

*Prepared for*



**Georgia Power Company**  
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Atlanta, Georgia 30308

# **2020 SEMIANNUAL GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT**

## **GEORGIA POWER COMPANY PLANT WANSLEY ASH POND 1 (AP-1)**

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**CERTIFICATION STATEMENT**

This 2020 Semiannual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - Plant Wansley – Ash Pond 1 (AP-1) 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 Geosyntec Consultants.



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## **LIST OF ACRONYMS**

AP	ash pond
CCR	coal combustion residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
DO	dissolved oxygen
ft	feet
ft/day	feet per day
ft/ft	feet per foot
GA EPD	Georgia Environmental Protection Division
GWPS	Groundwater Protection Standard
HAR	Hydrogeologic Assessment Report
MCL	Maximum Contaminant Level
mg/L	milligram per liter
NAD83	North American Datum of 1983
NAVD88	North American Vertical Datum of 1988
NELAP	National Environmental Laboratory Accreditation Program
NTU	Nephelometric turbidity units
ORP	oxidation-reduction potential
PE	professional engineer
PL	prediction limit
PWR	partially weathered rock
QA/QC	Quality Assurance/Quality Control
RL	reporting limit
SSI	statistically significant increase
SSL	statistically significant level
s.u.	standard unit
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency

## **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 (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants has prepared this *2020 Semiannual Groundwater Monitoring & Corrective Action Report* to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Wansley (the Site) Ash Pond 1 (AP-1). GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a) adopt the Federal CCR rule by reference. For ease of reference, the USEPA CCR rules are cited within this report. This report documents groundwater monitoring activities completed for AP-1 from January through August 2020.

Semiannual groundwater monitoring and reporting for AP-1 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 394-3-4-.10(6)(a). A CCR permit application to comply with EPD Rules was submitted in November 2018 and is currently under review.

### **1.1 Site Description and Background**

Plant Wansley is located on approximately 5,200 acres about 12 miles southeast of the City of Carrollton, Georgia. Although the majority of the plant property lies within Heard County, the physical address of and entrance to the plant is 1371 Liberty Church Road, Carrollton, Carroll County, Georgia. The plant property is bounded on the east and south by the Chattahoochee River, and sparsely populated, forested, rural, and agricultural land to the north, south, and west. AP-1 is a 343-acre surface impoundment located northwest of the plant (**Figure 1**) which was designed to receive and store CCR materials. AP-1 began receiving process water containing fly ash and bottom ash in 1976. As of April 2019, all process-related flows from the plant to AP-1 have ceased.

### **1.2 Regional Geology & Hydrogeologic Setting**

The following section summarizes the geologic and hydrogeologic conditions at AP-1 as described in the *Hydrogeologic Assessment Report Revision 01 – Plant Wansley* (HAR Rev 01) submitted to GA EPD as supporting documents for the closure permit application.

### **1.2.1 Regional and Site Geology**

Plant Wansley is located within the Piedmont Physiographic Province of western Georgia, which is characterized by gently rolling hills with locally pronounced low, linear ridges, trending northeast-southwest, and separated by valleys. Over geologic time, the Piedmont has been subjected to multiple events of uplift, folding and faulting, alternation, and erosion.

The Piedmont Province is generally underlain by a variably thick blanket of overburden, which is comprised of residual and saprolitic soils derived from the in-place weathering of bedrock. Near the ground surface, soils are generally silt- and clay-rich, with fine-sand and sand becoming more prominent with depth. With increasing depth, the weathered materials tend to retain details of the structural features of the underlying bedrock. Occasional deposits of alluvium are present in valleys and drainage features. A mantle of partially weathered rock (PWR) and the fractured surface of the bedrock in the Piedmont comprises a zone often referred to as the “transition zone.”

Bedrock in the Piedmont is predominately composed of metamorphic rock of Precambrian to Paleozoic age. The Site is underlain by several bedrock types consisting of schist, gneiss, quartzite, and amphibolite as identified in boring logs. Saprolitic soils were described at variable thickness across the Site but were generally encountered at or near ground surface. As is characteristic of this province, the Site has two pronounced ridges, one on the northwest side of AP-1 and one on the southeast side of AP-1, as well as smaller rolling hills along the western property boundary.

### **1.2.2 Hydrogeologic Setting**

While the aquifer characteristics of each lithologic unit may vary, the groundwater is interconnected between these units, and they effectively act as one, unconfined aquifer. According to previous site investigations, the potentiometric surface is a subdued reflection of the topography. The top of bedrock surface also generally follows topography and likely controls groundwater flow direction in the uppermost aquifer, which occurs within the saprolite and PWR and is hydraulically connected to the bedrock via fractures and deeply weathered areas of the rock. Recharge is by precipitation infiltrating through the saprolite to the bedrock. Based on observations of soil types and horizontal conductivity values, the movement of groundwater in the saprolite is very slow and likely acts as flow through a low-permeability porous media. Groundwater flow in the PWR and the “transition zone” between the PWR and the fractured bedrock is

expected to be greater than in the overlying saprolite and the underlying fractured bedrock. Groundwater flow in the bedrock is restricted entirely to flow through fractures. Visual observations and geophysical logging during field investigations indicate a trend of decreasing fracture spacing and density with depth, consistent with regional geologic trends.

### **1.3 Groundwater Monitoring Well Network**

In accordance with § 257.91, a groundwater monitoring system was installed at AP-1 that (1) consists of a sufficient number of wells, (2) is installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer, and (3) represents the groundwater quality both upgradient of AP-1 (i.e., background conditions) and passing the waste boundary of AP-1. The number, spacing, and depths of the groundwater monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions. The certified compliance monitoring well network for AP-1 consists of nineteen monitoring wells and was certified by a professional engineer (PE) on October 17, 2017; the certification is maintained in the AP-1 Operating Record and on the Georgia Power-managed webpage in accordance with § 257.105(h)(3) and § 257.107(h)(3).

Twelve piezometers, installed in 2014, are used in combination with the compliance well network to gauge groundwater levels in the vicinity of AP-1 to refine groundwater flow direction and gradients. Two groundwater characterization wells (WAMW-1 and WAMW-2) were installed in 2018. The piezometer and characterization wells are not part of the certified compliance monitoring well network.

The locations of the compliance monitoring wells, characterization wells, and piezometers are shown on **Figure 2**; well construction details are listed in **Table 1**.

## **2.0 GROUNDWATER MONITORING ACTIVITIES**

In accordance with § 257.90(e), the following describes monitoring-related activities performed during January through August 2020 and discusses any change in status of the monitoring program. All groundwater sampling was performed in accordance with § 257.93.

### **2.1 Monitoring Well Installation and Maintenance**

The AP-1 well network was re-surveyed by GEL Solutions in June 2020. The top of the well casing [top of casing (TOC)] elevation and the survey pin installed at each well pad were surveyed to within 0.5-foot horizontal accuracy and to 0.01-foot vertical accuracy. The horizontal location (i.e., northings and eastings) was recorded in feet relative to the North America Datum of 1983 (NAD83), Georgia West State Plane, with the vertical elevation recorded in feet relative to the North American Vertical Datum of 1988 (NAVD88). The new survey data are incorporated into applicable tables and figures in this report. A copy of the well survey data certified by a Georgia-licensed surveyor is included in **Appendix A**. Revised boring and well construction logs for the well locations listed in **Table 1** will be provided to GA EPD under separate cover.

There were no changes to the groundwater monitoring system during this reporting period. The well and piezometer networks are inspected during each groundwater monitoring event using GA EPD-based inspection criteria. Any issues identified with the wells (e.g., clogged weep holes within the outer protective casing, faded well identification signage, rusted locks and/or latches, etc.) are addressed before the subsequent groundwater sampling event. The well inspection forms for this reporting period are provided in **Appendix B**.

### **2.2 Assessment Monitoring**

Based on groundwater monitoring results discussed in the *2017 Annual Groundwater and Corrective Action Monitoring Report* [Atlantic Coast Consulting, Inc. (ACC), 2018], Georgia Power initiated an assessment monitoring program for groundwater at AP-1 in January 2018. An Assessment Monitoring Program Notification was placed in the AP-1 Operating Record on May 15, 2019.

During the reporting period discussed herein, compliance monitoring wells at AP-1 shown on **Figure 2** were sampled in February and March 2020<sup>1</sup>. Samples collected in February 2020 were analyzed for Appendix IV constituents and samples collected in March 2020 were analyzed for Appendix III constituents and Appendix IV constituents detected during the February 2020 event. The number of groundwater samples collected for analysis and the dates the samples were collected at AP-1 during this initial 2020 reporting period is summarized in **Table 2**. Details of these events and analytical results are discussed in Section 3, while the statistical results are discussed in Section 4.

### **2.3     Additional Groundwater Sampling**

No additional groundwater sampling occurred during this reporting period.

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<sup>1</sup> Due to a suspected sample identification error at the laboratory during the March 2020 event, WGWC-19 was resampled in May 2020. The May 2020 results are reported herein.

### **3.0 SAMPLING METHODOLOGY & ANALYSES**

The following section presents a summary of the field sampling procedures that were implemented, and the groundwater sampling results that were obtained in connection with the groundwater monitoring program conducted at AP-1 during this reporting period.

#### **3.1 Groundwater Level Measurement**

Prior to the February and March 2020 sampling events, a synoptic round of depth to groundwater level measurements were recorded from the AP-1 monitoring wells, characterization wells, and piezometers and used to calculate the corresponding groundwater elevations. Groundwater levels were measured and recorded to the nearest 0.01-foot within a 24-hour period. The calculated groundwater elevations for the February and March 2020 events are presented in **Table 3**. The June 2020 survey data was used to calculate the groundwater elevations for the February and March 2020 events. The groundwater elevations observed for the February 2020 event ranged from 749.94 ft NAVD88 in well WGWA-2 to 897.97 ft NAVD88 in piezometer PZ-6. For the March 2020 event, the groundwater elevations ranged from 750.35 ft NAVD88 in well WGWA-2 to 898.92 ft NAVD88 in PZ-6.

The groundwater elevation data were used to prepare potentiometric surface maps for the February and March 2020 events, which are presented on **Figures 3** and **4**, respectively.

#### **3.2 Groundwater Gradient and Flow Velocity**

The groundwater hydraulic gradients within the uppermost aquifer at AP-1 were calculated using the groundwater elevation data from the February and March 2020 events. The supporting calculations are presented in **Table 4**. The presented hydraulic gradients represent the calculated average of the February and March 2020 events. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figures 3** and **4**. The groundwater flow patterns observed during this reporting period are consistent with historical observations. The general direction of groundwater flow across the Site is to the southeast. As presented in **Table 4**, the average hydraulic gradients along the groundwater flow path lines associated with AP-1 are 0.081 feet per foot (ft/ft) and 0.093 ft/ft, respectively.

The approximate horizontal flow velocities associated with AP-1 were calculated using the following derivative of Darcy's Law. The calculations are presented on **Table 4**.

$$V = \text{linear velocity} = \frac{K * i}{n_e}$$

where:

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

$K$  = Hydraulic Conductivity ( $\frac{\text{feet}}{\text{day}}$ )

$i$  = Horizontal hydraulic gradient ( $\frac{\text{feet}}{\text{feet}}$ )

$n_e$  = Effective porosity

The average hydraulic conductivity for AP-1 of  $2.4 \times 10^{-4}$  centimeters per second (cm/sec) [0.67 feet per day (ft/day)] was computed from previous slug test data obtained from testing of wells at AP-1. An estimated effective porosity of 0.25 (based on a review of several sources, including Driscoll, 1986; USEPA, 1989; Freeze and Cherry, 1979) is used to represent average conditions at AP-1. With these variables determined, and accounting for the averaged hydraulic gradient discussed above for the two 2020 events, the calculated flow velocity was approximately 0.22 and 0.25 ft/day during the February and March 2020 events, respectively, for an average groundwater flow velocity in the vicinity of AP-1 of 0.23 ft/day. The calculated flow velocities are consistent with historical observations during previous semiannual monitoring events. Flow velocity calculations are provided in **Table 4**.

### 3.3 Groundwater Sampling Procedures

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

An Aqua Troll 400 or a SmarTroll (In-Situ field instrument) was used to monitor and record field water quality parameters [i.e., pH, conductivity, oxidation-reduction potential (ORP), temperature, and dissolved oxygen (DO)] during well purging to verify

stabilization prior to sampling. Turbidity was measured using a LaMotte 2100Q portable turbidimeter. Groundwater samples were collected when the following stabilization criteria were met:

- pH ± 0.1 Standard Units (s.u.).
- Conductivity ± 10%.
- ±10% for DO where DO > 0.5 mg/L. No criterion applies if DO < 0.5 mg/L, record only.
- Turbidity measured less than 10 nephelometric turbidity units (NTU).

Once stabilization was achieved, samples were collected into appropriately-preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Eurofins TestAmerica, Inc. in Pittsburgh, Pennsylvania following chain-of-custody protocol. The field sampling forms generated during the monitoring events conducted during February and March 2020 are provided in **Appendix C**.

### **3.4 Laboratory Analyses**

Laboratory analyses were performed by to Eurofins TestAmerica, Inc. in Pittsburgh, Pennsylvania, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Eurofins TestAmerica maintains a NELAP certification for the Appendix III and Appendix IV constituents analyzed for this project. In addition, the laboratory is certified to perform analysis by the State of Georgia. Analytical methods used for groundwater sample analysis are listed in the analytical laboratory reports included in **Appendix C**.

Samples were analyzed for Appendix IV constituents during the February 2020 event. Samples collected in March 2020 were analyzed for Appendix III constituents and Appendix IV constituents detected above the laboratory method detection limit (MDL) during the February 2020 event in accordance with § 257.95(b). Antimony was not detected above the laboratory MDL during the February 2020 event. The groundwater analytical results from the February and March 2020 monitoring events are summarized in **Table 5**. The Eurofins TestAmerica laboratory reports associated with the results presented in **Table 5** are provided in **Appendix C**.

### **3.5 Quality Assurance & Quality Control Summary**

Quality assurance/quality control (QA/QC) samples were collected during the groundwater monitoring events at the rate of one set of QA/QC samples per 10 groundwater samples. One set of QA/QC samples included the following: field duplicate, equipment blank (where non-dedicated sampling equipment was used), and field blank samples. QA/QC samples were collected in laboratory-provided bottles and submitted under the same chain of custody as the primary samples for analysis of the same constituents by Eurofins TestAmerica.

In addition to collecting QA/QC samples, the data were validated based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and applicable federal guidance documents (USEPA, 2011; USEPA, 2017). Where appropriate, the data were qualified with supporting documentation and justifications. The associated data validation report is provided in **Appendix B** with the laboratory reports.

Values followed by a "J" flag in **Table 5** indicate that the value is an estimated analyte concentration detected between the MDL and the laboratory reporting limit (RL). 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**

The following section summarizes the statistical analysis of Appendix III groundwater monitoring data performed pursuant to § 257.93. In addition, pursuant to § 257.95(d)(2), Georgia Power established groundwater protection standards (GWPS) for the Appendix IV monitoring constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the March 2020 assessment monitoring event. The analyses were performed by Groundwater Stats Consulting (GSC); the resulting report (GSC, 2020) is provided in **Appendix D**.

### **4.1 Statistical Methods**

Analytical data from the March 2020 semiannual monitoring event was statistically analyzed in accordance with the PE-certified Statistical Analysis Method Certification (October 2017, amended January 2020). The Sanitas™ groundwater statistical software was used to perform the statistical analyses. Sanitas™ is a decision-support software package, that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the USEPA document *Statistical Analysis of Groundwater Data at RCRA Facilities Unified Guidance* (Unified Guidance) (USEPA, 2009).

Appendix III statistical analysis was performed to determine if Appendix III constituents have returned to background levels. Appendix IV assessment monitoring constituents were evaluated to determine if concentrations statistically exceeded the established state and federal GWPS. Detailed statistical methods used for Appendix III and Appendix IV constituents are discussed in the statistical analysis package provided in **Appendix D** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to § 257.95(d)(2) and presented in **Table 6**.

#### **4.1.1 Appendix III Statistical Methods**

Based on guidance from GA EPD, statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits (PL) combined with a 1-of-2 verification resample plan for each of the Appendix III constituents. Interwell PL are constructed using data from upgradient wells to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs) identified. An "initial exceedance" occurs when an Appendix III constituent reported in the groundwater of a downgradient compliance monitoring well exceeds the

constituent's associated PL. The 1-of-2 resample plan allows for collection of an independent resample. A confirmed exceedance is noted only when the resample confirms the initial exceedance by also exceeding the statistical limit. If the resample falls within its respective PL, no exceedance is declared. The results are discussed in Section 4.2 and tabulated in Figure E of **Appendix D**.

#### **4.1.2 Appendix IV Statistical Methods**

To statistically compare groundwater data to GWPSs, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient compliance monitoring well. The confidence intervals are compared to both the state and federal GWPS. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its GWPS. If a confidence interval exceeds a GWPS, a statistically significant level (SSL) exceedance is identified.

USEPA revised the federal CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum. As described in § 257.95(h)(1-3), the GWPS is:

- (1) The maximum contaminant level (MCL) established under § 141.62 and 141.66.
- (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; and
  - (iv) Molybdenum 0.10 mg/L.
- (3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

USEPA's updated GWPS have not yet been incorporated under GA EPD's CCR Rule. The GA EPD CCR Rule GWPS is:

- (1) The federally established 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 and are presented in **Table 6**.

#### **4.2 Statistical Analyses Results**

Based on review of the Appendix III statistical analysis presented in Figure E of **Appendix D**, Appendix III constituents have not returned to background levels and assessment monitoring should continue. Based on the statistical analysis of Appendix IV constituents as described in Section 4.1.2, only lithium was identified at the following wells at concentrations in excess of the state and federal GWPS:

AP-1 (Federal CCR Rule):

- Lithium: WGWC-19

AP-1 (GA EPD CCR Rule):

- Lithium: WGWC-8, WGWC-9, and WGWC-19

A groundwater exceedance notification was placed in the Operating Record on August 7, 2020, pursuant to §257.95(g).

## **5.0 ALTERNATE SOURCE DEMONSTRATION**

In accordance with § 257.94(e), Georgia Power implemented assessment monitoring in January 2018. SSLs of the Appendix IV constituent lithium were identified in multiple wells during the 2018 reporting year. In accordance with § 257.95(g)(3), Georgia Power prepared an Alternate Source Demonstration (ASD) for lithium, which was included in the *2018 Annual Groundwater Monitoring and Corrective Action Report* (ACC, 2019). The ASD presented evidence that the source of lithium in groundwater was naturally-derived from the subsurface rock formation and did not originate from the unit. Since submitting the ASD, supplemental data have been collected providing additional evidence of the natural occurrence of lithium. Supplemental analyses, including sequential extraction procedure, will be submitted under separate cover to GA EPD in November 2020 as an addendum to the 2018 ASD. Supplemental ASD addendums may be prepared by Georgia Power as supporting data are identified while conducting the assessment monitoring program.

## **6.0 MONITORING PROGRAM STATUS**

Based on the statistical analyses results, SSIs of Appendix III constituents were identified for the March 2020 groundwater data, thereby causing the unit to remain in the assessment monitoring program in accordance with § 257.94(e). The ASD described in Section 5.0 attributes the SSLs of lithium identified during this reporting period to naturally-occurring sources within the rock formation and not originating from AP-1.

## **7.0 CONCLUSIONS & FUTURE ACTIONS**

This *2020 Semiannual Groundwater Monitoring & Corrective Action Report* for Plant Wansley AP-1 was prepared to fulfill the requirements of USEPA's CCR Rule and GA EPD Rules for Solid Waste Management 391-3-4-.10. Statistical evaluations of the March 2020 groundwater monitoring data for AP-1 confirmed the continued presence of SSLs of lithium in select AP-1 compliance monitoring wells. As discussed in the Section 5.0, an ASD (ACC, 2019) was previously submitted that attributes the lithium concentrations in excess of state and federal GWPS to a naturally-occurring source. An addendum to the ASD providing supplemental data and additional evidence of the natural occurrence of lithium will be provided to GA EPD in November 2020.

As monitoring data show SSIs for Appendix III parameters, Georgia Power will continue to monitor the groundwater in the vicinity of AP-1 in accordance with the assessment monitoring program regulations. The next semiannual assessment monitoring event is scheduled for the third quarter of 2020.

## 8.0 REFERENCES

- Atlantic Coast Consulting, Inc. (ACC), 2018. *2017 Annual Groundwater Monitoring and Corrective Action Report - Plant Wansley Ash Pond 1 (AP-1)*. January 2018.
- Atlantic Coast Consulting, Inc. (ACC), 2019a. *2018 Annual Groundwater Monitoring and Corrective Action Report - Plant Wansley Ash Pond 1 (AP-1)*. January 2019.
- Atlantic Coast Consulting, Inc. (ACC), 2019b, *Alternate Source Demonstration – Plant Wansley Ash Pond*. January 2019.
- Atlantic Coast Consulting, Inc. (ACC), 2020. *2019 Annual Groundwater Monitoring and Corrective Action Report - Plant Wansley Ash Pond 1 (AP-1)*. January 2020.
- Geosyntec Consultants, 2019. *Hydrogeologic Assessment Report (Revision 1) – Plant Wansley*. November 2019.
- Groundwater Stats Consulting (GSC), 2020. *Plant Wansley Ash Pond Statistical Analysis – March 2020 1<sup>st</sup> Semi-Annual Sample Event – Georgia Power Company, Plant Wansley Ash Pond*. July 2020.
- Sanitas: Groundwater Statistical Software, v. 9.6.05 (2018). Sanitas Technologies©, Boulder, CO.
- USEPA, 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March 2009.
- USEPA, 2011. *Region IV Data Validation Standard Operating Procedures*. Science and Ecosystem Support Division. Region IV. Athens, GA. September 2011.
- USEPA, 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. January 2017.

