Georgia Power Company
Plant Wansley Ash Pond
Heard County

2019 FIRST SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ATLANTIC COAST CONSULTING, INC.

CERTIFICATION STATEMENT

This *2019 First Semiannual Groundwater Monitoring & Corrective Action Report*, Georgia Power Company - Plant Wansley Ash Pond has been prepared in compliance with the United States Environmental Protection Agency coal combustion residual rule [40 Code of Federal Regulations (CFR) 257 Subpart D] and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or 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 *2019 First Semiannual Groundwater Monitoring and Corrective Action Report* to document groundwater monitoring activities conducted at the Georgia Power Company (GPC) Plant Wansley Ash Pond (the Site or AP-1). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257 Subpart D. For ease of reference, the US EPA CCR rules are cited within this report.

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the requirements of § 257.90 through § 257.95 of the Federal CCR rule and the Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). This report documents the activities completed for the groundwater monitoring program during the first half of 2019 calendar year.

A permit application to comply with EPD Rules was submitted in November 2018 and is currently under review. Semi-annual monitoring for the CCR unit is performed in accordance with the monitoring requirements 40 CFR § 257.90 through 257.91 and § 257.93 through 257.95 of the Federal CCR rule, and the EPD Rules for Solid Waste Management 391-3-4-.10(6)(a). The Federal regulations require annual reporting; this semi-annual report has been prepared to meet state requirements.

1.1 Site Description and Background

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. Semiannual monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of 40 CFR §257.90 through §257.95.

1.2 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. The Piedmont region 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. The 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.

1.3 Groundwater Monitoring System and CCR Unit Description

Pursuant to § 257.91, a groundwater monitoring system was installed within the uppermost aquifer at the CCR Unit AP-1. The monitoring system is designed to monitor groundwater passing the waste boundary of the CCR Units within the uppermost aquifer. Figure 2, Well Location Map, shows the monitoring well locations. Wells were located to serve as upgradient and downgradient monitoring points based on groundwater flow direction (Table 1A, Monitoring Network Well Summary, and Table 1B, Piezometer and Characterization Well Summary).

2.0 GROUNDWATER MONITORING ACTIVITIES

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed in the first half of 2019. All groundwater sampling was performed in accordance with § 257.93. Samples were collected from each well in the certified monitoring system shown on Figure 2.

Based on results of the *2017 Annual Groundwater and Corrective Action Monitoring Report*, an assessment monitoring program was implemented on January 15, 2018. A notice of assessment monitoring was placed in the operation record on May 15, 2018.

Table 2, Groundwater Sampling Event Summary, summarizes groundwater events conducted at AP-1 during February and April 2019. During the February 2019 event, groundwater samples were collected and analyzed for Appendix IV constituents to meet the requirement of § 257.95(b). During the April 2019 semi-annual sampling event, groundwater samples were collected for both Appendix III and the Appendix IV constituents detected during the February 2019 event. Results of sampling activities conducted in the first half of 2019 are presented 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 at the Site. Groundwater levels recorded during the monitoring events are summarized in Tables 3A and 3B, Summary of Groundwater Elevations – February 2019 and April 2019, respectively. Groundwater levels and top of casing elevations were used to calculate groundwater elevations and develop a potentiometric surface elevation contour map provided in Figure 3, Potentiometric Surface Contour Map – April 2019. The general direction of groundwater flow across the site is to the southeast. The groundwater flow patterns observed during the April 2019 monitoring event is consistent with historical observations.

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

Specifically:

Equation

$$v = \frac{K\,(dh/dl)}{P_e}$$

where: v = ground water velocity
K = hydraulic conductivity
dh/dl = hydraulic gradient
P_e = effective porosity

Groundwater flow velocities were calculated for the Site based on hydraulic gradients, average hydraulic conductivity 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 Table 4, Groundwater Flow Velocity Calculations – April 2019. The calculated flow velocity was approximately 0.20 feet per day or 87 feet per year.

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 and peristaltic pumps, the intake was lowered to 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.

Monitoring wells were purged and sampled using low-flow sampling procedures. A SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters (pH, conductivity, oxidation-reduction potential, dissolved oxygen, and temperature) during well purging 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
- ± 10% for specific conductance
- ± 10% for DO where DO > 0.5 mg/L. 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 Pittsburgh, Pennsylvania 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 two groundwater monitoring events in the first half of 2019. During the February 2019 sampling event, wells were sampled and analyzed for Appendix IV monitoring parameters pursuant to 40 CFR § 257.95(b). Groundwater samples collected during a semiannual event in April 2019 were analyzed for Appendix III and IV parameters detected above the laboratory method detection limit (MDL) during the February 2019 event in accordance with 40 CFR § 257.95(b). Parameters not detected above the

laboratory MDL included: antimony and mercury. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix A.

Analytical data collected in monitoring events from the first half of 2019 (February and April 2019) are summarized in Table 5A, Summary of Groundwater Analytical Data – February 2019, and Table 5B, Summary of Groundwater Analytical Data – April 2019, respectively.

Laboratory analyses were performed by Test America Laboratories, Inc. (TAL) of Pittsburgh, Pennsylvania. 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 QA/QC 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 (US EPA, 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 proprietary decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by US EPA 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. A summary of the statistical methodology used at the Site for routine groundwater monitoring is provided in Table 6, Summary of Statistical Methods.

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 were the background level is higher than the MCL or rule specified GWPS.

US EPA 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 7, 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 its respective standard.

4.2 Statistical Analysis Results

Analytical data from the assessment monitoring event in April 2019 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. The statistical analysis and comparison to prediction limits are included as Appendix B, Statistical Analyses.

Based on review of the Appendix III statistical analysis presented in Appendix B, Appendix III constituents have not returned to background levels. Exceedances were noted and are presented on the prediction limit summary table included in Appendix B. Because the site is in Assessment Monitoring, no resamples will be collected at this time; however, concentrations will continue to be monitored and will be evaluated during the next subsequent sample event.

4.2.1 First Semiannual Assessment Monitoring Event

Statistical analysis of Appendix IV data identified an Appendix IV constituent (lithium) to be at an SSL above the established GWPS for four groundwater monitoring wells. The lower 95% confidence level for lithium at WGWC-8, WGWC-9, WGWC-10, and WGWC-19 statistically exceeded the state-derived GWPS. Only the lower 95% confidence level for lithium at WGWC-19 exceeded the federally derived GWPS.

5.0 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 the sampling event conducted in the first half of 2019. An alternate source demonstration (ASD) for lithium was included in the *2018 Annual Groundwater and Corrective Action Report*. The demonstration showed the source of lithium in groundwater is naturally-derived from the subsurface rock formation and therefore, the SSL for lithium is not due to a release from the unit. The Site remains in assessment monitoring due to SSIs for Appendix III parameters.

6.0 CONCLUSIONS & FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for the Site identified SSIs of Appendix III groundwater monitoring parameters above background and SSLs 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 that concludes the source is naturally derived from the subsurface rock formation and therefore, the state and federal SSLs for lithium are not due to a release from the unit. Since the monitoring data show SSI for Appendix III parameters, this CCR unit will remain in assessment monitoring. The next semiannual monitoring event is planned for the second half of 2019.

7.0 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.*

MacStat Consulting, Ltd., *Statistical Analysis Plan – Plant Wansley Ash Pond*. 2017.

Sanitas: Groundwater Statistical Software, Sanitas Technologies, Shawnee, KS, 2007. *www.sanitastech.com*.

U.S. EPA Waste Management Division Office of Solid Waste, 1989, EPA 530/SW89-031 Interim Final RCRA Investigation (RFI) Guidance, Volume II or IV.

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, 2011, *Region IV Data Validation Standard Operating Procedures.* Science and Ecosystem Support Division. Athens, Georgia.

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.

U.S. EPA, 2017. *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Office of Superfund Remediation and Technology Innovation. OLEM 9355.0-135 [EPA-540-R-2017-001]. Washington, DC.

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	09/16/2018	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 the First Half of 2019

Well	Hydraulic Location	Feb. 25-28, 2019	Apr. 1-4, 2019
Purpose of Sampling Event		Assessment	First 2019 Semiannual
WGWA-1	Upgradient	Scan	A-03
WGWA-2	Upgradient	Scan	A-03
WGWA-3	Upgradient	Scan	A-03
WGWA-4	Upgradient	Scan	A-03
WGWA-5	Upgradient	Scan	A-03
WGWA-6	Upgradient	Scan	A-03
WGWA-7	Upgradient	Scan	A-03
WGWA-18	Upgradient	Scan	A-03
WGWC-8	Downgradient	Scan	A-03
WGWC-9	Downgradient	Scan	A-03
WGWC-10	Downgradient	Scan	A-03
WGWC-11	Downgradient	Scan	A-03
WGWC-12	Downgradient	Scan	A-03
WGWC-13	Downgradient	Scan	A-03
WGWC-14A	Downgradient	Scan	A-03
WGWC-15	Downgradient	Scan	A-03
WGWC-16	Downgradient	Scan	A-03
WGWC-17	Downgradient	Scan	A-03
WGWC-19	Downgradient	Scan	A-03

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

Table 3A
Summary of Groundwater Elevations
February 2019

Well ID	TOC Elevation (ft MSL)	Depth-to-Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	782.86	21.91	760.95
WGWA-2	758.29	7.28	751.01
WGWA-3	829.00	2.05	826.95
WGWA-4	834.30	1.80	832.50
WGWA-5	902.10	7.62	894.48
WGWA-6	897.10	9.87	887.23
WGWA-7	897.40	17.74	879.66
WGWA-18	878.10	13.24	864.86
WGWC-8	780.00	0.95	779.05
WGWC-9	812.08	15.70	796.38
WGWC-10	812.59	16.32	796.27
WGWC-11	824.00	19.67	804.33
WGWC-12	823.12	18.81	804.31
WGWC-13	810.04	14.44	795.60
WGWC-14A	811.09	14.01	797.08
WGWC-15	804.98	13.94	791.04
WGWC-16	804.49	13.15	791.34
WGWC-17	816.02	23.22	792.80
WGWC-19	783.44	16.31	767.13
PZ-1	856.78	36.62	820.16
PZ-4	889.09	10.94	878.15
PZ-6	915.33	17.87	897.46
PZ-8	882.84	29.34	853.50
PZ-10	832.16	20.40	811.76
PZ-11	822.99	17.38	805.61
PZ-12	818.88	23.14	795.74
PZ-13	850.04	52.42	797.62
PZ-15	826.96	24.90	802.06
PZ-16	800.55	9.23	791.32
PZ-17	831.21	36.02	795.19
PZ-18	814.22	10.15	804.07
PZ-20	787.27	8.52	778.75
PZ-21	814.71	17.31	797.40
WAMW-1	782.90	17.75	765.15
WAWM-2	767.86	10.96	756.90

Notes:
1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.
3. Depths to water measured February 25, 2019.

Table 3B
Summary of Groundwater Elevations
April 2019

Well ID	TOC Elevation (ft MSL)	Depth-to-Water (ft BTOC)	Groundwater Elevation (ft MSL)
WGWA-1	782.86	23.01	759.85
WGWA-2	758.29	9.09	749.20
WGWA-3	829.00	2.46	826.54
WGWA-4	834.30	3.18	831.12
WGWA-5	902.10	9.46	892.64
WGWA-6	897.10	11.06	886.04
WGWA-7	897.40	18.80	878.60
WGWA-18	878.10	14.95	863.15
WGWC-8	780.00	3.90	776.10
WGWC-9	812.08	16.26	795.82
WGWC-10	812.59	15.98	796.61
WGWC-11	824.00	20.09	803.91
WGWC-12	823.12	19.14	803.98
WGWC-13	810.04	17.23	792.81
WGWC-14A	811.09	17.32	793.77
WGWC-15	804.98	14.84	790.14
WGWC-16	804.49	14.25	790.24
WGWC-17	816.02	24.11	791.91
WGWC-19	783.44	17.18	766.26
PZ-1	856.78	36.53	820.25
PZ-4	889.09	17.75	871.34
PZ-6	915.33	18.97	896.36
PZ-8	882.84	29.35	853.49
PZ-10	832.16	25.09	807.07
PZ-11	822.99	18.45	804.54
PZ-12	818.88	23.31	795.57
PZ-13	850.04	48.02	802.02
PZ-15	826.96	23.10	803.86
PZ-16	800.55	10.84	789.71
PZ-17	831.21	36.51	794.70
PZ-18	814.22	13.76	800.22
PZ-20	787.27	10.24	777.03
PZ-21	814.71	15.81	798.90
WAMW-1	782.90	18.02	764.88
WAWM-2	767.86	11.51	756.35

Notes:
1. ft BTOC indicates feet below top of casing.
2. ft MSL indicates feet mean sea level.
3. Depths to water measured April 1, 2019.

TABLE 4
Groundwater Flow Velocity Calculation
April 2019

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 =	0.068	unitless	Hydraulic gradient from from WGWA-3 to WGWC-17
i_2 =	0.085	unitless	from PZ-10 to WGWC-19
i =	0.076	unitless	Average (i_1, i_2)
P_e =	0.25	unitless	See note 1.

Calculation

$$v = \frac{(0.67)(0.076)}{0.25} \qquad v = 0.20 \text{ ft/day}$$

Notes

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

Table 5A
Summary of Groundwater Analytical Data
February 2019

Substance		MCL/ (SMCL)	WGWA-1 2/25/2019	WGWA-2 2/25/2019	WGWA-3 2/26/2019	WGWA-4 2/26/2019	WGWA-5 2/26/2019	WGWA-6 2/26/2019	WGWA-7 2/26/2019	WGWA-18 2/26/2019
Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND	ND	ND	ND (0.00033 J)	ND	ND	ND	ND (0.00054 J)
	Barium	2	0.049	0.027	0.014	0.012	0.020	0.011	0.013	0.015
	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 (0.0016 J)	ND	ND	ND (0.0021 J)	ND	ND (0.0023 J)	ND	ND (0.0016 J)
	Cobalt	N/R	ND (0.00085 J)	ND (0.00083 J)	ND	ND (0.00029 J)	ND (0.00060 J)	ND (0.00031 J)	ND (0.00017 J)	ND (0.00026 J)
	Fluoride	4	ND	ND (0.032 J)	ND	ND (0.14 J)	ND	ND (0.074 J)	ND	0.23
	Lead	0.015	ND	ND (0.00019 J)	ND	ND (0.00046 J)	ND (0.00028 J)	ND (0.00037 J)	ND	ND
	Lithium	N/R	ND (0.0049 J)	0.0072	ND	0.0069	ND	0.0068	ND	ND
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND (0.0019 J)
	Radium	5	0.394	0.440	0.179 U	0.650	0.113 U	8.93	0.395	0.307 U
	Selenium	0.05	ND	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 guidline 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
February 2019

Substance		MCL/ (SMCL)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
			2/27/2019	2/28/2019	2/27/2019	2/27/2019	2/27/2019	2/27/2019	2/27/2019	2/27/2019
Appendix IV	Antimony	0.006	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.01	ND (0.00047 J)	ND	ND	ND	ND	ND (0.00036 J)	ND	0.0015
	Barium	2	ND	ND (0.0023 J)	0.040	0.040	0.016	0.054	0.028	0.023
	Beryllium	0.004	ND (0.0021 J)	ND (0.00031 J)	ND	ND	ND	ND	ND (0.00017 J)	ND
	Cadmium	0.005	ND	ND	ND	ND	ND	ND	ND	ND
	Chromium	0.1	ND	0.0025	0.0031	ND (0.0021 J)	ND	ND (0.0018 J)	ND	ND (0.0015 J)
	Cobalt	N/R	ND (0.0019 J)	ND	ND (0.00050 J)	ND (0.0022 J)	ND (0.00060 J)	ND (0.00013 J)	0.0049	ND
	Fluoride	4	ND (0.054 J)	1.4	0.21	ND (0.047 J)	ND (0.060 J)	0.25	ND	0.81
	Lead	0.015	ND (0.00017 J)	ND (0.00014 J)	ND (0.00023 J)	ND (0.00058 J)	ND	ND (0.00068 J)	ND	ND
	Lithium	N/R	0.014	0.037	0.0068	ND	0.0068	ND	ND	0.0055
	Mercury	0.002	ND	ND	ND	ND	ND	ND	ND	ND
	Molybdenum	N/R	ND	0.0053	ND	ND	ND (0.00063 J)	ND (0.0019 J)	ND	0.0061
	Radium	5	2.42	0.271 U	0.236 U	0.374	0.415	1.08	0.538	0.363 U
	Selenium	0.05	0.0035	0.0027	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND (0.00016 J)	ND

Notes:

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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
February 2019

Substance		MCL/ (SMCL)	WGWC-16 2/27/2019	WGWC-17 2/26/2019	WGWC-19 2/28/2019
Appendix IV	Antimony	0.006	ND	ND	ND
	Arsenic	0.01	ND (0.00046 J)	ND (0.00050 J)	ND
	Barium	2	0.028	0.012	ND
	Beryllium	0.004	ND (0.00022 J)	ND	ND
	Cadmium	0.005	ND (0.00055 J)	ND	ND
	Chromium	0.1	ND	ND	ND
	Cobalt	N/R	ND (0.00084 J)	ND (0.00086 J)	ND (0.00019 J)
	Fluoride	4	0.47	ND (0.068 J)	0.28
	Lead	0.015	ND (0.00014 J)	ND (0.00033 J)	ND
	Lithium	N/R	0.0075	0.0063	0.045
	Mercury	0.002	ND	ND	ND
	Molybdenum	N/R	ND	ND (0.0032 J)	ND (0.0013 J)
	Radium	5	0.721	0.431	0.254 U
	Selenium	0.05	0.0081	ND	ND
	Thallium	0.002	ND (0.00015 J)	ND	ND

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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).
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
April 2019

Substance		MCL/ (SMCL)	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18
			4/1/2019	4/1/2019	4/2/2019	4/2/2019	4/2/2019	4/2/2019	4/2/2019	4/2/2019
Appendix III	Boron	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	N/R	1.0	12	1.8	15	1.1	25	1.1	20
	Chloride	(250)	4.0	2.4	1.7	1.2	1.7	1.5	1.9	2.6
	Fluoride	4	ND	ND (0.061 J)	ND (0.039 J)	ND (0.14 J)	ND	ND (0.090 J)	ND	0.21
	Sulfate	(250)	ND	1.0	1.1	8.1	ND (0.94 J)	8.5	ND (0.40 J)	11
	TDS	(500)	ND	63	28	100	25	110	15	100
Appendix IV	Arsenic	0.01	ND	ND	ND	ND	ND	ND	ND	ND
	Barium	2	0.044	0.027	0.014	0.0056	0.016	0.0069	0.011	0.014
	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 (0.00079 J)	ND (0.00082 J)	ND	ND	ND (0.00046 J)	ND	ND	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND	ND	ND
	Lithium	N/R	ND (0.0044 J)	0.0055	ND	ND (0.0036 J)	ND (0.0016 J)	0.0052	ND	ND (0.0012 J)
	Molybdenum	N/R	ND	ND	ND	ND	ND	ND	ND	ND
	Radium	5	0.169 U	-0.00216 U	0.361	0.602	0.255 U	7.80	0.182 U	0.0436 U
	Selenium	0.05	ND	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 guidline 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.

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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
April 2019

Substance		MCL/ (SMCL)	WGWC-8 4/3/2019	WGWC-9 4/3/2019	WGWC-10 4/4/2019	WGWC-11 4/3/2019	WGWC-12 4/3/2019	WGWC-13 4/3/2019	WGWC-14A 4/3/2019	WGWC-15 4/4/2019
Appendix III	Boron	N/R	1.7	0.35	ND (0.024 J)	ND	ND	ND	ND	ND
	Calcium	N/R	61	7.2	7.9	1.7	14	4.7	0.84	30
	Chloride	(250)	70	2.0	1.4	3.3	3.0	1.2	2.4	3.7
	Fluoride	4	0.50	1.3	ND (0.13 J)	ND (0.048 J)	ND (0.084 J)	0.24	ND (0.048 J)	0.78
	Sulfate	(250)	180	41	2.2	1.9	13	3.8	3.8	41
	TDS	(500)	430	120	30	ND	66	72	31	170
Appendix IV	Arsenic	0.01	ND	ND	ND	ND	ND	ND (0.00053 J)	ND	0.0019
	Barium	2	ND (0.0010 J)	ND	0.040	0.035	0.015	0.056	0.026	0.022
	Beryllium	0.004	ND (0.0019 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 (0.0021 J)	ND	ND	ND	ND	ND
	Cobalt	N/R	0.0037	ND	ND (0.0017 J)	ND (0.00081 J)	ND (0.00043 J)	ND	0.0056	ND
	Lead	0.015	ND	ND	ND	ND	ND	ND (0.00047 J)	ND	ND
	Lithium	N/R	0.015	0.035	0.0059	ND	0.0075	ND	ND (0.0015 J)	0.0054
	Molybdenum	N/R	ND	ND (0.0026 J)	ND	ND	ND	ND	ND	ND (0.0039 J)
	Radium	5	1.55	0.0621 U	0.233 U	0.187 U	0.264 U	0.446	0.497	0.418
	Selenium	0.05	0.0031	0.0019	ND	ND	ND	ND	ND	ND
	Thallium	0.002	ND	ND	ND	ND	ND	ND	ND (0.00012 J)	ND

Notes:

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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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Table 5B
Summary of Groundwater Analytical Data
April 2019

Substance		MCL/ (SMCL)	WGWC-16 4/4/2019	WGWC-17 4/4/2019	WGWC-19 4/2/2019
Appendix III	Boron	N/R	3.2	ND (0.049 J)	ND
	Calcium	N/R	110	5.6	11
	Chloride	(250)	170	1.4	2.5
	Fluoride	4	ND (0.080 J)	ND (0.087 J)	0.33
	Sulfate	(250)	250	9.1	3.8
	TDS	(500)	710	89	88
Appendix IV	Arsenic	0.01	ND	ND	ND
	Barium	2	0.027	0.011	ND (0.0013 J)
	Beryllium	0.004	ND	ND	ND
	Cadmium	0.005	ND (0.00047 J)	ND	ND
	Chromium	0.1	ND	ND	ND
	Cobalt	N/R	ND (0.00077 J)	ND	ND
	Lead	0.015	ND	ND	ND
	Lithium	N/R	0.0077	ND (0.0042 J)	0.052
	Molybdenum	N/R	ND	ND (0.0020 J)	ND
	Radium	5	0.632	0.386	0.209 U
	Selenium	0.05	0.0091	ND	ND
	Thallium	0.002	ND (0.000095 J)	ND	ND

Notes:

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Table 6
Statistical Method Summary

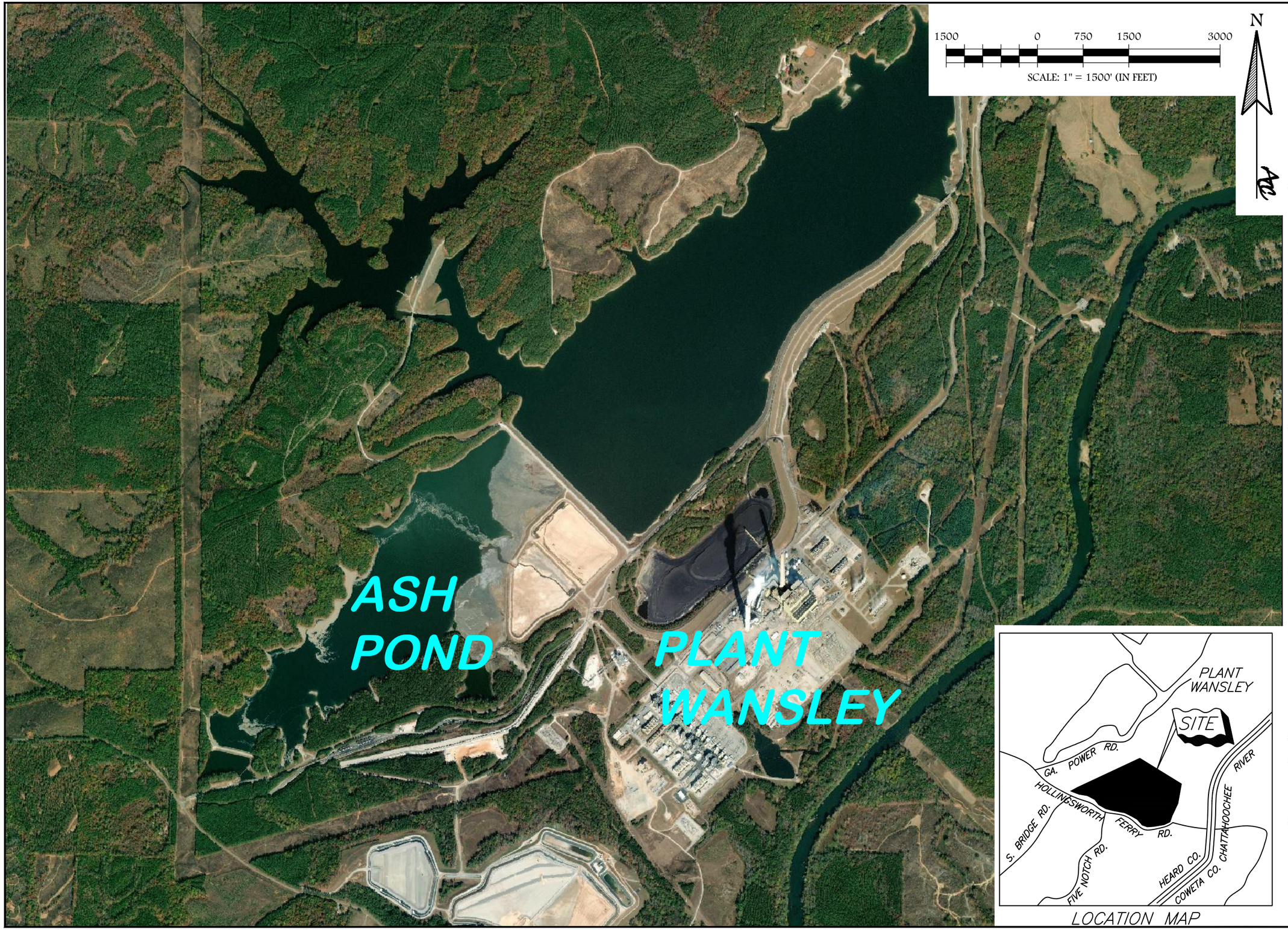
Plant Wansley AP Statistical Method Summary		
Monitoring Well Network	Upgradient Wells	WGWA-1, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, and WGWA-18
	Downgradient Wells	WGWC-8, WGWC-9, WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17 and WGWC-19
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, and TDS
	Appendix IV (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, combined Radium 226 + 228, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, and Thallium
Statistical Methodology	Data Screening Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell (boron, calcium, chloride, fluoride, TDS and sulfate) or intrawell (pH) statistical limits are on constituent specific basis, depending on the appropriateness of the method as determined by the Analysis of Variance

Table 7
Summary of Background Levels and Groundwater Protection Standards

Constituent	Site Background	Federal GWPS	State GWPS
Arsenic	0.0014	0.010	0.010
Barium	0.062	2	2
Beryllium	0.0025	0.004	0.004
Cadmium	0.0025	0.005	0.005
Chromium	0.0031	0.1	0.1
Cobalt	0.013	0.013	0.013
Fluoride	0.21	4	4
Lead	0.0013	0.015	0.015
Lithium	0.009	0.040	0.009
Molybdenum	0.015	0.1	0.015
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 = 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



LOCATION MAP

ATLANTIC COAST CONSULTING, INC.
1150 Northmeadow Pkwy.
Suite 100
Roswell, GA 30076
770.594.5998
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PROJECT:

PLANT WANSLEY
ASH POND

1371 LIBERTY CHURCH ROAD
CARROLLTON, GEORGIA

REVISIONS

Drawn by: MM

Checked by: EP

PROJECT NUMBER:

I054-110

July 2019

Plant Wansley
Ash Pond
Site Location Map

FIGURE 1

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

LEGEND

EXISTING	DESCRIPTION
WGWA-3	MONITORING WELL

700 0 350 700 1,400

SCALE: 1" = 700' (IN FEET)

N

WGWA-18
WGWA-7
WGWC-8
WGWC-9
WGWA-5
WGWA-6
WGWC-19
WGWA-4
WGWC-14A
WGWC-12
WGWC-11
WGWC-10
WGWA-3
WGWC-15
WGWC-16
WGWC-13
WGWC-17

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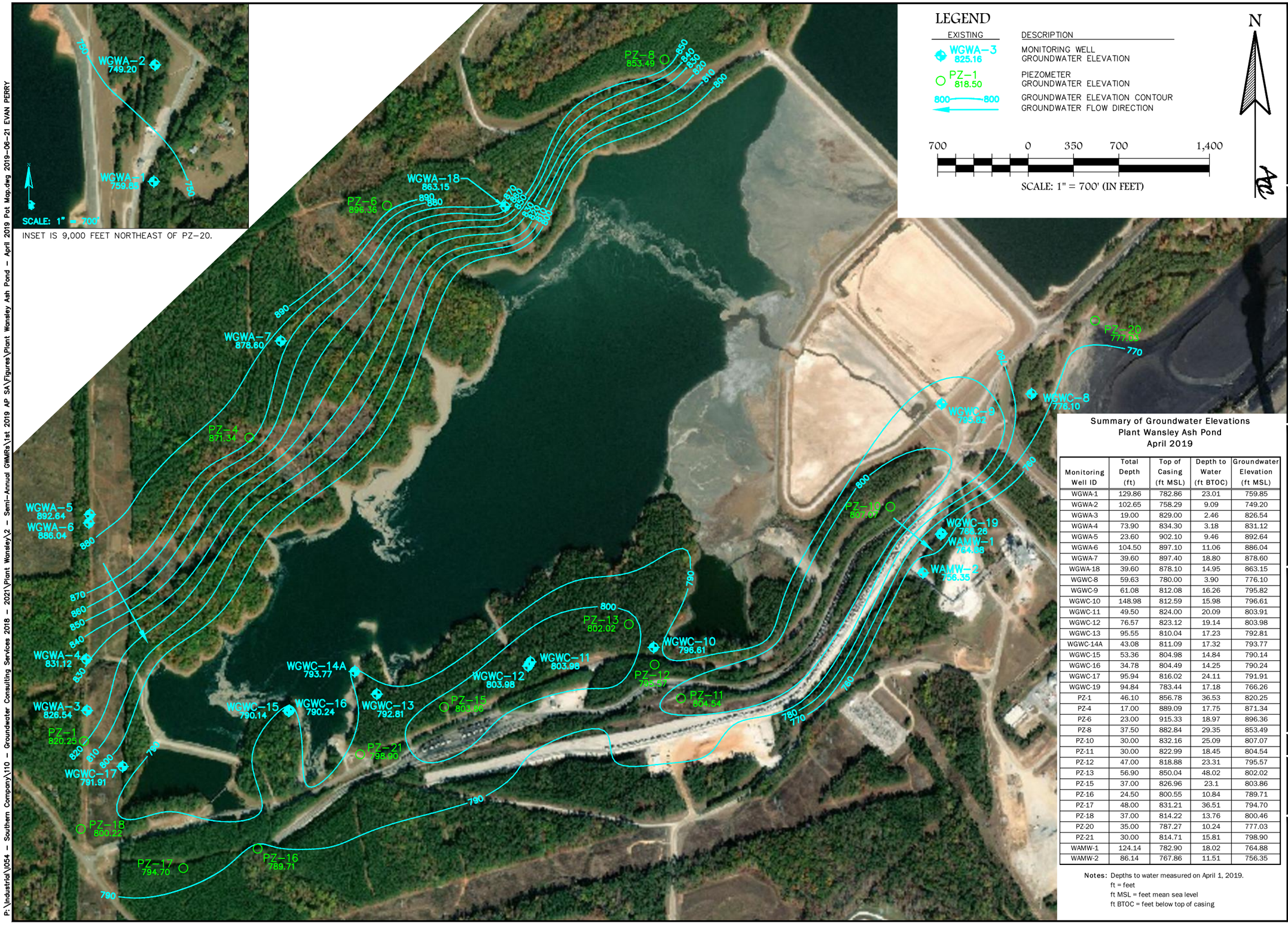
MONITORING
WELL NETWORK

FIGURE 2



Summary of Groundwater Elevations
Plant Wansley Ash Pond
April 2019

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	23.01	759.85
WGWA-2	102.65	758.29	9.09	749.20
WGWA-3	19.00	829.00	2.46	826.54
WGWA-4	73.90	834.30	3.18	831.12
WGWA-5	23.60	902.10	9.46	892.64
WGWA-6	104.50	897.10	11.06	886.04
WGWA-7	39.60	897.40	18.80	878.60
WGWA-18	39.60	878.10	14.95	863.15
WGWC-8	59.63	780.00	3.90	776.10
WGWC-9	61.08	812.08	16.26	795.82
WGWC-10	148.98	812.59	15.98	796.61
WGWC-11	49.50	824.00	20.09	803.91
WGWC-12	76.57	823.12	19.14	803.98
WGWC-13	95.55	810.04	17.23	792.81
WGWC-14A	43.08	811.09	17.32	793.77
WGWC-15	53.36	804.98	14.84	790.14
WGWC-16	34.78	804.49	14.25	790.24
WGWC-17	95.94	816.02	24.11	791.91
WGWC-19	94.84	783.44	17.18	766.26
PZ-1	46.10	856.78	36.53	820.25
PZ-4	17.00	889.09	17.75	871.34
PZ-6	23.00	915.33	18.97	896.36
PZ-8	37.50	882.84	29.35	853.49
PZ-10	30.00	832.16	25.09	807.07
PZ-11	30.00	822.99	18.45	804.54
PZ-12	47.00	818.88	23.31	795.57
PZ-13	56.90	850.04	48.02	802.02
PZ-15	37.00	826.96	23.1	803.86
PZ-16	24.50	800.55	10.84	789.71
PZ-17	48.00	831.21	36.51	794.70
PZ-18	37.00	814.22	13.76	800.46
PZ-20	35.00	787.27	10.24	777.03
PZ-21	30.00	814.71	15.81	798.90
WAMW-1	124.14	782.90	18.02	764.88
WAMW-2	86.14	767.86	11.51	756.35

Notes: Depths to water measured on April 1, 2019.
ft = feet
ft MSL = feet mean sea level
ft BTOC = feet below top of casing

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I054-110
July 2019

APRIL 2019
POTENTIOMETRIC
SURFACE
CONTOUR MAP

FIGURE 3

P:\Industrial\054 - Southern Company\110 - Groundwater Consulting Services 2018 - 2021\Plant Wansley\2 - Semi-Annual GWMRs\1st 2019 AP SA\Figures\Plant Wansley Ash Pond - April 2019 Pot Map.dwg 2019-06-21 EVAN PERRY

APPENDICES

APPENDIX A

Laboratory Analytical and Field Sampling Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

TestAmerica Job ID: 180-87210-1
Client Project/Site: CCR - Plant Wansley

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Veronica Bortot

Authorized for release by:
3/19/2019 3:16:55 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-87210-1

Laboratory: TestAmerica Pittsburgh

Narrative

Job Narrative
180-87210-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.6º C, 1.9º C, 1.9º C, 2.4º C and 2.6º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. No sample date on COC or containers for samples 11 and 22. Sample date of 2/25/19 used for login purposes.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWA-3 (180-87210-2). The container labels list WGWA-3, while the COC lists WGWA-2. Sample time on containers agreed with COC; sample logged per COC.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

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

TestAmerica Job ID: 180-87210-1

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
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)

Accreditation/Certification Summary

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

TestAmerica Job ID: 180-87210-1

Laboratory: TestAmerica Pittsburgh

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
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-19
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-19 *
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	01-28-19 *
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19
Texas	NELAP	6	T104704528-15-2	03-31-19 *
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

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

Sample Summary

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

TestAmerica Job ID: 180-87210-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-87210-1	WGWA-2	Ground Water	02/25/19 15:20	03/01/19 09:10
180-87210-2	WGWA-3	Ground Water	02/26/19 10:35	03/01/19 09:10
180-87210-3	WGWA-4	Ground Water	02/26/19 12:10	03/01/19 09:10
180-87210-4	WGWA-7	Water	02/26/19 14:00	03/01/19 09:10
180-87210-5	WGWA-1	Water	02/25/19 15:05	03/01/19 09:10
180-87210-6	WGWA-5	Water	02/26/19 13:15	03/01/19 09:10
180-87210-7	WGWA-6	Water	02/26/19 14:15	03/01/19 09:10
180-87210-8	WGWA-18	Water	02/26/19 15:15	03/01/19 09:10
180-87210-9	WGWC-17	Water	02/26/19 15:10	03/01/19 09:10
180-87210-10	WGWC-13	Water	02/27/19 11:00	03/01/19 09:10
180-87210-11	DUP-1	Water	02/25/19 00:00	03/01/19 09:10
180-87210-12	FB-1-2-26-19	Water	02/26/19 15:00	03/01/19 09:10
180-87210-13	EB-1-2-27-19	Water	02/27/19 09:50	03/01/19 09:10
180-87210-14	WGWC-14A	Water	02/27/19 11:55	03/01/19 09:10
180-87210-15	WGWC-15	Water	02/27/19 13:30	03/01/19 09:10
180-87210-16	WGWC-16	Water	02/27/19 14:30	03/01/19 09:10
180-87210-17	WGWC-8	Water	02/27/19 10:25	03/01/19 09:10
180-87210-18	WGWC-10	Water	02/27/19 11:25	03/01/19 09:10
180-87210-19	WGWC-11	Water	02/27/19 14:30	03/01/19 09:10
180-87210-20	WGWC-12	Water	02/27/19 17:00	03/01/19 09:10
180-87210-21	WGWC-9	Water	02/28/19 10:50	03/01/19 09:10
180-87210-22	DUP-2	Water	02/25/19 00:00	03/01/19 09:10
180-87210-23	WGWC-19	Water	02/28/19 11:25	03/01/19 09:10
180-87210-24	EB-2-2-28-19	Water	02/28/19 11:30	03/01/19 09:10
180-87210-25	FB-2-2-28-19	Water	02/28/19 10:40	03/01/19 09:10

Method Summary

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

TestAmerica Job ID: 180-87210-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PIT
EPA 6020	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

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 PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Client Sample ID: WGWA-2

Date Collected: 02/25/19 15:20
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 10:06	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:14	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:41	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-3

Date Collected: 02/26/19 10:35
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 10:22	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:17	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:44	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-4

Date Collected: 02/26/19 12:10
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 10:38	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:20	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:45	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-7

Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 10:53	MJH	TAL PIT

Lab Chronicle

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

TestAmerica Job ID: 180-87210-1

Client Sample ID: WGWA-7

Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 10:53	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:24	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:46	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-1

Date Collected: 02/25/19 15:05
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 11:41	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:27	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:47	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-5

Date Collected: 02/26/19 13:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 11:57	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:37	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:48	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-6

Date Collected: 02/26/19 14:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 12:13	MJH	TAL PIT

Client Sample ID: WGWA-6

Lab Sample ID: 180-87210-7

Date Collected: 02/26/19 14:15

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 12:13	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:53	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWA-18

Lab Sample ID: 180-87210-8

Date Collected: 02/26/19 15:15

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 12:28	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:44	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:54	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-17

Lab Sample ID: 180-87210-9

Date Collected: 02/26/19 15:10

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 13:16	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272014	03/05/19 11:45	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272199	03/06/19 13:47	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:55	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-13

Lab Sample ID: 180-87210-10

Date Collected: 02/27/19 11:00

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 13:32	MJH	TAL PIT

Client Sample ID: WGWC-13
Date Collected: 02/27/19 11:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272453	03/11/19 13:32	MJH	TAL PIT
	Instrument ID: CHICS2100B									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 11:57	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:56	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: DUP-1
Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272452	03/11/19 14:22	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:00	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:57	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: FB-1-2-26-19
Date Collected: 02/26/19 15:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272452	03/11/19 14:38	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:04	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:58	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: EB-1-2-27-19
Date Collected: 02/27/19 09:50
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 07:56	MJH	TAL PIT

Client Sample ID: EB-1-2-27-19

Lab Sample ID: 180-87210-13
Matrix: Water
Date Collected: 02/27/19 09:50
Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 07:56	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:07	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 15:59	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-14A

Lab Sample ID: 180-87210-14
Matrix: Water
Date Collected: 02/27/19 11:55
Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 08:42	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:10	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 16:00	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-15

Lab Sample ID: 180-87210-15
Matrix: Water
Date Collected: 02/27/19 13:30
Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 08:57	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:14	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 16:01	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-16

Lab Sample ID: 180-87210-16
Matrix: Water
Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 10:29	MJH	TAL PIT

Client Sample ID: WGWC-16

Lab Sample ID: 180-87210-16

Date Collected: 02/27/19 14:30

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 10:29	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:17	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 16:02	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-8

Lab Sample ID: 180-87210-17

Date Collected: 02/27/19 10:25

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 10:45	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:21	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271954	03/05/19 07:54	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 16:07	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-10

Lab Sample ID: 180-87210-18

Date Collected: 02/27/19 11:25

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 09:12	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:31	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:40	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-11

Lab Sample ID: 180-87210-19

Date Collected: 02/27/19 14:30

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:00	MJH	TAL PIT

Client Sample ID: WGWC-11

Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-19

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:00	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:34	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:41	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-12

Date Collected: 02/27/19 17:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:16	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:37	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:42	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-9

Date Collected: 02/28/19 10:50
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-21

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:32	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:41	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:43	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: DUP-2

Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:48	MJH	TAL PIT

Client Sample ID: DUP-2

Lab Sample ID: 180-87210-22

Date Collected: 02/25/19 00:00

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 11:48	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:44	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:44	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: WGWC-19

Lab Sample ID: 180-87210-23

Date Collected: 02/28/19 11:25

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 12:04	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:48	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:48	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: EB-2-2-28-19

Lab Sample ID: 180-87210-24

Date Collected: 02/28/19 11:30

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 08:11	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:51	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:49	KAK	TAL PIT
	Instrument ID: HGY									

Client Sample ID: FB-2-2-28-19

Lab Sample ID: 180-87210-25

Date Collected: 02/28/19 10:40

Matrix: Water

Date Received: 03/01/19 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 08:26	MJH	TAL PIT

Lab Chronicle

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

TestAmerica Job ID: 180-87210-1

Client Sample ID: FB-2-2-28-19

Date Collected: 02/28/19 10:40
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			272533	03/12/19 08:26	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	272017	03/05/19 11:50	NAM	TAL PIT
Total Recoverable	Analysis	EPA 6020		1			272426	03/08/19 12:54	RSK	TAL PIT
	Instrument ID: A									
Total/NA	Prep	7470A			50 mL	50 mL	271955	03/05/19 07:59	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			272176	03/06/19 14:50	KAK	TAL PIT
	Instrument ID: HGY									

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

NAM = Nicole Marfisi

RJR = Ron Rosenbaum

Batch Type: Analysis

KAK = Kayla Kalamasz

MJH = Matthew Hartman

RSK = Robert Kurtz

Client Sample ID: WGWA-2

Date Collected: 02/25/19 15:20
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-1
Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.032**	**J**	0.20	0.026	mg/L			03/11/19 10:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:14	1
Barium	**0.027**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:14	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:14	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:14	1
Cobalt	**0.00083**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:14	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:14	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:14	1
Lead	**0.00019**	**J**	0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:14	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:14	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:14	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:14	1
Lithium	**0.0072**		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:41	1

Client Sample ID: WGWA-3

Date Collected: 02/26/19 10:35
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-2
Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 10:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:17	1
Barium	**0.014**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:17	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:17	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:17	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:17	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:17	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:17	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:17	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:17	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:17	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:17	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:44	1

Client Sample ID: WGWA-4

Lab Sample ID: 180-87210-3

Date Collected: 02/26/19 12:10

Matrix: Ground Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.14**	**J**	0.20	0.026	mg/L			03/11/19 10:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00033**	**J**	0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:20	1
Barium	**0.012**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:20	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:20	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:20	1
Cobalt	**0.00029**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:20	1
Chromium	**0.0021**	**J**	0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:20	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:20	1
Lead	**0.00046**	**J**	0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:20	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:20	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:20	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:20	1
Lithium	**0.0069**		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:20	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:45	1

Client Sample ID: WGWA-7

Lab Sample ID: 180-87210-4

Date Collected: 02/26/19 14:00

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 10:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:24	1
Barium	**0.013**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:24	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:24	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:24	1
Cobalt	**0.00017**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:24	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:24	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:24	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:24	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:24	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:24	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:24	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:24	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:46	1

Client Sample ID: WGWA-1

Lab Sample ID: 180-87210-5
Date Collected: 02/25/19 15:05
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 11:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:27	1
Barium	**0.049**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:27	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:27	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:27	1
Cobalt	**0.00085**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:27	1
Chromium	**0.0016**	**J**	0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:27	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:27	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:27	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:27	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:27	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:27	1
Lithium	**0.0049**	**J**	0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:27	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:47	1

Client Sample ID: WGWA-5

Lab Sample ID: 180-87210-6
Date Collected: 02/26/19 13:15
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 11:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:37	1
Barium	**0.020**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:37	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:37	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:37	1
Cobalt	**0.00060**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:37	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:37	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:37	1
Lead	**0.00028**	**J**	0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:37	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:37	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:37	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:37	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:37	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:48	1

Client Sample ID: WGWA-6

Lab Sample ID: 180-87210-7
Date Collected: 02/26/19 14:15
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.074**	**J**	0.20	0.026	mg/L			03/11/19 12:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:41	1
Barium	**0.011**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:41	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:41	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:41	1
Cobalt	**0.00031**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:41	1
Chromium	**0.0023**	**J**	0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:41	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:41	1
Lead	**0.00037**	**J**	0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:41	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:41	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:41	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:41	1
Lithium	**0.0068**		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:53	1

Client Sample ID: WGWA-18

Lab Sample ID: 180-87210-8
Date Collected: 02/26/19 15:15
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.23**		0.20	0.026	mg/L			03/11/19 12:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00054**	**J**	0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:44	1
Barium	**0.015**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:44	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:44	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:44	1
Cobalt	**0.00026**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:44	1
Chromium	**0.0016**	**J**	0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:44	1
Molybdenum	**0.0019**	**J**	0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:44	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:44	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:44	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:44	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:54	1

Client Sample ID: WGWC-17

Lab Sample ID: 180-87210-9

Date Collected: 02/26/19 15:10

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.068**	**J**	0.20	0.026	mg/L			03/11/19 13:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00050**	**J**	0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 13:47	1
Barium	**0.012**		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:47	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 13:47	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 13:47	1
Cobalt	**0.00086**	**J**	0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 13:47	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 13:47	1
Molybdenum	**0.0032**	**J**	0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 13:47	1
Lead	**0.00033**	**J**	0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 13:47	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 13:47	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 13:47	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 13:47	1
Lithium	**0.0063**		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 13:47	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:55	1

Client Sample ID: WGWC-13

Lab Sample ID: 180-87210-10

Date Collected: 02/27/19 11:00

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.25**		0.20	0.026	mg/L			03/11/19 13:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00036**	**J**	0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 11:57	1
Barium	**0.054**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 11:57	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 11:57	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 11:57	1
Cobalt	**0.00013**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 11:57	1
Chromium	**0.0018**	**J**	0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 11:57	1
Molybdenum	**0.0019**	**J**	0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 11:57	1
Lead	**0.00068**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 11:57	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 11:57	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 11:57	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 11:57	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 11:57	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:56	1

Client Sample ID: DUP-1

Lab Sample ID: 180-87210-11
Matrix: Water
Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:00	1
Barium	**0.014**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:00	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:00	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:00	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:00	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:00	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:00	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:00	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:00	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:00	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:00	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:00	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:57	1

Client Sample ID: FB-1-2-26-19

Lab Sample ID: 180-87210-12
Matrix: Water
Date Collected: 02/26/19 15:00
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:04	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:04	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:04	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:04	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:04	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:04	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:04	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:04	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:04	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:04	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:04	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:04	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:58	1

Client Sample ID: EB-1-2-27-19

Lab Sample ID: 180-87210-13
Date Collected: 02/27/19 09:50
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/12/19 07:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:07	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:07	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:07	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:07	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:07	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:07	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:07	1
Lead	**0.00025**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:07	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:07	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:07	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:07	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:07	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:59	1

Client Sample ID: WGWC-14A

Lab Sample ID: 180-87210-14
Date Collected: 02/27/19 11:55
Matrix: Water
Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/12/19 08:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:10	1
Barium	**0.028**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:10	1
Beryllium	**0.00017**	**J**	0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:10	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:10	1
Cobalt	**0.0049**		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:10	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:10	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:10	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:10	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:10	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:10	1
Thallium	**0.00016**	**J**	0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:10	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:10	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 16:00	1

Client Sample ID: WGWC-15

Lab Sample ID: 180-87210-15

Date Collected: 02/27/19 13:30

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.81**		0.20	0.026	mg/L			03/12/19 08:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0015**		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:14	1
Barium	**0.023**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:14	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:14	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:14	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:14	1
Chromium	**0.0015**	**J**	0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:14	1
Molybdenum	**0.0061**		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:14	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:14	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:14	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:14	1
Lithium	**0.0055**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:14	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 16:01	1

Client Sample ID: WGWC-16

Lab Sample ID: 180-87210-16

Date Collected: 02/27/19 14:30

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.47**		0.20	0.026	mg/L			03/12/19 10:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00046**	**J**	0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:17	1
Barium	**0.028**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:17	1
Beryllium	**0.00022**	**J**	0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:17	1
Cadmium	**0.00055**	**J**	0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:17	1
Cobalt	**0.00084**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:17	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:17	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:17	1
Lead	**0.00014**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:17	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:17	1
Selenium	**0.0081**		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:17	1
Thallium	**0.00015**	**J**	0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:17	1
Lithium	**0.0075**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:17	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 16:02	1

Client Sample ID: WGWC-8

Lab Sample ID: 180-87210-17

Date Collected: 02/27/19 10:25

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.054**	**J**	0.20	0.026	mg/L			03/12/19 10:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00047**	**J**	0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:21	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:21	1
Beryllium	**0.0021**	**J**	0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:21	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:21	1
Cobalt	**0.0019**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:21	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:21	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:21	1
Lead	**0.00017**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:21	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:21	1
Selenium	**0.0035**		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:21	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:21	1
Lithium	**0.014**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:21	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 16:07	1

Client Sample ID: WGWC-10

Lab Sample ID: 180-87210-18

Date Collected: 02/27/19 11:25

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.21**		0.20	0.026	mg/L			03/12/19 09:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:31	1
Barium	**0.040**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:31	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:31	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:31	1
Cobalt	**0.00050**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:31	1
Chromium	**0.0031**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:31	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:31	1
Lead	**0.00023**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:31	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:31	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:31	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:31	1
Lithium	**0.0068**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:31	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:40	1

Client Sample ID: WGWC-11

Lab Sample ID: 180-87210-19

Date Collected: 02/27/19 14:30

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.047**	**J**	0.20	0.026	mg/L			03/12/19 11:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:34	1
Barium	**0.040**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:34	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:34	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:34	1
Cobalt	**0.0022**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:34	1
Chromium	**0.0021**	**J**	0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:34	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:34	1
Lead	**0.00058**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:34	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:34	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:34	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:34	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:34	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:41	1

Client Sample ID: WGWC-12

Lab Sample ID: 180-87210-20

Date Collected: 02/27/19 17:00

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.060**	**J**	0.20	0.026	mg/L			03/12/19 11:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:37	1
Barium	**0.016**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:37	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:37	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:37	1
Cobalt	**0.00060**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:37	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:37	1
Molybdenum	**0.00063**	**J**	0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:37	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:37	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:37	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:37	1
Lithium	**0.0068**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:37	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:42	1

Client Sample ID: WGWC-9

Lab Sample ID: 180-87210-21

Date Collected: 02/28/19 10:50

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.4**		0.20	0.026	mg/L			03/12/19 11:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:41	1
Barium	**0.0023**	**J**	0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:41	1
Beryllium	**0.00031**	**J**	0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:41	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:41	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:41	1
Chromium	**0.0025**		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:41	1
Molybdenum	**0.0053**		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:41	1
Lead	**0.00014**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:41	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:41	1
Selenium	**0.0027**		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:41	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:41	1
Lithium	**0.037**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:41	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:43	1

Client Sample ID: DUP-2

Lab Sample ID: 180-87210-22

Date Collected: 02/25/19 00:00

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.27**		0.20	0.026	mg/L			03/12/19 11:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:44	1
Barium	**0.0015**	**J**	0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:44	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:44	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:44	1
Cobalt	**0.00018**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:44	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:44	1
Molybdenum	**0.0013**	**J**	0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:44	1
Lead	**0.00014**	**J**	0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:44	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:44	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:44	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:44	1
Lithium	**0.045**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:44	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:44	1

Client Sample ID: WGWC-19

Lab Sample ID: 180-87210-23

Date Collected: 02/28/19 11:25

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.28**		0.20	0.026	mg/L			03/12/19 12:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:48	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:48	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:48	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:48	1
Cobalt	**0.00019**	**J**	0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:48	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:48	1
Molybdenum	**0.0013**	**J**	0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:48	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:48	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:48	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:48	1
Lithium	**0.045**		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:48	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:48	1

Client Sample ID: EB-2-2-28-19

Lab Sample ID: 180-87210-24

Date Collected: 02/28/19 11:30

Matrix: Water

Date Received: 03/01/19 09:10

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/12/19 08:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:51	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:51	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:51	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:51	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:51	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:51	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:51	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:51	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:51	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:51	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:51	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:51	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:49	1

Client Sample ID: FB-2-2-28-19
Date Collected: 02/28/19 10:40
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-25
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/12/19 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 12:54	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:54	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 12:54	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 12:54	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 12:54	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 12:54	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 12:54	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 12:54	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 12:54	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 12:54	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 12:54	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 12:54	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:50	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-272452/6
Matrix: Water
Analysis Batch: 272452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 04:59	1

Lab Sample ID: LCS 180-272452/5
Matrix: Water
Analysis Batch: 272452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.26		mg/L		101	90 - 110

Lab Sample ID: MB 180-272453/6
Matrix: Water
Analysis Batch: 272453

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/11/19 05:04	1

Lab Sample ID: LCS 180-272453/5
Matrix: Water
Analysis Batch: 272453

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.25		mg/L		100	90 - 110

Lab Sample ID: 180-87210-8 MS
Matrix: Water
Analysis Batch: 272453

Client Sample ID: WGWA-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.23		1.25	1.51		mg/L		102	80 - 120

Lab Sample ID: 180-87210-8 MSD
Matrix: Water
Analysis Batch: 272453

Client Sample ID: WGWA-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.23		1.25	1.50		mg/L		102	80 - 120	0	20

Lab Sample ID: MB 180-272533/6
Matrix: Water
Analysis Batch: 272533

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.20	0.026	mg/L			03/12/19 06:06	1

Lab Sample ID: LCS 180-272533/5
Matrix: Water
Analysis Batch: 272533

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.25	1.29		mg/L		103	90 - 110

Lab Sample ID: 180-87210-18 MS
Matrix: Water
Analysis Batch: 272533

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.21		1.25	1.41		mg/L		96	80 - 120

Lab Sample ID: 180-87210-18 MSD
Matrix: Water
Analysis Batch: 272533

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.21		1.25	1.40		mg/L		95	80 - 120	1	20

Method: EPA 6020 - Metals (ICP/MS)

Lab Sample ID: MB 180-272014/1-A
Matrix: Water
Analysis Batch: 272199

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:45	03/06/19 11:54	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 11:54	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:45	03/06/19 11:54	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:45	03/06/19 11:54	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:45	03/06/19 11:54	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:45	03/06/19 11:54	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:45	03/06/19 11:54	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:45	03/06/19 11:54	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:45	03/06/19 11:54	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:45	03/06/19 11:54	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:45	03/06/19 11:54	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:45	03/06/19 11:54	1

Lab Sample ID: LCS 180-272014/2-A
Matrix: Water
Analysis Batch: 272199

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0400	0.0392		mg/L		98	80 - 120
Barium	2.00	2.12		mg/L		106	80 - 120
Beryllium	0.0500	0.0537		mg/L		107	80 - 120
Cadmium	0.0500	0.0540		mg/L		108	80 - 120
Cobalt	0.500	0.496		mg/L		99	80 - 120
Chromium	0.200	0.216		mg/L		108	80 - 120
Molybdenum	1.00	1.11		mg/L		111	80 - 120
Lead	0.0200	0.0211		mg/L		105	80 - 120
Antimony	0.500	0.536		mg/L		107	80 - 120
Selenium	0.0100	0.00963		mg/L		96	80 - 120
Thallium	0.0500	0.0533		mg/L		107	80 - 120
Lithium	0.0500	0.0562		mg/L		112	80 - 120

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

Lab Sample ID: MB 180-272017/1-A
Matrix: Water
Analysis Batch: 272426

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 272017

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00032		0.0013	0.00032	mg/L		03/05/19 11:50	03/08/19 11:50	1
Barium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 11:50	1
Beryllium	<0.00016		0.0025	0.00016	mg/L		03/05/19 11:50	03/08/19 11:50	1
Cadmium	<0.00013		0.0025	0.00013	mg/L		03/05/19 11:50	03/08/19 11:50	1
Cobalt	<0.000075		0.0025	0.000075	mg/L		03/05/19 11:50	03/08/19 11:50	1
Chromium	<0.0015		0.0025	0.0015	mg/L		03/05/19 11:50	03/08/19 11:50	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		03/05/19 11:50	03/08/19 11:50	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/05/19 11:50	03/08/19 11:50	1
Antimony	<0.00038		0.0025	0.00038	mg/L		03/05/19 11:50	03/08/19 11:50	1
Selenium	<0.00081		0.0013	0.00081	mg/L		03/05/19 11:50	03/08/19 11:50	1
Thallium	<0.00013		0.00050	0.00013	mg/L		03/05/19 11:50	03/08/19 11:50	1
Lithium	<0.0031		0.0050	0.0031	mg/L		03/05/19 11:50	03/08/19 11:50	1

Lab Sample ID: LCS 180-272017/2-A
Matrix: Water
Analysis Batch: 272426

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 272017

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0400	0.0371		mg/L		93	80 - 120
Barium	2.00	1.99		mg/L		100	80 - 120
Beryllium	0.0500	0.0490		mg/L		98	80 - 120
Cadmium	0.0500	0.0530		mg/L		106	80 - 120
Cobalt	0.500	0.470		mg/L		94	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Molybdenum	1.00	1.05		mg/L		105	80 - 120
Lead	0.0200	0.0212		mg/L		106	80 - 120
Antimony	0.500	0.528		mg/L		106	80 - 120
Selenium	0.0100	0.0109		mg/L		109	80 - 120
Thallium	0.0500	0.0519		mg/L		104	80 - 120
Lithium	0.0500	0.0490		mg/L		98	80 - 120

Lab Sample ID: 180-87210-25 MS
Matrix: Water
Analysis Batch: 272426

Client Sample ID: FB-2-2-28-19
Prep Type: Total Recoverable
Prep Batch: 272017

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	<0.00032		0.0400	0.0352		mg/L		88	75 - 125
Barium	<0.0015		2.00	1.91		mg/L		95	75 - 125
Beryllium	<0.00016		0.0500	0.0463		mg/L		93	75 - 125
Cadmium	<0.00013		0.0500	0.0504		mg/L		101	75 - 125
Cobalt	<0.000075		0.500	0.444		mg/L		89	75 - 125
Chromium	<0.0015		0.200	0.198		mg/L		99	75 - 125
Molybdenum	<0.00061		1.00	0.994		mg/L		99	75 - 125
Lead	<0.00013		0.0200	0.0196		mg/L		98	75 - 125
Antimony	<0.00038		0.500	0.496		mg/L		99	75 - 125
Selenium	<0.00081		0.0100	0.0105		mg/L		105	75 - 125
Thallium	<0.00013		0.0500	0.0480		mg/L		96	75 - 125
Lithium	<0.0031		0.0500	0.0476		mg/L		95	75 - 125

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

Lab Sample ID: 180-87210-25 MSD
Matrix: Water
Analysis Batch: 272426

Client Sample ID: FB-2-2-28-19
Prep Type: Total Recoverable
Prep Batch: 272017

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	<0.00032		0.0400	0.0382		mg/L		96	75 - 125	8	20
Barium	<0.0015		2.00	2.03		mg/L		101	75 - 125	6	20
Beryllium	<0.00016		0.0500	0.0510		mg/L		102	75 - 125	10	20
Cadmium	<0.00013		0.0500	0.0517		mg/L		103	75 - 125	3	20
Cobalt	<0.000075		0.500	0.479		mg/L		96	75 - 125	8	20
Chromium	<0.0015		0.200	0.209		mg/L		105	75 - 125	5	20
Molybdenum	<0.00061		1.00	1.05		mg/L		105	75 - 125	5	20
Lead	<0.00013		0.0200	0.0207		mg/L		103	75 - 125	5	20
Antimony	<0.00038		0.500	0.525		mg/L		105	75 - 125	6	20
Selenium	<0.00081		0.0100	0.0107		mg/L		107	75 - 125	2	20
Thallium	<0.00013		0.0500	0.0492		mg/L		98	75 - 125	3	20
Lithium	<0.0031		0.0500	0.0500		mg/L		100	75 - 125	5	20

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-271954/1-A
Matrix: Water
Analysis Batch: 272176

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:54	03/06/19 15:24	1

Lab Sample ID: LCS 180-271954/2-A
Matrix: Water
Analysis Batch: 272176

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271954

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00250		mg/L		100	80 - 120

Lab Sample ID: 180-87210-1 MS
Matrix: Ground Water
Analysis Batch: 272176

Client Sample ID: WGWA-2
Prep Type: Total/NA
Prep Batch: 271954

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00010		0.00100	0.000911		mg/L		91	75 - 125

Lab Sample ID: 180-87210-1 MSD
Matrix: Ground Water
Analysis Batch: 272176

Client Sample ID: WGWA-2
Prep Type: Total/NA
Prep Batch: 271954

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00010		0.00100	0.000900		mg/L		90	75 - 125	1	20

Lab Sample ID: MB 180-271955/1-A
Matrix: Water
Analysis Batch: 272176

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/05/19 07:59	03/06/19 14:20	1

QC Sample Results

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

TestAmerica Job ID: 180-87210-1

Lab Sample ID: LCS 180-271955/2-A
Matrix: Water
Analysis Batch: 272176

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271955

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00249		mg/L		100	80 - 120		

HPLC/IC

Analysis Batch: 272452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-11	DUP-1	Total/NA	Water	300.0	
180-87210-12	FB-1-2-26-19	Total/NA	Water	300.0	
MB 180-272452/6	Method Blank	Total/NA	Water	300.0	
LCS 180-272452/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 272453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total/NA	Ground Water	300.0	
180-87210-2	WGWA-3	Total/NA	Ground Water	300.0	
180-87210-3	WGWA-4	Total/NA	Ground Water	300.0	
180-87210-4	WGWA-7	Total/NA	Water	300.0	
180-87210-5	WGWA-1	Total/NA	Water	300.0	
180-87210-6	WGWA-5	Total/NA	Water	300.0	
180-87210-7	WGWA-6	Total/NA	Water	300.0	
180-87210-8	WGWA-18	Total/NA	Water	300.0	
180-87210-9	WGWC-17	Total/NA	Water	300.0	
180-87210-10	WGWC-13	Total/NA	Water	300.0	
MB 180-272453/6	Method Blank	Total/NA	Water	300.0	
LCS 180-272453/5	Lab Control Sample	Total/NA	Water	300.0	
180-87210-8 MS	WGWA-18	Total/NA	Water	300.0	
180-87210-8 MSD	WGWA-18	Total/NA	Water	300.0	

Analysis Batch: 272533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-13	EB-1-2-27-19	Total/NA	Water	300.0	
180-87210-14	WGWC-14A	Total/NA	Water	300.0	
180-87210-15	WGWC-15	Total/NA	Water	300.0	
180-87210-16	WGWC-16	Total/NA	Water	300.0	
180-87210-17	WGWC-8	Total/NA	Water	300.0	
180-87210-18	WGWC-10	Total/NA	Water	300.0	
180-87210-19	WGWC-11	Total/NA	Water	300.0	
180-87210-20	WGWC-12	Total/NA	Water	300.0	
180-87210-21	WGWC-9	Total/NA	Water	300.0	
180-87210-22	DUP-2	Total/NA	Water	300.0	
180-87210-23	WGWC-19	Total/NA	Water	300.0	
180-87210-24	EB-2-2-28-19	Total/NA	Water	300.0	
180-87210-25	FB-2-2-28-19	Total/NA	Water	300.0	
MB 180-272533/6	Method Blank	Total/NA	Water	300.0	
LCS 180-272533/5	Lab Control Sample	Total/NA	Water	300.0	
180-87210-18 MS	WGWC-10	Total/NA	Water	300.0	
180-87210-18 MSD	WGWC-10	Total/NA	Water	300.0	

