SMCL)	Well ID								
		GWC-27	GWC-27	GWC-27	GWC-27	GWC-27	GWC-27	GWC-27	GWC-27	
		03/23/2016	05/24/2016	07/26/2016	09/19/2016	11/11/2016	01/20/2017	03/16/2017	04/28/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.73	0.745	1.4	1.2	3.3	2.2	1.0	0.88
	Chloride	(250)	1.0825	1.08	1.1	1.0	ND (0.97 J)	ND (0.99 J)	1.0	ND (0.96 J)
	Fluoride	4	0.4759	ND (0.198 J)	1.2	0.64	1.2	0.83	0.32	0.83
	Sulfate	(250)	1.3897	ND (0.598 J)	3.0	1.6	3.0	2.2	ND (0.95 J)	2.1
	TDS	(500)	46	34	16	52	56	38	32	46
CCR - Appendix IV	Antimony	0.006	ND	ND	ND (0.0013 J)	ND	ND	ND (0.0014 J)	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0107	ND (0.00672 J)	0.0085	0.0080	0.017	0.013	0.0096	0.0097
	Beryllium	0.004	ND (0.00229 J)	ND	ND (0.0015 J)	ND (0.0013 J)	0.0057	0.0030	ND (0.0018 J)	ND (0.00075 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND (0.00275 J)	ND (0.0024 J)	0.0043	ND (0.0024 J)	ND (0.0018 J)	0.0027	ND (0.0024 J)	0.0026
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND (0.0046 J)	ND (0.0038 J)	0.0093	0.0062	ND	ND
	Mercury	0.002	ND	ND	ND (0.00012 J)	ND	ND	ND	ND (0.00015 J)	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND (0.0010 J)	ND	ND
	Radium	5	1.74354	0.887	1.66	1.40	3.54	3.31	1.96	0.675
	Selenium	0.05	ND	ND	ND	ND	ND	ND (0.00045 J)	ND	ND
Thallium	0.002	ND	ND	ND (0.00017 J)	ND (0.00016 J)	ND	ND (0.00016 J)	ND (0.00017 J)	ND (0.00018 J)	

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Substance	MCL/ (SMCL)	Well ID								
		GWC-30	GWC-30	GWC-30	GWC-30	GWC-30	GWC-30	GWC-30	GWC-30	
		03/23/2016	05/20/2016	07/21/2016	09/20/2016	11/14/2016	01/24/2017	03/17/2017	05/01/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	3.03	3.37	2.9	3.2	2.8	3.1	2.9	3.0
	Chloride	(250)	1.3598	1.4	1.4	1.3	1.3	1.3	1.3	1.3
	Fluoride	4	ND (0.0999 J)	ND (0.104 J)	ND (0.11 J)	ND (0.092 J)	ND	ND (0.094 J)	ND (0.084 J)	ND (0.092 J)
	Sulfate	(250)	1.3729	1.31	1.3	1.3	1.1	1.3	1.3	1.2
	TDS	(500)	51	58	42	52	38	36	48	10
CCR - Appendix IV	Antimony	0.006	ND	ND	ND	ND (0.0012 J)	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	ND (0.00731 J)	ND (0.00703 J)	0.0067	0.0070	0.0070	0.0075	0.0071	0.0057
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND (0.0011 J)	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND (0.0038 J)	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND (0.000086 J)	ND	ND	ND	ND (0.00017 J)	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	ND	ND	ND	ND	0.542	0.400	ND	ND
	Selenium	0.05	ND	ND	ND (0.00030 J)	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