## TABLES

**Table 1**  
 Monitoring Well Network Summary  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Well ID	Hydraulic Location/ Purpose	Installation Date	Northing <sup>(1)</sup>	Easting <sup>(1)</sup>	Top of Casing Elevation <sup>(2)</sup> (ft NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation <sup>(2)</sup> (ft NAVD88)	Bottom of Screen Elevation <sup>(2)</sup> (ft NAVD88)	Well Depth (ft BTOC) <sup>(3)</sup>	Screen Interval Length
<i>Compliance Monitoring Well</i>										
WGWA-1	Upgradient	10/21/2015	1250656.10	2035580.71	782.93	119.86	663.07	653.07	129.86	10
WGWA-2	Upgradient	10/16/2015	1251556.40	2035590.11	758.23	92.65	665.58	655.58	102.65	10
WGWA-3	Upgradient	12/15/2014	1240848.21	2022350.10	828.91	9.00	819.91	809.91	19.00	10
WGWA-4	Upgradient	01/13/2015	1240879.58	2022339.66	834.34	53.90	780.44	760.44	73.90	20
WGWA-5	Upgradient	12/23/2014	1241997.94	2022368.85	902.15	13.60	888.55	878.55	23.60	10
WGWA-6	Upgradient	01/13/2015	1241932.02	2022360.58	897.13	72.50	824.63	794.63	104.50	30
WGWA-7	Upgradient	12/22/2014	1243338.63	2023843.81	897.33	29.60	867.73	857.73	39.60	10
WGWA-18	Upgradient	12/16/2014	1244592.56	2025580.71	878.02	29.60	848.42	838.42	39.60	10
WGWC-8	Downgradient	10/29/2015	1242929.40	2029644.58	780.08	49.63	730.45	720.45	59.63	10
WGWC-9	Downgradient	10/04/2014	1242801.12	2029115.75	812.03	51.08	760.95	750.95	61.08	10
WGWC-10	Downgradient	10/27/2015	1240971.96	2026725.61	812.38	138.98	673.40	663.40	148.98	10
WGWC-11	Downgradient	10/21/2015	1240860.18	2025773.39	823.96	39.50	784.46	774.46	49.50	10
WGWC-12	Downgradient	01/22/2017	1240827.68	2025755.99	823.04	66.57	756.47	746.47	76.57	10
WGWC-13	Downgradient	11/14/2015	1240610.93	2024585.91	809.78	75.55	734.23	714.23	95.55	20
WGWC-14A	Downgradient	01/31/2017	1240604.54	2024599.63	810.94	33.08	777.86	767.86	43.08	10
WGWC-15	Downgradient	11/11/2015	1240483.16	2023912.92	804.69	43.36	761.33	751.33	53.36	10
WGWC-16	Downgradient	11/11/2015	1240480.46	2023903.77	804.21	24.78	779.43	769.43	34.78	10
WGWC-17	Downgradient	11/06/2015	1240052.06	2022623.82	816.00	85.94	730.06	720.06	95.94	10
WGWC-19	Downgradient	10/28/2017	1241851.51	2028949.19	783.42	84.84	698.58	688.58	94.84	10
<i>Piezometer</i>										
PZ-1	Piezometer	12/12/2014	1240249.86	2022319.93	856.72	36.10	820.62	810.62	46.10	10
PZ-4	Piezometer	12/22/2014	1242592.03	2023595.91	889.01	7.00	882.01	872.01	17.00	10
PZ-6	Piezometer	12/17/2014	1244382.89	2024661.39	915.15	13.00	902.15	892.15	23.00	10
PZ-8	Piezometer	12/15/2014	1245514.59	2026807.30	867.29	27.50	839.79	829.79	37.50	10
PZ-10	Piezometer	12/05/2014	1242058.41	2028554.29	832.02	20.00	812.02	802.02	30.00	10
PZ-11	Piezometer	12/05/2014	1240578.87	2026933.09	823.09	20.00	803.09	793.09	30.00	10
PZ-12	Piezometer	12/08/2014	1240837.96	2026731.01	818.74	37.00	781.74	771.74	47.00	10
PZ-15	Piezometer	12/10/2014	1240457.61	2025105.38	826.86	27.00	799.86	789.86	37.00	10
PZ-16	Piezometer	12/11/2014	1239419.77	2023662.22	800.70	14.50	786.20	776.20	24.50	10
PZ-17	Piezometer	12/11/2014	1239270.02	2023086.50	831.01	38.00	793.01	783.01	48.00	10
PZ-18	Piezometer	12/11/2014	1239569.52	2022299.20	814.51	27.00	787.51	777.51	37.00	10
PZ-20	Piezometer	01/31/2017	1243496.86	2030132.73	787.30	25.00	762.30	752.30	35.00	10
<i>Characterization Monitoring Well</i>										
WAMW-1	Characterization	09/16/2018	1241843.66	2028944.63	782.66	114.14	668.52	658.52	124.14	10
WAMW-2	Characterization	09/14/2018	1241547.56	2028806.27	770.82	76.14	694.68	684.68	86.14	10

Notes:

ft = feet

ft BTOC = feet below top of casing

(1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey data obtained in June 2020.

(2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey data obtained in June 2020.

(3) Total well depth accounts for sump if data provided on well construction logs.

**Table 2**  
**Groundwater Sampling Event Summary**  
**Plant Wansley AP-1, Heard and Carroll Counties, Georgia**

Well ID	Hydraulic Location	Feb 3 - 7, 2020	Mar 16 - 19, 2020	Status of Monitoring Well
		Purpose of Sampling Event:	App. IV Annual	
<b><i>Compliance Monitoring Well</i></b>				
WGWA-1	Upgradient	S03	A05	Assessment
WGWA-2	Upgradient	S03	A05	Assessment
WGWA-3	Upgradient	S03	A05	Assessment
WGWA-4	Upgradient	S03	A05	Assessment
WGWA-5	Upgradient	S03	A05	Assessment
WGWA-6	Upgradient	S03	A05	Assessment
WGWA-7	Upgradient	S03	A05	Assessment
WGWA-18	Upgradient	S03	A05	Assessment
WGWC-8	Downgradient	S03	A05	Assessment
WGWC-9	Downgradient	S03	A05	Assessment
WGWC-10	Downgradient	S03	A05	Assessment
WGWC-11	Downgradient	S03	A05	Assessment
WGWC-12	Downgradient	S03	A05	Assessment
WGWC-13	Downgradient	S03	A05	Assessment
WGWC-14A	Downgradient	S03	A05	Assessment
WGWC-15	Downgradient	S03	A05	Assessment
WGWC-16	Downgradient	S03	A05	Assessment
WGWC-17	Downgradient	S03	A05	Assessment
WGWC-19 <sup>(1)</sup>	Downgradient	S03	A05	Assessment

Notes:

S## = Initial annual Appendix IV sampling event number since program initiation in January 2018.

A## = Semiannual assessment monitoring event number for given reporting year.

(1) Due to a suspected sample identification error at the laboratory during the March 2020 event, WGWC-19 was sampled on May 4, 2020.

**Table 3**  
 Summary of Groundwater Elevations  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Well ID	Top of Casing Elevation <sup>(1)</sup> (ft NAVD88)	February 3, 2020		March 16, 2020	
		Depth to Water (ft BTOC)	Groundwater Elevations (ft NAVD88)	Depth to Water (ft BTOC)	Groundwater Elevations (ft NAVD88)
<b><i>Compliance Monitoring Well</i></b>					
WGWA-1	782.93	23.35	759.58	19.49	763.44
WGWA-2	758.23	8.29	749.94	7.88	750.35
WGWA-3	828.91	2.64	826.27	2.04	826.87
WGWA-4	834.34	3.47	830.87	1.18	833.16
WGWA-5	902.15	11.17	890.98	7.04	895.11
WGWA-6	897.13	13.05	884.08	7.95	889.18
WGWA-7	897.33	22.55	874.78	15.29	882.04
WGWA-18	878.02	18.05	859.97	10.25	867.77
WGWC-8	780.08	2.51	777.57	1.95	778.13
WGWC-9	812.03	18.20	793.83	16.31	795.72
WGWC-10	812.38	14.95	797.43	11.00	801.38
WGWC-11	823.96	17.60	806.36	12.20	811.76
WGWC-12	823.04	17.31	805.73	12.14	810.90
WGWC-13	809.78	16.81	792.97	14.48	795.30
WGWC-14A	810.94	15.26	795.68	12.28	798.66
WGWC-15	804.69	17.50	787.19	15.56	789.13
WGWC-16	804.21	19.96	784.25	14.46	789.75
WGWC-17	816.00	27.79	788.21	25.00	791.00
WGWC-19	783.42	18.32	765.10	15.73	767.69
<b><i>Piezometer</i></b>					
PZ-1	856.72	38.09	818.63	35.80	820.92
PZ-4	889.01	14.46	874.55	14.90	874.11
PZ-6	915.15	17.18	897.97	16.23	898.92
PZ-8	867.29	30.78	836.51	28.28	839.01
PZ-10	832.02	24.67	807.35	23.33	808.69
PZ-11	823.09	18.88	804.21	16.60	806.49
PZ-12	818.74	24.55	794.19	21.08	797.66
PZ-15	826.86	25.8	801.06	18.07	808.79
PZ-16	800.70	10.37	790.33	9.60	791.10
PZ-17	831.01	35.16	795.85	32.54	798.47
PZ-18	814.51	13.31	801.20	10.76	803.75
PZ-20	787.30	11.55	775.75	8.07	779.23
<b><i>Characterization Monitoring Well</i></b>					
WAMW-1	782.66	19.24	763.42	16.96	765.70
WAMW-2	770.82	12.31	758.51	10.61	760.21

Notes:

ft = feet

ft BTOC = feet below top of casing

(1) Survey data obtained June 16, 2020. Elevations referenced to the North American Vertical Datum of 1988 (ft NAVD88).

**Table 4**  
 Horizontal Groundwater Gradient and Flow Velocity Calculations  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Flow Path Direction	K (ft/d) <sup>(1)</sup>	n <sup>(1)</sup>	February 3, 2020				March 16, 2020					
			h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d) <sup>(2)</sup>	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d) <sup>(2)</sup>
PZ-1 to WGWC-17	0.67	0.25	818.63	788.21	373	0.082	0.22	820.92	791.00	373	0.080	0.21
PZ-10 to WGWC-19	0.67	0.25	807.35	765.10	446	0.095	0.25	808.69	767.69	446	0.092	0.25

Averaged for 2020					
Flow Path Direction	K (ft/d) <sup>(1)</sup>	n <sup>(1)</sup>	Δh/Δl (ft/ft)	V (ft/d) <sup>(2)</sup>	V (ft/d) <sup>(3)</sup>
PZ-1 to WGWC-17	0.67	0.25	0.081	0.22	0.23
PZ-10 to WGWC-19	0.67	0.25	0.093	0.25	

Notes:

ft = feet

ft/d = feet per day

ft/ft = feet per foot

K = hydraulic conductivity

n = effective porosity

h<sub>1</sub>, h<sub>2</sub> = groundwater elevation at identified wells

Δh/Δl = hydraulic gradient

Δh = change in groundwater elevation between identified wells

Δl = distance between identified wells

V = groundwater flow velocity

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

(2) Groundwater flow velocity equation:  $V = [K * (\Delta h / \Delta l)] / n$

(3) Average groundwater flow velocity for unit.

**Table 5**  
 Summary of Groundwater Analytical Data  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

	Well ID:	WGWA-1	WGWA-1	WGWA-2	WGWA-2	WGWA-3	WGWA-4	WGWA-4
	Sample Date:	2/3/2020	3/16/2020	2/3/2020	3/16/2020	2/4/2020	3/17/2020	2/4/2020
	Parameter <sup>(1,2,4, 5)</sup>							
Appendix III	Boron	--	<0.039	--	0.048 J	--	<0.039	--
	Calcium*	--	1.1	--	10	--	1.7	--
	Chloride*	--	4.3	--	2.7	--	1.8	--
	Fluoride	0.032 J	0.042 J	0.061 J	0.052 J	0.031 J	0.040 J	0.13
	pH <sup>(3)</sup>	5.40	5.29	6.09	6.01	5.66	5.61	7.29
	Sulfate*	--	0.42 J	--	1.3	--	1.2	--
	TDS*	--	23	--	90	--	20	--
Appendix IV	Antimony	<0.00038	--	<0.00038	--	<0.00038	--	<0.00038
	Arsenic	<0.00031	0.00038 J	<0.00031	0.00043 J	<0.00031	<0.00031	0.00033 J
	Barium	0.053	0.046	0.045	0.026	0.019	0.013	0.0087 J
	Beryllium	<0.00018	0.00071 J	<0.00018	0.00076 J	<0.00018	0.00021 J	<0.00018
	Cadmium	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00062	0.00092 J	0.00068	0.00066 J	<0.00013	<0.00013	<0.00013
	Fluoride	0.032 J	0.042 J	0.061 J	0.052 J	0.031 J	0.040 J	0.13
	Lead	<0.00013	0.00021 J	0.00013 J	0.00018 J	0.00013 J	0.00019 J	0.00019 J
	Lithium <sup>+</sup>	<0.0034	0.0053	0.0085	0.0083	<0.0034	<0.0034	0.0055
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	0.00016 J	<0.00010	0.00011 J
	Molybdenum	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	Comb. Radium 226/228	0.283 U	0.394 U	0.0879 U	0.289 U	-0.107 U	-0.139 U	1.49
	Selenium	<0.0015	<0.0015	<0.0015	0.0026 J	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	0.00036 J	0.00020 J	0.00030 J	<0.00015	<0.00015	<0.00015

Notes:

-- = Parameter was not analyzed

J = Indicates the parameter was estimated and detected between the method detection limit (MDL) and the reporting limit (RL)

< = Indicated the parameter was not detected above the applicable laboratory method detection limit (MDL).

TDS = total dissolved solids

U = Indicates the parameter was not detected above the minimum detection concentration (MDC, specific to combined radium)

(1) Appendix III/IV parameter per 40 CFR 257 Subpart D. Parameters are reported in units of milligrams per liter (mg/L), except for pH reported as s.u. (standard units) and combined radium reported as picocuries per liter (pCi/L).

(2) Metals were analyzed by EPA Method 6020B, Mercury was analyzed by EPA Method 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM2540C, and combined radium by EPA Methods 9315/9320.

(3) The pH value presented was recorded at the time of sample collection in the field.

(4) Appendix III parameters with a "\*" exhibited statistically significant increases (SSIs) over background concentrations at WGWC-8 during the March 2020 assessment monitoring event.

(5) Appendix IV parameters with a "+" exhibited statistically significant levels (SSLs) over established Groundwater Protection Standards (GWPS) at WGWC-8, WGWC-9, and WGWC-19 during during the March 2020 assessment monitoring event.

**Table 5**  
 Summary of Groundwater Analytical Data  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

	Well ID:	WGWA-5	WGWA-5	WGWA-6	WGWA-6	WGWA-7	WGWA-7	WGWA-18	WGWA-18
	Sample Date:	2/4/2020	3/17/2020	2/4/2020	3/17/2020	2/5/2020	3/17/2020	2/5/2020	3/17/2020
	Parameter <sup>(1,2,4, 5)</sup>								
Appendix III	Boron	--	<0.039	--	<0.039	--	<0.039	--	<0.039
	Calcium*	--	1.4	--	26	--	0.82	--	10
	Chloride*	--	1.6	--	1.7	--	2.2	--	2.3
	Fluoride	<0.026	<0.026	0.13	0.037 J	0.026 J	0.044 J	0.12	<0.026
	pH <sup>(3)</sup>	5.3	5.34	7.74	7.95	5.54	5.32	6.73	6.36
	Sulfate*	--	4.0	--	12	--	0.86 J	--	8.5
	TDS*	--	18	--	120	--	19	--	81
Appendix IV	Antimony	<0.00038	--	<0.00038	--	<0.00038	--	<0.00038	--
	Arsenic	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	0.00058 J	<0.00031
	Barium	0.022	0.017	0.013	0.0081 J	0.012	0.012	0.020	0.013
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	0.00041 J	<0.00018	<0.00018	<0.00018
	Cadmium	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00082	0.00066 J	<0.00013	0.00014 J	0.00021 J	0.00065 J	0.0027	0.0017 J
	Fluoride	<0.026	<0.026	0.13	0.037 J	0.026 J	0.044 J	0.12	<0.026
	Lead	0.00024 J	<0.00013	<0.00013	0.00017 J	<0.00013	<0.00013	<0.00013	<0.00013
	Lithium <sup>+</sup>	<0.0034	<0.0034	0.0053	0.0055	<0.0034	<0.0034	<0.0034	<0.0034
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	Comb. Radium 226/228	0.198 U	0.207 U	8.30	8.88	-0.0263 U	0.258 U	0.327 U	0.600 U
	Selenium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	<0.00015	<0.00015	<0.00015	0.00026 J	<0.00015	<0.00015	<0.00015

**Table 5**  
 Summary of Groundwater Analytical Data  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

	Well ID:	WGWC-8	WGWC-8	WGWC-9	WGWC-9	WGWC-10	WGWC-10	WGWC-11	WGWC-11
	Sample Date:	2/7/2020	3/19/2020	2/5/2020	3/19/2020	2/5/2020	3/18/2020	2/5/2020	3/18/2020
	Parameter <sup>(1,2,4, 5)</sup>								
Appendix III	Boron	--	2.2	--	0.55	--	0.049 J	--	<0.039
	Calcium*	--	79	--	9.3	--	7.5	--	1.6
	Chloride*	--	98	--	2.1	--	1.5	--	3.2
	Fluoride	0.25	0.057 J	1.3	1.0	0.14	0.052 J	0.045 J	<0.026
	pH <sup>(3)</sup>	5.38	6.43	6.54	6.6	6.42	6.40	5.89	5.89
	Sulfate*	--	200	--	45	--	2.1	--	1.6
	TDS*	--	540	--	160	--	58	--	26
Appendix IV	Antimony	<0.00038	--	<0.00038	--	<0.00038	--	<0.00038	--
	Arsenic	0.0011	0.00071 J	<0.00031	<0.00031	0.00035 J	<0.00031	<0.00031	<0.00031
	Barium	<0.0016	<0.0016	0.0022 J	0.0021 J	0.061	0.035	0.047	0.038
	Beryllium	0.0023	0.0028	0.00040 J	0.00056 J	<0.00018	<0.00018	<0.00018	<0.00018
	Cadmium	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	0.0022	<0.0015	<0.0015	<0.0015
	Cobalt	0.0011	0.00092 J	<0.00013	<0.00013	0.0013	0.0012 J	0.00026 J	0.00069 J
	Fluoride	0.25	0.057 J	1.3	1.0	0.14	0.052 J	0.045 J	<0.026
	Lead	<0.00013	0.00016 J	<0.00013	<0.00013	0.00016 J	0.00021 J	<0.00013	<0.00013
	Lithium <sup>+</sup>	0.014	0.015	0.034	0.039	0.0061	0.0071	<0.0034	<0.0034
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum	<0.00061	<0.00061	0.0044 J	0.0042 J	<0.00061	<0.00061	<0.00061	<0.00061
	Comb. Radium 226/228	1.66	1.21	-0.137 U	0.230 U	0.0961 U	0.461 U	0.163 U	0.866
	Selenium	0.0048 J	0.0037 J	0.0033 J	0.0033 J	<0.0015	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015

**Table 5**  
 Summary of Groundwater Analytical Data  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

	Well ID:	WGWC-12	WGWC-12	WGWC-13	WGWC-13	WGWC-14A	WGWC-14A	WGWC-15	WGWC-15
	Sample Date:	2/5/2020	3/18/2020	2/5/2020	3/19/2020	2/5/2020	3/19/2020	2/7/2020	3/18/2020
	Parameter <sup>(1,2,4, 5)</sup>								
Appendix III	Boron	--	0.039 J	--	0.053 J	--	0.039 J	--	0.071 J
	Calcium*	--	14	--	5.0	--	0.89	--	30
	Chloride*	--	3.2	--	1.3	--	1.9	--	1.7
	Fluoride	0.098 J	0.033 J	0.20	0.15	0.040 J	<0.026	0.79	0.71
	pH <sup>(3)</sup>	6.76	6.93	6.44	6.56	5.52	5.49	7.66	7.73
	Sulfate*	--	12	--	4.0	--	1.5	--	17
	TDS*	--	73	--	95	--	18	--	160
Appendix IV	Antimony	<0.00038	--	<0.00038	--	<0.00038	--	<0.00038	--
	Arsenic	<0.00031	<0.00031	0.00048 J	0.00039 J	<0.00031	<0.00031	0.0010	0.00088 J
	Barium	0.016	0.016	0.052	0.072	0.077	0.031	0.022	0.021
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	0.00024 J	0.00025 J	<0.00018	<0.00018
	Cadmium	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022
	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	0.0017 J	<0.0015	<0.0015	<0.0015
	Cobalt	0.00058	0.00071 J	<0.00013	<0.00013	0.0044	0.0039	<0.00013	<0.00013
	Fluoride	0.098 J	0.033 J	0.20	0.15	0.040 J	<0.026	0.79	0.71
	Lead	<0.00013	<0.00013	0.00045 J	0.00060 J	<0.00013	0.00017 J	<0.00013	<0.00013
	Lithium <sup>+</sup>	0.0063	0.0081	<0.0034	<0.0034	<0.0034	<0.0034	0.0068	0.0086
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum	<0.00061	<0.00061	0.0012 J	0.0018 J	<0.00061	<0.00061	0.0024 J	0.0020 J
	Comb. Radium 226/228	0.225 U	-0.0262 U	0.609	0.470	0.500	0.376 U	0.125 U	0.303 U
	Selenium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	<0.00015	<0.00015	<0.00015	0.00022 J	0.00017 J	<0.00015	<0.00015

**Table 5**  
 Summary of Groundwater Analytical Data  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

	Well ID:	WGWC-16	WGWC-16	WGWC-17	WGWC-17	WGWC-19	WGWC-19
	Sample Date:	2/7/2020	3/18/2020	2/7/2020	3/18/2020	2/7/2020	5/4/2020
	Parameter <sup>(1,2,4,5)</sup>						
Appendix III	Boron	--	2.0	--	0.049 J	--	<0.039
	Calcium*	--	66	--	6.3	--	15
	Chloride*	--	93	--	1.5	--	2.8
	Fluoride	0.072 J	0.084 J	0.079 J	<0.026	0.35	0.36
	pH <sup>(3)</sup>	5.17	5.08	6.34	6.30	7.08	7.11
	Sulfate*	--	120	--	4.2	--	4.5
	TDS*	--	370	--	98	--	110
Appendix IV	Antimony	<0.00038	--	<0.00038	--	<0.00038	--
	Arsenic	<0.00031	<0.00031	0.00075 J	0.00054 J	<0.00031	<0.00031
	Barium	0.034	0.034	0.011	0.012	0.0065 J	<0.0016
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
	Cadmium	<0.00022	0.00022 J	<0.00022	<0.00022	<0.00022	<0.00022
	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00016 J	0.00016 J	0.00077	0.00052 J	0.00024 J	0.00018 J
	Fluoride	0.072 J	0.084 J	0.079 J	<0.026	0.35	0.36
	Lead	<0.00013	<0.00013	<0.00013	0.00020 J	<0.00013	<0.00013
	Lithium <sup>+</sup>	0.0053	0.0057	0.0045 J	0.0054	0.044	0.049
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00013
	Molybdenum	<0.00061	<0.00061	0.0025 J	0.0024 J	0.0014 J	0.0013 J
	Comb. Radium 226/228	0.797	0.437	0.244 U	0.0655 U	0.200 U	0.0697 U
	Selenium	0.0036 J	0.0046 J	<0.0015	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015

**Table 6**  
 Summary of Background Concentrations and Groundwater Protection Standards  
 March 2020 Event  
 Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Analyte	Units	Background <sup>(1)</sup>	Federal GWPS <sup>(2)</sup>	State GWPS <sup>(3)</sup>
Antimony	mg/L	0.0022	0.006	0.006
Arsenic	mg/L	0.0014	0.01	0.01
Barium	mg/L	0.062	2	2
Beryllium	mg/L	0.0025	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.0049	0.1	0.1
Cobalt	mg/L	0.013	0.013	0.013
Fluoride	mg/L	0.284	4	4
Lead	mg/L	0.001	0.015	0.001
Lithium	mg/L	0.009	0.040	0.009
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.015	0.1	0.015
Selenium	mg/L	0.005	0.05	0.05
Thallium	mg/L	0.001	0.002	0.002
Combined Radium-226/228	pCi/L	10.4	10.4	10.4

Notes:

"mg/L" = milligrams per liter

"pCi/L" = picocuries per liter

"--" = Parameter has not been detected a sufficient number of times to provide a sample set size adequate for statistical analysis

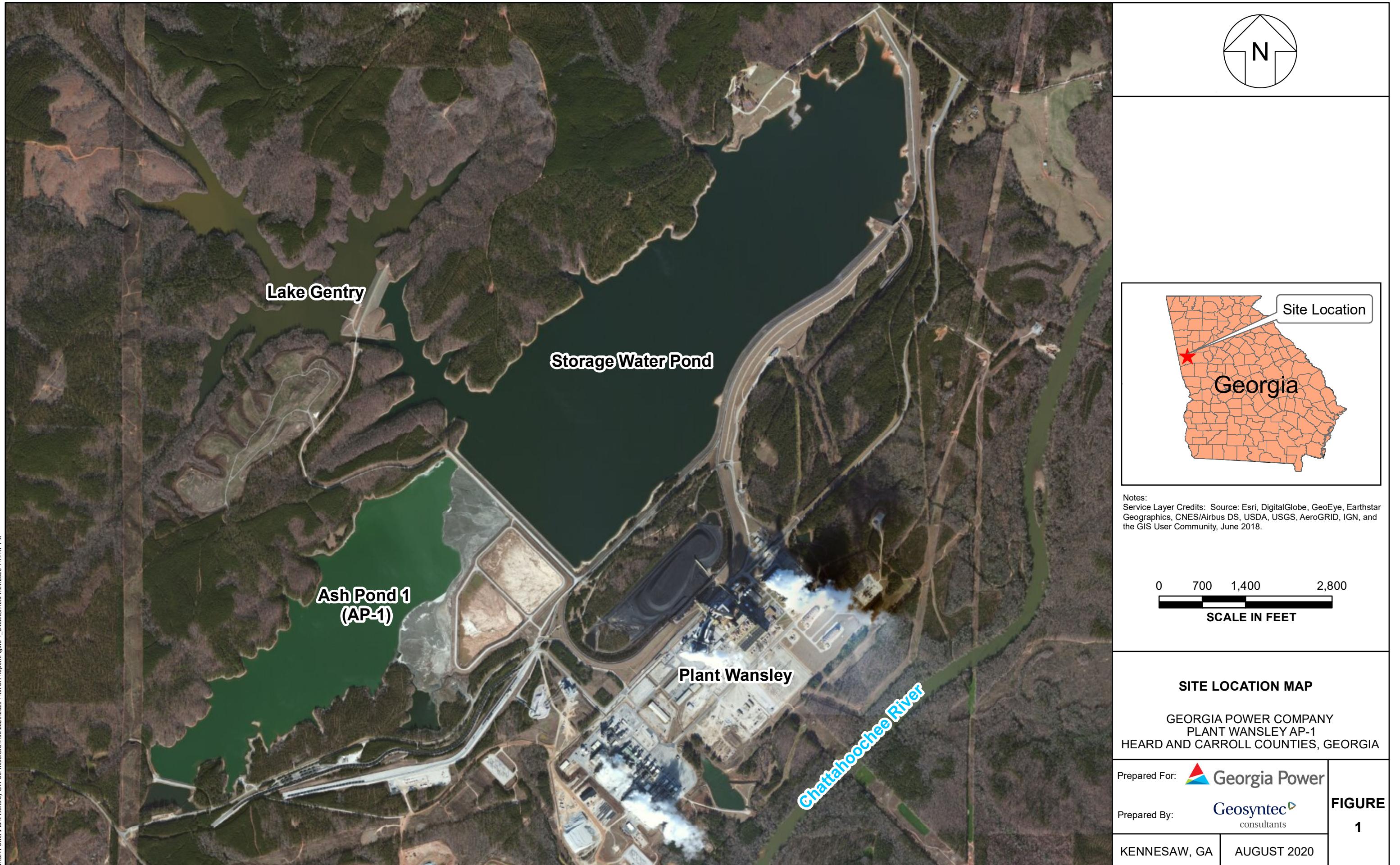
1. The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR

§257.95(h) and Georgia Environmental Protection Division (EPD) Rule 391-3-4-10(6)(a).