Metals

Prep Batch: 271954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total/NA	Ground Water	7470A	
180-87210-2	WGWA-3	Total/NA	Ground Water	7470A	
180-87210-3	WGWA-4	Total/NA	Ground Water	7470A	
180-87210-4	WGWA-7	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 271954 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-5	WGWA-1	Total/NA	Water	7470A	
180-87210-6	WGWA-5	Total/NA	Water	7470A	
180-87210-7	WGWA-6	Total/NA	Water	7470A	
180-87210-8	WGWA-18	Total/NA	Water	7470A	
180-87210-9	WGWC-17	Total/NA	Water	7470A	
180-87210-10	WGWC-13	Total/NA	Water	7470A	
180-87210-11	DUP-1	Total/NA	Water	7470A	
180-87210-12	FB-1-2-26-19	Total/NA	Water	7470A	
180-87210-13	EB-1-2-27-19	Total/NA	Water	7470A	
180-87210-14	WGWC-14A	Total/NA	Water	7470A	
180-87210-15	WGWC-15	Total/NA	Water	7470A	
180-87210-16	WGWC-16	Total/NA	Water	7470A	
180-87210-17	WGWC-8	Total/NA	Water	7470A	
MB 180-271954/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-271954/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-87210-1 MS	WGWA-2	Total/NA	Ground Water	7470A	
180-87210-1 MSD	WGWA-2	Total/NA	Ground Water	7470A	

Prep Batch: 271955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-18	WGWC-10	Total/NA	Water	7470A	
180-87210-19	WGWC-11	Total/NA	Water	7470A	
180-87210-20	WGWC-12	Total/NA	Water	7470A	
180-87210-21	WGWC-9	Total/NA	Water	7470A	
180-87210-22	DUP-2	Total/NA	Water	7470A	
180-87210-23	WGWC-19	Total/NA	Water	7470A	
180-87210-24	EB-2-2-28-19	Total/NA	Water	7470A	
180-87210-25	FB-2-2-28-19	Total/NA	Water	7470A	
MB 180-271955/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-271955/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 272014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total Recoverable	Ground Water	3005A	
180-87210-2	WGWA-3	Total Recoverable	Ground Water	3005A	
180-87210-3	WGWA-4	Total Recoverable	Ground Water	3005A	
180-87210-4	WGWA-7	Total Recoverable	Water	3005A	
180-87210-5	WGWA-1	Total Recoverable	Water	3005A	
180-87210-6	WGWA-5	Total Recoverable	Water	3005A	
180-87210-7	WGWA-6	Total Recoverable	Water	3005A	
180-87210-8	WGWA-18	Total Recoverable	Water	3005A	
180-87210-9	WGWC-17	Total Recoverable	Water	3005A	
MB 180-272014/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-272014/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 272017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-10	WGWC-13	Total Recoverable	Water	3005A	
180-87210-11	DUP-1	Total Recoverable	Water	3005A	
180-87210-12	FB-1-2-26-19	Total Recoverable	Water	3005A	
180-87210-13	EB-1-2-27-19	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 272017 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-14	WGWC-14A	Total Recoverable	Water	3005A	
180-87210-15	WGWC-15	Total Recoverable	Water	3005A	
180-87210-16	WGWC-16	Total Recoverable	Water	3005A	
180-87210-17	WGWC-8	Total Recoverable	Water	3005A	
180-87210-18	WGWC-10	Total Recoverable	Water	3005A	
180-87210-19	WGWC-11	Total Recoverable	Water	3005A	
180-87210-20	WGWC-12	Total Recoverable	Water	3005A	
180-87210-21	WGWC-9	Total Recoverable	Water	3005A	
180-87210-22	DUP-2	Total Recoverable	Water	3005A	
180-87210-23	WGWC-19	Total Recoverable	Water	3005A	
180-87210-24	EB-2-2-28-19	Total Recoverable	Water	3005A	
180-87210-25	FB-2-2-28-19	Total Recoverable	Water	3005A	
MB 180-272017/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-272017/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-87210-25 MS	FB-2-2-28-19	Total Recoverable	Water	3005A	
180-87210-25 MSD	FB-2-2-28-19	Total Recoverable	Water	3005A	

Analysis Batch: 272176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total/NA	Ground Water	EPA 7470A	271954
180-87210-2	WGWA-3	Total/NA	Ground Water	EPA 7470A	271954
180-87210-3	WGWA-4	Total/NA	Ground Water	EPA 7470A	271954
180-87210-4	WGWA-7	Total/NA	Water	EPA 7470A	271954
180-87210-5	WGWA-1	Total/NA	Water	EPA 7470A	271954
180-87210-6	WGWA-5	Total/NA	Water	EPA 7470A	271954
180-87210-7	WGWA-6	Total/NA	Water	EPA 7470A	271954
180-87210-8	WGWA-18	Total/NA	Water	EPA 7470A	271954
180-87210-9	WGWC-17	Total/NA	Water	EPA 7470A	271954
180-87210-10	WGWC-13	Total/NA	Water	EPA 7470A	271954
180-87210-11	DUP-1	Total/NA	Water	EPA 7470A	271954
180-87210-12	FB-1-2-26-19	Total/NA	Water	EPA 7470A	271954
180-87210-13	EB-1-2-27-19	Total/NA	Water	EPA 7470A	271954
180-87210-14	WGWC-14A	Total/NA	Water	EPA 7470A	271954
180-87210-15	WGWC-15	Total/NA	Water	EPA 7470A	271954
180-87210-16	WGWC-16	Total/NA	Water	EPA 7470A	271954
180-87210-17	WGWC-8	Total/NA	Water	EPA 7470A	271954
180-87210-18	WGWC-10	Total/NA	Water	EPA 7470A	271955
180-87210-19	WGWC-11	Total/NA	Water	EPA 7470A	271955
180-87210-20	WGWC-12	Total/NA	Water	EPA 7470A	271955
180-87210-21	WGWC-9	Total/NA	Water	EPA 7470A	271955
180-87210-22	DUP-2	Total/NA	Water	EPA 7470A	271955
180-87210-23	WGWC-19	Total/NA	Water	EPA 7470A	271955
180-87210-24	EB-2-2-28-19	Total/NA	Water	EPA 7470A	271955
180-87210-25	FB-2-2-28-19	Total/NA	Water	EPA 7470A	271955
MB 180-271954/1-A	Method Blank	Total/NA	Water	EPA 7470A	271954
MB 180-271955/1-A	Method Blank	Total/NA	Water	EPA 7470A	271955
LCS 180-271954/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	271954
LCS 180-271955/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	271955
180-87210-1 MS	WGWA-2	Total/NA	Ground Water	EPA 7470A	271954
180-87210-1 MSD	WGWA-2	Total/NA	Ground Water	EPA 7470A	271954

Metals (Continued)

Analysis Batch: 272199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total Recoverable	Ground Water	EPA 6020	272014
180-87210-2	WGWA-3	Total Recoverable	Ground Water	EPA 6020	272014
180-87210-3	WGWA-4	Total Recoverable	Ground Water	EPA 6020	272014
180-87210-4	WGWA-7	Total Recoverable	Water	EPA 6020	272014
180-87210-5	WGWA-1	Total Recoverable	Water	EPA 6020	272014
180-87210-6	WGWA-5	Total Recoverable	Water	EPA 6020	272014
180-87210-7	WGWA-6	Total Recoverable	Water	EPA 6020	272014
180-87210-8	WGWA-18	Total Recoverable	Water	EPA 6020	272014
180-87210-9	WGWC-17	Total Recoverable	Water	EPA 6020	272014
MB 180-272014/1-A	Method Blank	Total Recoverable	Water	EPA 6020	272014
LCS 180-272014/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	272014

Analysis Batch: 272426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-10	WGWC-13	Total Recoverable	Water	EPA 6020	272017
180-87210-11	DUP-1	Total Recoverable	Water	EPA 6020	272017
180-87210-12	FB-1-2-26-19	Total Recoverable	Water	EPA 6020	272017
180-87210-13	EB-1-2-27-19	Total Recoverable	Water	EPA 6020	272017
180-87210-14	WGWC-14A	Total Recoverable	Water	EPA 6020	272017
180-87210-15	WGWC-15	Total Recoverable	Water	EPA 6020	272017
180-87210-16	WGWC-16	Total Recoverable	Water	EPA 6020	272017
180-87210-17	WGWC-8	Total Recoverable	Water	EPA 6020	272017
180-87210-18	WGWC-10	Total Recoverable	Water	EPA 6020	272017
180-87210-19	WGWC-11	Total Recoverable	Water	EPA 6020	272017
180-87210-20	WGWC-12	Total Recoverable	Water	EPA 6020	272017
180-87210-21	WGWC-9	Total Recoverable	Water	EPA 6020	272017
180-87210-22	DUP-2	Total Recoverable	Water	EPA 6020	272017
180-87210-23	WGWC-19	Total Recoverable	Water	EPA 6020	272017
180-87210-24	EB-2-2-28-19	Total Recoverable	Water	EPA 6020	272017
180-87210-25	FB-2-2-28-19	Total Recoverable	Water	EPA 6020	272017
MB 180-272017/1-A	Method Blank	Total Recoverable	Water	EPA 6020	272017
LCS 180-272017/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020	272017
180-87210-25 MS	FB-2-2-28-19	Total Recoverable	Water	EPA 6020	272017
180-87210-25 MSD	FB-2-2-28-19	Total Recoverable	Water	EPA 6020	272017

TestAmerica Pittsburgh
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Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

681-Atlanta

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUA, J. Benistad	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:

Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:
City: Atlanta	TAT Requested (days):
State, Zip: GA, 30308	
Phone: 404-506-7239	PO #: SCS10382606
Email: JABRAHAM@SOUTHERNCO.COM	WO #:
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922
Site: Georgia	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
WGWA-2	2-25-19	1520	G	Water	X	X	✓	✓	✓	3	
WGWA-3	2-26-19	1035	G	Water	X	X	✓	✓	✓	3	
WGWA-4	2-26-19	1210	G	Water	X	X	✓	✓	✓	3	
WGWA-7	2-26-19	1400	G	Water	X	X	✓	✓	✓	3	
WGWA-1	2-25-19	1505	G	Water	X	X	✓	✓	✓	3	
WGWA-5	2-26-19	1315	G	Water	X	X	✓	✓	✓	3	
WGWA-6	2-26-19	1415	G	Water	X	X	✓	✓	✓	3	
WGWA-18	2-26-19	1515	G	Water	X	X	✓	✓	✓	3	
WGWC-17	2-26-19	1510	G	Water	X	X	✓	✓	✓	3	
WGWC-13	2-27-19	1100	G	Water	X	X	✓	✓	✓	3	
DUP-1	—	—	G	Water	N	N	✓	✓	✓	3	

180-87210 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 3/1/19				
Relinquished by:	Date/Time: 2/28/19	1345	Company ACC	Received by:	Date/Time: 2/28/19 0710	Company
Relinquished by: 2/28/19	Date/Time:	1600	Company TA	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:		Company	Received by:	Date/Time:	Company

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

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

681-Atlanta

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUA J. BEASSFORD	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:
Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7239	PO #: SCS10382606			
Email: JABRAHAM@SOUTHERNCO.COM	WO #:			
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
FB-1-2-26-19	2-26-19	1500	G	Water	X	X	✓	✓	✓	3	
~~EB-2~~ EB-1-2-27-19	2-27-19	0950	G	Water	X	X	✓	✓	✓	3	
WGWC-14A	2-27-19	1155	G	Water	X	X	✓	✓	✓	3	
WGWC-15	2-27-19	1330	G	Water	X	X	✓	✓	✓	3	
WGWC-16	2-27-19	1430	G	Water	X	X	✓	✓	✓	3	
WGWC-8	2-28-19	1035	G	Water	X	X	✓	✓	✓	3	
WGWC-10	2-27-19	1125	G	Water	X	X	✓	✓	✓	3	
WGWC-11	2-27-19	1430	G	Water	X	X	✓	✓	✓	3	
WGWC-12	2-27-19	1700	G	Water	X	X	✓	✓	✓	3	
WGWC-9	2-28-19	1050	G	Water	X	X	✓	✓	✓	3	
DUP-2	—	—	G	Water	X	X	✓	✓	✓	3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 2/28/19 1345	Company ACC	Received by:	2/28/19	Date/Time: 2/28/19 1345	Company TA
Relinquished by: 2/28/19	Date/Time: 16:10	Company TA	Received by:		Date/Time: 3/1/19 0910	Company TA
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company

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

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA, J. BERSFORD	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:
Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7239	PO #: SCS10382606			
Email: JABRAHAM@SOUTHERNCO.COM	WO #:			
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
WGWC-19	2-28-19	1125	G	Water	X	X	✓	✓	✓	3	
EB-2-2-28-19	2-28-19	1130	G	Water	X	X	✓	✓	✓	3	
FB-2-2-28-19	2-28-19	1040	G	Water	X	X	✓	✓	✓	3	
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/28/19 1345	ACC			
2		2/28/19 1610	TA		3/1/19 0910	TA
3						

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

Page 41 of 50

3/19/2019

TestAmerica

TestAmerica

HE LEADER IN ENV TESTING

159469-434 RIT2 EXP 10/19

RT97 FZ 1 16:00 7291 03.01

28FEB19
3.65 LB
3116/CAFE3211

N ID:MULA (678) 966-9991
E TAYLOR
AMERICA ATLANTA
MCDONOUGH-DRIVE
ROSS, GA 30093
UNITED STATES US

BILL RECIPIENT

TO SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058

180-87210 Waybill

FedEx Express

1 of 5

FRI - 01 MAR 3:00P
STANDARD OVERNIGHT

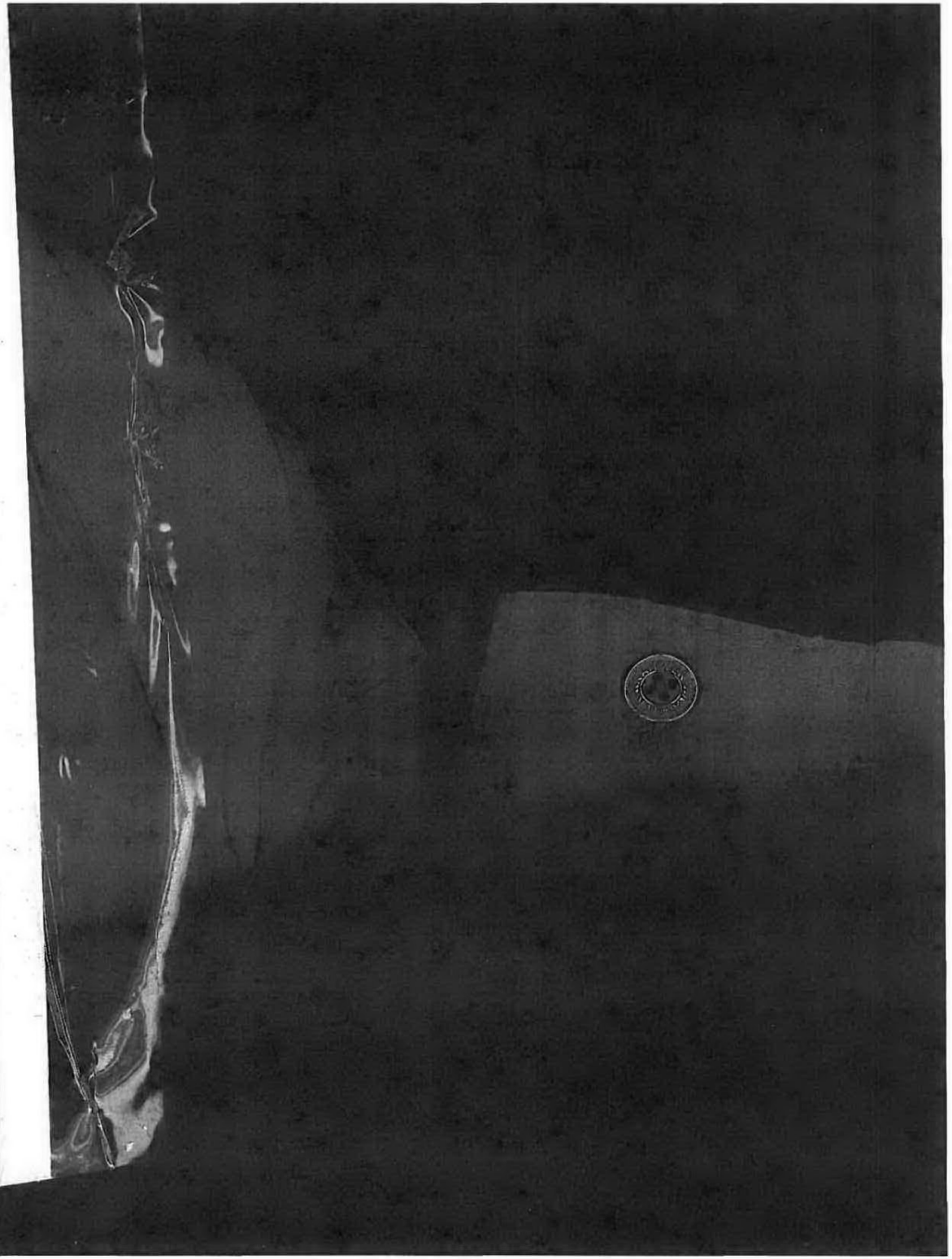
RK# 0201 4651 0080 7291

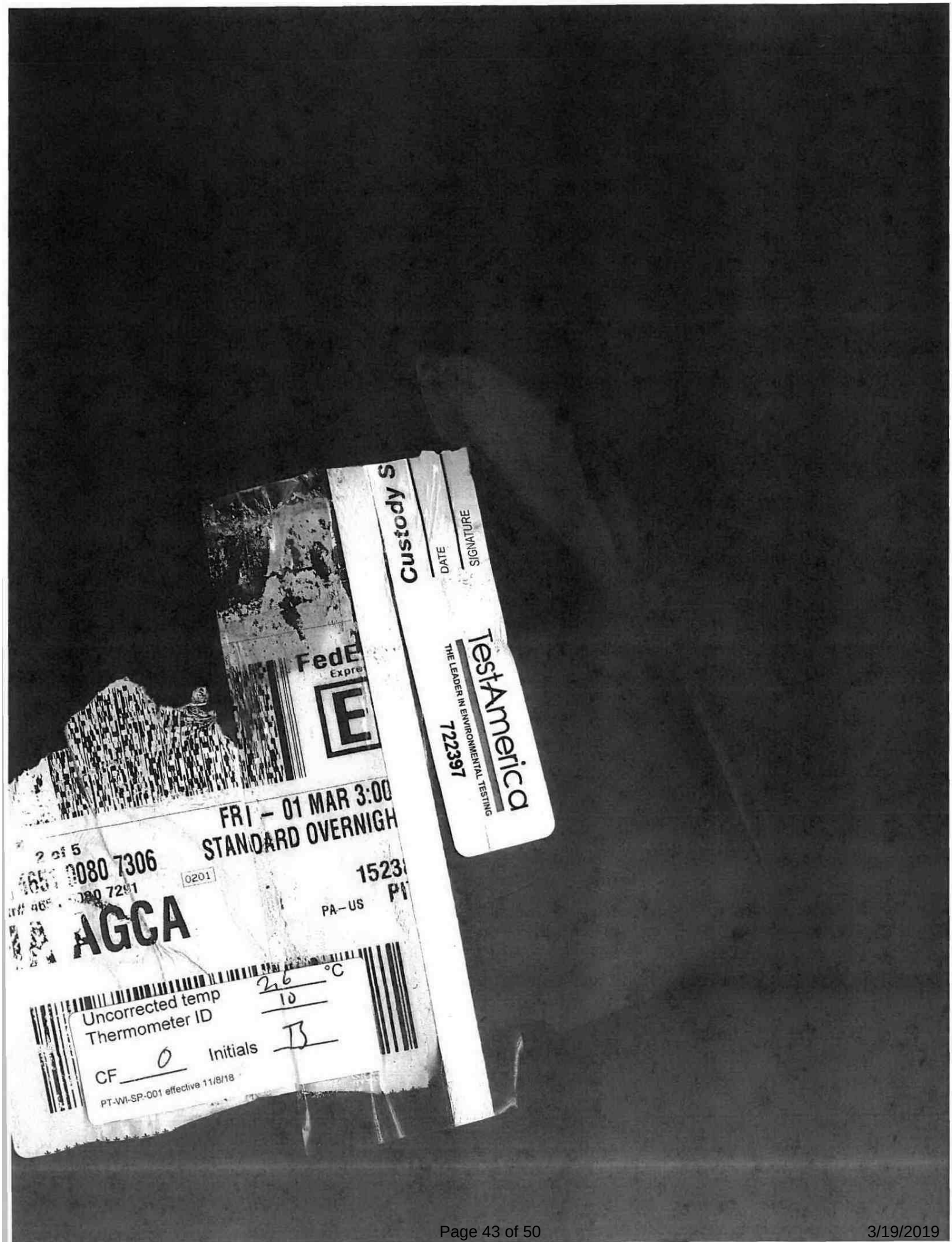
MASTER

NA AGCA

15238
PA-US PIT

Uncorrected temp 1.9 °C
Thermometer ID 10
CF 0 Initials JB
PT-WI-SR-001 effective 11/8/18




Custody S
DATE
SIGNATURE
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
722397
FedE
Expre
FRI - 01 MAR 3:00
STANDARD OVERNIGH
080 7306
0201
PA-US
AGCA
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SP-001 effective 11/8/18

TestAmerica

THE LEADER IN EN... ...STING

RT 97
FZ
1
15:00
A
7317
03.01

ORIGIN ID:MULA (678) 966-9991
GEORGE TAYLOR
TEST AMERICA ATLANTA
6500 MCDONOUGH DRIVE

NORCROSS, GA 30093
UNITED STATES US

SH... ...19
ACTW... ...LB
CAD: AFE3211

BILL RECIPIENT

TO **SAMPLE RECEIVING**
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO.

FedEx Express

E

3 of 5
MPS# 0263 **4651 0080 7317**
Mstr# 4651 0080 7291 0201

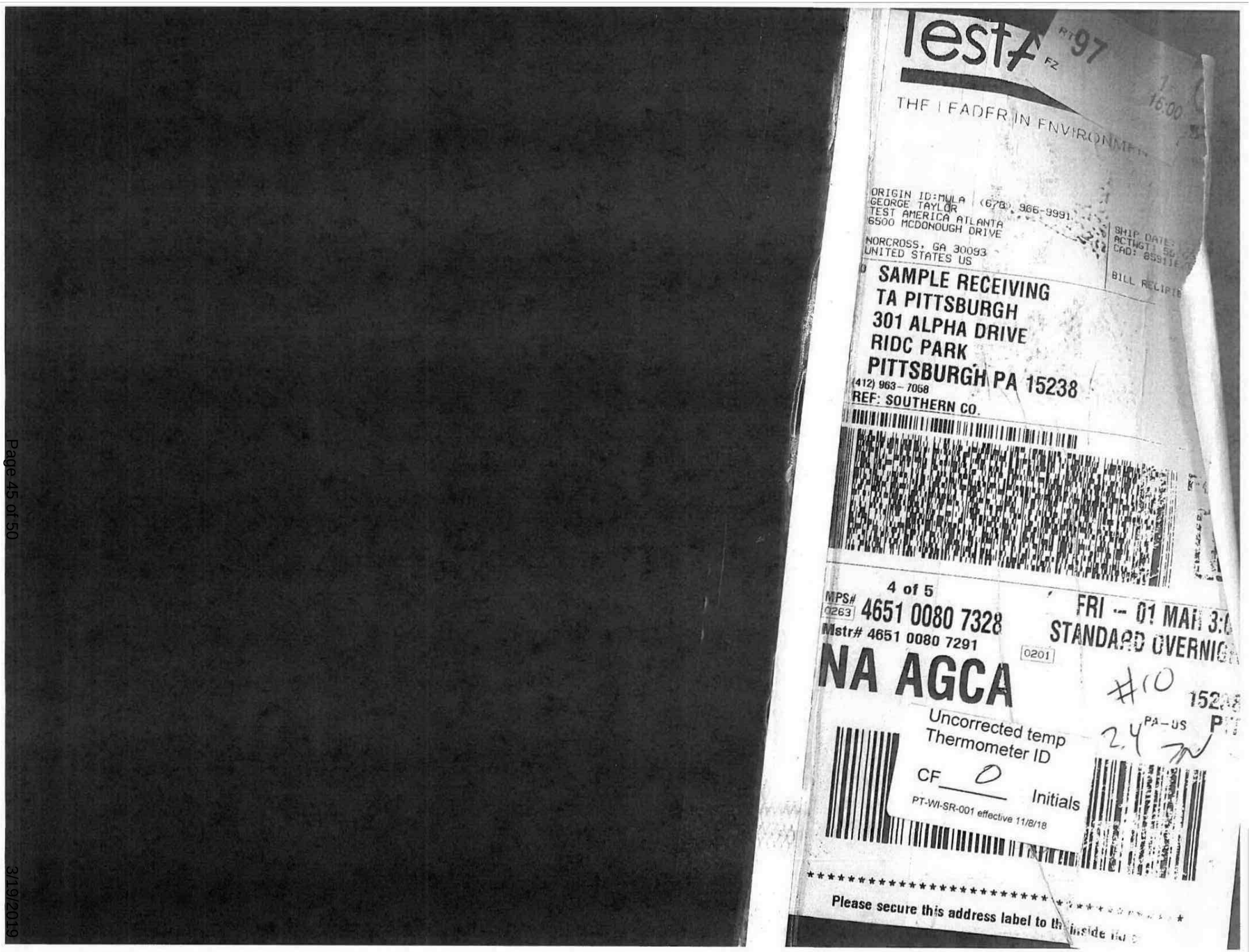
FRI - 01 MAR 3:00P
STANDARD OVERNIGHT

NA AGCA

15238
PA-US **PIT**

Uncorrected temp 1.6 °C
Thermometer ID 10
CF 0 Initials TJ
PT-WI-SR-001 effective 11/8/18

Custody Seal
Part # 159469-434 RIT2 EXP 10/19
THE LEADER IN ENVIRONMENTAL TESTING


Test
THE LEADER IN ENVIRONMENT
ORIGIN ID:MVLA (678) 966-9991
GEORGE TAYLOR
TEST AMERICA ATLANTA
6500 MCDONOUGH DRIVE
NORCROSS, GA 30093
UNITED STATES US
SHIP DATE:
ACTWGT: 56
CAD: 85911
BILL RECIPIE
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO.
4 of 5
MPS# 0263 4651 0080 7328
Mstr# 4651 0080 7291
0201
NA AGCA
FRI -- 01 MAR
STANDARD OVERNIGHT
#10
PA-US
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
Please secure this address label to the inside


EADER IN ENVIRONMENTAL TESTING
SHIP DATE: 28FEB19
ACTWGT: 55.65 LB
CAD: 859116/CAFE3211
BILL RECIPIENT
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
REF: SOUTHERN CO.
FedEx
Express
5 of 5
MPS# 4651 0080 7339
Mstr# 4651 0080 7291
FRI - 01 MAR 3:00P
STANDARD OVERNIGHT
0263
0201
FedEx
MPS#
4651 0080 7339
FRI - 01 MAR AA
STANDARD OVERNIGHT
NA AGCA
15238
PA-US
PIT
Uncorrected temp 1.9 °C
Thermometer ID 10
CF 0 Initials
PT-WI-SR-001 effective 11/8/18
FID 966468 28FEB19 MGEA 553C2/0E3D/0C8A

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-356418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-87210-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
WGWA-2 (180-87210-1)	2/25/19	15:20 Eastern		Water			X	X	1	
WGWA-3 (180-87210-2)	2/26/19	10:35 Eastern		Water			X	X	1	
WGWA-4 (180-87210-3)	2/26/19	12:10 Eastern		Water			X	X	1	
WGWA-7 (180-87210-4)	2/26/19	14:00 Eastern		Water			X	X	1	
WGWA-1 (180-87210-5)	2/25/19	15:05 Eastern		Water			X	X	1	
WGWA-5 (180-87210-6)	2/26/19	13:15 Eastern		Water			X	X	1	
WGWA-6 (180-87210-7)	2/26/19	14:15 Eastern		Water			X	X	1	
WGWA-18 (180-87210-8)	2/26/19	15:15 Eastern		Water			X	X	1	
WGWC-17 (180-87210-9)	2/26/19	15:10 Eastern		Water			X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 3/4/19 1200	Company AT+	Received by: Michael Keen	Date/Time: 3/5/19 09:25	Company TA SZ
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-356418.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-87210-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
WGWC-13 (180-87210-10)	2/27/19	11:00 Eastern		Water			X	X	1	
DUP-1 (180-87210-11)	2/25/19	Eastern		Water			X	X	1	
FB-1-2-26-19 (180-87210-12)	2/26/19	15:00 Eastern		Water			X	X	1	
EB-1-2-27-19 (180-87210-13)	2/27/19	09:50 Eastern		Water			X	X	1	
WGWC-14A (180-87210-14)	2/27/19	11:55 Eastern		Water			X	X	1	
WGWC-15 (180-87210-15)	2/27/19	13:30 Eastern		Water			X	X	1	
WGWC-16 (180-87210-16)	2/27/19	14:30 Eastern		Water			X	X	1	
WGWC-8 (180-87210-17)	2/27/19	10:25 Eastern		Water			X	X	1	
WGWC-10 (180-87210-18)	2/27/19	11:25 Eastern		Water			X	X	1	

180-87210-01 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	3/4/19 1700	TA PGH		3/5/19 09:25	TA STL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-356418.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-87210-1
Address: 13715 Rider Trail North,	Due Date Requested: 3/13/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Total Number of containers	Special Instructions/Note:
				Preservation Code:						
WGWC-11 (180-87210-19)	2/27/19	14:30 Eastern		Water			X	X	1	
WGWC-12 (180-87210-20)	2/27/19	17:00 Eastern		Water			X	X	1	
WGWC-9 (180-87210-21)	2/28/19	10:50 Eastern		Water			X	X	1	
DUP-2 (180-87210-22)	2/25/19	Eastern		Water			X	X	1	
WGWC-19 (180-87210-23)	2/28/19	11:25 Eastern		Water			X	X	1	
EB-2-2-28-19 (180-87210-24)	2/28/19	11:30 Eastern		Water			X	X	1	
FB-2-2-28-19 (180-87210-25)	2/28/19	10:40 Eastern		Water			X	X	1	

180-87210-02 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by: [signature]	Date/Time: 3/4/19 1700	Company: MPitt	Received by: Michael Klein	Date/Time: 3/5/19 09:25 — Company: TA STL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: — Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: — Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-87210-1

Login Number: 87210
List Number: 1
Creator: Neri, Tom

List Source: TestAmerica Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No date or time on COC or containers.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-87210-2
Laboratory Sample Delivery Group: App IV Scan
Client Project/Site: CCR - Plant Wansley

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
4/18/2019 4:54:19 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-87210-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-87210-2

Comments
No additional comments.

Receipt
The samples were received on 3/1/2019 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 1.6º C, 1.9º C, 1.9º C, 2.4º C and 2.6º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. No sample date on COC or containers for samples 11 and 22. Sample date of 2/25/19 used for login purposes.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWA-3 (180-87210-2). The container labels list WGWA-3, while the COC lists WGWA-2. Sample time on containers agreed with COC; sample logged per COC. The client was contacted, and the lab was instructed to <EXPLANATION_REQUIRED>.

RAD
Method(s) 903.0, 9315: Ra-226 Prep Batch 160-417892

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWC-9 (180-87210-21), DUP-2 (180-87210-22), WGWC-19 (180-87210-23), EB-2-2-28-19 (180-87210-24), FB-2-2-28-19 (180-87210-25), (LCS 160-417892/1-A), (MB 160-417892/23-A), (500-159262-E-1-A) and (500-159262-E-1-B DU)

Method(s) 9315: Ra-226 Prep Batch 160-417889

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWA-2 (180-87210-1), WGWA-3 (180-87210-2), WGWA-4 (180-87210-3), WGWA-7 (180-87210-4), WGWA-1 (180-87210-5), WGWA-5 (180-87210-6), WGWA-6 (180-87210-7), WGWA-18 (180-87210-8), WGWC-17 (180-87210-9), WGWC-13 (180-87210-10), DUP-1 (180-87210-11), FB-1-2-26-19 (180-87210-12), EB-1-2-27-19 (180-87210-13), WGWC-14A (180-87210-14), WGWC-15 (180-87210-15), WGWC-16 (180-87210-16), WGWC-8 (180-87210-17), WGWC-10 (180-87210-18), WGWC-11 (180-87210-19), WGWC-12 (180-87210-20), (LCS 160-417889/1-A), (LCSD 160-417889/2-A) and (MB 160-417889/23-A)

Method(s) 9320: Radium-228 Prep Batch 160-417890

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWA-2 (180-87210-1), WGWA-3 (180-87210-2), WGWA-4 (180-87210-3), WGWA-7 (180-87210-4), WGWA-1 (180-87210-5), WGWA-5 (180-87210-6), WGWA-6 (180-87210-7), WGWA-18 (180-87210-8), WGWC-17 (180-87210-9), WGWC-13 (180-87210-10), DUP-1 (180-87210-11), FB-1-2-26-19 (180-87210-12), EB-1-2-27-19 (180-87210-13), WGWC-14A (180-87210-14), WGWC-15 (180-87210-15), WGWC-16 (180-87210-16), WGWC-8 (180-87210-17), WGWC-10 (180-87210-18), WGWC-11 (180-87210-19), WGWC-12 (180-87210-20), (LCS 160-417890/1-A), (LCSD 160-417890/2-A) and (MB 160-417890/23-A)

Job ID: 180-87210-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Method(s) 904.0, 9320: Ra-228 Prep Batch 160-417898

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWC-9 (180-87210-21), DUP-2 (180-87210-22), WGWC-19 (180-87210-23), EB-2-2-28-19 (180-87210-24), FB-2-2-28-19 (180-87210-25), (LCS 160-417898/1-A), (MB 160-417898/23-A), (500-159262-E-1-C) and (500-159262-E-1-D DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

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

Job ID: 180-87210-2
SDG: App IV Scan

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)

Accreditation/Certification Summary

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

Job ID: 180-87210-2
SDG: App IV Scan

Laboratory: Eurofins TestAmerica, Pittsburgh

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
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

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

Accreditation/Certification Summary

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

Job ID: 180-87210-2
SDG: App IV Scan

Laboratory: Eurofins 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 / DOE		L2305	04-06-22
Arizona	State Program	9	AZ0813	12-08-19
California	State Program	9	2886	06-30-19 *
Connecticut	State Program	1	PH-0241	03-31-21
Florida	NELAP	4	E87689	06-30-19 *
Hawaii	State Program	9	NA	06-30-19
Illinois	NELAP	5	200023	11-30-19
Iowa	State Program	7	373	12-01-20
Kansas	NELAP	7	E-10236	10-31-19
Kentucky (DW)	State Program	4	KY90125	12-31-19
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA011	12-31-19
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-19
Missouri	State Program	7	780	06-30-19
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19 *
New York	NELAP	2	11616	03-31-20
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	02-28-20
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-13	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

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

Sample Summary

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

Job ID: 180-87210-2
SDG: App IV Scan

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-87210-1	WGWA-2	Ground Water	02/25/19 15:20	03/01/19 09:10
180-87210-2	WGWA-3	Ground Water	02/26/19 10:35	03/01/19 09:10
180-87210-3	WGWA-4	Ground Water	02/26/19 12:10	03/01/19 09:10
180-87210-4	WGWA-7	Water	02/26/19 14:00	03/01/19 09:10
180-87210-5	WGWA-1	Water	02/25/19 15:05	03/01/19 09:10
180-87210-6	WGWA-5	Water	02/26/19 13:15	03/01/19 09:10
180-87210-7	WGWA-6	Water	02/26/19 14:15	03/01/19 09:10
180-87210-8	WGWA-18	Water	02/26/19 15:15	03/01/19 09:10
180-87210-9	WGWC-17	Water	02/26/19 15:10	03/01/19 09:10
180-87210-10	WGWC-13	Water	02/27/19 11:00	03/01/19 09:10
180-87210-11	DUP-1	Water	02/25/19 00:00	03/01/19 09:10
180-87210-12	FB-1-2-26-19	Water	02/26/19 15:00	03/01/19 09:10
180-87210-13	EB-1-2-27-19	Water	02/27/19 09:50	03/01/19 09:10
180-87210-14	WGWC-14A	Water	02/27/19 11:55	03/01/19 09:10
180-87210-15	WGWC-15	Water	02/27/19 13:30	03/01/19 09:10
180-87210-16	WGWC-16	Water	02/27/19 14:30	03/01/19 09:10
180-87210-17	WGWC-8	Water	02/27/19 10:25	03/01/19 09:10
180-87210-18	WGWC-10	Water	02/27/19 11:25	03/01/19 09:10
180-87210-19	WGWC-11	Water	02/27/19 14:30	03/01/19 09:10
180-87210-20	WGWC-12	Water	02/27/19 17:00	03/01/19 09:10
180-87210-21	WGWC-9	Water	02/28/19 10:50	03/01/19 09:10
180-87210-22	DUP-2	Water	02/25/19 00:00	03/01/19 09:10
180-87210-23	WGWC-19	Water	02/28/19 11:25	03/01/19 09:10
180-87210-24	EB-2-2-28-19	Water	02/28/19 11:30	03/01/19 09:10
180-87210-25	FB-2-2-28-19	Water	02/28/19 10:40	03/01/19 09:10

Method Summary

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

Job ID: 180-87210-2
SDG: App IV Scan

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

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: WGWA-2
Date Collected: 02/25/19 15:20
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.18 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421606	03/28/19 07:30	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.18 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420141	03/20/19 15:48	KLS	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-3
Date Collected: 02/26/19 10:35
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.63 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421606	03/28/19 07:30	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.63 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-4
Date Collected: 02/26/19 12:10
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.58 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:32	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.58 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-7
Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:32	CDR	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: WGWA-7
Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-1
Date Collected: 02/25/19 15:05
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.85 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:32	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.85 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-5
Date Collected: 02/26/19 13:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.76 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:32	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.76 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-6
Date Collected: 02/26/19 14:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.48 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:32	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.48 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420144	03/20/19 15:52	CDR	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: WGWA-6
Date Collected: 02/26/19 14:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL

Client Sample ID: WGWA-18
Date Collected: 02/26/19 15:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.12 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:33	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.12 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:57	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-17
Date Collected: 02/26/19 15:10
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.62 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:33	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:57	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-13
Date Collected: 02/27/19 11:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.03 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 07:33	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.03 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:57	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: DUP-1
Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.76 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:01	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.76 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:57	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1-2-26-19
Date Collected: 02/26/19 15:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.52 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:01	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.52 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-1-2-27-19
Date Collected: 02/27/19 09:50
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.68 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:01	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.68 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-14A
Date Collected: 02/27/19 11:55
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.31 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									

Client Sample ID: WGWC-14A
Date Collected: 02/27/19 11:55
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.31 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-15
Date Collected: 02/27/19 13:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.75 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.75 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-16
Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.07 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-8
Date Collected: 02/27/19 10:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.80 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.80 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: WGWC-8
Date Collected: 02/27/19 10:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL

Client Sample ID: WGWC-10
Date Collected: 02/27/19 11:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.21 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			1000.21 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-11
Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.94 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421605	03/28/19 10:02	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Prep	PrecSep_0			999.94 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-12
Date Collected: 02/27/19 17:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.47 mL	1.0 g	417889	03/06/19 09:16	LTC	TAL SL
Total/NA	Analysis	9315		1			421606	03/28/19 13:09	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.47 mL	1.0 g	417890	03/06/19 09:37	LTC	TAL SL
Total/NA	Analysis	9320		1			420143	03/20/19 15:58	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: WGWC-9
Date Collected: 02/28/19 10:50
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.05 mL	1.0 g	417892	03/06/19 09:41	LTC	TAL SL
Total/NA	Analysis	9315		1			421604	03/28/19 07:24	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			1000.05 mL	1.0 g	417898	03/06/19 10:16	LTC	TAL SL
Total/NA	Analysis	9320		1			420716	03/22/19 08:40	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2
Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.97 mL	1.0 g	417892	03/06/19 09:41	LTC	TAL SL
Total/NA	Analysis	9315		1			421604	03/28/19 07:24	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			999.97 mL	1.0 g	417898	03/06/19 10:16	LTC	TAL SL
Total/NA	Analysis	9320		1			420716	03/22/19 08:40	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-19
Date Collected: 02/28/19 11:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.30 mL	1.0 g	417892	03/06/19 09:41	LTC	TAL SL
Total/NA	Analysis	9315		1			421604	03/28/19 07:24	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			999.30 mL	1.0 g	417898	03/06/19 10:16	LTC	TAL SL
Total/NA	Analysis	9320		1			420716	03/22/19 08:40	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2-2-28-19
Date Collected: 02/28/19 11:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.42 mL	1.0 g	417892	03/06/19 09:41	LTC	TAL SL
Total/NA	Analysis	9315		1			421604	03/28/19 07:24	CDR	TAL SL
	Instrument ID: GFPCORANGE									

Lab Chronicle

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

Job ID: 180-87210-2
SDG: App IV Scan

Client Sample ID: EB-2-2-28-19

Date Collected: 02/28/19 11:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-24

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.42 mL	1.0 g	417898	03/06/19 10:16	LTC	TAL SL
Total/NA	Analysis	9320		1			420716	03/22/19 08:40	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2-2-28-19

Date Collected: 02/28/19 10:40
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.65 mL	1.0 g	417892	03/06/19 09:41	LTC	TAL SL
Total/NA	Analysis	9315		1			421604	03/28/19 07:24	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			1000.65 mL	1.0 g	417898	03/06/19 10:16	LTC	TAL SL
Total/NA	Analysis	9320		1			420716	03/22/19 08:41	KLS	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Analysis	Ra226_Ra228		1			423877	04/15/19 14:10	BLH	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL SL

Batch Type: Prep

LTC = Logan Curtright

Batch Type: Analysis

BLH = Brandi Hayes

CDR = Conrad Reuscher

KLS = Kody Saulters

Client Sample ID: WGWA-2

Date Collected: 02/25/19 15:20
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-1

Matrix: Ground Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.115		0.0736	0.0743	1.00	0.0941	pCi/L	03/06/19 09:16	03/28/19 07:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.7*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.325	U	0.264	0.266	1.00	0.417	pCi/L	03/06/19 09:37	03/20/19 15:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.7*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:48*	*1*
Y Carrier	*74.4*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:48*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.440		0.274	0.276	5.00	0.417	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-3

Date Collected: 02/26/19 10:35
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-2

Matrix: Ground Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0385	U	0.0704	0.0705	1.00	0.124	pCi/L	03/06/19 09:16	03/28/19 07:30	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:30*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.140	U	0.253	0.254	1.00	0.430	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*74.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

Client Sample ID: WGWA-3
Date Collected: 02/26/19 10:35
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-2
Matrix: Ground Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.179	U	0.263	0.264	5.00	0.430	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-4
Date Collected: 02/26/19 12:10
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-3
Matrix: Ground Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.364**		0.105	0.110	1.00	0.0800	pCi/L	03/06/19 09:16	03/28/19 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.286	U	0.224	0.226	1.00	0.353	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*78.1*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.650**		0.247	0.251	5.00	0.353	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-7
Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0205	U	0.0447	0.0447	1.00	0.0828	pCi/L	03/06/19 09:16	03/28/19 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:32*	*1*

Client Sample ID: WGWA-7

Date Collected: 02/26/19 14:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-4

Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.374		0.242	0.244	1.00	0.370	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*80.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.395		0.246	0.248	5.00	0.370	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-1

Date Collected: 02/25/19 15:05
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-5

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0796		0.0574	0.0578	1.00	0.0772	pCi/L	03/06/19 09:16	03/28/19 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.314	U	0.215	0.217	1.00	0.328	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*78.5*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.394		0.223	0.225	5.00	0.328	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-5

Date Collected: 02/26/19 13:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-6
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	0.0710	U	0.0586	0.0589	1.00	0.0842	pCi/L	03/06/19 09:16	03/28/19 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0417	U	0.210	0.210	1.00	0.371	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*80.7*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.113	U	0.218	0.218	5.00	0.371	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-6

Date Collected: 02/26/19 14:15
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-7
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	**3.57**		0.312	0.447	1.00	0.0854	pCi/L	03/06/19 09:16	03/28/19 07:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**5.36**		0.518	0.716	1.00	0.383	pCi/L	03/06/19 09:37	03/20/19 15:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*
Y Carrier	*82.6*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:52*	*1*

Client Sample ID: WGWA-6
Lab Sample ID: 180-87210-7

Date Collected: 02/26/19 14:15
Matrix: Water
Date Received: 03/01/19 09:10

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**8.93**		0.605	0.844	5.00	0.383	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWA-18
Lab Sample ID: 180-87210-8

Date Collected: 02/26/19 15:15
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0147	U	0.0411	0.0411	1.00	0.0797	pCi/L	03/06/19 09:16	03/28/19 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.292	U	0.242	0.244	1.00	0.384	pCi/L	03/06/19 09:37	03/20/19 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*
Y Carrier	*78.5*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.307	U	0.245	0.247	5.00	0.384	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-17
Lab Sample ID: 180-87210-9

Date Collected: 02/26/19 15:10
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.122**		0.0756	0.0764	1.00	0.102	pCi/L	03/06/19 09:16	03/28/19 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:33*	*1*

Client Sample ID: WGWC-17

Lab Sample ID: 180-87210-9

Date Collected: 02/26/19 15:10
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.309	U	0.252	0.254	1.00	0.400	pCi/L	03/06/19 09:37	03/20/19 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*
Y Carrier	*81.5*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.431		0.263	0.265	5.00	0.400	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-13

Lab Sample ID: 180-87210-10

Date Collected: 02/27/19 11:00
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.289		0.0978	0.101	1.00	0.0887	pCi/L	03/06/19 09:16	03/28/19 07:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*03/06/19 09:16*	*03/28/19 07:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.788		0.284	0.293	1.00	0.382	pCi/L	03/06/19 09:37	03/20/19 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*
Y Carrier	*80.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.300	0.310	5.00	0.382	pCi/L		04/15/19 14:10	1

Client Sample ID: DUP-1

Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-11

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.000	U	0.0403	0.0403	1.00	0.0868	pCi/L	03/06/19 09:16	03/28/19 10:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.1*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0655	U	0.242	0.242	1.00	0.422	pCi/L	03/06/19 09:37	03/20/19 15:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.1*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*
Y Carrier	*78.5*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0655	U	0.245	0.245	5.00	0.422	pCi/L		04/15/19 14:10	1

Client Sample ID: FB-1-2-26-19

Date Collected: 02/26/19 15:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-12

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	0.0356	U	0.0479	0.0480	1.00	0.0802	pCi/L	03/06/19 09:16	03/28/19 10:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.156	U	0.223	0.223	1.00	0.374	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*80.7*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*

Client Sample ID: FB-1-2-26-19

Lab Sample ID: 180-87210-12
Date Collected: 02/26/19 15:00
Matrix: Water
Date Received: 03/01/19 09:10

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.192	U	0.228	0.228	5.00	0.374	pCi/L		04/15/19 14:10	1

Client Sample ID: EB-1-2-27-19

Lab Sample ID: 180-87210-13
Date Collected: 02/27/19 09:50
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0542	U	0.0537	0.0539	1.00	0.0821	pCi/L	03/06/19 09:16	03/28/19 10:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.100	U	0.210	0.210	1.00	0.361	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*80.4*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	0.154	U	0.217	0.217	5.00	0.361	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-14A

Lab Sample ID: 180-87210-14
Date Collected: 02/27/19 11:55
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.312**		0.0975	0.101	1.00	0.0787	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Client Sample ID: WGWC-14A

Lab Sample ID: 180-87210-14

Date Collected: 02/27/19 11:55
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.226	U	0.230	0.231	1.00	0.374	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*80.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	**0.538**		0.250	0.252	5.00	0.374	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-15

Lab Sample ID: 180-87210-15

Date Collected: 02/27/19 13:30
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.120**		0.0694	0.0702	1.00	0.0851	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.244	U	0.245	0.246	1.00	0.397	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*77.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	0.363	U	0.255	0.256	5.00	0.397	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-16

Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-16
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	0.220		0.0864	0.0886	1.00	0.0852	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.501		0.252	0.256	1.00	0.368	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*80.0*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	0.721		0.266	0.271	5.00	0.368	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-8

Date Collected: 02/27/19 10:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-17
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.587		0.133	0.143	1.00	0.0794	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.83		0.362	0.399	1.00	0.386	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*80.4*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*

Client Sample ID: WGWC-8
Date Collected: 02/27/19 10:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-17
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.42**		0.386	0.424	5.00	0.386	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-10
Date Collected: 02/27/19 11:25
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-18
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.155**		0.0789	0.0801	1.00	0.0983	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0813	U	0.192	0.192	1.00	0.333	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*81.5*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	0.236	U	0.208	0.208	5.00	0.333	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-11
Date Collected: 02/27/19 14:30
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-19
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0625	U	0.0571	0.0574	1.00	0.0859	pCi/L	03/06/19 09:16	03/28/19 10:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:16*	*03/28/19 10:02*	*1*

Client Sample ID: WGWC-11

Lab Sample ID: 180-87210-19

Date Collected: 02/27/19 14:30
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.312	U	0.226	0.228	1.00	0.352	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*81.1*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	**0.374**		0.233	0.235	5.00	0.352	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-12

Lab Sample ID: 180-87210-20

Date Collected: 02/27/19 17:00
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.101**		0.0624	0.0630	1.00	0.0753	pCi/L	03/06/19 09:16	03/28/19 13:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*03/06/19 09:16*	*03/28/19 13:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.314	U	0.208	0.210	1.00	0.316	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*1*
Y Carrier	*81.9*		*40 - 110*	*03/06/19 09:37*	*03/20/19 15:58*	*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	**0.415**		0.217	0.219	5.00	0.316	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-9

Date Collected: 02/28/19 10:50
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-21

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.110	U	0.0857	0.0862	1.00	0.118	pCi/L	03/06/19 09:41	03/28/19 07:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U	0.215	0.215	1.00	0.358	pCi/L	03/06/19 10:16	03/22/19 08:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*
Y Carrier	*88.6*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.271	U	0.231	0.232	5.00	0.358	pCi/L		04/15/19 14:10	1

Client Sample ID: DUP-2

Date Collected: 02/25/19 00:00
Date Received: 03/01/19 09:10

Lab Sample ID: 180-87210-22

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	0.0754	U	0.0713	0.0716	1.00	0.109	pCi/L	03/06/19 09:41	03/28/19 07:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.410**		0.225	0.228	1.00	0.333	pCi/L	03/06/19 10:16	03/22/19 08:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*
Y Carrier	*82.2*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*

Client Sample ID: DUP-2
Lab Sample ID: 180-87210-22
Date Collected: 02/25/19 00:00
Matrix: Water
Date Received: 03/01/19 09:10

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.486		0.236	0.239	5.00	0.333	pCi/L		04/15/19 14:10	1

Client Sample ID: WGWC-19
Lab Sample ID: 180-87210-23
Date Collected: 02/28/19 11:25
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0234	U	0.0547	0.0547	1.00	0.102	pCi/L	03/06/19 09:41	03/28/19 07:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.216	0.217	1.00	0.347	pCi/L	03/06/19 10:16	03/22/19 08:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.6*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*
Y Carrier	*88.2*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.254	U	0.223	0.224	5.00	0.347	pCi/L		04/15/19 14:10	1

Client Sample ID: EB-2-2-28-19
Lab Sample ID: 180-87210-24
Date Collected: 02/28/19 11:30
Matrix: Water
Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0197	U	0.0684	0.0684	1.00	0.129	pCi/L	03/06/19 09:41	03/28/19 07:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:24*	*1*

Client Sample ID: EB-2-2-28-19

Lab Sample ID: 180-87210-24

Date Collected: 02/28/19 11:30

Matrix: Water

Date Received: 03/01/19 09:10

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0164	U	0.187	0.187	1.00	0.341	pCi/L	03/06/19 10:16	03/22/19 08:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*
Y Carrier	*88.2*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:40*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.00332	U	0.199	0.199	5.00	0.341	pCi/L		04/15/19 14:10	1

Client Sample ID: FB-2-2-28-19

Lab Sample ID: 180-87210-25

Date Collected: 02/28/19 10:40

Matrix: Water

Date Received: 03/01/19 09:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0408	U	0.0570	0.0571	1.00	0.0965	pCi/L	03/06/19 09:41	03/28/19 07:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:24*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.151	U	0.215	0.216	1.00	0.361	pCi/L	03/06/19 10:16	03/22/19 08:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:41*	*1*
Y Carrier	*81.5*		*40 - 110*	*03/06/19 10:16*	*03/22/19 08:41*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.192	U	0.222	0.223	5.00	0.361	pCi/L		04/15/19 14:10	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-417889/23-A
Matrix: Water
Analysis Batch: 421606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417889

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02134	U	0.0299	0.0299	1.00	0.0839	pCi/L	03/06/19 09:16	03/28/19 13:09	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*03/06/19 09:16*	*03/28/19 13:09*	*1*

Lab Sample ID: LCS 160-417889/1-A
Matrix: Water
Analysis Batch: 421606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417889

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	10.51		1.09	1.00	0.0788	pCi/L	93	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*104*		*40 - 110*

Lab Sample ID: LCSD 160-417889/2-A
Matrix: Water
Analysis Batch: 421606

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 417889

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.4	10.31		1.08	1.00	0.0783	pCi/L	91	68 - 137	0.09	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*104*		*40 - 110*

Lab Sample ID: MB 160-417892/23-A
Matrix: Water
Analysis Batch: 421605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417892

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07501	U	0.0650	0.0654	1.00	0.0957	pCi/L	03/06/19 09:41	03/28/19 07:27	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*03/06/19 09:41*	*03/28/19 07:27*	*1*

Lab Sample ID: LCS 160-417892/1-A
Matrix: Water
Analysis Batch: 421604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417892

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	9.220		0.994	1.00	0.0779	pCi/L	81	68 - 137		

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

Lab Sample ID: LCS 160-417892/1-A
Matrix: Water
Analysis Batch: 421604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417892

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-417890/23-A
Matrix: Water
Analysis Batch: 420143

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417890

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.004142	U	0.186	0.186	1.00	0.336	pCi/L	03/06/19 09:37	03/20/19 15:58	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	108		40 - 110	03/06/19 09:37	03/20/19 15:58	1
Y Carrier	85.2		40 - 110	03/06/19 09:37	03/20/19 15:58	1

Lab Sample ID: LCS 160-417890/1-A
Matrix: Water
Analysis Batch: 420141

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417890

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.38	8.829		1.06	1.00	0.408	pCi/L	94	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	74.8		40 - 110

Lab Sample ID: LCSD 160-417890/2-A
Matrix: Water
Analysis Batch: 420141

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 417890

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.38	8.529		1.04	1.00	0.412	pCi/L	91	56 - 140	0.14	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	71.0		40 - 110

Lab Sample ID: MB 160-417898/23-A
Matrix: Water
Analysis Batch: 420713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417898

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.03310	U	0.173	0.173	1.00	0.318	pCi/L	03/06/19 10:16	03/22/19 08:43	1

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

Lab Sample ID: MB 160-417898/23-A
Matrix: Water
Analysis Batch: 420713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 417898

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110	03/06/19 10:16	03/22/19 08:43	1
Y Carrier	92.3		40 - 110	03/06/19 10:16	03/22/19 08:43	1

Lab Sample ID: LCS 160-417898/1-A
Matrix: Water
Analysis Batch: 420716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 417898

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.37	9.437		1.06	1.00	0.301	pCi/L	101	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	104		40 - 110
Y Carrier	87.1		40 - 110

Rad

Prep Batch: 417889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total/NA	Ground Water	PrecSep-21	
180-87210-2	WGWA-3	Total/NA	Ground Water	PrecSep-21	
180-87210-3	WGWA-4	Total/NA	Ground Water	PrecSep-21	
180-87210-4	WGWA-7	Total/NA	Water	PrecSep-21	
180-87210-5	WGWA-1	Total/NA	Water	PrecSep-21	
180-87210-6	WGWA-5	Total/NA	Water	PrecSep-21	
180-87210-7	WGWA-6	Total/NA	Water	PrecSep-21	
180-87210-8	WGWA-18	Total/NA	Water	PrecSep-21	
180-87210-9	WGWC-17	Total/NA	Water	PrecSep-21	
180-87210-10	WGWC-13	Total/NA	Water	PrecSep-21	
180-87210-11	DUP-1	Total/NA	Water	PrecSep-21	
180-87210-12	FB-1-2-26-19	Total/NA	Water	PrecSep-21	
180-87210-13	EB-1-2-27-19	Total/NA	Water	PrecSep-21	
180-87210-14	WGWC-14A	Total/NA	Water	PrecSep-21	
180-87210-15	WGWC-15	Total/NA	Water	PrecSep-21	
180-87210-16	WGWC-16	Total/NA	Water	PrecSep-21	
180-87210-17	WGWC-8	Total/NA	Water	PrecSep-21	
180-87210-18	WGWC-10	Total/NA	Water	PrecSep-21	
180-87210-19	WGWC-11	Total/NA	Water	PrecSep-21	
180-87210-20	WGWC-12	Total/NA	Water	PrecSep-21	
MB 160-417889/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-417889/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-417889/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 417890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-1	WGWA-2	Total/NA	Ground Water	PrecSep_0	
180-87210-2	WGWA-3	Total/NA	Ground Water	PrecSep_0	
180-87210-3	WGWA-4	Total/NA	Ground Water	PrecSep_0	
180-87210-4	WGWA-7	Total/NA	Water	PrecSep_0	
180-87210-5	WGWA-1	Total/NA	Water	PrecSep_0	
180-87210-6	WGWA-5	Total/NA	Water	PrecSep_0	
180-87210-7	WGWA-6	Total/NA	Water	PrecSep_0	
180-87210-8	WGWA-18	Total/NA	Water	PrecSep_0	
180-87210-9	WGWC-17	Total/NA	Water	PrecSep_0	
180-87210-10	WGWC-13	Total/NA	Water	PrecSep_0	
180-87210-11	DUP-1	Total/NA	Water	PrecSep_0	
180-87210-12	FB-1-2-26-19	Total/NA	Water	PrecSep_0	
180-87210-13	EB-1-2-27-19	Total/NA	Water	PrecSep_0	
180-87210-14	WGWC-14A	Total/NA	Water	PrecSep_0	
180-87210-15	WGWC-15	Total/NA	Water	PrecSep_0	
180-87210-16	WGWC-16	Total/NA	Water	PrecSep_0	
180-87210-17	WGWC-8	Total/NA	Water	PrecSep_0	
180-87210-18	WGWC-10	Total/NA	Water	PrecSep_0	
180-87210-19	WGWC-11	Total/NA	Water	PrecSep_0	
180-87210-20	WGWC-12	Total/NA	Water	PrecSep_0	
MB 160-417890/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-417890/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-417890/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Association Summary

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

Job ID: 180-87210-2
SDG: App IV Scan

Rad

Prep Batch: 417892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-21	WGWC-9	Total/NA	Water	PrecSep-21	
180-87210-22	DUP-2	Total/NA	Water	PrecSep-21	
180-87210-23	WGWC-19	Total/NA	Water	PrecSep-21	
180-87210-24	EB-2-2-28-19	Total/NA	Water	PrecSep-21	
180-87210-25	FB-2-2-28-19	Total/NA	Water	PrecSep-21	
MB 160-417892/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-417892/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 417898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-87210-21	WGWC-9	Total/NA	Water	PrecSep_0	
180-87210-22	DUP-2	Total/NA	Water	PrecSep_0	
180-87210-23	WGWC-19	Total/NA	Water	PrecSep_0	
180-87210-24	EB-2-2-28-19	Total/NA	Water	PrecSep_0	
180-87210-25	FB-2-2-28-19	Total/NA	Water	PrecSep_0	
MB 160-417898/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-417898/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

681-Atlanta

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUA, J. Benistad	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:
Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7239	PO #: SCS10382606			
Email: JABRAHAM@SOUTHERNCO.COM	WO #:			
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
WGWA-2	2-25-19	1520	G	Water	X	X	✓	✓	✓	3	
WGWA-3	2-26-19	1035	G	Water	X	X	✓	✓	✓	3	
WGWA-4	2-26-19	1210	G	Water	X	X	✓	✓	✓	3	
WGWA-7	2-26-19	1400	G	Water	X	X	✓	✓	✓	3	
WGWA-1	2-25-19	1505	G	Water	X	X	✓	✓	✓	3	
WGWA-5	2-26-19	1315	G	Water	X	X	✓	✓	✓	3	
WGWA-6	2-26-19	1415	G	Water	X	X	✓	✓	✓	3	
WGWA-18	2-26-19	1515	G	Water	X	X	✓	✓	✓	3	
WGWC-17	2-26-19	1510	G	Water	X	X	✓	✓	✓	3	
WGWC-13	2-27-19	1100	G	Water	X	X	✓	✓	✓	3	
DUP-1	—	—	G	Water	N	N	✓	✓	✓	3	

180-87210 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 3/1/19			
Relinquished by:	Date/Time: 2/28/19	1345 Company ACC	Received by:	Date/Time: 2/28/19 0710	Company
Relinquished by: 2/28/19	Date/Time: 16:00	Company TA	Received by:	Date/Time: 3/1	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 08/04/2016

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

681-Atlanta

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUA J. BRASSFORD	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:
Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7239	PO #: SCS10382606			
Email: JABRAHAM@SOUTHERNCO.COM	WO #:			
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
FB-1-2-26-19	2-26-19	1500	G	Water	X	X	✓	✓	✓	3	
~~EB-2~~ EB-1-2-27-19	2-27-19	0950	G	Water	X	X	✓	✓	✓	3	
WGWC-14A	2-27-19	1155	G	Water	X	X	✓	✓	✓	3	
WGWC-15	2-27-19	1330	G	Water	X	X	✓	✓	✓	3	
WGWC-16	2-27-19	1430	G	Water	X	X	✓	✓	✓	3	
WGWC-8	2-28-19	1035	G	Water	X	X	✓	✓	✓	3	
WGWC-10	2-27-19	1125	G	Water	X	X	✓	✓	✓	3	
WGWC-11	2-27-19	1430	G	Water	X	X	✓	✓	✓	3	
WGWC-12	2-27-19	1700	G	Water	X	X	✓	✓	✓	3	
WGWC-9	2-28-19	1050	G	Water	X	X	✓	✓	✓	3	
DUP-2	—	—	G	Water	X	X	✓	✓	✓	3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 2/28/19 1345	Company ACC	Received by:	Date/Time: 2/28/19 1345	Company TA
Relinquished by:	Date/Time: 2/28/19 1610	Company TA	Received by:	Date/Time: 3/1/19 0910	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 08/04/2016

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4/18/2019

TestAmerica Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA, J. BERSFORD	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-49924-10499.1
Client Contact: Mr. Joju Abraham	Phone: (770) 594-5998	E-Mail: veronica.bortot@testamericainc.com		Page: Page 1 of 3
Company: Southern Company Services				Job #:
Address: 241 Ralph McGill Blvd NE, Bin 10185	Due Date Requested:			
City: Atlanta	TAT Requested (days):			
State, Zip: GA, 30308				
Phone: 404-506-7239	PO #: SCS10382606			
Email: JABRAHAM@SOUTHERNCO.COM	WO #:			
Project Name: CCR - Plant Wansley App IV Scan Event	Project #: 18019922			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D - Fluoride,	6020, 7470A (App IV metals)	9315_Ra226, 9320_Ra228	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	D	D		
WGWC-19	2-28-19	1125	G	Water	X	X	✓	✓	✓	3	
EB-2-2-28-19	2-28-19	1130	G	Water	X	X	✓	✓	✓	3	
FB-2-2-28-19	2-28-19	1040	G	Water	X	X	✓	✓	✓	3	
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

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

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

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

Special Instructions/QC Requirements:

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

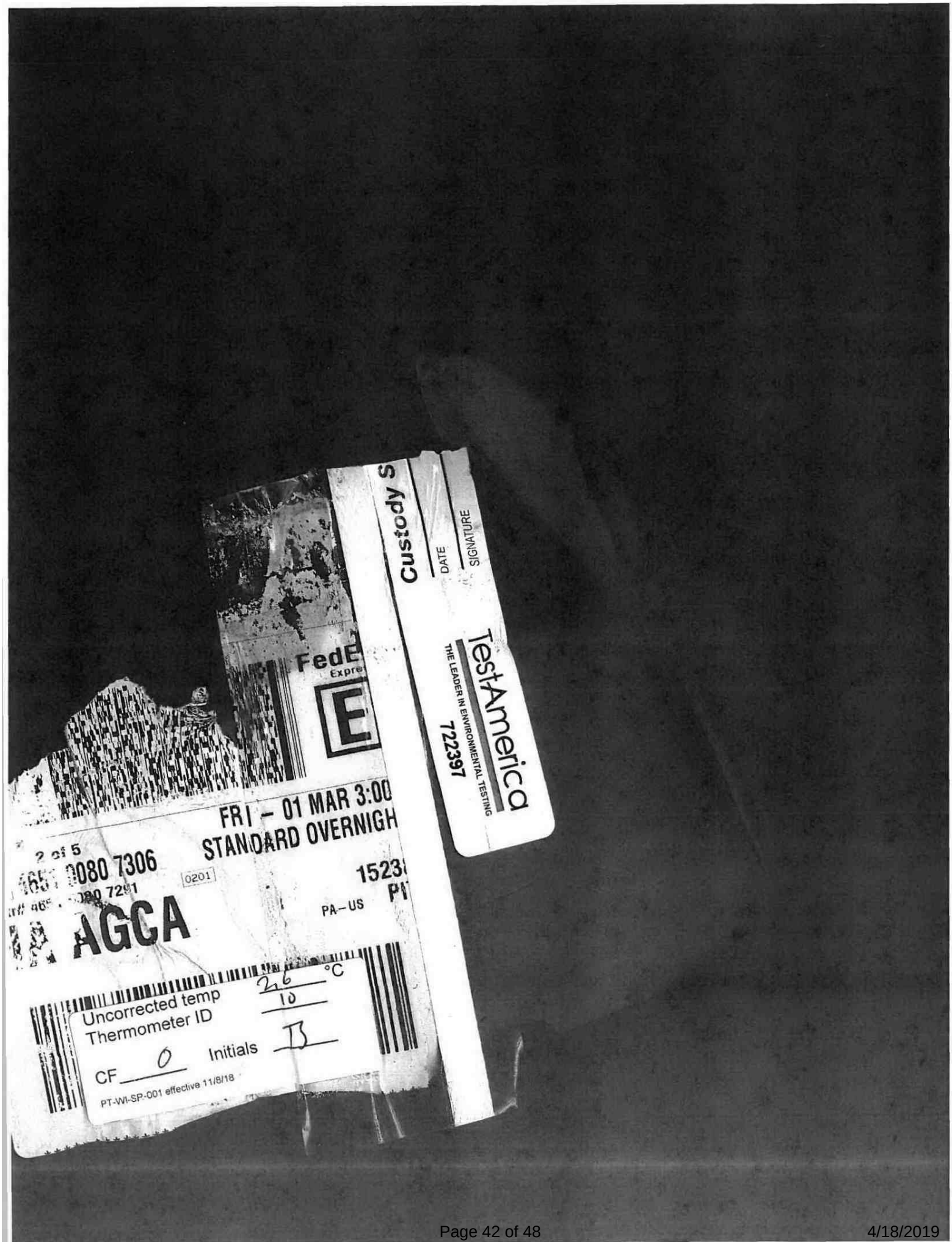
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2/28/19 1345	ACC			
2		2/28/19 1610	TA		3/1/19 0910	TABAT
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016


TestAmerica
TESTING
159469-434 RIT2 EXP 10/19
RT97
FZ
1
16:00
7291
03.01
28FEB19
N ID:MULA (678) 966-9991
E TAYLOR
AMERICA ATLANTA
MCDONOUGH-DRIVE
BILL RECIPIENT
UNITED STATES US
TO SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963 - 7058
180-87210 Waybill
FedEx
Express
1 of 5
4651 0080 7291
FRI - 01 MAR 3:00P
STANDARD OVERNIGHT
MASTER
NA AGCA
15238
PA-US
PIT
Uncorrected temp
Thermometer ID
°C
CF
Initials
PT-WI-SR-001 effective 11/8/18


Custody S
DATE
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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
722397
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FRI - 01 MAR 3:00
STANDARD OVERNIGH
0201
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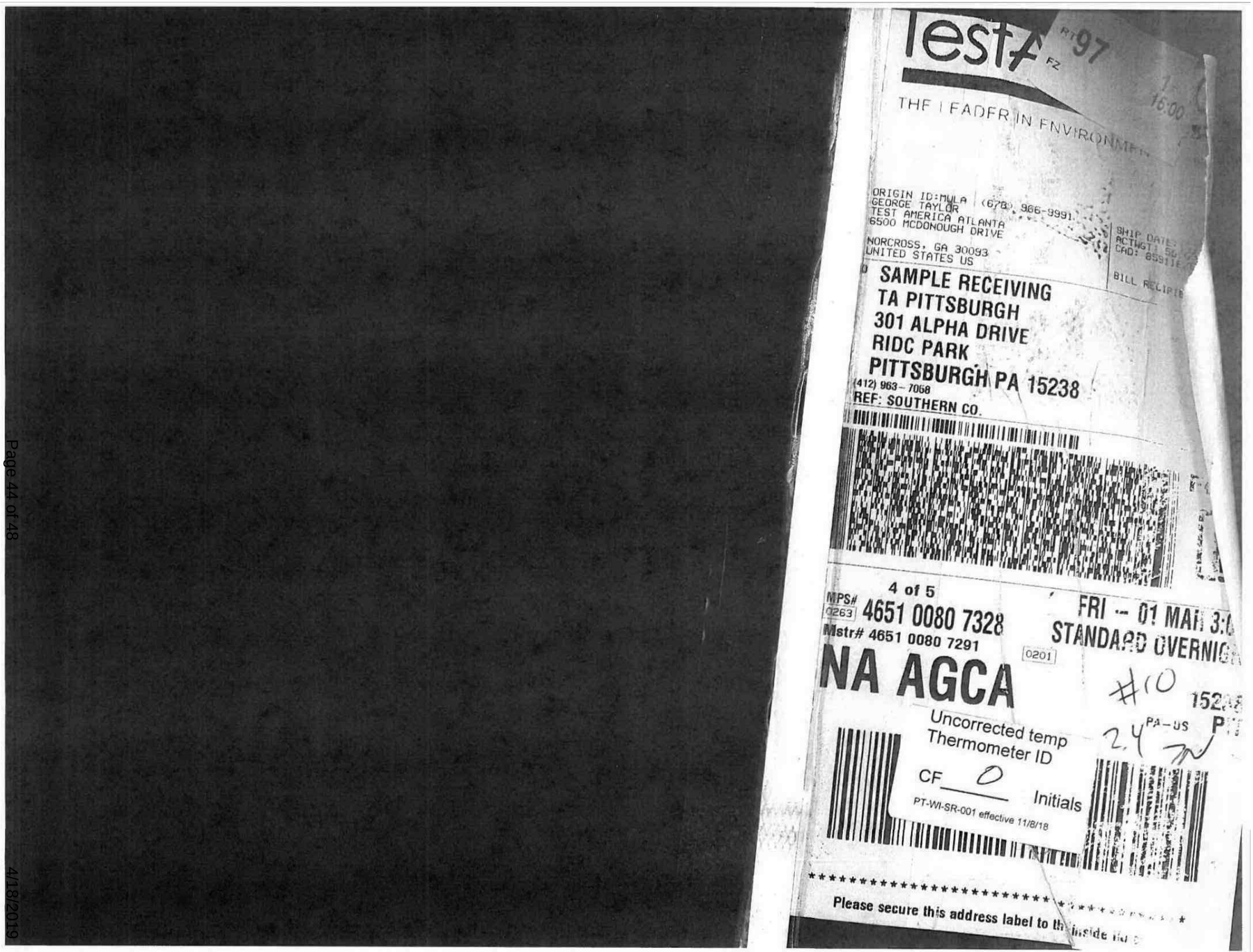
AGCA
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SP-001 effective 11/8/18


TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Part # 150460-434 RIT2 EXP 10/19
ORIGIN ID:MULA (678) 966-9991
GEORGE TAYLOR
TEST AMERICA ATLANTA
6500 MCDONOUGH DRIVE
NORCROSS, GA 30093
UNITED STATES US
BILL RECIPIENT
TO SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO.
FedEx Express
3 of 5
MPS# 0263 4651 0080 7317
Mstr# 4651 0080 7291
FRI - 01 MAR 3:00P
STANDARD OVERNIGHT
0201
NA AGCA
15238
PA-US PIT
Uncorrected temp 1.6 °C
Thermometer ID 10
CF 0 Initials
PT-WI-SR-001 effective 11/8/18


Test
THE LEADER IN ENVIRONMENT
ORIGIN ID:MVLA (678) 966-9991
GEORGE TAYLOR
TEST AMERICA ATLANTA
6500 MCDONOUGH DRIVE
NORCROSS, GA 30093
UNITED STATES US
SHIP DATE:
ACTWGT: 56
CAD: 85911
BILL RECIPIE
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO.
4 of 5
MPS# 0263 4651 0080 7328
Mstr# 4651 0080 7291
0201
NA AGCA
FRI -- 01 MAR
STANDARD OVERNIGHT
#10
PA-US
Uncorrected temp
Thermometer ID
CF 0
Initials
PT-WI-SR-001 effective 11/8/18
Please secure this address label to the inside


EADER IN ENVIRONMENTAL TESTING
SHIP DATE: 28FEB19
ACTWGT: 55.65 LB
CAD: 859116/CAFE3211
BILL RECIPIENT
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
REF: SOUTHERN CO.
FedEx
Express
5 of 5
MPS# 0263 4651 0080 7339
Mstr# 4651 0080 7291
0201
FRI - 01 MAR 3:00P
STANDARD OVERNIGHT
FedEx
PS# 0263 4651 0080 7339
FRI - 01 MAR AA
STANDARD OVERNIGHT
NA AGCA
15238
PA-US
PIT
Uncorrected temp 1.9 °C
Thermometer ID 10
CF 0 Initials
PT-WI-SR-001 effective 11/8/18
FID 966468 28FEB19 MGEA 553C2/0E3D/0C8A

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-87210-2
SDG Number: App IV Scan

Login Number: 87210
List Number: 1
Creator: Neri, Tom

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No date or time on COC or containers.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
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").	True	
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: 180-87210-2
SDG Number: App IV Scan

Login Number: 87210
List Number: 2
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/05/19 12:35 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	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 <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: 180-87210-2
SDG Number: App IV Scan

Login Number: 87210
List Number: 3
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 03/05/19 12:40 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	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 <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	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-88630-1
Laboratory Sample Delivery Group: Ash Pond
Client Project/Site: CCR - Plant Wansley

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
4/22/2019 4:10:39 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-88630-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-88630-1

Comments
No additional comments.

Receipt
The samples were received on 4/5/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.2º C, 1.4º C, 1.8º C and 2.4º C.

Anions
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method(s) 200.8, 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-437187 and analytical batch 400-437398 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 post digestion spike % recovery associated with batch 400-437615 was outside of control limits. The following sample is impacted: (180-88630-C-7-A PDS ^5).

Method(s) 6020: The following sample was diluted to bring the concentration of target analytes within the calibration range: WGWC-16 (180-88630-24). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

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

Job ID: 180-88630-1
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.
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)

Accreditation/Certification Summary

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

Job ID: 180-88630-1
SDG: Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-19 *
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-19
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

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

Accreditation/Certification Summary

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

Job ID: 180-88630-1
SDG: Ash Pond

Laboratory: Eurofins 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	01-12-20
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	10-31-19
Kentucky (UST)	State Program	4	53	06-30-19
Kentucky (WW)	State Program	4	98030	12-31-19
Louisiana	NELAP	6	30976	06-30-19
Louisiana (DW)	NELAP	6	LA017	12-31-19
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	12-31-19
Oklahoma	State Program	6	9810	08-31-19
Pennsylvania	NELAP	3	68-00467	01-31-20
Rhode Island	State Program	1	LAO00307	12-30-19
South Carolina	State Program	4	96026	06-30-19
Tennessee	State Program	4	TN02907	06-30-19
Texas	NELAP	6	T104704286-18-15	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	07-31-19

Sample Summary

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

Job ID: 180-88630-1
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-88630-1	WGWA-1	Water	04/01/19 13:45	04/05/19 09:00
180-88630-2	WGWA-5	Water	04/02/19 11:30	04/05/19 09:00
180-88630-3	WGWA-6	Water	04/02/19 13:15	04/05/19 09:00
180-88630-4	FB-1-4-2-19	Water	04/02/19 12:10	04/05/19 09:00
180-88630-5	WGWA-18	Water	04/02/19 14:25	04/05/19 09:00
180-88630-6	WGWC-9	Water	04/03/19 13:40	04/05/19 09:00
180-88630-7	WGWC-8	Water	04/03/19 14:50	04/05/19 09:00
180-88630-8	WGWC-17	Water	04/04/19 09:55	04/05/19 09:00
180-88630-9	EB-2-4-4-19	Water	04/04/19 09:40	04/05/19 09:00
180-88630-10	WGWC-10	Water	04/04/19 11:35	04/05/19 09:00
180-88630-11	DUP-2-4-3-19	Water	04/04/19 00:00	04/05/19 09:00
180-88630-12	DUP-1	Water	04/04/19 00:00	04/05/19 09:00
180-88630-13	WGWA-2	Water	04/01/19 14:50	04/05/19 09:00
180-88630-14	WGWA-7	Water	04/02/19 11:15	04/05/19 09:00
180-88630-15	WGWA-4	Water	04/02/19 12:45	04/05/19 09:00
180-88630-16	WGWA-3	Water	04/02/19 13:50	04/05/19 09:00
180-88630-17	WGWC-19	Water	04/02/19 14:55	04/05/19 09:00
180-88630-18	WGWC-12	Water	04/03/19 11:05	04/05/19 09:00
180-88630-19	WGWC-11	Water	04/03/19 12:20	04/05/19 09:00
180-88630-20	WGWC-13	Water	04/03/19 13:20	04/05/19 09:00
180-88630-21	WGWC-14A	Water	04/03/19 14:35	04/05/19 09:00
180-88630-23	WGWC-15	Water	04/04/19 10:35	04/05/19 09:00
180-88630-24	WGWC-16	Water	04/04/19 11:40	04/05/19 09:00
180-88630-25	FB-2-4-4-19	Water	04/04/19 12:00	04/05/19 09:00

Method Summary

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

Job ID: 180-88630-1
SDG: Ash Pond

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PIT
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
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 = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: WGWA-1
Date Collected: 04/01/19 13:45
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 14:42	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 06:22	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275110	04/08/19 11:54	JAS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-5
Date Collected: 04/02/19 11:30
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 15:29	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 06:26	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-6
Date Collected: 04/02/19 13:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 15:45	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 06:30	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1-4-2-19
Date Collected: 04/02/19 12:10
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 17:52	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 06:54	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: WGWA-18
Date Collected: 04/02/19 14:25
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 16:01	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 06:58	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-9
Date Collected: 04/03/19 13:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 16:17	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437187	04/15/19 16:45	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437398	04/17/19 07:02	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-8
Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 16:32	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:23	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-17
Date Collected: 04/04/19 09:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 16:48	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:43	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: EB-2-4-4-19

Lab Sample ID: 180-88630-9

Date Collected: 04/04/19 09:40
Date Received: 04/05/19 09:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 18:07	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:47	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-10

Lab Sample ID: 180-88630-10

Date Collected: 04/04/19 11:35
Date Received: 04/05/19 09:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 17:04	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:51	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-2-4-3-19

Lab Sample ID: 180-88630-11

Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 18:23	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:56	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Lab Sample ID: 180-88630-12

Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 18:39	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 15:59	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-2
Date Collected: 04/01/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 18:55	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:23	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275110	04/08/19 11:54	JAS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-7
Date Collected: 04/02/19 11:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 19:11	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:27	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-4
Date Collected: 04/02/19 12:45
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 19:26	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:32	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-3
Date Collected: 04/02/19 13:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 19:42	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:35	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-19
Date Collected: 04/02/19 14:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 19:58	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:39	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275263	04/09/19 13:59	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-12
Date Collected: 04/03/19 11:05
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275706	04/15/19 20:14	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:44	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-11
Date Collected: 04/03/19 12:20
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 06:00	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:47	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-13
Date Collected: 04/03/19 13:20
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 07:02	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:51	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: WGWC-14A
Date Collected: 04/03/19 14:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 07:17	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 16:56	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275424	04/10/19 16:42	TAM	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-15
Date Collected: 04/04/19 10:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 07:32	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 17:00	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-16
Date Collected: 04/04/19 11:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 06:46	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total/NA	Analysis	300.0		5			275800	04/16/19 07:48	MJH	TAL PIT
	Instrument ID: CHIC2100A									
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 17:24	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total Recoverable	Prep	3005A	DL		50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020	DL	25			437615	04/18/19 09:20	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2-4-4-19
Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			275800	04/16/19 08:33	MJH	TAL PIT
	Instrument ID: CHIC2100A									

Lab Chronicle

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: FB-2-4-4-19

Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	437361	04/16/19 18:10	DRE	TAL PEN
Total Recoverable	Analysis	6020		5			437615	04/17/19 17:27	DRE	TAL PEN
	Instrument ID: ICPMS7700									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	275517	04/11/19 11:51	AVS	TAL PIT
	Instrument ID: NOEQUIP									

Laboratory References:

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

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PEN

Batch Type: Prep

DRE = Daniel Etscheid

Batch Type: Analysis

DRE = Daniel Etscheid

Lab: TAL PIT

Batch Type: Analysis

AVS = Abbey Smith

JAS = Joshua Schmidt

MJH = Matthew Hartman

TAM = Tessa Mastalski

Client Sample ID: WGWA-1

Lab Sample ID: 180-88630-1

Date Collected: 04/01/19 13:45

Matrix: Water

Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4.0**		1.0	0.71	mg/L			04/15/19 14:42	1
Fluoride	<0.026		0.20	0.026	mg/L			04/15/19 14:42	1
Sulfate	<0.38		1.0	0.38	mg/L			04/15/19 14:42	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		04/15/19 16:45	04/17/19 06:22	5
Barium	**0.044**		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 06:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:22	5
Cobalt	**0.00079**	**J**	0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 06:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 06:22	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 06:22	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 06:22	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 06:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 06:22	5
Lithium	**0.0044**	**J**	0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 06:22	5
Calcium	**1.0**		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 06:22	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 06:22	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/08/19 11:54	1

Client Sample ID: WGWA-5

Lab Sample ID: 180-88630-2

Date Collected: 04/02/19 11:30

Matrix: Water

Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.7**		1.0	0.71	mg/L			04/15/19 15:29	1
Fluoride	<0.026		0.20	0.026	mg/L			04/15/19 15:29	1
Sulfate	**0.94**	**J**	1.0	0.38	mg/L			04/15/19 15:29	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		04/15/19 16:45	04/17/19 06:26	5
Barium	**0.016**		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 06:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:26	5
Cobalt	**0.00046**	**J**	0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 06:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 06:26	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 06:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 06:26	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 06:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 06:26	5
Lithium	**0.0016**	**J**	0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 06:26	5
Calcium	**1.1**		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 06:26	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 06:26	5

Client Sample ID: WGWA-5
Lab Sample ID: 180-88630-2

Date Collected: 04/02/19 11:30
Matrix: Water
Date Received: 04/05/19 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**25**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWA-6
Lab Sample ID: 180-88630-3

Date Collected: 04/02/19 13:15
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.5**		1.0	0.71	mg/L			04/15/19 15:45	1
Fluoride	**0.090**	**J**	0.20	0.026	mg/L			04/15/19 15:45	1
Sulfate	**8.5**		1.0	0.38	mg/L			04/15/19 15:45	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		04/15/19 16:45	04/17/19 06:30	5
Barium	**0.0069**		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 06:30	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:30	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:30	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 06:30	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 06:30	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 06:30	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 06:30	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 06:30	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 06:30	5
Lithium	**0.0052**		0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 06:30	5
Calcium	**25**		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 06:30	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 06:30	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**110**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: FB-1-4-2-19
Lab Sample ID: 180-88630-4

Date Collected: 04/02/19 12:10
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/15/19 17:52	1
Fluoride	**0.035**	**J**	0.20	0.026	mg/L			04/15/19 17:52	1
Sulfate	<0.38		1.0	0.38	mg/L			04/15/19 17:52	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		04/15/19 16:45	04/17/19 06:54	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 06:54	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:54	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 06:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 06:54	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 06:54	5

Client Sample ID: FB-1-4-2-19

Lab Sample ID: 180-88630-4
Date Collected: 04/02/19 12:10
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 06:54	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 06:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 06:54	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 06:54	5
Calcium	<0.13		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 06:54	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 06:54	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWA-18

Lab Sample ID: 180-88630-5
Date Collected: 04/02/19 14:25
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.6**		1.0	0.71	mg/L			04/15/19 16:01	1
Fluoride	**0.21**		0.20	0.026	mg/L			04/15/19 16:01	1
Sulfate	**11**		1.0	0.38	mg/L			04/15/19 16:01	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		04/15/19 16:45	04/17/19 06:58	5
Barium	**0.014**		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 06:58	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 06:58	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 06:58	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 06:58	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 06:58	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 06:58	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 06:58	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 06:58	5
Lithium	**0.0012**	**J**	0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 06:58	5
Calcium	**20**		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 06:58	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 06:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**100**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWC-9

Lab Sample ID: 180-88630-6
Date Collected: 04/03/19 13:40
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.0**		1.0	0.71	mg/L			04/15/19 16:17	1
Fluoride	**1.3**		0.20	0.026	mg/L			04/15/19 16:17	1
Sulfate	**41**		1.0	0.38	mg/L			04/15/19 16:17	1

Client Sample ID: WGWC-9

Date Collected: 04/03/19 13:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/15/19 16:45	04/17/19 07:02	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 07:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 07:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 07:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 07:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 07:02	5
Molybdenum	**0.0026**	**J**	0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 07:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 07:02	5
Selenium	**0.0019**		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 07:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 07:02	5
Lithium	**0.035**		0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 07:02	5
Calcium	**7.2**		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 07:02	5
Boron	**0.35**		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 07:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**120**		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-8

Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70**		1.0	0.71	mg/L			04/15/19 16:32	1
Fluoride	**0.50**		0.20	0.026	mg/L			04/15/19 16:32	1
Sulfate	**180**		1.0	0.38	mg/L			04/15/19 16:32	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		04/16/19 18:10	04/17/19 15:23	5
Barium	**0.0010**	**J**	0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:23	5
Beryllium	**0.0019**	**J**	0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:23	5
Cobalt	**0.0037**		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:23	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:23	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:23	5
Selenium	**0.0031**		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:23	5
Lithium	**0.015**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:23	5
Calcium	**61**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:23	5
Boron	**1.7**		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:23	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-17

Lab Sample ID: 180-88630-8

Date Collected: 04/04/19 09:55
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.4**		1.0	0.71	mg/L			04/15/19 16:48	1
Fluoride	**0.087**	**J**	0.20	0.026	mg/L			04/15/19 16:48	1
Sulfate	**9.1**		1.0	0.38	mg/L			04/15/19 16:48	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		04/16/19 18:10	04/17/19 15:43	5
Barium	**0.011**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:43	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:43	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:43	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:43	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:43	5
Molybdenum	**0.0020**	**J**	0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:43	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:43	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:43	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:43	5
Lithium	**0.0042**	**J**	0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:43	5
Calcium	**5.6**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:43	5
Boron	**0.049**	**J**	0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**89**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: EB-2-4-4-19

Lab Sample ID: 180-88630-9

Date Collected: 04/04/19 09:40
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/15/19 18:07	1
Fluoride	<0.026		0.20	0.026	mg/L			04/15/19 18:07	1
Sulfate	<0.38		1.0	0.38	mg/L			04/15/19 18:07	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		04/16/19 18:10	04/17/19 15:47	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:47	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:47	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:47	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:47	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:47	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:47	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:47	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:47	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:47	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:47	5
Calcium	<0.13		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:47	5
Boron	**0.025**	**J**	0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:47	5

Client Sample ID: EB-2-4-4-19

Lab Sample ID: 180-88630-9
Date Collected: 04/04/19 09:40
Matrix: Water
Date Received: 04/05/19 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: WGWC-10

Lab Sample ID: 180-88630-10
Date Collected: 04/04/19 11:35
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.4**		1.0	0.71	mg/L			04/15/19 17:04	1
Fluoride	**0.13**	**J**	0.20	0.026	mg/L			04/15/19 17:04	1
Sulfate	**2.2**		1.0	0.38	mg/L			04/15/19 17:04	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		04/16/19 18:10	04/17/19 15:51	5
Barium	**0.040**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:51	5
Cobalt	**0.0017**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:51	5
Chromium	**0.0021**	**J**	0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:51	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:51	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:51	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:51	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:51	5
Lithium	**0.0059**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:51	5
Calcium	**7.9**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:51	5
Boron	**0.024**	**J**	0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**30**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: DUP-2-4-3-19

Lab Sample ID: 180-88630-11
Date Collected: 04/04/19 00:00
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68**		1.0	0.71	mg/L			04/15/19 18:23	1
Fluoride	**0.56**		0.20	0.026	mg/L			04/15/19 18:23	1
Sulfate	**180**		1.0	0.38	mg/L			04/15/19 18:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00046**	**J**	0.0013	0.00046	mg/L		04/16/19 18:10	04/17/19 15:56	5
Barium	**0.00091**	**J**	0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:56	5
Beryllium	**0.0017**	**J**	0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:56	5
Cobalt	**0.0036**		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:56	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:56	5

Client Sample ID: DUP-2-4-3-19

Lab Sample ID: 180-88630-11
Date Collected: 04/04/19 00:00
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:56	5
Selenium	**0.0028**		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:56	5
Lithium	**0.015**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:56	5
Calcium	**60**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:56	5
Boron	**1.7**		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**430**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: DUP-1

Lab Sample ID: 180-88630-12
Date Collected: 04/04/19 00:00
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.4**		1.0	0.71	mg/L			04/15/19 18:39	1
Fluoride	**0.059**	**J**	0.20	0.026	mg/L			04/15/19 18:39	1
Sulfate	**0.89**	**J**	1.0	0.38	mg/L			04/15/19 18:39	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		04/16/19 18:10	04/17/19 15:59	5
Barium	**0.038**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 15:59	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:59	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 15:59	5
Cobalt	**0.0011**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 15:59	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 15:59	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 15:59	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 15:59	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 15:59	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 15:59	5
Lithium	**0.0057**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 15:59	5
Calcium	**17**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 15:59	5
Boron	**0.038**	**J**	0.050	0.021	mg/L		04/16/19 18:10	04/17/19 15:59	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**98**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: WGWA-2

Lab Sample ID: 180-88630-13
Date Collected: 04/01/19 14:50
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.4**		1.0	0.71	mg/L			04/15/19 18:55	1
Fluoride	**0.061**	**J**	0.20	0.026	mg/L			04/15/19 18:55	1
Sulfate	**1.0**		1.0	0.38	mg/L			04/15/19 18:55	1

Client Sample ID: WGWA-2

Lab Sample ID: 180-88630-13

Date Collected: 04/01/19 14:50
Matrix: Water
Date Received: 04/05/19 09:00

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		04/16/19 18:10	04/17/19 16:23	5
Barium	**0.027**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:23	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:23	5
Cobalt	**0.00082**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:23	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:23	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:23	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:23	5
Lithium	**0.0055**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:23	5
Calcium	**12**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:23	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:23	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**63**		10	10	mg/L			04/08/19 11:54	1

Client Sample ID: WGWA-7

Lab Sample ID: 180-88630-14

Date Collected: 04/02/19 11:15
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.9**		1.0	0.71	mg/L			04/15/19 19:11	1
Fluoride	<0.026		0.20	0.026	mg/L			04/15/19 19:11	1
Sulfate	**0.40**	**J**	1.0	0.38	mg/L			04/15/19 19:11	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		04/16/19 18:10	04/17/19 16:27	5
Barium	**0.011**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:27	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:27	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:27	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:27	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:27	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:27	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:27	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:27	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:27	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:27	5
Calcium	**1.1**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:27	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**15**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWA-4

Lab Sample ID: 180-88630-15

Date Collected: 04/02/19 12:45

Matrix: Water

Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.2**		1.0	0.71	mg/L			04/15/19 19:26	1
Fluoride	**0.14**	**J**	0.20	0.026	mg/L			04/15/19 19:26	1
Sulfate	**8.1**		1.0	0.38	mg/L			04/15/19 19:26	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		04/16/19 18:10	04/17/19 16:32	5
Barium	**0.0056**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:32	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:32	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:32	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:32	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:32	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:32	5
Lithium	**0.0036**	**J**	0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:32	5
Calcium	**15**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:32	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:32	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**100**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWA-3

Lab Sample ID: 180-88630-16

Date Collected: 04/02/19 13:50

Matrix: Water

Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.7**		1.0	0.71	mg/L			04/15/19 19:42	1
Fluoride	**0.039**	**J**	0.20	0.026	mg/L			04/15/19 19:42	1
Sulfate	**1.1**		1.0	0.38	mg/L			04/15/19 19:42	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		04/16/19 18:10	04/17/19 16:35	5
Barium	**0.014**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:35	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:35	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:35	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:35	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:35	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:35	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:35	5
Calcium	**1.8**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:35	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:35	5

Client Sample ID: WGWA-3
Lab Sample ID: 180-88630-16

Date Collected: 04/02/19 13:50
Matrix: Water
Date Received: 04/05/19 09:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**28**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWC-19
Lab Sample ID: 180-88630-17

Date Collected: 04/02/19 14:55
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.5**		1.0	0.71	mg/L			04/15/19 19:58	1
Fluoride	**0.33**		0.20	0.026	mg/L			04/15/19 19:58	1
Sulfate	**3.8**		1.0	0.38	mg/L			04/15/19 19:58	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		04/16/19 18:10	04/17/19 16:39	5
Barium	**0.0013**	**J**	0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:39	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:39	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:39	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:39	5
Lithium	**0.052**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:39	5
Calcium	**11**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:39	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:39	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**88**		10	10	mg/L			04/09/19 13:59	1

Client Sample ID: WGWC-12
Lab Sample ID: 180-88630-18

Date Collected: 04/03/19 11:05
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.0**		1.0	0.71	mg/L			04/15/19 20:14	1
Fluoride	**0.084**	**J**	0.20	0.026	mg/L			04/15/19 20:14	1
Sulfate	**13**		1.0	0.38	mg/L			04/15/19 20:14	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		04/16/19 18:10	04/17/19 16:44	5
Barium	**0.015**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:44	5
Cobalt	**0.00043**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:44	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:44	5

Client Sample ID: WGWC-12

Lab Sample ID: 180-88630-18
Date Collected: 04/03/19 11:05
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:44	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:44	5
Lithium	**0.0075**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:44	5
Calcium	**14**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:44	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:44	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**66**		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-11

Lab Sample ID: 180-88630-19
Date Collected: 04/03/19 12:20
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.3**		1.0	0.71	mg/L			04/16/19 06:00	1
Fluoride	**0.048**	**J**	0.20	0.026	mg/L			04/16/19 06:00	1
Sulfate	**1.9**		1.0	0.38	mg/L			04/16/19 06:00	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		04/16/19 18:10	04/17/19 16:47	5
Barium	**0.035**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:47	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:47	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:47	5
Cobalt	**0.00081**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:47	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:47	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:47	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:47	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:47	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:47	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:47	5
Calcium	**1.7**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:47	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:47	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-13

Lab Sample ID: 180-88630-20
Date Collected: 04/03/19 13:20
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.2**		1.0	0.71	mg/L			04/16/19 07:02	1
Fluoride	**0.24**		0.20	0.026	mg/L			04/16/19 07:02	1
Sulfate	**3.8**		1.0	0.38	mg/L			04/16/19 07:02	1

Client Sample ID: WGWC-13

Lab Sample ID: 180-88630-20

Date Collected: 04/03/19 13:20
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00053**	**J**	0.0013	0.00046	mg/L		04/16/19 18:10	04/17/19 16:51	5
Barium	**0.056**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:51	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:51	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:51	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:51	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:51	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:51	5
Lead	**0.00047**	**J**	0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:51	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:51	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:51	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:51	5
Calcium	**4.7**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:51	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**72**		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-14A

Lab Sample ID: 180-88630-21

Date Collected: 04/03/19 14:35
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.4**		1.0	0.71	mg/L			04/16/19 07:17	1
Fluoride	**0.048**	**J**	0.20	0.026	mg/L			04/16/19 07:17	1
Sulfate	**3.8**		1.0	0.38	mg/L			04/16/19 07:17	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		04/16/19 18:10	04/17/19 16:56	5
Barium	**0.026**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 16:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 16:56	5
Cobalt	**0.0056**		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 16:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 16:56	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 16:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 16:56	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 16:56	5
Thallium	**0.00012**	**J**	0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 16:56	5
Lithium	**0.0015**	**J**	0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 16:56	5
Calcium	**0.84**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 16:56	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 16:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**31**		10	10	mg/L			04/10/19 16:42	1

Client Sample ID: WGWC-15

Lab Sample ID: 180-88630-23

Date Collected: 04/04/19 10:35
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3.7**		1.0	0.71	mg/L			04/16/19 07:32	1
Fluoride	**0.78**		0.20	0.026	mg/L			04/16/19 07:32	1
Sulfate	**41**		1.0	0.38	mg/L			04/16/19 07:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0019**		0.0013	0.00046	mg/L		04/16/19 18:10	04/17/19 17:00	5
Barium	**0.022**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 17:00	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:00	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:00	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 17:00	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 17:00	5
Molybdenum	**0.0039**	**J**	0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 17:00	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 17:00	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 17:00	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 17:00	5
Lithium	**0.0054**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 17:00	5
Calcium	**30**		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 17:00	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 17:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**170**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: WGWC-16

Lab Sample ID: 180-88630-24

Date Collected: 04/04/19 11:40
Matrix: Water
Date Received: 04/05/19 09:00

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		1.0	0.71	mg/L			04/16/19 06:46	1
Fluoride	**0.080**	**J**	0.20	0.026	mg/L			04/16/19 06:46	1
Sulfate	**250**		5.0	1.9	mg/L			04/16/19 07:48	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		04/16/19 18:10	04/17/19 17:24	5
Barium	**0.027**		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 17:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:24	5
Cadmium	**0.00047**	**J**	0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:24	5
Cobalt	**0.00077**	**J**	0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 17:24	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 17:24	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 17:24	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 17:24	5
Selenium	**0.0091**		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 17:24	5
Thallium	**0.000095**	**J**	0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 17:24	5
Lithium	**0.0077**		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 17:24	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**110**		1.3	0.63	mg/L		04/16/19 18:10	04/18/19 09:20	25

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

Job ID: 180-88630-1
SDG: Ash Pond

Client Sample ID: WGWC-16

Lab Sample ID: 180-88630-24

Date Collected: 04/04/19 11:40
Date Received: 04/05/19 09:00

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**3.2**		0.25	0.11	mg/L		04/16/19 18:10	04/18/19 09:20	25

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**710**		10	10	mg/L			04/11/19 11:51	1

Client Sample ID: FB-2-4-4-19

Lab Sample ID: 180-88630-25

Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/16/19 08:33	1
Fluoride	**0.043**	**J**	0.20	0.026	mg/L			04/16/19 08:33	1
Sulfate	<0.38		1.0	0.38	mg/L			04/16/19 08:33	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		04/16/19 18:10	04/17/19 17:27	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 17:27	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:27	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 17:27	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 17:27	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 17:27	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 17:27	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 17:27	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 17:27	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 17:27	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 17:27	5
Calcium	<0.13		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 17:27	5
Boron	**0.044**	**J**	0.050	0.021	mg/L		04/16/19 18:10	04/17/19 17:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			04/11/19 11:51	1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-275706/39
Matrix: Water
Analysis Batch: 275706

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/15/19 13:38	1
Fluoride	<0.026		0.20	0.026	mg/L			04/15/19 13:38	1
Sulfate	<0.38		1.0	0.38	mg/L			04/15/19 13:38	1

Lab Sample ID: LCS 180-275706/38
Matrix: Water
Analysis Batch: 275706

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.9		mg/L		100	90 - 110
Fluoride	1.25	1.25		mg/L		100	90 - 110
Sulfate	25.0	24.7		mg/L		99	90 - 110

Lab Sample ID: 180-88630-1 MS
Matrix: Water
Analysis Batch: 275706

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.0		25.0	29.2		mg/L		101	80 - 120
Fluoride	<0.026		1.25	1.24		mg/L		99	80 - 120
Sulfate	<0.38		25.0	24.9		mg/L		100	80 - 120

Lab Sample ID: 180-88630-1 MSD
Matrix: Water
Analysis Batch: 275706

Client Sample ID: WGWA-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	4.0		25.0	29.3		mg/L		101	80 - 120	0	20
Fluoride	<0.026		1.25	1.25		mg/L		100	80 - 120	1	20
Sulfate	<0.38		25.0	24.9		mg/L		100	80 - 120	0	20

Lab Sample ID: MB 180-275800/6
Matrix: Water
Analysis Batch: 275800

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/16/19 05:30	1
Fluoride	<0.026		0.20	0.026	mg/L			04/16/19 05:30	1
Sulfate	<0.38		1.0	0.38	mg/L			04/16/19 05:30	1

Lab Sample ID: LCS 180-275800/5
Matrix: Water
Analysis Batch: 275800

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	25.0	24.6		mg/L		98	90 - 110
Fluoride	1.25	1.21		mg/L		97	90 - 110
Sulfate	25.0	24.7		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-88630-19 MS
Matrix: Water
Analysis Batch: 275800

Client Sample ID: WGWC-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.3		25.0	30.0		mg/L		107	80 - 120
Fluoride	0.048	J	1.25	1.33		mg/L		103	80 - 120
Sulfate	1.9		25.0	28.5		mg/L		106	80 - 120

Lab Sample ID: 180-88630-19 MSD
Matrix: Water
Analysis Batch: 275800

Client Sample ID: WGWC-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	3.3		25.0	29.5		mg/L		105	80 - 120	1	20
Fluoride	0.048	J	1.25	1.33		mg/L		102	80 - 120	1	20
Sulfate	1.9		25.0	27.9		mg/L		104	80 - 120	2	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-437187/1-A ^5
Matrix: Water
Analysis Batch: 437398

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 437187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/15/19 16:45	04/17/19 08:41	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/15/19 16:45	04/17/19 08:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 08:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/15/19 16:45	04/17/19 08:41	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/15/19 16:45	04/17/19 08:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/15/19 16:45	04/17/19 08:41	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/15/19 16:45	04/17/19 08:41	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/15/19 16:45	04/17/19 08:41	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/15/19 16:45	04/17/19 08:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/15/19 16:45	04/17/19 08:41	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/15/19 16:45	04/17/19 08:41	5
Calcium	<0.13		0.25	0.13	mg/L		04/15/19 16:45	04/17/19 08:41	5
Boron	<0.021		0.050	0.021	mg/L		04/15/19 16:45	04/17/19 08:41	5

Lab Sample ID: LCS 400-437187/2-A
Matrix: Water
Analysis Batch: 437398

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 437187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0498		mg/L		100	80 - 120
Barium	0.0500	0.0482		mg/L		96	80 - 120
Beryllium	0.0500	0.0475		mg/L		95	80 - 120
Cadmium	0.0500	0.0495		mg/L		99	80 - 120
Cobalt	0.0500	0.0505		mg/L		101	80 - 120
Chromium	0.0500	0.0476		mg/L		95	80 - 120
Molybdenum	0.0500	0.0526		mg/L		105	80 - 120
Lead	0.0500	0.0485		mg/L		97	80 - 120
Selenium	0.0500	0.0510		mg/L		102	80 - 120
Thallium	0.0100	0.00948		mg/L		95	80 - 120

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

Lab Sample ID: LCS 400-437187/2-A
Matrix: Water
Analysis Batch: 437398

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 437187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.0500	0.0473		mg/L		95	80 - 120
Calcium	5.00	4.62		mg/L		92	80 - 120
Boron	0.100	0.0975		mg/L		98	80 - 120

Lab Sample ID: MB 400-437361/1-A ^1
Matrix: Water
Analysis Batch: 437615

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.000092		0.00025	0.000092	mg/L		04/16/19 18:10	04/17/19 17:32	1
Barium	<0.000098		0.00050	0.000098	mg/L		04/16/19 18:10	04/17/19 17:32	1
Beryllium	<0.000068		0.00050	0.000068	mg/L		04/16/19 18:10	04/17/19 17:32	1
Cadmium	<0.000068		0.00050	0.000068	mg/L		04/16/19 18:10	04/17/19 17:32	1
Cobalt	<0.000080		0.00050	0.000080	mg/L		04/16/19 18:10	04/17/19 17:32	1
Chromium	<0.00022		0.00050	0.00022	mg/L		04/16/19 18:10	04/17/19 17:32	1
Molybdenum	<0.00040		0.0030	0.00040	mg/L		04/16/19 18:10	04/17/19 17:32	1
Lead	<0.000070		0.00025	0.000070	mg/L		04/16/19 18:10	04/17/19 17:32	1
Selenium	<0.00014		0.00025	0.00014	mg/L		04/16/19 18:10	04/17/19 17:32	1
Thallium	<0.000017		0.00010	0.000017	mg/L		04/16/19 18:10	04/17/19 17:32	1
Lithium	<0.00022		0.0010	0.00022	mg/L		04/16/19 18:10	04/17/19 17:32	1
Calcium	<0.025		0.050	0.025	mg/L		04/16/19 18:10	04/17/19 17:32	1
Boron	<0.0042		0.010	0.0042	mg/L		04/16/19 18:10	04/17/19 17:32	1

Lab Sample ID: MB 400-437361/1-A ^5
Matrix: Water
Analysis Batch: 437615

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/16/19 18:10	04/17/19 14:55	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/16/19 18:10	04/17/19 14:55	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 14:55	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/16/19 18:10	04/17/19 14:55	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/16/19 18:10	04/17/19 14:55	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/16/19 18:10	04/17/19 14:55	5
Molybdenum	<0.0020		0.015	0.0020	mg/L		04/16/19 18:10	04/17/19 14:55	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/16/19 18:10	04/17/19 14:55	5
Selenium	<0.00071		0.0013	0.00071	mg/L		04/16/19 18:10	04/17/19 14:55	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/16/19 18:10	04/17/19 14:55	5
Lithium	<0.0011		0.0050	0.0011	mg/L		04/16/19 18:10	04/17/19 14:55	5
Calcium	<0.13		0.25	0.13	mg/L		04/16/19 18:10	04/17/19 14:55	5
Boron	<0.021		0.050	0.021	mg/L		04/16/19 18:10	04/17/19 14:55	5

Lab Sample ID: LCS 400-437361/2-A
Matrix: Water
Analysis Batch: 437615

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.0527		mg/L		105	80 - 120
Barium	0.0500	0.0507		mg/L		101	80 - 120

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

Lab Sample ID: LCS 400-437361/2-A
Matrix: Water
Analysis Batch: 437615

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0500	0.0488		mg/L		98	80 - 120
Cadmium	0.0500	0.0515		mg/L		103	80 - 120
Cobalt	0.0500	0.0516		mg/L		103	80 - 120
Chromium	0.0500	0.0496		mg/L		99	80 - 120
Molybdenum	0.0500	0.0513		mg/L		103	80 - 120
Lead	0.0500	0.0477		mg/L		95	80 - 120
Selenium	0.0500	0.0503		mg/L		101	80 - 120
Thallium	0.0100	0.00974		mg/L		97	80 - 120
Lithium	0.0500	0.0509		mg/L		102	80 - 120
Calcium	5.00	5.20		mg/L		104	80 - 120
Boron	0.100	0.0957		mg/L		96	80 - 120

Lab Sample ID: 180-88630-7 MS
Matrix: Water
Analysis Batch: 437615

Client Sample ID: WGWC-8
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	<0.00046		0.0500	0.0544		mg/L		109	75 - 125
Barium	0.0010	J	0.0500	0.0532		mg/L		104	75 - 125
Beryllium	0.0019	J	0.0500	0.0513		mg/L		99	75 - 125
Cadmium	<0.00034		0.0500	0.0533		mg/L		107	75 - 125
Cobalt	0.0037		0.0500	0.0554		mg/L		103	75 - 125
Chromium	<0.0011		0.0500	0.0504		mg/L		101	75 - 125
Molybdenum	<0.0020		0.0500	0.0534		mg/L		107	75 - 125
Lead	<0.00035		0.0500	0.0486		mg/L		97	75 - 125
Selenium	0.0031		0.0500	0.0562		mg/L		106	75 - 125
Thallium	<0.000085		0.0100	0.00977		mg/L		98	75 - 125
Lithium	0.015		0.0500	0.0657		mg/L		102	75 - 125
Calcium	61		5.00	66.5	4	mg/L		119	75 - 125
Boron	1.7		0.100	1.85	E 4	mg/L		174	75 - 125

Lab Sample ID: 180-88630-7 MSD
Matrix: Water
Analysis Batch: 437615

Client Sample ID: WGWC-8
Prep Type: Total Recoverable
Prep Batch: 437361

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	<0.00046		0.0500	0.0547		mg/L		109	75 - 125	1	20
Barium	0.0010	J	0.0500	0.0516		mg/L		101	75 - 125	3	20
Beryllium	0.0019	J	0.0500	0.0515		mg/L		99	75 - 125	0	20
Cadmium	<0.00034		0.0500	0.0525		mg/L		105	75 - 125	2	20
Cobalt	0.0037		0.0500	0.0564		mg/L		105	75 - 125	2	20
Chromium	<0.0011		0.0500	0.0510		mg/L		102	75 - 125	1	20
Molybdenum	<0.0020		0.0500	0.0508		mg/L		102	75 - 125	5	20
Lead	<0.00035		0.0500	0.0496		mg/L		99	75 - 125	2	20
Selenium	0.0031		0.0500	0.0548		mg/L		103	75 - 125	3	20
Thallium	<0.000085		0.0100	0.0103		mg/L		103	75 - 125	5	20
Lithium	0.015		0.0500	0.0678		mg/L		107	75 - 125	3	20
Calcium	61		5.00	68.8	4	mg/L		167	75 - 125	4	20
Boron	1.7		0.100	1.88	E 4	mg/L		197	75 - 125	1	20

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

Lab Sample ID: MB 180-275110/2
Matrix: Water
Analysis Batch: 275110

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	<10		10	10	mg/L			04/08/19 11:54	1

Lab Sample ID: LCS 180-275110/1
Matrix: Water
Analysis Batch: 275110

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	304	286		mg/L		94	80 - 120

Lab Sample ID: MB 180-275263/2
Matrix: Water
Analysis Batch: 275263

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	<10		10	10	mg/L			04/09/19 13:59	1

Lab Sample ID: LCS 180-275263/1
Matrix: Water
Analysis Batch: 275263

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	201	166		mg/L		83	80 - 120

Lab Sample ID: MB 180-275424/2
Matrix: Water
Analysis Batch: 275424

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	<10		10	10	mg/L			04/10/19 16:42	1

Lab Sample ID: LCS 180-275424/1
Matrix: Water
Analysis Batch: 275424

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	201	164		mg/L		82	80 - 120

Lab Sample ID: MB 180-275517/2
Matrix: Water
Analysis Batch: 275517

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	<10		10	10	mg/L			04/11/19 11:51	1

Lab Sample ID: LCS 180-275517/1
Matrix: Water
Analysis Batch: 275517

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	201	182		mg/L		91	80 - 120

HPLC/IC

Analysis Batch: 275706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total/NA	Water	300.0	
180-88630-2	WGWA-5	Total/NA	Water	300.0	
180-88630-3	WGWA-6	Total/NA	Water	300.0	
180-88630-4	FB-1-4-2-19	Total/NA	Water	300.0	
180-88630-5	WGWA-18	Total/NA	Water	300.0	
180-88630-6	WGWC-9	Total/NA	Water	300.0	
180-88630-7	WGWC-8	Total/NA	Water	300.0	
180-88630-8	WGWC-17	Total/NA	Water	300.0	
180-88630-9	EB-2-4-4-19	Total/NA	Water	300.0	
180-88630-10	WGWC-10	Total/NA	Water	300.0	
180-88630-11	DUP-2-4-3-19	Total/NA	Water	300.0	
180-88630-12	DUP-1	Total/NA	Water	300.0	
180-88630-13	WGWA-2	Total/NA	Water	300.0	
180-88630-14	WGWA-7	Total/NA	Water	300.0	
180-88630-15	WGWA-4	Total/NA	Water	300.0	
180-88630-16	WGWA-3	Total/NA	Water	300.0	
180-88630-17	WGWC-19	Total/NA	Water	300.0	
180-88630-18	WGWC-12	Total/NA	Water	300.0	
MB 180-275706/39	Method Blank	Total/NA	Water	300.0	
LCS 180-275706/38	Lab Control Sample	Total/NA	Water	300.0	
180-88630-1 MS	WGWA-1	Total/NA	Water	300.0	
180-88630-1 MSD	WGWA-1	Total/NA	Water	300.0	

Analysis Batch: 275800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-19	WGWC-11	Total/NA	Water	300.0	
180-88630-20	WGWC-13	Total/NA	Water	300.0	
180-88630-21	WGWC-14A	Total/NA	Water	300.0	
180-88630-23	WGWC-15	Total/NA	Water	300.0	
180-88630-24	WGWC-16	Total/NA	Water	300.0	
180-88630-24	WGWC-16	Total/NA	Water	300.0	
180-88630-25	FB-2-4-4-19	Total/NA	Water	300.0	
MB 180-275800/6	Method Blank	Total/NA	Water	300.0	
LCS 180-275800/5	Lab Control Sample	Total/NA	Water	300.0	
180-88630-19 MS	WGWC-11	Total/NA	Water	300.0	
180-88630-19 MSD	WGWC-11	Total/NA	Water	300.0	

Metals

Prep Batch: 437187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total Recoverable	Water	3005A	
180-88630-2	WGWA-5	Total Recoverable	Water	3005A	
180-88630-3	WGWA-6	Total Recoverable	Water	3005A	
180-88630-4	FB-1-4-2-19	Total Recoverable	Water	3005A	
180-88630-5	WGWA-18	Total Recoverable	Water	3005A	
180-88630-6	WGWC-9	Total Recoverable	Water	3005A	
MB 400-437187/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-437187/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals

Prep Batch: 437361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-7	WGWC-8	Total Recoverable	Water	3005A	
180-88630-8	WGWC-17	Total Recoverable	Water	3005A	
180-88630-9	EB-2-4-4-19	Total Recoverable	Water	3005A	
180-88630-10	WGWC-10	Total Recoverable	Water	3005A	
180-88630-11	DUP-2-4-3-19	Total Recoverable	Water	3005A	
180-88630-12	DUP-1	Total Recoverable	Water	3005A	
180-88630-13	WGWA-2	Total Recoverable	Water	3005A	
180-88630-14	WGWA-7	Total Recoverable	Water	3005A	
180-88630-15	WGWA-4	Total Recoverable	Water	3005A	
180-88630-16	WGWA-3	Total Recoverable	Water	3005A	
180-88630-17	WGWC-19	Total Recoverable	Water	3005A	
180-88630-18	WGWC-12	Total Recoverable	Water	3005A	
180-88630-19	WGWC-11	Total Recoverable	Water	3005A	
180-88630-20	WGWC-13	Total Recoverable	Water	3005A	
180-88630-21	WGWC-14A	Total Recoverable	Water	3005A	
180-88630-23	WGWC-15	Total Recoverable	Water	3005A	
180-88630-24	WGWC-16	Total Recoverable	Water	3005A	
180-88630-24 - DL	WGWC-16	Total Recoverable	Water	3005A	
180-88630-25	FB-2-4-4-19	Total Recoverable	Water	3005A	
MB 400-437361/1-A ^1	Method Blank	Total Recoverable	Water	3005A	
MB 400-437361/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-437361/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-88630-7 MS	WGWC-8	Total Recoverable	Water	3005A	
180-88630-7 MSD	WGWC-8	Total Recoverable	Water	3005A	

Analysis Batch: 437398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total Recoverable	Water	6020	437187
180-88630-2	WGWA-5	Total Recoverable	Water	6020	437187
180-88630-3	WGWA-6	Total Recoverable	Water	6020	437187
180-88630-4	FB-1-4-2-19	Total Recoverable	Water	6020	437187
180-88630-5	WGWA-18	Total Recoverable	Water	6020	437187
180-88630-6	WGWC-9	Total Recoverable	Water	6020	437187
MB 400-437187/1-A ^5	Method Blank	Total Recoverable	Water	6020	437187
LCS 400-437187/2-A	Lab Control Sample	Total Recoverable	Water	6020	437187

Analysis Batch: 437615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-7	WGWC-8	Total Recoverable	Water	6020	437361
180-88630-8	WGWC-17	Total Recoverable	Water	6020	437361
180-88630-9	EB-2-4-4-19	Total Recoverable	Water	6020	437361
180-88630-10	WGWC-10	Total Recoverable	Water	6020	437361
180-88630-11	DUP-2-4-3-19	Total Recoverable	Water	6020	437361
180-88630-12	DUP-1	Total Recoverable	Water	6020	437361
180-88630-13	WGWA-2	Total Recoverable	Water	6020	437361
180-88630-14	WGWA-7	Total Recoverable	Water	6020	437361
180-88630-15	WGWA-4	Total Recoverable	Water	6020	437361
180-88630-16	WGWA-3	Total Recoverable	Water	6020	437361
180-88630-17	WGWC-19	Total Recoverable	Water	6020	437361
180-88630-18	WGWC-12	Total Recoverable	Water	6020	437361
180-88630-19	WGWC-11	Total Recoverable	Water	6020	437361

Metals (Continued)

Analysis Batch: 437615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-20	WGWC-13	Total Recoverable	Water	6020	437361
180-88630-21	WGWC-14A	Total Recoverable	Water	6020	437361
180-88630-23	WGWC-15	Total Recoverable	Water	6020	437361
180-88630-24	WGWC-16	Total Recoverable	Water	6020	437361
180-88630-24 - DL	WGWC-16	Total Recoverable	Water	6020	437361
180-88630-25	FB-2-4-4-19	Total Recoverable	Water	6020	437361
MB 400-437361/1-A ^1	Method Blank	Total Recoverable	Water	6020	437361
MB 400-437361/1-A ^5	Method Blank	Total Recoverable	Water	6020	437361
LCS 400-437361/2-A	Lab Control Sample	Total Recoverable	Water	6020	437361
180-88630-7 MS	WGWC-8	Total Recoverable	Water	6020	437361
180-88630-7 MSD	WGWC-8	Total Recoverable	Water	6020	437361

General Chemistry

Analysis Batch: 275110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total/NA	Water	SM 2540C	
180-88630-13	WGWA-2	Total/NA	Water	SM 2540C	
MB 180-275110/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-275110/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 275263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-2	WGWA-5	Total/NA	Water	SM 2540C	
180-88630-3	WGWA-6	Total/NA	Water	SM 2540C	
180-88630-4	FB-1-4-2-19	Total/NA	Water	SM 2540C	
180-88630-5	WGWA-18	Total/NA	Water	SM 2540C	
180-88630-14	WGWA-7	Total/NA	Water	SM 2540C	
180-88630-15	WGWA-4	Total/NA	Water	SM 2540C	
180-88630-16	WGWA-3	Total/NA	Water	SM 2540C	
180-88630-17	WGWC-19	Total/NA	Water	SM 2540C	
MB 180-275263/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-275263/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 275424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-6	WGWC-9	Total/NA	Water	SM 2540C	
180-88630-7	WGWC-8	Total/NA	Water	SM 2540C	
180-88630-18	WGWC-12	Total/NA	Water	SM 2540C	
180-88630-19	WGWC-11	Total/NA	Water	SM 2540C	
180-88630-20	WGWC-13	Total/NA	Water	SM 2540C	
180-88630-21	WGWC-14A	Total/NA	Water	SM 2540C	
MB 180-275424/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-275424/1	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 275517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-8	WGWC-17	Total/NA	Water	SM 2540C	
180-88630-9	EB-2-4-4-19	Total/NA	Water	SM 2540C	
180-88630-10	WGWC-10	Total/NA	Water	SM 2540C	
180-88630-11	DUP-2-4-3-19	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 275517 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-12	DUP-1	Total/NA	Water	SM 2540C	
180-88630-23	WGWC-15	Total/NA	Water	SM 2540C	
180-88630-24	WGWC-16	Total/NA	Water	SM 2540C	
180-88630-25	FB-2-4-4-19	Total/NA	Water	SM 2540C	
MB 180-275517/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-275517/1	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pittsburgh

681-Atlanta

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jordan Benstord	Lab PM: Veronica Bertot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 770-594-5998	E-Mail: Veronica.Bertot@testamericainc.com		Page:
Company: Southern Company		Analysis Requested		Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35291				
Phone:	PO #: SCS10347656			
Email: JAbraham@southernco.com	WO #:			
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			Other:
Site: Georgia	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO4, & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions
Preservation Code:							D	N				
WGWA-1	4-1-19	1345	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWA-5	4-2-19	1130	G	W	N	N	✓	✓	✓	✓	3	
WGWA-6	4-2-19	1315	G	W	N	N	✓	✓	✓	✓	3	
FB-1-4-2-19	4-2-19	1210	G	W	N	N	✓	✓	✓	✓	3	
WGWA-18	4-2-19	1425	G	W	N	N	✓	✓	✓	✓	3	
WGWC-9	4-3-19	1340	G	W	N	N	✓	✓	✓	✓	3	
WGWC-8	4-3-19	1450	G	W	N	N	✓	✓	✓	✓	3	
WGWC-17	4-4-19	0955	G	W	N	N	✓	✓	✓	✓	3	
EB-2-4-4-19	4-4-19	0940	G	W	N	N	✓	✓	✓	✓	3	
WGWC-10	4-4-19	1135	G	W	N	N	✓	✓	✓	✓	3	
Dup-2-4-3-19	←	—	G	W	N	N	✓	✓	✓	✓	3	

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		4/4/19 1435	ACC		4-4-19 1435	
2		4-4-19 1513			4-5-19	TAL
3					900	

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

Detected APP IV: **Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride**

Ver: 08/04/2016

4/22/2019

681-Atlanta

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA	Lab PM: Veronica Bartot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: (770) 598-5998	E-Mail: Veronica.Bartot@testamericainc.com		Page:
Company: Southern Company				Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35291				
Phone:	PO #: SCS10347656			
Email: JAbraham@southernco.com	WO #:			
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions
Preservation Code:							D	N				
DUP-1	—	—	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWA-2	4-1-19	1450	G	W	N	N	✓	✓	✓	✓	3	
WGWA-7	4-2-19	1115	G	W	N	N	✓	✓	✓	✓	3	
WGWA-4	4-2-19	1245	G	W	N	N	✓	✓	✓	✓	3	
WGWA-3	4-2-19	1350	G	W	N	N	✓	✓	✓	✓	3	
WGWC-19	4-2-19	1455	G	W	N	N	✓	✓	✓	✓	3	
WGWC-12	4-3-19	~~1100~~ 1105	G	W	N	N	✓	✓	✓	✓	3	
WGWC-11	4-3-19	1220	G	W	N	N	✓	✓	✓	✓	3	
WGWC-13	4-3-19	1320	G	W	N	N	✓	✓	✓	✓	3	
WGWC-14A	4-3-19	1435	G	W	N	N	✓	✓	✓	✓	3	
EB-1-4-3-19	4-3-19	0930	G	W	N	N	✓	✓	✓	✓	3	

180-88630-02 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	4-4-19 1435	ACC		4-4-19 1435	
Relinquished by:	4-5-19 1513		Received by: Phillie Watson	4-5-19	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 900	Company

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

Detected APP IV: **Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride**

Ver: 08/04/2016

4/22/2019

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA	Lab PM: Jessica Bartot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: (770) 594-5998	E-Mail: Jessica.Bartot@testamerica.com		Page:
Company: Southern Company		Analysis Requested		Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35291				
Phone:	PO #: SCS10347656			
Email: JAbraham@southernco.com	WO #:			
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			
Site: Georgia	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N				
WGWC-15	4-4-19	1035	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWC-16	4-4-19	1140	G	W	N	N	✓	✓	✓	✓	3	
FB-2-4-4-19		1200	G	W	N	N	✓	✓	✓	✓	3	

180-88630-03 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

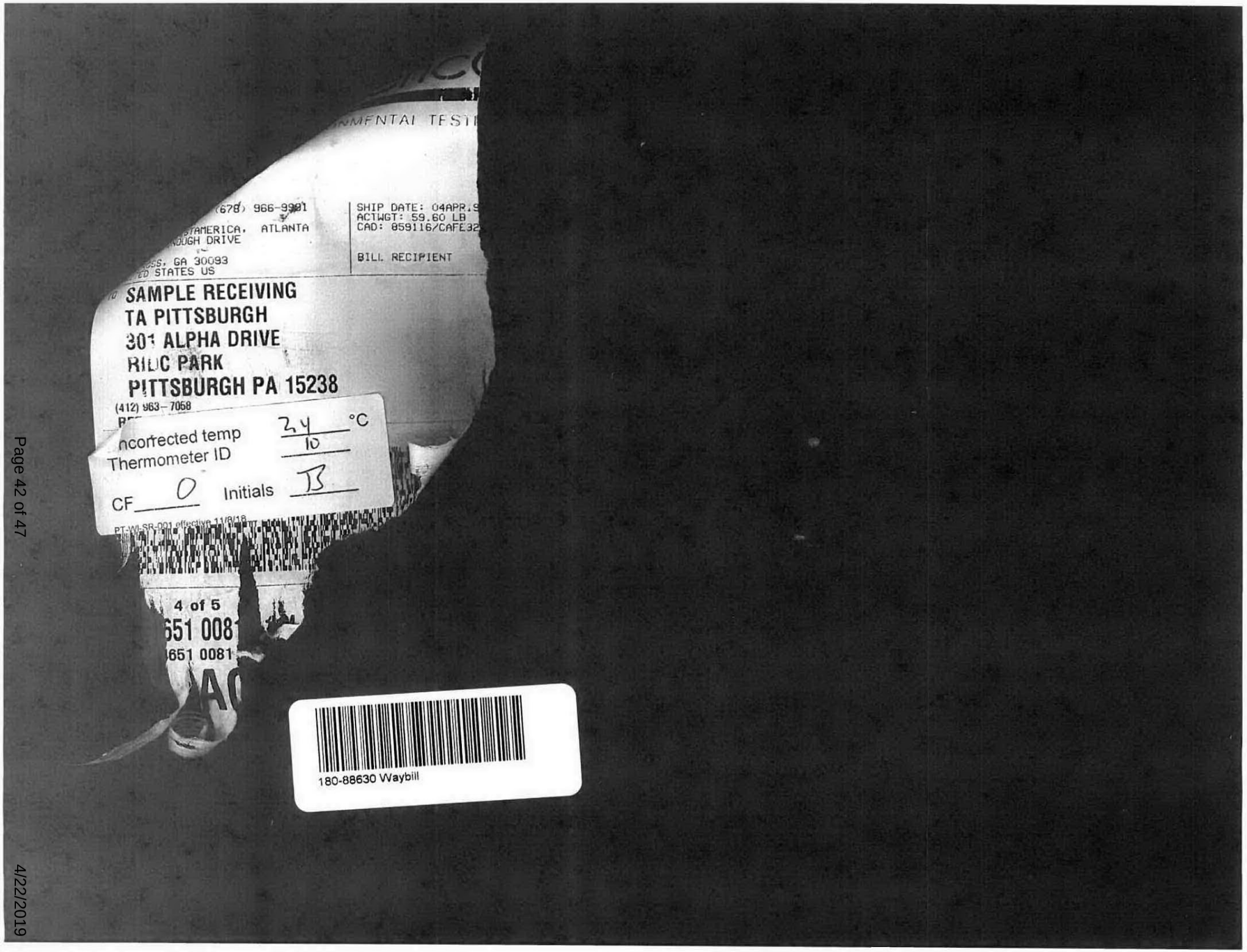
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