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Analytical Data Summary**

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Substance	MCL/ (SMCL)	Well ID									
		GWC-31	GWC-31	GWC-31	GWC-31	GWC-31	GWC-31	GWC-31	GWC-31	GWC-31	GWC-31
		03/30/2016	05/25/2016	07/27/2016	01/25/2017	03/23/2017	05/02/2017	07/19/2017	08/04/2017	09/06/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND	NS
	Calcium	N/R	11.3	12.9	12	8.3	10	9.8	10	13	NS
	Chloride	(250)	1.9069	1.89	NS	1.9	NS	NS	1.6	NS	ND
	Fluoride	4	1.5245	1.65	NS	1.4	NS	NS	1.6	NS	ND
	Sulfate	(250)	15.0114	19.1	NS	13	NS	NS	15	NS	ND (76 J)
	TDS	(500)	128	118	NS	120	NS	NS	100	NS	90
CCR - Appendix IV	Antimony	0.006	ND	ND (0.00129 J)	0.0027	ND	ND	ND	ND	ND	NS
	Arsenic	0.01	ND	ND	ND (0.00055 J)	ND	ND	ND	ND (0.00055 J)	ND	NS
	Barium	2	ND (0.00491 J)	ND (0.00502 J)	0.0033	0.0051	ND (0.0024 J)	0.0026	0.0040	0.0033	NS
	Beryllium	0.004	ND	ND	ND (0.00076 J)	ND (0.00064 J)	ND (0.00067 J)	ND (0.00077 J)	ND (0.00083 J)	ND (0.0011 J)	NS
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND	NS
	Chromium	0.1	ND (0.00334 J)	ND (0.00321 J)	0.0043	0.0027	ND (0.0022 J)	0.0027	ND (0.0019 J)	ND (0.0021 J)	NS
	Cobalt	N/R	ND	ND	ND (0.0015 J)	ND	ND	ND	ND	ND	NS
	Lead	0.015	ND	ND	ND (0.00078 J)	ND (0.00042 J)	ND	ND (0.00039 J)	ND (0.00051 J)	ND (0.00037 J)	NS
	Lithium	N/R	ND (0.0202 J)	ND (0.0229 J)	0.022	0.020	0.023	0.019	0.026	0.027	NS
	Mercury	0.002	ND	ND	ND (0.00010 J)	ND	ND	ND	ND	ND	NS
	Molybdenum	N/R	ND	ND	ND (0.0041 J)	ND	ND	ND	ND (0.00090 J)	ND	NS
	Radium	5	NS	NS	NS	0.230 U	NS	NS	NS	NS	0.527
	Selenium	0.05	ND	ND	ND (0.00095 J)	ND (0.00035 J)	ND	ND	ND (0.00068 J)	ND (0.00042 J)	NS
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	NS	

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10. NS (Not Sampled) indicates a sample was not collected for laboratory analysis

Plant Wansley Coal Combustion By-Product Disposal Facility Analytical Data Summary

Georgia Power is in the process of closing all of its ash ponds. As part of this process, the company is monitoring groundwater around its ash ponds as required by the Environmental Protection Agency's (EPA) Coal Combustion Residuals (CCR) Rule and the Georgia Environmental Protection Division's (EPD) CCR Rule (State CCR rule). The CCR Rule and the State CCR rule require at least eight independent groundwater sampling events to be conducted at monitoring wells around its coal ash ponds to determine background groundwater conditions. These data tables summarize the results from background sample events. Collective data from background sampling events will be required to establish background groundwater conditions at each facility.

Substance	MCL/ (SMCL)	Well ID								
		GWC-32	GWC-32	GWC-32	GWC-32	GWC-32	GWC-32	GWC-32	GWC-32	
		03/23/2016	05/24/2016	07/22/2016	09/16/2016	11/15/2016	01/26/2017	03/24/2017	05/02/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	5.18	6.58	7.1	8.7	6.9	13	12	15
	Chloride	(250)	1.0533	1.1	1.1	1.1	1.1	1.1	1.1	ND (0.99 J)
	Fluoride	4	2.1209	2.71	3.5	3.5	3.2	3.9	3.2	3.5
	Sulfate	(250)	12.8473	13.5	12	12	13	9.2	9.2	9.0
	TDS	(500)	75	83	76	84	94	68	110	76
CCR - Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	ND	ND	ND (0.0014 J)	ND (0.0018 J)	ND (0.0014 J)	0.0030	ND (0.0021 J)	0.0025
	Beryllium	0.004	ND (0.000735 J)	ND (0.00134 J)	ND (0.0012 J)	ND (0.0015 J)	ND (0.0015 J)	ND (0.0010 J)	ND (0.0016 J)	ND (0.0012 J)
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND (0.00058 J)	ND (0.00088 J)	ND	ND (0.0013 J)	ND (0.0012 J)	ND (0.00095 J)
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	0.010	0.013	0.012	0.018	0.018	0.019
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.000073 J)	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND (0.00097 J)	ND	ND
	Radium	5	ND	ND	ND	ND	0.597	1.20	0.578	1.45
	Selenium	0.05	ND	ND	ND (0.00025 J)	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

- MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
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- ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
- ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
- N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
- TDS indicates total dissolved solids.
- U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
- Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.

**Plant Wansley Coal Combustion By-Product Disposal Facility
Analytical Data Summary**

Georgia Power is in the process of closing all of its ash ponds. As part of this process, the company is monitoring groundwater around its ash ponds as required by the Environmental Protection Agency's (EPA) Coal Combustion Residuals (CCR) Rule and the Georgia Environmental Protection Division's (EPD) CCR Rule (State CCR rule). The CCR Rule and the State CCR rule require at least eight independent groundwater sampling events to be conducted at monitoring wells around its coal ash ponds to determine background groundwater conditions. These data tables summarize the results from background sample events. Collective data from background sampling events will be required to establish background groundwater conditions at each facility.

Substance	MCL/ (SMCL)	Well ID													
		GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	GWC-33	
		03/23/2016	05/24/2016	07/22/2016	09/16/2016	11/17/2016	01/25/2017	03/23/2017	05/01/2017	07/19/2017	08/04/2017	08/24/2017	09/06/2017		
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND (0.023 J)	ND	ND	ND	NS	ND	NS	NS	
	Calcium	N/R	13.8	9.38	9.0	11	55	ND	15	10	NS	11	NS	NS	
	Chloride	(250)	2.2604	NS	NS	NS	2.5	2.1	2.0	2.1	2.1	1.9	1.9	ND	
	Fluoride	4	2.8158	NS	NS	NS	4.1	5.6	3.1	4.2	3.4	4.0	4.2	ND	
	Sulfate	(250)	19.6956	NS	NS	NS	22	50	28	25	22	25	19	ND	
	TDS	(500)	80	NS	NS	NS	140	160	120	72	120	90	82	58	
CCR - Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	NS	NS	
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	NS	NS	
	Barium	2	ND (0.00902 J)	ND (0.00573 J)	0.010	0.0061	0.014	ND	0.0096	0.0057	NS	0.0062	NS	NS	
	Beryllium	0.004	ND (0.000892 J)	ND (0.00065 J)	ND (0.0011 J)	ND (0.0010 J)	ND (0.00046 J)	ND	ND (0.00077 J)	ND (0.00062 J)	NS	ND (0.00051 J)	NS	NS	
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	NS	NS	
	Chromium	0.1	ND	ND	ND	ND	0.0034	ND	0.0032	ND	NS	ND	NS	NS	
	Cobalt	N/R	ND	0.0136	0.010	0.011	0.0032	ND	0.0037	0.0085	NS	ND (0.0023 J)	NS	NS	
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND	NS	NS	
	Lithium	N/R	ND	ND	ND	ND (0.0038 J)	ND	ND	ND	ND	NS	ND	NS	NS	
	Mercury	0.002	ND	ND	ND	ND	ND	ND (0.00012 J)	ND	ND	NS	ND	NS	NS	
	Molybdenum	N/R	ND	ND	ND	ND	ND (0.0016 J)	ND	ND	ND	NS	ND (0.0018 J)	NS	NS	
	Radium	5	0	NS	NS	NS	1.11	0.940	0.504	ND	2.00	NS	1.07	0.820	
	Selenium	0.05	ND	ND	ND (0.00074 J)	ND	ND	ND	ND	ND (0.00084 J)	NS	ND (0.00084 J)	NS	NS	
	Thallium	0.002	ND	ND (0.000242 J)	ND (0.00022 J)	ND (0.00021 J)	ND (0.00017 J)	ND	ND (0.00017 J)	ND (0.00018 J)	NS	ND (0.00016 J)	NS	NS	