2. Under 40 CFR §257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under 141.62 and 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS is used; or (iii) background concentrations for constituents were the background level is higher than the MCL or rule-specified GWPS.

3. Under the existing Georgia EPD rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background concentrations for constituents were the background level is higher than the MCL.

## **FIGURES**









## APPENDIX A

### Certified Survey Data

Well ID	Casing Northing	Casing Easting	Top of Casing Elevation	Nail on Pad Northing	Nail on Pad Easting	Nail on Pad Elevation
PZ-1	1240249.8630	2022319.9310	856.72	1240249.9700	2022320.5080	853.91
PZ-4	1242592.0290	2023595.9140	889.01	1242592.3380	2023596.5490	886.13
PZ-6	1244382.8880	2024661.3940	915.15	1244383.1700	2024661.9960	912.30
PZ-8	1245514.5910	2026807.2980	867.29	1245514.7420	2026806.5550	864.65
PZ-10	1242058.4080	2028554.2850	832.02	1242059.0170	2028553.7330	829.26
PZ-11	1240578.8710	2026933.0880	823.09	1240579.6810	2026932.6430	820.21
PZ-12	1240837.9640	2026731.0050	818.74	1240838.5000	2026731.0470	816.17
PZ-15	1240457.6050	2025105.3770	826.86	1240456.9660	2025105.5600	824.59
PZ-16	1239419.7700	2023662.2240	800.70	1239419.1270	2023662.3410	798.05
PZ-17	1239270.0160	2023086.5000	831.01	1239269.7540	2023086.3130	828.54
PZ-18	1239569.5150	2022299.1990	814.51	1239569.7940	2022300.1040	812.10
PZ-20	1243496.8600	2030132.7300	787.30	1243495.6070	2030132.0520	784.45
WAMW-1	1241843.6600	2028944.6250	782.66	1241844.0310	2028943.9790	780.05
WAMW-2	1241547.5560	2028806.2670	770.82	1241547.1220	2028805.7030	768.39
WGWA-1	1250656.0950	2035580.7080	782.93	1250656.4090	2035580.1280	780.37
WGWA-2	1251556.3950	2035590.1080	758.23	1251556.3970	2035589.4980	755.77
WGWA-3	1240848.2140	2022350.0950	828.91	1240848.0950	2022350.8040	826.63
WGWA-4	1240879.5820	2022339.6570	834.34	1240879.8680	2022340.9730	831.33
WGWA-5	1241997.9440	2022368.8480	902.15	1241998.0000	2022369.7100	899.28
WGWA-6	1241932.0170	2022360.5840	897.13	1241931.8200	2022361.6140	894.62
WGWA-7	1243338.6270	2023843.8080	897.33	1243337.9640	2023843.4880	894.49
WGWA-18	1244592.5610	2025580.7050	878.02	1244592.1320	2025580.1320	875.47
WGWC-8	1242929.4040	2029644.5810	780.08	1242928.7100	2029644.4410	777.70
WGWC-9	1242801.1220	2029115.7520	812.03	1242800.5100	2029116.3540	809.33
WGWC-10	1240971.9590	2026725.6080	812.38	1240971.3740	2026725.3710	809.61
WGWC-11	1240860.1770	2025773.3940	823.96	1240859.5740	2025772.9470	821.44
WGWC-12	1240827.6760	2025755.9870	823.04	1240827.1900	2025755.4920	820.57
WGWC-13	1240610.9290	2024585.9120	809.78	1240610.3180	2024586.1010	807.32
WGWC-14A	1240604.5360	2024599.6310	810.94	1240603.9380	2024598.3360	808.20
WGWC-15	1240483.1620	2023912.9150	804.69	1240483.1680	2023912.2850	802.03
WGWC-16	1240480.4570	2023903.7730	804.21	1240480.3010	2023903.1200	801.72
WGWC-17	1240052.0560	2022623.8220	816.00	1240052.0140	2022623.1790	813.36
WGWC-19	1241851.5120	2028949.1850	783.42	1241851.9040	2028948.5970	780.60

Benchmark	Northing	Easting	Elevation
BM-W1	1243475.416	2029633.083	804.08
BM-W2	1251565.596	2035853.723	747.75

SURVEY DATA CERTIFICATION FOR SOUTHERN COMPANY TO DETERMINE NORTHING, EASTING, AND VERTICAL ELEVATION OF THE NAIL IN THE CONCRETE PAD & THE PVC WELL CASING. DATE OF FIELD SURVEY & INSPECTION: 06/03/2020-06/10/2020. FIELD SURVEY POSITIONAL TOLERANCE=0.5 FEET HORIZONTAL-NAD'83, 0.01 VERTICAL-NAVD '88. EQUIPMENT USED FOR HORIZONTAL LOCATION: TRIMBLE R10 RTK GPS & TRIMBLE S5 ROBOTIC TOTAL STATION. THE VERTICAL LOCATION OF EACH SURVEYED POINT WAS ESTABLISHED BASED UPON LEVEL RUNS WITH A DIGITAL LEVEL LOOP FROM VERTICAL CONTROL ESTABLISHED BY ON-SITE BENCHMARK BM-W1 & BM-W2 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL




06/16/202

## **APPENDIX B**

### **Well Inspection Forms**

# WELL CONDITION SUMMARY

Site: Plant Wansley - Ash Ponds

Date(s): 3-16-20

Page: 1 of 4

*T. Goble*

ATLANTIC COAST  
CONSULTING, INC.

Personnel:

*T. Goble*

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
WGWA-1	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-2	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-3	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-4	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-5	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-6	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWA-7	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWC-8	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWC-9	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
WGWC-10	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

# WELL CONDITION SUMMARY

Site: Plant Wansley - Ash Ponds

Date(s): 3-16-20

Page: 2 of 4

*T. Gable*  
ATLANTIC COAST  
CONSULTING, INC.

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
WGWC-11	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
WGWC-11	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
WGWC-12	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
WGWC-12	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
WGWC-13	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
WGWC-13	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
WGWC-14	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
WGWC-14	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
WGWC-14A	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
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WGWC-16	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
WGWC-16	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
WGWC-17	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
WGWC-17	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
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WGWA-18	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
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PZ-1	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No

# WELL CONDITION SUMMARY

Site: Plant Wansley - Ash Ponds

Date(s): 3-16-20

Personnel:

T. Gobie

ATLANTIC COAST  
CONSULTING, INC.

Page: 3 of 4

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
PZ-4	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-6	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-8	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
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PZ-12	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-15	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-16	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
PZ-17	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> OK <input type="checkbox"/> Damaged	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

# WELL CONDITION SUMMARY

Site: Plant Wansley - Ash Ponds

Date(s): 3-16-20

ATLANTIC COAST  
CONSULTING, INC.

Personnel: T. Gobie

Page: 4 of 4

Well ID	Protective Casing	Well Casing	Label	Bollards	Lock	Well Pad	Weep Hole	Vent Hole	Notes
PZ-18	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input type="checkbox"/> Deficient	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
PZ-20	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input type="checkbox"/> Deficient	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No
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	<input type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input type="checkbox"/> Deficient	<input type="checkbox"/> Yes	<input type="checkbox"/> OK	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No
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	<input type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input type="checkbox"/> Deficient	<input type="checkbox"/> Yes	<input type="checkbox"/> OK	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No
	<input type="checkbox"/> OK	<input type="checkbox"/> OK	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> OK	<input type="checkbox"/> Deficient	<input type="checkbox"/> Yes	<input type="checkbox"/> OK	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
	<input type="checkbox"/> Damaged	<input type="checkbox"/> Damaged	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Deficient	<input type="checkbox"/> No	<input type="checkbox"/> Damaged	<input type="checkbox"/> No	<input type="checkbox"/> No

## APPENDIX C

### Laboratory Analytical and Field Sampling Reports

Appendix C1: Laboratory Data Packages and Data Validation Reports

Appendix C2: Field Data Sheets

## APPENDIX C1

### Laboratory Analytical Data Packages and Data Validation Reports

# Laboratory Reports



# Environment Testing TestAmerica

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## ANALYTICAL REPORT

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

Laboratory Job ID: 180-102004-1

Client Project/Site: CCR - Plant Wansley

Sampling Event: Wansley Ash Pond Initial Scan Event

**For:**

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

Attn: Joju Abraham

Authorized for release by:

2/25/2020 8:05:04 PM

Veronica Bortot, Senior Project Manager

(412)963-2435

[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

LINKS

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results through

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The  
Expert

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

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

PA Lab ID: 02-00416

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# Case Narrative

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

Job ID: 180-102004-1

## Job ID: 180-102004-1

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-102004-1

### Comments

No additional comments.

### Receipt

The samples were received on 2/6/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.4° C and 3.8° C.

### GC Semi VOA

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

### Metals

Methods 200.8, 6020A, 6020B: The following samples were diluted due to the nature of the sample matrix: (180-101756-M-1-B ^100), (180-101756-M-1-C MS ^100), (180-101756-M-1-D MSD ^100), (180-101756-M-1-B PDS ^100) and (180-101756-M-1-B SD ^500). Elevated reporting limits (RLs) are provided.

Methods 200.8, 6020A, 6020B: The continuing calibration verification (CCV) associated with batch 180-307621 recovered above the upper control limit for boron. The samples associated with this CCV were non-detects or less than the RL for the affected analytes; therefore, the data have been reported.

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: 180-102004-1

## 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
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	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: 180-102004-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20 *
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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

Eurofins TestAmerica, Pittsburgh

## Sample Summary

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

Job ID: 180-102004-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID	
180-102004-1	WGWA-2	Water	02/03/20 15:18	02/06/20 10:00		1
180-102004-2	WGWA-4	Water	02/04/20 10:45	02/06/20 10:00		2
180-102004-3	WGWA-3	Water	02/04/20 11:42	02/06/20 10:00		3
180-102004-4	WGWA-5	Water	02/04/20 15:17	02/06/20 10:00		4
180-102004-5	WGWA-6	Water	02/04/20 14:55	02/06/20 10:00		5
180-102004-6	WGWA-1	Water	02/03/20 15:30	02/06/20 10:00		6
180-102004-7	Dup-1	Water	02/04/20 00:00	02/06/20 10:00		7
180-102004-8	FB-1-2-4-20	Water	02/04/20 14:30	02/06/20 10:00		8
180-102004-9	EB-1-2-4-20	Water	02/04/20 14:00	02/06/20 10:00		9

## Method Summary

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

Job ID: 180-102004-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	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:

EPA = US Environmental Protection Agency

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

### Laboratory References:

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: 180-102004-1

**Client Sample ID: WGWA-2**  
**Date Collected: 02/03/20 15:18**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-1**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			306773	02/12/20 17:56	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:19	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:07	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307012	02/13/20 16:03	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307145	02/14/20 15:02	NAM	TAL PIT

**Client Sample ID: WGWA-4**  
**Date Collected: 02/04/20 10:45**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-2**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 05:59	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:22	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:09	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307012	02/13/20 16:03	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307145	02/14/20 15:04	NAM	TAL PIT

**Client Sample ID: WGWA-3**  
**Date Collected: 02/04/20 11:42**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-3**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 06:51	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:24	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:12	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307012	02/13/20 16:03	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307145	02/14/20 15:05	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102004-1

**Client Sample ID: WGWA-5**  
**Date Collected: 02/04/20 15:17**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-4**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 07:06	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:27	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:24	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:12	NAM	TAL PIT

**Client Sample ID: WGWA-6**  
**Date Collected: 02/04/20 14:55**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-5**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			307466	02/19/20 06:41	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:29	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:22	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:15	NAM	TAL PIT

**Client Sample ID: WGWA-1**  
**Date Collected: 02/03/20 15:30**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-6**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			306773	02/12/20 18:41	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:31	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:14	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:16	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102004-1

**Client Sample ID: Dup-1**

Date Collected: 02/04/20 00:00

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-7**

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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 07:21	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:34	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:27	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:17	NAM	TAL PIT

**Client Sample ID: FB-1-2-4-20**

Date Collected: 02/04/20 14:30

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-8**

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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 05:28	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:41	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:29	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:18	NAM	TAL PIT

**Client Sample ID: EB-1-2-4-20**

Date Collected: 02/04/20 14:00

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-9**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307222	02/17/20 05:43	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307167	02/14/20 17:44	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307621	02/19/20 18:32	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307128	02/14/20 13:55	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 14:21	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

## Lab Chronicle

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

Job ID: 180-102004-1

### Laboratory References:

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

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

JL = James Lyu

KEM = Kimberly Mahoney

NAM = Nicole Marfisi

Batch Type: Analysis

MJH = Matthew Hartman

NAM = Nicole Marfisi

RSK = Robert Kurtz

SAC = Shawn Clemente

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# Client Sample Results

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

Job ID: 180-102004-1

**Client Sample ID: WGWA-2**

**Lab Sample ID: 180-102004-1**

Matrix: Water

Date Collected: 02/03/20 15:18

Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.061	J	0.10	0.026	mg/L			02/12/20 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L				1
<b>Barium</b>	<b>0.045</b>		0.010	0.0016	mg/L				1
Beryllium	<0.00018		0.0010	0.00018	mg/L				1
Cadmium	<0.00022		0.0010	0.00022	mg/L				1
Chromium	<0.0015		0.0020	0.0015	mg/L				1
<b>Cobalt</b>	<b>0.00068</b>		0.00050	0.00013	mg/L				1
Molybdenum	<0.00061		0.0050	0.00061	mg/L				1
<b>Lead</b>	<b>0.00013 J B</b>		0.0010	0.00013	mg/L				1
Antimony	<0.00038		0.0020	0.00038	mg/L				1
Selenium	<0.0015		0.0050	0.0015	mg/L				1
<b>Thallium</b>	<b>0.00020 J B</b>		0.0010	0.00015	mg/L				1
Lithium	<b>0.0085</b>		0.0050	0.0034	mg/L				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				1

**Client Sample ID: WGWA-4**

**Lab Sample ID: 180-102004-2**

Matrix: Water

Date Collected: 02/04/20 10:45

Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13		0.10	0.026	mg/L			02/17/20 05:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.00033 J</b>		0.0010	0.00031	mg/L				1
<b>Barium</b>	<b>0.0087 J</b>		0.010	0.0016	mg/L				1
Beryllium	<0.00018		0.0010	0.00018	mg/L				1
Cadmium	<0.00022		0.0010	0.00022	mg/L				1
Chromium	<0.0015		0.0020	0.0015	mg/L				1
Cobalt	<0.00013		0.00050	0.00013	mg/L				1
Molybdenum	<0.00061		0.0050	0.00061	mg/L				1
<b>Lead</b>	<b>0.00019 J B</b>		0.0010	0.00013	mg/L				1
Antimony	<0.00038		0.0020	0.00038	mg/L				1
Selenium	<0.0015		0.0050	0.0015	mg/L				1
Thallium	<0.00015		0.0010	0.00015	mg/L				1
Lithium	<b>0.0055</b>		0.0050	0.0034	mg/L				1

**Method: EPA 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00011	J	0.00020	0.00010	mg/L				1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102004-1

**Client Sample ID: WGWA-3**  
Date Collected: 02/04/20 11:42  
Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-3**  
Matrix: Water

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.031	J	0.10	0.026	mg/L			02/17/20 06:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 17:24	1
<b>Barium</b>	<b>0.019</b>		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:12	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:24	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:24	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:24	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:24	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:24	1
<b>Lead</b>	<b>0.00013</b>	<b>J B</b>	0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:24	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:24	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:24	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:24	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:12	1

## Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00016	J	0.00020	0.00010	mg/L		02/13/20 16:03	02/14/20 15:05	1

**Client Sample ID: WGWA-5**

Date Collected: 02/04/20 15:17  
Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-4**

Matrix: Water

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/17/20 07:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 17:27	1
<b>Barium</b>	<b>0.022</b>		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:24	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:27	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:27	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:27	1
<b>Cobalt</b>	<b>0.00082</b>		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:27	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:27	1
<b>Lead</b>	<b>0.00024</b>	<b>J B</b>	0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:27	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:27	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:27	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:27	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:24	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		02/14/20 13:55	02/17/20 14:12	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102004-1

**Client Sample ID: WGWA-6**

**Lab Sample ID: 180-102004-5**

Matrix: Water

Date Collected: 02/04/20 14:55  
Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13		0.10	0.026	mg/L			02/19/20 06:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			02/12/20 15:51	02/14/20 17:29
<b>Barium</b>	<b>0.013</b>		0.010	0.0016	mg/L			02/18/20 09:20	02/19/20 18:22
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/12/20 15:51	02/14/20 17:29
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/12/20 15:51	02/14/20 17:29
Chromium	<0.0015		0.0020	0.0015	mg/L			02/12/20 15:51	02/14/20 17:29
Cobalt	<0.00013		0.00050	0.00013	mg/L			02/12/20 15:51	02/14/20 17:29
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/12/20 15:51	02/14/20 17:29
Lead	<0.00013		0.0010	0.00013	mg/L			02/12/20 15:51	02/14/20 17:29
Antimony	<0.00038		0.0020	0.00038	mg/L			02/12/20 15:51	02/14/20 17:29
Selenium	<0.0015		0.0050	0.0015	mg/L			02/12/20 15:51	02/14/20 17:29
Thallium	<0.00015		0.0010	0.00015	mg/L			02/12/20 15:51	02/14/20 17:29
Lithium	<b>0.0053</b>		0.0050	0.0034	mg/L			02/18/20 09:20	02/19/20 18:22

**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			02/14/20 13:55	02/17/20 14:15

**Client Sample ID: WGWA-1**

**Lab Sample ID: 180-102004-6**

Matrix: Water

Date Collected: 02/03/20 15:30  
Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.032	J	0.10	0.026	mg/L			02/12/20 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			02/12/20 15:51	02/14/20 17:31
<b>Barium</b>	<b>0.053</b>		0.010	0.0016	mg/L			02/18/20 09:20	02/19/20 18:14
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/12/20 15:51	02/14/20 17:31
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/12/20 15:51	02/14/20 17:31
Chromium	<0.0015		0.0020	0.0015	mg/L			02/12/20 15:51	02/14/20 17:31
<b>Cobalt</b>	<b>0.00062</b>		0.00050	0.00013	mg/L			02/12/20 15:51	02/14/20 17:31
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/12/20 15:51	02/14/20 17:31
Lead	<0.00013		0.0010	0.00013	mg/L			02/12/20 15:51	02/14/20 17:31
Antimony	<0.00038		0.0020	0.00038	mg/L			02/12/20 15:51	02/14/20 17:31
Selenium	<0.0015		0.0050	0.0015	mg/L			02/12/20 15:51	02/14/20 17:31
Thallium	<0.00015		0.0010	0.00015	mg/L			02/12/20 15:51	02/14/20 17:31
Lithium	<0.0034		0.0050	0.0034	mg/L			02/18/20 09:20	02/19/20 18:14

**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			02/14/20 13:55	02/17/20 14:16

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# Client Sample Results

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

Job ID: 180-102004-1

**Client Sample ID: Dup-1**

**Lab Sample ID: 180-102004-7**

Matrix: Water

Date Collected: 02/04/20 00:00  
Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.036	J	0.10	0.026	mg/L			02/17/20 07:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L				1
Barium	0.017		0.010	0.0016	mg/L				1
Beryllium	<0.00018		0.0010	0.00018	mg/L				1
Cadmium	<0.00022		0.0010	0.00022	mg/L				1
Chromium	<0.0015		0.0020	0.0015	mg/L				1
Cobalt	<0.00013		0.00050	0.00013	mg/L				1
Molybdenum	<0.00061		0.0050	0.00061	mg/L				1
Lead	<0.00013		0.0010	0.00013	mg/L				1
Antimony	<0.00038		0.0020	0.00038	mg/L				1
Selenium	<0.0015		0.0050	0.0015	mg/L				1
Thallium	<0.00015		0.0010	0.00015	mg/L				1
Lithium	<0.0034		0.0050	0.0034	mg/L				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				1

**Client Sample ID: FB-1-2-4-20**

**Lab Sample ID: 180-102004-8**

Matrix: Water

Date Collected: 02/04/20 14:30  
Date Received: 02/06/20 10:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.029	J	0.10	0.026	mg/L			02/17/20 05:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L				1
Barium	<0.0016		0.010	0.0016	mg/L				1
Beryllium	<0.00018		0.0010	0.00018	mg/L				1
Cadmium	<0.00022		0.0010	0.00022	mg/L				1
Chromium	<0.0015		0.0020	0.0015	mg/L				1
Cobalt	<0.00013		0.00050	0.00013	mg/L				1
Molybdenum	<0.00061		0.0050	0.00061	mg/L				1
Lead	<0.00013		0.0010	0.00013	mg/L				1
Antimony	<0.00038		0.0020	0.00038	mg/L				1
Selenium	<0.0015		0.0050	0.0015	mg/L				1
Thallium	<0.00015		0.0010	0.00015	mg/L				1
Lithium	<0.0034		0.0050	0.0034	mg/L				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				1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102004-1