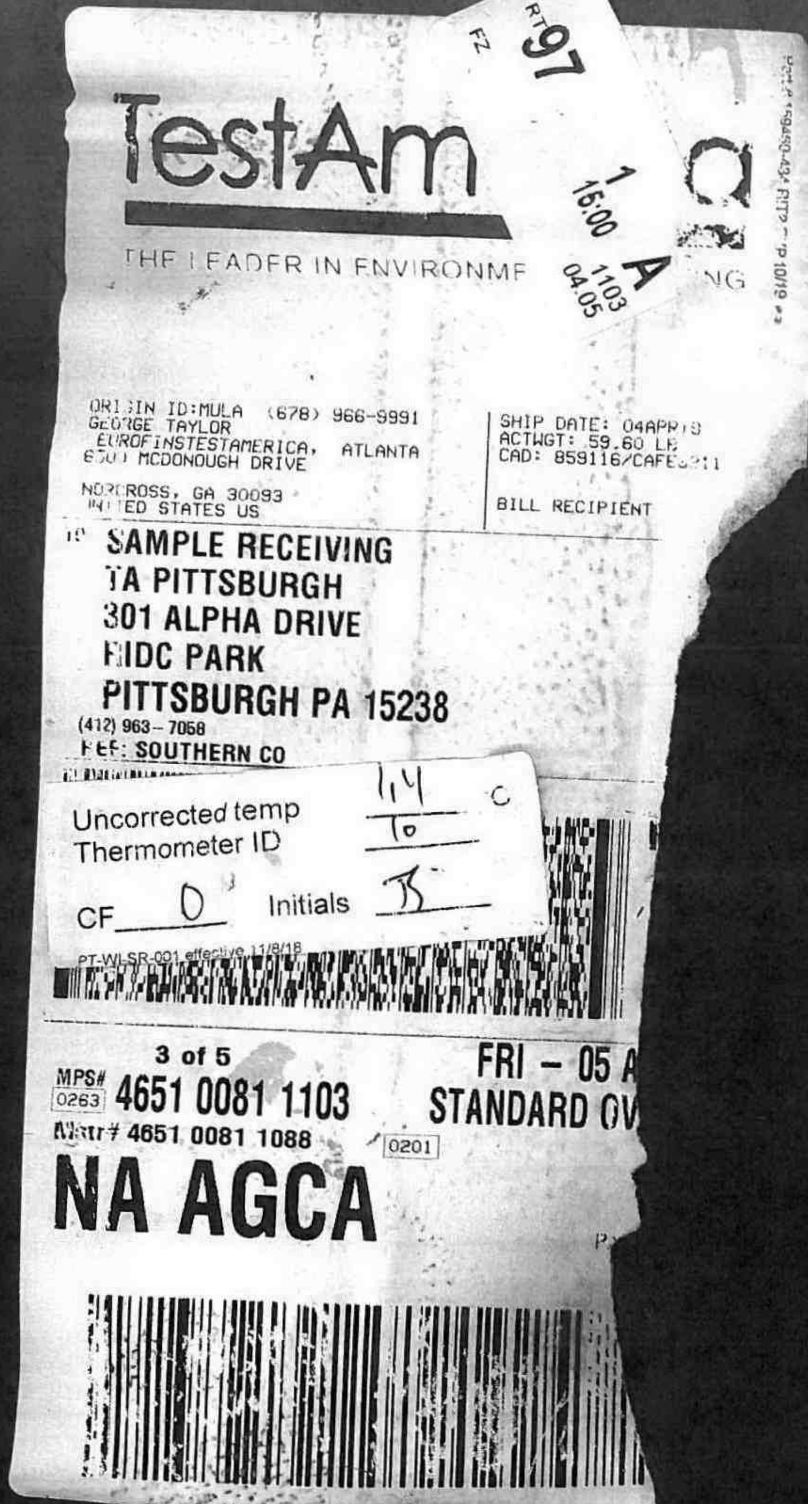
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-4-19 1438	ACC		4-4-19 1435	
2		4-4-19 1513		Dealie Watson	4-5-19	PAPitt
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 900	Company

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

Detected APP IV: ***Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride***

Ver: 08/04/2016


(678) 966-9981
SHIP DATE: 04APR19
ACTWGT: 59.60 LB
CAD: 859116/CAFE32
BILL RECIPIENT
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
Uncorrected temp 2.4 °C
Thermometer ID 10
CF 0 Initials JB
4 of 5
180-88630 Waybill



TestAmerica

THE LEADER IN ENVIRONME

RT97 FZ

1 15:00 A 1103 04.05

ORIGIN ID:MULA (678) 966-9991
GEORGE TAYLOR
EUROFINSTESTAMERICA, ATLANTA
6500 MCDONOUGH DRIVE

NORCROSS, GA 30093
UNITED STATES US

SHIP DATE: 04APR19
ACTWGT: 59.60 LB
CAD: 859116/CAFE3211

BILL RECIPIENT

TO SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO

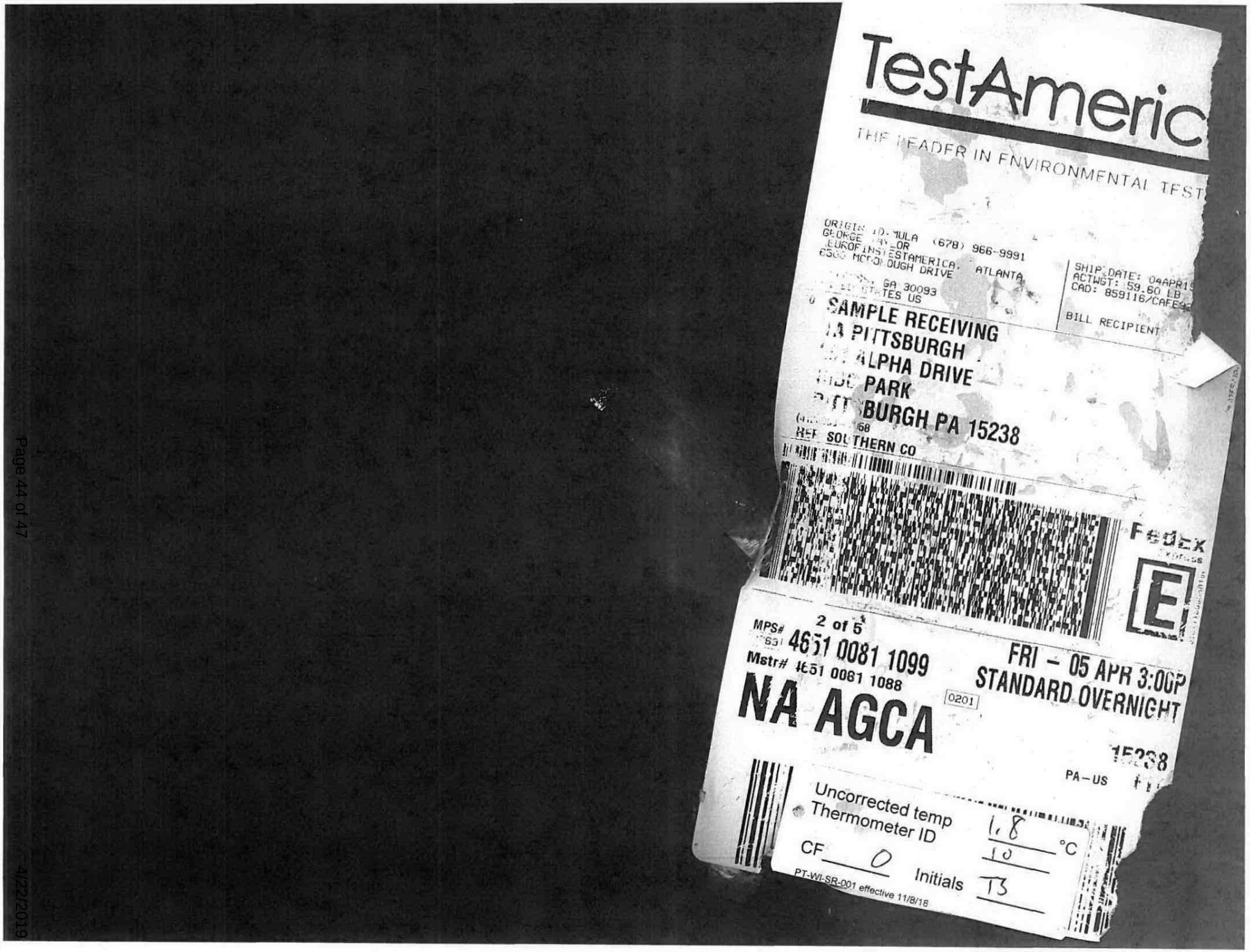
Uncorrected temp 1.4 C
Thermometer ID To
CF 0 Initials JB

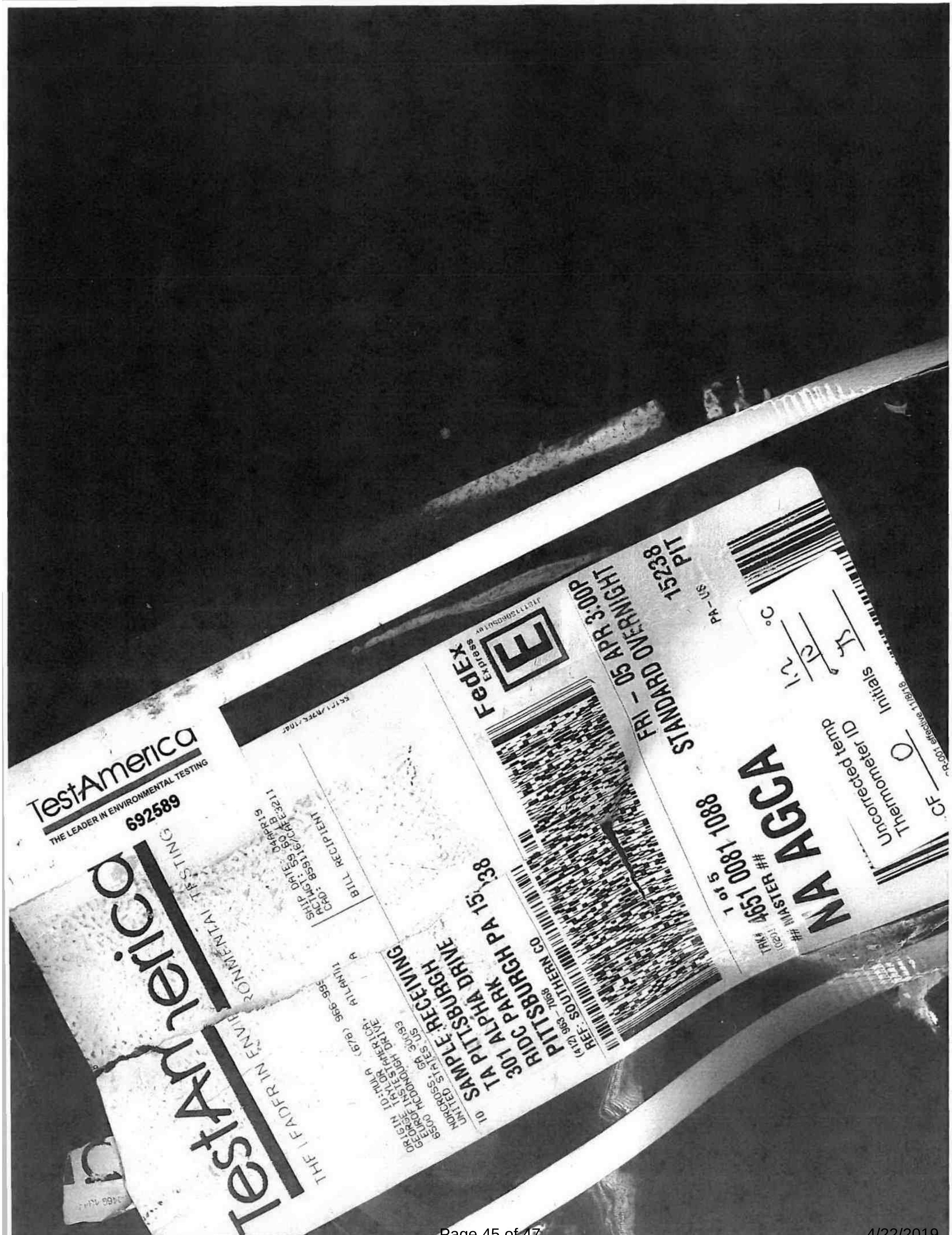
PT-WI-SR-001 effective 11/8/18

3 of 5
MPS# 0263 4651 0081 1103
Mstr# 4651 0081 1088 0201

FRI - 05 A
STANDARD OV

NA AGCA


TestAmeric
THE LEADER IN ENVIRONMENTAL TEST
(678) 966-9991
EUROFINS TESTAMERICA, ATLANTA
GA 30093
SHIP DATE: 04APR1
ACTWGT: 59.60 LB
BILL RECIPIENT
SAMPLE RECEIVING
PITTSBURGH
ALPHA DRIVE
PARK
BURGH PA 15238
SOUTHERN CO
FedEx
2 of 5
MPS# 4651 0081 1099
Mstr# 4651 0081 1088
FRI - 05 APR 3:00P
STANDARD OVERNIGHT
NA AGCA
0201
PA-US
Uncorrected temp 1.8 °C
Thermometer ID 10
CF 0 Initials TB
PT-WI-SR-001 effective 11/8/18


TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
692589
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
FedEx
Express
FRI - 05 APR 3:00P
STANDARD OVERNIGHT
15238
PIT
PA-US
1 of 5
TRK# 4651 0081 1088
MASTER
NA AGCA
Uncorrected temp
Thermometer ID
Initials
CF

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88630-1
SDG Number: Ash Pond

Login Number: 88630
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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").	True	
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: 180-88630-1
SDG Number: Ash Pond

Login Number: 88630
List Number: 2
Creator: Avery, Kathy R

List Source: Eurofins TestAmerica, Pensacola
List Creation: 04/12/19 05:43 PM

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	Not Present
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	

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ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-88630-2
Laboratory Sample Delivery Group: Ash Pond
Client Project/Site: CCR - Plant Wansley

For:
Southern Company
241 Ralph McGill Blvd SE
B10185
Atlanta, Georgia 30308

Attn: Joju Abraham

Authorized for release by:
5/31/2019 5:29:45 PM

Veronica Bortot, Senior Project Manager
(412)963-2435
veronica.bortot@testamericainc.com

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.

PA Lab ID: 02-00416

Table of Contents

Job ID: 180-88630-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-88630-2

Comments
No additional comments.

Receipt
The samples were received on 4/5/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.2º C, 1.4º C, 1.8º C and 2.4º C.

Receipt Exceptions

The container label for the 500 ml and 250 nitric following sample did not match the information listed on the Chain-of-Custody (COC): EB-1-4-3-19 (180-88630-22). The container labels list WGWC-12 while the COC lists EB-1-4-3-19. There is a separate sample WGWC-12 which has the correct date and time.

RAD
Method(s) PrecSep-21: Radium 226 Prep Batch 160-424964:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2-4-4-19 (180-88630-9), WGWC-10 (180-88630-10), DUP-2-4-3-19 (180-88630-11), DUP-1 (180-88630-12), WGWA-2 (180-88630-13), WGWA-7 (180-88630-14), WGWA-4 (180-88630-15), WGWA-3 (180-88630-16), WGWC-19 (180-88630-17), WGWC-12 (180-88630-18), WGWC-11 (180-88630-19), WGWC-13 (180-88630-20), WGWC-14A (180-88630-21), WGWC-15 (180-88630-23) and WGWC-16 (180-88630-24). 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 160-424965:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: EB-2-4-4-19 (180-88630-9), WGWC-10 (180-88630-10), DUP-2-4-3-19 (180-88630-11), DUP-1 (180-88630-12), WGWA-2 (180-88630-13), WGWA-7 (180-88630-14), WGWA-4 (180-88630-15), WGWA-3 (180-88630-16), WGWC-19 (180-88630-17), WGWC-12 (180-88630-18), WGWC-11 (180-88630-19), WGWC-13 (180-88630-20), WGWC-14A (180-88630-21), WGWC-15 (180-88630-23) and WGWC-16 (180-88630-24). 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 160-424966:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: FB-2-4-4-19 (180-88630-25). 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 160-424967:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: FB-2-4-4-19 (180-88630-25). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) 904.0, 9320: Ra-228 Prep Batch 160-424965

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
EB-2-4-4-19 (180-88630-9), WGWC-10 (180-88630-10), DUP-2-4-3-19 (180-88630-11), DUP-1 (180-88630-12), WGWA-2 (180-88630-13), WGWA-7 (180-88630-14), WGWA-4 (180-88630-15), WGWA-3 (180-88630-16), WGWC-19 (180-88630-17), WGWC-12 (180-88630-18), WGWC-11 (180-88630-19), WGWC-13 (180-88630-20), WGWC-14A (180-88630-21), WGWC-15 (180-88630-23), WGWC-16 (180-88630-24), (LCS 160-424965/1-A), (LCSD 160-424965/2-A) and (MB 160-424965/23-A)

Job ID: 180-88630-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

Method(s) 904.0, 9320: Radium-228 Prep Batch 160-424967
Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
FB-2-4-4-19 (180-88630-25), (LCS 160-424967/1-A), (LCSD 160-424967/2-A) and (MB 160-424967/23-A)

Method(s) 903.0, 9315: Ra-226 Prep Batch 160-424966

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
FB-2-4-4-19 (180-88630-25), (LCS 160-424966/1-A), (LCSD 160-424966/2-A) and (MB 160-424966/23-A)

Method(s) 903.0, 9315: Ra-226 Prep Batch 160-424964

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
EB-2-4-4-19 (180-88630-9), WGWC-10 (180-88630-10), DUP-2-4-3-19 (180-88630-11), DUP-1 (180-88630-12), WGWA-2 (180-88630-13), WGWA-7 (180-88630-14), WGWA-4 (180-88630-15), WGWA-3 (180-88630-16), WGWC-19 (180-88630-17), WGWC-12 (180-88630-18), WGWC-11 (180-88630-19), WGWC-13 (180-88630-20), WGWC-14A (180-88630-21), WGWC-15 (180-88630-23), WGWC-16 (180-88630-24), (LCS 160-424964/1-A), (LCSD 160-424964/2-A) and (MB 160-424964/23-A)

Method(s) 903.0, 9315: Ra-226 Prep Batch 160-424955

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWA-1 (180-88630-1), WGWA-5 (180-88630-2), WGWA-6 (180-88630-3), FB-1-4-2-19 (180-88630-4), WGWA-18 (180-88630-5), WGWC-9 (180-88630-6), WGWC-8 (180-88630-7), WGWC-17 (180-88630-8), (LCS 160-424955/1-A), (MB 160-424955/23-A), (400-168447-A-8-A) and (400-168447-A-8-B DU)

Method(s) 904.0, 9320: Ra-228 Prep Batch 160-424962

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative.

Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date.
WGWA-1 (180-88630-1), WGWA-5 (180-88630-2), WGWA-6 (180-88630-3), FB-1-4-2-19 (180-88630-4), WGWA-18 (180-88630-5), WGWC-9 (180-88630-6), WGWC-8 (180-88630-7), WGWC-17 (180-88630-8), (LCS 160-424962/1-A), (MB 160-424962/23-A), (400-168447-A-8-C) and (400-168447-A-8-D DU)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

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

Job ID: 180-88630-2
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)

Accreditation/Certification Summary

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

Job ID: 180-88630-2
SDG: Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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
Arkansas DEQ	State Program	6	88-0690	06-27-19
California	State Program	9	2891	04-30-20
Connecticut	State Program	1	PH-0688	09-30-20
Florida	NELAP	4	E871008	06-30-19
Illinois	NELAP	5	200005	06-30-19
Kansas	NELAP	7	E-10350	01-31-20
Louisiana	NELAP	6	04041	06-30-19
Nevada	State Program	9	PA00164	07-31-19
New Hampshire	NELAP	1	2030	04-04-20
New Jersey	NELAP	2	PA005	06-30-19
New York	NELAP	2	11182	03-31-20
North Carolina (WW/SW)	State Program	4	434	12-31-19
Oregon	NELAP	10	PA-2151	02-06-20
Pennsylvania	NELAP	3	02-00416	04-30-20
South Carolina	State Program	4	89014	04-30-19 *
Texas	NELAP	6	T104704528-15-2	03-31-20
US Fish & Wildlife	Federal		LE94312A-1	07-31-19
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-19 *
Virginia	NELAP	3	460189	09-14-19
West Virginia DEP	State Program	3	142	01-31-20
Wisconsin	State Program	5	998027800	08-31-19

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

Accreditation/Certification Summary

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

Job ID: 180-88630-2
SDG: Ash Pond

Laboratory: Eurofins 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		L2305	04-06-22
Arizona	State Program	9	AZ0813	12-08-19
California	State Program	9	2886	06-30-19 *
Connecticut	State Program	1	PH-0241	03-31-21
Florida	NELAP	4	E87689	06-30-19 *
Hawaii	State Program	9	NA	06-30-19
Illinois	NELAP	5	200023	11-30-19
Iowa	State Program	7	373	12-01-20
Kansas	NELAP	7	E-10236	10-31-19
Kentucky (DW)	State Program	4	KY90125	12-31-19
Louisiana	NELAP	6	04080	06-30-19
Louisiana (DW)	NELAP	6	LA011	12-31-19
Maryland	State Program	3	310	09-30-19
Michigan	State Program	5	9005	06-30-19
Missouri	State Program	7	780	06-30-19
Nevada	State Program	9	MO000542018-1	07-31-19
New Jersey	NELAP	2	MO002	06-30-19 *
New York	NELAP	2	11616	03-31-20
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	02-28-20
South Carolina	State Program	4	85002001	06-30-19
Texas	NELAP	6	T104704193-18-13	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

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

Sample Summary

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

Job ID: 180-88630-2
SDG: Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-88630-1	WGWA-1	Water	04/01/19 13:45	04/05/19 09:00	
180-88630-2	WGWA-5	Water	04/02/19 11:30	04/05/19 09:00	
180-88630-3	WGWA-6	Water	04/02/19 13:15	04/05/19 09:00	
180-88630-4	FB-1-4-2-19	Water	04/02/19 12:10	04/05/19 09:00	
180-88630-5	WGWA-18	Water	04/02/19 14:25	04/05/19 09:00	
180-88630-6	WGWC-9	Water	04/03/19 13:40	04/05/19 09:00	
180-88630-7	WGWC-8	Water	04/03/19 14:50	04/05/19 09:00	
180-88630-8	WGWC-17	Water	04/04/19 09:55	04/05/19 09:00	
180-88630-9	EB-2-4-4-19	Water	04/04/19 09:40	04/05/19 09:00	
180-88630-10	WGWC-10	Water	04/04/19 11:35	04/05/19 09:00	
180-88630-11	DUP-2-4-3-19	Water	04/04/19 00:00	04/05/19 09:00	
180-88630-12	DUP-1	Water	04/04/19 00:00	04/05/19 09:00	
180-88630-13	WGWA-2	Water	04/01/19 14:50	04/05/19 09:00	
180-88630-14	WGWA-7	Water	04/02/19 11:15	04/05/19 09:00	
180-88630-15	WGWA-4	Water	04/02/19 12:45	04/05/19 09:00	
180-88630-16	WGWA-3	Water	04/02/19 13:50	04/05/19 09:00	
180-88630-17	WGWC-19	Water	04/02/19 14:55	04/05/19 09:00	
180-88630-18	WGWC-12	Water	04/03/19 11:05	04/05/19 09:00	
180-88630-19	WGWC-11	Water	04/03/19 12:20	04/05/19 09:00	
180-88630-20	WGWC-13	Water	04/03/19 13:20	04/05/19 09:00	
180-88630-21	WGWC-14A	Water	04/03/19 14:35	04/05/19 09:00	
180-88630-23	WGWC-15	Water	04/04/19 10:35	04/05/19 09:00	
180-88630-24	WGWC-16	Water	04/04/19 11:40	04/05/19 09:00	
180-88630-25	FB-2-4-4-19	Water	04/04/19 12:00	04/05/19 09:00	

Method Summary

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

Job ID: 180-88630-2
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 = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: WGWA-1
Date Collected: 04/01/19 13:45
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.49 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429039	05/18/19 19:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			1000.49 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:54	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-5
Date Collected: 04/02/19 11:30
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.34 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429039	05/18/19 19:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			1000.34 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:54	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-6
Date Collected: 04/02/19 13:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.43 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429039	05/18/19 19:03	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Prep	PrecSep_0			1000.43 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-1-4-2-19
Date Collected: 04/02/19 12:10
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.30 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 19:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: FB-1-4-2-19
Date Collected: 04/02/19 12:10
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.30 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-18
Date Collected: 04/02/19 14:25
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.14 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 19:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.14 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-9
Date Collected: 04/03/19 13:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.86 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 19:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.86 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-8
Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.92 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 19:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.92 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: WGWC-8
Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL

Client Sample ID: WGWC-17
Date Collected: 04/04/19 09:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.07 mL	1.0 g	424955	04/22/19 12:54	JLC	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 19:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	424962	04/22/19 14:21	JLC	TAL SL
Total/NA	Analysis	9320		1			427716	05/08/19 15:55	CDR	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: EB-2-4-4-19
Date Collected: 04/04/19 09:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.96 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:01	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.96 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			427893	05/10/19 09:02	BLH	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-10
Date Collected: 04/04/19 11:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.88 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:01	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.88 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: DUP-2-4-3-19

Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.20 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:02	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.20 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: DUP-1

Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.35 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:03	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.35 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-2

Date Collected: 04/01/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.07 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:03	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-7

Date Collected: 04/02/19 11:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.44 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:03	CDR	TAL SL
	Instrument ID: GFPCBLUE									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: WGWA-7
Date Collected: 04/02/19 11:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.44 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-4
Date Collected: 04/02/19 12:45
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.80 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:03	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			999.80 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWA-3
Date Collected: 04/02/19 13:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.53 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429043	05/18/19 13:04	CDR	TAL SL
	Instrument ID: GFPCBLUE									
Total/NA	Prep	PrecSep_0			1000.53 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-19
Date Collected: 04/02/19 14:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.20 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:06	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			1000.20 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: WGWC-19
Date Collected: 04/02/19 14:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL

Client Sample ID: WGWC-12
Date Collected: 04/03/19 11:05
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.86 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:06	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			1000.86 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-11
Date Collected: 04/03/19 12:20
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.81 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:07	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			999.81 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-13
Date Collected: 04/03/19 13:20
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-20
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.40 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:07	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			1000.40 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:10	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: WGWC-14A
Date Collected: 04/03/19 14:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.48 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:08	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			1000.48 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:11	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-15
Date Collected: 04/04/19 10:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.83 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:08	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			1000.83 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:11	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: WGWC-16
Date Collected: 04/04/19 11:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.96 mL	1.0 g	424964	04/22/19 15:16	CLP	TAL SL
Total/NA	Analysis	9315		1			429045	05/18/19 13:09	CDR	TAL SL
	Instrument ID: GFPCPROTEAN									
Total/NA	Prep	PrecSep_0			999.96 mL	1.0 g	424965	04/22/19 15:19	CLP	TAL SL
Total/NA	Analysis	9320		1			428035	05/10/19 09:11	CDR	TAL SL
	Instrument ID: GFPCPURPLE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Client Sample ID: FB-2-4-4-19
Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.17 mL	1.0 g	424966	04/22/19 15:20	CLP	TAL SL
Total/NA	Analysis	9315		1			429039	05/18/19 14:57	CDR	TAL SL
	Instrument ID: GFPCORANGE									

Lab Chronicle

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

Job ID: 180-88630-2
SDG: Ash Pond

Client Sample ID: FB-2-4-4-19

Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	424967	04/22/19 15:23	CLP	TAL SL
Total/NA	Analysis	9320		1			427892	05/10/19 08:49	KLS	TAL SL
	Instrument ID: GFPCORANGE									
Total/NA	Analysis	Ra226_Ra228		1			430219	05/30/19 08:50	SMP	TAL SL
	Instrument ID: NOEQUIP									

Laboratory References:

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

Analyst References:

Lab: TAL SL

Batch Type: Prep

CLP = Cassandra Park

JLC = Jessica Chapman

Batch Type: Analysis

BLH = Brandi Hayes

CDR = Conrad Reuscher

KLS = Kody Saulters

SMP = Siobhan Perry

Client Sample ID: WGWA-1

Date Collected: 04/01/19 13:45
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-1
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0598	U	0.0575	0.0578	1.00	0.0884	pCi/L	04/22/19 12:54	05/18/19 19:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.109	U	0.240	0.241	1.00	0.410	pCi/L	04/22/19 14:21	05/08/19 15:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:54*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:54*	*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	0.169	U	0.247	0.248	5.00	0.410	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-5

Date Collected: 04/02/19 11:30
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-2
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	0.0166	U	0.0456	0.0456	1.00	0.0865	pCi/L	04/22/19 12:54	05/18/19 19:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.238	U	0.259	0.260	1.00	0.425	pCi/L	04/22/19 14:21	05/08/19 15:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:54*	*1*
Y Carrier	*89.3*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:54*	*1*

Client Sample ID: WGWA-5
Date Collected: 04/02/19 11:30
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-2
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.255	U	0.263	0.264	5.00	0.425	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-6
Date Collected: 04/02/19 13:15
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-3
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	**2.82**		0.269	0.369	1.00	0.0728	pCi/L	04/22/19 12:54	05/18/19 19:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**4.99**		0.484	0.667	1.00	0.362	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*108*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*91.2*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*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	**7.80**		0.554	0.762	5.00	0.362	pCi/L		05/30/19 08:50	1

Client Sample ID: FB-1-4-2-19
Date Collected: 04/02/19 12:10
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-4
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0593	U	0.0564	0.0566	1.00	0.0864	pCi/L	04/22/19 12:54	05/18/19 19:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:04*	*1*

Client Sample ID: FB-1-4-2-19

Lab Sample ID: 180-88630-4

Date Collected: 04/02/19 12:10
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.163	U	0.251	0.251	1.00	0.421	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*86.7*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*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	0.222	U	0.257	0.257	5.00	0.421	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-18

Lab Sample ID: 180-88630-5

Date Collected: 04/02/19 14:25
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.0931**		0.0635	0.0640	1.00	0.0848	pCi/L	04/22/19 12:54	05/18/19 19:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0495	U	0.211	0.211	1.00	0.387	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*88.6*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*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	0.0436	U	0.220	0.220	5.00	0.387	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-9

Date Collected: 04/03/19 13:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-6
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	0.0402	U	0.0499	0.0500	1.00	0.0820	pCi/L	04/22/19 12:54	05/18/19 19:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0219	U	0.196	0.196	1.00	0.348	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*92.3*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*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	0.0621	U	0.202	0.202	5.00	0.348	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-8

Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
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	**0.423**		0.108	0.114	1.00	0.0669	pCi/L	04/22/19 12:54	05/18/19 19:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.12**		0.276	0.295	1.00	0.324	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*92.0*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*

Client Sample ID: WGWC-8
Date Collected: 04/03/19 14:50
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-7
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.55		0.296	0.316	5.00	0.324	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-17
Date Collected: 04/04/19 09:55
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-8
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0379	U	0.0421	0.0423	1.00	0.0661	pCi/L	04/22/19 12:54	05/18/19 19:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U	0.239	0.241	1.00	0.372	pCi/L	04/22/19 14:21	05/08/19 15:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*105*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*1*
Y Carrier	*89.3*		*40 - 110*	*04/22/19 14:21*	*05/08/19 15:55*	*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	0.386		0.243	0.245	5.00	0.372	pCi/L		05/30/19 08:50	1

Client Sample ID: EB-2-4-4-19
Date Collected: 04/04/19 09:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-9
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	-0.0264	U	0.0387	0.0387	1.00	0.100	pCi/L	04/22/19 15:16	05/18/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:01*	*1*

Client Sample ID: EB-2-4-4-19

Date Collected: 04/04/19 09:40
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-9

Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.258	U	0.227	0.229	1.00	0.364	pCi/L	04/22/19 15:19	05/10/19 09:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:02*	*1*
Y Carrier	*92.7*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.232	U	0.230	0.232	5.00	0.364	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-10

Date Collected: 04/04/19 11:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-10

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	0.0890	U	0.0677	0.0681	1.00	0.0947	pCi/L	04/22/19 15:16	05/18/19 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.144	U	0.239	0.239	1.00	0.403	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*90.5*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	0.233	U	0.248	0.249	5.00	0.403	pCi/L		05/30/19 08:50	1

Client Sample ID: DUP-2-4-3-19

Lab Sample ID: 180-88630-11
Matrix: Water
Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.352		0.113	0.117	1.00	0.0962	pCi/L	04/22/19 15:16	05/18/19 13:02	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110	04/22/19 15:16	05/18/19 13:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.80		0.353	0.390	1.00	0.383	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110	04/22/19 15:19	05/10/19 09:10	1
Y Carrier	87.9		40 - 110	04/22/19 15:19	05/10/19 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	2.16		0.371	0.407	5.00	0.383	pCi/L		05/30/19 08:50	1

Client Sample ID: DUP-1

Lab Sample ID: 180-88630-12
Matrix: Water
Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0680	U	0.0556	0.0560	1.00	0.0767	pCi/L	04/22/19 15:16	05/18/19 13:03	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110	04/22/19 15:16	05/18/19 13:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.543		0.249	0.254	1.00	0.359	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110	04/22/19 15:19	05/10/19 09:10	1
Y Carrier	89.0		40 - 110	04/22/19 15:19	05/10/19 09:10	1

Client Sample ID: DUP-1

Lab Sample ID: 180-88630-12
Matrix: Water
Date Collected: 04/04/19 00:00
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.611		0.255	0.260	5.00	0.359	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-2

Lab Sample ID: 180-88630-13
Matrix: Water
Date Collected: 04/01/19 14:50
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0293	U	0.0440	0.0440	1.00	0.0759	pCi/L	04/22/19 15:16	05/18/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0314	U	0.203	0.203	1.00	0.371	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*86.7*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	-0.00216	U	0.208	0.208	5.00	0.371	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-7

Lab Sample ID: 180-88630-14
Matrix: Water
Date Collected: 04/02/19 11:15
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0454	U	0.0495	0.0496	1.00	0.0774	pCi/L	04/22/19 15:16	05/18/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:03*	*1*

Client Sample ID: WGWA-7

Lab Sample ID: 180-88630-14

Date Collected: 04/02/19 11:15

Matrix: Water

Date Received: 04/05/19 09:00

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.137	U	0.205	0.205	1.00	0.345	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.3*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*89.3*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	0.182	U	0.211	0.211	5.00	0.345	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-4

Lab Sample ID: 180-88630-15

Date Collected: 04/02/19 12:45

Matrix: Water

Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.324**		0.114	0.118	1.00	0.0977	pCi/L	04/22/19 15:16	05/18/19 13:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.209	0.210	1.00	0.326	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.5*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*91.6*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	**0.602**		0.238	0.241	5.00	0.326	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWA-3

Lab Sample ID: 180-88630-16

Date Collected: 04/02/19 13:50

Matrix: Water

Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0392	U	0.0494	0.0495	1.00	0.0811	pCi/L	04/22/19 15:16	05/18/19 13:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.322	U	0.219	0.221	1.00	0.338	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*90.1*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	**0.361**		0.225	0.226	5.00	0.338	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-19

Lab Sample ID: 180-88630-17

Date Collected: 04/02/19 14:55

Matrix: Water

Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0576	U	0.0588	0.0591	1.00	0.0907	pCi/L	04/22/19 15:16	05/18/19 13:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.2*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.151	U	0.218	0.219	1.00	0.365	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.2*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*88.6*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*

Client Sample ID: WGWC-19
Lab Sample ID: 180-88630-17
Date Collected: 04/02/19 14:55
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.209	U	0.226	0.227	5.00	0.365	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-12
Lab Sample ID: 180-88630-18
Date Collected: 04/03/19 11:05
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.0827	0.0832	1.00	0.123	pCi/L	04/22/19 15:16	05/18/19 13:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.162	U	0.203	0.204	1.00	0.337	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*92.3*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	0.264	U	0.219	0.220	5.00	0.337	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-11
Lab Sample ID: 180-88630-19
Date Collected: 04/03/19 12:20
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0623	U	0.0651	0.0653	1.00	0.102	pCi/L	04/22/19 15:16	05/18/19 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:07*	*1*

Client Sample ID: WGWC-11

Lab Sample ID: 180-88630-19

Date Collected: 04/03/19 12:20
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.125	U	0.206	0.207	1.00	0.349	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*84.1*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	0.187	U	0.216	0.217	5.00	0.349	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-13

Lab Sample ID: 180-88630-20

Date Collected: 04/03/19 13:20
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.192**		0.100	0.102	1.00	0.126	pCi/L	04/22/19 15:16	05/18/19 13:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.5*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:07*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.254	U	0.227	0.228	1.00	0.363	pCi/L	04/22/19 15:19	05/10/19 09:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.5*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:10*	*1*
Y Carrier	*89.0*		*40 - 110*	*04/22/19 15:19*	*05/10/19 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	**0.446**		0.248	0.250	5.00	0.363	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-14A

Date Collected: 04/03/19 14:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-21

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.323		0.111	0.114	1.00	0.0940	pCi/L	04/22/19 15:16	05/18/19 13:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.174	U	0.208	0.208	1.00	0.343	pCi/L	04/22/19 15:19	05/10/19 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.2*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*
Y Carrier	*92.7*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.497		0.236	0.237	5.00	0.343	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-15

Date Collected: 04/04/19 10:35
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-23

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0844	U	0.0689	0.0694	1.00	0.0993	pCi/L	04/22/19 15:16	05/18/19 13:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.334	U	0.237	0.239	1.00	0.366	pCi/L	04/22/19 15:19	05/10/19 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*
Y Carrier	*83.4*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*

Client Sample ID: WGWC-15
Lab Sample ID: 180-88630-23
Date Collected: 04/04/19 10:35
Matrix: Water
Date Received: 04/05/19 09:00

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.418		0.247	0.249	5.00	0.366	pCi/L		05/30/19 08:50	1

Client Sample ID: WGWC-16
Lab Sample ID: 180-88630-24
Date Collected: 04/04/19 11:40
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.145		0.0935	0.0944	1.00	0.131	pCi/L	04/22/19 15:16	05/18/19 13:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.6*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.487		0.237	0.241	1.00	0.342	pCi/L	04/22/19 15:19	05/10/19 09:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.6*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*
Y Carrier	*87.1*		*40 - 110*	*04/22/19 15:19*	*05/10/19 09:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.632		0.255	0.259	5.00	0.342	pCi/L		05/30/19 08:50	1

Client Sample ID: FB-2-4-4-19
Lab Sample ID: 180-88630-25
Date Collected: 04/04/19 12:00
Matrix: Water
Date Received: 04/05/19 09:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0551	U	0.0659	0.0661	1.00	0.108	pCi/L	04/22/19 15:20	05/18/19 14:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*04/22/19 15:20*	*05/18/19 14:57*	*1*

Client Sample ID: FB-2-4-4-19

Date Collected: 04/04/19 12:00
Date Received: 04/05/19 09:00

Lab Sample ID: 180-88630-25

Matrix: Water

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.102	U	0.178	0.178	1.00	0.341	pCi/L	04/22/19 15:23	05/10/19 08:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*04/22/19 15:23*	*05/10/19 08:49*	*1*
Y Carrier	*88.2*		*40 - 110*	*04/22/19 15:23*	*05/10/19 08:49*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0472	U	0.190	0.190	5.00	0.341	pCi/L		05/30/19 08:50	1

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-424955/23-A
Matrix: Water
Analysis Batch: 429045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424955

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.007075	U	0.0557	0.0557	1.00	0.116	pCi/L	04/22/19 12:54	05/18/19 19:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*109*		*40 - 110*	*04/22/19 12:54*	*05/18/19 19:07*	*1*

Lab Sample ID: LCS 160-424955/1-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424955

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	9.416		0.984	1.00	0.0871	pCi/L	83	75 - 125		

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

Lab Sample ID: MB 160-424964/23-A
Matrix: Water
Analysis Batch: 429045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424964

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04674	U	0.0739	0.0740	1.00	0.127	pCi/L	04/22/19 15:16	05/18/19 13:09	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*04/22/19 15:16*	*05/18/19 13:09*	*1*

Lab Sample ID: LCS 160-424964/1-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424964

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	9.432		1.00	1.00	0.0980	pCi/L	83	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*101*		*40 - 110*

Lab Sample ID: LCSD 160-424964/2-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424964

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.4	9.388		0.995	1.00	0.0915	pCi/L	83	75 - 125	0.02	1

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

Lab Sample ID: LCSD 160-424964/2-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424964

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	96.0		40 - 110

Lab Sample ID: MB 160-424966/23-A
Matrix: Water
Analysis Batch: 429045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424966

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02463	U	0.0725	0.0725	1.00	0.134	pCi/L	04/22/19 15:20	05/18/19 15:04	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110	04/22/19 15:20	05/18/19 15:04	1

Lab Sample ID: LCS 160-424966/1-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424966

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.4	9.856		1.04	1.00	0.0996	pCi/L	87	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	98.6		40 - 110

Lab Sample ID: LCSD 160-424966/2-A
Matrix: Water
Analysis Batch: 429039

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424966

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.4	9.074		0.965	1.00	0.0936	pCi/L	80	75 - 125	0.39	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	98.0		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-424962/23-A
Matrix: Water
Analysis Batch: 427688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424962

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1244	U	0.178	0.178	1.00	0.298	pCi/L	04/22/19 14:21	05/08/19 16:01	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	109		40 - 110	04/22/19 14:21	05/08/19 16:01	1

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

Lab Sample ID: MB 160-424962/23-A
Matrix: Water
Analysis Batch: 427688

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424962

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Y Carrier	95.3		40 - 110	04/22/19 14:21	05/08/19 16:01	1

Lab Sample ID: LCS 160-424962/1-A
Matrix: Water
Analysis Batch: 427716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424962

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.23	7.421		0.884	1.00	0.348	pCi/L	80	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	110		40 - 110
Y Carrier	91.6		40 - 110

Lab Sample ID: MB 160-424965/23-A
Matrix: Water
Analysis Batch: 428035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424965

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.02741	U	0.204	0.204	1.00	0.369	pCi/L	04/22/19 15:19	05/10/19 09:11	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110	04/22/19 15:19	05/10/19 09:11	1
Y Carrier	87.1		40 - 110	04/22/19 15:19	05/10/19 09:11	1

Lab Sample ID: LCS 160-424965/1-A
Matrix: Water
Analysis Batch: 427893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424965

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.22	9.433		1.08	1.00	0.401	pCi/L	102	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	92.7		40 - 110

Lab Sample ID: LCSD 160-424965/2-A
Matrix: Water
Analysis Batch: 427893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424965

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.22	9.863		1.14	1.00	0.405	pCi/L	107	75 - 125	0.19	1

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

Lab Sample ID: LCSD 160-424965/2-A
Matrix: Water
Analysis Batch: 427893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424965

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	96.0		40 - 110
Y Carrier	86.7		40 - 110

Lab Sample ID: MB 160-424967/23-A
Matrix: Water
Analysis Batch: 427870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424967

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08420	U	0.206	0.206	1.00	0.355	pCi/L	04/22/19 15:23	05/10/19 08:55	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.5		40 - 110	04/22/19 15:23	05/10/19 08:55	1
Y Carrier	87.5		40 - 110	04/22/19 15:23	05/10/19 08:55	1

Lab Sample ID: LCS 160-424967/1-A
Matrix: Water
Analysis Batch: 427892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424967

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.22	9.288		1.06	1.00	0.337	pCi/L	101	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	98.6		40 - 110
Y Carrier	88.6		40 - 110

Lab Sample ID: LCSD 160-424967/2-A
Matrix: Water
Analysis Batch: 427892

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 424967

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.22	8.964		1.04	1.00	0.347	pCi/L	97	75 - 125	0.15	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	98.0		40 - 110
Y Carrier	88.2		40 - 110

QC Association Summary

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

Job ID: 180-88630-2
SDG: Ash Pond

Rad

Prep Batch: 424955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total/NA	Water	PrecSep-21	
180-88630-2	WGWA-5	Total/NA	Water	PrecSep-21	
180-88630-3	WGWA-6	Total/NA	Water	PrecSep-21	
180-88630-4	FB-1-4-2-19	Total/NA	Water	PrecSep-21	
180-88630-5	WGWA-18	Total/NA	Water	PrecSep-21	
180-88630-6	WGWC-9	Total/NA	Water	PrecSep-21	
180-88630-7	WGWC-8	Total/NA	Water	PrecSep-21	
180-88630-8	WGWC-17	Total/NA	Water	PrecSep-21	
MB 160-424955/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-424955/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 424962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-1	WGWA-1	Total/NA	Water	PrecSep_0	
180-88630-2	WGWA-5	Total/NA	Water	PrecSep_0	
180-88630-3	WGWA-6	Total/NA	Water	PrecSep_0	
180-88630-4	FB-1-4-2-19	Total/NA	Water	PrecSep_0	
180-88630-5	WGWA-18	Total/NA	Water	PrecSep_0	
180-88630-6	WGWC-9	Total/NA	Water	PrecSep_0	
180-88630-7	WGWC-8	Total/NA	Water	PrecSep_0	
180-88630-8	WGWC-17	Total/NA	Water	PrecSep_0	
MB 160-424962/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-424962/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 424964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-9	EB-2-4-4-19	Total/NA	Water	PrecSep-21	
180-88630-10	WGWC-10	Total/NA	Water	PrecSep-21	
180-88630-11	DUP-2-4-3-19	Total/NA	Water	PrecSep-21	
180-88630-12	DUP-1	Total/NA	Water	PrecSep-21	
180-88630-13	WGWA-2	Total/NA	Water	PrecSep-21	
180-88630-14	WGWA-7	Total/NA	Water	PrecSep-21	
180-88630-15	WGWA-4	Total/NA	Water	PrecSep-21	
180-88630-16	WGWA-3	Total/NA	Water	PrecSep-21	
180-88630-17	WGWC-19	Total/NA	Water	PrecSep-21	
180-88630-18	WGWC-12	Total/NA	Water	PrecSep-21	
180-88630-19	WGWC-11	Total/NA	Water	PrecSep-21	
180-88630-20	WGWC-13	Total/NA	Water	PrecSep-21	
180-88630-21	WGWC-14A	Total/NA	Water	PrecSep-21	
180-88630-23	WGWC-15	Total/NA	Water	PrecSep-21	
180-88630-24	WGWC-16	Total/NA	Water	PrecSep-21	
MB 160-424964/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-424964/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-424964/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 424965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-9	EB-2-4-4-19	Total/NA	Water	PrecSep_0	
180-88630-10	WGWC-10	Total/NA	Water	PrecSep_0	
180-88630-11	DUP-2-4-3-19	Total/NA	Water	PrecSep_0	
180-88630-12	DUP-1	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 424965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-13	WGWA-2	Total/NA	Water	PrecSep_0	
180-88630-14	WGWA-7	Total/NA	Water	PrecSep_0	
180-88630-15	WGWA-4	Total/NA	Water	PrecSep_0	
180-88630-16	WGWA-3	Total/NA	Water	PrecSep_0	
180-88630-17	WGWC-19	Total/NA	Water	PrecSep_0	
180-88630-18	WGWC-12	Total/NA	Water	PrecSep_0	
180-88630-19	WGWC-11	Total/NA	Water	PrecSep_0	
180-88630-20	WGWC-13	Total/NA	Water	PrecSep_0	
180-88630-21	WGWC-14A	Total/NA	Water	PrecSep_0	
180-88630-23	WGWC-15	Total/NA	Water	PrecSep_0	
180-88630-24	WGWC-16	Total/NA	Water	PrecSep_0	
MB 160-424965/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-424965/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-424965/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 424966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-25	FB-2-4-4-19	Total/NA	Water	PrecSep-21	
MB 160-424966/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-424966/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-424966/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 424967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-88630-25	FB-2-4-4-19	Total/NA	Water	PrecSep_0	
MB 160-424967/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-424967/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-424967/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

TestAmerica Pittsburgh

681-Atlanta

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jordan Benstord	Lab PM: Veronica Bertot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: 770-594-5998	E-Mail: Veronica.Bertot@testamericainc.com		Page:
Company: Southern Company		Analysis Requested		Job #:

Address: PO BOX 2641 GSC8	Due Date Requested:	Preservation Codes:
City: Birmingham	TAT Requested (days):	A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: AL, 35291		
Phone:	PO #: SCS10347656	
Email: JAbraham@southernco.com	WO #:	
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709	Other:
Site: Georgia	SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions
			Preservation Code:				D	N				
WGWA-1	4-1-19	1345	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWA-5	4-2-19	1130	G	W	N	N	✓	✓	✓	✓	3	
WGWA-6	4-2-19	1315	G	W	N	N	✓	✓	✓	✓	3	
FB-1-4-2-19	4-2-19	1210	G	W	N	N	✓	✓	✓	✓	3	
WGWA-18	4-2-19	1425	G	W	N	N	✓	✓	✓	✓	3	
WGWC-9	4-3-19	1340	G	W	N	N	✓	✓	✓	✓	3	
WGWC-8	4-3-19	1450	G	W	N	N	✓	✓	✓	✓	3	
WGWC-17	4-4-19	0955	G	W	N	N	✓	✓	✓	✓	3	
EB-2-4-4-19	4-4-19	0940	G	W	N	N	✓	✓	✓	✓	3	
WGWC-10	4-4-19	1135	G	W	N	N	✓	✓	✓	✓	3	
Dup-2-4-3-19	←	—	G	W	N	N	✓	✓	✓	✓	3	

180-88630-01 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time: 4/4/19 1435	Company: ACC	Received by:	Date/Time: 4-4-19 1435	Company
Relinquished by:	Date/Time: 4-4-19 1513	Company	Received by: Priscilla Watson	Date/Time: 4-5-19	Company: TAPT
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 900	Company

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

Detected APP IV: **Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride**

Ver: 08/04/2016

5/31/2019

681-Atlanta

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA	Lab PM: Veronica Bartot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: (770) 598-5998	E-Mail: Veronica.Bartot@testamericainc.com		Page:
Company: Southern Company				Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35291				
Phone:	PO #: SCS10347656			
Email: JAbraham@southernco.com	WO #:			
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			
Site: Georgia	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO4 & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions
Preservation Code:							D	N				
DUP-1	—	—	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWA-2	4-1-19	1450	G	W	N	N	✓	✓	✓	✓	3	
WGWA-7	4-2-19	1115	G	W	N	N	✓	✓	✓	✓	3	
WGWA-4	4-2-19	1245	G	W	N	N	✓	✓	✓	✓	3	
WGWA-3	4-2-19	1350	G	W	N	N	✓	✓	✓	✓	3	
WGWC-19	4-2-19	1455	G	W	N	N	✓	✓	✓	✓	3	
WGWC-12	4-3-19	~~1100~~ 1105	G	W	N	N	✓	✓	✓	✓	3	
WGWC-11	4-3-19	1220	G	W	N	N	✓	✓	✓	✓	3	
WGWC-13	4-3-19	1320	G	W	N	N	✓	✓	✓	✓	3	
WGWC-14A	4-3-19	1435	G	W	N	N	✓	✓	✓	✓	3	
EB-1-4-3-19	4-3-19	0930	G	W	N	N	✓	✓	✓	✓	3	

180-88630-02 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	4-4-19 1435	ACC		4-4-19 1435	
Relinquished by:	4-5-19 1513		Received by: Phillie Watson	4-5-19	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 900	Company

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

Detected APP IV: **Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride**

Ver: 08/04/2016

Page 40 of 53

5/31/2019

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: O. FUQUEA	Lab PM: Jessica Bartot	Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone: (770) 594-5998	E-Mail: Jessica.Bartot@testamerica.com		Page:
Company: Southern Company		Analysis Requested		Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Birmingham	TAT Requested (days):			
State, Zip: AL, 35291				
Phone:	PO #: SCS10347656			
Email: JAbraham@southernco.com	WO #:			
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			
Site: Georgia	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Metals App. III (EPA 6020/7470)	Cl, F, SO_4, & TDS (EPA 300.0 & SM 2540C)	Detected App IV Metals (See list below)	Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N				
WGWC-15	4-4-19	1035	G	W	N	N	✓	✓	✓	✓	3	APP III
WGWC-16	4-4-19	1140	G	W	N	N	✓	✓	✓	✓	3	
FB-2-4-4-19		1200	G	W	N	N	✓	✓	✓	✓	3	

180-88630-03 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

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

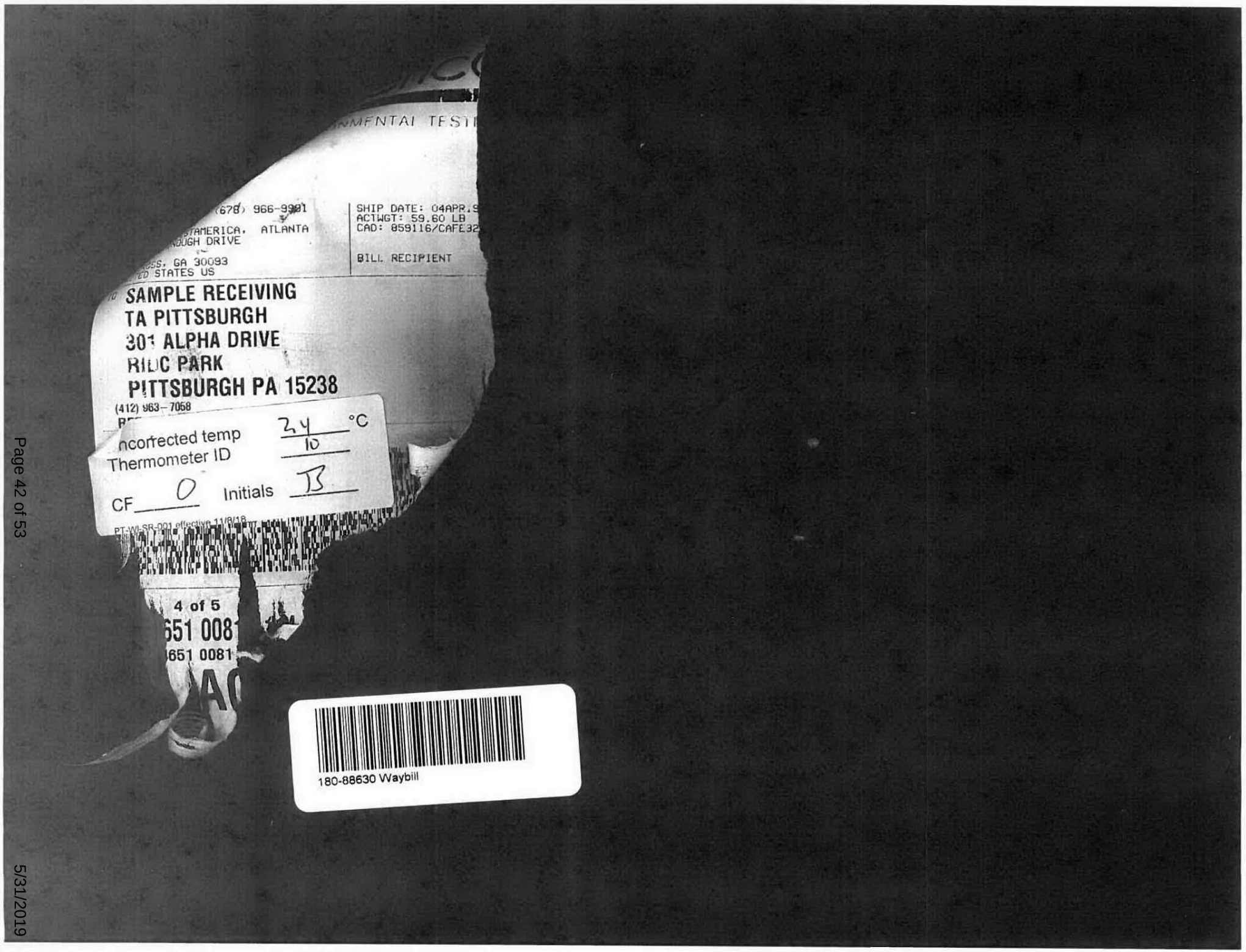
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-4-19 1438	ACC		4-4-19 1435	
2		4-4-19 1513		Dealie Watson	4-5-19	PAPitt
3					900	

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

Detected APP IV: ***Metals: Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride***

Ver: 08/04/2016

5/31/2019


(678) 966-9901
SHIP DATE: 04APR.
ACTWGT: 59.60 LB
CAD: 859116/CAFE32
BILL RECIPIENT
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
Uncorrected temp 2.4 °C
Thermometer ID 10
CF 0 Initials JB
4 of 5
651 008
651 0081
180-88630 Waybill

TestAmerica

THE LEADER IN ENVIRONME

1
15:00
A
1103
04.05

RT 97
FZ

ORIGIN ID:MULA (678) 966-9991
GEORGE TAYLOR
EUROFINSTESTAMERICA, ATLANTA
6500 MCDONOUGH DRIVE

NORCROSS, GA 30093
UNITED STATES US

SHIP DATE: 04APR19
ACTWGT: 59.60 LB
CAD: 859116/CAFE3211

BILL RECIPIENT

TO SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: SOUTHERN CO

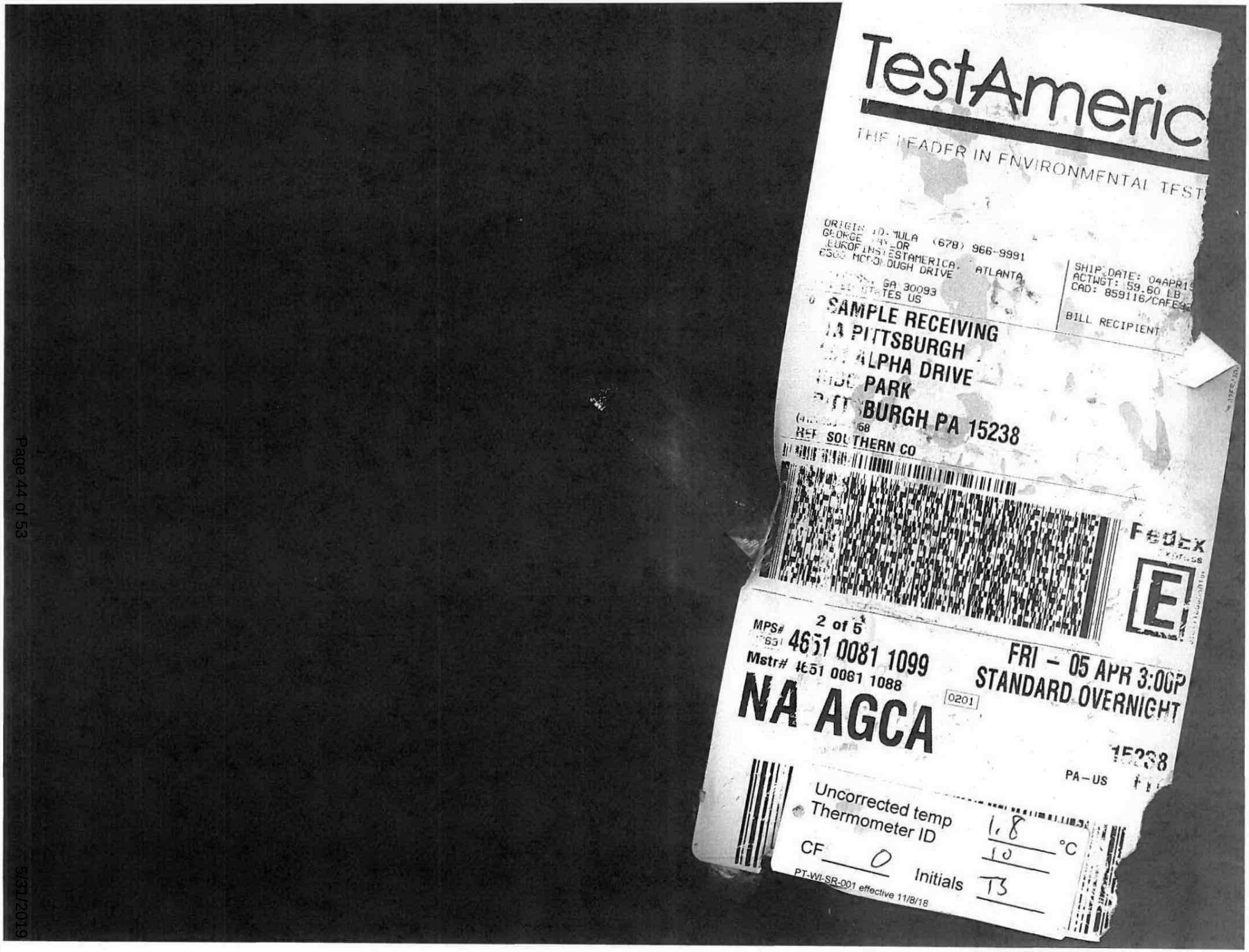
Uncorrected temp 1.4 C
Thermometer ID To
CF 0 Initials JS

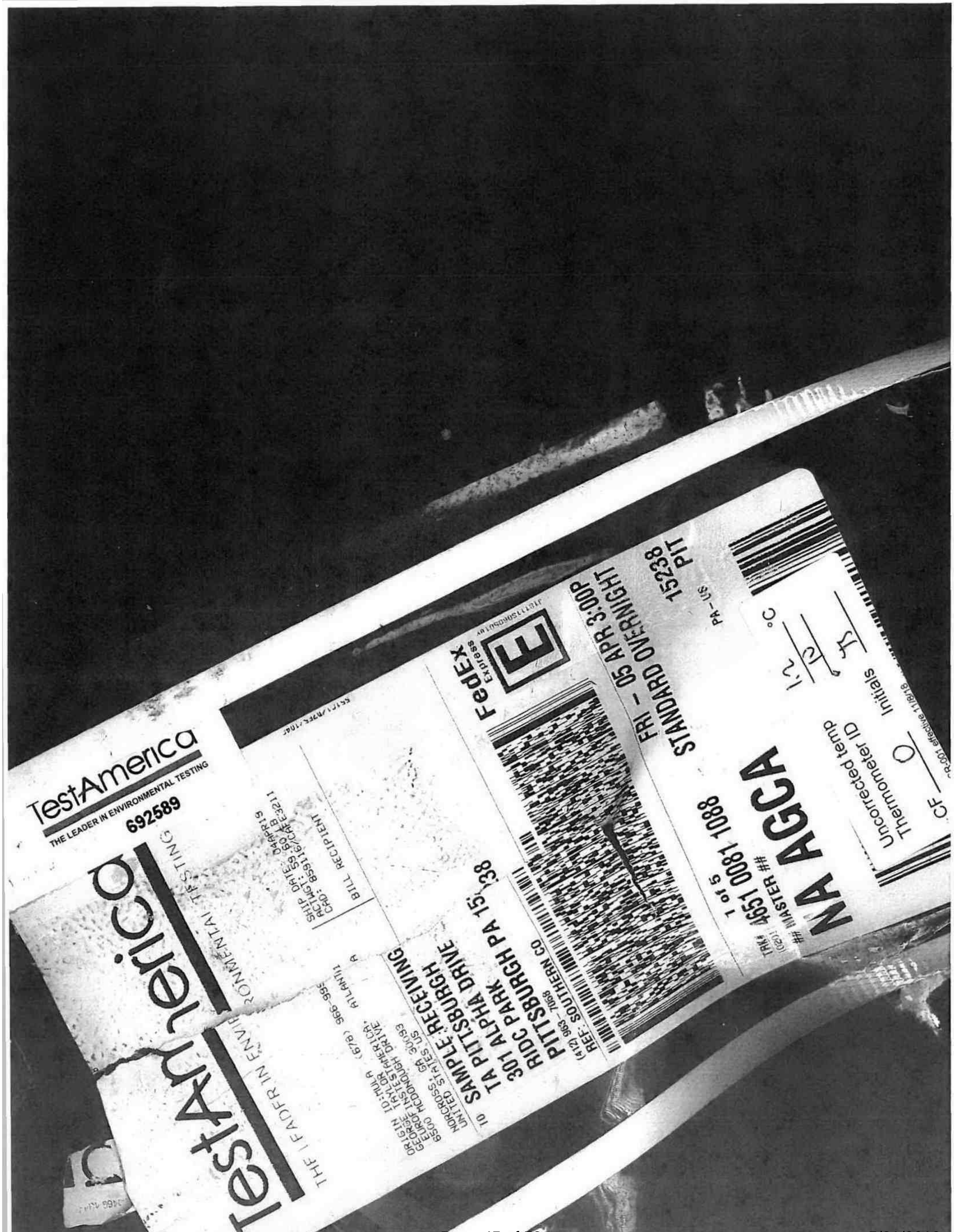
PT-WI-SR-001 effective 11/8/18

3 of 5
MPS# 0263 4651 0081 1103
Mstr# 4651 0081 1088 0201

FRI – 05 A
STANDARD OV

NA AGCA


TestAmeric
THE LEADER IN ENVIRONMENTAL TEST
(678) 966-9991
EUROFINS TESTAMERICA, ATLANTA
GA 30093
SHIP DATE: 04APR1
ACTWGT: 59.60 LB
BILL RECIPIENT
SAMPLE RECEIVING
PITTSBURGH
ALPHA DRIVE
PARK
BURGH PA 15238
REF SOUTHERN CO
FedEx
2 of 5
MPS# 4651 0081 1099
Mstr# 4651 0081 1088
FRI - 05 APR 3:00P
STANDARD OVERNIGHT
NA AGCA
0201
PA-US
Uncorrected temp 1.8 °C
Thermometer ID 10
CF 0 Initials TB
PT-WI-SR-001 effective 11/8/18


TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
692589
BILL RECIPIENT
SAMPLE RECEIVING
TA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
FedEx Express
FRI - 05 APR 3:00P
STANDARD OVERNIGHT
15238 PIT
PA-US
1 of 5
TRK# 4651 0081 1088
MASTER
NA AGCA
Uncorrected temp
Thermometer ID
Initials
°C
CF

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359809.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/17/2019	**Analysis Requested**		**Preservation Codes:**
City: Earth City	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA; M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			Other:
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
WGWA-1 (180-88630-1)	4/1/19	13:45 Eastern		Water			X	X	X	1	
WGWA-5 (180-88630-2)	4/2/19	11:30 Eastern		Water			X	X	X	1	
WGWA-6 (180-88630-3)	4/2/19	13:15 Eastern		Water			X	X	X	1	
FB-1-4-2-19 (180-88630-4)	4/2/19	12:10 Eastern		Water			X	X	X	1	
WGWA-18 (180-88630-5)	4/2/19	14:25 Eastern		Water			X	X	X	1	
WGWC-9 (180-88630-6)	4/3/19	13:40 Eastern		Water			X	X	X	1	
WGWC-8 (180-88630-7)	4/3/19	14:50 Eastern		Water			X	X	X	1	
WGWC-17 (180-88630-8)	4/4/19	09:55 Eastern		Water			X	X	X	1	
EB-2-4-4-19 (180-88630-9)	4/4/19	09:40 Eastern		Water			X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

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

Relinquished by: [signature]	Date/Time: 4/11/19 1200	Company: TAPitt	Received by: Michael Heem	Date/Time: 4-12-19 0910	Company: TASTL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359809.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/17/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
WGWC-10 (180-88630-10)	4/4/19	11:35 Eastern		Water			X	X	X	1	
DUP-2-4-3-19 (180-88630-11)	4/4/19	Eastern		Water			X	X	X	1	
DUP-1 (180-88630-12)	4/4/19	Eastern		Water			X	X	X	1	
WGWA-2 (180-88630-13)	4/1/19	14:50 Eastern		Water			X	X	X	1	
WGWA-7 (180-88630-14)	4/2/19	11:15 Eastern		Water			X	X	X	1	
WGWA-4 (180-88630-15)	4/2/19	12:45 Eastern		Water			X	X	X	1	
WGWA-3 (180-88630-16)	4/2/19	13:50 Eastern		Water			X	X	X	1	
WGWC-19 (180-88630-17)	4/2/19	14:55 Eastern		Water			X	X	X	1	
WGWC-12 (180-88630-18)	4/3/19	11:05 Eastern		Water			X	X	X	1	

180-88630-01 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) | Primary Deliverable Rank: 2 | Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 4/11/19 1700	Company: MPitt	Received by: Michael Heun	Date/Time: 4-12-19 0910	Company: TA SL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359809.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/17/2019			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
WGWC-11 (180-88630-19)	4/3/19	12:20 Eastern		Water			X	X	X	1	
WGWC-13 (180-88630-20)	4/3/19	13:20 Eastern		Water			X	X	X	1	
WGWC-14A (180-88630-21)	4/3/19	14:35 Eastern		Water			X	X	X	1	
WGWC-15 (180-88630-23)	4/4/19	10:35 Eastern		Water			X	X	X	1	
WGWC-16 (180-88630-24)	4/4/19	11:40 Eastern		Water			X	X	X	1	
FB-2-4-4-19 (180-88630-25)	4/4/19	12:00 Eastern		Water			X	X	X	1	

180-88630-02 Chain of Custody

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	4/11/19 1700	onsite	Michael Flum	4-12-19 0910	TA SRC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359806.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/17/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3005A (MOD) Edison TAL Metals (SOM01.2 List)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WGWA-1 (180-88630-1)	4/1/19	13:45 Eastern		Water			X	1	
WGWA-5 (180-88630-2)	4/2/19	11:30 Eastern		Water			X	1	
WGWA-6 (180-88630-3)	4/2/19	13:15 Eastern		Water			X	1	
FB-1-4-2-19 (180-88630-4)	4/2/19	12:10 Eastern		Water			X	1	
WGWA-18 (180-88630-5)	4/2/19	14:25 Eastern		Water			X	1	
WGWC-9 (180-88630-6)	4/3/19	13:40 Eastern		Water			X	1	
WGWC-8 (180-88630-7)	4/3/19	14:50 Eastern		Water			X	1	
WGWC-17 (180-88630-8)	4/4/19	09:55 Eastern		Water			X	1	
EB-2-4-4-19 (180-88630-9)	4/4/19	09:40 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/11/19 1700	TA Pitt	Kathy R Avery	4-12-19 857	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.2°C IR7

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359806.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/17/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3005A (MOD) Edison TAL Metals (SOM01.2 List)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WGWC-10 (180-88630-10)	4/4/19	11:35 Eastern		Water			X	1	
DUP-2-4-3-19 (180-88630-11)	4/4/19	Eastern		Water			X	1	
DUP-1 (180-88630-12)	4/4/19	Eastern		Water			X	1	
WGWA-2 (180-88630-13)	4/1/19	14:50 Eastern		Water			X	1	
WGWA-7 (180-88630-14)	4/2/19	11:15 Eastern		Water			X	1	
WGWA-4 (180-88630-15)	4/2/19	12:45 Eastern		Water			X	1	
WGWA-3 (180-88630-16)	4/2/19	13:50 Eastern		Water			X	1	
WGWC-19 (180-88630-17)	4/2/19	14:55 Eastern		Water			X	1	
WGWC-12 (180-88630-18)	4/3/19	11:05 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/11/19 1700	MPM	Kathy R Avery	4-12-19 857	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.2° IR7

Ver: 01/16/2019

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s):	COC No: 180-359806.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 3 of 3
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 180-88630-2
Address: 3355 McLemore Drive, ,	Due Date Requested: 4/17/2019			
City: Pensacola	TAT Requested (days):			
State, Zip: FL, 32514				
Phone: 850-474-1001(Tel) 850-478-2671(Fax)	PO #:			
Email:	WO #:			
Project Name: CCR - Plant Wansley	Project #: 18019922			
Site: CCR - Plant Wansley Lanfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020/3005A (MOD) Edison TAL Metals (SOM01.2 List)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
WGWC-11 (180-88630-19)	4/3/19	12:20 Eastern		Water			X	1	
WGWC-13 (180-88630-20)	4/3/19	13:20 Eastern		Water			X	1	
WGWC-14A (180-88630-21)	4/3/19	14:35 Eastern		Water			X	1	
WGWC-15 (180-88630-23)	4/4/19	10:35 Eastern		Water			X	1	
WGWC-16 (180-88630-24)	4/4/19	11:40 Eastern		Water			X	1	
FB-2-4-4-19 (180-88630-25)	4/4/19	12:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/11/19 1720	[illegible]	Kathy R Avery	4-12-19 857	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.2°C IR7

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-88630-2
SDG Number: Ash Pond

Login Number: 88630
List Number: 1
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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").	True	
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: 180-88630-2
SDG Number: Ash Pond

Login Number: 88630
List Number: 3
Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis
List Creation: 04/16/19 10:03 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.	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?	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 <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	

Product Name: Low-Flow System

Date: 2019-02-25 15:07:25

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	129 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	122 ft

Well Information:		Pumping Information:	
Well ID	WGWA-1	Final Pumping Rate	75 mL/min
Well diameter	2 in	Total System Volume	3.286705 L
Well Total Depth	129.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.3 in
Depth to Water	21.89 ft	Total Volume Pumped	3.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:50:07	300.03	16.52	5.26	37.02	0.39	22.00	1.86	110.25
Last 5	14:55:07	600.02	17.01	5.26	37.03	0.57	22.00	1.86	109.93
Last 5	15:00:07	900.02	17.67	5.25	37.12	0.48	22.00	1.86	110.59
Last 5	15:05:07	1200.01	18.16	5.25	36.87	0.31	22.00	1.85	111.28
Last 5									
Variance 0			0.49	-0.01	0.01			0.00	-0.32
Variance 1			0.66	-0.01	0.09			-0.01	0.67
Variance 2			0.49	-0.00	-0.25			-0.00	0.68

Notes

Sunny, sample time: 1505

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-25 15:21:04

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	103 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	97.65 ft

Well Information:		Pumping Information:	
Well ID	WGWA-2	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.9447325 L
Well Total Depth	103.65 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	7.33 ft	Total Volume Pumped	13 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	15:00:03	2102.02	16.00	6.03	122.48	10.50	7.90	0.13	106.98
Last 5	15:05:03	2402.02	16.00	6.03	123.11	10.20	7.90	0.15	109.67
Last 5	15:10:03	2702.02	15.91	6.05	123.86	6.76	7.90	0.16	106.84
Last 5	15:15:03	3002.02	15.86	6.02	124.64	5.85	7.90	0.17	108.22
Last 5	15:20:04	3303.02	15.90	6.02	125.39	4.92	7.90	0.18	106.74
Variance 0			-0.09	0.03	0.75			0.01	-2.83
Variance 1			-0.04	-0.04	0.78			0.01	1.38
Variance 2			0.04	0.00	0.76			0.01	-1.48

Notes

Sampled at 1520. 61F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 10:37:37

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	15 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	14 ft

Well Information:		Pumping Information:	
Well ID	WGWA-3	Final Pumping Rate	325 mL/min
Well diameter	2 in	Total System Volume	0.5519513 L
Well Total Depth	19 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	2.05 ft	Total Volume Pumped	9.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:15:05	300.01	16.35	5.80	34.55	4.71	2.10	5.64	98.02
Last 5	10:20:05	600.02	16.38	5.63	34.50	2.37	2.20	5.61	97.19
Last 5	10:25:05	900.01	16.40	5.61	34.47	1.48	2.30	5.59	96.49
Last 5	10:30:06	1201.02	16.53	5.60	34.34	0.79	2.30	5.57	96.57
Last 5	10:35:11	1506.02	16.80	5.60	34.20	0.61	2.30	5.52	96.35
Variance 0			0.02	-0.01	-0.04			-0.02	-0.69
Variance 1			0.13	-0.02	-0.12			-0.02	0.08
Variance 2			0.27	0.00	-0.14			-0.05	-0.22

Notes

Collected at 1035. 56F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 12:11:31

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	75 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	68.9 ft

Well Information:		Pumping Information:	
Well ID	WGWA-4	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.8197567 L
Well Total Depth	73.90 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	14 in
Depth to Water	1.8 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:50:05	600.02	16.05	6.74	147.29	7.81	2.60	1.06	100.43
Last 5	11:55:05	900.02	16.09	6.77	145.87	7.72	2.90	0.80	95.11
Last 5	12:00:05	1200.02	16.27	6.76	144.30	5.61	3.00	0.88	91.18
Last 5	12:05:07	1502.02	16.27	6.73	142.70	4.48	3.00	0.66	89.09
Last 5	12:10:08	1803.02	16.27	6.74	141.39	2.97	3.00	1.09	86.36
Variance 0			0.18	-0.00	-1.57			0.07	-3.93
Variance 1			-0.00	-0.03	-1.60			-0.21	-2.10
Variance 2			0.00	0.00	-1.30			0.42	-2.73

Notes

Sampled at 1210. 60F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 13:15:52

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	Peri Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	23 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	20 ft

Well Information:		Pumping Information:	
Well ID	WGWA-5	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.1926587 L
Well Total Depth	23.19 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	4.2 in
Depth to Water	7.65 ft	Total Volume Pumped	36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:55:04	9599.92	16.16	5.18	22.23	9.69	8.00	5.24	146.79
Last 5	13:00:04	9899.92	16.02	5.20	22.15	9.86	8.00	5.24	146.03
Last 5	13:05:04	10199.92	15.96	5.20	22.22	9.72	8.00	5.25	146.39
Last 5	13:10:04	10499.91	16.02	5.20	22.18	9.66	8.00	5.25	147.01
Last 5	13:15:04	10799.91	15.87	5.21	22.27	9.58	8.00	5.34	147.49
Variance 0			-0.06	-0.00	0.07			0.01	0.35
Variance 1			0.07	-0.00	-0.04			-0.01	0.63
Variance 2			-0.16	0.00	0.08			0.10	0.47

Notes

Cloudy, sample time: 1315

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 14:17:04

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	104 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	101 ft

Well Information:		Pumping Information:	
Well ID	WGWA-6	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	2.743739 L
Well Total Depth	104.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.2 in
Depth to Water	9.80 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:55:54	1200.01	16.25	7.77	180.72	8.92	10.30	1.89	110.06
Last 5	14:00:54	1500.01	16.52	7.82	180.82	7.66	10.40	1.77	111.22
Last 5	14:05:54	1800.00	16.63	7.84	181.01	6.13	10.40	1.71	112.03
Last 5	14:10:54	2100.00	16.69	7.86	181.15	5.02	10.40	1.65	112.23
Last 5	14:15:54	2400.00	16.60	7.87	181.10	4.07	10.40	1.60	112.35
Variance 0			0.12	0.02	0.19			-0.05	0.81
Variance 1			0.06	0.02	0.14			-0.07	0.20
Variance 2			-0.09	0.01	-0.05			-0.04	0.13

Notes

Cloudy, sample time:1415

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 14:01:58

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	42 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	34.6 ft

Well Information:		Pumping Information:	
Well ID	WGWA-7	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6724638 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	17.74 ft	Total Volume Pumped	9.625 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:40:07	1802.02	16.35	5.78	31.36	0.58	17.80	7.47	71.76
Last 5	13:45:07	2102.02	16.35	5.72	29.22	1.02	17.80	7.69	73.34
Last 5	13:50:07	2402.02	16.38	5.67	28.34	0.95	17.80	7.85	75.21
Last 5	13:55:07	2702.02	16.45	5.64	27.81	0.77	17.80	7.86	76.99
Last 5	14:00:07	3002.02	16.62	5.62	27.46	0.69	17.80	7.67	78.37
Variance 0			0.02	-0.05	-0.88			0.16	1.87
Variance 1			0.07	-0.03	-0.53			0.01	1.77
Variance 2			0.18	-0.02	-0.35			-0.20	1.38

Notes

Sampled at 1400. 60F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 15:15:42

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	40 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	WGWA-18	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	11 in
Depth to Water	13.21 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:55:02	600.02	16.78	7.54	173.93	3.20	14.10	1.52	144.48
Last 5	15:00:02	900.02	16.65	7.61	176.75	2.99	14.10	1.53	145.83
Last 5	15:05:02	1200.02	16.56	7.63	177.43	1.68	14.10	1.48	147.07
Last 5	15:10:02	1500.01	16.52	7.65	177.68	0.98	14.10	1.42	148.33
Last 5	15:15:02	1800.01	16.48	7.66	177.89	1.11	14.10	1.35	149.34
Variance 0			-0.09	0.02	0.68			-0.05	1.25
Variance 1			-0.04	0.02	0.25			-0.06	1.25
Variance 2			-0.04	0.01	0.22			-0.07	1.01

Notes

Cloudy, sample time: 1515

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-28 10:27:59

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	54.4 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	54.4 ft

Well Information:		Pumping Information:	
Well ID	WGWC-8	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.7278102 L
Well Total Depth	59.4 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19 in
Depth to Water	.95 ft	Total Volume Pumped	3.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:05:51	600.02	13.83	5.60	646.66	1.18	2.70	1.57	135.83
Last 5	10:10:51	900.02	13.76	5.58	648.76	1.97	3.20	1.60	135.94
Last 5	10:15:51	1200.02	13.74	5.58	653.47	1.17	3.50	1.66	136.11
Last 5	10:20:53	1502.02	13.76	5.57	658.53	1.58	3.60	1.68	136.25
Last 5	10:26:00	1809.02	13.88	5.55	664.08	1.02	3.70	1.67	136.48
Variance 0			-0.01	-0.00	4.71			0.05	0.17
Variance 1			0.01	-0.01	5.06			0.02	0.14
Variance 2			0.12	-0.01	5.56			-0.00	0.23

Notes

Collected at 1025. 58F rain.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-28 10:51:36

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	61 ft
Latitude	33° 51' 9.87"		
Longitude	-84° -31' -41.27"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	56 ft

Well Information:		Pumping Information:	
Well ID	WGWC-9	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.7572688 L
Well Total Depth	61.42 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17.7 in
Depth to Water	15.52 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:30:04	600.03	17.14	6.54	163.94	1.70	16.30	6.53	116.00
Last 5	10:35:04	900.02	17.25	6.55	162.89	1.03	16.70	6.50	116.72
Last 5	10:40:04	1200.02	17.19	6.55	162.96	1.11	16.90	6.47	117.79
Last 5	10:45:04	1500.01	17.14	6.55	162.64	1.43	17.00	6.45	119.53
Last 5	10:50:04	1800.01	17.16	6.54	163.22	1.27	17.00	6.44	121.62
Variance 0			-0.07	0.01	0.07			-0.04	1.07
Variance 1			-0.05	-0.00	-0.32			-0.02	1.74
Variance 2			0.02	-0.01	0.58			-0.01	2.09

Notes

Rain, sample time:1050, FB-2-2-28-2019 here

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 11:27:42

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	147 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	142 ft

Well Information:		Pumping Information:	
Well ID	WGWC-10	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	3.677641 L
Well Total Depth	147.16 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	8.5 in
Depth to Water	16.19 ft	Total Volume Pumped	6.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:05:05	2699.99	16.43	6.20	80.90	4.05	16.80	2.57	137.61
Last 5	11:10:05	2999.99	16.47	6.20	81.08	3.46	16.80	3.50	139.02
Last 5	11:15:05	3299.99	16.47	6.20	81.03	3.88	16.80	4.02	140.44
Last 5	11:20:05	3599.99	16.49	6.21	81.01	2.03	16.90	4.27	142.19
Last 5	11:25:05	3899.98	16.47	6.23	81.10	2.45	16.90	4.28	142.98
Variance 0			0.00	0.00	-0.05			0.52	1.42
Variance 1			0.02	0.01	-0.02			0.26	1.75
Variance 2			-0.02	0.02	0.09			0.01	0.79

Notes

Cloudy, sample time-1125

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 14:31:33

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	49. ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	44 ft

Well Information:		Pumping Information:	
Well ID	WGWC-11	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	1.549214 L
Well Total Depth	49.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12.6 in
Depth to Water	19.25 ft	Total Volume Pumped	9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:10:31	2400.00	17.46	5.79	45.78	8.35	20.30	6.26	143.61
Last 5	14:15:31	2700.00	17.45	5.78	45.90	7.21	20.30	6.24	145.15
Last 5	14:20:31	2999.99	17.59	5.78	45.98	6.48	20.30	6.26	145.65
Last 5	14:25:31	3299.99	18.06	5.78	46.08	5.28	20.30	6.26	146.61
Last 5	14:30:31	3599.99	18.35	5.78	46.06	4.97	20.30	6.21	147.15
Variance 0			0.14	0.01	0.08			0.02	0.50
Variance 1			0.47	-0.00	0.10			-0.00	0.96
Variance 2			0.29	0.00	-0.02			-0.05	0.54

Notes

Cloudy, sample time-1430

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 17:02:20

Project Information:		Pump Information:	
Operator Name	J Berisford	Pump Model/Type	QED Bladder Pump
Company Name	Atlantic Coast Consulting	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.375 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	76 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	613179		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	71 ft

Well Information:		Pumping Information:	
Well ID	WGWC-12	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.135617 L
Well Total Depth	76.50 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	18.46 ft	Total Volume Pumped	19.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	16:40:10	6599.95	17.25	6.68	135.83	9.22	18.70	0.24	76.90
Last 5	16:45:10	6899.95	17.64	6.69	135.20	8.65	18.70	0.23	75.80
Last 5	16:50:10	7199.95	17.70	6.69	134.43	7.51	18.70	0.22	75.37
Last 5	16:55:10	7499.95	17.32	6.70	135.17	5.31	18.70	0.22	74.91
Last 5	17:00:10	7799.94	16.96	6.70	135.13	4.88	18.70	0.22	74.65
Variance 0			0.07	-0.00	-0.77			-0.00	-0.43
Variance 1			-0.38	0.01	0.74			-0.01	-0.46
Variance 2			-0.36	0.00	-0.04			0.00	-0.27

Notes

Sunny, sample time-1700

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 11:02:05

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	92 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	90.55 ft

Well Information:		Pumping Information:	
Well ID	WGWC-13	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.8956349 L
Well Total Depth	95.55 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	27 in
Depth to Water	14.44 ft	Total Volume Pumped	5.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:40:21	3300.02	16.57	6.47	90.59	8.32	16.70	0.60	107.08
Last 5	10:45:22	3601.02	16.57	6.47	90.65	8.00	16.70	0.61	106.91
Last 5	10:50:22	3901.02	16.67	6.46	90.47	6.43	16.70	0.61	107.15
Last 5	10:55:22	4201.02	16.74	6.47	90.33	5.73	16.70	0.61	106.54
Last 5	11:00:22	4501.01	16.76	6.47	90.07	4.98	16.70	0.63	106.90
Variance 0			0.10	-0.01	-0.18			-0.00	0.24
Variance 1			0.07	0.01	-0.14			0.00	-0.61
Variance 2			0.02	-0.01	-0.26			0.02	0.37

Notes

Sampled at 1100. 61F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 11:57:42

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	38.08 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	38.08 ft

Well Information:		Pumping Information:	
Well ID	WGWC-14A	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.6549672 L
Well Total Depth	43.08 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	14 in
Depth to Water	14.01 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:35:17	300.03	16.85	5.82	37.44	2.99	15.10	4.93	98.56
Last 5	11:40:17	600.02	16.80	5.79	37.49	1.78	15.20	4.88	99.95
Last 5	11:45:17	900.02	16.80	5.79	37.44	1.54	15.20	4.96	100.56
Last 5	11:50:17	1200.02	16.80	5.74	37.62	1.28	15.20	4.55	100.60
Last 5	11:55:22	1505.02	16.81	5.73	38.07	1.43	15.20	4.39	101.60
Variance 0			-0.00	-0.01	-0.06			0.08	0.61
Variance 1			0.00	-0.05	0.18			-0.40	0.03
Variance 2			0.00	-0.01	0.46			-0.16	1.01

Notes

Sampled at 1155. 61 F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 13:32:27

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	48.36 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	48.36 ft

Well Information:		Pumping Information:	
Well ID	WGWC-15	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.7008512 L
Well Total Depth	53.36 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	72 in
Depth to Water	13.94 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:10:29	2103.02	17.08	7.33	313.20	0.94	19.50	2.88	112.10
Last 5	13:15:29	2403.02	17.02	7.38	312.98	0.89	19.80	2.87	113.34
Last 5	13:20:29	2703.02	16.98	7.38	312.94	0.91	20.10	2.93	113.08
Last 5	13:25:30	3004.02	17.03	7.40	312.74	0.87	20.20	2.94	112.22
Last 5	13:30:30	3304.02	17.02	7.40	312.68	0.91	20.30	2.64	112.71
Variance 0			-0.03	-0.00	-0.04			0.06	-0.26
Variance 1			0.05	0.03	-0.20			0.01	-0.86
Variance 2			-0.00	-0.00	-0.06			-0.29	0.49

Notes

Sampled at 1330. 62F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-27 14:30:52

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	29.7 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	29.7 ft

Well Information:		Pumping Information:	
Well ID	WGWC-16	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.6175637 L
Well Total Depth	34.7 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	13.15 ft	Total Volume Pumped	7.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:05:02	300.03	17.13	5.08	1180.35	6.67	13.40	4.01	131.82
Last 5	14:10:02	600.02	17.11	5.06	1145.79	5.67	13.40	3.82	132.89
Last 5	14:15:02	900.02	17.12	5.06	1138.01	2.86	13.40	3.77	133.37
Last 5	14:25:05	1503.02	17.25	5.08	1135.44	2.67	13.40	3.84	134.28
Last 5	14:30:07	1805.02	17.30	5.08	1135.77	2.34	13.40	3.86	134.68
Variance 0			0.00	0.01	-7.78			-0.04	0.48
Variance 1			0.13	0.02	-2.57			0.06	0.91
Variance 2			0.05	0.00	0.32			0.02	0.40

Notes

Sampled at 1430. 61F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-26 15:11:23

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	90 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	90.54 ft

Well Information:		Pumping Information:	
Well ID	WGWC-17	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.886708 L
Well Total Depth	95.94 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17 in
Depth to Water	23.22 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:50:33	600.02	17.12	6.26	112.30	29.60	24.40	1.29	99.58
Last 5	14:55:33	900.05	17.02	6.22	111.37	11.30	24.50	0.86	102.41
Last 5	15:00:33	1200.03	16.98	6.24	111.78	6.85	24.60	0.80	98.14
Last 5	15:05:34	1501.02	16.93	6.19	112.84	5.70	24.60	0.80	98.97
Last 5	15:10:35	1802.02	16.92	6.17	113.13	4.41	24.70	0.83	98.94
Variance 0			-0.04	0.02	0.42			-0.06	-4.27
Variance 1			-0.05	-0.05	1.06			-0.01	0.83
Variance 2			-0.01	-0.02	0.28			0.03	-0.04

Notes

Sampled at 1510. 60F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-02-28 11:26:21

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	2019 Assessment Event	Tubing Diameter	.17 in
Site Name	Plant Wansley - Ash Pond	Tubing Length	89.4 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	89.4 ft

Well Information:		Pumping Information:	
Well ID	WGWC-19	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.88403 L
Well Total Depth	94.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17 in
Depth to Water	16.4 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:05:10	600.02	16.71	6.81	170.87	22.90	17.30	0.23	93.72
Last 5	11:10:10	900.02	16.76	6.87	177.36	11.70	17.90	0.13	93.44
Last 5	11:15:13	1203.02	16.72	6.89	182.88	6.12	17.90	0.13	94.79
Last 5	11:20:15	1505.02	16.76	6.95	186.22	4.13	17.90	0.13	93.83
Last 5	11:25:20	1810.02	16.77	6.98	187.86	4.21	17.90	0.14	93.87
Variance 0			-0.04	0.03	5.52			-0.00	1.36
Variance 1			0.04	0.06	3.35			0.01	-0.96
Variance 2			0.01	0.03	1.63			0.01	0.04

Notes

Sampled at 1125. 57F rain.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-01 13:48:07

Project Information:		Pump Information:	
Operator Name	Jordan Verified	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	129 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	124 ft

Well Information:		Pumping Information:	
Well ID	WGWA-1	Final Pumping Rate	75 mL/min
Well diameter	2 in	Total System Volume	3.286705 L
Well Total Depth	129.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	23.01 ft	Total Volume Pumped	4.126 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:25:12	2100.03	16.64	5.36	36.04	0.34	23.10	3.36	137.52
Last 5	13:30:12	2400.67	16.82	5.33	36.21	0.33	23.10	3.62	143.25
Last 5	13:35:12	2700.67	16.54	5.32	36.26	0.45	23.10	4.69	139.49
Last 5	13:40:12	3000.67	16.15	5.31	36.28	0.51	23.10	4.33	138.49
Last 5	13:45:12	3300.67	16.19	5.31	36.18	0.29	23.10	4.51	138.47
Variance 0			-0.27	-0.01	0.05			1.07	-3.76
Variance 1			-0.39	-0.00	0.02			-0.36	-1.00
Variance 2			0.04	-0.00	-0.10			0.19	-0.02

Notes

Sunny, sample time-1345

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-01 14:51:44

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	105 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	97.65 ft

Well Information:		Pumping Information:	
Well ID	WGWA-2	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.9536594 L
Well Total Depth	102.65 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7 in
Depth to Water	9.09 ft	Total Volume Pumped	9.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:30:25	1802.99	15.79	6.05	125.71	1.15	9.80	0.18	-9.37
Last 5	14:35:26	2103.98	15.73	6.06	126.56	1.13	9.80	0.21	14.85
Last 5	14:40:26	2403.97	15.75	6.08	127.11	1.24	9.80	0.24	41.65
Last 5	14:45:32	2709.96	15.84	6.09	127.90	1.03	9.80	0.24	42.48
Last 5	14:50:34	3011.96	15.80	6.09	129.24	1.03	9.80	0.23	39.88
Variance 0			0.02	0.02	0.55			0.03	26.80
Variance 1			0.09	0.01	0.78			-0.00	0.83
Variance 2			-0.05	0.00	1.35			-0.01	-2.60

Notes

Sampled at 1450. 65F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 13:52:04

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	24 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	14 ft

Well Information:		Pumping Information:	
Well ID	WGWA-3	Final Pumping Rate	300 mL/min
Well diameter	2 in	Total System Volume	0.5921222 L
Well Total Depth	19 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1 in
Depth to Water	2.46 ft	Total Volume Pumped	10.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 10
Last 5	13:30:03	900.01	16.82	5.93	34.50	0.61	2.50	5.18	17.27
Last 5	13:35:06	1203.01	17.72	5.82	34.26	0.36	2.50	5.11	14.57
Last 5	13:40:06	1503.00	17.18	5.75	34.35	0.37	2.50	5.15	12.41
Last 5	13:45:06	1803.00	17.81	5.71	34.28	0.31	2.50	5.11	13.11
Last 5	13:50:06	2102.99	17.39	5.69	34.51	0.26	2.50	5.14	7.66
Variance 0			-0.54	-0.08	0.10			0.04	-2.16
Variance 1			0.63	-0.04	-0.08			-0.04	0.70
Variance 2			-0.42	-0.02	0.23			0.03	-5.45

Notes

Sampled at 1350. 56F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 12:47:08

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	75 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	68.4 ft

Well Information:		Pumping Information:	
Well ID	WGWA-4	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5747567 L
Well Total Depth	73.9 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	3.18 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:25:13	1201.00	17.47	6.62	133.20	2.06	3.70	0.13	-86.00
Last 5	12:30:14	1502.00	17.64	6.69	133.25	1.75	3.70	0.12	-84.00
Last 5	12:35:16	1803.99	17.56	6.74	132.60	1.30	3.70	0.11	-82.24
Last 5	12:40:16	2103.98	17.68	6.78	133.45	1.25	3.70	0.11	-81.82
Last 5	12:45:17	2404.98	18.08	6.81	133.32	0.75	3.70	0.12	-74.48
Variance 0			-0.08	0.05	-0.65			-0.01	1.75
Variance 1			0.12	0.04	0.85			-0.00	0.42
Variance 2			0.40	0.03	-0.13			0.01	7.34

Notes

Sampled at 1245. 53F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 11:32:43

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	Peri Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	23 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	18 ft

Well Information:		Pumping Information:	
Well ID	WGWA-5	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.5895288 L
Well Total Depth	23.91 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.3 in
Depth to Water	9.52 ft	Total Volume Pumped	18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:10:12	4200.23	15.07	5.25	25.29	5.81	9.80	3.76	130.78
Last 5	11:15:12	4500.23	15.17	5.25	25.42	5.69	9.80	3.77	130.79
Last 5	11:20:12	4800.23	15.25	5.24	24.97	5.55	9.80	3.73	131.33
Last 5	11:25:12	5100.23	15.47	5.25	25.26	5.11	9.80	3.75	132.37
Last 5	11:30:12	5400.23	15.56	5.25	25.15	4.92	9.80	3.72	133.04
Variance 0			0.08	-0.01	-0.45			-0.04	0.55
Variance 1			0.22	0.01	0.29			0.02	1.04
Variance 2			0.09	0.00	-0.11			-0.03	0.67

Notes

Sunny, sample time-1130

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 13:17:35

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	104 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	99 ft

Well Information:		Pumping Information:	
Well ID	WGWA-6	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	2.743739 L
Well Total Depth	104.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5 in
Depth to Water	11.08 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:55:26	3601.95	17.91	7.93	180.25	2.69	11.50	2.46	-100.02
Last 5	13:00:26	3901.95	17.82	7.93	179.29	2.71	11.50	2.31	-99.91
Last 5	13:05:26	4201.95	17.72	7.93	179.83	2.28	11.50	2.19	-100.89
Last 5	13:10:26	4501.86	17.40	7.94	180.04	2.00	11.50	2.09	-103.14
Last 5	13:15:26	4801.86	18.00	7.94	179.51	2.17	11.50	2.08	-108.15
Variance 0			-0.10	0.00	0.54			-0.12	-0.98
Variance 1			-0.33	0.01	0.21			-0.10	-2.25
Variance 2			0.61	0.00	-0.53			-0.01	-5.01

Notes

Sunny, sample time-1315, FB-1-4-2-19 here

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 11:18:25

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	peri Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	45 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	27.1 ft

Well Information:		Pumping Information:	
Well ID	WGWA-7	Final Pumping Rate	130 mL/min
Well diameter	2 in	Total System Volume	0.290854 L
Well Total Depth	39.6 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2 in
Depth to Water	18.8 ft	Total Volume Pumped	12.1 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:55:04	3001.96	15.88	5.78	27.72	0.31	19.00	7.07	83.22
Last 5	11:00:04	3301.95	15.93	5.73	27.29	0.43	19.00	7.07	80.25
Last 5	11:05:08	3605.95	15.77	5.67	25.64	0.70	19.00	7.09	83.14
Last 5	11:10:09	3906.94	15.71	5.62	25.62	0.79	19.00	7.13	84.62
Last 5	11:15:18	4215.93	15.84	5.60	25.29	0.50	19.00	7.11	85.04
Variance 0			-0.17	-0.06	-1.66			0.02	2.89
Variance 1			-0.05	-0.05	-0.02			0.04	1.48
Variance 2			0.13	-0.02	-0.33			-0.01	0.42

Notes

Sampled at 1115. 51F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 14:28:12

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	40 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	35 ft

Well Information:		Pumping Information:	
Well ID	WGWA-18	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.353746 L
Well Total Depth	40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.2 in
Depth to Water	15 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:05:15	900.02	17.23	7.45	171.12	2.21	15.60	2.83	126.06
Last 5	14:10:15	1200.02	17.93	7.50	171.30	2.55	15.60	2.33	124.92
Last 5	14:15:15	1500.02	18.47	7.59	171.26	2.10	15.60	1.84	124.12
Last 5	14:20:15	1800.03	17.97	7.61	169.90	1.77	15.60	1.70	121.84
Last 5	14:25:15	2100.02	16.99	7.53	169.76	1.42	15.60	1.81	113.67
Variance 0			0.53	0.08	-0.04			-0.49	-0.81
Variance 1			-0.50	0.02	-1.36			-0.14	-2.28
Variance 2			-0.98	-0.08	-0.14			0.12	-8.17

Notes

Cloudy, sample time 1425

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 14:52:12

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	59 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	54 ft

Well Information:		Pumping Information:	
Well ID	WGWC-8	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	1.7664 L
Well Total Depth	59.40 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.7 in
Depth to Water	4.04 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:30:04	600.02	20.76	5.64	680.15	1.11	4.60	1.64	219.63
Last 5	14:35:04	900.02	21.20	5.59	665.71	0.74	4.60	1.79	231.30
Last 5	14:40:04	1200.02	21.66	5.57	661.87	0.88	4.60	1.82	240.77
Last 5	14:45:04	1500.03	21.86	5.56	663.01	0.90	4.60	1.88	260.38
Last 5	14:50:04	1800.03	22.08	5.55	664.82	0.92	4.60	1.92	273.74
Variance 0			0.46	-0.03	-3.83			0.04	9.47
Variance 1			0.20	-0.01	1.14			0.05	19.61
Variance 2			0.21	-0.00	1.80			0.04	13.36

Notes

Sunny, sample time-1450, dup-2-4-3-19

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 13:43:49

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	Peri Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.17 in
Site Name	Plant Wansley	Tubing Length	61 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	56 ft

Well Information:		Pumping Information:	
Well ID	WGWC-9	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3622688 L
Well Total Depth	61.42 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	24 in
Depth to Water	16.19 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:20:11	600.03	21.85	6.04	161.29	1.62	17.30	1.92	166.72
Last 5	13:25:11	900.02	21.63	6.12	161.43	3.13	17.60	2.44	170.74
Last 5	13:30:11	1200.02	21.48	6.12	160.54	3.22	18.00	2.74	179.08
Last 5	13:35:11	1500.03	21.59	6.12	161.43	2.01	18.10	2.65	187.70
Last 5	13:40:12	1800.45	21.72	6.10	160.93	1.02	18.10	2.51	191.18
Variance 0			-0.15	0.00	-0.89			0.30	8.34
Variance 1			0.11	-0.01	0.89			-0.09	8.62
Variance 2			0.13	-0.01	-0.50			-0.14	3.48

Notes

Sunny, sample time-1340

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-04 11:37:30

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	147 ft
Latitude	33º 51' 9.49"		
Longitude	-84º -31' -40.93"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	142 ft

Well Information:		Pumping Information:	
Well ID	WGWC-10	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	3.677641 L
Well Total Depth	147.16 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17.6 in
Depth to Water	16.13 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:15:08	1200.02	16.82	6.36	81.99	2.19	17.40	2.99	99.51
Last 5	11:20:08	1500.23	16.90	6.42	82.03	3.43	17.40	3.88	101.85
Last 5	11:25:08	1800.22	17.08	6.46	82.11	4.20	17.50	4.42	102.49
Last 5	11:30:08	2100.23	17.09	6.46	82.17	4.65	17.50	4.67	105.51
Last 5	11:35:08	2400.22	17.35	6.46	82.33	4.12	17.60	4.71	110.73
Variance 0			0.18	0.04	0.08			0.54	0.63
Variance 1			0.00	0.00	0.06			0.25	3.02
Variance 2			0.27	-0.00	0.16			0.05	5.22

Notes

Cloudy, sample time-1135

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 12:25:08

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	55 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	44.50 ft

Well Information:		Pumping Information:	
Well ID	WGWC-11	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.7304883 L
Well Total Depth	49.5 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	18 in
Depth to Water	20.09 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	12:00:07	1200.01	18.34	6.31	40.13	8.48	21.80	7.17	28.04
Last 5	12:05:07	1500.01	18.41	6.20	40.37	7.32	21.90	7.14	26.61
Last 5	12:10:07	1800.00	18.30	6.16	40.60	5.51	21.90	7.15	25.40
Last 5	12:15:07	2100.00	18.45	6.10	40.71	5.21	21.90	7.08	25.04
Last 5	12:20:07	2400.00	18.52	6.07	40.99	4.81	21.90	7.08	23.65
Variance 0			-0.11	-0.04	0.24			0.02	-1.20
Variance 1			0.15	-0.06	0.11			-0.08	-0.36
Variance 2			0.07	-0.03	0.27			0.00	-1.39

Notes

Sampled 1220. 65F cleat

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 11:06:08

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	80 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	71.57 ft

Well Information:		Pumping Information:	
Well ID	WGWC-12	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.8420739 L
Well Total Depth	76.57 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	19.14 ft	Total Volume Pumped	14.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:45:11	3301.97	17.01	6.93	127.93	6.98	19.70	1.53	-10.51
Last 5	10:50:11	3601.96	17.01	6.92	129.35	6.62	19.70	1.16	-24.09
Last 5	10:55:11	3901.96	17.05	6.91	129.89	6.13	19.70	1.45	-16.75
Last 5	11:00:11	4201.95	17.18	6.91	129.04	5.20	19.70	1.17	-26.80
Last 5	11:05:11	4501.95	17.10	6.91	130.61	4.94	19.70	1.46	-24.35
Variance 0			0.04	-0.01	0.54			0.29	7.34
Variance 1			0.13	0.00	-0.85			-0.28	-10.05
Variance 2			-0.08	-0.01	1.56			0.29	2.44

Notes

Sampled at 1105. 62F clear.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 13:22:11

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	100 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	90.00 ft

Well Information:		Pumping Information:	
Well ID	WGWC-13	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.9313423 L
Well Total Depth	95.55 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	19 in
Depth to Water	17.23 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	13:00:11	600.02	19.86	6.39	85.88	1.55	18.60	1.66	-71.63
Last 5	13:05:12	901.02	19.64	6.44	87.40	4.57	18.70	1.94	-9.72
Last 5	13:10:12	1201.01	18.88	6.46	87.46	4.18	18.70	1.61	9.08
Last 5	13:15:18	1507.00	18.99	6.47	87.45	3.94	18.80	1.51	9.52
Last 5	13:20:23	1812.00	19.00	6.47	87.04	4.05	18.90	1.48	7.57
Variance 0			-0.76	0.02	0.06			-0.33	18.81
Variance 1			0.10	0.01	-0.02			-0.10	0.43
Variance 2			0.01	0.00	-0.40			-0.03	-1.95

Notes

Sampled at 1320. 67F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-03 14:36:06

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	Peri. Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	49 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	37.08 ft

Well Information:		Pumping Information:	
Well ID	WGWC-14A	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.3087077 L
Well Total Depth	43.08 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	16 in
Depth to Water	17.32 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:15:11	901.02	19.24	5.71	51.99	5.78	18.70	0.28	32.91
Last 5	14:20:12	1202.02	19.13	5.69	52.46	6.75	18.70	0.31	31.76
Last 5	14:25:12	1502.01	19.24	5.69	52.54	4.28	18.70	0.29	29.49
Last 5	14:30:12	1802.01	19.42	5.69	53.45	3.90	18.70	0.28	22.64
Last 5	14:35:12	2101.99	19.64	5.68	53.42	3.36	18.70	0.26	35.28
Variance 0			0.10	0.00	0.08			-0.02	-2.28
Variance 1			0.18	-0.00	0.90			-0.02	-6.85
Variance 2			0.22	-0.00	-0.02			-0.02	12.65

Notes

Sampled at 1435. 69F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-04 10:36:57

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	56 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	48 ft

Well Information:		Pumping Information:	
Well ID	WGWC-15	Final Pumping Rate	60 mL/min
Well diameter	2 in	Total System Volume	0.7349517 L
Well Total Depth	53.36 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	113 in
Depth to Water	14.84 ft	Total Volume Pumped	9.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	10:15:32	3303.95	16.74	7.55	297.28	1.48	23.60	2.41	-29.75
Last 5	10:20:32	3603.95	16.52	7.58	297.74	1.32	23.80	2.40	-30.63
Last 5	10:25:32	3903.94	16.60	7.57	297.91	1.50	23.90	2.38	-30.49
Last 5	10:30:32	4203.93	16.69	7.58	297.89	1.06	24.00	2.40	-30.09
Last 5	10:35:32	4503.92	16.75	7.58	298.58	1.03	24.10	2.37	-31.67
Variance 0			0.08	-0.00	0.17			-0.02	0.14
Variance 1			0.09	0.01	-0.01			0.02	0.40
Variance 2			0.05	-0.00	0.69			-0.02	-1.57

Notes

Sampled at 1035. 67F partly cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-04 11:42:30

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	38 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	29.28 ft

Well Information:		Pumping Information:	
Well ID	WGWC-16	Final Pumping Rate	125 mL/min
Well diameter	2 in	Total System Volume	0.6546101 L
Well Total Depth	34.78 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	14.25 ft	Total Volume Pumped	11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	11:20:48	900.01	17.01	5.52	1070.29	1.11	14.50	3.53	36.59
Last 5	11:25:51	1203.00	17.02	5.36	1070.78	0.59	14.50	3.57	42.13
Last 5	11:30:51	1503.00	17.08	5.27	1072.80	0.44	14.50	3.60	39.55
Last 5	11:35:53	1804.99	17.05	5.22	1070.51	0.45	14.50	3.63	43.55
Last 5	11:40:53	2104.98	17.06	5.19	1068.06	0.65	14.50	3.66	43.50
Variance 0			0.06	-0.08	2.02			0.04	-2.58
Variance 1			-0.02	-0.05	-2.29			0.03	3.99
Variance 2			0.01	-0.03	-2.45			0.03	-0.05

Notes

Sampled at 1140. 69F cloudy.

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-04 09:57:59

Project Information:		Pump Information:	
Operator Name	Jordan Berisford	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	Poly
Project Name	First 2019 Semi-annual Event	Tubing Diameter	.375 in
Site Name	Plant Wansley	Tubing Length	95 ft
Latitude	33º 51' 9.49"		
Longitude	-84º -31' -40.93"		
Sonde SN	354293		
Turbidity Make/Model	Hach 2100Q	Pump placement from TOC	90 ft

Well Information:		Pumping Information:	
Well ID	WGWC-17	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	2.548271 L
Well Total Depth	95.94 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	17 in
Depth to Water	24.18 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	09:35:08	600.06	15.96	6.14	112.16	6.62	25.10	0.87	42.31
Last 5	09:40:08	900.03	15.96	6.15	111.98	6.02	25.40	0.70	63.59
Last 5	09:45:08	1200.03	15.98	6.16	112.47	2.84	25.60	0.52	64.61
Last 5	09:50:08	1500.02	15.99	6.16	112.83	2.19	25.60	0.40	58.54
Last 5	09:55:08	1800.02	16.05	6.16	112.98	2.11	25.60	0.37	57.60
Variance 0			0.01	0.00	0.49			-0.18	1.03
Variance 1			0.01	0.00	0.35			-0.12	-6.08
Variance 2			0.06	0.00	0.15			-0.03	-0.94

Notes

Sunny, sample time-0955

Grab Samples

Product Name: Low-Flow System

Date: 2019-04-02 14:57:13

Project Information:		Pump Information:	
Operator Name	O. Fuquea	Pump Model/Type	QED Bladder Pump
Company Name	ACC	Tubing Type	poly
Project Name	First 2019 - Semi-annual event	Tubing Diameter	.17 in
Site Name	Wansley-Ash Pond	Tubing Length	100 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	339797		
Turbidity Make/Model	HACH 2100Q	Pump placement from TOC	89.84 ft

Well Information:		Pumping Information:	
Well ID	WGWC-19	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.9313423 L
Well Total Depth	94.84 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	10 in
Depth to Water	17.18 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 100	+/- 0.1	+/- 5%	+/- 100		+/- 10%	+/- 100
Last 5	14:35:37	900.01	16.89	6.64	146.56	2.32	18.40	0.24	-32.58
Last 5	14:40:39	1202.00	17.61	6.67	145.99	1.41	18.40	0.16	-31.07
Last 5	14:45:41	1504.00	17.72	6.70	146.50	1.36	18.40	0.15	-32.22
Last 5	14:50:42	1804.99	17.74	6.72	147.94	1.46	18.40	0.14	-33.62
Last 5	14:55:44	2106.99	17.94	6.75	148.74	1.33	18.40	0.14	-31.64
Variance 0			0.11	0.03	0.50			-0.02	-1.15
Variance 1			0.03	0.02	1.45			-0.01	-1.41
Variance 2			0.20	0.03	0.80			0.00	1.99

Notes

Sampled at 1455. 59F cloudy.

Grab Samples

APPENDIX B

Statistical Analyses

100% ND

Date: 6/6/2019 1:00 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Antimony (mg/L)

WGWC-10, WGWC-11, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19, WGWC-8

Arsenic (mg/L)

WGWC-19

Beryllium (mg/L)

WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19

Boron (mg/L)

WGWC-14A, WGWC-15

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-14A, WGWC-16, WGWC-17, WGWC-19, WGWC-8

Cobalt (mg/L)

WGWC-15

Lead (mg/L)

WGWC-12, WGWC-14A, WGWC-15, WGWC-19

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

Interwell Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:23 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	WGWC-10	0.05	4/4/2019	0.024	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.05	4/3/2019	0.05ND	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	0.05	4/3/2019	0.05ND	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-13	0.05	4/3/2019	0.05ND	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	**WGWC-16**	**0.05**	**4/4/2019**	**3.2**	**Yes**	**95**	**100**	**n/a**	**0.0002141**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	WGWC-17	0.05	4/4/2019	0.049	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-19	0.05	4/2/2019	0.05ND	No	95	100	n/a	0.0002141	NP Inter (NDs) 1 of 2
Boron (mg/L)	**WGWC-8**	**0.05**	**4/3/2019**	**1.7**	**Yes**	**95**	**100**	**n/a**	**0.0002141**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**WGWC-9**	**0.05**	**4/3/2019**	**0.35**	**Yes**	**95**	**100**	**n/a**	**0.0002141**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	WGWC-10	52	4/4/2019	7.9	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-11	52	4/3/2019	1.7	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-12	52	4/3/2019	14	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-13	52	4/3/2019	4.7	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-14A	52	4/3/2019	0.84	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-15	52	4/4/2019	30	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	**WGWC-16**	**52**	**4/4/2019**	**110**	**Yes**	**95**	**0**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	WGWC-17	52	4/4/2019	5.6	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-19	52	4/2/2019	11	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Calcium (mg/L)	**WGWC-8**	**52**	**4/3/2019**	**61**	**Yes**	**95**	**0**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	WGWC-9	52	4/3/2019	7.2	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-10	6.05	4/4/2019	1.4	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-11	6.05	4/3/2019	3.3	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-12	6.05	4/3/2019	3	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-13	6.05	4/3/2019	1.2	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-14A	6.05	4/3/2019	2.4	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-15	6.05	4/4/2019	3.7	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	**WGWC-16**	**6.05**	**4/4/2019**	**170**	**Yes**	**95**	**0**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	WGWC-17	6.05	4/4/2019	1.4	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-19	6.05	4/2/2019	2.5	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Chloride (mg/L)	**WGWC-8**	**6.05**	**4/3/2019**	**70**	**Yes**	**95**	**0**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	WGWC-9	6.05	4/3/2019	2	No	95	0	n/a	0.0002141	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-10	0.284	4/4/2019	0.13	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-11	0.284	4/3/2019	0.048	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-12	0.284	4/3/2019	0.084	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-13	0.284	4/3/2019	0.24	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-14A	0.284	4/3/2019	0.048	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**WGWC-15**	**0.284**	**4/4/2019**	**0.78**	**Yes**	**111**	**56.76**	**n/a**	**0.0001605**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	WGWC-16	0.284	4/4/2019	0.08	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	WGWC-17	0.284	4/4/2019	0.087	No	111	56.76	n/a	0.0001605	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	**WGWC-19**	**0.284**	**4/2/2019**	**0.33**	**Yes**	**111**	**56.76**	**n/a**	**0.0001605**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**WGWC-8**	**0.284**	**4/3/2019**	**0.5**	**Yes**	**111**	**56.76**	**n/a**	**0.0001605**	**NP Inter (NDs) 1 of 2**
Fluoride (mg/L)	**WGWC-9**	**0.284**	**4/3/2019**	**1.3**	**Yes**	**111**	**56.76**	**n/a**	**0.0001605**	**NP Inter (NDs) 1 of 2**
Sulfate (mg/L)	WGWC-10	21	4/4/2019	2.2	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-11	21	4/3/2019	1.9	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-12	21	4/3/2019	13	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-13	21	4/3/2019	3.8	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-14A	21	4/3/2019	3.8	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**WGWC-15**	**21**	**4/4/2019**	**41**	**Yes**	**95**	**26.32**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**WGWC-16**	**21**	**4/4/2019**	**250**	**Yes**	**95**	**26.32**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	WGWC-17	21	4/4/2019	9.1	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2

Interwell Prediction Limit

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:23 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	WGWC-19	21	4/2/2019	3.8	No	95	26.32	n/a	0.0002141	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**WGWC-8**	**21**	**4/3/2019**	**180**	**Yes**	**95**	**26.32**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**WGWC-9**	**21**	**4/3/2019**	**41**	**Yes**	**95**	**26.32**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	WGWC-10	150	4/4/2019	30	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-11	150	4/3/2019	5ND	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-12	150	4/3/2019	66	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-13	150	4/3/2019	72	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-14A	150	4/3/2019	31	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**WGWC-15**	**150**	**4/4/2019**	**170**	**Yes**	**95**	**10.53**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**WGWC-16**	**150**	**4/4/2019**	**710**	**Yes**	**95**	**10.53**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	WGWC-17	150	4/4/2019	89	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-19	150	4/2/2019	88	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**WGWC-8**	**150**	**4/3/2019**	**430**	**Yes**	**95**	**10.53**	**n/a**	**0.0002141**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	WGWC-9	150	4/3/2019	120	No	95	10.53	n/a	0.0002141	NP Inter (normality) 1 of 2

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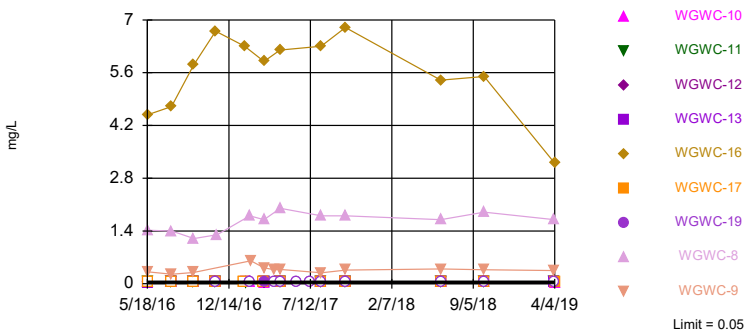
Hollow symbols indicate censored values.

Exceeds Limit: WGWC-16, WGWC-8, WGWC-9

Boron

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 95) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.004701. Individual comparison alpha = 0.0002141 (1 of 2). Comparing 9 points to limit. Assumes 2 future values.

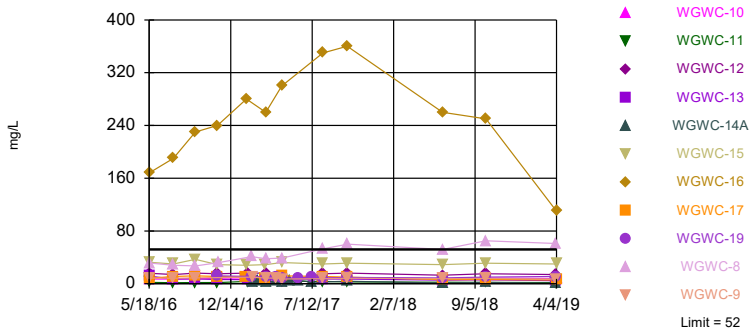
Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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 95 background values. Annual per-constituent alpha = 0.004701. Individual comparison alpha = 0.0002141 (1 of 2). Comparing 11 points to limit.

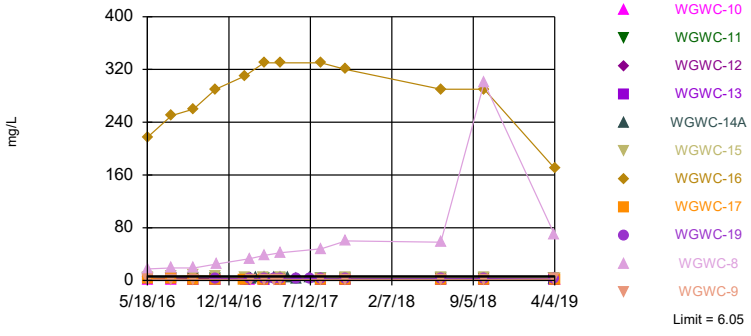
Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Exceeds Limit: 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 95 background values. Annual per-constituent alpha = 0.004701. Individual comparison alpha = 0.0002141 (1 of 2). Comparing 11 points to limit.

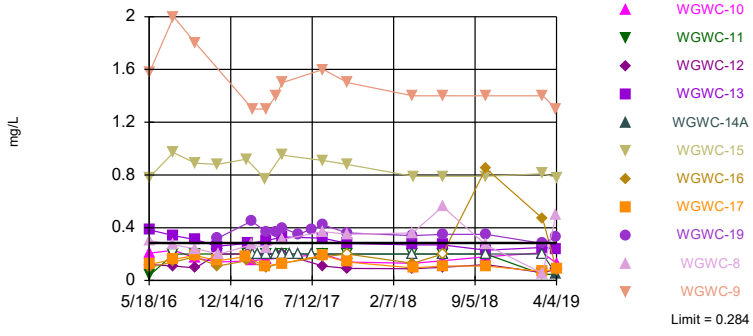
Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-19, WGWC-8, WGWC-9

Fluoride

Interwell Non-parametric



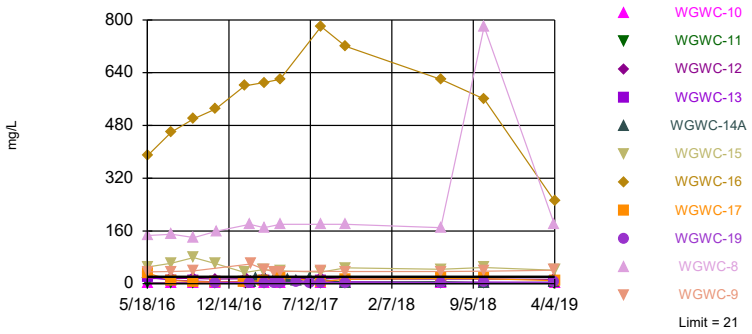
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 111 background values. 56.76% NDs. Annual per-constituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL
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 95 background values. 26.32% NDs. Annual per-constituent alpha = 0.004701. Individual comparison alpha = 0.0002141 (1 of 2). Comparing 11 points to limit.

Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL

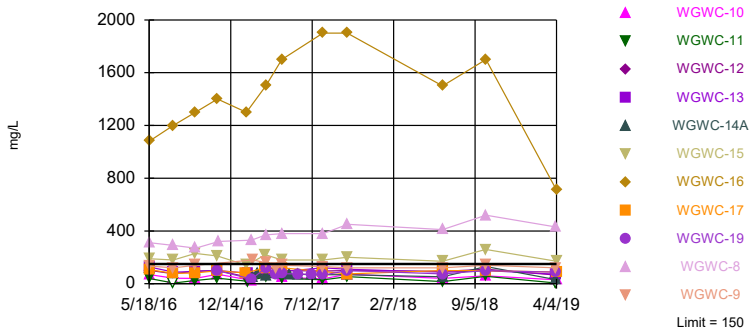
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Hollow symbols indicate censored values.

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 95 background values. 10.53% NDs. Annual per-constituent alpha = 0.004701. Individual comparison alpha = 0.0002141 (1 of 2). Comparing 11 points to limit.