1. MCL indicates Environmental Protection Agency (EPA) and Georgia Environmental Protection Division (EPD) maximum contaminant level.
2. (SMCL) indicates a secondary MCL that is established by EPA as a general guideline only (not enforced).
3. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
9. Appendix III = indicator parameters evaluated during Detection Monitoring; Appendix IV = parameters evaluated during Assessment Monitoring.
10. NS (Not Sampled) indicates a sample was not collected for laboratory analysis

Plant Wansley Coal Combustion By-Product Disposal Facility Analytical Data Summary

Georgia Power is in the process of closing all of its ash ponds. As part of this process, the company is monitoring groundwater around its ash ponds as required by the Environmental Protection Agency's (EPA) Coal Combustion Residuals (CCR) Rule and the Georgia Environmental Protection Division's (EPD) CCR Rule (State CCR rule). The CCR Rule and the State CCR rule require at least eight independent groundwater sampling events to be conducted at monitoring wells around its coal ash ponds to determine background groundwater conditions. These data tables summarize the results from background sample events. Collective data from background sampling events will be required to establish background groundwater conditions at each facility.

Substance	MCL/ (SMCL)	Well ID								
		GWC-34	GWC-34	GWC-34	GWC-34	GWC-34	GWC-34	GWC-34	GWC-34	GWC-34
		03/24/2016	05/23/2016	07/21/2016	09/15/2016	11/15/2016	01/25/2017	03/22/2017	05/01/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	3.27	2.82	2.6	2.9	2.5	2.7	2.7	3.1
	Chloride	(250)	1.2259	1.19	1.3	1.2	1.2	1.2	1.1	1.1
	Fluoride	4	ND (0.1653 J)	ND (0.155 J)	ND (0.19 J)	ND (0.16 J)	ND (0.14 J)	ND (0.16 J)	ND (0.14 J)	ND (0.16 J)
	Sulfate	(250)	1.8782	1.44	1.6	1.6	1.3	1.5	1.5	1.4
	TDS	(500)	55	61	32	62	56	ND	58	22
CCR - Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0132	0.0119	0.011	0.012	0.011	0.011	0.010	0.012
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND (0.00043 J)	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	0.0052	0.0055	ND (0.0043 J)	ND (0.0046 J)	0.0051
	Mercury	0.002	ND	ND	ND (0.000084 J)	ND	ND	ND (0.00012 J)	ND (0.000079 J)	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	ND	0.939	ND	ND	ND	0.380	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

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Plant Wansley Coal Combustion By-Product Disposal Facility Analytical Data Summary

Georgia Power is in the process of closing all of its ash ponds. As part of this process, the company is monitoring groundwater around its ash ponds as required by the Environmental Protection Agency's (EPA) Coal Combustion Residuals (CCR) Rule and the Georgia Environmental Protection Division's (EPD) CCR Rule (State CCR rule). The CCR Rule and the State CCR rule require at least eight independent groundwater sampling events to be conducted at monitoring wells around its coal ash ponds to determine background groundwater conditions. These data tables summarize the results from background sample events. Collective data from background sampling events will be required to establish background groundwater conditions at each facility.