**Client Sample ID: EB-1-2-4-20**

**Lab Sample ID: 180-102004-9**

**Matrix: Water**

Date Collected: 02/04/20 14:00  
Date Received: 02/06/20 10:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.046	J	0.10	0.026	mg/L			02/17/20 05:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 17:44	1
<b>Barium</b>	<b>0.0017</b>	<b>J</b>	0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:32	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:44	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:44	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:44	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:44	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:44	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:44	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:32	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		02/14/20 13:55	02/17/20 14:21	1

# QC Sample Results

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

Job ID: 180-102004-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID:** MB 180-306773/48

**Matrix:** Water

**Analysis Batch:** 306773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/12/20 17:40	1

**Lab Sample ID:** LCS 180-306773/47

**Matrix:** Water

**Analysis Batch:** 306773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	2.50	2.53		mg/L		101	90 - 110

**Lab Sample ID:** 180-102004-1 MS

**Matrix:** Water

**Analysis Batch:** 306773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Fluoride	0.061	J	1.25	1.30		mg/L		99	80 - 120

**Lab Sample ID:** 180-102004-1 MSD

**Matrix:** Water

**Analysis Batch:** 306773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Fluoride	0.061	J	1.25	1.26		mg/L		96	80 - 120	4 20

**Lab Sample ID:** MB 180-307222/6

**Matrix:** Water

**Analysis Batch:** 307222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/17/20 04:57	1

**Lab Sample ID:** LCS 180-307222/5

**Matrix:** Water

**Analysis Batch:** 307222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	2.50	2.61		mg/L		104	90 - 110

**Lab Sample ID:** 180-102004-2 MS

**Matrix:** Water

**Analysis Batch:** 307222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Fluoride	0.13		1.25	1.38		mg/L		100	80 - 120

**Lab Sample ID:** 180-102004-2 MSD

**Matrix:** Water

**Analysis Batch:** 307222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Fluoride	0.13		1.25	1.36		mg/L		98	80 - 120	2 20

**Client Sample ID:** WGWA-4  
**Prep Type:** Total/NA

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# QC Sample Results

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

Job ID: 180-102004-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID:** MB 180-307466/6

**Matrix:** Water

**Analysis Batch:** 307466

**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		0.10	0.026	mg/L			02/19/20 05:51	1

**Lab Sample ID:** LCS 180-307466/5

**Matrix:** Water

**Analysis Batch:** 307466

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	2.50	2.58		mg/L		103	90 - 110

**Lab Sample ID:** 180-102004-5 MS

**Matrix:** Water

**Analysis Batch:** 307466

**Client Sample ID:** WGWA-6  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Fluoride	0.13		1.25	1.35		mg/L		98	80 - 120

**Lab Sample ID:** 180-102004-5 MSD

**Matrix:** Water

**Analysis Batch:** 307466

**Client Sample ID:** WGWA-6  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Fluoride	0.13		1.25	1.36		mg/L		99	80 - 120	1 20

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID:** MB 180-306884/1-A

**Matrix:** Water

**Analysis Batch:** 307167

**Client Sample ID:** Method Blank  
**Prep Type:** Total Recoverable  
**Prep Batch:** 306884

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 16:31	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 16:31	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 16:31	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 16:31	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 16:31	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 16:31	1
Lead	0.000161 J		0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 16:31	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 16:31	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 16:31	1
Thallium	0.000165 J		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 16:31	1

**Lab Sample ID:** LCS 180-306668/2-C

**Matrix:** Water

**Analysis Batch:** 307167

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total Recoverable  
**Prep Batch:** 306884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Arsenic	1.00	1.01		mg/L		101	80 - 120
Beryllium	0.500	0.542		mg/L		108	80 - 120
Cadmium	0.500	0.532		mg/L		106	80 - 120
Chromium	0.500	0.521		mg/L		104	80 - 120

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-102004-1

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

**Lab Sample ID: LCS 180-306668/2-C**

**Matrix: Water**

**Analysis Batch: 307167**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 306884**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cobalt	0.500	0.500		mg/L	100	80 - 120	
Molybdenum	0.500	0.520		mg/L	104	80 - 120	
Lead	0.500	0.519		mg/L	104	80 - 120	
Antimony	0.250	0.246		mg/L	98	80 - 120	
Selenium	1.00	1.02		mg/L	102	80 - 120	
Thallium	1.00	1.03		mg/L	103	80 - 120	

**Lab Sample ID: LCS 180-306884/2-A**

**Matrix: Water**

**Analysis Batch: 307167**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 306884**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.02		mg/L	102	80 - 120	
Beryllium	0.500	0.531		mg/L	106	80 - 120	
Cadmium	0.500	0.531		mg/L	106	80 - 120	
Chromium	0.500	0.520		mg/L	104	80 - 120	
Cobalt	0.500	0.505		mg/L	101	80 - 120	
Molybdenum	0.500	0.526		mg/L	105	80 - 120	
Lead	0.500	0.513		mg/L	103	80 - 120	
Antimony	0.250	0.246		mg/L	99	80 - 120	
Selenium	1.00	0.999		mg/L	100	80 - 120	
Thallium	1.00	1.02		mg/L	102	80 - 120	

**Lab Sample ID: MB 180-307378/1-A**

**Matrix: Water**

**Analysis Batch: 307621**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 307378**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.0016		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:34	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:34	1

**Lab Sample ID: LCS 180-307378/2-A**

**Matrix: Water**

**Analysis Batch: 307621**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 307378**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Barium	1.00	1.09		mg/L	109	80 - 120	
Lithium	0.500	0.479		mg/L	96	80 - 120	

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-307012/1-A**

**Matrix: Water**

**Analysis Batch: 307145**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 307012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		02/13/20 16:03	02/14/20 14:41	1

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# QC Sample Results

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

Job ID: 180-102004-1

## Method: EPA 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCS 180-307012/2-A**

**Matrix: Water**

**Analysis Batch: 307145**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 307012**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Mercury	0.00250	0.00255		mg/L	102		80 - 120

**Lab Sample ID: 180-102004-3 MS**

**Matrix: Water**

**Analysis Batch: 307145**

**Client Sample ID: WGWA-3**

**Prep Type: Total/NA**

**Prep Batch: 307012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Mercury	0.00016	J	0.00100	0.00118		mg/L	102		75 - 125

**Lab Sample ID: 180-102004-3 MSD**

**Matrix: Water**

**Analysis Batch: 307145**

**Client Sample ID: WGWA-3**

**Prep Type: Total/NA**

**Prep Batch: 307012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Mercury	0.00016	J	0.00100	0.00129		mg/L	113		75 - 125	9 20

**Lab Sample ID: MB 180-307128/1-A**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 307128**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		02/14/20 13:55	02/17/20 14:10	1

**Lab Sample ID: LCS 180-307128/2-A**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 307128**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Mercury	0.00250	0.00241		mg/L	96		80 - 120

**Lab Sample ID: 180-102004-4 MS**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: WGWA-5**

**Prep Type: Total/NA**

**Prep Batch: 307128**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Mercury	<0.00010		0.00100	0.000955		mg/L	96		75 - 125

**Lab Sample ID: 180-102004-4 MSD**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: WGWA-5**

**Prep Type: Total/NA**

**Prep Batch: 307128**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Mercury	<0.00010		0.00100	0.000992		mg/L	99		75 - 125	4 20

# QC Association Summary

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

Job ID: 180-102004-1

## HPLC/IC

### Analysis Batch: 306773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-102004-6	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-306773/48	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-306773/47	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-102004-1 MS	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-102004-1 MSD	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 307222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-2	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-102004-3	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-102004-4	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-102004-7	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-102004-8	FB-1-2-4-20	Total/NA	Water	EPA 300.0 R2.1	
180-102004-9	EB-1-2-4-20	Total/NA	Water	EPA 300.0 R2.1	
MB 180-307222/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-307222/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-102004-2 MS	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-102004-2 MSD	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 307466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-5	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
MB 180-307466/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-307466/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-102004-5 MS	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
180-102004-5 MSD	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Filtration Batch: 306668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-306668/2-C	Lab Control Sample	Total Recoverable	Water	Filtration	

### Prep Batch: 306884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total Recoverable	Water	3005A	
180-102004-2	WGWA-4	Total Recoverable	Water	3005A	
180-102004-3	WGWA-3	Total Recoverable	Water	3005A	
180-102004-4	WGWA-5	Total Recoverable	Water	3005A	
180-102004-5	WGWA-6	Total Recoverable	Water	3005A	
180-102004-6	WGWA-1	Total Recoverable	Water	3005A	
180-102004-7	Dup-1	Total Recoverable	Water	3005A	
180-102004-8	FB-1-2-4-20	Total Recoverable	Water	3005A	
180-102004-9	EB-1-2-4-20	Total Recoverable	Water	3005A	
MB 180-306884/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-306668/2-C	Lab Control Sample	Total Recoverable	Water	3005A	306668
LCS 180-306884/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

# QC Association Summary

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

Job ID: 180-102004-1

## Metals

### Prep Batch: 307012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total/NA	Water	7470A	
180-102004-2	WGWA-4	Total/NA	Water	7470A	
180-102004-3	WGWA-3	Total/NA	Water	7470A	
MB 180-307012/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-307012/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-102004-3 MS	WGWA-3	Total/NA	Water	7470A	
180-102004-3 MSD	WGWA-3	Total/NA	Water	7470A	

### Prep Batch: 307128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-4	WGWA-5	Total/NA	Water	7470A	
180-102004-5	WGWA-6	Total/NA	Water	7470A	
180-102004-6	WGWA-1	Total/NA	Water	7470A	
180-102004-7	Dup-1	Total/NA	Water	7470A	
180-102004-8	FB-1-2-4-20	Total/NA	Water	7470A	
180-102004-9	EB-1-2-4-20	Total/NA	Water	7470A	
MB 180-307128/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-307128/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-102004-4 MS	WGWA-5	Total/NA	Water	7470A	
180-102004-4 MSD	WGWA-5	Total/NA	Water	7470A	

### Analysis Batch: 307145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total/NA	Water	EPA 7470A	307012
180-102004-2	WGWA-4	Total/NA	Water	EPA 7470A	307012
180-102004-3	WGWA-3	Total/NA	Water	EPA 7470A	307012
MB 180-307012/1-A	Method Blank	Total/NA	Water	EPA 7470A	307012
LCS 180-307012/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	307012
180-102004-3 MS	WGWA-3	Total/NA	Water	EPA 7470A	307012
180-102004-3 MSD	WGWA-3	Total/NA	Water	EPA 7470A	307012

### Analysis Batch: 307167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total Recoverable	Water	EPA 6020B	306884
180-102004-2	WGWA-4	Total Recoverable	Water	EPA 6020B	306884
180-102004-3	WGWA-3	Total Recoverable	Water	EPA 6020B	306884
180-102004-4	WGWA-5	Total Recoverable	Water	EPA 6020B	306884
180-102004-5	WGWA-6	Total Recoverable	Water	EPA 6020B	306884
180-102004-6	WGWA-1	Total Recoverable	Water	EPA 6020B	306884
180-102004-7	Dup-1	Total Recoverable	Water	EPA 6020B	306884
180-102004-8	FB-1-2-4-20	Total Recoverable	Water	EPA 6020B	306884
180-102004-9	EB-1-2-4-20	Total Recoverable	Water	EPA 6020B	306884
MB 180-306884/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	306884
LCS 180-306668/2-C	Lab Control Sample	Total Recoverable	Water	EPA 6020B	306884
LCS 180-306884/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	306884

### Analysis Batch: 307328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-4	WGWA-5	Total/NA	Water	EPA 7470A	307128
180-102004-5	WGWA-6	Total/NA	Water	EPA 7470A	307128
180-102004-6	WGWA-1	Total/NA	Water	EPA 7470A	307128

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# QC Association Summary

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

Job ID: 180-102004-1

## Metals (Continued)

### Analysis Batch: 307328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-7	Dup-1	Total/NA	Water	EPA 7470A	307128
180-102004-8	FB-1-2-4-20	Total/NA	Water	EPA 7470A	307128
180-102004-9	EB-1-2-4-20	Total/NA	Water	EPA 7470A	307128
MB 180-307128/1-A	Method Blank	Total/NA	Water	EPA 7470A	307128
LCS 180-307128/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	307128
180-102004-4 MS	WGWA-5	Total/NA	Water	EPA 7470A	307128
180-102004-4 MSD	WGWA-5	Total/NA	Water	EPA 7470A	307128

### Prep Batch: 307378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total Recoverable	Water	3005A	9
180-102004-2	WGWA-4	Total Recoverable	Water	3005A	10
180-102004-3	WGWA-3	Total Recoverable	Water	3005A	11
180-102004-4	WGWA-5	Total Recoverable	Water	3005A	12
180-102004-5	WGWA-6	Total Recoverable	Water	3005A	13
180-102004-6	WGWA-1	Total Recoverable	Water	3005A	
180-102004-7	Dup-1	Total Recoverable	Water	3005A	
180-102004-8	FB-1-2-4-20	Total Recoverable	Water	3005A	
180-102004-9	EB-1-2-4-20	Total Recoverable	Water	3005A	
MB 180-307378/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-307378/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 307621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total Recoverable	Water	EPA 6020B	307378
180-102004-2	WGWA-4	Total Recoverable	Water	EPA 6020B	307378
180-102004-3	WGWA-3	Total Recoverable	Water	EPA 6020B	307378
180-102004-4	WGWA-5	Total Recoverable	Water	EPA 6020B	307378
180-102004-5	WGWA-6	Total Recoverable	Water	EPA 6020B	307378
180-102004-6	WGWA-1	Total Recoverable	Water	EPA 6020B	307378
180-102004-7	Dup-1	Total Recoverable	Water	EPA 6020B	307378
180-102004-8	FB-1-2-4-20	Total Recoverable	Water	EPA 6020B	307378
180-102004-9	EB-1-2-4-20	Total Recoverable	Water	EPA 6020B	307378
MB 180-307378/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	307378
LCS 180-307378/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	307378

# TestAmerica Pittsburgh

301 Alpha Drive RIDC Park  
Pittsburgh, PA 15238  
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## Chain of Custody Record

Client Information		Sampler: O. Fuquera / H. Aulich	Lab PM: Veronica Bortot	Carrier Tracking No(s): TA-ATL-999	COC No: 400-72601-28757-1																																																																																																																														
Client Contact:	Joju Abraham	Phone: (720)594-5998	E-Mail: (Veronica.Bortot@testamericainc.com)	Page:	Page:																																																																																																																														
Company: Southern Company	Address: PO BOX 2841 GSC8	Due Date Requested:	Analysis Requested																																																																																																																																
City: Birmingham	State, Zip: AL, 35291	TAT Requested (days):																																																																																																																																	
Phone:	Email: JAbraham@southernco.com	PO#:																																																																																																																																	
Project Name: CCR - Plant Wansley - Ash Pond	SSOW#:	WW#:																																																																																																																																	
Site: Georgia																																																																																																																																			
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| 180-102004 Chain of Custody | | | | | |
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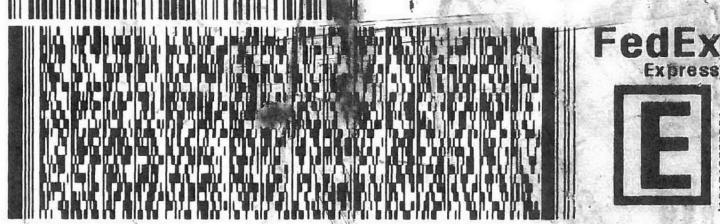
180-102004 Waybill

ORIGIN ID: LIA - (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 05FEB20  
ACTWTG: 54.85/LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

TO **SAMPLE RECEIVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
**301 ALPHA DR.**  
**RIDC PARK**  
**PITTSBURGH PA 15238**  
(412) 963-7058  
REF: ACC-PLT WANSLEY



1 of 2  
TRK# 1516 9323 0072 THU - 06 FEB 3:00P  
0201 STANDARD OVERNIGHT  
## MASTER ##

**NA AGCA**

15238  
PA-US PIT



Uncorrected temp  
Thermometer ID

24°C  
10

CF

Initials

B

PT-WI-SR-001 effective 11/8/18

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Environment Testing  
TestAmerica

ID:LIYA (678) 966-9991  
TAYLOR  
TESTAMERICA  
MOUGH DRIVE

30093  
US

SHIP DATE: 0  
ACTWTG: 54.8  
CAD: 859116

BILL RECIPIE

RECEIVING  
TESTAMERICA PITTSBURGH  
PA.

PA 15238

RT 97

1 15.00 A

3800  
02.00

FZ



THU - 06 FEB 3:00P  
STANDARD OVERNIGHT

15238  
PIT

3.8 °C  
10

PA-US

Initials

B

Selected temp  
Container ID

Effective 11/8/18



## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-102004-1

**Login Number: 102004**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

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	



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-102004-2

Client Project/Site: CCR - Plant Wansley

Sampling Event: Wansley Ash Pond Initial Scan Event

**For:**

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

Attn: Joju Abraham



Authorized for release by:

3/11/2020 4:46:06 PM

Veronica Bortot, Senior Project Manager

(412)963-2435

[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

LINKS

Review your project  
results through

Total Access

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Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.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

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# Case Narrative

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

Job ID: 180-102004-2

## Job ID: 180-102004-2

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-102004-2

### Receipt

The samples were received on 2/6/2020 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.4° C and 3.8° C.

### RAD

Methods 903.0, 9315: Ra-226 Prep Batch 160-459759

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 (180-102004-1), WGWA-4 (180-102004-2), WGWA-3 (180-102004-3), WGWA-5 (180-102004-4), WGWA-6 (180-102004-5),  
WGWA-1 (180-102004-6), Dup-1 (180-102004-7), FB-1-2-4-20 (180-102004-8), EB-1-2-4-20 (180-102004-9), (LCS 160-459759/1-A),  
(LCSD 160-459759/2-A) and (MB 160-459759/22-A)

Methods 904.0, 9320: Radium-228 Prep Batch 160-459763

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 (180-102004-1), WGWA-4 (180-102004-2), WGWA-3 (180-102004-3), WGWA-5 (180-102004-4), WGWA-6 (180-102004-5),  
WGWA-1 (180-102004-6), Dup-1 (180-102004-7), FB-1-2-4-20 (180-102004-8), EB-1-2-4-20 (180-102004-9), (LCS 160-459763/1-A),  
(LCSD 160-459763/2-A) and (MB 160-459763/22-A)

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: 180-102004-2

## Qualifiers

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

## Glossary

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

# Accreditation/Certification Summary

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

Job ID: 180-102004-2

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

# Accreditation/Certification Summary

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

Job ID: 180-102004-2

## 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	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-20 *
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

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

Eurofins TestAmerica, Pittsburgh

## Sample Summary

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

Job ID: 180-102004-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID	
180-102004-1	WGWA-2	Water	02/03/20 15:18	02/06/20 10:00		1
180-102004-2	WGWA-4	Water	02/04/20 10:45	02/06/20 10:00		2
180-102004-3	WGWA-3	Water	02/04/20 11:42	02/06/20 10:00		3
180-102004-4	WGWA-5	Water	02/04/20 15:17	02/06/20 10:00		4
180-102004-5	WGWA-6	Water	02/04/20 14:55	02/06/20 10:00		5
180-102004-6	WGWA-1	Water	02/03/20 15:30	02/06/20 10:00		6
180-102004-7	Dup-1	Water	02/04/20 00:00	02/06/20 10:00		7
180-102004-8	FB-1-2-4-20	Water	02/04/20 14:30	02/06/20 10:00		8
180-102004-9	EB-1-2-4-20	Water	02/04/20 14:00	02/06/20 10:00		9

## Method Summary

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

Job ID: 180-102004-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
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: 180-102004-2

**Client Sample ID: WGWA-2**  
**Date Collected: 02/03/20 15:18**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-1**  
**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			1000.13 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:25	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.13 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-4**  
**Date Collected: 02/04/20 10:45**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-2**  
**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			1000.38 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:25	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.38 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-3**  
**Date Collected: 02/04/20 11:42**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-3**  
**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			999.95 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:25	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.95 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-5**  
**Date Collected: 02/04/20 15:17**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-4**  
**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			1000.90 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:25	AJD	TAL SL
		Instrument ID: GFPCRED								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102004-2

**Client Sample ID: WGWA-5**  
**Date Collected: 02/04/20 15:17**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-4**  
**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			1000.90 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-6**  
**Date Collected: 02/04/20 14:55**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-5**  
**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			999.98 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:26	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.98 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-1**  
**Date Collected: 02/03/20 15:30**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-6**  
**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			999.08 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:26	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.08 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461940	02/26/20 17:24	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: Dup-1**  
**Date Collected: 02/04/20 00:00**  
**Date Received: 02/06/20 10:00**

**Lab Sample ID: 180-102004-7**  
**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			1000.27 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:26	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461921	02/26/20 17:28	AJD	TAL SL
		Instrument ID: GFPCORANGE								

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# Lab Chronicle

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

Job ID: 180-102004-2

**Client Sample ID: Dup-1**

Date Collected: 02/04/20 00:00

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-7**

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			463073	03/04/20 10:54	SMP	TAL SL

**Client Sample ID: FB-1-2-4-20**

Date Collected: 02/04/20 14:30

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-8**

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			999.80 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:26	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.80 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461921	02/26/20 17:28	AJD	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: EB-1-2-4-20**

Date Collected: 02/04/20 14:00

Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-9**

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			1000.08 mL	1.0 g	459759	02/10/20 07:45	MNH	TAL SL
Total/NA	Analysis	9315		1			462630	03/03/20 09:26	AJD	TAL SL
		Instrument ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.08 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis	9320		1			461921	02/26/20 17:28	AJD	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	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

MNH = Molly Howard

Batch Type: Analysis

AJD = Audra DeMariano

KLS = Kody Saulters

SMP = Siobhan Perry

# Client Sample Results

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

Job ID: 180-102004-2

**Client Sample ID: WGWA-2**  
Date Collected: 02/03/20 15:18  
Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-1**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0922	U	0.0926	0.0930	1.00	0.148	pCi/L	02/10/20 07:45	03/03/20 09:25	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	98.5		40 - 110					02/10/20 07:45	03/03/20 09:25	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.00435	U	0.237	0.237	1.00	0.423	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	98.5		40 - 110					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	87.5		40 - 110					02/10/20 08:15	02/26/20 17:24	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0879	U	0.254	0.255	2.00	0.423	pCi/L		03/04/20 10:54	1

## Client Sample ID: WGWA-4

Date Collected: 02/04/20 10:45  
Date Received: 02/06/20 10:00

**Lab Sample ID: 180-102004-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.537		0.146	0.154	1.00	0.124	pCi/L	02/10/20 07:45	03/03/20 09:25	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					02/10/20 07:45	03/03/20 09:25	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.954		0.323	0.335	1.00	0.438	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	89.0		40 - 110					02/10/20 08:15	02/26/20 17:24	1

# Client Sample Results

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

Job ID: 180-102004-2

## **Client Sample ID: WGWA-4**

Date Collected: 02/04/20 10:45  
Date Received: 02/06/20 10:00

## **Lab Sample ID: 180-102004-2**

Matrix: Water

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.49		0.354	0.369	2.00	0.438	pCi/L		03/04/20 10:54	1

## **Client Sample ID: WGWA-3**

Date Collected: 02/04/20 11:42  
Date Received: 02/06/20 10:00

## **Lab Sample ID: 180-102004-3**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0576	U	0.0669	0.0671	1.00	0.108	pCi/L	02/10/20 07:45	03/03/20 09:25	1
<b>Carrier</b>										
Ba Carrier	97.2		<b>Limits</b>					02/10/20 07:45	03/03/20 09:25	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.165	U	0.225	0.226	1.00	0.430	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>										
Ba Carrier	97.2		<b>Limits</b>					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	85.6		40 - 110					02/10/20 08:15	02/26/20 17:24	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.107	U	0.235	0.236	2.00	0.430	pCi/L		03/04/20 10:54	1