Prediction Limit Analysis Run 6/6/2019 1:20 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17	WGWA-5 (bg)
5/17/2016	<0.05	<0.05	<0.05						
5/18/2016				<0.05	<0.05	4.48	<0.05	<0.05	<0.05
5/19/2016									
7/19/2016	<0.05	<0.05	<0.05		<0.05	4.7	<0.05		<0.05
7/20/2016				<0.05				<0.05	
9/13/2016	<0.05	<0.05	<0.05		<0.05		<0.05		
9/14/2016				<0.05		5.8		<0.05	<0.05
9/15/2016									
11/9/2016	<0.05	<0.05	<0.05				<0.05		
11/10/2016					<0.05	6.7		<0.05	
11/11/2016				<0.05					
11/14/2016									
1/17/2017	<0.05		<0.05						
1/18/2017					<0.05		<0.05		
1/19/2017		<0.05							<0.05
1/20/2017								<0.05	
1/24/2017						6.3			
1/27/2017									
2/6/2017				<0.05					
2/9/2017									
3/13/2017	<0.05		<0.05						
3/14/2017		<0.05			<0.05		<0.05	<0.05	<0.05
3/15/2017				0.032 (J)		5.9			
4/11/2017									
4/24/2017	<0.05		<0.05						
4/25/2017		<0.05			<0.05	6.2	<0.05	<0.05	<0.05
4/26/2017				<0.05					
6/7/2017									
7/11/2017									
8/8/2017	<0.05	<0.05	<0.05		<0.05		<0.05		
8/9/2017						6.3		<0.05	<0.05
8/10/2017				<0.05					
10/10/2017	<0.05		<0.05						
10/11/2017		<0.05			<0.05	6.8	<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	5.4		<0.05	
9/24/2018			<0.05						
9/27/2018	<0.05								
9/28/2018		<0.05							
10/2/2018							<0.05		
10/3/2018					<0.05				<0.05
10/4/2018				<0.05		5.5		<0.05	
4/1/2019	<0.05		<0.05						
4/2/2019		<0.05			<0.05		<0.05		<0.05
4/3/2019									
4/4/2019				0.024 (J)		3.2		0.049 (J)	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016								
5/18/2016	<0.05	<0.05						
5/19/2016			<0.05	0.0252 (J)	1.42	0.314	<0.05	
7/19/2016								
7/20/2016	<0.05	<0.05	<0.05	<0.05	1.4	0.25	<0.05	
9/13/2016	<0.05	<0.05						
9/14/2016			<0.05	<0.05		0.3	<0.05	
9/15/2016					1.2			
11/9/2016								
11/10/2016	<0.05	<0.05		<0.05				
11/11/2016			<0.05				<0.05	<0.05
11/14/2016					1.3			
1/17/2017								
1/18/2017	<0.05	<0.05						
1/19/2017								
1/20/2017								
1/24/2017								
1/27/2017			0.021 (J)	0.033 (J)			0.047 (J)	
2/6/2017					1.8			<0.05
2/9/2017						0.61		
3/13/2017								
3/14/2017	<0.05	<0.05						
3/15/2017			0.058	<0.05	1.7	0.42	0.024 (J)	0.034 (J)
4/11/2017						0.37		<0.05
4/24/2017								
4/25/2017	<0.05	<0.05						
4/26/2017			<0.05	<0.05	2	0.38	<0.05	<0.05
6/7/2017								<0.05
7/11/2017								<0.05
8/8/2017		<0.05						
8/9/2017	<0.05			<0.05				
8/10/2017			<0.05		1.8	0.29	<0.05	<0.05
10/10/2017								
10/11/2017	<0.05	<0.05						
10/12/2017			<0.05	<0.05	1.8	0.36	<0.05	<0.05
6/13/2018								
6/14/2018	<0.05	<0.05	<0.05	<0.05	1.7	0.39	<0.05	<0.05
9/24/2018								
9/27/2018								
9/28/2018								
10/2/2018								
10/3/2018	<0.05	<0.05						
10/4/2018			<0.05	<0.05	1.9	0.37	<0.05	<0.05
4/1/2019								
4/2/2019	<0.05	<0.05						<0.05
4/3/2019			<0.05	<0.05	1.7	0.35	<0.05	
4/4/2019								

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-5 (bg)	WGWC-17	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)
5/17/2016	0.927	12.2	23.7						
5/18/2016				1.7	8.24	27	2.1	168	1.36
5/19/2016									
7/19/2016	1	13	23	1.5		23		190	0.88
7/20/2016					11		1.7		
9/13/2016	0.44	13	23			25	1.3		0.93
9/14/2016				52	12			230	
9/15/2016									
11/9/2016	1.1	19	6.7			25			
11/10/2016					11		1.6	240	6.1
11/11/2016									
11/14/2016									
1/17/2017	1.4	28							
1/18/2017						26	1.7		10
1/19/2017			8.5	13					
1/20/2017					10				
1/24/2017								280	
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	1.1	14							
3/14/2017			13	1.6	8.8	20	1.8		1.3
3/15/2017								260	
3/17/2017									
4/11/2017									
4/24/2017	1.1	12							
4/25/2017			23	1.5	12	28	2	300	1.9
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.1	18	24			26	2		4.8
8/9/2017				1.3	11			350	
8/10/2017									
10/10/2017	1.2	21							
10/11/2017			23	1.5	10	29	2.1	360	0.93
10/12/2017									
6/13/2018	1.1		11	1.2		25			
6/14/2018		12			6.2		2	260	0.94
9/24/2018		11							
9/27/2018	1.2								
9/28/2018			11						
10/2/2018						26			
10/3/2018				1.4			1.8		1.2
10/4/2018					6.4			250	
4/1/2019	1	12							
4/2/2019			20	1.1		25	1.8		1.1
4/3/2019									
4/4/2019					5.6			110	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-15	WGWC-10	WGWA-4 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	32.5	7.17	17.9						
5/19/2016				15.8	1.95	31.4	8.53	11.4	
7/19/2016	30								
7/20/2016		7	15	14	1.5	28	8.2	7.1	
9/13/2016			16						
9/14/2016	37	7.7		16	1.8		8.8	7.4	
9/15/2016						27			
11/9/2016									
11/10/2016	29		15					6.4	
11/11/2016		8.2		15	1.7				12
11/14/2016						32			
1/17/2017									
1/18/2017			17						
1/19/2017									
1/20/2017									
1/24/2017	28								
1/27/2017				16	3.5			6.2	
2/6/2017		9.1				41			11
2/8/2017									
2/9/2017							10		
2/23/2017									
3/13/2017									
3/14/2017	29		17						
3/15/2017		9		16	3.8	38	8.6	6.7	10
3/17/2017									
4/11/2017							8.6		11
4/24/2017									
4/25/2017	32		17						
4/26/2017		8.1		3	4	39	7.1	6.5	8.4
5/17/2017									
6/7/2017									9
7/11/2017									9.5
8/8/2017									
8/9/2017	30		15					7	
8/10/2017		8.1		15	3.5	53	7.5		8.8
10/10/2017									
10/11/2017	31		17						
10/12/2017		8.6		16	2.7	60	8.2	7	9.5
6/13/2018									
6/14/2018	29	7.7	15	13	2.2	52	7.5	5.5	8.9
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	31		16						
10/4/2018		8.5		15	2	65	8	5.9	10
4/1/2019									
4/2/2019			15						11
4/3/2019				14	1.7	61	7.2	4.7	
4/4/2019	30	7.9							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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	
11/14/2016	
1/17/2017	
1/18/2017	
1/19/2017	
1/20/2017	
1/24/2017	
1/27/2017	
2/6/2017	
2/8/2017	3.2
2/9/2017	
2/23/2017	4.1
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	2.4
4/11/2017	4.1
4/24/2017	
4/25/2017	
4/26/2017	2.5
5/17/2017	5.2
6/7/2017	5.2
7/11/2017	2.3
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	3.8
10/12/2017	
6/13/2018	
6/14/2018	1.1
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	2
4/1/2019	
4/2/2019	
4/3/2019	0.84
4/4/2019	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-5 (bg)	WGWC-17	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)
5/17/2016	3.8	2.5	6.05						
5/18/2016				2.14	2.72	1.58	1.92	217	2.06
5/19/2016									
7/19/2016	3.9	2.6	4	2.4		1.6		250	2.1
7/20/2016					1.9		1.8		
9/13/2016	3.6	2.4	3.1			1.4	1.7		2
9/14/2016				2.1	1.6			260	
9/15/2016									
11/9/2016	3.9	2.3	2.3			1.5			
11/10/2016					1.6		1.6	290	1.8
11/11/2016									
11/14/2016									
1/17/2017	3.8	2.3							
1/18/2017						1.5	1.7		1.8
1/19/2017			2	1.8					
1/20/2017					1.5				
1/24/2017								310	
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	3.4	2.2							
3/14/2017			1.9	2	1.5	2.5	1.6		1.8
3/15/2017								330	
3/17/2017									
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017			1.9	1.8	1.8	1.3	1.6	330	1.8
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2			1.4	1.7		1.9
8/9/2017				1.9	1.4			330	
8/10/2017									
10/10/2017	3.6	2.5							
10/11/2017			1.9	2.1	1.5	1.3	1.6	320	1.8
10/12/2017									
6/13/2018	3.8		2	1.7		1.4			
6/14/2018		2.3			1.5		1.6	290	1.7
9/24/2018		2.4							
9/27/2018	4								
9/28/2018			2.1						
10/2/2018						1.4			
10/3/2018				1.8			1.6		1.8
10/4/2018					1.5			290	
4/1/2019	4	2.4							
4/2/2019			2.6	1.7		1.5	1.7		1.9
4/3/2019									
4/4/2019					1.4			170	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-15	WGWC-10	WGWA-4 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	4.59	1.45	1.45						
5/19/2016				3.8	3.21	17.5	1.46	2.26	
7/19/2016	5.9								
7/20/2016		1.6	1.4	3.8	3.4	19	1.5	1.9	
9/13/2016			1.4						
9/14/2016	7.9	1.5		3.7	3.1		1.4	1.6	
9/15/2016						19			
11/9/2016									
11/10/2016	6.5		1.3					1.4	
11/11/2016		1.5		3.5	3.2				2.6
11/14/2016						25			
1/17/2017									
1/18/2017			1.3						
1/19/2017									
1/20/2017									
1/24/2017	4.1								
1/27/2017				3.1	3.4			1.4	
2/6/2017		1.4				33			2.6
2/8/2017									
2/9/2017							1.5		
2/23/2017									
3/13/2017									
3/14/2017	4.4		1.2						
3/15/2017		1.4		3.2	3.1	38	1.3	1.4	2.4
3/17/2017									
4/11/2017							1.2		2.3
4/24/2017									
4/25/2017	4		1.2						
4/26/2017		1.3		3.2	3.1	42	1.2	1.3	2.3
5/17/2017									
6/7/2017									2.5
7/11/2017									2.3
8/8/2017									
8/9/2017	3.6		1.2					1.4	
8/10/2017		1.4		3.4	3.1	48	1.3		2.5
10/10/2017									
10/11/2017	5		1.2						
10/12/2017		1.3		3.1	3	60	1.4	1.2	2.3
6/13/2018									
6/14/2018	4.3	1.3	1.2	3	3	58	1.2	1.2	2.4
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	4.8		1.2						
10/4/2018		1.3		3.1	3.1	300	1.2	1.2	2.6
4/1/2019									
4/2/2019			1.2						2.5
4/3/2019				3	3.3	70	2	1.2	
4/4/2019	3.7	1.4							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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	
11/14/2016	
1/17/2017	
1/18/2017	
1/19/2017	
1/20/2017	
1/24/2017	
1/27/2017	
2/6/2017	
2/8/2017	2.5
2/9/2017	
2/23/2017	4.3
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	4.8
4/11/2017	3.8
4/24/2017	
4/25/2017	
4/26/2017	4.8
5/17/2017	3.9
6/7/2017	3.2
7/11/2017	4.1
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	2.2
10/12/2017	
6/13/2018	
6/14/2018	2.8
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	2.2
4/1/2019	
4/2/2019	
4/3/2019	2.4
4/4/2019	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
5/17/2016	0.0131 (J)	0.0538 (J)	0.284 (J)						
5/18/2016				0.206	0.779	0.018 (J)	0.1 (J)	0.106 (J)	0.121 (J)
5/19/2016									
7/19/2016	<0.2	<0.2	0.21		0.97	<0.2	0.14 (J)	0.11 (J)	
7/20/2016				0.23					0.16 (J)
9/13/2016	<0.2	<0.2	0.15 (J)			<0.2		0.11 (J)	
9/14/2016				0.17 (J)	0.89		0.18 (J)		0.19 (J)
9/15/2016									
11/9/2016	<0.2	0.085 (J)	<0.2					0.1 (J)	
11/10/2016					0.88	<0.2	0.11 (J)		0.15 (J)
11/11/2016				0.14 (J)					
11/14/2016									
1/17/2017	<0.2	<0.2							
1/18/2017						<0.2		0.11 (J)	
1/19/2017			0.087 (J)						
1/20/2017									0.18 (J)
1/24/2017					0.92		0.15 (J)		
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		0.77	<0.2		<0.2	0.11 (J)
3/15/2017				0.16 (J)			0.1 (J)		
3/17/2017									
4/11/2017									
4/24/2017	<0.2	<0.2							
4/25/2017			<0.2		0.95	<0.2	0.13 (J)	<0.2	0.13 (J)
4/26/2017				0.17 (J)					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.2	<0.2	0.087 (J)			<0.2		0.099 (J)	
8/9/2017					0.91		0.18 (J)		0.19 (J)
8/10/2017				0.2					
10/10/2017	<0.2	0.18 (J)							
10/11/2017			0.09 (J)		0.88	<0.2	<0.2	0.098 (J)	0.14 (J)
10/12/2017				0.14 (J)					
3/27/2018	<0.2	<0.2							
3/28/2018			0.11 (J)			<0.2		0.088 (J)	
3/29/2018							0.13 (J)		
3/30/2018				0.13 (J)	0.79				0.095 (J)
6/13/2018	<0.2		0.085 (J)					0.093 (J)	
6/14/2018		<0.2		0.15 (J)	0.79	<0.2	<0.2		0.11 (J)
9/24/2018		<0.2							
9/27/2018	<0.2								
9/28/2018			0.082 (J)						
10/2/2018								0.13 (J)	
10/3/2018					0.79	<0.2			
10/4/2018				0.18 (J)			0.85 (J)		0.11 (J)
2/25/2019	<0.2	0.032 (J)							

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
2/26/2019			0.23			<0.2		0.074 (J)	0.068 (J)
2/27/2019				0.21	0.81		0.47		
2/28/2019									
4/1/2019	<0.2	0.061 (J)							
4/2/2019			0.21			<0.2		0.09 (J)	
4/3/2019									
4/4/2019				0.13 (J)	0.78		0.08 (J)		0.087 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	0.014 (J)	0.164 (J)	0.029 (J)						
5/19/2016				0.12 (J)	0.039 (J)	0.304	1.58	0.384	
7/19/2016	<0.2								
7/20/2016		0.17 (J)	<0.2	0.11 (J)	<0.2	0.27	2	0.34	
9/13/2016		0.15 (J)	<0.2						
9/14/2016	0.095 (J)			0.095 (J)	<0.2		1.8	0.31	
9/15/2016						0.24			
11/9/2016									
11/10/2016		0.12 (J)	<0.2					0.26	
11/11/2016				<0.2	<0.2				0.32
11/14/2016						0.2			
1/17/2017									
1/18/2017		0.15 (J)	<0.2						
1/19/2017	<0.2								
1/20/2017									
1/24/2017									
1/27/2017				<0.2	<0.2			0.28	
2/6/2017						0.27			0.45
2/8/2017									
2/9/2017							1.3		
2/23/2017									
3/13/2017									
3/14/2017	<0.2	0.13 (J)	<0.2						
3/15/2017				<0.2	<0.2	0.25	1.3	0.3	0.37
3/17/2017									
4/11/2017							1.4		0.37
4/24/2017									
4/25/2017	<0.2	0.12 (J)	<0.2						
4/26/2017				<0.2	<0.2	0.31	1.5	0.33	0.4
5/17/2017									
6/7/2017									0.35
7/11/2017									0.39
8/8/2017			<0.2						
8/9/2017	<0.2	0.14 (J)						0.32	
8/10/2017				0.11 (J)	<0.2	0.37	1.6		0.42
10/10/2017									
10/11/2017	<0.2	0.14 (J)	<0.2						
10/12/2017				0.091 (J)	<0.2	0.35	1.5	0.28	0.36
3/27/2018									
3/28/2018	<0.2	0.12 (J)	<0.2						
3/29/2018				0.089 (J)	<0.2	0.36	1.4	0.27	0.34
3/30/2018									
6/13/2018	<0.2								
6/14/2018		0.12 (J)	<0.2	0.1 (J)	<0.2	0.56	1.4	0.27	0.35
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	<0.2	0.13 (J)	<0.2						
10/4/2018				0.12 (J)	<0.2	0.27	1.4	0.23	0.35
2/25/2019									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
2/26/2019	<0.2	0.14 (J)	<0.2						
2/27/2019				0.06 (J)	0.047 (J)	0.054 (J)		0.25	
2/28/2019							1.4		0.28
4/1/2019									
4/2/2019	<0.2	0.14 (J)	0.039 (J)						0.33
4/3/2019				0.084 (J)	0.048 (J)	0.5	1.3	0.24	
4/4/2019									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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	
11/14/2016	
1/17/2017	
1/18/2017	
1/19/2017	
1/20/2017	
1/24/2017	
1/27/2017	
2/6/2017	
2/8/2017	<0.2
2/9/2017	
2/23/2017	<0.2
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	<0.2
4/11/2017	<0.2
4/24/2017	
4/25/2017	
4/26/2017	<0.2
5/17/2017	<0.2
6/7/2017	<0.2
7/11/2017	<0.2
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	<0.2
10/12/2017	
3/27/2018	
3/28/2018	
3/29/2018	<0.2
3/30/2018	
6/13/2018	
6/14/2018	<0.2
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	<0.2
2/25/2019	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14A
2/26/2019	
2/27/2019	<0.2
2/28/2019	
4/1/2019	
4/2/2019	
4/3/2019	0.048 (J)
4/4/2019	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-5 (bg)	WGWC-17	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)
5/17/2016	<1	1.14	19.9						
5/18/2016				0.955 (J)	32.1	8.88	0.821 (J)	388	0.368 (J)
5/19/2016									
7/19/2016	<1	1.4	14	0.76 (J)		9		460	<1
7/20/2016					9.7		0.82 (J)		
9/13/2016	<1	1.1	11			8.5	0.81 (J)		<1
9/14/2016				3.4	6.6			500	
9/15/2016									
11/9/2016	<1	1.1	6.3			8.2			
11/10/2016					5.2		0.73 (J)	530	<1
11/11/2016									
11/14/2016									
1/17/2017	<1	2.1							
1/18/2017						9.4	0.99 (J)		1.4
1/19/2017			7.4	21					
1/20/2017					5.3				
1/24/2017								600	
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<1	0.97 (J)							
3/14/2017			10	1.4	9.6	2	0.83 (J)		<1
3/15/2017								610	
3/17/2017									
4/11/2017									
4/24/2017	<1	0.75 (J)							
4/25/2017			10	0.89 (J)	20	8.2	0.7 (J)	620	<1
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<1	1.1	12			8.5	0.82 (J)		<1
8/9/2017				0.75 (J)	6.5			780	
8/10/2017									
10/10/2017	<1	1.3							
10/11/2017			11	<1	13	8.3	0.72 (J)	720	<1
10/12/2017									
6/13/2018	<1		8.2	<1		8.3			
6/14/2018		0.84 (J)			16		<1	620	<1
9/24/2018		0.79 (J)							
9/27/2018	<1								
9/28/2018			7.6						
10/2/2018						8.3			
10/3/2018				<1			0.73 (J)		<1
10/4/2018					15			560	
4/1/2019	<1	1							
4/2/2019			11	0.94 (J)		8.5	1.1		0.4 (J)
4/3/2019									
4/4/2019					9.1			250	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-15	WGWC-10	WGWA-4 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	50.7	2.84	5.32						
5/19/2016				15.8	1.83	146	35.9	19.2	
7/19/2016	62								
7/20/2016		2.8	6.5	16	1.6	150	37	11	
9/13/2016			5.6						
9/14/2016	79	2.8		16	1.5		39	8.6	
9/15/2016						140			
11/9/2016									
11/10/2016	61		5.4					5.7	
11/11/2016		2.6		14	1.4				3.4
11/14/2016						160			
1/17/2017									
1/18/2017			5.1						
1/19/2017									
1/20/2017									
1/24/2017	34								
1/27/2017				15	2.5			6.8	
2/6/2017		2.7				180			3.7
2/8/2017									
2/9/2017							60		
2/23/2017									
3/13/2017									
3/14/2017	43		4.6						
3/15/2017		2.7		17	2.5	170	44	11	3.6
3/17/2017									
4/11/2017							36		3.2
4/24/2017									
4/25/2017	39		6.6						
4/26/2017		2.5		15	2.2	180	37	8.1	3.3
5/17/2017									
6/7/2017									3.8
7/11/2017									3.3
8/8/2017									
8/9/2017	35		7.3					8.1	
8/10/2017		2.2		16	2.3	180	38		3.7
10/10/2017									
10/11/2017	48		6.8						
10/12/2017		1.9		14	1.9	180	37	6.1	3.6
6/13/2018									
6/14/2018	44	2	6.9	14	1.7	170	37	5	3.5
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	49		7						
10/4/2018		1.9		14	1.6	780	38	4.3	4.6
4/1/2019									
4/2/2019			8.1						3.8
4/3/2019				13	1.9	180	41	3.8	
4/4/2019	41	2.2							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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	
11/14/2016	
1/17/2017	
1/18/2017	
1/19/2017	
1/20/2017	
1/24/2017	
1/27/2017	
2/6/2017	
2/8/2017	4.3
2/9/2017	
2/23/2017	16
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	22
4/11/2017	13
4/24/2017	
4/25/2017	
4/26/2017	20
5/17/2017	12
6/7/2017	8.1
7/11/2017	17
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	3.4
10/12/2017	
6/13/2018	
6/14/2018	5.8
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	2.8
4/1/2019	
4/2/2019	
4/3/2019	3.8
4/4/2019	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-5 (bg)	WGWC-17	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)
5/17/2016	<10	100	112						
5/18/2016				33	107	113	29	1080	31
5/19/2016									
7/19/2016	14	84	80	<10		92		1200	<10
7/20/2016					78		<10		
9/13/2016	50	70	120			100	12		<10
9/14/2016				150	82			1300	
9/15/2016									
11/9/2016	22	110	76			130			
11/10/2016					98		30	1400	44
11/11/2016									
11/14/2016									
1/17/2017	8	120							
1/18/2017						120	22		50
1/19/2017			36	34					
1/20/2017					82				
1/24/2017								1300	
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<10	58							
3/14/2017			70	32	120	110	22		26
3/15/2017								1500	
3/17/2017									
4/11/2017									
4/24/2017	10	94							
4/25/2017			70	22	120	100	22	1700	10
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<10	62	72			90	4 (J)		<10
8/9/2017				20	92			1900	
8/10/2017									
10/10/2017	44	140							
10/11/2017			90	4 (J)	74	98	10	1900	42
10/12/2017									
6/13/2018	24		38	<10		110			
6/14/2018		80			100		26	1500	14
9/24/2018		76							
9/27/2018	28								
9/28/2018			68						
10/2/2018						130			
10/3/2018				24			50		6
10/4/2018					98			1700	
4/1/2019	<10	63							
4/2/2019			100	25		110	28		15
4/3/2019									
4/4/2019					89			710	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-15	WGWC-10	WGWA-4 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	190	70	101						
5/19/2016				101	39	311	134	127	
7/19/2016	180								
7/20/2016		42	86	76	<10	290	120	88	
9/13/2016			28						
9/14/2016	230	40		96	24		140	92	
9/15/2016						270			
11/9/2016									
11/10/2016	210		110					100	
11/11/2016		72		100	42				98
11/14/2016						320			
1/17/2017									
1/18/2017			98						
1/19/2017									
1/20/2017									
1/24/2017	140								
1/27/2017				50	18			80	
2/6/2017		24				330			36
2/8/2017									
2/9/2017							180		
2/23/2017									
3/13/2017									
3/14/2017	220		110						
3/15/2017		78		120	54	370	160	100	120
3/17/2017									
4/11/2017							120		68
4/24/2017									
4/25/2017	180		86						
4/26/2017		48		100	42	380	140	92	76
5/17/2017									
6/7/2017									74
7/11/2017									70
8/8/2017									
8/9/2017	180		92					120	
8/10/2017		38		96	30	380	130		66
10/10/2017									
10/11/2017	200		110						
10/12/2017		72		100	54	450	120	110	100
6/13/2018									
6/14/2018	170	40	92	94	16	410	120	88	74
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	260		100						
10/4/2018		60		110	56	520	140	100	100
4/1/2019									
4/2/2019			100						88
4/3/2019				66	<10	430	120	72	
4/4/2019	170	30							

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/6/2019 1:23 PM View: Interwell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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	
11/14/2016	
1/17/2017	
1/18/2017	
1/19/2017	
1/20/2017	
1/24/2017	
1/27/2017	
2/6/2017	
2/8/2017	54
2/9/2017	
2/23/2017	78
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	56
4/11/2017	76
4/24/2017	
4/25/2017	
4/26/2017	76
5/17/2017	68
6/7/2017	72
7/11/2017	68
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	68
10/12/2017	
6/13/2018	
6/14/2018	52
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	130
4/1/2019	
4/2/2019	
4/3/2019	31
4/4/2019	

Intrawell Prediction Limit

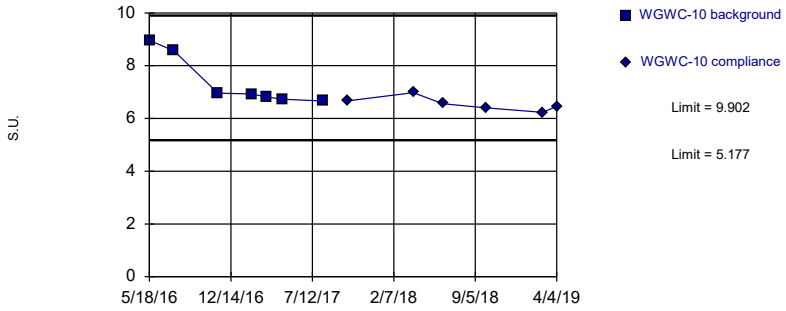
Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:36 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
pH (S.U.)	WGWC-10	9.902	5.177	4/4/2019	6.46	No	7	0	sqrt(x)	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-11	6.316	5.777	4/3/2019	6.07	No	7	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-12	7.233	6.248	4/3/2019	6.91	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-13	6.939	6.335	4/3/2019	6.47	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-14A	6.437	5.643	4/3/2019	5.68	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-15	8.055	7.269	4/4/2019	7.58	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-16	6.262	5.015	4/4/2019	5.19	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-17	6.846	6.112	4/4/2019	6.16	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-19	7.076	6.539	4/2/2019	6.75	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-8	6.578	5.09	4/3/2019	5.55	No	8	0	No	0.000342	Param Intra 1 of 3
pH (S.U.)	WGWC-9	6.731	5.557	4/3/2019	6.1	No	6	0	No	0.000342	Param Intra 1 of 3

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 = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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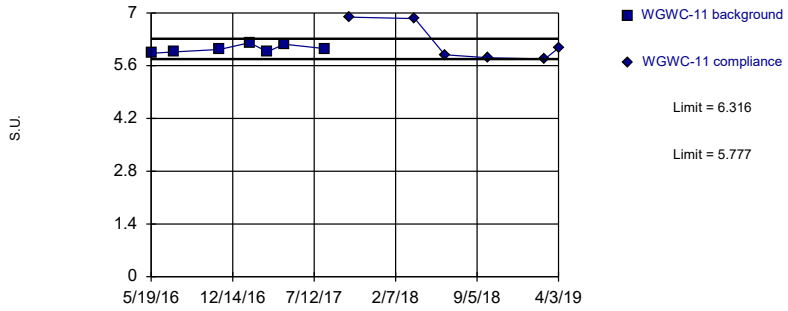
Within Limits

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 = 2.527 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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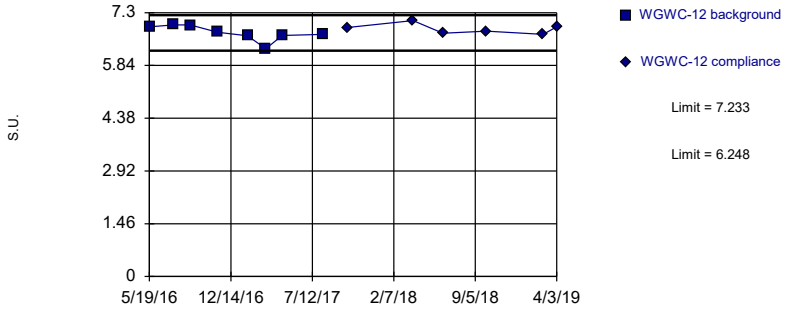
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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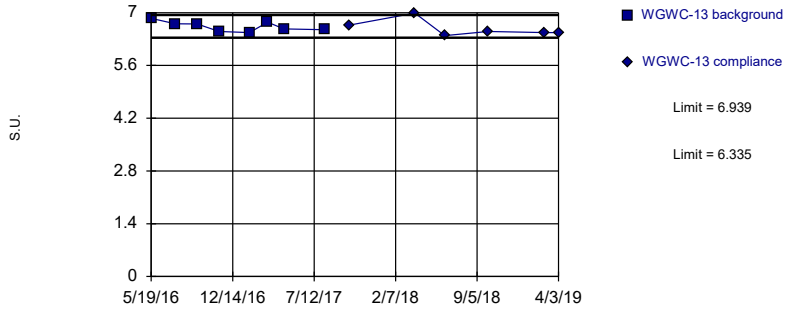
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

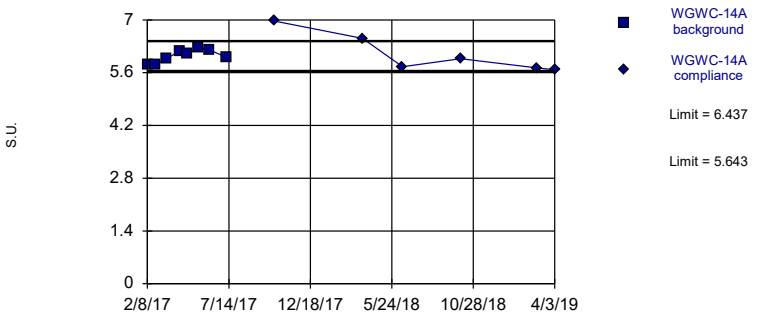
Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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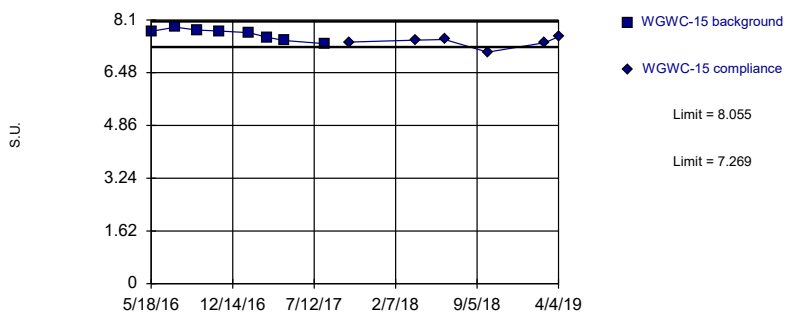
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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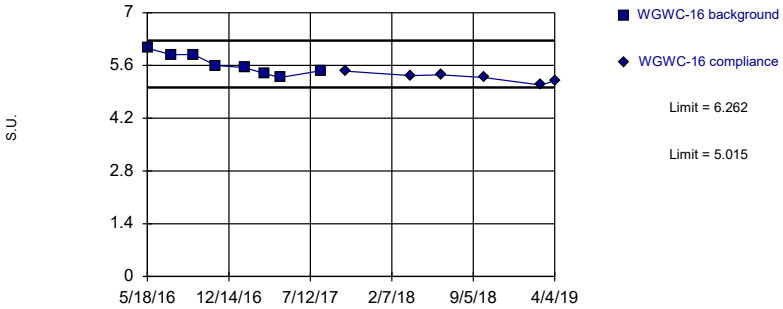
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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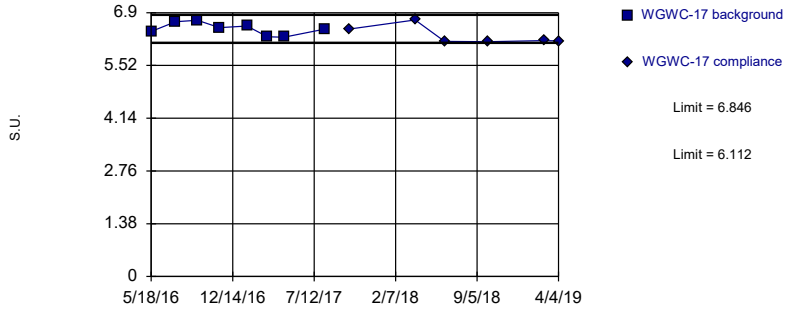
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

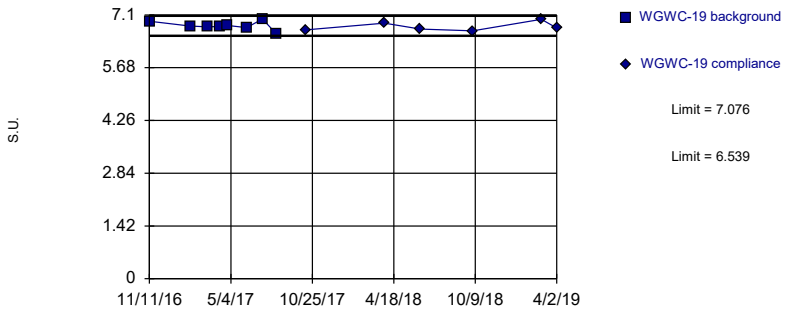
Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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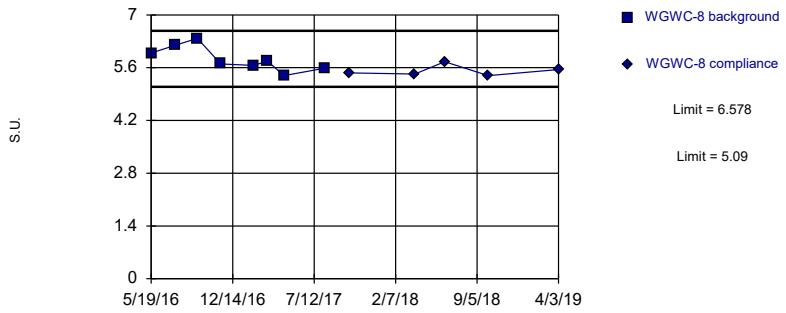
Within Limits

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 = 2.256 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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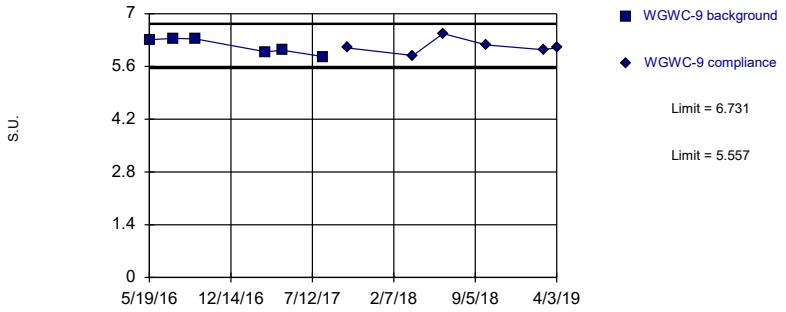
Within Limits

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 = 2.798 (c=7, w=11, 1 of 3, event alpha = 0.05132). Report alpha = 0.0006839.

Prediction Limit Analysis Run 6/6/2019 1:33 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Prediction Limit

Constituent: pH Analysis Run 6/6/2019 1:36 PM View: Intrawell PL

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
3/29/2018				6.85		7.08		6.99
3/30/2018		6.98						
6/14/2018		6.56		5.89		6.73		6.39
10/4/2018		6.4		5.81		6.79		6.5
2/27/2019		6.23		5.78		6.7		6.47
4/3/2019				6.07		6.91		6.47
4/4/2019		6.46						

Prediction Limit

Constituent: pH Analysis Run 6/6/2019 1:36 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14A	WGWC-14A	WGWC-15	WGWC-15	WGWC-16	WGWC-16	WGWC-17	WGWC-17
5/18/2016			7.75		6.06		6.41	
7/18/2016					5.884339			
7/19/2016			7.876073					
7/20/2016							6.662463	
9/14/2016			7.79		5.89		6.7	
11/10/2016			7.76		5.6		6.51	
1/20/2017							6.55	
1/24/2017			7.71		5.54			
2/8/2017	5.81							
2/23/2017	5.8							
3/14/2017			7.57				6.27	
3/15/2017					5.39			
3/17/2017	5.97							
4/11/2017	6.18							
4/25/2017			7.47		5.28		6.26	
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		6.47	
10/11/2017		6.97		7.42		5.45		6.47
3/29/2018		6.51				5.33		
3/30/2018				7.48				6.71
6/14/2018		5.76		7.5		5.35		6.15
10/3/2018				7.11				
10/4/2018		5.97				5.28		6.14
2/26/2019								6.17
2/27/2019		5.73		7.4		5.08		
4/3/2019		5.68						
4/4/2019				7.58		5.19		6.16

Prediction Limit

Constituent: pH Analysis Run 6/6/2019 1:36 PM View: Intrawell PL

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-19	WGWC-8	WGWC-8	WGWC-9	WGWC-9
5/19/2016			5.99		6.31	
7/20/2016			6.194334		6.345061	
9/14/2016					6.33	
9/15/2016			6.38			
11/11/2016	6.93					
11/14/2016			5.7			
2/6/2017	6.8		5.66			
3/15/2017	6.78		5.77		5.99	
4/11/2017	6.79					
4/26/2017	6.82		5.39		6.03	
6/7/2017	6.76					
7/11/2017	6.99					
8/10/2017	6.59		5.59		5.86	
10/12/2017		6.7		5.46		6.09
3/29/2018		6.88		5.43		5.89
6/14/2018		6.72		5.76		6.47
10/4/2018		6.67		5.39		6.17
2/28/2019		6.98				6.045 (D)
4/2/2019		6.75				
4/3/2019				5.55		6.1

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	WGWC-10	0.0013	0.00089	0.01	No	13	84.62	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.0013	0.00054	0.01	No	13	84.62	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.0013	0.00052	0.01	No	13	84.62	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.0015	0.00053	0.01	No	13	53.85	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0021	0.00095	0.01	No	13	46.15	No	0.01	NP (Cohens/xfrm)
Arsenic (mg/L)	WGWC-15	0.002579	0.001721	0.01	No	13	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.0015	0.0009	0.01	No	13	23.08	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-17	0.0013	0.00058	0.01	No	13	53.85	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-19	0.0013	0.0013	0.01	No	13	100	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-8	0.0015	0.00055	0.01	No	13	76.92	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	13	76.92	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.03675	2	No	13	0	x^4	0.01	Param.
Barium (mg/L)	WGWC-11	0.036	0.02969	2	No	13	0	No	0.01	Param.
Barium (mg/L)	WGWC-12	0.02124	0.01501	2	No	13	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05622	0.04503	2	No	13	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-14A	0.04909	0.03122	2	No	13	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02188	0.01882	2	No	13	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.06749	0.04923	2	No	13	0	x^3	0.01	Param.
Barium (mg/L)	WGWC-17	0.01968	0.014	2	No	13	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.001602	0.001158	2	No	13	7.692	sqrt(x)	0.01	Param.
Barium (mg/L)	WGWC-8	0.00233	0.001053	2	No	13	7.692	sqrt(x)	0.01	Param.
Barium (mg/L)	WGWC-9	0.002545	0.0008699	2	No	13	30.77	No	0.01	Param.
Beryllium (mg/L)	WGWC-10	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-11	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-12	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-13	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00017	0.004	No	13	92.31	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-15	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	13	92.31	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-17	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-19	0.0025	0.0025	0.004	No	13	100	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.00184	0.001337	0.004	No	13	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00034	0.004	No	13	69.23	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-10	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-11	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-12	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-13	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-14A	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-15	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.00082	0.00037	0.005	No	13	15.38	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-17	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-19	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-8	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-9	0.0025	0.0025	0.005	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-10	0.002718	0.00152	0.1	No	13	15.38	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0025	0.0012	0.1	No	13	76.92	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-12	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.0025	0.0018	0.1	No	13	92.31	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.0025	0.0015	0.1	No	13	92.31	No	0.01	NP (NDs)

Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	WGWC-16	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-17	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-19	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-8	0.0025	0.0025	0.1	No	13	100	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.0025	0.1	No	13	92.31	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001883	0.0007394	0.013	No	13	7.692	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00052	0.013	No	13	38.46	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001627	0.0005765	0.013	No	13	7.692	No	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.0004	0.013	No	13	69.23	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01285	0.00709	0.013	No	13	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.0025	0.0025	0.013	No	13	100	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.01404	0.005804	0.013	No	13	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-17	0.002082	0.001037	0.013	No	13	7.692	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00045	0.013	No	13	69.23	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0037	0.0011	0.013	No	13	69.23	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	13	92.31	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.5186	0.1264	10.4	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5974	0.03323	10.4	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.7053	0.1448	10.4	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8599	0.4544	10.4	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.9734	0.527	10.4	No	13	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.7793	0.2612	10.4	No	13	7.692	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.415	1.135	10.4	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.65	0.0821	10.4	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.4698	0.1208	10.4	No	13	7.692	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.973	1.067	10.4	No	13	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3939	0.1452	10.4	No	13	7.692	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1917	0.1463	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.2	0.048	4	No	14	78.57	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.2	0.089	4	No	14	28.57	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-13	0.3207	0.2599	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.2	0.048	4	No	14	92.86	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.9007	0.8005	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.47	0.1	4	No	14	14.29	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.1588	0.1042	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.3932	0.3325	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.395	0.2205	4	No	14	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.6	1.3	4	No	14	0	No	0.01	NP (normality)
Lead (mg/L)	WGWC-10	0.0013	0.00023	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-11	0.0013	0.00058	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-12	0.0013	0.0013	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-13	0.0013	0.00047	0.015	No	11	63.64	No	0.006	NP (normality)
Lead (mg/L)	WGWC-14A	0.0013	0.0013	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-15	0.0013	0.0013	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-16	0.0013	0.00014	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-17	0.0013	0.00033	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-19	0.0013	0.0013	0.015	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-8	0.0013	0.00017	0.015	No	11	90.91	No	0.006	NP (NDs)
Lead (mg/L)	WGWC-9	0.0013	0.00014	0.015	No	11	90.91	No	0.006	NP (NDs)
Lithium (mg/L)	**WGWC-10**	**0.01978**	**0.009083**	**0.009**	**Yes**	**13**	**0**	**No**	**0.01**	**Param.**

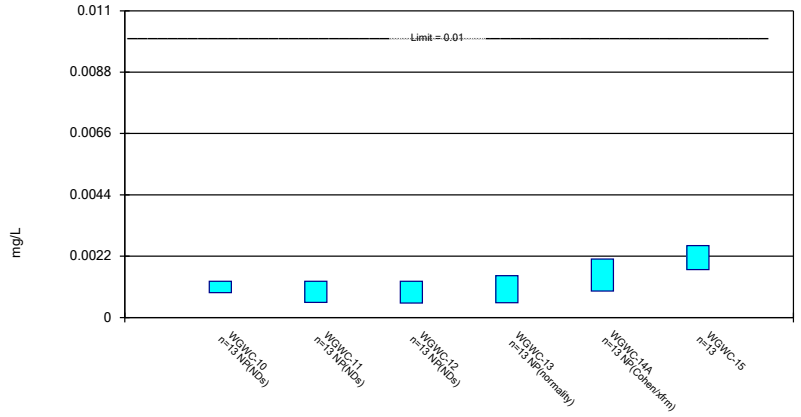
Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 6/6/2019, 1:57 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Lithium (mg/L)	WGWC-11	0.005	0.0014	0.009	No	13	76.92	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.00797	0.005458	0.009	No	13	7.692	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0022	0.009	No	13	69.23	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0016	0.009	No	13	53.85	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.006633	0.004772	0.009	No	13	15.38	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01226	0.008109	0.009	No	13	7.692	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.006014	0.004601	0.009	No	13	7.692	sqrt(x)	0.01	Param.
Lithium (mg/L)	**WGWC-19**	**0.062**	**0.045**	**0.009**	**Yes**	**13**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**WGWC-8**	**0.026**	**0.012**	**0.009**	**Yes**	**13**	**0**	**No**	**0.01**	**NP (normality)**
Lithium (mg/L)	**WGWC-9**	**0.04006**	**0.03156**	**0.009**	**Yes**	**13**	**0**	**No**	**0.01**	**Param.**
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.015	No	13	84.62	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0011	0.015	No	13	92.31	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.015	No	13	69.23	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0018	0.015	No	13	15.38	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.015	No	13	92.31	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.008176	0.004107	0.015	No	13	0	ln(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-16	0.015	0.015	0.015	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-17	0.007132	0.003085	0.015	No	13	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.015	No	13	53.85	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-8	0.015	0.015	0.015	No	13	100	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-9	0.008195	0.003709	0.015	No	13	0	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.0013	0.00031	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.0013	0.00049	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.0021	0.0013	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-13	0.0013	0.0013	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.0013	0.0003	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.0013	0.0005	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01328	0.00837	0.05	No	13	0	No	0.01	Param.
Selenium (mg/L)	WGWC-17	0.0013	0.0013	0.05	No	13	100	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-19	0.0013	0.00036	0.05	No	13	92.31	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.0031	0.05	No	13	0	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-9	0.002532	0.001957	0.05	No	13	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.0005	0.000085	0.002	No	13	92.31	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-11	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-12	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-13	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.0005	0.00012	0.002	No	13	46.15	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-15	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-16	0.0002542	0.0001291	0.002	No	13	7.692	x^(1/3)	0.01	Param.
Thallium (mg/L)	WGWC-17	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-19	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-8	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-9	0.0005	0.0005	0.002	No	13	100	No	0.01	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

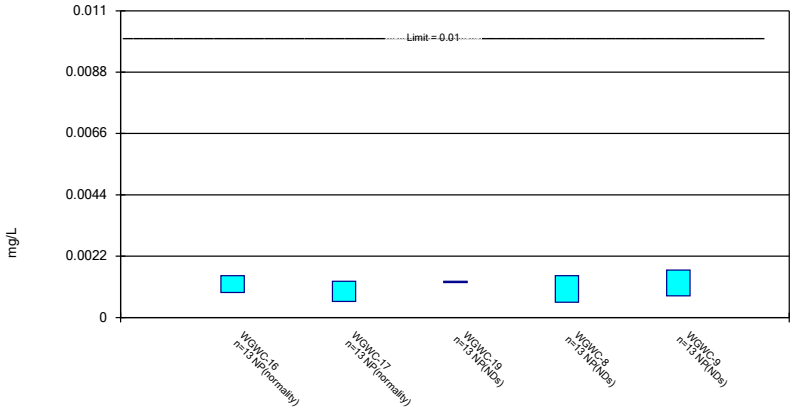
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

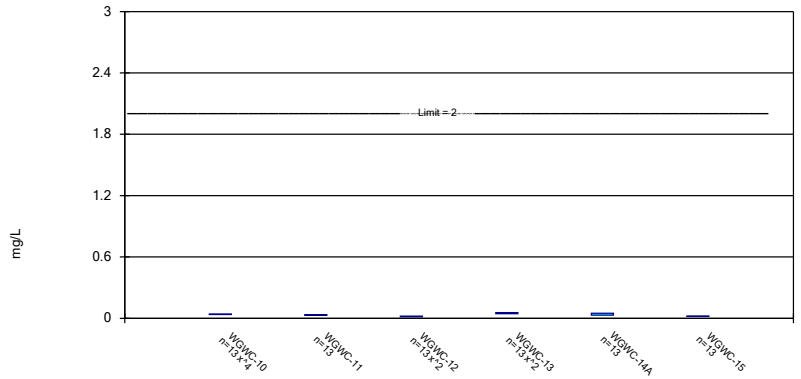
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Arsenic Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

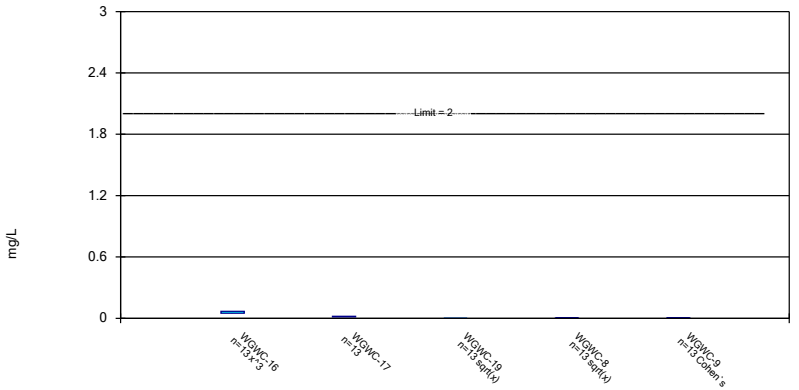
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric Confidence Interval

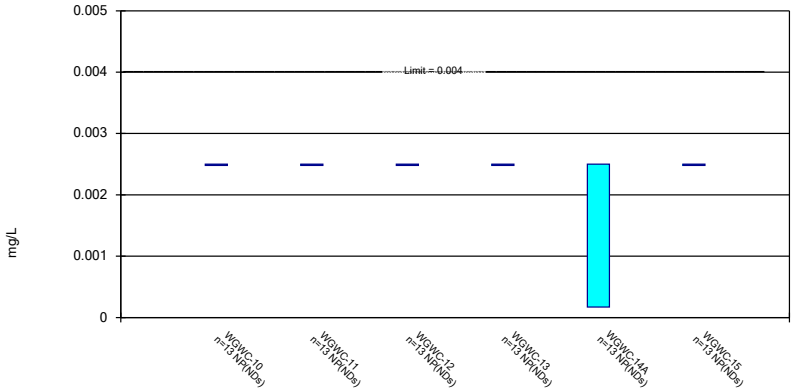
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Beryllium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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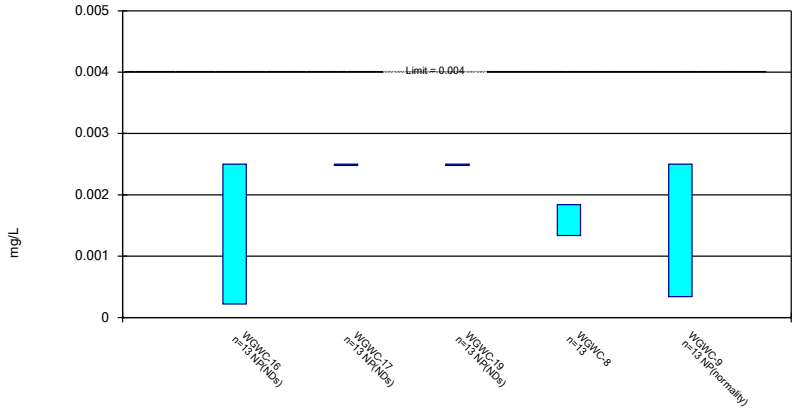
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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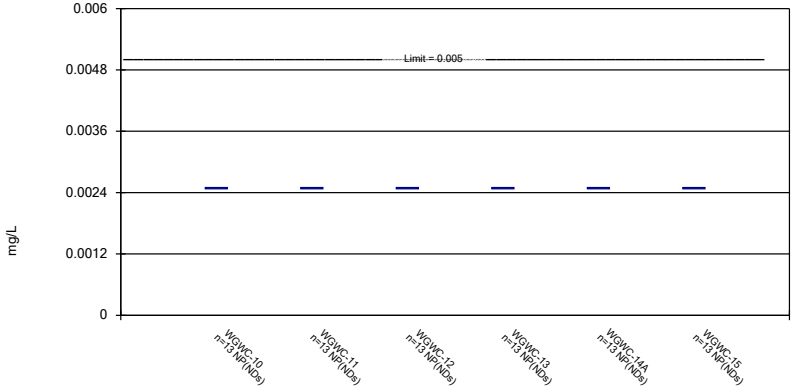
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

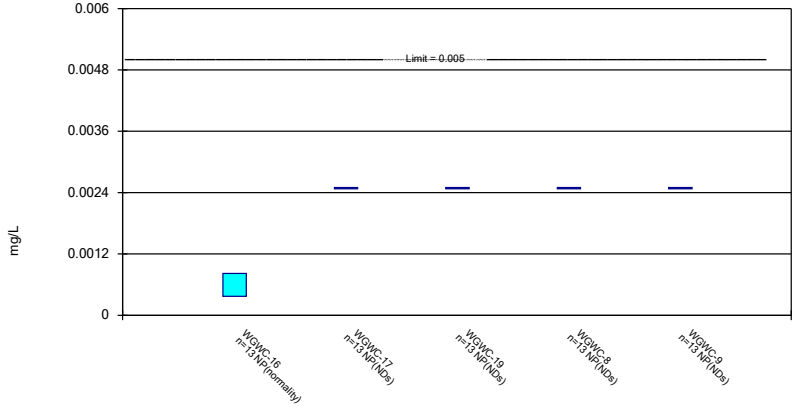


Constituent: Cadmium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Non-Parametric Confidence Interval

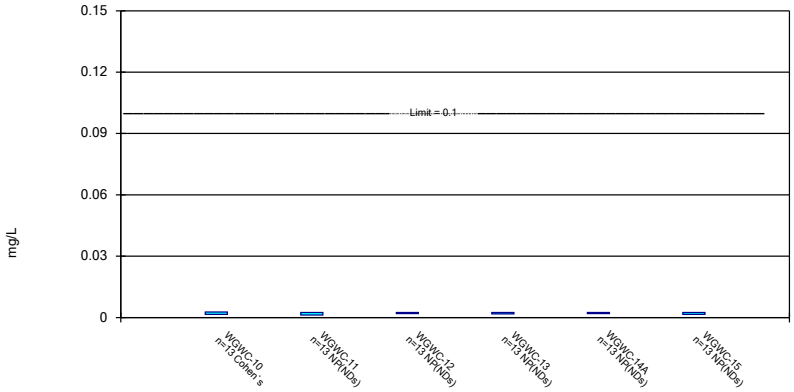
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

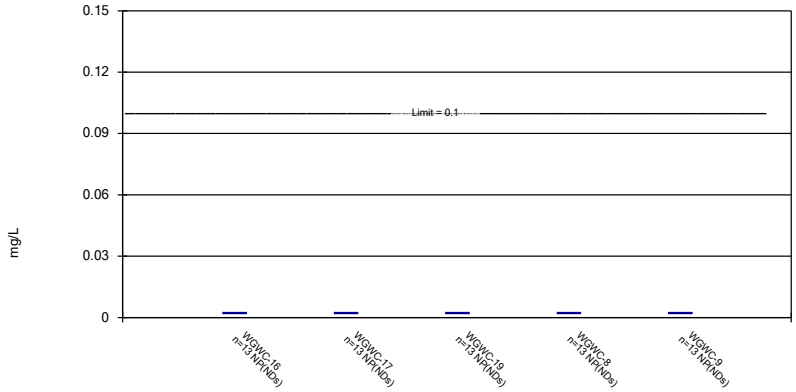
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

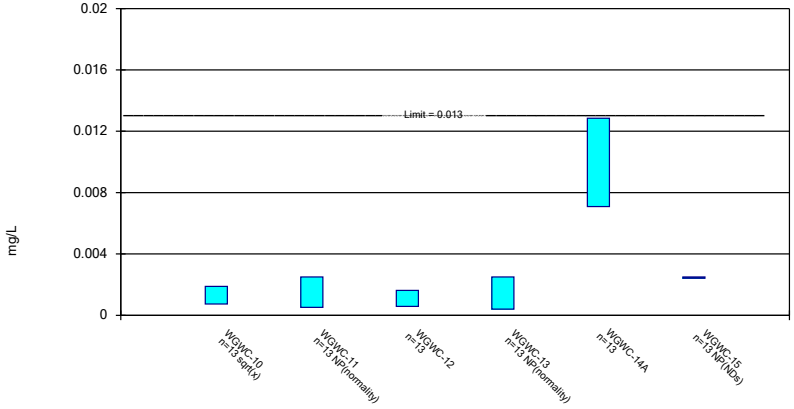
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

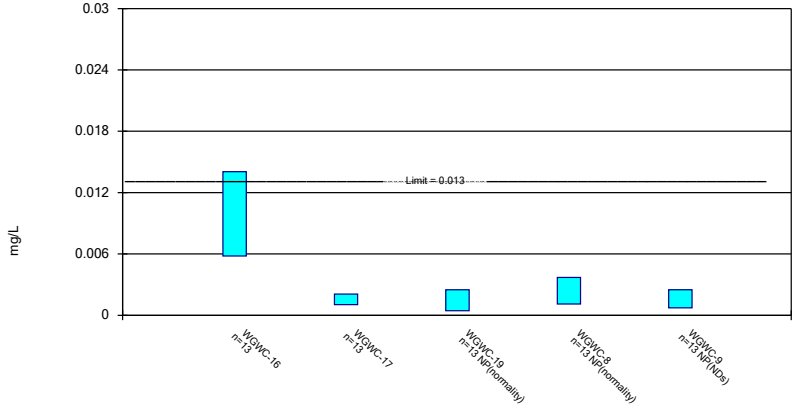
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

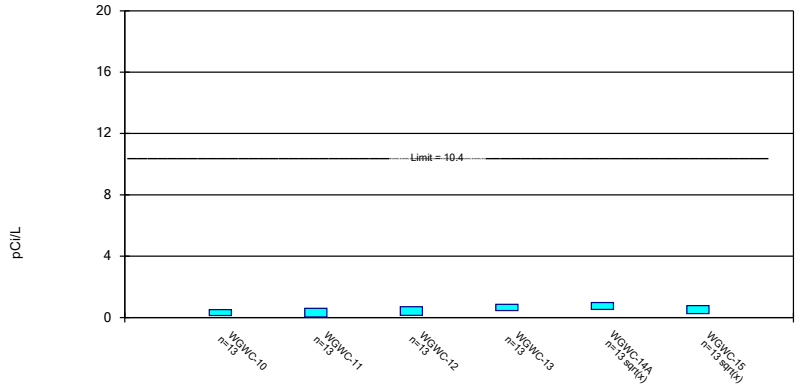
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 6/6/2019 1:54 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 6/6/2019 1:54 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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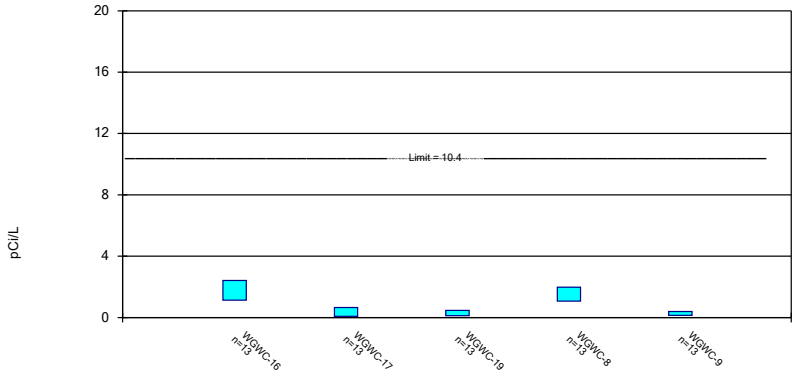
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



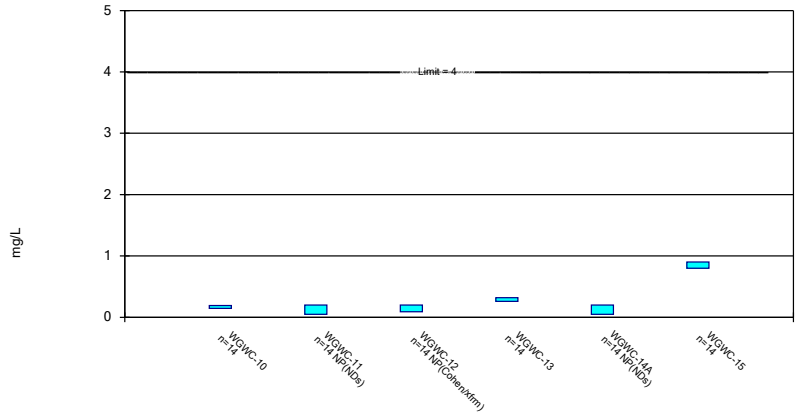
Constituent: Combined Radium 226 + 228 Analysis Run 6/6/2019 1:54 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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.



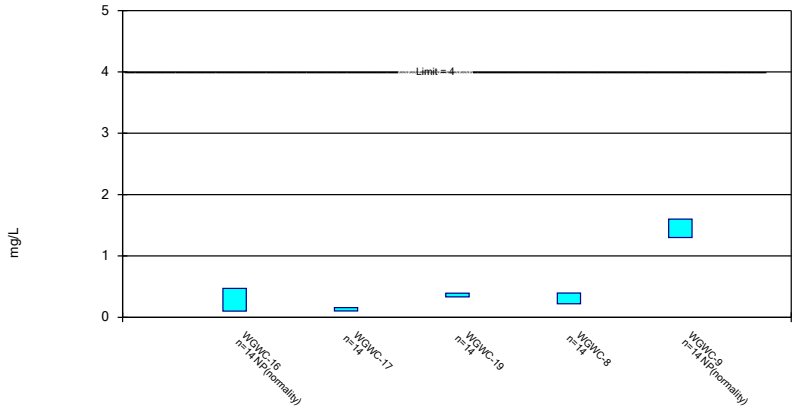
Constituent: Fluoride Analysis Run 6/6/2019 1:54 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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.

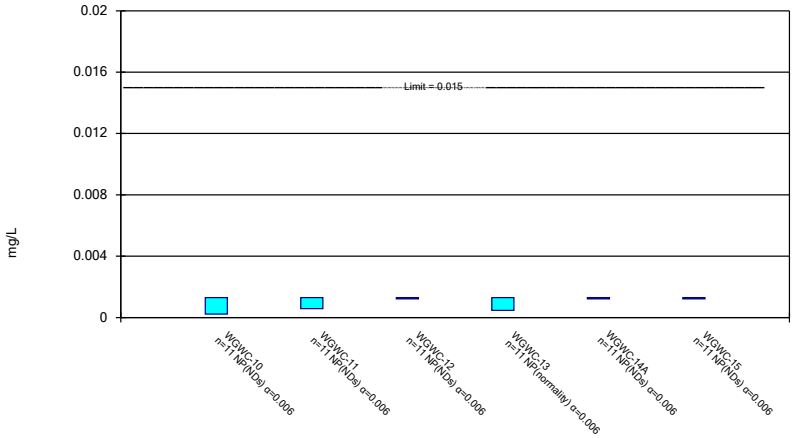


Constituent: Fluoride Analysis Run 6/6/2019 1:54 PM View: Confidence Interval

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

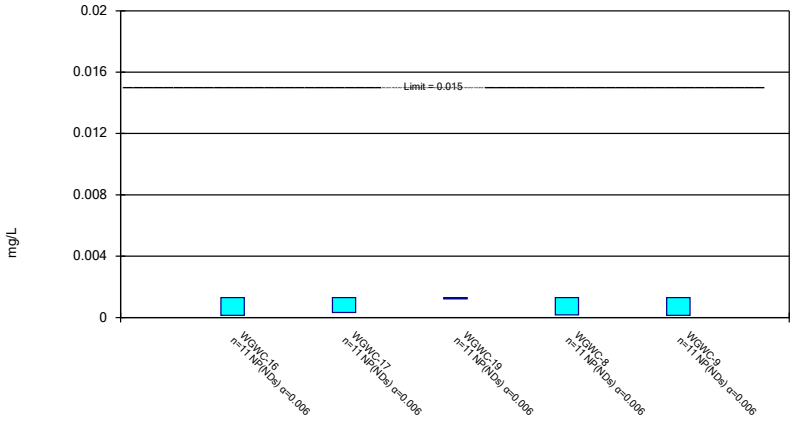


Constituent: Lead Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

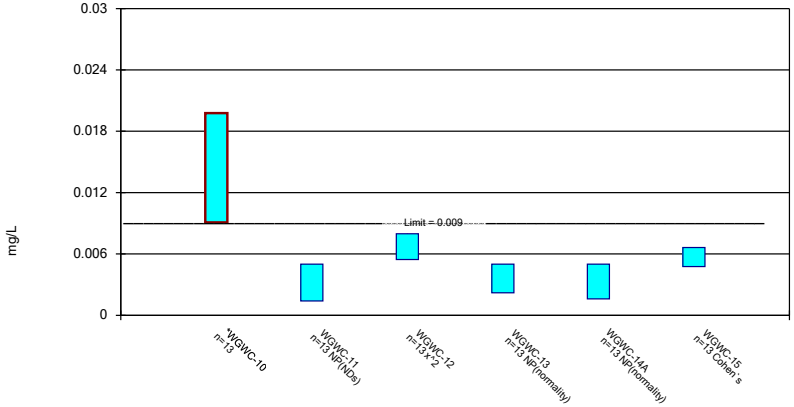


Constituent: Lead Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

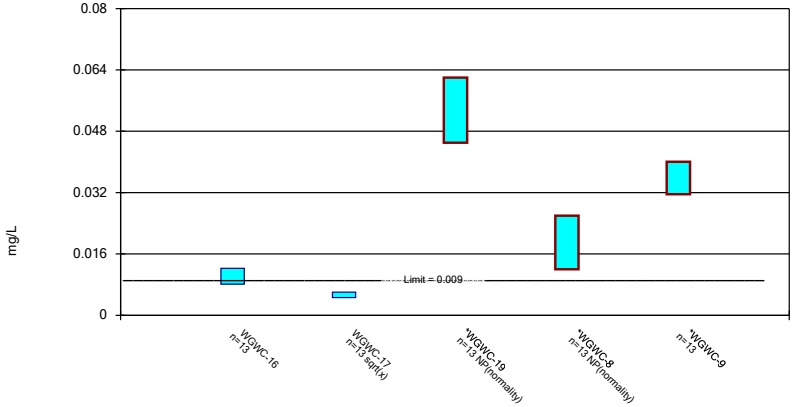


Constituent: Lithium Analysis Run 6/6/2019 1:54 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Parametric and Non-Parametric (NP) Confidence Interval

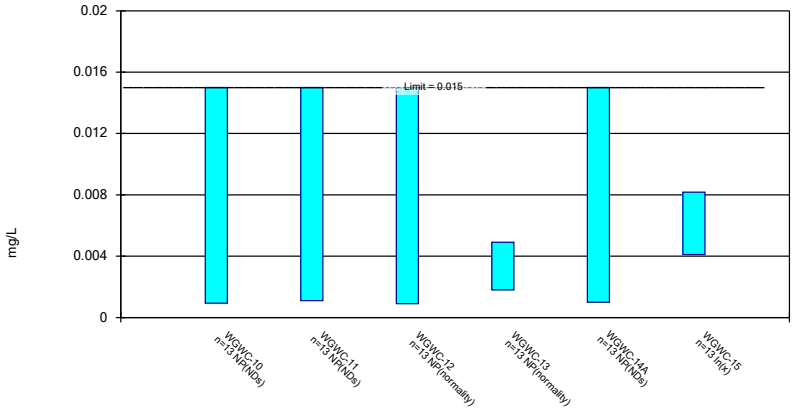
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 6/6/2019 1:54 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.

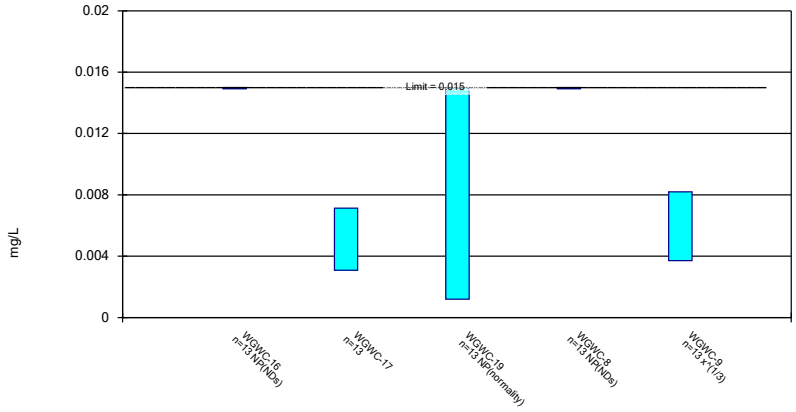


Constituent: Molybdenum Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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.