Substance	MCL/ (SMCL)	Well ID								
		GWC-35	GWC-35	GWC-35	GWC-35	GWC-35	GWC-35	GWC-35	GWC-35	
		03/24/2016	05/23/2016	07/21/2016	09/15/2016	11/15/2016	01/26/2017	03/22/2017	05/02/2017	
CCR - Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.97	1.97	1.7	1.9	1.8	2.2	1.8	2.1
	Chloride	(250)	4.4998	4.19	4.4	4.0	4.2	4.2	3.9	4.0
	Fluoride	4	ND (0.0396 J)	ND (0.0343 J)	ND	ND	ND	ND	ND	ND
	Sulfate	(250)	2.7482	2.76	2.8	2.4	2.3	2.7	2.4	2.5
	TDS	(500)	33	48	36	38	44	ND	34	ND (4.0 J)
CCR - Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.0206	0.0221	0.019	0.020	0.020	0.021	0.019	0.020
	Beryllium	0.004	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	ND	ND	ND	ND	ND	ND	ND
	Cobalt	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND (0.000096 J)	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	ND	ND*	ND	ND	ND	0.265 U	ND	ND
	Selenium	0.05	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	0.002	ND	ND	ND	ND	ND	ND	ND	ND	

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4. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
5. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
6. N/R indicates a substance does not have an MCL or SMCL, but will be further evaluated statistically at the conclusion of all the background sampling events, as required by EPA's CCR rule.
7. TDS indicates total dissolved solids.
8. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.
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10. *Sampled 5/25/16

APPENDIX E – Summary of Appendix III Data

Summary Report

Constituent: Boron Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 87
 ND/Trace = 87
 Wells = 8
 Minimum Value = 0.025
 Maximum Value = 0.05
 Mean Value = 0.0273
 Median Value = 0.025
 Standard Deviation = 0.007266
 Coefficient of Variation = 0.2662
 Skewness = 2.824

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-18 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-2 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-3 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-4 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-5 (bg)	10	10	0.025	0.05	0.0275	0.025	0.007906	0.2875	2.667
WGWA-6 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846
WGWA-7 (bg)	11	11	0.025	0.05	0.02727	0.025	0.007538	0.2764	2.846

Summary Report

Constituent: Calcium Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 87
 ND/Trace = 0
 Wells = 8
 Minimum Value = 0.44
 Maximum Value = 52
 Mean Value = 11.03
 Median Value = 11
 Standard Deviation = 10.44
 Coefficient of Variation = 0.9467
 Skewness = 0.9138

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	0	0.44	1.4	1.061	1.1	0.2384	0.2248	-1.523
WGWA-18 (bg)	11	0	6.7	24	17.26	23	7.096	0.411	-0.321
WGWA-2 (bg)	11	0	11	28	15.75	13	5.241	0.3329	1.259
WGWA-3 (bg)	11	0	1.3	2.1	1.827	1.8	0.2453	0.1343	-0.7563
WGWA-4 (bg)	11	0	15	17.9	16.17	16	1.062	0.06568	0.0837
WGWA-5 (bg)	10	0	1.2	52	7.67	1.5	15.99	2.085	2.444
WGWA-6 (bg)	11	0	20	29	25.45	26	2.423	0.0952	-0.8262
WGWA-7 (bg)	11	0	0.88	10	2.758	1.3	2.976	1.079	1.555

Summary Report

Constituent: Chloride Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 87
 ND/Trace = 0
 Wells = 8
 Minimum Value = 1.2
 Maximum Value = 6.05
 Mean Value = 2.134
 Median Value = 1.9
 Standard Deviation = 0.8742
 Coefficient of Variation = 0.4096
 Skewness = 1.752

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	0	3.4	4	3.709	3.8	0.2023	0.05453	-0.281
WGWA-18 (bg)	11	0	1.9	6.05	2.659	2	1.302	0.4898	1.856
WGWA-2 (bg)	11	0	2.2	2.6	2.364	2.3	0.1286	0.05442	0.4228
WGWA-3 (bg)	11	0	1.6	1.92	1.675	1.6	0.1055	0.06299	1.28
WGWA-4 (bg)	11	0	1.2	1.45	1.277	1.2	0.0984	0.07704	0.6722
WGWA-5 (bg)	10	0	1.7	2.4	1.974	1.95	0.2142	0.1085	0.5856
WGWA-6 (bg)	11	0	1.3	2.5	1.535	1.4	0.3352	0.2184	2.409
WGWA-7 (bg)	11	0	1.7	2.1	1.869	1.8	0.1285	0.06874	0.7283