## **Client Sample ID: WGWA-5**

Date Collected: 02/04/20 15:17  
Date Received: 02/06/20 10:00

## **Lab Sample ID: 180-102004-4**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0982	U	0.0908	0.0912	1.00	0.142	pCi/L	02/10/20 07:45	03/03/20 09:25	1
<b>Carrier</b>										
Ba Carrier	94.8		<b>Limits</b>					02/10/20 07:45	03/03/20 09:25	1
			40 - 110							

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# Client Sample Results

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

Job ID: 180-102004-2

## **Client Sample ID: WGWA-5**

Date Collected: 02/04/20 15:17  
Date Received: 02/06/20 10:00

## **Lab Sample ID: 180-102004-4**

Matrix: Water

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0995	U	0.259	0.259	1.00	0.446	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>										
Ba Carrier	94.8		40 - 110					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	85.6		40 - 110					02/10/20 08:15	02/26/20 17:24	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.198	U	0.274	0.275	2.00	0.446	pCi/L	03/04/20 10:54		1

## **Client Sample ID: WGWA-6**

Date Collected: 02/04/20 14:55  
Date Received: 02/06/20 10:00

## **Lab Sample ID: 180-102004-5**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	3.05		0.317	0.419	1.00	0.0976	pCi/L	02/10/20 07:45	03/03/20 09:26	1
<b>Carrier</b>										
Ba Carrier	93.2		40 - 110					02/10/20 07:45	03/03/20 09:26	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	5.25		0.547	0.730	1.00	0.429	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>										
Ba Carrier	93.2		40 - 110					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	86.0		40 - 110					02/10/20 08:15	02/26/20 17:24	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	8.30		0.632	0.842	2.00	0.429	pCi/L	03/04/20 10:54		1

# Client Sample Results

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

Job ID: 180-102004-2

**Client Sample ID: WGWA-1**

**Lab Sample ID: 180-102004-6**

Matrix: Water

Date Collected: 02/03/20 15:30

Date Received: 02/06/20 10:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0685	U	0.0630	0.0633	1.00	0.0934	pCi/L	02/10/20 07:45	03/03/20 09:26	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	92.9		40 - 110					02/10/20 07:45	03/03/20 09:26	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.215	U	0.279	0.280	1.00	0.464	pCi/L	02/10/20 08:15	02/26/20 17:24	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	92.9		40 - 110					02/10/20 08:15	02/26/20 17:24	1
Y Carrier	87.1		40 - 110					02/10/20 08:15	02/26/20 17:24	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.283	U	0.286	0.287	2.00	0.464	pCi/L		03/04/20 10:54	1

**Client Sample ID: Dup-1**

**Lab Sample ID: 180-102004-7**

Matrix: Water

Date Collected: 02/04/20 00:00

Date Received: 02/06/20 10:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0280	U	0.0480	0.0481	1.00	0.0854	pCi/L	02/10/20 07:45	03/03/20 09:26	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	102		40 - 110					02/10/20 07:45	03/03/20 09:26	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0189	U	0.200	0.200	1.00	0.357	pCi/L	02/10/20 08:15	02/26/20 17:28	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	102		40 - 110					02/10/20 08:15	02/26/20 17:28	1
Y Carrier	84.5		40 - 110					02/10/20 08:15	02/26/20 17:28	1

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# Client Sample Results

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

Job ID: 180-102004-2

## Client Sample ID: Dup-1

Date Collected: 02/04/20 00:00  
Date Received: 02/06/20 10:00

## Lab Sample ID: 180-102004-7

Matrix: Water

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0469	U	0.206	0.206	2.00	0.357	pCi/L		03/04/20 10:54	1

## Client Sample ID: FB-1-2-4-20

Date Collected: 02/04/20 14:30  
Date Received: 02/06/20 10:00

## Lab Sample ID: 180-102004-8

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0251	U	0.0378	0.0378	1.00	0.101	pCi/L	02/10/20 07:45	03/03/20 09:26	1
<b>Carrier</b>										
Ba Carrier	98.5		<b>Limits</b>					02/10/20 07:45	03/03/20 09:26	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0106	U	0.204	0.204	1.00	0.366	pCi/L	02/10/20 08:15	02/26/20 17:28	1
<b>Carrier</b>										
Ba Carrier	98.5		<b>Limits</b>					02/10/20 08:15	02/26/20 17:28	1
Y Carrier	87.1		<b>Limits</b>					02/10/20 08:15	02/26/20 17:28	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0144	U	0.207	0.207	2.00	0.366	pCi/L		03/04/20 10:54	1

## Client Sample ID: EB-1-2-4-20

Date Collected: 02/04/20 14:00  
Date Received: 02/06/20 10:00

## Lab Sample ID: 180-102004-9

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0116	U	0.0330	0.0330	1.00	0.0858	pCi/L	02/10/20 07:45	03/03/20 09:26	1
<b>Carrier</b>										
Ba Carrier	98.8		<b>Limits</b>					02/10/20 07:45	03/03/20 09:26	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102004-2

**Client Sample ID: EB-1-2-4-20**

**Lab Sample ID: 180-102004-9**

Matrix: Water

Date Collected: 02/04/20 14:00

Date Received: 02/06/20 10:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.129	U	0.219	0.220	1.00	0.371	pCi/L	02/10/20 08:15	02/26/20 17:28	1
<b>Carrier</b>										
Ba Carrier	98.8		40 - 110					02/10/20 08:15	02/26/20 17:28	1
Y Carrier	89.0		40 - 110					02/10/20 08:15	02/26/20 17:28	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.118	U	0.221	0.222	2.00	0.371	pCi/L	03/04/20 10:54		1

# QC Sample Results

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

Job ID: 180-102004-2

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

**Lab Sample ID:** MB 160-459759/22-A

**Matrix:** Water

**Analysis Batch:** 462630

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 459759

Analyte	MB		MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Radium-226	-0.02040	U		0.0425	0.0425	1.00	0.109	pCi/L	02/10/20 07:45	03/03/20 11:17	1
<i>Carrier</i>	<i>MB</i>	<i>MB</i>							<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	%Yield	Qualifier	Limits						02/10/20 07:45	03/03/20 11:17	1
	84.3		40 - 110								

**Lab Sample ID:** LCS 160-459759/1-A

**Matrix:** Water

**Analysis Batch:** 462630

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 459759

Analyte	Spike		LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER
	Added										
Radium-226		11.3	10.33		1.09	1.00	0.0980	pCi/L	91	75 - 125	
<i>Carrier</i>	<i>LCS</i>	<i>LCS</i>									
Ba Carrier	%Yield	Qualifier	Limits								
	96.6		40 - 110								

**Lab Sample ID:** LCSD 160-459759/2-A

**Matrix:** Water

**Analysis Batch:** 462630

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 459759

Analyte	Spike		LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER
	Added										
Radium-226		11.3	10.29		1.09	1.00	0.0916	pCi/L	91	75 - 125	0.01
<i>Carrier</i>	<i>LCSD</i>	<i>LCSD</i>									
Ba Carrier	%Yield	Qualifier	Limits								
	99.1		40 - 110								

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

**Lab Sample ID:** MB 160-459763/22-A

**Matrix:** Water

**Analysis Batch:** 461921

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 459763

Analyte	MB		MB	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Radium-228	0.002449	U		0.224	0.224	1.00	0.405	pCi/L	02/10/20 08:15	02/26/20 17:30	1
<i>Carrier</i>	<i>MB</i>	<i>MB</i>							<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	%Yield	Qualifier	Limits						02/10/20 08:15	02/26/20 17:30	1
Y Carrier	84.3		40 - 110						02/10/20 08:15	02/26/20 17:30	1
	88.6		40 - 110								

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-102004-2

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

**Lab Sample ID: LCS 160-459763/1-A**

**Matrix: Water**

**Analysis Batch: 461940**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 459763**

Analyte	Spike Added	LCS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual						
Radium-228	9.07	7.880		0.963	1.00	0.421	pCi/L	87	75 - 125

**Carrier LCS LCS**

Carrier	%Yield	Qualifier	Limits
Ba Carrier	96.6		40 - 110
Y Carrier	89.0		40 - 110

**Lab Sample ID: LCSD 160-459763/2-A**

**Matrix: Water**

**Analysis Batch: 461940**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 459763**

Analyte	Spike Added	LCSD		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
		Result	Qual								
Radium-228	9.07	7.834		0.956	1.00	0.405	pCi/L	86	75 - 125	0.02	1

**Carrier LCSD LCSD**

Carrier	%Yield	Qualifier	Limits
Ba Carrier	99.1		40 - 110
Y Carrier	86.7		40 - 110

# QC Association Summary

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

Job ID: 180-102004-2

**Rad**

**Prep Batch: 459759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total/NA	Water	PrecSep-21	1
180-102004-2	WGWA-4	Total/NA	Water	PrecSep-21	2
180-102004-3	WGWA-3	Total/NA	Water	PrecSep-21	3
180-102004-4	WGWA-5	Total/NA	Water	PrecSep-21	4
180-102004-5	WGWA-6	Total/NA	Water	PrecSep-21	5
180-102004-6	WGWA-1	Total/NA	Water	PrecSep-21	6
180-102004-7	Dup-1	Total/NA	Water	PrecSep-21	7
180-102004-8	FB-1-2-4-20	Total/NA	Water	PrecSep-21	8
180-102004-9	EB-1-2-4-20	Total/NA	Water	PrecSep-21	9
MB 160-459759/22-A	Method Blank	Total/NA	Water	PrecSep-21	10
LCS 160-459759/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-459759/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

**Prep Batch: 459763**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102004-1	WGWA-2	Total/NA	Water	PrecSep_0	11
180-102004-2	WGWA-4	Total/NA	Water	PrecSep_0	12
180-102004-3	WGWA-3	Total/NA	Water	PrecSep_0	
180-102004-4	WGWA-5	Total/NA	Water	PrecSep_0	13
180-102004-5	WGWA-6	Total/NA	Water	PrecSep_0	
180-102004-6	WGWA-1	Total/NA	Water	PrecSep_0	
180-102004-7	Dup-1	Total/NA	Water	PrecSep_0	
180-102004-8	FB-1-2-4-20	Total/NA	Water	PrecSep_0	
180-102004-9	EB-1-2-4-20	Total/NA	Water	PrecSep_0	
MB 160-459763/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-459763/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-459763/2-A	Lab Control Sample Dup	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

Client Information		Sampler: O. Fuquera / H. Aulch	Lab PM: Veronica Bortot	Carrier Tracking No(s): TA-ATL-999	COC No: 400-72601-28757-1																																																																																																																														
Client Contact:	Joju Abraham	Phone: (720)594-5998	E-Mail: (Veronica.Bortot@testamericainc.com)	Page:	Page:																																																																																																																														
Company: Southern Company	Address: PO BOX 2841 GSC8	Due Date Requested:	Analysis Requested																																																																																																																																
City: Birmingham	State, Zip: AL, 35291	TAT Requested (days):																																																																																																																																	
Phone:	Email: JAbraham@southernco.com	PO#:																																																																																																																																	
Project Name: CCR - Plant Wansley - Ash Pond	SSOW#:	WW#:																																																																																																																																	
Site: Georgia																																																																																																																																			
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| 180-102004 Chain of Custody | | | | | |
| |                     |                       |                     | |---------------------|-----------------------|---------------------| | Preservation Codes: | A - HCl               | M - Hexane          | | B - NaOH            | N - None              | O - Acetone         | | C - Zn Acetate      | P - NaO4S             | Q - NazSO3          | | D - Nitric Acid     | R - NazSS2O3          | S - H2SO4           | | E - NaHSO4          | T - TSP Dodecahydrate |                     | | F - MeOH            | I - Ice               |                     | | G - Anchors         | J - DI Water          | V - MCAA            | | H - Ascorbic Acid   | K - EDTA              | W - pH 4-5          | | I - Ice             | L - EDA               | Z - other (specify) | | Other:              |                       |                     | | | | | | |

1 2 3 4 5 6 7 8 9 10 11 12 13

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39469-434 R/T EXP 07/26



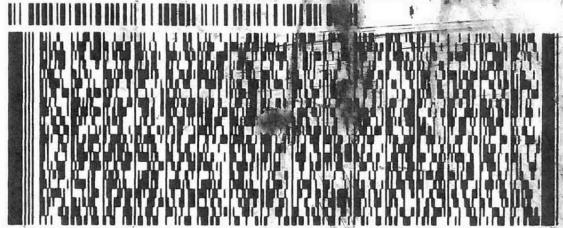
180-102004 Waybill

ORIGIN ID: LIA - (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 05FEB20  
ACTWTG: 54.85/LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

TO **SAMPLE RECEIVING**  
**EUROFINS TESTAMERICA PITTSBURGH**  
**301 ALPHA DR.**  
**RIDC PARK**  
**PITTSBURGH PA 15238**  
(412) 963-7058  
REF: ACC-PLT WANSLEY



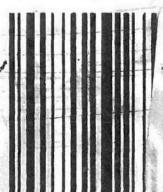
JF121008200144

1 of 2  
TRK# 1516 9323 0072 THU - 06 FEB 3:00P  
0201 STANDARD OVERNIGHT

## MASTER ##

**NA AGCA**

15238  
PA-US PIT



Uncorrected temp  
Thermometer ID

24°C  
10

CF

Initials

B

PT-WI-SR-001 effective 11/8/18

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3  
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5  
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7  
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13



Environment Testing  
TestAmerica

ID:LIYA (678) 966-9991  
TAYLOR  
TESTAMERICA  
MOUGH DRIVE

30093  
US

SHIP DATE: 0  
ACTWTG: 54.8  
CAD: 859116

BILL RECIPIE

RECEIVING  
TESTAMERICA PITTSBURGH  
PA.

PA 15238

RT 97

1 15.00 A

3800  
02.00

FZ



THU - 06 FEB 3:00P  
STANDARD OVERNIGHT

15238  
PIT

3.8 °C  
10

PA-US

Initials  
B

Effective 11/8/18

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-102004-2

**Login Number: 102004**

**List Source: Eurofins TestAmerica, Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

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: 180-102004-2

**Login Number:** 102004

**List Source:** Eurofins TestAmerica, St. Louis

**List Number:** 2

**List Creation:** 02/08/20 11:08 AM

**Creator:** Hellm, Michael

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	21.0
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	



# Environment Testing TestAmerica

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## ANALYTICAL REPORT

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

Laboratory Job ID: 180-102169-1

Client Project/Site: CCR - Plant Wansley

Sampling Event: Wansley Ash Pond Initial Scan Event

**For:**

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

Attn: Joju Abraham

Authorized for release by:

2/29/2020 3:38:55 PM

Veronica Bortot, Senior Project Manager

(412)963-2435

[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

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

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

PA Lab ID: 02-00416

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# Case Narrative

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

Job ID: 180-102169-1

## Job ID: 180-102169-1

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-102169-1

### Comments

No additional comments.

### Receipt

The samples were received on 2/11/2020 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.0° C, 3.0° C and 3.8° C.

### Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWA-18 (180-102169-4). The container labels list WGWA-18, while the COC lists WGWA-8. The client emailed login a new COC with the corrected id of WGWA-18.

### GC Semi VOA

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

### Metals

Methods 6020A, 6020B: The prep. blank for preparation batch 180-306668 and 180-307560 contained aluminum above the reporting limit (RL). None of the samples associated with this prep. blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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: 180-102169-1

## 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

Job ID: 180-102169-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-20 *
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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

Eurofins TestAmerica, Pittsburgh

# Sample Summary

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

Job ID: 180-102169-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-102169-1	WGWA-7	Water	02/05/20 12:33	02/11/20 09:00	
180-102169-2	FB-2-2-7-20	Water	02/07/20 10:20	02/11/20 09:00	
180-102169-3	Dup-2	Water	02/07/20 00:00	02/11/20 09:00	
180-102169-4	WGWA-18	Water	02/05/20 12:05	02/11/20 09:00	
180-102169-5	EB-2-2-7-20	Water	02/07/20 10:10	02/11/20 09:00	
180-102169-6	WGWC-10	Water	02/05/20 11:24	02/11/20 09:00	
180-102169-7	WGWC-12	Water	02/05/20 14:16	02/11/20 09:00	
180-102169-8	WGWC-11	Water	02/05/20 15:07	02/11/20 09:00	
180-102169-9	WGWC-15	Water	02/07/20 10:38	02/11/20 09:00	
180-102169-10	WGWC-16	Water	02/07/20 11:28	02/11/20 09:00	
180-102169-11	WGWC-19	Water	02/07/20 12:19	02/11/20 09:00	
180-102169-12	WGWC-13	Water	02/05/20 13:35	02/11/20 09:00	
180-102169-13	WGWC-14A	Water	02/05/20 14:40	02/11/20 09:00	
180-102169-14	WGWC-9	Water	02/05/20 16:00	02/11/20 09:00	
180-102169-15	WGWC-8	Water	02/07/20 10:35	02/11/20 09:00	
180-102169-16	WGWC-17	Water	02/07/20 12:20	02/11/20 09:00	

## Method Summary

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

Job ID: 180-102169-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	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:

EPA = US Environmental Protection Agency

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

### Laboratory References:

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: 180-102169-1

**Client Sample ID: WGWA-7**  
**Date Collected: 02/05/20 12:33**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-1**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			307734	02/21/20 07:40	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:06	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:07	NAM	TAL PIT

**Client Sample ID: FB-2-2-7-20**

**Lab Sample ID: 180-102169-2**  
**Matrix: Water**

**Date Collected: 02/07/20 10:20**  
**Date Received: 02/11/20 09:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307633	02/20/20 12:45	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:08	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:10	NAM	TAL PIT

**Client Sample ID: Dup-2**

**Lab Sample ID: 180-102169-3**  
**Matrix: Water**

**Date Collected: 02/07/20 00:00**  
**Date Received: 02/11/20 09:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307633	02/20/20 13:00	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:16	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:11	NAM	TAL PIT

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-102169-4**  
**Matrix: Water**

**Date Collected: 02/05/20 12:05**  
**Date Received: 02/11/20 09:00**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 10:16	MJH	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-1

**Client Sample ID: WGWA-18**  
**Date Collected: 02/05/20 12:05**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-4**  
**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	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:18	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:12	NAM	TAL PIT

**Client Sample ID: EB-2-2-7-20**  
**Date Collected: 02/07/20 10:10**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-5**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 21:40	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:20	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:12	NAM	TAL PIT

**Client Sample ID: WGWC-10**  
**Date Collected: 02/05/20 11:24**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-6**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 21:55	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:23	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:13	NAM	TAL PIT

**Client Sample ID: WGWC-12**  
**Date Collected: 02/05/20 14:16**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-7**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 22:10	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:25	RSK	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-12**  
**Date Collected: 02/05/20 14:16**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-7**  
**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	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:16	NAM	TAL PIT

**Client Sample ID: WGWC-11**  
**Date Collected: 02/05/20 15:07**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-8**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 22:25	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:28	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:17	NAM	TAL PIT

**Client Sample ID: WGWC-15**  
**Date Collected: 02/07/20 10:38**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 22:40	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:30	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:18	NAM	TAL PIT

**Client Sample ID: WGWC-16**  
**Date Collected: 02/07/20 11:28**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-10**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307633	02/20/20 12:04	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:33	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:19	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-19**  
**Date Collected: 02/07/20 12:19**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-11**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 22:55	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:35	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:20	NAM	TAL PIT

**Client Sample ID: WGWC-13**  
**Date Collected: 02/05/20 13:35**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-12**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 23:10	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:38	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:21	NAM	TAL PIT

**Client Sample ID: WGWC-14A**  
**Date Collected: 02/05/20 14:40**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-13**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/21/20 23:25	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:45	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:22	NAM	TAL PIT

**Client Sample ID: WGWC-9**  
**Date Collected: 02/05/20 16:00**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-14**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/22/20 00:10	MJH	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-9**  
**Date Collected: 02/05/20 16:00**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-14**  
**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	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			307853	02/21/20 14:48	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:23	NAM	TAL PIT

**Client Sample ID: WGWC-8**  
**Date Collected: 02/07/20 10:35**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-15**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307633	02/20/20 12:19	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307162	02/15/20 06:51	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: M		1			307402	02/17/20 17:20	WTR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:24	NAM	TAL PIT

**Client Sample ID: WGWC-17**  
**Date Collected: 02/07/20 12:20**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-16**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2000		1			307733	02/22/20 00:25	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307162	02/15/20 06:51	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: M		1			307402	02/17/20 17:25	WTR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			307328	02/17/20 15:25	NAM	TAL PIT

## Laboratory References:

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

Eurofins TestAmerica, Pittsburgh

## Lab Chronicle

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

Job ID: 180-102169-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

JL = James Lyu

NAM = Nicole Marfisi

Batch Type: Analysis

MJH = Matthew Hartman

NAM = Nicole Marfisi

RSK = Robert Kurtz

WTR = Bill Reinheimer

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# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWA-7**

Date Collected: 02/05/20 12:33

Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-1**

Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.026	J	0.10	0.026	mg/L			02/21/20 07:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:06	1
Barium	0.012		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:06	1
Beryllium	0.00041	J	0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:06	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:06	1
Cobalt	0.00021	J	0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:06	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:06	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:06	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:06	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:06	1
Thallium	0.00026	J	0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:06	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:06	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		02/14/20 14:00	02/17/20 15:07	1

**Client Sample ID: FB-2-2-7-20**

Date Collected: 02/07/20 10:20

Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-2**

Matrix: Water

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.031	J	0.10	0.026	mg/L			02/20/20 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:08	1
Barium	<0.0016		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:08	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:08	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:08	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:08	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:08	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:08	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:08	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:08	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		02/14/20 14:00	02/17/20 15:10	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: Dup-2**

**Lab Sample ID: 180-102169-3**

Matrix: Water

Date Collected: 02/07/20 00:00  
Date Received: 02/11/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.10	0.026	mg/L			02/20/20 13:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			02/19/20 14:08	02/21/20 14:16
Barium	<0.0016		0.010	0.0016	mg/L			02/19/20 14:08	02/21/20 14:16
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/19/20 14:08	02/21/20 14:16
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/19/20 14:08	02/21/20 14:16
Chromium	<0.0015		0.0020	0.0015	mg/L			02/19/20 14:08	02/21/20 14:16
<b>Cobalt</b>	<b>0.00024 J</b>		0.00050	0.00013	mg/L			02/19/20 14:08	02/21/20 14:16
<b>Molybdenum</b>	<b>0.0013 J</b>		0.0050	0.00061	mg/L			02/19/20 14:08	02/21/20 14:16
Lead	<0.00013		0.0010	0.00013	mg/L			02/19/20 14:08	02/21/20 14:16
Antimony	<0.00038		0.0020	0.00038	mg/L			02/19/20 14:08	02/21/20 14:16
Selenium	<0.0015		0.0050	0.0015	mg/L			02/19/20 14:08	02/21/20 14:16
Thallium	<0.00015		0.0010	0.00015	mg/L			02/19/20 14:08	02/21/20 14:16
Lithium	0.044		0.0050	0.0034	mg/L			02/19/20 14:08	02/21/20 14:16

## 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			02/14/20 14:00	02/17/20 15:11

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-102169-4**

Matrix: Water

Date Collected: 02/05/20 12:05

Date Received: 02/11/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.12		0.10	0.026	mg/L			02/21/20 10:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.00058 J</b>		0.0010	0.00031	mg/L			02/19/20 14:08	02/21/20 14:18
<b>Barium</b>	<b>0.020</b>		0.010	0.0016	mg/L			02/19/20 14:08	02/21/20 14:18
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/19/20 14:08	02/21/20 14:18
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/19/20 14:08	02/21/20 14:18
Chromium	<0.0015		0.0020	0.0015	mg/L			02/19/20 14:08	02/21/20 14:18
<b>Cobalt</b>	<b>0.0027</b>		0.00050	0.00013	mg/L			02/19/20 14:08	02/21/20 14:18
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/19/20 14:08	02/21/20 14:18
Lead	<0.00013		0.0010	0.00013	mg/L			02/19/20 14:08	02/21/20 14:18
Antimony	<0.00038		0.0020	0.00038	mg/L			02/19/20 14:08	02/21/20 14:18
Selenium	<0.0015		0.0050	0.0015	mg/L			02/19/20 14:08	02/21/20 14:18
Thallium	<0.00015		0.0010	0.00015	mg/L			02/19/20 14:08	02/21/20 14:18
Lithium	<0.0034		0.0050	0.0034	mg/L			02/19/20 14:08	02/21/20 14:18