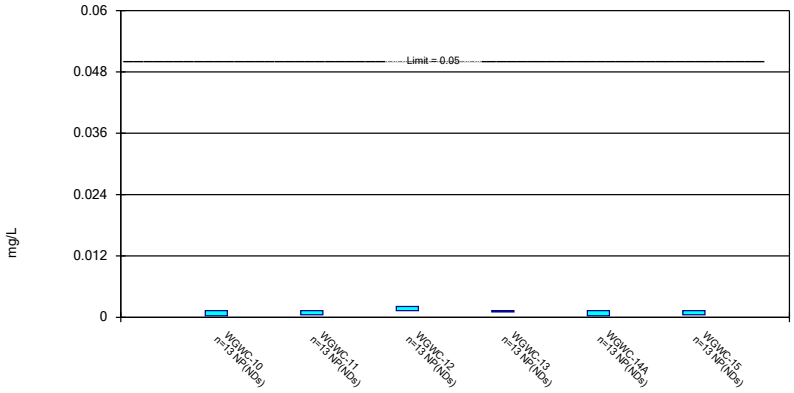


Constituent: Molybdenum Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

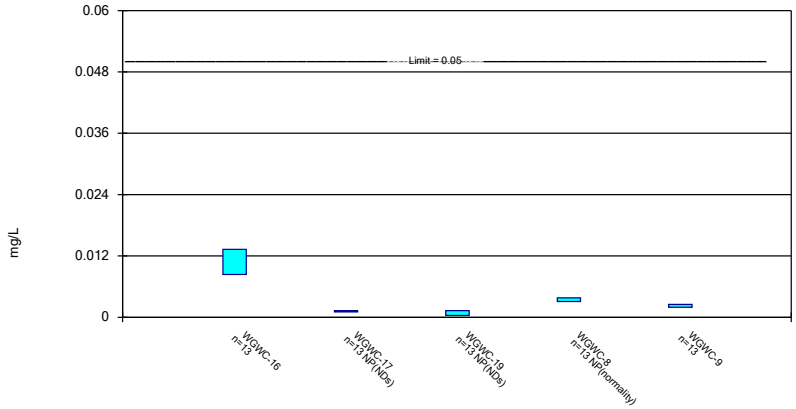


Constituent: Selenium Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Parametric and Non-Parametric (NP) Confidence Interval

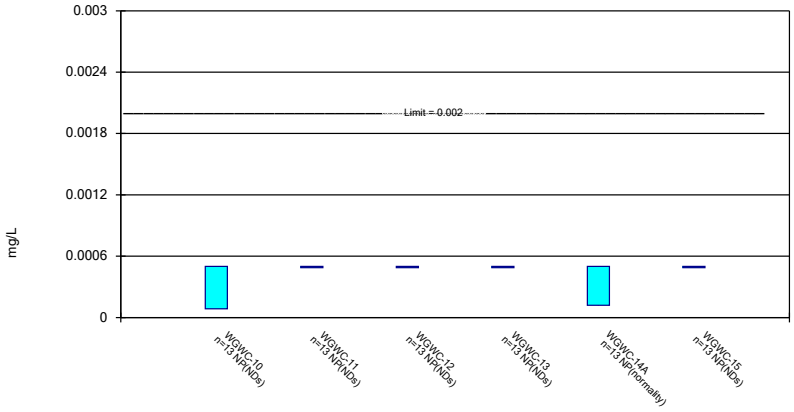
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

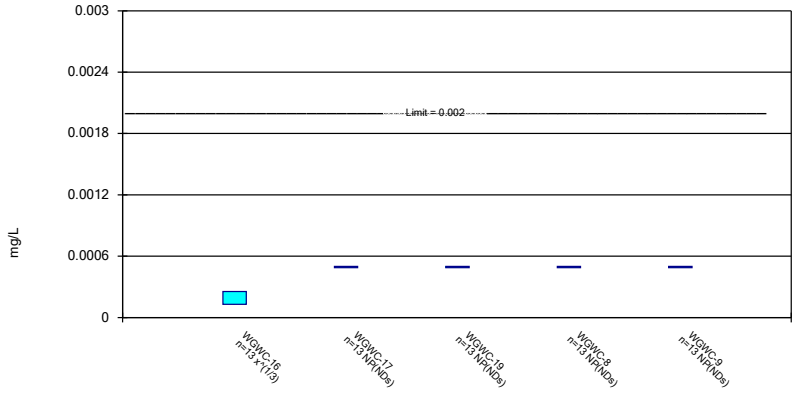


Constituent: Thallium Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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: Thallium Analysis Run 6/6/2019 1:55 PM View: Confidence Interval
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	<0.0013	<0.0013	<0.0013	0.00036 (J)	<0.0013	0.0015
4/3/2019		<0.0013	<0.0013	0.00053 (J)	<0.0013	
4/4/2019	<0.0013					0.0019
Mean	0.001207	0.001178	0.001177	0.001058	0.001512	0.00215
Std. Dev.	0.0002407	0.0002989	0.0003005	0.000376	0.0006332	0.0005774
Upper Lim.	0.0013	0.0013	0.0013	0.0015	0.0021	0.002579
Lower Lim.	0.00089	0.00054	0.00052	0.00053	0.00095	0.001721

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		0.0005 (J)			
2/27/2019	0.00046 (J)			0.00047 (J)	
2/28/2019			<0.0013		<0.0013
4/2/2019			<0.0013		
4/3/2019				<0.0013	<0.0013
4/4/2019	<0.0013	<0.0013			
Mean	0.001312	0.001045	0.0013	0.001194	0.001227
Std. Dev.	0.0003633	0.0003078	0	0.0003089	0.0002958
Upper Lim.	0.0015	0.0013	0.0013	0.0015	0.0017
Lower Lim.	0.0009	0.00058	0.0013	0.00055	0.00078

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	0.04	0.04	0.016	0.054	0.028	0.023
4/3/2019		0.035	0.015	0.056	0.026	
4/4/2019	0.04					0.022
Mean	0.03862	0.03285	0.01772	0.05038	0.04015	0.02035
Std. Dev.	0.003687	0.00424	0.005112	0.007784	0.01201	0.002056
Upper Lim.	0.041	0.036	0.02124	0.05622	0.04909	0.02188
Lower Lim.	0.03675	0.02969	0.01501	0.04503	0.03122	0.01882

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 6/6/2019 1:57 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)
2/26/2019		0.012			
2/27/2019	0.028			<0.0025	
2/28/2019			<0.0025		0.0023 (J)
4/2/2019			0.0013 (J)		
4/3/2019				0.001 (J)	<0.0025
4/4/2019	0.027	0.011			
Mean	0.05627	0.01684	0.001386	0.001733	0.001118
Std. Dev.	0.01563	0.003815	0.0003169	0.0009426	0.0004805
Upper Lim.	0.06749	0.01968	0.001602	0.00233	0.002545
Lower Lim.	0.04923	0.014	0.001158	0.001053	0.0008699

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	<0.0025	<0.0025	<0.0025	<0.0025	0.00017 (J)	<0.0025
4/3/2019		<0.0025	<0.0025	<0.0025	<0.0025	
4/4/2019	<0.0025					<0.0025
Mean	0.0025	0.0025	0.0025	0.0025	0.002321	0.0025
Std. Dev.	0	0	0	0	0.0006462	0
Upper Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.0025	0.0025	0.00017	0.0025

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 6/6/2019 1:57 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)
2/26/2019		<0.0025			
2/27/2019	0.00022 (J)			0.0021 (J)	
2/28/2019			<0.0025		0.00031 (J)
4/2/2019			<0.0025		
4/3/2019				0.0019 (J)	<0.0025
4/4/2019	<0.0025	<0.0025			
Mean	0.002325	0.0025	0.0025	0.001588	0.00184
Std. Dev.	0.0006324	0	0	0.0003383	0.001031
Upper Lim.	0.0025	0.0025	0.0025	0.00184	0.0025
Lower Lim.	0.00022	0.0025	0.0025	0.001337	0.00034

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/3/2019		<0.0025	<0.0025	<0.0025	<0.0025	
4/4/2019	<0.0025					<0.0025
Mean	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Std. Dev.	0	0	0	0	0	0
Upper Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.0025	0.0025	0.0025	0.0025

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		<0.0025			
2/27/2019	0.00055 (J)			<0.0025	
2/28/2019			<0.0025		<0.0025
4/2/2019			<0.0025		
4/3/2019				<0.0025	<0.0025
4/4/2019	0.00047 (J)	<0.0025			
Mean	0.0008663	0.0025	0.0025	0.0025	0.0025
Std. Dev.	0.0007359	0	0	0	0
Upper Lim.	0.00082	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.00037	0.0025	0.0025	0.0025	0.0025

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	0.0031	0.0021 (J)	<0.0025	0.0018 (J)	<0.0025	0.0015 (J)
4/3/2019		<0.0025	<0.0025	<0.0025	<0.0025	
4/4/2019	0.0021 (J)					<0.0025
Mean	0.002038	0.002262	0.0025	0.002446	0.0025	0.002423
Std. Dev.	0.0007124	0.0005059	0	0.0001941	0	0.0002774
Upper Lim.	0.002718	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.00152	0.0012	0.0025	0.0018	0.0025	0.0015

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		<0.0025			
2/27/2019	<0.0025			<0.0025	
2/28/2019			<0.0025		0.0025
4/2/2019			<0.0025		
4/3/2019				<0.0025	<0.0025
4/4/2019	<0.0025	<0.0025			
Mean	0.0025	0.0025	0.0025	0.0025	0.0025
Std. Dev.	0	0	0	0	1.5E-11
Upper Lim.	0.0025	0.0025	0.0025	0.0025	0.0025
Lower Lim.	0.0025	0.0025	0.0025	0.0025	0.0025

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	0.0005 (J)	0.0022 (J)	0.0006 (J)	0.00013 (J)	0.0049	<0.0025
4/3/2019		0.00081 (J)	0.00043 (J)	<0.0025	0.0056	
4/4/2019	0.0017 (J)					<0.0025
Mean	0.001355	0.001674	0.001102	0.001875	0.009969	0.0025
Std. Dev.	0.0008746	0.0008992	0.000706	0.0009863	0.003872	0
Upper Lim.	0.001883	0.0025	0.001627	0.0025	0.01285	0.0025
Lower Lim.	0.0007394	0.00052	0.0005765	0.0004	0.00709	0.0025

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		0.00086 (J)			
2/27/2019	0.00084 (J)			0.0019 (J)	
2/28/2019			0.00019 (J)		<0.0025
4/2/2019			<0.0025		
4/3/2019				0.0037	<0.0025
4/4/2019	0.00077 (J)	<0.0025			
Mean	0.009924	0.001559	0.001862	0.002297	0.002364
Std. Dev.	0.00554	0.0007028	0.0009991	0.0007422	0.0004909
Upper Lim.	0.01404	0.002082	0.0025	0.0037	0.0025
Lower Lim.	0.005804	0.001037	0.00045	0.0011	0.00073

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/6/2019 1:57 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	<0.395	<0.395	0.463	0.55	<0.395
10/3/2018						0.766
10/4/2018	0.84	1.18	1.29	0.99	0.563	
2/27/2019	0.236 (U)	0.374	0.415	1.08	0.538	0.363 (U)
4/3/2019		0.187 (U)	0.264 (U)	0.446	0.497	
4/4/2019	0.233 (U)					0.418
Mean	0.3225	0.3153	0.4251	0.6572	0.7615	0.5434
Std. Dev.	0.2637	0.3794	0.3769	0.2726	0.3405	0.4089
Upper Lim.	0.5186	0.5974	0.7053	0.8599	0.9734	0.7793
Lower Lim.	0.1264	0.03323	0.1448	0.4544	0.527	0.2612

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 6/6/2019 1:57 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	<0.395	<0.395	1.86	<0.395
10/4/2018	1.99	0.775	0.381	2.44	0.48
2/26/2019		0.431			
2/27/2019	0.721			2.42	
2/28/2019			0.254 (U)		0.271 (U)
4/2/2019			0.209 (U)		
4/3/2019				1.55	0.0621 (U)
4/4/2019	0.632	0.386			
Mean	1.775	0.3661	0.2953	1.52	0.2696
Std. Dev.	0.8607	0.3819	0.2347	0.609	0.1672
Upper Lim.	2.415	0.65	0.4698	1.973	0.3939
Lower Lim.	1.135	0.0821	0.1208	1.067	0.1452

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	0.21	0.047 (J)	0.06 (J)	0.25	<0.2	0.81
4/3/2019		0.048 (J)	0.084 (J)	0.24	0.048 (J)	
4/4/2019	0.13 (J)					0.78
Mean	0.169	0.1667	0.1271	0.2903	0.1891	0.8506
Std. Dev.	0.03208	0.06617	0.05025	0.04291	0.04062	0.07073
Upper Lim.	0.1917	0.2	0.2	0.3207	0.2	0.9007
Lower Lim.	0.1463	0.048	0.089	0.2599	0.048	0.8005

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		0.068 (J)			
2/27/2019	0.47			0.054 (J)	
2/28/2019			0.28		1.4
4/2/2019			0.33		
4/3/2019				0.5	1.3
4/4/2019	0.08 (J)	0.087 (J)			
Mean	0.2157	0.1315	0.3629	0.3077	1.491
Std. Dev.	0.2059	0.0385	0.04286	0.1232	0.201
Upper Lim.	0.47	0.1588	0.3932	0.395	1.6
Lower Lim.	0.1	0.1042	0.3325	0.2205	1.3

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 6/6/2019 1:57 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	0.00055 (J)		<0.0013
11/10/2016				0.00047 (J)		<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	<0.0013	<0.0013	<0.0013			
3/29/2018		<0.0013	<0.0013	<0.0013	<0.0013	
3/30/2018	<0.0013					<0.0013
2/27/2019	0.00023 (J)	0.00058 (J)	<0.0013	0.00068 (J)	<0.0013	<0.0013
4/3/2019		<0.0013	<0.0013	0.00047 (J)	<0.0013	
4/4/2019	<0.0013					<0.0013
Mean	0.001203	0.001235	0.0013	0.001025	0.0013	0.0013
Std. Dev.	0.0003226	0.0002171	0	0.000386	0	0
Upper Lim.	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Lower Lim.	0.00023	0.00058	0.0013	0.00047	0.0013	0.0013

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 6/6/2019 1:57 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	<0.0013				
7/20/2016		<0.0013		<0.0013	<0.0013
9/14/2016	<0.0013	<0.0013			<0.0013
9/15/2016				<0.0013	
11/10/2016	<0.0013	<0.0013			
11/11/2016			<0.0013		
11/14/2016				<0.0013	
1/20/2017		<0.0013			
1/24/2017	<0.0013				
2/6/2017			<0.0013	<0.0013	
2/9/2017					<0.0013
3/14/2017		<0.0013			
3/15/2017	<0.0013		<0.0013	<0.0013	<0.0013
4/11/2017			<0.0013		<0.0013
4/25/2017	<0.0013	<0.0013			
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	<0.0013		<0.0013	<0.0013	<0.0013
3/30/2018		<0.0013			
2/26/2019		0.00033 (J)			
2/27/2019	0.00014 (J)			0.00017 (J)	
2/28/2019			<0.0013		0.00014 (J)
4/2/2019			<0.0013		
4/3/2019				<0.0013	<0.0013
4/4/2019	<0.0013	<0.0013			
Mean	0.001195	0.001212	0.0013	0.001197	0.001195
Std. Dev.	0.0003498	0.0002925	0	0.0003407	0.0003498
Upper Lim.	0.0013	0.0013	0.0013	0.0013	0.0013
Lower Lim.	0.00014	0.00033	0.0013	0.00017	0.00014

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 6/6/2019 1:57 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)	
2/27/2019	0.0068	<0.005	0.0068	<0.005	<0.005	0.0055
4/3/2019		<0.005	0.0075	<0.005	0.0015 (J)	
4/4/2019	0.0059					0.0054
Mean	0.01443	0.004177	0.006546	0.004254	0.003815	0.005823
Std. Dev.	0.007192	0.001571	0.002029	0.001243	0.001476	0.001105
Upper Lim.	0.01978	0.005	0.00797	0.005	0.005	0.006633
Lower Lim.	0.009083	0.0014	0.005458	0.0022	0.0016	0.004772

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		0.0063			
2/27/2019	0.0075			0.014	
2/28/2019			0.045		0.037
4/2/2019			0.052		
4/3/2019				0.015	0.035
4/4/2019	0.0077	0.0042 (J)			
Mean	0.01018	0.005323	0.05123	0.01882	0.03581
Std. Dev.	0.002792	0.0009645	0.008064	0.01226	0.005714
Upper Lim.	0.01226	0.006014	0.062	0.026	0.04006
Lower Lim.	0.008109	0.004601	0.045	0.012	0.03156

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	<0.015	<0.015	0.00063 (J)	0.0019 (J)	<0.015	0.0061
4/3/2019		<0.015	<0.015	<0.015	<0.015	
4/4/2019	<0.015					0.0039 (J)
Mean	0.01283	0.01393	0.01093	0.004424	0.01392	0.006477
Std. Dev.	0.005288	0.003855	0.006425	0.004766	0.003883	0.003597
Upper Lim.	0.015	0.015	0.015	0.00491	0.015	0.008176
Lower Lim.	0.00093	0.0011	0.0009	0.0018	0.001	0.004107

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 6/6/2019 1:57 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)
2/26/2019		0.0032 (J)			
2/27/2019	<0.015			<0.015	
2/28/2019			0.0013 (J)		0.0053
4/2/2019			<0.015		
4/3/2019				<0.015	0.0026 (J)
4/4/2019	<0.015	0.002 (J)			
Mean	0.015	0.005108	0.008692	0.015	0.006186
Std. Dev.	0	0.002721	0.007093	0	0.00393
Upper Lim.	0.015	0.007132	0.015	0.015	0.008195
Lower Lim.	0.015	0.003085	0.0012	0.015	0.003709

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 6/6/2019 1:57 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	
2/27/2019	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
4/3/2019		<0.0013	<0.0013	<0.0013	<0.0013	
4/4/2019	<0.0013					<0.0013
Mean	0.001224	0.001238	0.001362	0.0013	0.001223	0.001238
Std. Dev.	0.0002746	0.0002247	0.0002219	0	0.0002774	0.0002219
Upper Lim.	0.0013	0.0013	0.0021	0.0013	0.0013	0.0013
Lower Lim.	0.00031	0.00049	0.0013	0.0013	0.0003	0.0005

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		<0.0013			
2/27/2019	0.0081			0.0035	
2/28/2019			<0.0013		0.0027
4/2/2019			<0.0013		
4/3/2019				0.0031	0.0019
4/4/2019	0.0091	<0.0013			
Mean	0.01083	0.0013	0.001228	0.003437	0.002245
Std. Dev.	0.003304	0	0.0002607	0.0005643	0.0003863
Upper Lim.	0.01328	0.0013	0.0013	0.0038	0.002532
Lower Lim.	0.00837	0.0013	0.00036	0.0031	0.001957

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 6/6/2019 1:57 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)	
2/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	0.00016 (J)	<0.0005
4/3/2019		<0.0005	<0.0005	<0.0005	0.00012 (J)	
4/4/2019	<0.0005					<0.0005
Mean	0.0004681	0.0005	0.0005	0.0005	0.0003062	0.0005
Std. Dev.	0.0001151	0	0	0	0.0001881	0
Upper Lim.	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Lower Lim.	8.5E-05	0.0005	0.0005	0.0005	0.00012	0.0005

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 6/6/2019 1:57 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
2/26/2019		<0.0005			
2/27/2019	0.00015 (J)			<0.0005	
2/28/2019			<0.0005		<0.0005
4/2/2019			<0.0005		
4/3/2019				<0.0005	<0.0005
4/4/2019	9.5E-05 (J)	<0.0005			
Mean	0.0001969	0.0005	0.0005	0.0005	0.0005
Std. Dev.	0.0001019	0	0	0	0
Upper Lim.	0.0002542	0.0005	0.0005	0.0005	0.0005
Lower Lim.	0.0001291	0.0005	0.0005	0.0005	0.0005

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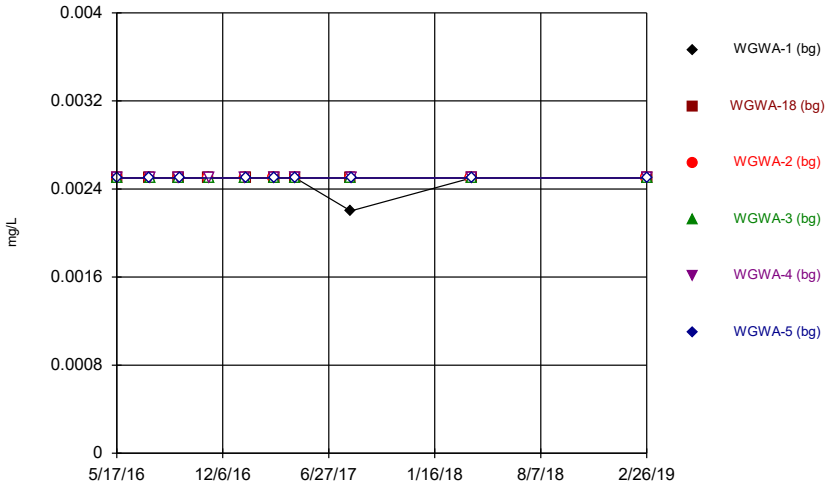
Hollow symbols indicate censored values.

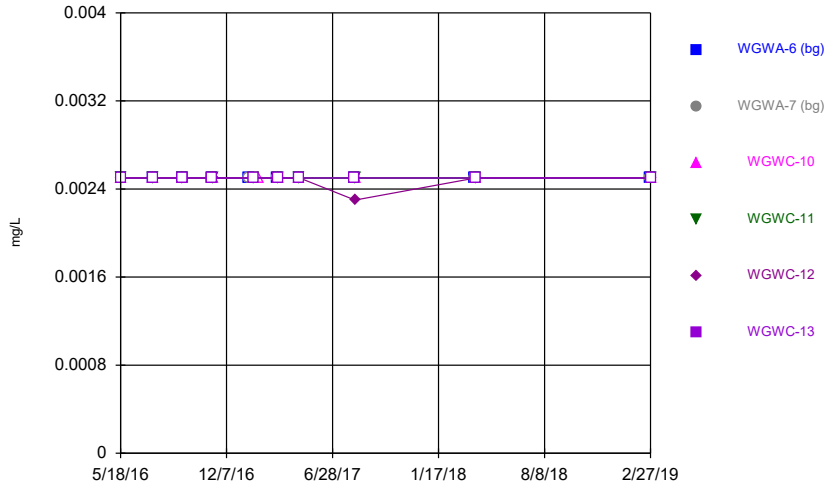
Antimony



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Antimony



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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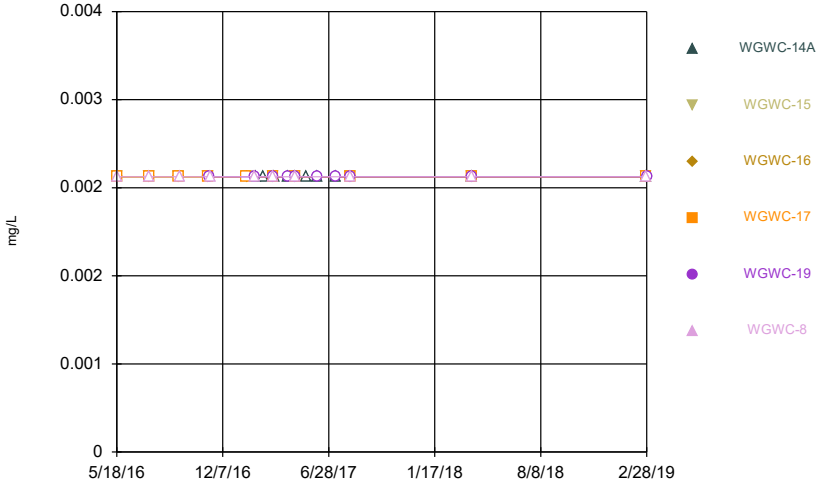
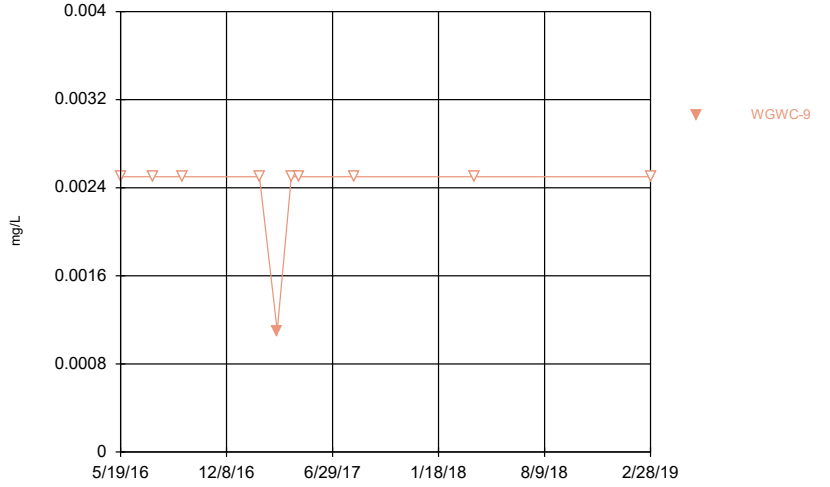
Antimony



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

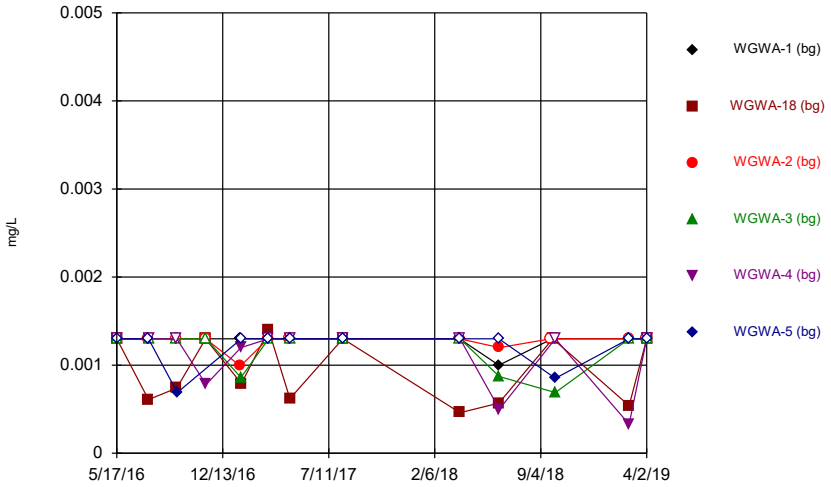
Antimony



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

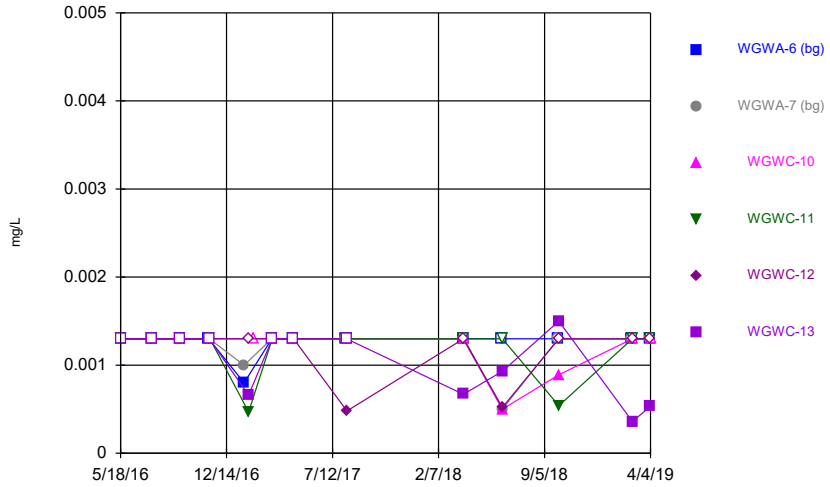
Arsenic



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

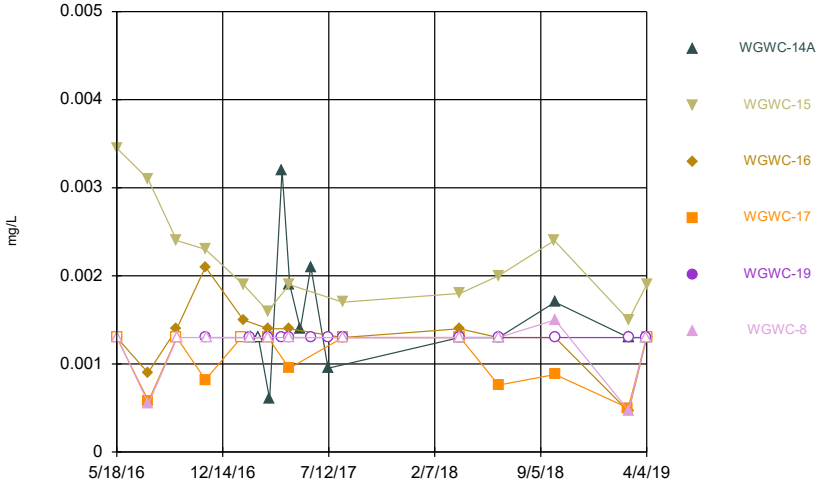
Arsenic



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

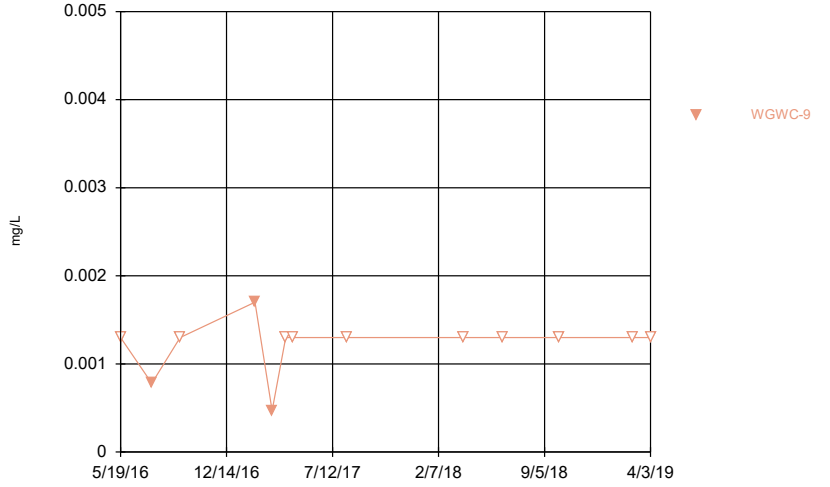
Arsenic



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Arsenic



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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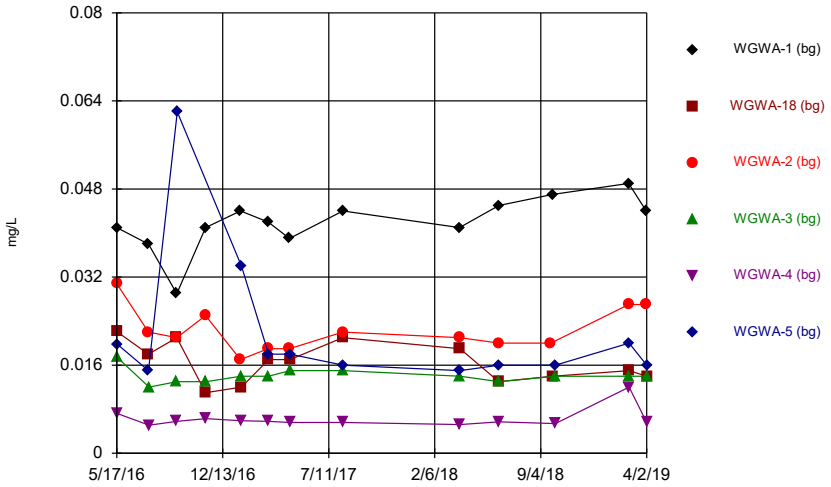
Barium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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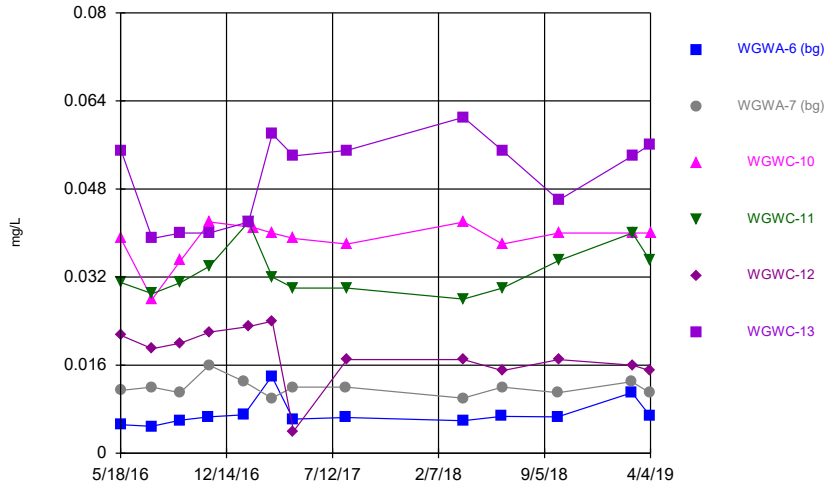
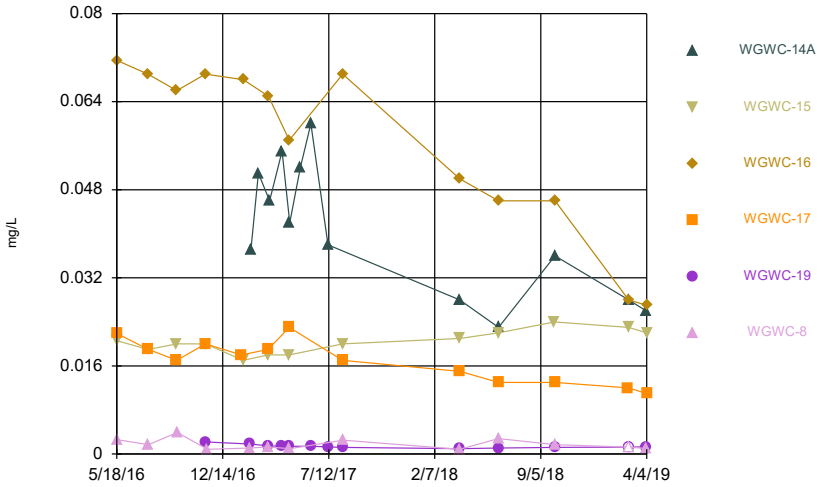
Barium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

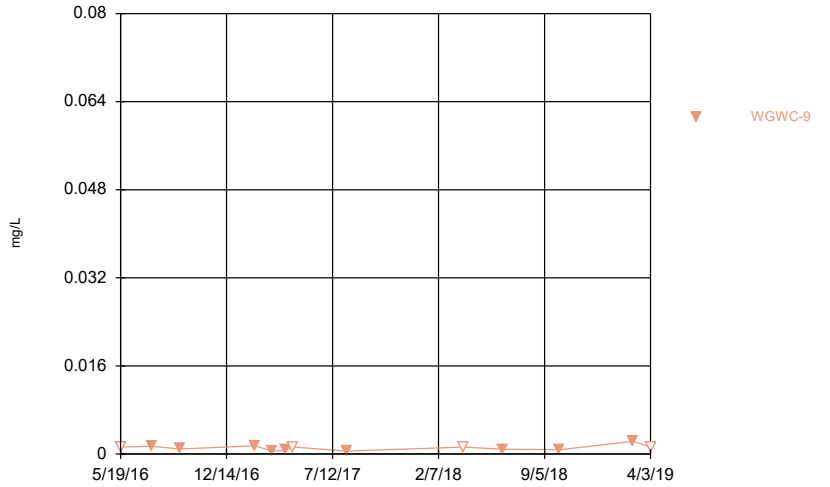
Barium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

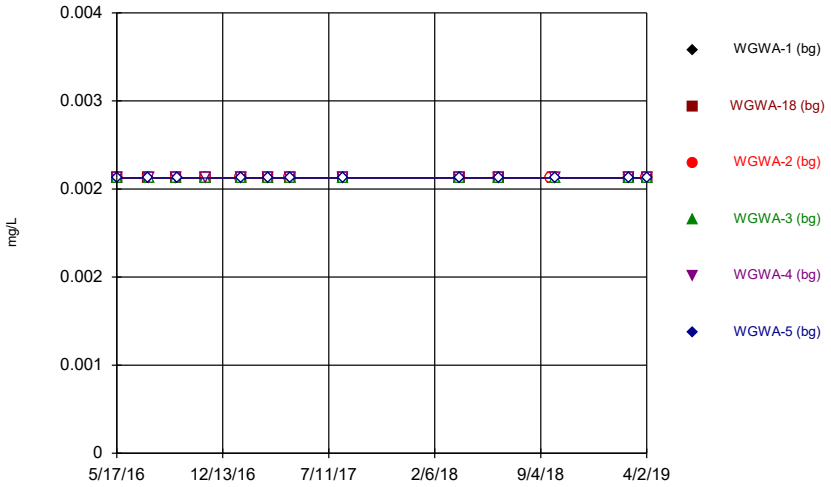
Barium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

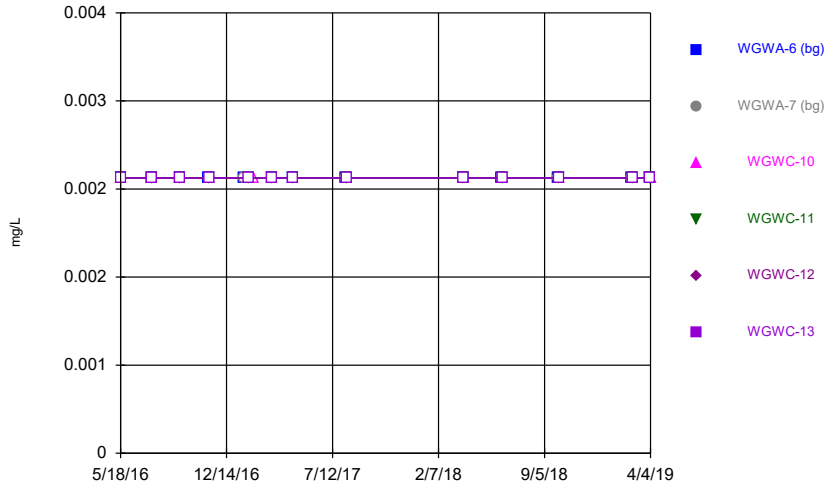
Beryllium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Beryllium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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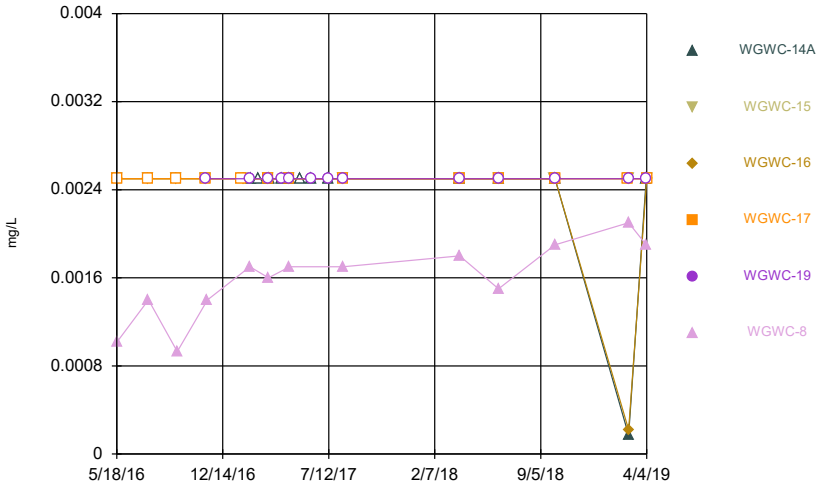
Beryllium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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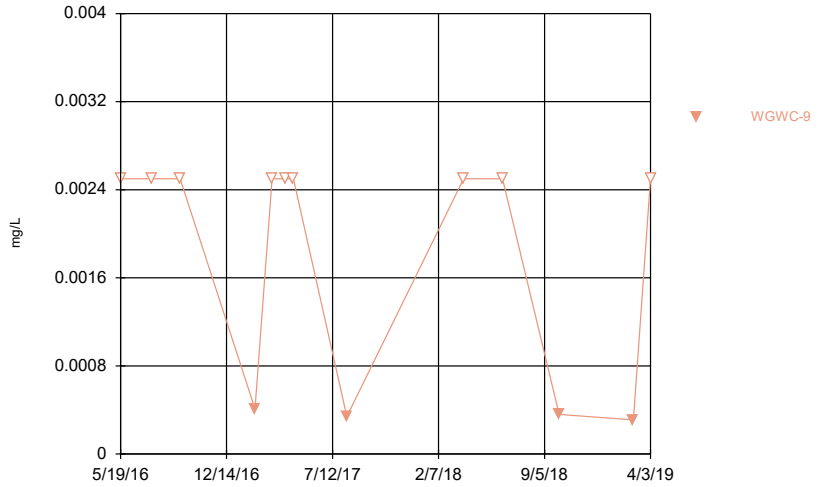
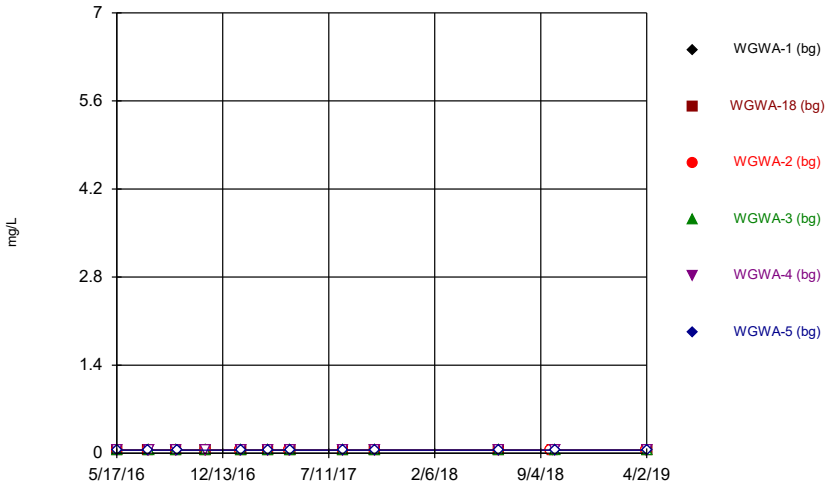
Beryllium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

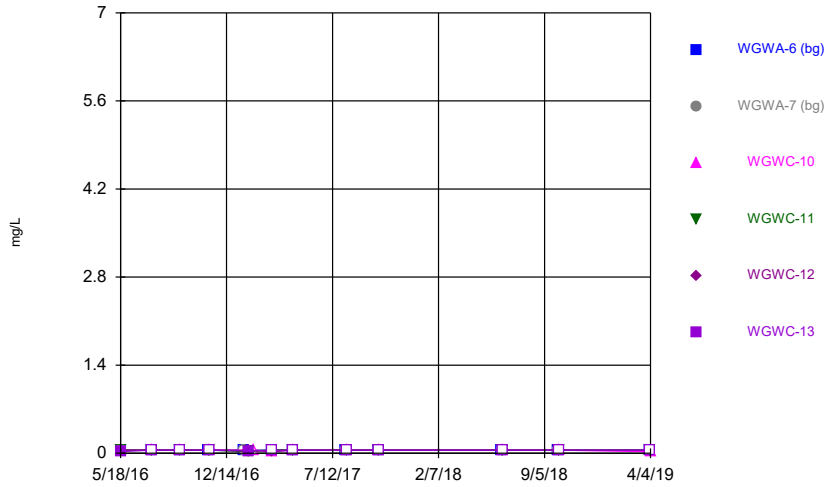
Boron



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

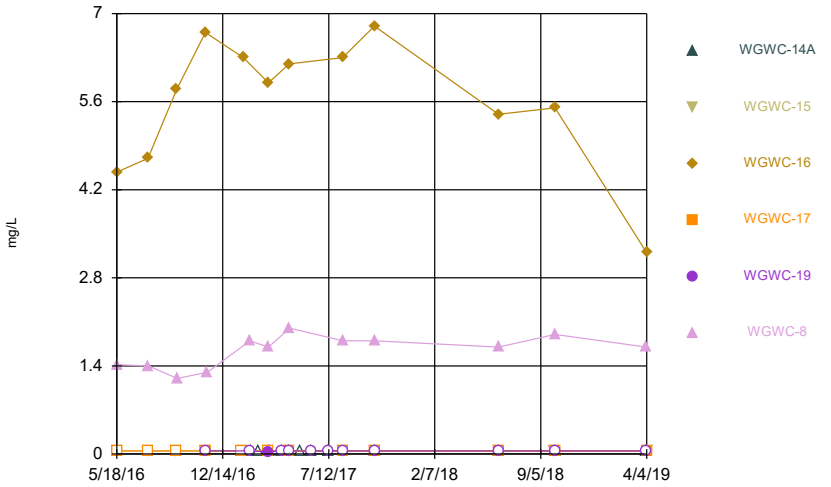
Boron



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

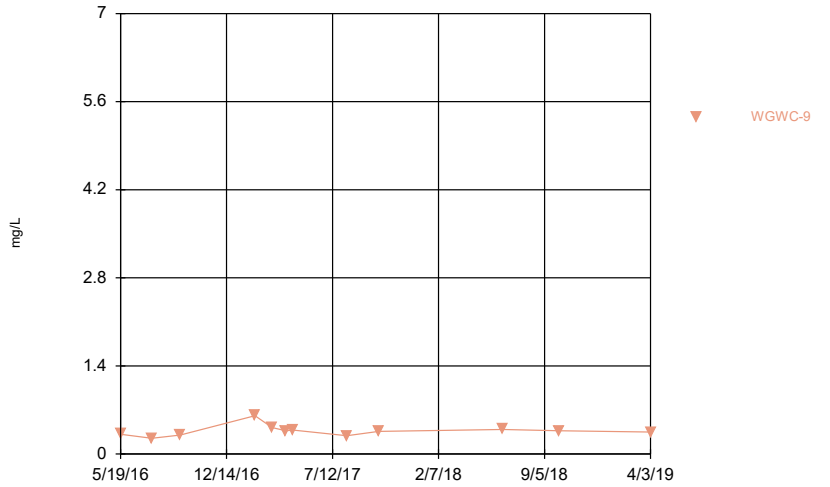
Boron



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

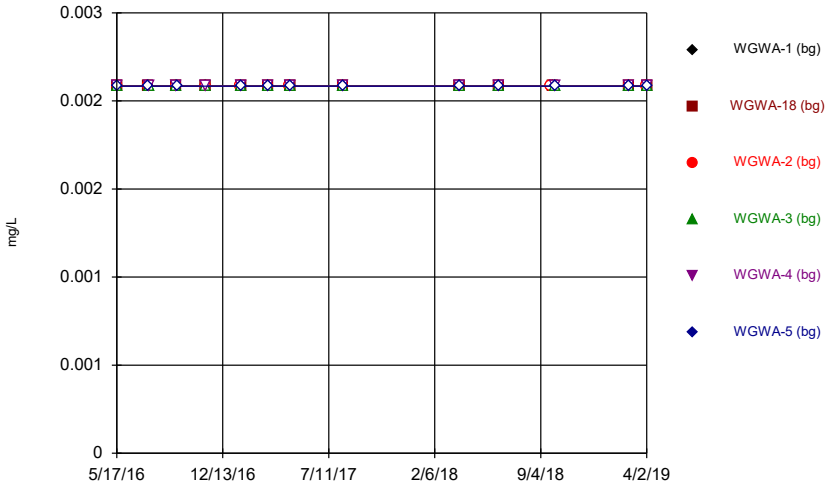
Boron



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

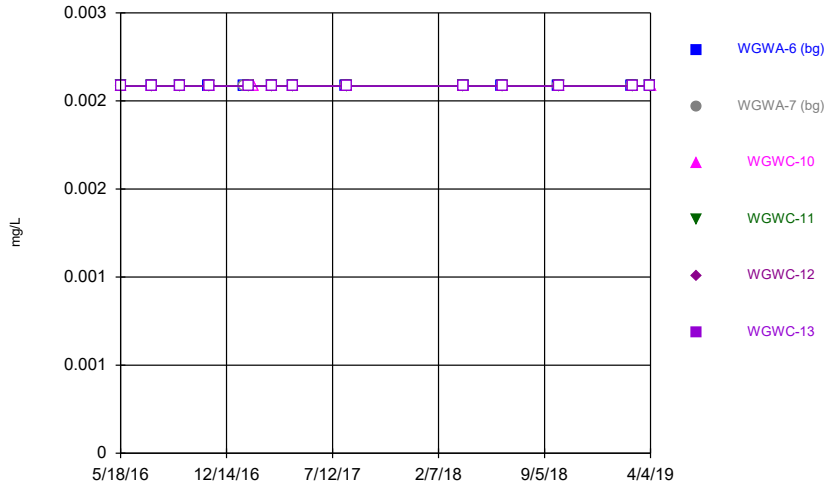
Cadmium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

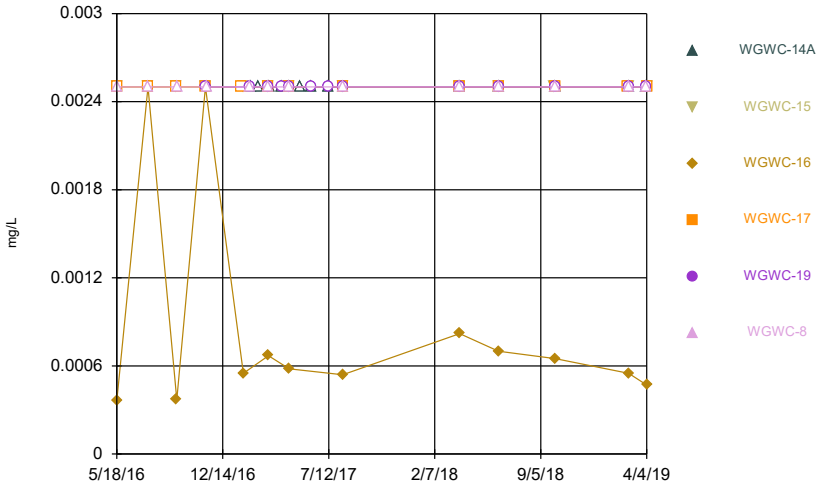
Cadmium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

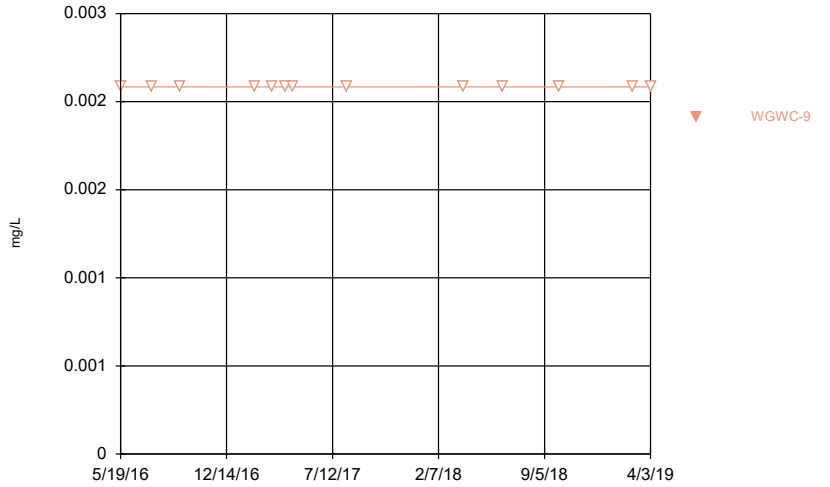
Cadmium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

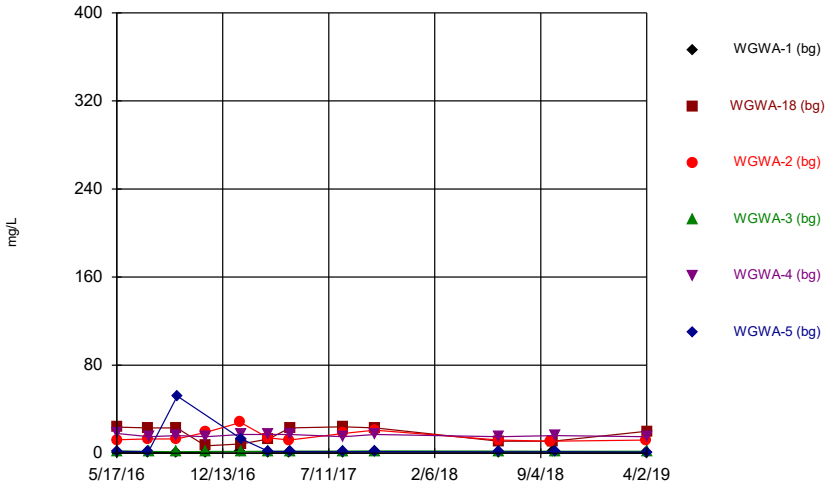
Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Cadmium



Time Series Analysis Run 6/6/2019 1:10 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

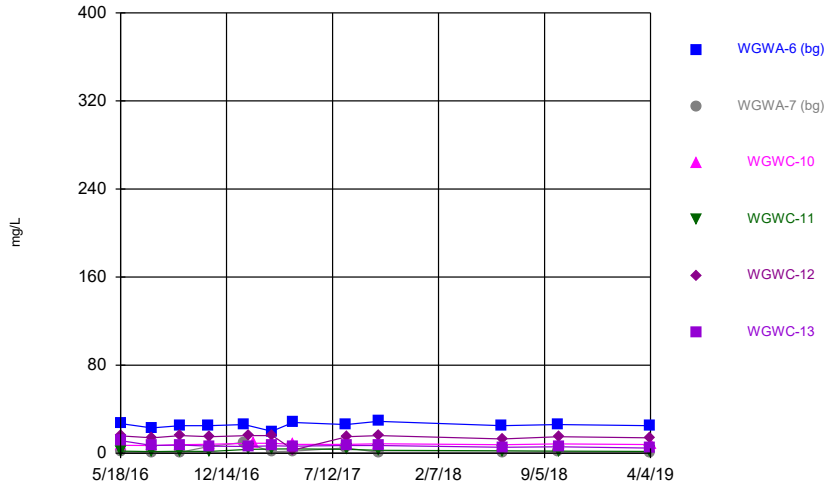
Calcium



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

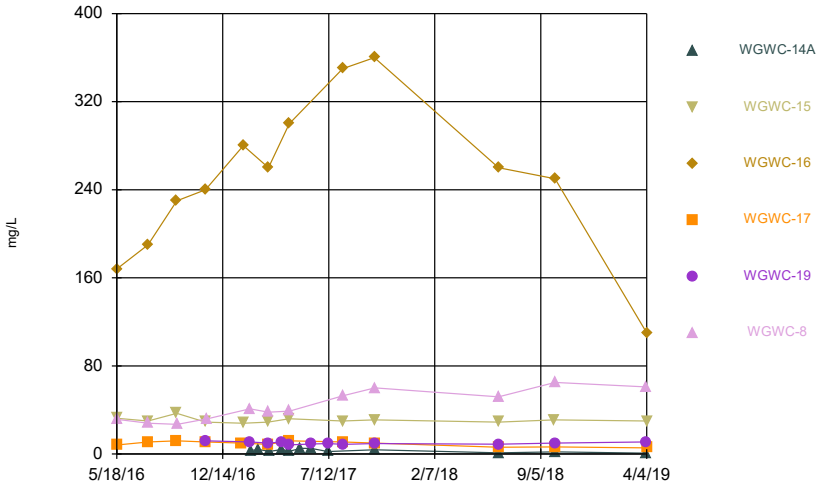
Calcium



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

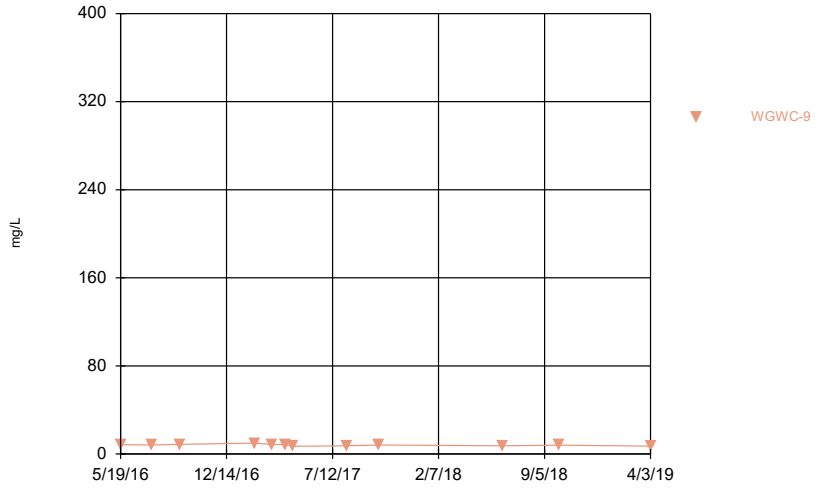
Calcium



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

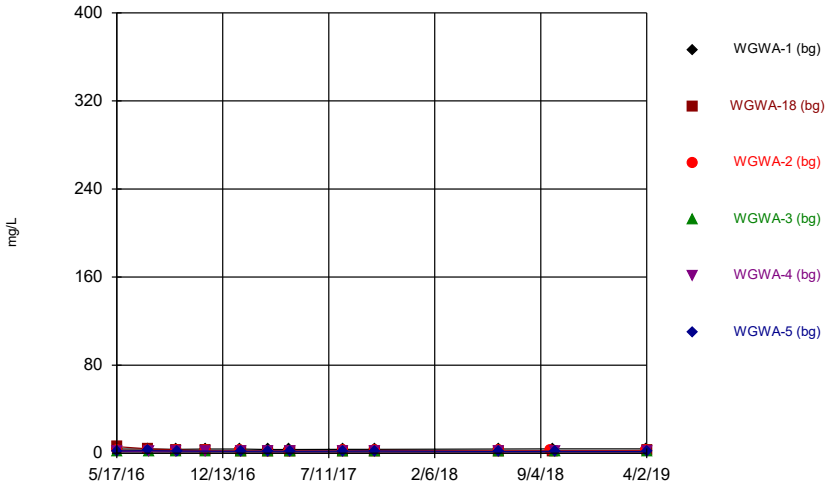
Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Calcium



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

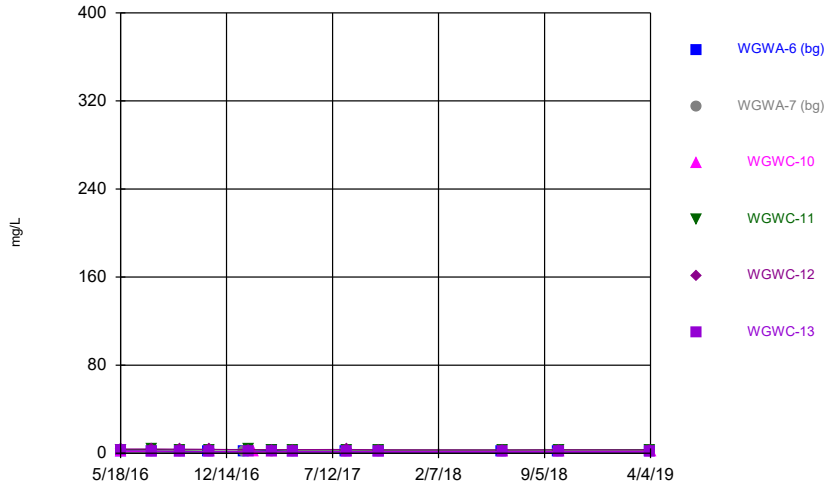
Chloride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

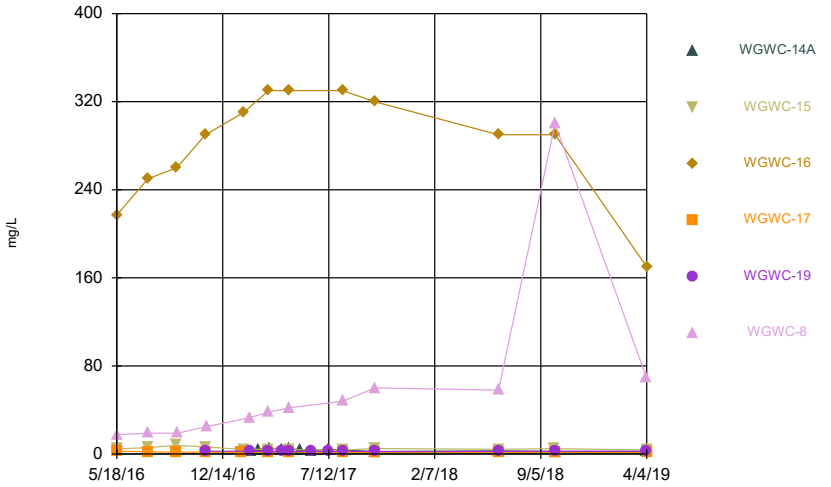
Chloride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

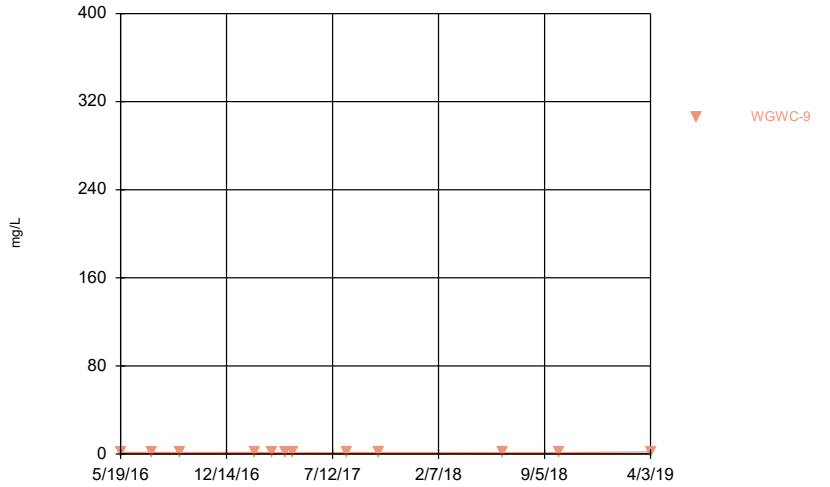
Chloride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

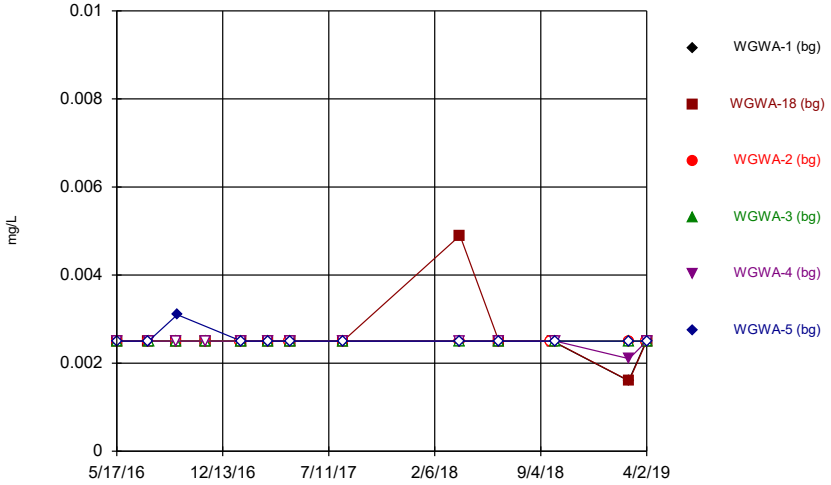
Chloride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
Hollow symbols indicate censored values.