Summary Report

Constituent: Fluoride Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 95
 ND/Trace = 56
 Wells = 8
 Minimum Value = 0.0131
 Maximum Value = 0.284
 Mean Value = 0.105
 Median Value = 0.1
 Standard Deviation = 0.03338
 Coefficient of Variation = 0.318
 Skewness = 1.555

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	12	11	0.0131	0.1	0.09276	0.1	0.02509	0.2704	-3.015
WGWA-18 (bg)	12	3	0.082	0.284	0.1238	0.1	0.06236	0.5039	1.748
WGWA-2 (bg)	12	9	0.0538	0.18	0.1016	0.1	0.02817	0.2774	1.567
WGWA-3 (bg)	12	11	0.029	0.1	0.09408	0.1	0.0205	0.2178	-3.015
WGWA-4 (bg)	12	0	0.12	0.17	0.1378	0.135	0.01763	0.1279	0.54
WGWA-5 (bg)	11	9	0.014	0.1	0.09173	0.1	0.02582	0.2815	-2.829
WGWA-6 (bg)	12	2	0.088	0.13	0.1037	0.1	0.01076	0.1038	1.033
WGWA-7 (bg)	12	11	0.018	0.1	0.09317	0.1	0.02367	0.2541	-3.015

Summary Report

Constituent: Sulfate Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 87
 ND/Trace = 24
 Wells = 8
 Minimum Value = 0.368
 Maximum Value = 21
 Mean Value = 3.857
 Median Value = 1.1
 Standard Deviation = 4.506
 Coefficient of Variation = 1.168
 Skewness = 1.503

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	11	0.5	0.5	0.5	0.5	0	0	NaN
WGWA-18 (bg)	11	0	6.3	19.9	10.67	10	3.801	0.3561	1.263
WGWA-2 (bg)	11	0	0.75	2.1	1.145	1.1	0.3759	0.3284	1.487
WGWA-3 (bg)	11	1	0.5	0.99	0.7701	0.81	0.1203	0.1562	-0.5428
WGWA-4 (bg)	11	0	4.6	7.3	6.102	6.5	0.9159	0.1501	-0.2542
WGWA-5 (bg)	10	3	0.5	21	3.066	0.825	6.361	2.075	2.58
WGWA-6 (bg)	11	0	2	9.4	7.962	8.3	2.014	0.253	-2.652
WGWA-7 (bg)	11	9	0.368	1.4	0.5698	0.5	0.2782	0.4882	2.733

Summary Report

Constituent: Total Dissolved Solids Analysis Run 12/18/2018 1:49 PM
 Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 5/17/2016 and 10/3/2018, a summary of the selected data set:

Observations = 87
 ND/Trace = 9
 Wells = 8
 Minimum Value = 2.5
 Maximum Value = 150
 Mean Value = 57.86
 Median Value = 50
 Standard Deviation = 42.24
 Coefficient of Variation = 0.7301
 Skewness = 0.2469

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWA-1 (bg)	11	3	2.5	50	19.77	14	15.84	0.801	0.7666
WGWA-18 (bg)	11	0	36	120	75.64	72	25.77	0.3406	0.135
WGWA-2 (bg)	11	0	58	140	90.36	84	25.41	0.2812	0.5586
WGWA-3 (bg)	11	1	2.5	50	20.86	22	13.59	0.6514	0.5519
WGWA-4 (bg)	11	0	28	110	92.09	98	23.07	0.2505	-2.094
WGWA-5 (bg)	10	2	2.5	150	32.4	23	43.15	1.332	2.254
WGWA-6 (bg)	11	0	90	130	108.5	110	13.97	0.1288	0.3292
WGWA-7 (bg)	11	3	2.5	50	20.95	14	18.32	0.8745	0.3981