## 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			02/14/20 14:00	02/17/20 15:12

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: EB-2-2-7-20**

**Lab Sample ID: 180-102169-5**

**Matrix: Water**

Date Collected: 02/07/20 10:10  
Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.031	J	0.10	0.026	mg/L			02/21/20 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			02/19/20 14:08	02/21/20 14:20
Barium	<0.0016		0.010	0.0016	mg/L			02/19/20 14:08	02/21/20 14:20
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/19/20 14:08	02/21/20 14:20
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/19/20 14:08	02/21/20 14:20
<b>Chromium</b>	<b>0.0016</b>	<b>J</b>	0.0020	0.0015	mg/L			02/19/20 14:08	02/21/20 14:20
Cobalt	<0.00013		0.00050	0.00013	mg/L			02/19/20 14:08	02/21/20 14:20
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/19/20 14:08	02/21/20 14:20
Lead	<0.00013		0.0010	0.00013	mg/L			02/19/20 14:08	02/21/20 14:20
Antimony	<0.00038		0.0020	0.00038	mg/L			02/19/20 14:08	02/21/20 14:20
Selenium	<0.0015		0.0050	0.0015	mg/L			02/19/20 14:08	02/21/20 14:20
Thallium	<0.00015		0.0010	0.00015	mg/L			02/19/20 14:08	02/21/20 14:20
Lithium	<0.0034		0.0050	0.0034	mg/L			02/19/20 14:08	02/21/20 14:20

**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			02/14/20 14:00	02/17/20 15:12

**Client Sample ID: WGWC-10**

**Lab Sample ID: 180-102169-6**

**Matrix: Water**

Date Collected: 02/05/20 11:24  
Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.14		0.10	0.026	mg/L			02/21/20 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.00035</b>	<b>J</b>	0.0010	0.00031	mg/L			02/19/20 14:08	02/21/20 14:23
<b>Barium</b>	<b>0.061</b>		0.010	0.0016	mg/L			02/19/20 14:08	02/21/20 14:23
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/19/20 14:08	02/21/20 14:23
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/19/20 14:08	02/21/20 14:23
<b>Chromium</b>	<b>0.0022</b>		0.0020	0.0015	mg/L			02/19/20 14:08	02/21/20 14:23
<b>Cobalt</b>	<b>0.0013</b>		0.00050	0.00013	mg/L			02/19/20 14:08	02/21/20 14:23
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/19/20 14:08	02/21/20 14:23
<b>Lead</b>	<b>0.00016</b>	<b>J</b>	0.0010	0.00013	mg/L			02/19/20 14:08	02/21/20 14:23
Antimony	<0.00038		0.0020	0.00038	mg/L			02/19/20 14:08	02/21/20 14:23
Selenium	<0.0015		0.0050	0.0015	mg/L			02/19/20 14:08	02/21/20 14:23
Thallium	<0.00015		0.0010	0.00015	mg/L			02/19/20 14:08	02/21/20 14:23
Lithium	<b>0.0061</b>		0.0050	0.0034	mg/L			02/19/20 14:08	02/21/20 14:23

**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			02/14/20 14:00	02/17/20 15:13

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-12**

**Lab Sample ID: 180-102169-7**

Matrix: Water

Date Collected: 02/05/20 14:16

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.098	J	0.10	0.026	mg/L			02/21/20 22:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:25	1
<b>Barium</b>	<b>0.016</b>		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:25	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:25	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:25	1
<b>Cobalt</b>	<b>0.00058</b>		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:25	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:25	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:25	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:25	1
Lithium	<b>0.0063</b>		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:25	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		02/14/20 14:00	02/17/20 15:16	1

**Client Sample ID: WGWC-11**

**Lab Sample ID: 180-102169-8**

Matrix: Water

Date Collected: 02/05/20 15:07

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.045	J	0.10	0.026	mg/L			02/21/20 22:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:28	1
<b>Barium</b>	<b>0.047</b>		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:28	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:28	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:28	1
<b>Cobalt</b>	<b>0.00026 J</b>		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:28	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:28	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:28	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:28	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		02/14/20 14:00	02/17/20 15:17	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-15**

**Lab Sample ID: 180-102169-9**

Matrix: Water

Date Collected: 02/07/20 10:38

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.79		0.10	0.026	mg/L			02/21/20 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0010		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:30	1
Barium	0.022		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:30	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:30	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:30	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:30	1
Molybdenum	0.0024 J		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:30	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:30	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:30	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:30	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:30	1
Lithium	0.0068		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:30	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		02/14/20 14:00	02/17/20 15:18	1

**Client Sample ID: WGWC-16**

**Lab Sample ID: 180-102169-10**

Matrix: Water

Date Collected: 02/07/20 11:28

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.072 J		0.10	0.026	mg/L			02/20/20 12:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:33	1
Barium	0.034		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:33	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:33	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:33	1
Cobalt	0.00016 J		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:33	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:33	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:33	1
Selenium	0.0036 J		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:33	1
Lithium	0.0053		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:33	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		02/14/20 14:00	02/17/20 15:19	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-19**

**Lab Sample ID: 180-102169-11**

Matrix: Water

Date Collected: 02/07/20 12:19

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.35		0.10	0.026	mg/L			02/21/20 22:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:35	1
Barium	0.0065 J		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:35	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:35	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:35	1
Cobalt	0.00024 J		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:35	1
Molybdenum	0.0014 J		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:35	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:35	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:35	1
Lithium	0.044		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:35	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		02/14/20 14:00	02/17/20 15:20	1

**Client Sample ID: WGWC-13**

**Lab Sample ID: 180-102169-12**

Matrix: Water

Date Collected: 02/05/20 13:35

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.10	0.026	mg/L			02/21/20 23:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00048 J		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:38	1
Barium	0.052		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:38	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:38	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:38	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:38	1
Molybdenum	0.0012 J		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:38	1
Lead	0.00045 J		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:38	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:38	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		02/14/20 14:00	02/17/20 15:21	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-14A**

**Lab Sample ID: 180-102169-13**

Matrix: Water

Date Collected: 02/05/20 14:40  
Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.026	mg/L			02/21/20 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:45	1
Barium	0.077		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:45	1
Beryllium	0.00024	J	0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:45	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:45	1
Chromium	0.0017	J	0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:45	1
Cobalt	0.0044		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:45	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:45	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:45	1
Thallium	0.00022	J	0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:45	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:45	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		02/14/20 14:00	02/17/20 15:22	1

**Client Sample ID: WGWC-9**

**Lab Sample ID: 180-102169-14**

Matrix: Water

Date Collected: 02/05/20 16:00  
Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.3		0.10	0.026	mg/L			02/22/20 00:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:48	1
Barium	0.022	J	0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:48	1
Beryllium	0.00040	J	0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:48	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:48	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:48	1
Molybdenum	0.0044	J	0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:48	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:48	1
Selenium	0.0033	J	0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:48	1
Lithium	0.034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:48	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		02/14/20 14:00	02/17/20 15:23	1

# Client Sample Results

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

Job ID: 180-102169-1

**Client Sample ID: WGWC-8**

**Lab Sample ID: 180-102169-15**

**Matrix: Water**

Date Collected: 02/07/20 10:35

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.25		0.10	0.026	mg/L			02/20/20 12:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011		0.0010	0.00031	mg/L			02/15/20 06:51	02/17/20 17:20
Barium	<0.0016		0.010	0.0016	mg/L			02/15/20 06:51	02/17/20 17:20
Beryllium	0.0023		0.0010	0.00018	mg/L			02/15/20 06:51	02/17/20 17:20
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/15/20 06:51	02/17/20 17:20
Chromium	<0.0015		0.0020	0.0015	mg/L			02/15/20 06:51	02/17/20 17:20
Cobalt	0.0011		0.00050	0.00013	mg/L			02/15/20 06:51	02/17/20 17:20
Molybdenum	<0.00061		0.0050	0.00061	mg/L			02/15/20 06:51	02/17/20 17:20
Lead	<0.00013		0.0010	0.00013	mg/L			02/15/20 06:51	02/17/20 17:20
Antimony	<0.00038		0.0020	0.00038	mg/L			02/15/20 06:51	02/17/20 17:20
Selenium	0.0048 J		0.0050	0.0015	mg/L			02/15/20 06:51	02/17/20 17:20
Thallium	<0.00015		0.0010	0.00015	mg/L			02/15/20 06:51	02/17/20 17:20
Lithium	0.014		0.0050	0.0034	mg/L			02/15/20 06:51	02/17/20 17:20

**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			02/14/20 14:00	02/17/20 15:24

**Client Sample ID: WGWC-17**

**Lab Sample ID: 180-102169-16**

**Matrix: Water**

Date Collected: 02/07/20 12:20

Date Received: 02/11/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.079 J		0.10	0.026	mg/L			02/22/20 00:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00075 J		0.0010	0.00031	mg/L			02/15/20 06:51	02/17/20 17:25
Barium	0.011		0.010	0.0016	mg/L			02/15/20 06:51	02/17/20 17:25
Beryllium	<0.00018		0.0010	0.00018	mg/L			02/15/20 06:51	02/17/20 17:25
Cadmium	<0.00022		0.0010	0.00022	mg/L			02/15/20 06:51	02/17/20 17:25
Chromium	<0.0015		0.0020	0.0015	mg/L			02/15/20 06:51	02/17/20 17:25
Cobalt	0.00077		0.00050	0.00013	mg/L			02/15/20 06:51	02/17/20 17:25
Molybdenum	0.0025 J		0.0050	0.00061	mg/L			02/15/20 06:51	02/17/20 17:25
Lead	<0.00013		0.0010	0.00013	mg/L			02/15/20 06:51	02/17/20 17:25
Antimony	<0.00038		0.0020	0.00038	mg/L			02/15/20 06:51	02/17/20 17:25
Selenium	<0.0015		0.0050	0.0015	mg/L			02/15/20 06:51	02/17/20 17:25
Thallium	<0.00015		0.0010	0.00015	mg/L			02/15/20 06:51	02/17/20 17:25
Lithium	0.0045 J		0.0050	0.0034	mg/L			02/15/20 06:51	02/17/20 17:25

**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			02/14/20 14:00	02/17/20 15:25

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# QC Sample Results

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

Job ID: 180-102169-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID:** MB 180-307633/6

**Matrix:** Water

**Analysis Batch:** 307633

**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		0.10	0.026	mg/L			02/20/20 10:35	1

**Lab Sample ID:** LCS 180-307633/5

**Matrix:** Water

**Analysis Batch:** 307633

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	2.50	2.47		mg/L		99	90 - 110

**Lab Sample ID:** LB1 180-307769/1-A

**Matrix:** Water

**Analysis Batch:** 307733

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

Analyte	LB1 Result	LB1 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.26		1.0	0.26	mg/L			02/21/20 12:26	1

**Lab Sample ID:** MB 180-307733/6

**Matrix:** Water

**Analysis Batch:** 307733

**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		0.10	0.026	mg/L			02/21/20 06:51	1

**Lab Sample ID:** LCS 180-307733/5

**Matrix:** Water

**Analysis Batch:** 307733

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Fluoride	2.50	2.52		mg/L		101	90 - 110

**Lab Sample ID:** 180-102169-4 MS

**Matrix:** Water

**Analysis Batch:** 307733

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Fluoride	0.12		1.25	1.41		mg/L		103	80 - 120

**Lab Sample ID:** 180-102169-4 MSD

**Matrix:** Water

**Analysis Batch:** 307733

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Fluoride	0.12		1.25	1.40		mg/L				

**Lab Sample ID:** MB 180-307734/6

**Matrix:** Water

**Analysis Batch:** 307734

**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		0.10	0.026	mg/L			02/21/20 05:34	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-102169-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID: LCS 180-307734/5**

**Matrix: Water**

**Analysis Batch: 307734**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	2.50	2.54		mg/L	102		90 - 110

**Lab Sample ID: 180-102169-1 MS**

**Matrix: Water**

**Analysis Batch: 307734**

**Client Sample ID: WGWA-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.026	J	1.25	1.28		mg/L	100		80 - 120

**Lab Sample ID: 180-102169-1 MSD**

**Matrix: Water**

**Analysis Batch: 307734**

**Client Sample ID: WGWA-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.026	J	1.25	1.23		mg/L	96		80 - 120	4	20

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-307162/1-A**

**Matrix: Water**

**Analysis Batch: 307402**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 307162**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<0.00031		0.0010	0.00031	mg/L	02/15/20 06:50	02/17/20 14:50		1
Barium	<0.0016		0.010	0.0016	mg/L	02/15/20 06:50	02/17/20 14:50		1
Beryllium	<0.00018		0.0010	0.00018	mg/L	02/15/20 06:50	02/17/20 14:50		1
Cadmium	<0.00022		0.0010	0.00022	mg/L	02/15/20 06:50	02/17/20 14:50		1
Chromium	<0.0015		0.0020	0.0015	mg/L	02/15/20 06:50	02/17/20 14:50		1
Cobalt	<0.00013		0.00050	0.00013	mg/L	02/15/20 06:50	02/17/20 14:50		1
Molybdenum	<0.00061		0.0050	0.00061	mg/L	02/15/20 06:50	02/17/20 14:50		1
Lead	<0.00013		0.0010	0.00013	mg/L	02/15/20 06:50	02/17/20 14:50		1
Antimony	0.000384	J	0.0020	0.00038	mg/L	02/15/20 06:50	02/17/20 14:50		1
Selenium	<0.0015		0.0050	0.0015	mg/L	02/15/20 06:50	02/17/20 14:50		1
Thallium	<0.00015		0.0010	0.00015	mg/L	02/15/20 06:50	02/17/20 14:50		1
Lithium	<0.0034		0.0050	0.0034	mg/L	02/15/20 06:50	02/17/20 14:50		1

**Lab Sample ID: LCS 180-307162/2-A**

**Matrix: Water**

**Analysis Batch: 307402**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 307162**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.06		mg/L	106		80 - 120
Barium	1.00	1.01		mg/L	101		80 - 120
Beryllium	0.500	0.474		mg/L	95		80 - 120
Cadmium	0.500	0.536		mg/L	107		80 - 120
Chromium	0.500	0.516		mg/L	103		80 - 120
Cobalt	0.500	0.511		mg/L	102		80 - 120
Molybdenum	0.500	0.530		mg/L	106		80 - 120
Lead	0.500	0.514		mg/L	103		80 - 120
Antimony	0.250	0.231		mg/L	92		80 - 120

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-102169-1

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

**Lab Sample ID: LCS 180-307162/2-A**

**Matrix: Water**

**Analysis Batch: 307402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 307162**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Selenium	1.00	0.953		mg/L	95	80 - 120	
Thallium	1.00	0.978		mg/L	98	80 - 120	
Lithium	0.500	0.467		mg/L	93	80 - 120	

**Lab Sample ID: MB 180-307560/1-A**

**Matrix: Water**

**Analysis Batch: 307853**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 307560**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L	02/19/20 14:08	02/21/20 13:34		1
Barium	<0.0016		0.010	0.0016	mg/L	02/19/20 14:08	02/21/20 13:34		1
Beryllium	<0.00018		0.0010	0.00018	mg/L	02/19/20 14:08	02/21/20 13:34		1
Cadmium	<0.00022		0.0010	0.00022	mg/L	02/19/20 14:08	02/21/20 13:34		1
Chromium	<0.0015		0.0020	0.0015	mg/L	02/19/20 14:08	02/21/20 13:34		1
Cobalt	<0.00013		0.00050	0.00013	mg/L	02/19/20 14:08	02/21/20 13:34		1
Molybdenum	<0.00061		0.0050	0.00061	mg/L	02/19/20 14:08	02/21/20 13:34		1
Lead	<0.00013		0.0010	0.00013	mg/L	02/19/20 14:08	02/21/20 13:34		1
Antimony	<0.00038		0.0020	0.00038	mg/L	02/19/20 14:08	02/21/20 13:34		1
Selenium	<0.0015		0.0050	0.0015	mg/L	02/19/20 14:08	02/21/20 13:34		1
Thallium	<0.00015		0.0010	0.00015	mg/L	02/19/20 14:08	02/21/20 13:34		1
Lithium	<0.0034		0.0050	0.0034	mg/L	02/19/20 14:08	02/21/20 13:34		1

**Lab Sample ID: LCS 180-306668/2-I**

**Matrix: Water**

**Analysis Batch: 307853**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 307560**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.03		mg/L	103	80 - 120	
Barium	1.00	0.956		mg/L	96	80 - 120	
Beryllium	0.500	0.523		mg/L	105	80 - 120	
Cadmium	0.500	0.505		mg/L	101	80 - 120	
Chromium	0.500	0.506		mg/L	101	80 - 120	
Cobalt	0.500	0.517		mg/L	103	80 - 120	
Molybdenum	0.500	0.469		mg/L	94	80 - 120	
Lead	0.500	0.488		mg/L	98	80 - 120	
Antimony	0.250	0.236		mg/L	94	80 - 120	
Selenium	1.00	1.01		mg/L	101	80 - 120	
Thallium	1.00	1.01		mg/L	101	80 - 120	
Lithium	0.500	0.422		mg/L	84	80 - 120	

**Lab Sample ID: LCS 180-307560/2-A**

**Matrix: Water**

**Analysis Batch: 307853**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 307560**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	1.09		mg/L	109	80 - 120	
Barium	1.00	1.02		mg/L	102	80 - 120	
Beryllium	0.500	0.541		mg/L	108	80 - 120	
Cadmium	0.500	0.538		mg/L	108	80 - 120	

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-102169-1

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

**Lab Sample ID: LCS 180-307560/2-A**

**Matrix: Water**

**Analysis Batch: 307853**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 307560**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	0.500	0.530		mg/L	106	80 - 120	
Cobalt	0.500	0.534		mg/L	107	80 - 120	
Molybdenum	0.500	0.488		mg/L	98	80 - 120	
Lead	0.500	0.512		mg/L	102	80 - 120	
Antimony	0.250	0.235		mg/L	94	80 - 120	
Selenium	1.00	1.02		mg/L	102	80 - 120	
Thallium	1.00	1.05		mg/L	105	80 - 120	
Lithium	0.500	0.464		mg/L	93	80 - 120	

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-307130/1-A**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 307130**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		02/14/20 14:00	02/17/20 15:05	1

**Lab Sample ID: LCS 180-307130/2-A**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 307130**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00250	0.00246		mg/L	98	80 - 120	

**Lab Sample ID: 180-102169-1 MS**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: WGWA-7**

**Prep Type: Total/NA**

**Prep Batch: 307130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.00010		0.00100	0.00105		mg/L	105	75 - 125	

**Lab Sample ID: 180-102169-1 MSD**

**Matrix: Water**

**Analysis Batch: 307328**

**Client Sample ID: WGWA-7**

**Prep Type: Total/NA**

**Prep Batch: 307130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD
Mercury	<0.00010		0.00100	0.00101		mg/L	101	75 - 125		4 20

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

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

Job ID: 180-102169-1

## HPLC/IC

### Analysis Batch: 307633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-2	FB-2-2-7-20	Total/NA	Water	EPA 300.0 R2.1	
180-102169-3	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-102169-10	WGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-102169-15	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
MB 180-307633/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-307633/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 307733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-4	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-102169-5	EB-2-2-7-20	Total/NA	Water	EPA 300.0 R2.1	
180-102169-6	WGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-102169-7	WGWC-12	Total/NA	Water	EPA 300.0 R2.1	
180-102169-8	WGWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-102169-9	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-102169-11	WGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-102169-12	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-102169-13	WGWC-14A	Total/NA	Water	EPA 300.0 R2.1	
180-102169-14	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-102169-16	WGWC-17	Total/NA	Water	EPA 300.0 R2.1	
LB1 180-307769/1-A	Method Blank	Total/NA	Water	EPA 300.0 R2.1	307769
MB 180-307733/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-307733/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-102169-4 MS	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-102169-4 MSD	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 307734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
MB 180-307734/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-307734/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-102169-1 MS	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-102169-1 MSD	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	

### Leach Batch: 307769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB1 180-307769/1-A	Method Blank	Total/NA	Water	DI Leach	

## Metals

### Filtration Batch: 306668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-306668/2-I	Lab Control Sample	Total Recoverable	Water	Filtration	

### Prep Batch: 307130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total/NA	Water	7470A	
180-102169-2	FB-2-2-7-20	Total/NA	Water	7470A	
180-102169-3	Dup-2	Total/NA	Water	7470A	
180-102169-4	WGWA-18	Total/NA	Water	7470A	
180-102169-5	EB-2-2-7-20	Total/NA	Water	7470A	

# QC Association Summary

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

Job ID: 180-102169-1

## Metals (Continued)

### Prep Batch: 307130 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-6	WGWC-10	Total/NA	Water	7470A	
180-102169-7	WGWC-12	Total/NA	Water	7470A	
180-102169-8	WGWC-11	Total/NA	Water	7470A	
180-102169-9	WGWC-15	Total/NA	Water	7470A	
180-102169-10	WGWC-16	Total/NA	Water	7470A	
180-102169-11	WGWC-19	Total/NA	Water	7470A	
180-102169-12	WGWC-13	Total/NA	Water	7470A	
180-102169-13	WGWC-14A	Total/NA	Water	7470A	
180-102169-14	WGWC-9	Total/NA	Water	7470A	
180-102169-15	WGWC-8	Total/NA	Water	7470A	
180-102169-16	WGWC-17	Total/NA	Water	7470A	
MB 180-307130/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-307130/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-102169-1 MS	WGWA-7	Total/NA	Water	7470A	
180-102169-1 MSD	WGWA-7	Total/NA	Water	7470A	

### Prep Batch: 307162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-15	WGWC-8	Total Recoverable	Water	3005A	
180-102169-16	WGWC-17	Total Recoverable	Water	3005A	
MB 180-307162/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-307162/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 307328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total/NA	Water	EPA 7470A	307130
180-102169-2	FB-2-2-7-20	Total/NA	Water	EPA 7470A	307130
180-102169-3	Dup-2	Total/NA	Water	EPA 7470A	307130
180-102169-4	WGWA-18	Total/NA	Water	EPA 7470A	307130
180-102169-5	EB-2-2-7-20	Total/NA	Water	EPA 7470A	307130
180-102169-6	WGWC-10	Total/NA	Water	EPA 7470A	307130
180-102169-7	WGWC-12	Total/NA	Water	EPA 7470A	307130
180-102169-8	WGWC-11	Total/NA	Water	EPA 7470A	307130
180-102169-9	WGWC-15	Total/NA	Water	EPA 7470A	307130
180-102169-10	WGWC-16	Total/NA	Water	EPA 7470A	307130
180-102169-11	WGWC-19	Total/NA	Water	EPA 7470A	307130
180-102169-12	WGWC-13	Total/NA	Water	EPA 7470A	307130
180-102169-13	WGWC-14A	Total/NA	Water	EPA 7470A	307130
180-102169-14	WGWC-9	Total/NA	Water	EPA 7470A	307130
180-102169-15	WGWC-8	Total/NA	Water	EPA 7470A	307130
180-102169-16	WGWC-17	Total/NA	Water	EPA 7470A	307130
MB 180-307130/1-A	Method Blank	Total/NA	Water	EPA 7470A	307130
LCS 180-307130/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	307130
180-102169-1 MS	WGWA-7	Total/NA	Water	EPA 7470A	307130
180-102169-1 MSD	WGWA-7	Total/NA	Water	EPA 7470A	307130

### Analysis Batch: 307402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-15	WGWC-8	Total Recoverable	Water	EPA 6020B	307162
180-102169-16	WGWC-17	Total Recoverable	Water	EPA 6020B	307162
MB 180-307162/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	307162