Chromium



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
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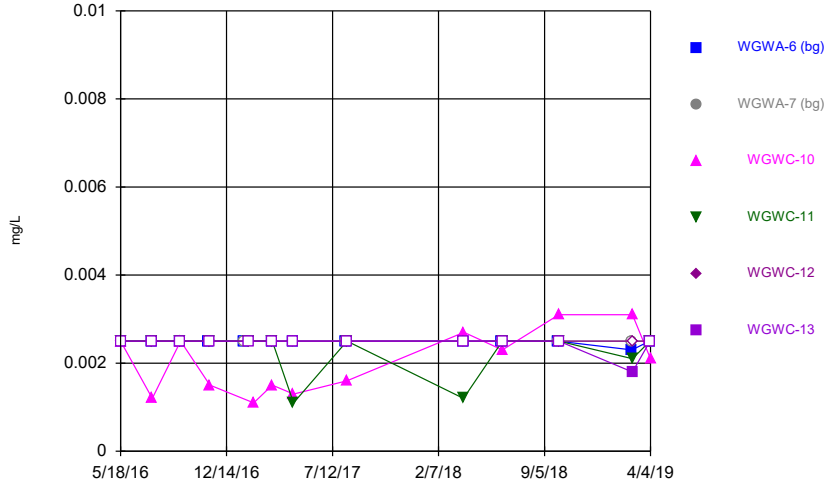

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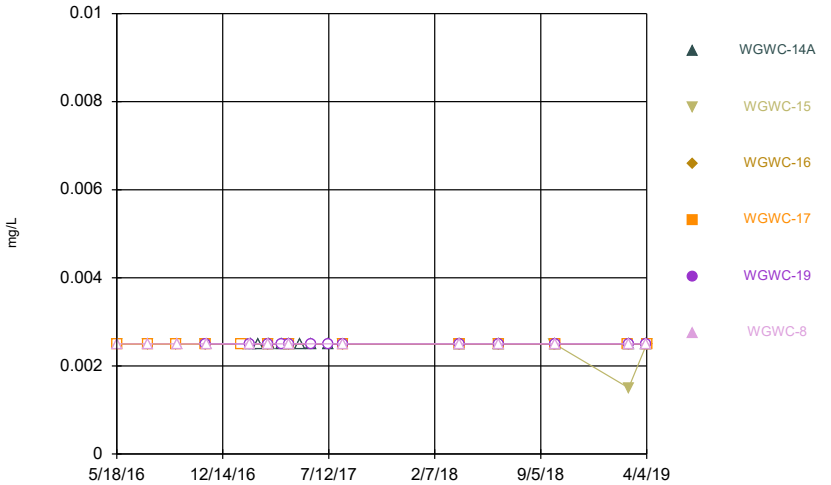

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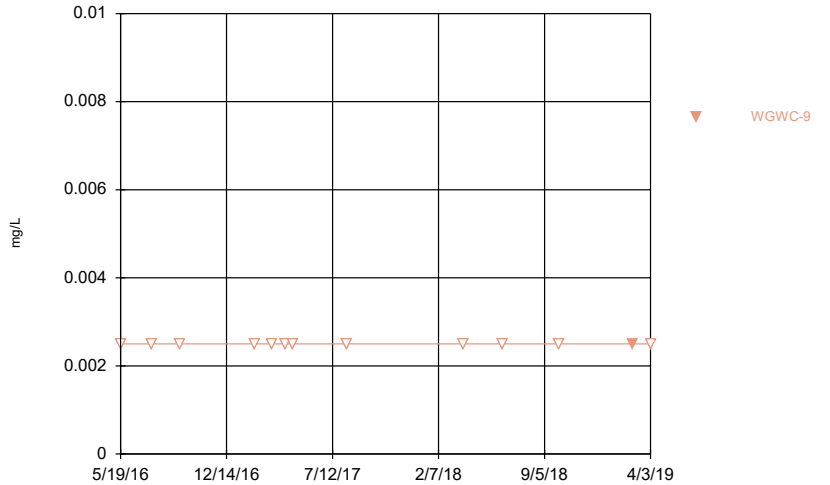

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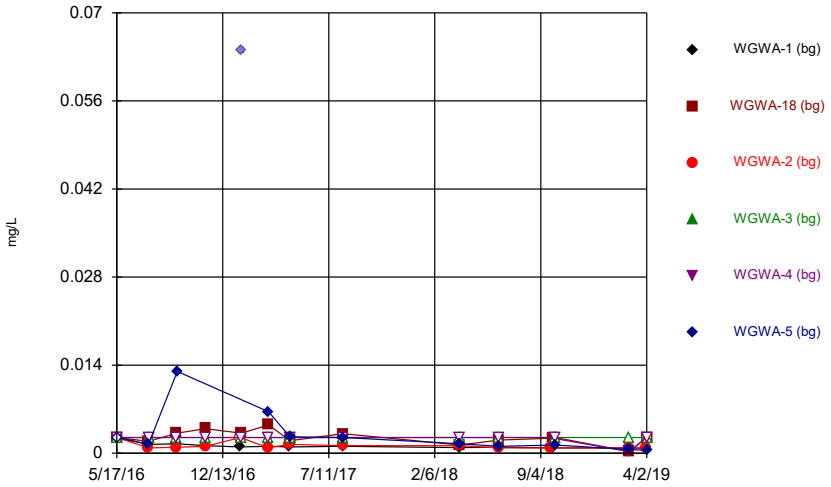
Cobalt



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
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Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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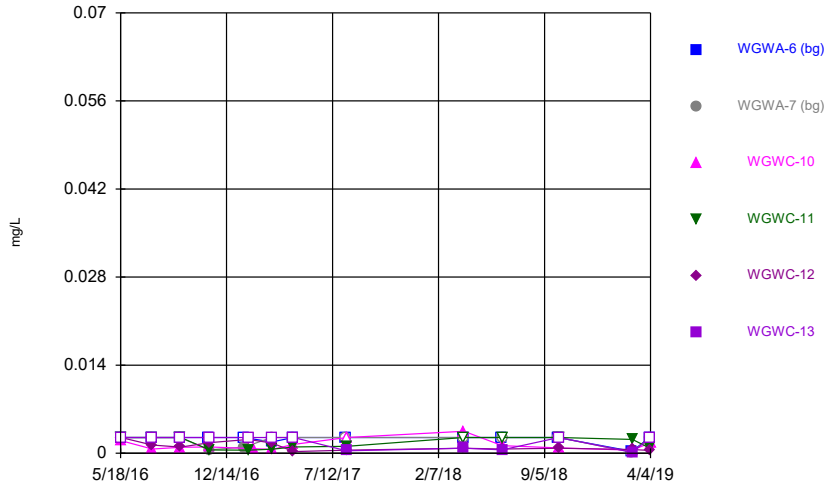

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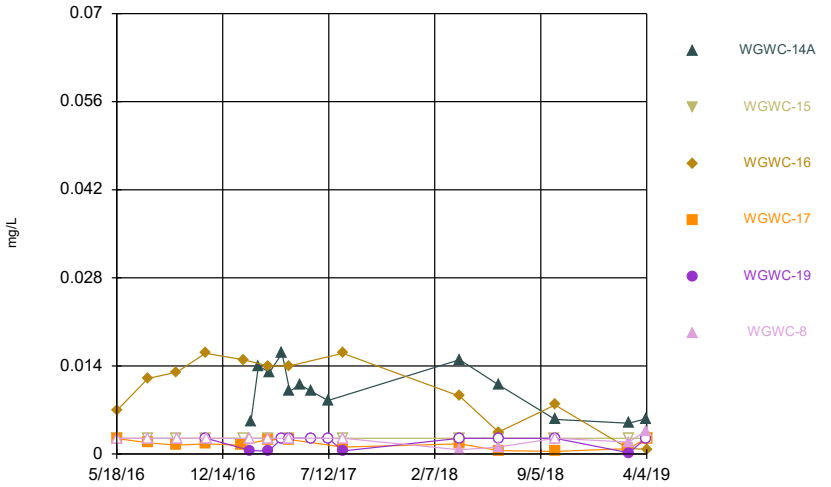

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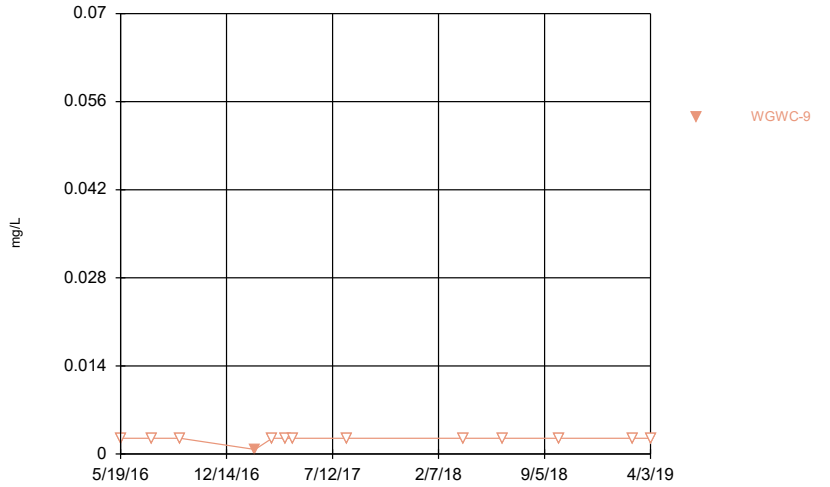

Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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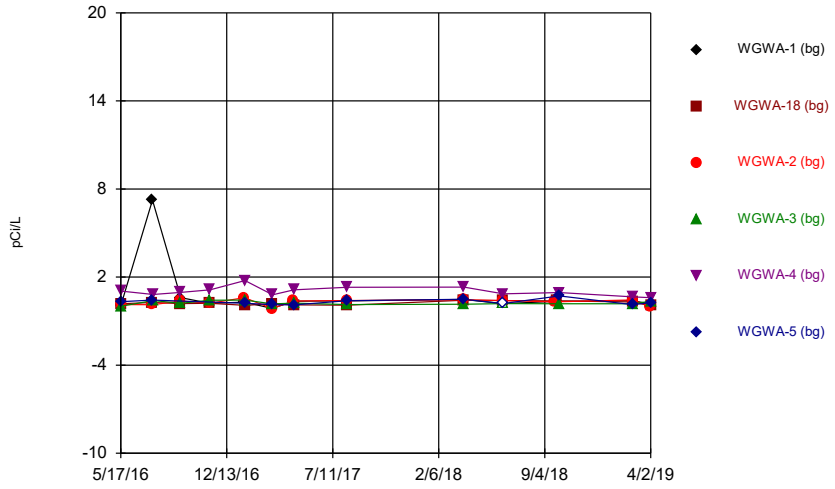
Combined Radium 226 + 228



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Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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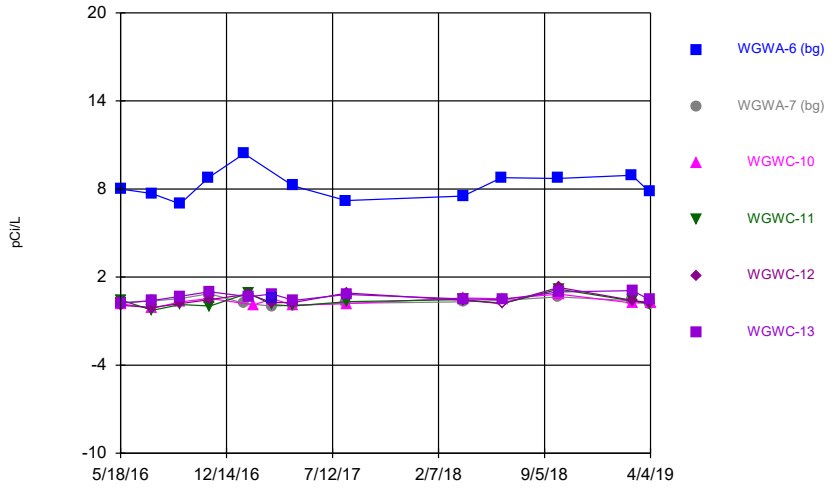
Combined Radium 226 + 228



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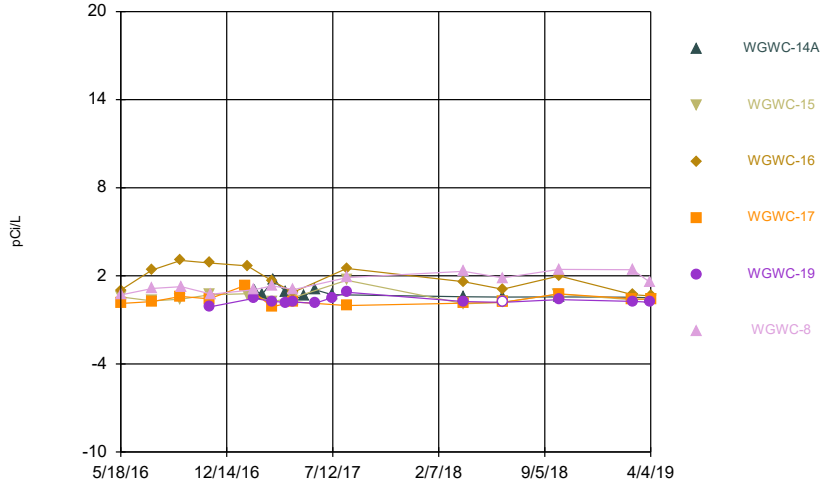
Combined Radium 226 + 228



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
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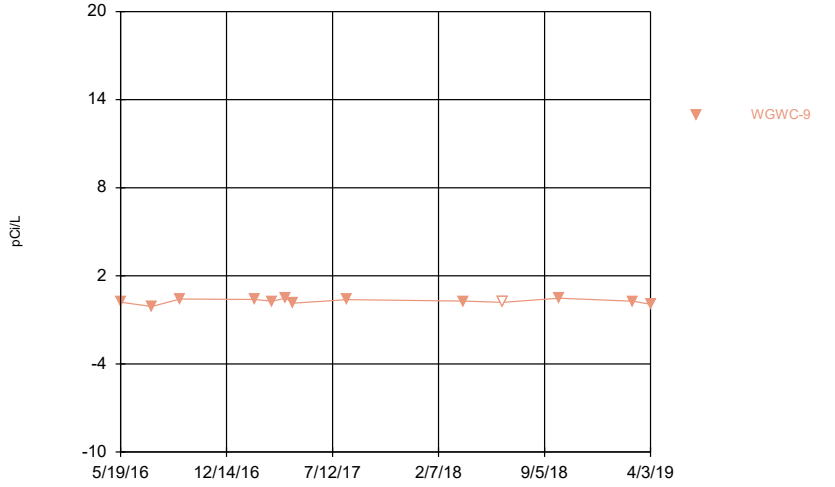
Combined Radium 226 + 228



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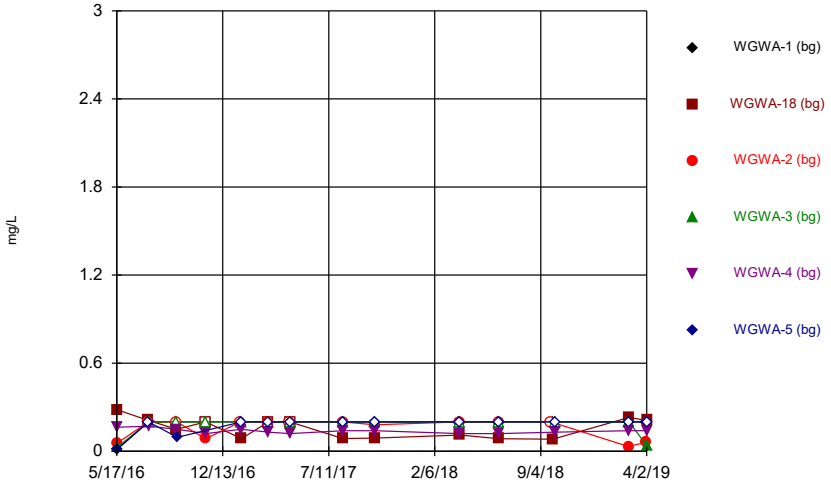
Fluoride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
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Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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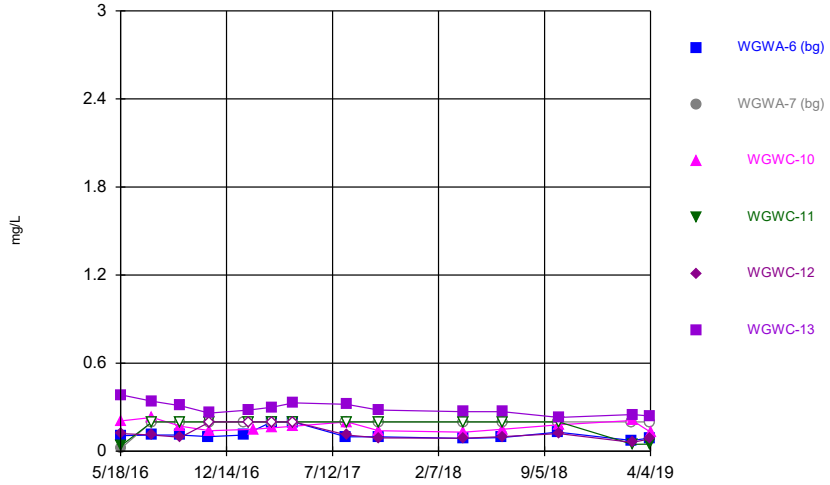

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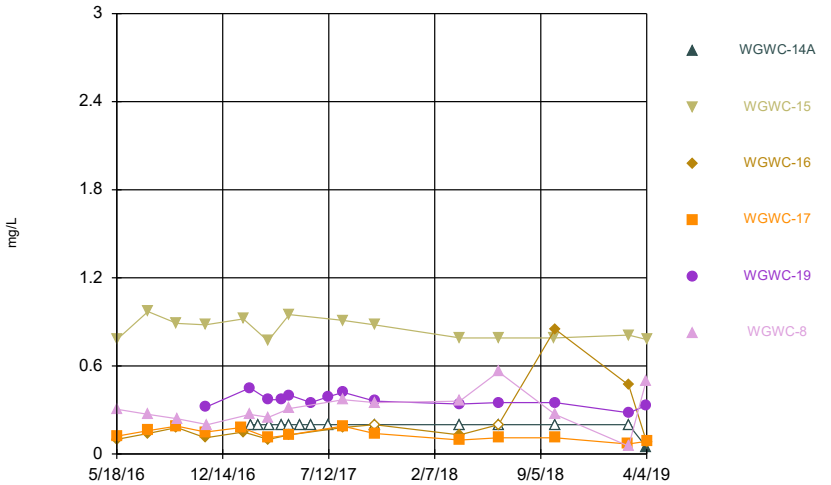

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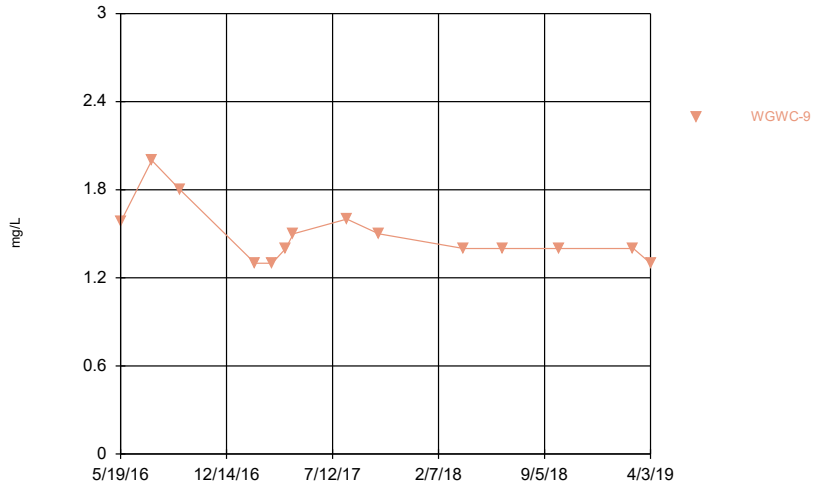
Fluoride



Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
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Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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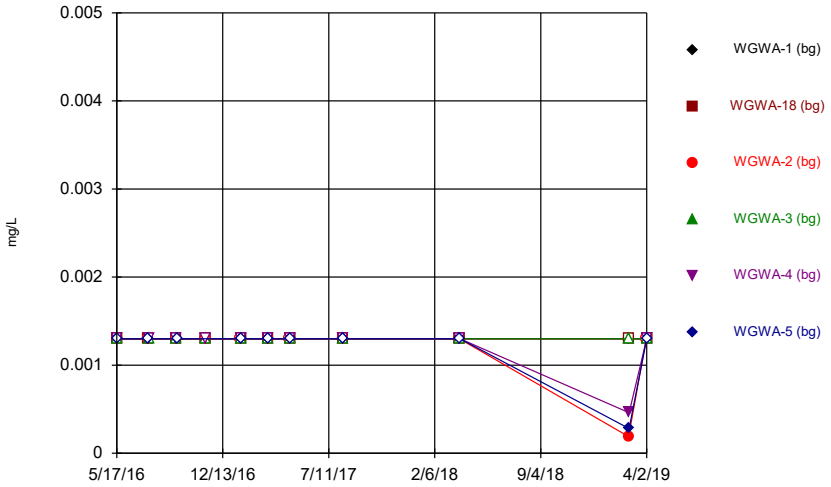
Lead



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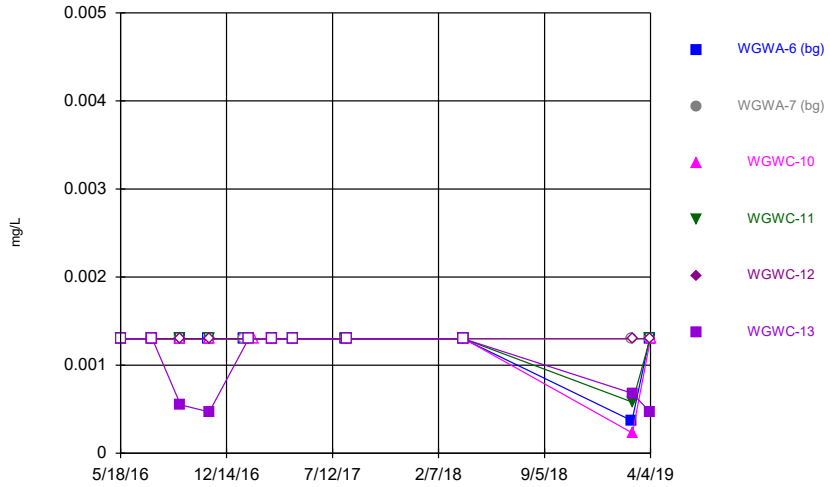

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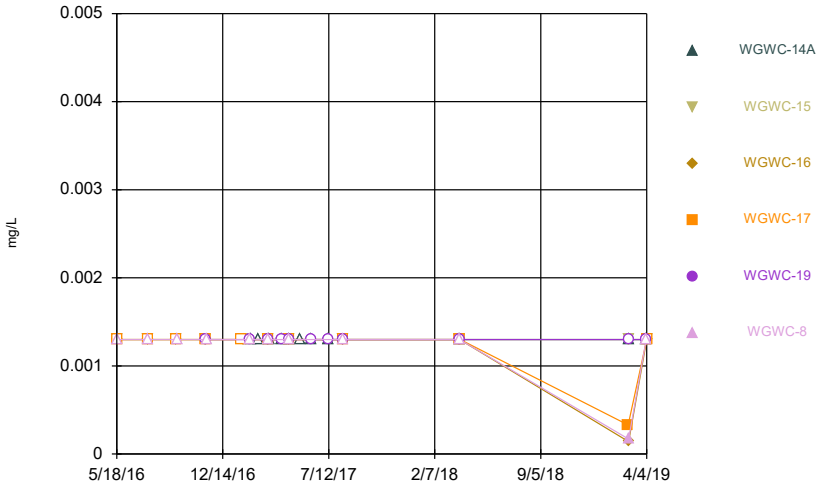

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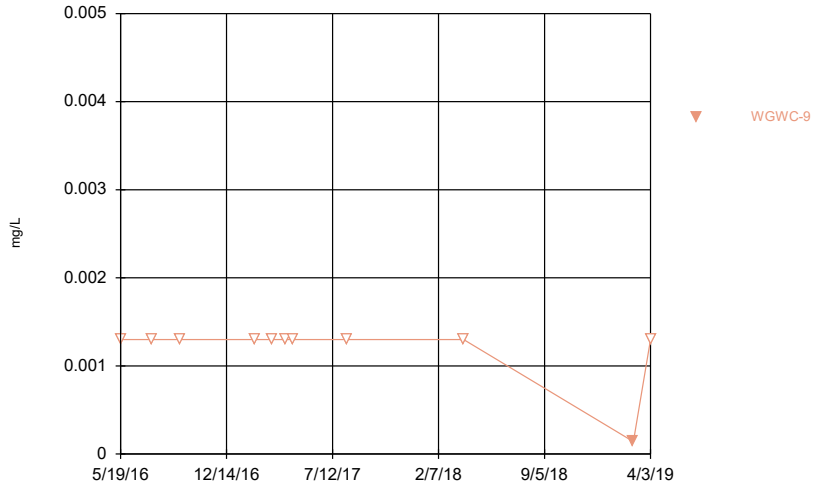

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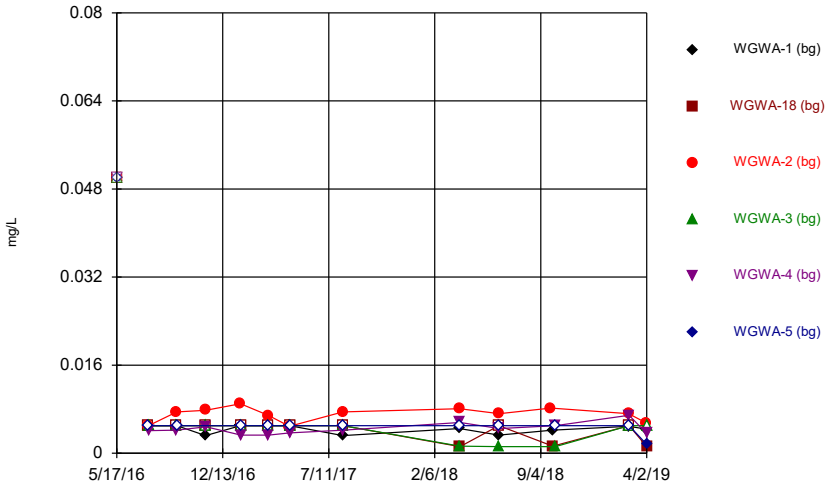
Lithium



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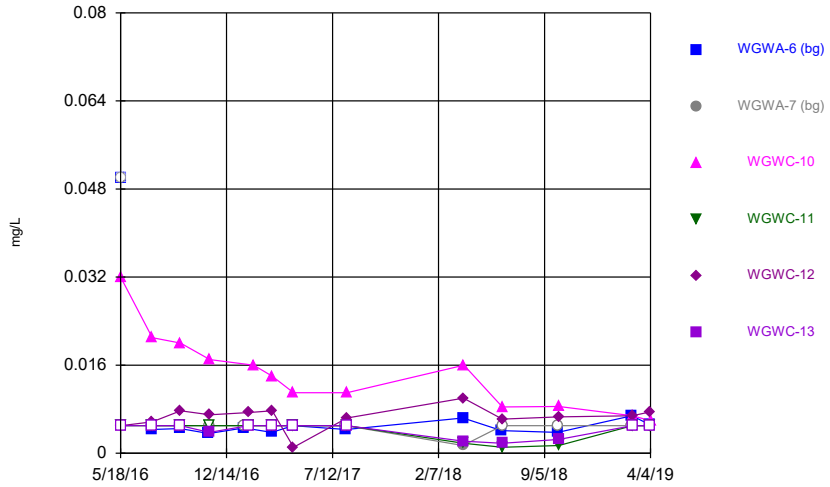

Time Series Analysis Run 6/6/2019 1:11 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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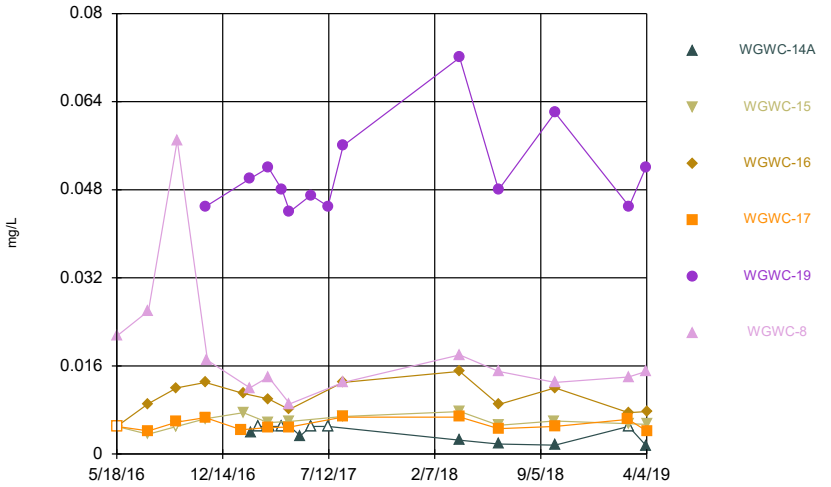

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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

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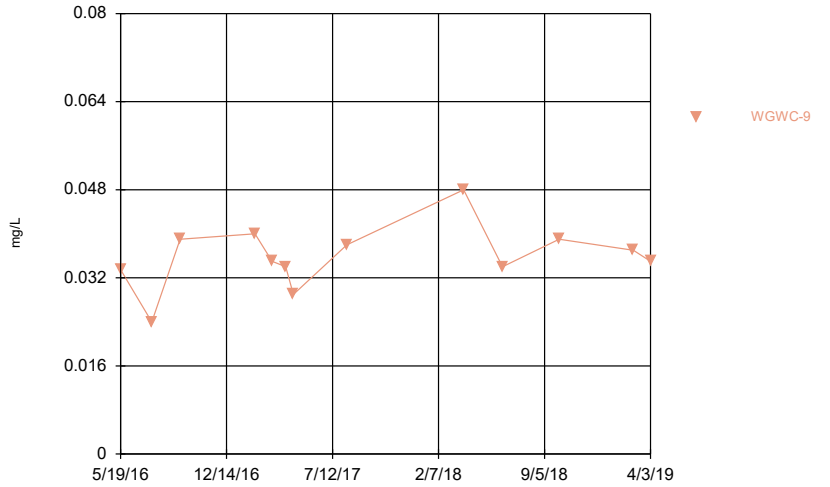

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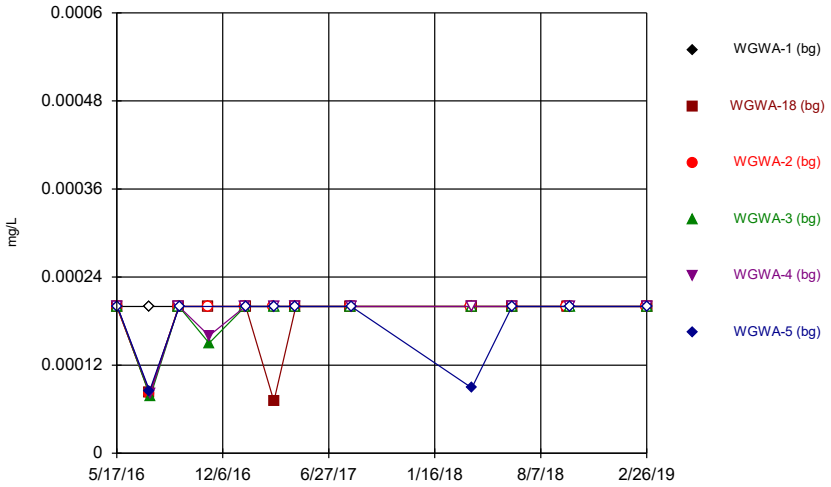
Mercury



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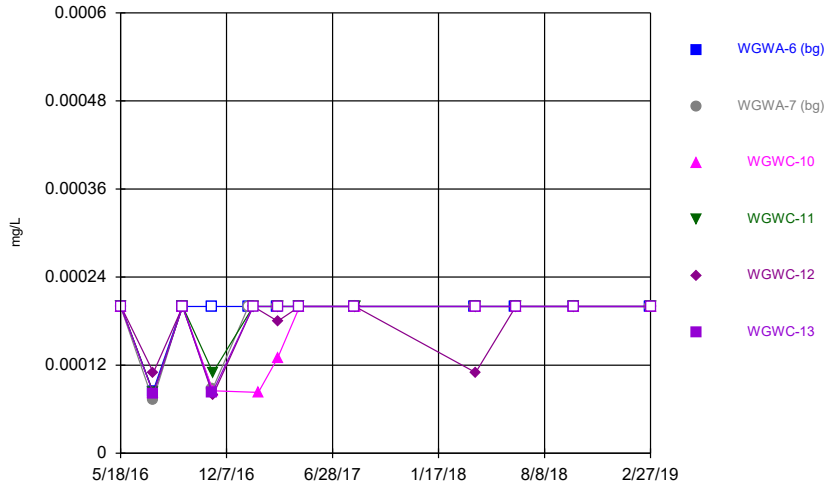

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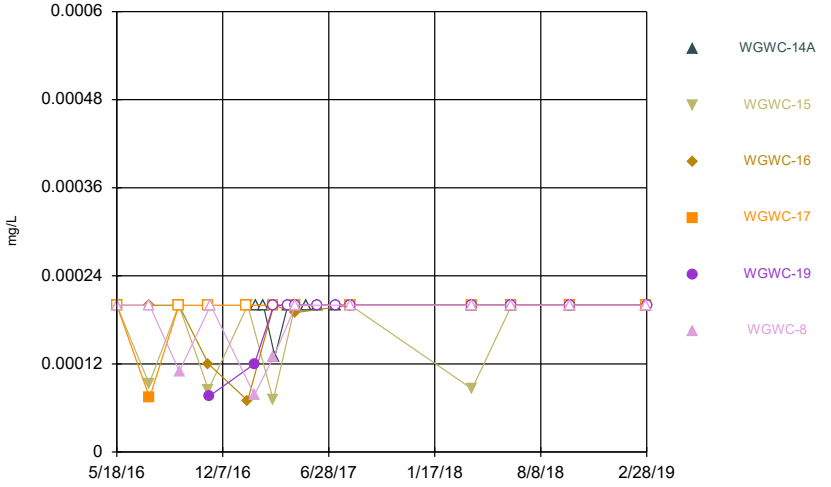

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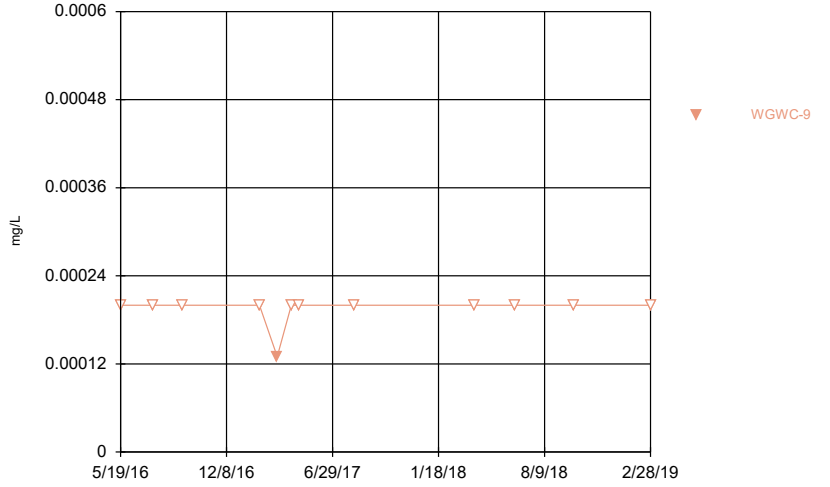

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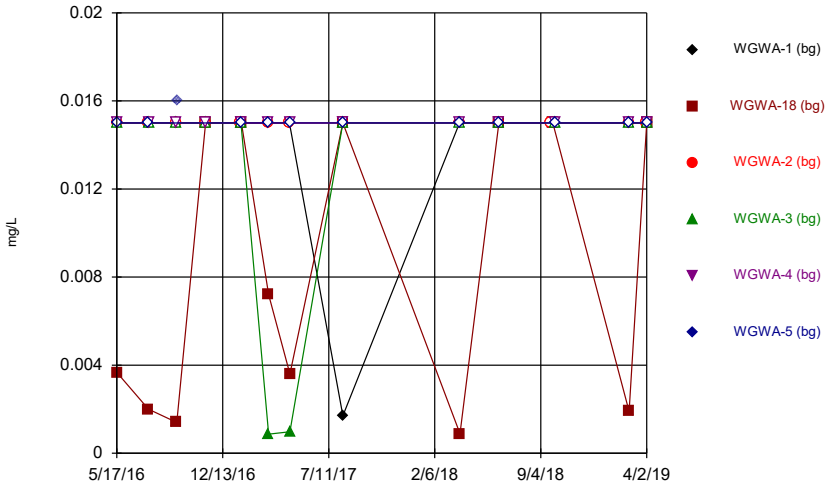
Molybdenum



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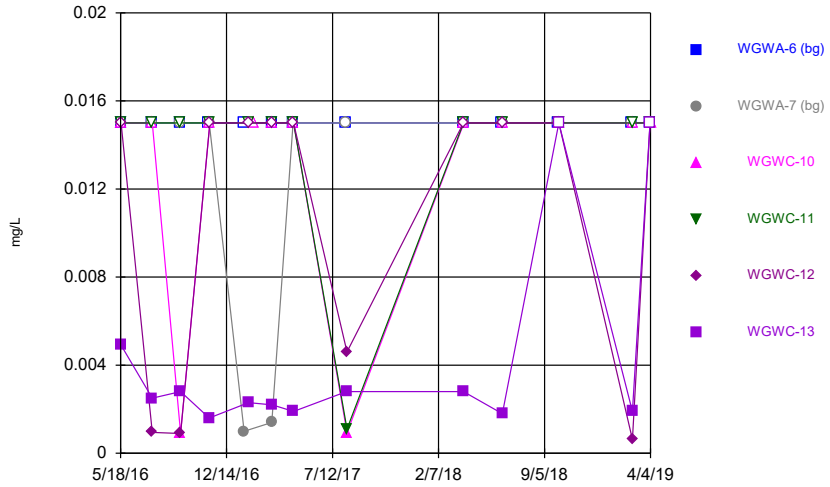
Molybdenum



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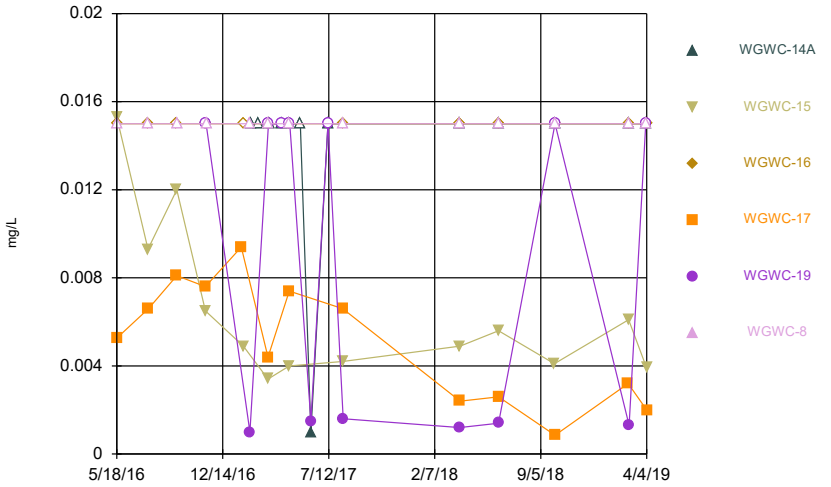

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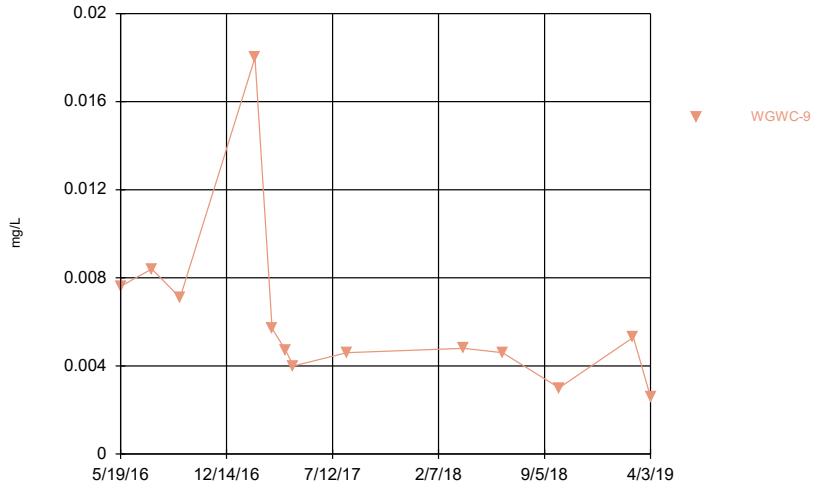
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

Molybdenum



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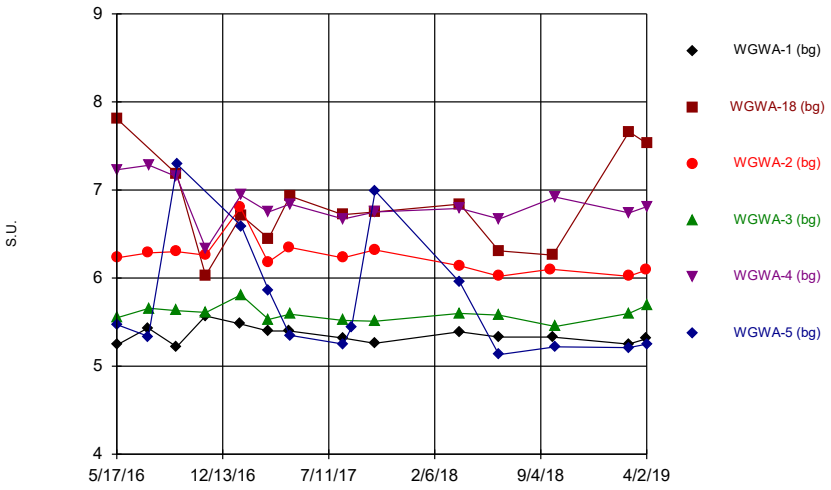
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

pH



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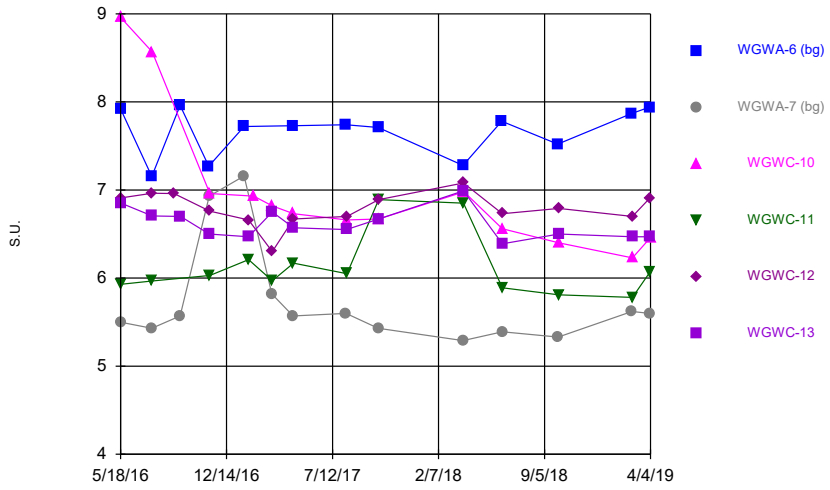
Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

pH



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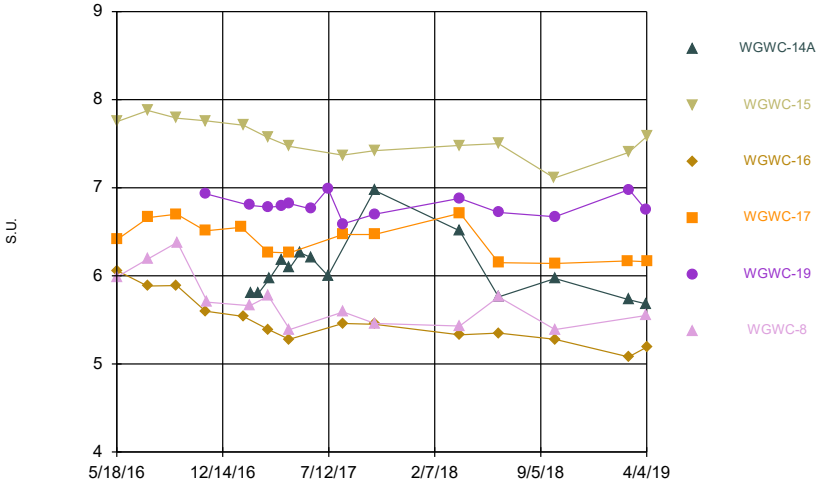

Time Series Analysis Run 6/6/2019 1:12 PM View: Time Series
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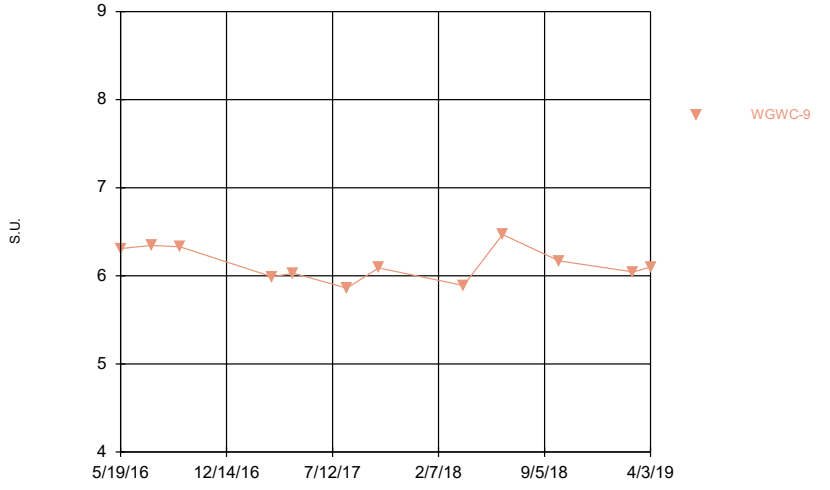
Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG

pH



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Sanitas™ v.9.6.14 Sanitas software licensed to ACC. UG
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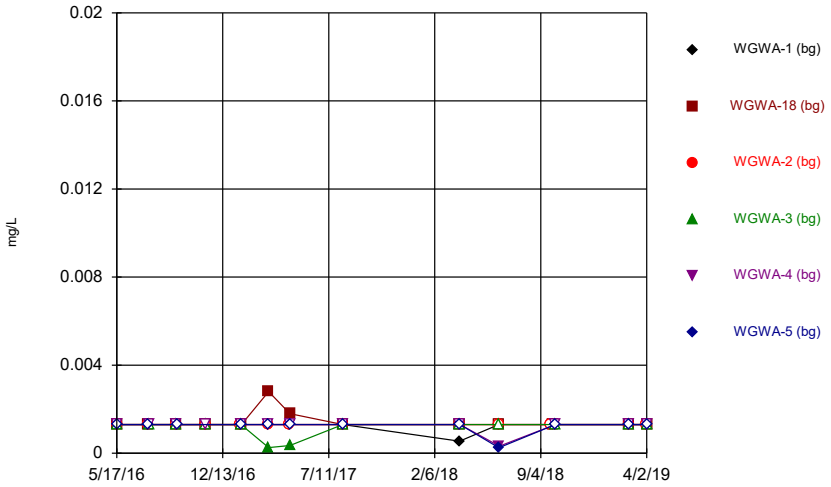
Selenium



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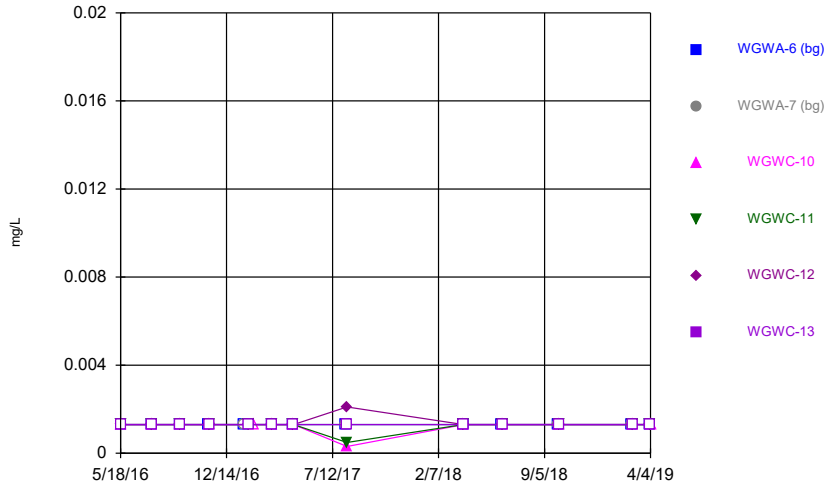

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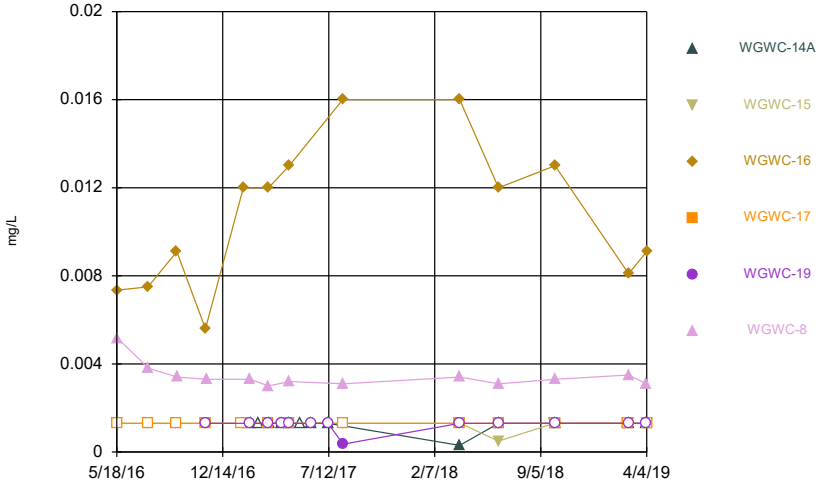
Hollow symbols indicate censored values.

Selenium



Time Series Analysis Run 6/6/2019 1:12 PM View: Time Series
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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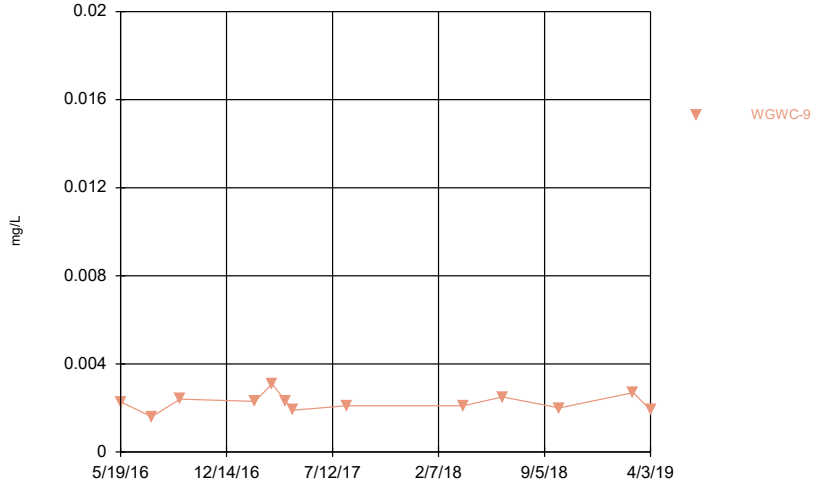
Selenium



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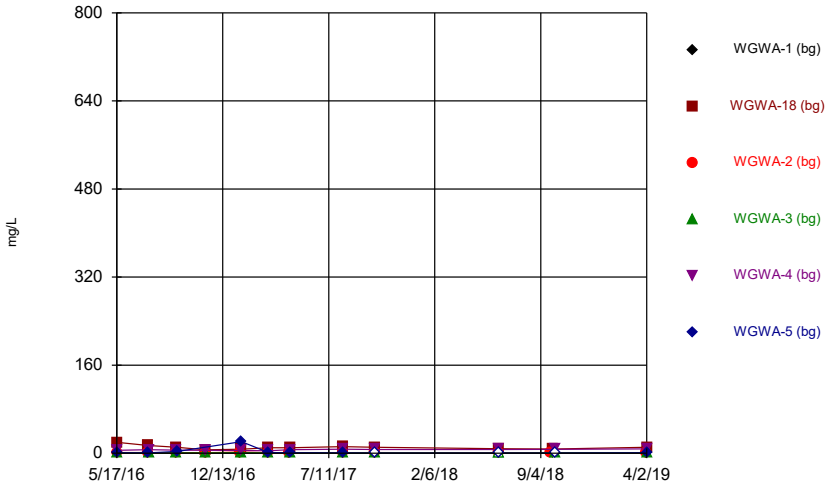
Sulfate



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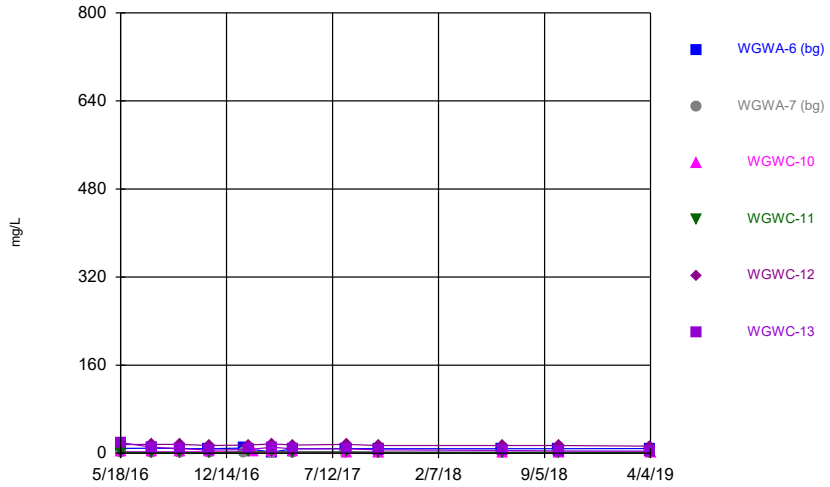

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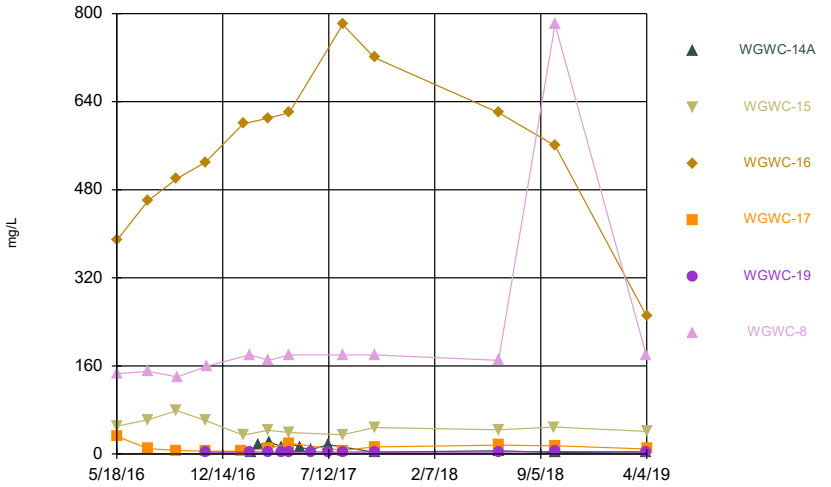

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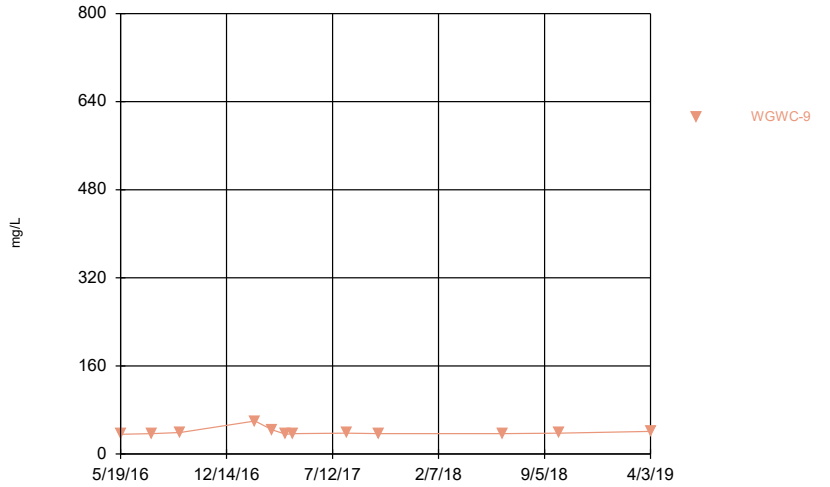

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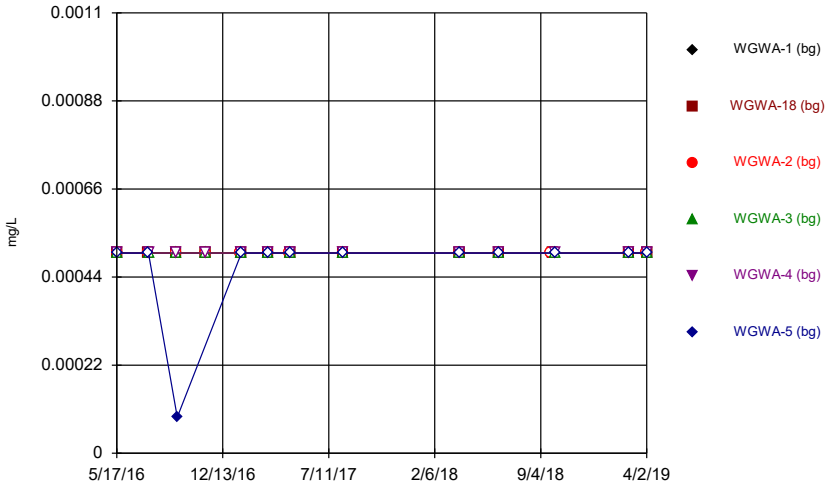
Thallium



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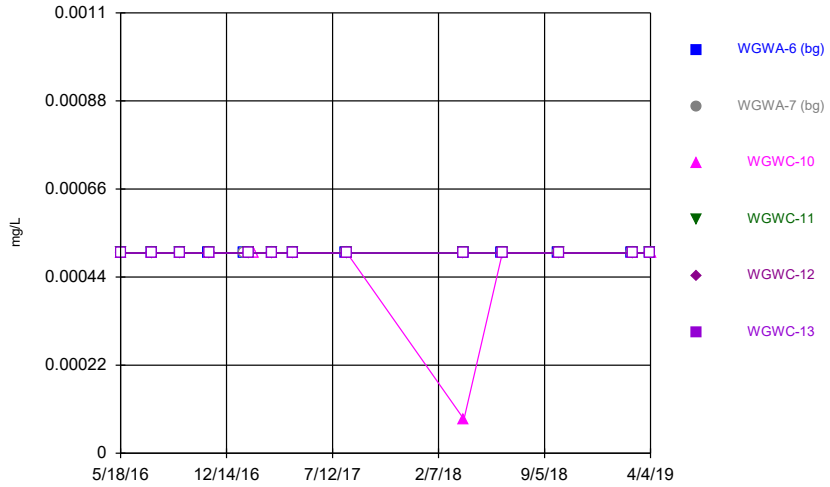

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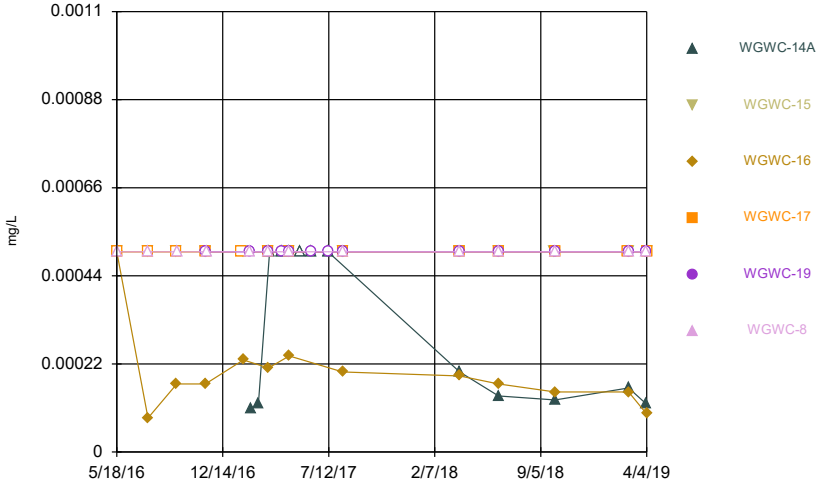

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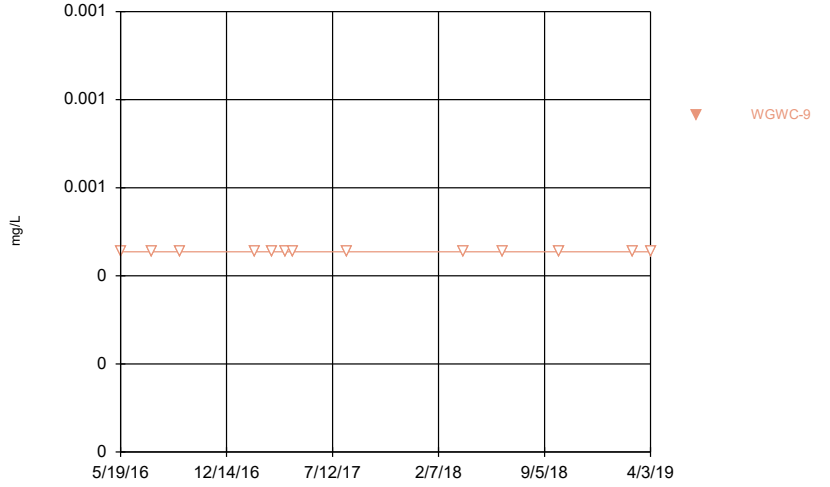

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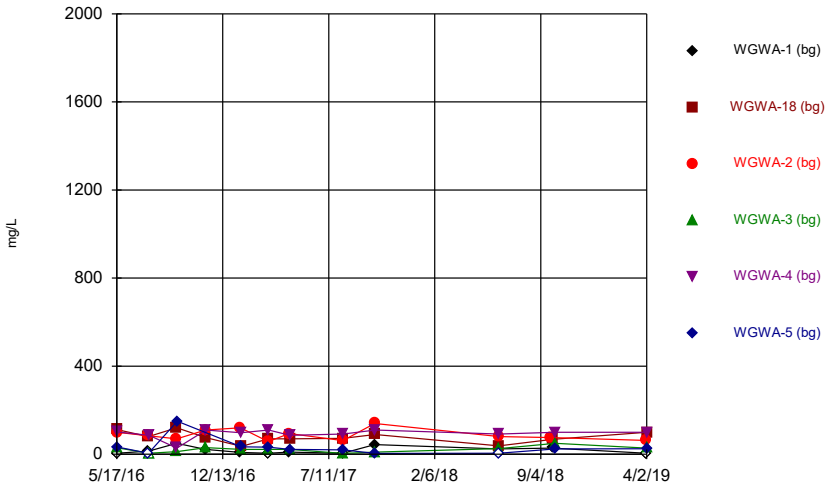
Total Dissolved Solids



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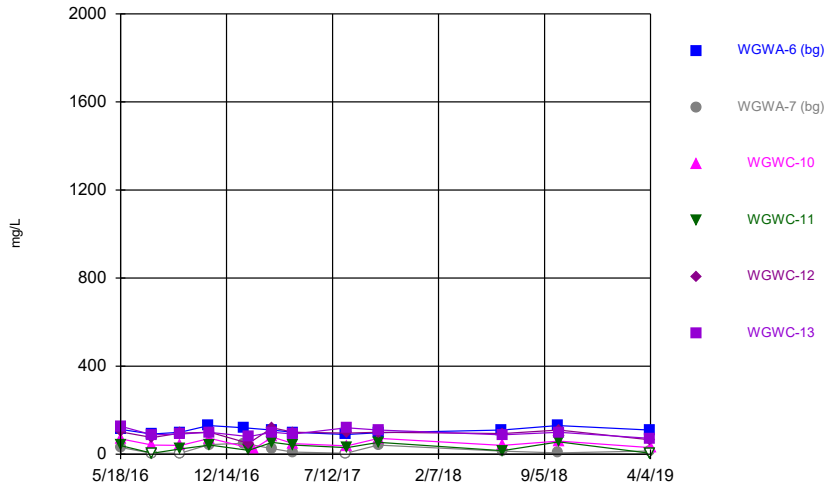

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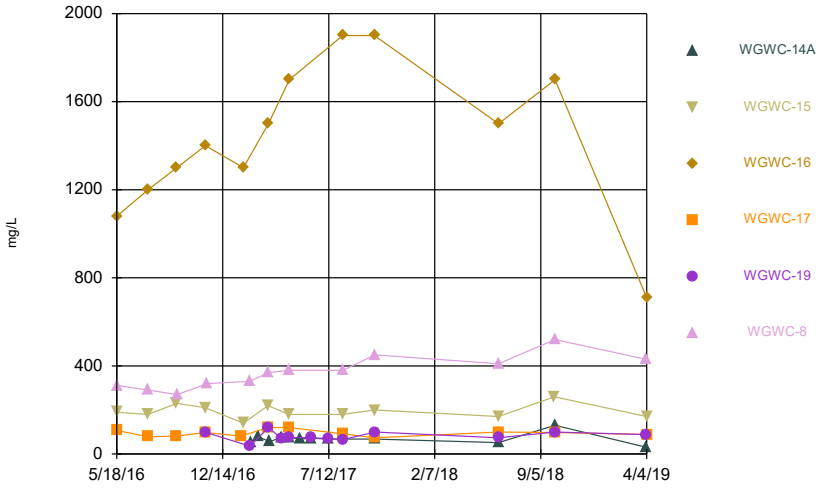

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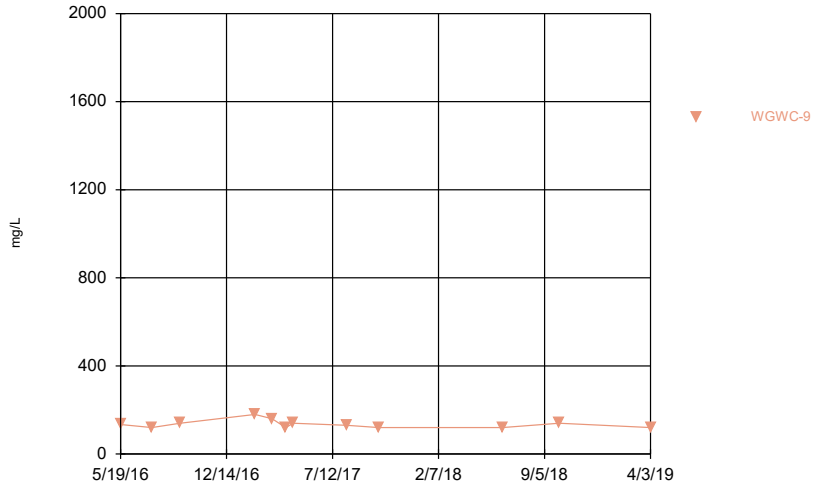

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