Summary Report

Constituent: Boron Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 11
ND/Trace = 10
Wells = 1
Minimum Value = 0.025
Maximum Value = 0.034
Mean Value = 0.02582
Median Value = 0.025
Standard Deviation = 0.002714
Coefficient of Variation = 0.1051
Skewness = 2.846

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	11	10	0.025	0.034	0.02582	0.025	0.002714	0.1051	2.846

Summary Report

Constituent: Calcium Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 11
ND/Trace = 0
Wells = 1
Minimum Value = 8.4
Maximum Value = 12
Mean Value = 9.827
Median Value = 9.5
Standard Deviation = 1.113
Coefficient of Variation = 0.1132
Skewness = 0.6141

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	11	0	8.4	12	9.827	9.5	1.113	0.1132	0.6141

Summary Report

Constituent: Chloride Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 11
ND/Trace = 0
Wells = 1
Minimum Value = 2.3
Maximum Value = 2.6
Mean Value = 2.436
Median Value = 2.4
Standard Deviation = 0.1286
Coefficient of Variation = 0.0528
Skewness = 0.1686

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	11	0	2.3	2.6	2.436	2.4	0.1286	0.0528	0.1686

Summary Report

Constituent: Fluoride Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 12
ND/Trace = 0
Wells = 1
Minimum Value = 0.32
Maximum Value = 0.45
Mean Value = 0.3725
Median Value = 0.365
Standard Deviation = 0.03671
Coefficient of Variation = 0.09855
Skewness = 0.7362

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	12	0	0.32	0.45	0.3725	0.365	0.03671	0.09855	0.7362

Summary Report

Constituent: Sulfate Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 11
ND/Trace = 0
Wells = 1
Minimum Value = 3.2
Maximum Value = 4.6
Mean Value = 3.609
Median Value = 3.6
Standard Deviation = 0.3807
Coefficient of Variation = 0.1055
Skewness = 1.604

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	11	0	3.2	4.6	3.609	3.6	0.3807	0.1055	1.604

Summary Report

Constituent: Total Dissolved Solids Analysis Run 12/18/2018 1:55 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

For observations made between 11/11/2016 and 10/4/2018, a summary of the selected data set:

Observations = 11
ND/Trace = 0
Wells = 1
Minimum Value = 36
Maximum Value = 120
Mean Value = 80.18
Median Value = 74
Standard Deviation = 22.78
Coefficient of Variation = 0.2841
Skewness = -0.07234

<u>Well</u>	<u>#Obs.</u>	<u>ND/Trace</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Median</u>	<u>Std.Dev.</u>	<u>CV</u>	<u>Skewness</u>
WGWC-19	11	0	36	120	80.18	74	22.78	0.2841	-0.07234

**Plant Wansley
Analytical Data Summary**

Substance		Well ID	
		WAMW-1	WAMW-2
		10/18/2018	10/16/2018
APPENDIX III	Boron	ND	ND
	Calcium	19	18
	Chloride	2.6	2.5
	Fluoride	0.60	0.47
	Sulfate	3.7	9.5
	TDS	120	110
APPENDIX IV (site list)	Arsenic	ND (0.00052 J)	ND (0.00066 J)
	Barium	0.0050	0.0069
	Beryllium	ND	ND
	Cadmium	ND	ND
	Chromium	ND	ND
	Cobalt	ND	ND
	Lithium	0.026	0.023
	Mercury	ND	ND
	Molybdenum	ND (0.0028 J)	ND
	Radium	0.314 U	0.476
	Selenium	ND	ND
	Thallium	ND	ND

Notes:

1. Results for substances are reported in milligrams per liter (mg/L). Radium results are reported in picocuries per liter (pCi/L).
2. ND (Not Detected) indicates the substance was not detected above the analytical method detection limit (MDL).
3. ND (value J) indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed (value J) is qualified by the laboratory as an estimated number.
4. TDS indicates total dissolved solids.
5. U indicates the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualified by the laboratory as estimated.



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