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

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

Job ID: 180-102169-1

## Metals (Continued)

### Analysis Batch: 307402 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-307162/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	307162

### Prep Batch: 307560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total Recoverable	Water	3005A	6
180-102169-2	FB-2-2-7-20	Total Recoverable	Water	3005A	7
180-102169-3	Dup-2	Total Recoverable	Water	3005A	8
180-102169-4	WGWA-18	Total Recoverable	Water	3005A	9
180-102169-5	EB-2-2-7-20	Total Recoverable	Water	3005A	10
180-102169-6	WGWC-10	Total Recoverable	Water	3005A	11
180-102169-7	WGWC-12	Total Recoverable	Water	3005A	12
180-102169-8	WGWC-11	Total Recoverable	Water	3005A	13
180-102169-9	WGWC-15	Total Recoverable	Water	3005A	
180-102169-10	WGWC-16	Total Recoverable	Water	3005A	
180-102169-11	WGWC-19	Total Recoverable	Water	3005A	
180-102169-12	WGWC-13	Total Recoverable	Water	3005A	
180-102169-13	WGWC-14A	Total Recoverable	Water	3005A	
180-102169-14	WGWC-9	Total Recoverable	Water	3005A	
MB 180-307560/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-306668/2-I	Lab Control Sample	Total Recoverable	Water	3005A	306668
LCS 180-307560/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 307853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total Recoverable	Water	EPA 6020B	307560
180-102169-2	FB-2-2-7-20	Total Recoverable	Water	EPA 6020B	307560
180-102169-3	Dup-2	Total Recoverable	Water	EPA 6020B	307560
180-102169-4	WGWA-18	Total Recoverable	Water	EPA 6020B	307560
180-102169-5	EB-2-2-7-20	Total Recoverable	Water	EPA 6020B	307560
180-102169-6	WGWC-10	Total Recoverable	Water	EPA 6020B	307560
180-102169-7	WGWC-12	Total Recoverable	Water	EPA 6020B	307560
180-102169-8	WGWC-11	Total Recoverable	Water	EPA 6020B	307560
180-102169-9	WGWC-15	Total Recoverable	Water	EPA 6020B	307560
180-102169-10	WGWC-16	Total Recoverable	Water	EPA 6020B	307560
180-102169-11	WGWC-19	Total Recoverable	Water	EPA 6020B	307560
180-102169-12	WGWC-13	Total Recoverable	Water	EPA 6020B	307560
180-102169-13	WGWC-14A	Total Recoverable	Water	EPA 6020B	307560
180-102169-14	WGWC-9	Total Recoverable	Water	EPA 6020B	307560
MB 180-307560/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	307560
LCS 180-306668/2-I	Lab Control Sample	Total Recoverable	Water	EPA 6020B	307560
LCS 180-307560/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	307560

## Chain of Custody Record

Phone (412) 963-7058 Fax (412) 963-2468

<b>Client Information</b>	Carrier Tra Southern Company
Client Contact: Joju Abraham Company:	
Sampler: <u>H. Auld</u>	Lab PM: Veronica Bortot
Phone: <u>(770) 594 - 5998</u>	E-Mail: <u>(Veronica.Bortot@testamericainc.com)</u>

Ver: 08/04/2016

1 2 3 4 5 6 7 8 9 10 11 12 13





180-102189 Waybill

eurofins

Environment Testing  
TestAmerica

Pac#115926544344 FLTEK4 07/21/20

ORIGIN IDLIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 TURNBROUGH DRIVE  
SUITE 110  
ATLANTA GA 30093  
STATES US

SHIP DATE: 10FEB20  
ACTWTG: 55.80 LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
963-7068  
REF: ACC - PLT WANSLEY

C5547-4840/C5545



2 of 3  
MPS# 1516 9323 0175  
0263  
Mstr# 1516 9323 0164

TUE - 11 FEB 3:00P  
STANDARD OVERNIGHT  
[0201]

15238  
PA-US PIT

Corrected temp  
meter ID

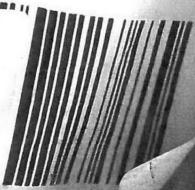
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10



Initials

B

I-SR-001 effective 11/8/18



Loc: 180  
100986

97

1  
16.00 A  
0103  
02/11



Environment Testing  
TestAmerica

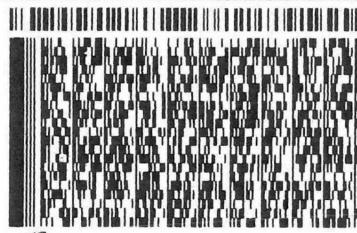
TEXAS/07/20

ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 10FEB20  
ACTWGT: 55.00 LB  
CAD: 859116/CAFE3312

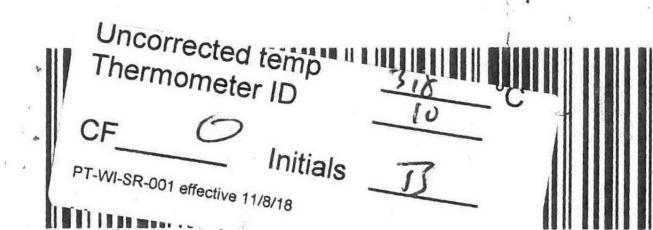
BILL RECIPIENT

To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7068  
REF: ACC - PLT WANSLEY



1 of 3  
TRK# 0201 1516 9323 0164 TUE 11 FEB 3:00P  
## MASTER ## STANDARD OVERNIGHT

15238  
PA-US PIT



1  
2  
3  
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13

3.0

CE<sub>0</sub>

#10

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-102169-1

**Login Number:** 102169

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

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	



# Environment Testing TestAmerica

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## ANALYTICAL REPORT

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

Laboratory Job ID: 180-102169-2

Client Project/Site: CCR - Plant Wansley

Sampling Event: Wansley Ash Pond Initial Scan Event

**For:**

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

Attn: Joju Abraham

Authorized for release by:

3/11/2020 4:42:55 PM

Veronica Bortot, Senior Project Manager

(412)963-2435

[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

LINKS

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

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

PA Lab ID: 02-00416

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# Case Narrative

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

Job ID: 180-102169-2

## Job ID: 180-102169-2

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-102169-2

### Comments

No additional comments.

### Receipt

The samples were received on 2/11/2020 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.0° C, 3.0° C and 3.8° C.

### Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWA-18 (180-102169-4). The container labels list WGWA-18, while the COC lists WGWA-8. The client emailed login a new COC with the corrected id of WGWA-18.

### RAD

Methods 903.0, 9315: Radium-226 Prep Batch 160-460626

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-7 (180-102169-1), FB-2-2-7-20 (180-102169-2), Dup-2 (180-102169-3), WGWA-18 (180-102169-4), EB-2-2-7-20 (180-102169-5), WGWC-10 (180-102169-6), WGWC-12 (180-102169-7), WGWC-11 (180-102169-8), WGWC-15 (180-102169-9), WGWC-16 (180-102169-10), WGWC-19 (180-102169-11), WGWC-13 (180-102169-12), WGWC-14A (180-102169-13), WGWC-9 (180-102169-14), WGWC-8 (180-102169-15), WGWC-17 (180-102169-16), (LCS 160-460626/1-A), (LCSD 160-460626/2-A) and (MB 160-460626/24-A)

Methods 904.0, 9320: Radium-228 Prep Batch 160-460632

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-7 (180-102169-1), FB-2-2-7-20 (180-102169-2), Dup-2 (180-102169-3), WGWA-18 (180-102169-4), EB-2-2-7-20 (180-102169-5), WGWC-10 (180-102169-6), WGWC-12 (180-102169-7), WGWC-11 (180-102169-8), WGWC-15 (180-102169-9), WGWC-16 (180-102169-10), WGWC-19 (180-102169-11), WGWC-13 (180-102169-12), WGWC-14A (180-102169-13), WGWC-9 (180-102169-14), WGWC-8 (180-102169-15), WGWC-17 (180-102169-16), (LCS 160-460632/1-A), (LCSD 160-460632/2-A) and (MB 160-460632/24-A)

Method PrecSep\_0: Radium 228 Prep Batch 160-460632:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWA-7 (180-102169-1), FB-2-2-7-20 (180-102169-2), Dup-2 (180-102169-3), WGWA-18 (180-102169-4), EB-2-2-7-20 (180-102169-5), WGWC-10 (180-102169-6), WGWC-12 (180-102169-7), WGWC-11 (180-102169-8), WGWC-15 (180-102169-9), WGWC-16 (180-102169-10), WGWC-19 (180-102169-11), WGWC-13 (180-102169-12), WGWC-14A (180-102169-13), WGWC-9 (180-102169-14), WGWC-8 (180-102169-15) and WGWC-17 (180-102169-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 prep Batch 160-460626:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWA-7 (180-102169-1), FB-2-2-7-20 (180-102169-2), Dup-2 (180-102169-3), WGWA-18 (180-102169-4), EB-2-2-7-20 (180-102169-5), WGWC-10 (180-102169-6), WGWC-12 (180-102169-7), WGWC-11 (180-102169-8), WGWC-15 (180-102169-9), WGWC-16 (180-102169-10), WGWC-19 (180-102169-11), WGWC-13 (180-102169-12), WGWC-14A (180-102169-13), WGWC-9 (180-102169-14), WGWC-8 (180-102169-15) and WGWC-17

## Case Narrative

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

Job ID: 180-102169-2

### Job ID: 180-102169-2 (Continued)

#### Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

(180-102169-16). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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: 180-102169-2

## Qualifiers

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

## Glossary

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

# Accreditation/Certification Summary

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

Job ID: 180-102169-2

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	03-31-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-04-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-20
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

# Accreditation/Certification Summary

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

Job ID: 180-102169-2

## 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	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-20
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-20 *
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

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

Eurofins TestAmerica, Pittsburgh

# Sample Summary

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

Job ID: 180-102169-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-102169-1	WGWA-7	Water	02/05/20 12:33	02/11/20 09:00	
180-102169-2	FB-2-2-7-20	Water	02/07/20 10:20	02/11/20 09:00	
180-102169-3	Dup-2	Water	02/07/20 00:00	02/11/20 09:00	
180-102169-4	WGWA-18	Water	02/05/20 12:05	02/11/20 09:00	
180-102169-5	EB-2-2-7-20	Water	02/07/20 10:10	02/11/20 09:00	
180-102169-6	WGWC-10	Water	02/05/20 11:24	02/11/20 09:00	
180-102169-7	WGWC-12	Water	02/05/20 14:16	02/11/20 09:00	
180-102169-8	WGWC-11	Water	02/05/20 15:07	02/11/20 09:00	
180-102169-9	WGWC-15	Water	02/07/20 10:38	02/11/20 09:00	
180-102169-10	WGWC-16	Water	02/07/20 11:28	02/11/20 09:00	
180-102169-11	WGWC-19	Water	02/07/20 12:19	02/11/20 09:00	
180-102169-12	WGWC-13	Water	02/05/20 13:35	02/11/20 09:00	
180-102169-13	WGWC-14A	Water	02/05/20 14:40	02/11/20 09:00	
180-102169-14	WGWC-9	Water	02/05/20 16:00	02/11/20 09:00	
180-102169-15	WGWC-8	Water	02/07/20 10:35	02/11/20 09:00	
180-102169-16	WGWC-17	Water	02/07/20 12:20	02/11/20 09:00	

Eurofins TestAmerica, Pittsburgh

## Method Summary

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

Job ID: 180-102169-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
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: 180-102169-2

**Client Sample ID: WGWA-7**  
**Date Collected: 02/05/20 12:33**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-1**  
**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			1000.41 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 13:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.41 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463178	03/04/20 18:15	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: FB-2-2-7-20**

**Date Collected: 02/07/20 10:20**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-2**  
**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			1000.56 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 13:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.56 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463178	03/04/20 18:15	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: Dup-2**

**Date Collected: 02/07/20 00:00**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-3**  
**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			1000.40 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.40 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463178	03/04/20 18:15	KLS	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-18**

**Date Collected: 02/05/20 12:05**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-4**  
**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	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-2

**Client Sample ID: WGWA-18**  
**Date Collected: 02/05/20 12:05**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-4**  
**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	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:18	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: EB-2-2-7-20**  
**Date Collected: 02/07/20 10:10**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-5**  
**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			1000.76 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.76 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:18	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-10**  
**Date Collected: 02/05/20 11:24**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-6**  
**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			1000.72 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.72 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:18	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-12**  
**Date Collected: 02/05/20 14:16**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-7**  
**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			1000.51 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:54	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.51 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-12**  
Date Collected: 02/05/20 14:16  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-7**  
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			463806	03/11/20 08:03	SMP	TAL SL

**Client Sample ID: WGWC-11**  
Date Collected: 02/05/20 15:07  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-8**  
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			1000.17 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-15**  
Date Collected: 02/07/20 10:38  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-9**  
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			1000.50 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.50 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-16**  
Date Collected: 02/07/20 11:28  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-10**  
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			1000.80 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.80 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

# Lab Chronicle

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-19**  
**Date Collected: 02/07/20 12:19**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-11**  
**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			1000.62 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-13**  
**Date Collected: 02/05/20 13:35**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-12**  
**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			1000.77 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.77 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:19	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-14A**  
**Date Collected: 02/05/20 14:40**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-13**  
**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			1000.16 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.16 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:20	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-9**  
**Date Collected: 02/05/20 16:00**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-14**  
**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			1000.71 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								

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# Lab Chronicle

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-9**  
**Date Collected: 02/05/20 16:00**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-14**  
**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			1000.71 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:20	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-8**  
**Date Collected: 02/07/20 10:35**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-15**  
**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			1000.31 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:55	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.31 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:20	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-17**  
**Date Collected: 02/07/20 12:20**  
**Date Received: 02/11/20 09:00**

**Lab Sample ID: 180-102169-16**  
**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			1000.48 mL	1.0 g	460626	02/17/20 12:15	RBR	TAL SL
Total/NA	Analysis	9315		1			463594	03/10/20 15:56	AJD	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.48 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis	9320		1			463111	03/04/20 18:20	KLS	TAL SL
		Instrument ID: GFPCORANGE								
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	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

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano

KLS = Kody Saulters

SMP = Siobhan Perry

# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWA-7**  
Date Collected: 02/05/20 12:33  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-1**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0239	U	0.0649	0.0649	1.00	0.143	pCi/L	02/17/20 12:15	03/10/20 13:54	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.2		40 - 110					02/17/20 12:15	03/10/20 13:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.00240	U	0.265	0.265	1.00	0.473	pCi/L	02/17/20 13:01	03/04/20 18:15	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.2		40 - 110					02/17/20 13:01	03/04/20 18:15	1
Y Carrier	86.4		40 - 110					02/17/20 13:01	03/04/20 18:15	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0263	U	0.273	0.273	2.00	0.473	pCi/L		03/11/20 08:03	1

## Client Sample ID: FB-2-2-7-20

Date Collected: 02/07/20 10:20  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0648	U	0.0831	0.0833	1.00	0.138	pCi/L	02/17/20 12:15	03/10/20 13:54	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					02/17/20 12:15	03/10/20 13:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.201	U	0.244	0.244	1.00	0.403	pCi/L	02/17/20 13:01	03/04/20 18:15	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	100		40 - 110					02/17/20 13:01	03/04/20 18:15	1
Y Carrier	86.7		40 - 110					02/17/20 13:01	03/04/20 18:15	1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: FB-2-2-7-20**

**Lab Sample ID: 180-102169-2**

Matrix: Water

Date Collected: 02/07/20 10:20

Date Received: 02/11/20 09:00

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.266	U	0.258	0.258	2.00	0.403	pCi/L		03/11/20 08:03	1

**Client Sample ID: Dup-2**

**Lab Sample ID: 180-102169-3**

Matrix: Water

Date Collected: 02/07/20 00:00

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0361	U	0.0548	0.0549	1.00	0.0947	pCi/L	02/17/20 12:15	03/10/20 15:54	1
<b>Carrier</b>										
Ba Carrier	98.8		<b>Limits</b>					02/17/20 12:15	03/10/20 15:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.378	U	0.279	0.281	1.00	0.439	pCi/L	02/17/20 13:01	03/04/20 18:15	1
<b>Carrier</b>										
Ba Carrier	98.8		<b>Limits</b>					02/17/20 13:01	03/04/20 18:15	1
Y Carrier	87.9		40 - 110					02/17/20 13:01	03/04/20 18:15	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.415	U	0.284	0.286	2.00	0.439	pCi/L		03/11/20 08:03	1

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-102169-4**

Matrix: Water

Date Collected: 02/05/20 12:05

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.122	U	0.0898	0.0905	1.00	0.130	pCi/L	02/17/20 12:15	03/10/20 15:54	1
<b>Carrier</b>										
Ba Carrier	95.4		<b>Limits</b>					02/17/20 12:15	03/10/20 15:54	1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-102169-4**

Date Collected: 02/05/20 12:05

Matrix: Water

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.206	U	0.227	0.228	1.00	0.372	pCi/L	02/17/20 13:01	03/04/20 18:18	1
<b>Carrier</b>										
Ba Carrier	95.4		40 - 110					02/17/20 13:01	03/04/20 18:18	1
Y Carrier	88.6		40 - 110					02/17/20 13:01	03/04/20 18:18	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.327	U	0.244	0.245	2.00	0.372	pCi/L	03/11/20 08:03		1

**Client Sample ID: EB-2-2-7-20**

**Lab Sample ID: 180-102169-5**

Date Collected: 02/07/20 10:10

Matrix: Water

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00728	U	0.0589	0.0589	1.00	0.124	pCi/L	02/17/20 12:15	03/10/20 15:54	1
<b>Carrier</b>										
Ba Carrier	93.8		40 - 110					02/17/20 12:15	03/10/20 15:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.298	U	0.248	0.250	1.00	0.395	pCi/L	02/17/20 13:01	03/04/20 18:18	1
<b>Carrier</b>										
Ba Carrier	93.8		40 - 110					02/17/20 13:01	03/04/20 18:18	1
Y Carrier	86.0		40 - 110					02/17/20 13:01	03/04/20 18:18	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.291	U	0.255	0.257	2.00	0.395	pCi/L	03/11/20 08:03		1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-10**  
Date Collected: 02/05/20 11:24  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-6**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0551	U	0.0841	0.0843	1.00	0.144	pCi/L	02/17/20 12:15	03/10/20 15:54	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.7		40 - 110					02/17/20 12:15	03/10/20 15:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0410	U	0.243	0.243	1.00	0.429	pCi/L	02/17/20 13:01	03/04/20 18:18	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.7		40 - 110					02/17/20 13:01	03/04/20 18:18	1
Y Carrier	84.1		40 - 110					02/17/20 13:01	03/04/20 18:18	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0961	U	0.257	0.257	2.00	0.429	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-12

Date Collected: 02/05/20 14:16  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-7**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.118	U	0.0882	0.0888	1.00	0.127	pCi/L	02/17/20 12:15	03/10/20 15:54	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	92.9		40 - 110					02/17/20 12:15	03/10/20 15:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.107	U	0.306	0.306	1.00	0.524	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	92.9		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	87.1		40 - 110					02/17/20 13:01	03/04/20 18:19	1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-12**  
Date Collected: 02/05/20 14:16  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-7**  
Matrix: Water

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.225	U	0.318	0.319	2.00	0.524	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-11

Date Collected: 02/05/20 15:07  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-8**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0274	U	0.0620	0.0620	1.00	0.114	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>										
Ba Carrier	92.6		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.136	U	0.264	0.264	1.00	0.448	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>										
Ba Carrier	92.6		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	87.1		40 - 110					02/17/20 13:01	03/04/20 18:19	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.163	U	0.271	0.271	2.00	0.448	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-15

Date Collected: 02/07/20 10:38  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-9**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0889	U	0.0815	0.0819	1.00	0.124	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>										
Ba Carrier	84.3		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-15**

Date Collected: 02/07/20 10:38

Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-9**

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0365	U	0.284	0.284	1.00	0.498	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>										
Ba Carrier	84.3		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	90.5		40 - 110					02/17/20 13:01	03/04/20 18:19	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.125	U	0.295	0.296	2.00	0.498	pCi/L	03/11/20 08:03		1

**Client Sample ID: WGWC-16**

Date Collected: 02/07/20 11:28

Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-10**

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.155	U	0.109	0.110	1.00	0.157	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>										
Ba Carrier	90.8		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.642		0.293	0.299	1.00	0.424	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>										
Ba Carrier	90.8		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	87.5		40 - 110					02/17/20 13:01	03/04/20 18:19	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.797		0.313	0.319	2.00	0.424	pCi/L	03/11/20 08:03		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-19**  
Date Collected: 02/07/20 12:19  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-11**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00328	U	0.0569	0.0569	1.00	0.117	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	88.9		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.197	U	0.266	0.267	1.00	0.444	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	88.9		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	85.2		40 - 110					02/17/20 13:01	03/04/20 18:19	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.200	U	0.272	0.273	2.00	0.444	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-13

Date Collected: 02/05/20 13:35  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-12**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0718	U	0.0883	0.0885	1.00	0.146	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	96.0		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.537		0.270	0.274	1.00	0.397	pCi/L	02/17/20 13:01	03/04/20 18:19	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	96.0		40 - 110					02/17/20 13:01	03/04/20 18:19	1
Y Carrier	87.1		40 - 110					02/17/20 13:01	03/04/20 18:19	1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-13**  
Date Collected: 02/05/20 13:35  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-12**  
Matrix: Water

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.609		0.284	0.288	2.00	0.397	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-14A

Date Collected: 02/05/20 14:40  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-13**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.384		0.131	0.135	1.00	0.130	pCi/L	02/17/20 12:15	03/10/20 15:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.116	U	0.220	0.220	1.00	0.376	pCi/L	02/17/20 13:01	03/04/20 18:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					02/17/20 13:01	03/04/20 18:20	1
Y Carrier	87.5		40 - 110					02/17/20 13:01	03/04/20 18:20	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.500		0.256	0.258	2.00	0.376	pCi/L		03/11/20 08:03	1

## Client Sample ID: WGWC-9

Date Collected: 02/05/20 16:00  
Date Received: 02/11/20 09:00

**Lab Sample ID: 180-102169-14**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0831	U	0.0744	0.0747	1.00	0.112	pCi/L	02/17/20 12:15	03/10/20 15:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-9**

**Lab Sample ID: 180-102169-14**

Matrix: Water

Date Collected: 02/05/20 16:00

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.220	U	0.192	0.193	1.00	0.389	pCi/L	02/17/20 13:01	03/04/20 18:20	1
<b>Carrier</b>										
Ba Carrier	95.7		40 - 110					02/17/20 13:01	03/04/20 18:20	1
Y Carrier	87.1		40 - 110					02/17/20 13:01	03/04/20 18:20	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.137	U	0.206	0.207	2.00	0.389	pCi/L	03/11/20 08:03		1

**Client Sample ID: WGWC-8**

**Lab Sample ID: 180-102169-15**

Matrix: Water

Date Collected: 02/07/20 10:35

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.504		0.158	0.164	1.00	0.161	pCi/L	02/17/20 12:15	03/10/20 15:55	1
<b>Carrier</b>										
Ba Carrier	82.8		40 - 110					02/17/20 12:15	03/10/20 15:55	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	1.16		0.356	0.372	1.00	0.465	pCi/L	02/17/20 13:01	03/04/20 18:20	1
<b>Carrier</b>										
Ba Carrier	82.8		40 - 110					02/17/20 13:01	03/04/20 18:20	1
Y Carrier	86.4		40 - 110					02/17/20 13:01	03/04/20 18:20	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.66		0.389	0.407	2.00	0.465	pCi/L	03/11/20 08:03		1

# Client Sample Results

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

Job ID: 180-102169-2

**Client Sample ID: WGWC-17**

**Lab Sample ID: 180-102169-16**

Date Collected: 02/07/20 12:20

Matrix: Water

Date Received: 02/11/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0807	U	0.0833	0.0836	1.00	0.131	pCi/L	02/17/20 12:15	03/10/20 15:56	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.2		40 - 110					02/17/20 12:15	03/10/20 15:56	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.163	U	0.236	0.237	1.00	0.396	pCi/L	02/17/20 13:01	03/04/20 18:20	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.2		40 - 110					02/17/20 13:01	03/04/20 18:20	1
Y Carrier	86.4		40 - 110					02/17/20 13:01	03/04/20 18:20	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.244	U	0.250	0.251	2.00	0.396	pCi/L		03/11/20 08:03	1

# QC Sample Results

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

Job ID: 180-102169-2

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

**Lab Sample ID:** MB 160-460626/24-A

**Matrix:** Water

**Analysis Batch:** 463594

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 460626

Analyte	Result	MB	MB	Count		Total		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert.	(2σ+/-)	Uncert.	(2σ+/-)						
Radium-226	-0.02286	U		0.0621		0.0622		1.00	0.137	pCi/L	02/17/20 12:15	03/10/20 15:56	1
<i>Carrier</i>		<i>MB</i>	<i>MB</i>								<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier		%Yield	Qualifier		Limits						02/17/20 12:15	03/10/20 15:56	1
		94.5			40 - 110								

**Lab Sample ID:** LCS 160-460626/1-A

**Matrix:** Water

**Analysis Batch:** 463594

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 460626

Analyte	Spike Added	LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec	%Rec. Limits	Limits
				Uncert.	(2σ+/-)						
Radium-226	11.3	9.861		1.08		1.00	0.163	pCi/L	87	75 - 125	
<i>Carrier</i>		<i>LCS</i>	<i>LCS</i>								
Ba Carrier		%Yield	Qualifier		Limits						
		87.7			40 - 110						

**Lab Sample ID:** LCSD 160-460626/2-A

**Matrix:** Water

**Analysis Batch:** 463594

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 460626

Analyte	Spike Added	LCSD Result	LCSD Qual	Total		RL	MDC	Unit	%Rec	%Rec. Limits	RER	Limit
				Uncert.	(2σ+/-)							
Radium-226	11.3	9.303		0.992		1.00	0.107	pCi/L	82	75 - 125	0.27	1
<i>Carrier</i>		<i>LCSD</i>	<i>LCSD</i>									
Ba Carrier		%Yield	Qualifier		Limits							
		99.1			40 - 110							

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

**Lab Sample ID:** MB 160-460632/24-A

**Matrix:** Water

**Analysis Batch:** 463111

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 460632

Analyte	Result	MB	MB	Count		RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert.	(2σ+/-)						
Radium-228	0.01360	U		0.209		0.209	0.375	pCi/L	02/17/20 13:01	03/04/20 18:20	1
<i>Carrier</i>		<i>MB</i>	<i>MB</i>						<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier		%Yield	Qualifier		Limits				02/17/20 13:01	03/04/20 18:20	1
Y Carrier		94.5			40 - 110				02/17/20 13:01	03/04/20 18:20	1
		86.7			40 - 110						

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# QC Sample Results

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

Job ID: 180-102169-2

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

**Lab Sample ID: LCS 160-460632/1-A**

**Matrix: Water**

**Analysis Batch: 463178**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 460632**

Analyte	Spike Added	LCS		Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	LCS							
Radium-228	9.05	8.766			1.07	1.00	0.477	pCi/L	97	75 - 125

**Carrier LCS LCS**

Carrier	%Yield	Qualifier	Limits	
			Ba Carrier	Y Carrier
	87.7		40 - 110	
	88.2		40 - 110	

**Lab Sample ID: LCSD 160-460632/2-A**

**Matrix: Water**

**Analysis Batch: 463178**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 460632**

Analyte	Spike Added	LCSD		Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
		Result	LCSD									
Radium-228	9.05	8.231			0.987	1.00	0.405	pCi/L	91	75 - 125	0.26	1

**Carrier LCSD LCSD**

Carrier	%Yield	Qualifier	Limits	
			Ba Carrier	Y Carrier
	99.1		40 - 110	
	88.6		40 - 110	

# QC Association Summary

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

Job ID: 180-102169-2

## Rad

### Prep Batch: 460626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total/NA	Water	PrecSep-21	1
180-102169-2	FB-2-2-7-20	Total/NA	Water	PrecSep-21	2
180-102169-3	Dup-2	Total/NA	Water	PrecSep-21	3
180-102169-4	WGWA-18	Total/NA	Water	PrecSep-21	4
180-102169-5	EB-2-2-7-20	Total/NA	Water	PrecSep-21	5
180-102169-6	WGWC-10	Total/NA	Water	PrecSep-21	6
180-102169-7	WGWC-12	Total/NA	Water	PrecSep-21	7
180-102169-8	WGWC-11	Total/NA	Water	PrecSep-21	8
180-102169-9	WGWC-15	Total/NA	Water	PrecSep-21	9
180-102169-10	WGWC-16	Total/NA	Water	PrecSep-21	10
180-102169-11	WGWC-19	Total/NA	Water	PrecSep-21	11
180-102169-12	WGWC-13	Total/NA	Water	PrecSep-21	12
180-102169-13	WGWC-14A	Total/NA	Water	PrecSep-21	13
180-102169-14	WGWC-9	Total/NA	Water	PrecSep-21	
180-102169-15	WGWC-8	Total/NA	Water	PrecSep-21	
180-102169-16	WGWC-17	Total/NA	Water	PrecSep-21	
MB 160-460626/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-460626/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-460626/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

### Prep Batch: 460632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-102169-1	WGWA-7	Total/NA	Water	PrecSep_0	1
180-102169-2	FB-2-2-7-20	Total/NA	Water	PrecSep_0	2
180-102169-3	Dup-2	Total/NA	Water	PrecSep_0	3
180-102169-4	WGWA-18	Total/NA	Water	PrecSep_0	4
180-102169-5	EB-2-2-7-20	Total/NA	Water	PrecSep_0	5
180-102169-6	WGWC-10	Total/NA	Water	PrecSep_0	6
180-102169-7	WGWC-12	Total/NA	Water	PrecSep_0	7
180-102169-8	WGWC-11	Total/NA	Water	PrecSep_0	8
180-102169-9	WGWC-15	Total/NA	Water	PrecSep_0	9
180-102169-10	WGWC-16	Total/NA	Water	PrecSep_0	10
180-102169-11	WGWC-19	Total/NA	Water	PrecSep_0	11
180-102169-12	WGWC-13	Total/NA	Water	PrecSep_0	12
180-102169-13	WGWC-14A	Total/NA	Water	PrecSep_0	13
180-102169-14	WGWC-9	Total/NA	Water	PrecSep_0	
180-102169-15	WGWC-8	Total/NA	Water	PrecSep_0	
180-102169-16	WGWC-17	Total/NA	Water	PrecSep_0	
MB 160-460632/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-460632/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-460632/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

## Chain of Custody Record

Client Contact:

Joju Abraham  
Company:  
Southern Company

Address:

PO BOX 2641 GSC8  
City: Birmingham  
State, Zip:  
AL, 35291  
Phone:

Email:

JAbraham@southernco.com  
Project Name:  
CCR - Plant Wansley - Ash Pond

Site:

Georgia

Sampler:

O. Fugue A  
Phone: (770) 594-5998

TAT Requested (days):

PO #:

SCS10347656

WCO #:

Project #:

40007099

SSOW#:

Sample Date

Sample Time

Sample Type

(C=comp,  
G=grab)

Preservation Code:

D N D

Field Filtered Sample (Yes or No)

X

Petroform M/S/MSD (yes or No)

X

Metals App. IV

X

Field 226 & 228

X

Radium 226 & 228

X

SW-846 9315/9320

X

Water

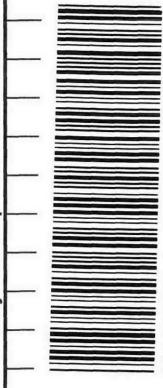
X

(W=water,  
S=solid,  
O=waste oil,  
B=tissue,  
A=Air)

X

Preservation Notes:

### Analysis Requested



180-102169 Chain of Custody

Preservation Codes:  
A - HCl  
B - NaOH  
C - Zn Acetate  
D - Nitric Acid  
E - NaHSO4  
F - MeOH  
G - Anhyd  
H - Ascorbic Acid  
I - Ice  
J - DI Water  
K - EDTA  
L - EDA  
Other:

<b>Client Information</b>	Carrier Tra Southern Company
Client Contact: Joju Abraham Company:	
Sampler: <u>H. Auld</u>	Lab PM: Veronica Bortot
Phone: <u>(770) 594 - 5998</u>	E-Mail: <u>(Veronica.Bortot@testamericainc.com)</u>

---

Ver: 08/04/2016

1 2 3 4 5 6 7 8 9 10 11 12 13

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

## Chain of Custody Record

Client Contact: Jojo Abraham

Company: Southern Company

Address: PO BOX 2641 GSC8

City: Birmingham

State: AL

Phone:

PO #:

VO #:

Project #:

SSDW#:

Email: JAbraham@southernco.com

Project Name: CCR - Plant Wansley - Ash Pond

Site: Georgia

Sampler: H. Au/IQ

Phone: (770) 594-5998

Lab P#: Veronica.Borot

E-Mail: (Veronica.Borot@testamericainc.com)

Sample Date: 2-5-20

Sample Time: 1205

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: D

Sample Date: 2-5-20

Sample Time: 1335

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-5-20

Sample Time: 1440

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: D

Sample Date: 2-5-20

Sample Time: 1600

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1010

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: D

Sample Date: 2-7-20

Sample Time: 1025

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1220

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1330

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1445

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: D

Sample Date: 2-7-20

Sample Time: 1610

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1725

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1840

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 1955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2110

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2225

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2340

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2455

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2510

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2625

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2740

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2855

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2955

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2910

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2925

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N

Sample Date: 2-7-20

Sample Time: 2940

Sample Type: G

Preservation Code: W

Matrix: N

Special Instructions/Note: N



180-102189 Waybill

eurofins

Environment Testing  
TestAmerica

Pac#115926544 RFL EXP 07/21/20

ORIGIN IDLIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 TUNNOUGH DRIVE  
SUITE 110  
3035 GA 30093  
STATES USSHIP DATE: 10FEB20  
ACTWTG: 55.80 LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
963-7068  
REF: ACC - PLT WANSLEY

C5507-FB404/C5505

2 of 3  
MPS# 1516 9323 0175  
0263  
Mstr# 1516 9323 0164TUE - 11 FEB 3:00P  
STANDARD OVERNIGHT  
[0201]15238  
PA-US PITCorrected temp  
meter ID3.0  
10

Initials

B

I-SR-001 effective 11/8/18

Loc: 180  
100986

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16.00 A  
0103  
02/11



Environment Testing  
TestAmerica

TEXAS/07/20

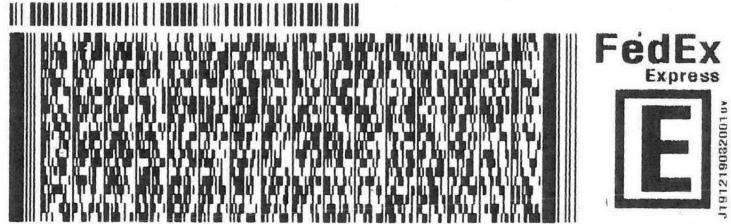
ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 10FEB20  
ACTWGT: 55.00 LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7068  
REF: ACC - PLT WANSLEY

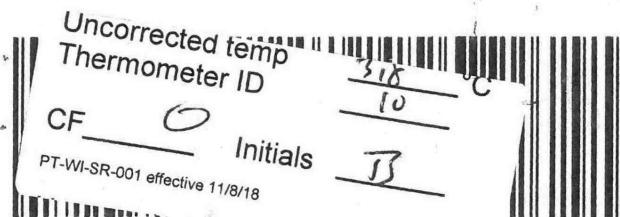
2019/02/11 09:55



1 of 3  
TRK# 0201 1516 9323 0164 TUE 11 FEB 3:00P  
## MASTER ## STANDARD OVERNIGHT

NA AGCA

15238  
PA-US PIT



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JJ

PT-WI-SR-001 effective 11/8/18

CF

Initials

JJ

PT-WI-SR-001 effective 11/8/18

CF

Initials

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CE<sub>0</sub>

#10





## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-102169-2

**Login Number:** 102169

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Watson, Debbie

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: 180-102169-2

**Login Number:** 102169

**List Source:** Eurofins TestAmerica, St. Louis

**List Number:** 2

**List Creation:** 02/14/20 03:52 PM

**Creator:** Harris, Lorin C

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.	False	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-103742-1

Client Project/Site: CCR - Plant Wansley Ash Pond  
Revision: 1

**For:**

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

Attn: Joju Abraham

Authorized for release by:  
6/1/2020 11:30:38 AM

Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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# Table of Contents

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# Case Narrative

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

Job ID: 180-103742-1

## Job ID: 180-103742-1

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-103742-1

### Comments

060120 Revised report to remove Antimony per client request. This report replaces the report previously issued on 041320.

### Receipt

The samples were received on 3/19/2020 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.3° C, 1.4° C, 2.9° C and 3.9° C.

### GC Semi VOA

Methods 300.0, 9056A: The matrix spike / matrix spike duplicate (MS/MSD) precision for Fluoride for analytical batch 180-311618 was outside control limits. Sample matrix interference is suspected.

Methods 300.0, 9056A: The matrix spike duplicate (MSD) recovery for Sulfate for analytical batch 180-311839 was outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery and matrix spike (MS) were within acceptance limits.

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

### Metals

Method 7470A: The LCS associated with 310886 was accidentally spiked with 2.25 mL rather than 1.25 mL.

WGWA-3 (180-103742-3), WGWA-4 (180-103742-4), WGWA-5 (180-103742-5), WGWA-6 (180-103742-6), WGWA-7 (180-103742-7),  
WGWA-18 (180-103742-8), EB-1 3-17-20 (180-103742-9) and DUPLICATE 1 3-17-20 (180-103742-10)

Method 7470A: The LCS associated with 310888 was accidentally spiked with 2.25 mL rather than 1.25 mL.

WGWC-11 (180-103742-11), (180-103742-C-11 MS) and (180-103742-C-11 MSD)

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

### Field Service

No analytical or quality issues were noted, other than those described 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 Ash Pond

Job ID: 180-103742-1

## 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)
MQL	Method Quantitation Limit
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 Ash Pond

Job ID: 180-103742-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Eurofins TestAmerica, Pittsburgh

# Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID	
180-103742-1	WGWA-1	Water	03/16/20 14:15	03/19/20 08:30		1
180-103742-2	WGWA-2	Water	03/16/20 12:25	03/19/20 08:30		2
180-103742-3	WGWA-3	Water	03/17/20 11:35	03/19/20 08:30		3
180-103742-4	WGWA-4	Water	03/17/20 10:40	03/19/20 08:30		4
180-103742-5	WGWA-5	Water	03/17/20 12:50	03/19/20 08:30		5
180-103742-6	WGWA-6	Water	03/17/20 11:15	03/19/20 08:30		6
180-103742-7	WGWA-7	Water	03/17/20 14:05	03/19/20 08:30		7
180-103742-8	WGWA-18	Water	03/17/20 14:35	03/19/20 08:30		8
180-103742-9	EB-1 3-17-20	Water	03/17/20 14:00	03/19/20 08:30		9
180-103742-10	DUPLICATE 1 3-17-20	Water	03/17/20 00:00	03/19/20 08:30		10
180-103742-11	WGWC-11	Water	03/18/20 13:05	03/19/20 08:30		11

# Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

## Protocol References:

EPA = US Environmental Protection Agency

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

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

## Laboratory References:

TAL 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 Ash Pond

Job ID: 180-103742-1

## **Client Sample ID: WGWA-1**

Date Collected: 03/16/20 14:15

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-1**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 00:11	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 14:41	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310885	03/23/20 17:44	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 16:33	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/16/20 14:15	FDS	TAL PIT

## **Client Sample ID: WGWA-2**

Date Collected: 03/16/20 12:25

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-2**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 00:27	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 14:53	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310885	03/23/20 17:44	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 16:34	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/16/20 12:25	FDS	TAL PIT

## **Client Sample ID: WGWA-3**

Date Collected: 03/17/20 11:35

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-3**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311839	04/03/20 00:52	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 14:56	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:13	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103742-1

## **Client Sample ID: WGWA-3**

**Date Collected: 03/17/20 11:35**

**Date Received: 03/19/20 08:30**

## **Lab Sample ID: 180-103742-3**

**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	SM 2540C		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 11:35	FDS	TAL PIT

## **Client Sample ID: WGWA-4**

**Date Collected: 03/17/20 10:40**

**Date Received: 03/19/20 08:30**

## **Lab Sample ID: 180-103742-4**

**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311491	03/30/20 16:46	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:03	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:14	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 10:40	FDS	TAL PIT

## **Client Sample ID: WGWA-5**

**Date Collected: 03/17/20 12:50**

**Date Received: 03/19/20 08:30**

## **Lab Sample ID: 180-103742-5**

**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311491	03/30/20 17:33	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:05	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:15	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310587	03/20/20 11:51	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 12:50	FDS	TAL PIT

# Lab Chronicle

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

Job ID: 180-103742-1

## **Client Sample ID: WGWA-6**

Date Collected: 03/17/20 11:15

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-6**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311491	03/30/20 17:49	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:08	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:16	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310562	03/20/20 09:05	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 11:15	FDS	TAL PIT

## **Client Sample ID: WGWA-7**

Date Collected: 03/17/20 14:05

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-7**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 00:43	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:10	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:17	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310562	03/20/20 09:05	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 14:05	FDS	TAL PIT

## **Client Sample ID: WGWA-18**

Date Collected: 03/17/20 14:35

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-8**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 00:59	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:13	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:18	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-18**  
**Date Collected: 03/17/20 14:35**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-8**  
**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	SM 2540C		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/17/20 14:35	FDS	TAL PIT

**Client Sample ID: EB-1 3-17-20**  
**Date Collected: 03/17/20 14:00**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 01:15	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:15	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:19	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT

**Client Sample ID: DUPLICATE 1 3-17-20**  
**Date Collected: 03/17/20 00:00**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-10**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 01:30	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:18	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	310886	03/23/20 17:48	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:20	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT

**Client Sample ID: WGWC-11**  
**Date Collected: 03/18/20 13:05**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-11**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			311618	04/01/20 01:46	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312551	04/09/20 15:20	RJR	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103742-1

**Client Sample ID: WGWC-11**

**Lab Sample ID: 180-103742-11**

**Matrix: Water**

**Date Collected: 03/18/20 13:05**

**Date Received: 03/19/20 08:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	310888	03/23/20 17:54	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311000	03/24/20 17:43	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/18/20 13:05	FDS	TAL PIT

## Laboratory References:

TAL PIT = Eurofins 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

AVS = Abbey Smith

FDS = Sampler Field

NAM = Nicole Marfisi

RJR = Ron Rosenbaum

SAC = Shawn Clemente

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-1**

**Lab Sample ID: 180-103742-1**

Matrix: Water

Date Collected: 03/16/20 14:15

Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.3		1.0	0.32	mg/L			04/01/20 00:11	1
Fluoride	0.042 J		0.10	0.026	mg/L			04/01/20 00:11	1
Sulfate	0.42 J		1.0	0.38	mg/L			04/01/20 00:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00038 J		0.0010	0.00031	mg/L			03/25/20 11:00	04/09/20 14:41
Barium	0.046		0.010	0.0016	mg/L			03/25/20 11:00	04/09/20 14:41
Beryllium	0.00071 J		0.0025	0.00018	mg/L			03/25/20 11:00	04/09/20 14:41
Boron	<0.039		0.080	0.039	mg/L			03/25/20 11:00	04/09/20 14:41
Cadmium	<0.00022		0.0025	0.00022	mg/L			03/25/20 11:00	04/09/20 14:41
Calcium	1.1		0.50	0.13	mg/L			03/25/20 11:00	04/09/20 14:41
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/09/20 14:41
Cobalt	0.00092 J		0.0025	0.00013	mg/L			03/25/20 11:00	04/09/20 14:41
Molybdenum	<0.00061		0.015	0.00061	mg/L			03/25/20 11:00	04/09/20 14:41
Lead	0.00021 J		0.0010	0.00013	mg/L			03/25/20 11:00	04/09/20 14:41
Selenium	<0.0015		0.0050	0.0015	mg/L			03/25/20 11:00	04/09/20 14:41
Thallium	0.00036 J		0.0010	0.00015	mg/L			03/25/20 11:00	04/09/20 14:41
Lithium	0.0053		0.0050	0.0034	mg/L			03/25/20 11:00	04/09/20 14:41

## 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			03/23/20 17:44	03/24/20 16:33

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	23		10	10	mg/L			03/20/20 09:14	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.29			SU				03/16/20 14:15	1

**Client Sample ID: WGWA-2**

**Lab Sample ID: 180-103742-2**

Matrix: Water

Date Collected: 03/16/20 12:25

Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.7		1.0	0.32	mg/L			04/01/20 00:27	1
Fluoride	0.052 J		0.10	0.026	mg/L			04/01/20 00:27	1
Sulfate	1.3		1.0	0.38	mg/L			04/01/20 00:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00043 J		0.0010	0.00031	mg/L			03/25/20 11:00	04/09/20 14:53
Barium	0.026		0.010	0.0016	mg/L			03/25/20 11:00	04/09/20 14:53
Beryllium	0.00076 J		0.0025	0.00018	mg/L			03/25/20 11:00	04/09/20 14:53
Boron	0.048 J		0.080	0.039	mg/L			03/25/20 11:00	04/09/20 14:53
Cadmium	<0.00022		0.0025	0.00022	mg/L			03/25/20 11:00	04/09/20 14:53
Calcium	10		0.50	0.13	mg/L			03/25/20 11:00	04/09/20 14:53
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/09/20 14:53

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-2**

**Lab Sample ID: 180-103742-2**

**Matrix: Water**

Date Collected: 03/16/20 12:25

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	0.00066	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 14:53	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 14:53	1
Lead	0.00018	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 14:53	1
Selenium	0.0026	J	0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 14:53	1
Thallium	0.00030	J	0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 14:53	1
Lithium	0.0083		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 14:53	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		03/23/20 17:44	03/24/20 16:34	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	90		10	10	mg/L			03/20/20 09:14	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.01			SU				03/16/20 12:25	1

**Client Sample ID: WGWA-3**

**Lab Sample ID: 180-103742-3**

**Matrix: Water**

Date Collected: 03/17/20 11:35

Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.32	mg/L			04/03/20 00:52	1
Fluoride	0.040	J	0.10	0.026	mg/L			04/03/20 00:52	1
Sulfate	1.2		1.0	0.38	mg/L			04/03/20 00:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/09/20 14:56	1
Barium	0.013		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 14:56	1
Beryllium	0.00021	J	0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 14:56	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 14:56	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 14:56	1
Calcium	1.7		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 14:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 14:56	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 14:56	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 14:56	1
Lead	0.00019	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 14:56	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 14:56	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 14:56	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 14:56	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		03/23/20 17:48	03/24/20 17:13	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

## **Client Sample ID: WGWA-3**

Date Collected: 03/17/20 11:35  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-3**

Matrix: Water

### **General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		10	10	mg/L			03/20/20 09:14	1

### **Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.61			SU				03/17/20 11:35	1

## **Client Sample ID: WGWA-4**

Date Collected: 03/17/20 10:40  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-4**

Matrix: Water

### **Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.32	mg/L			03/30/20 16:46	1
Fluoride	0.11		0.10	0.026	mg/L			03/30/20 16:46	1
Sulfate	12		1.0	0.38	mg/L			03/30/20 16:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			03/25/20 11:00	04/09/20 15:03
Barium	0.0059 J		0.010	0.0016	mg/L			03/25/20 11:00	04/09/20 15:03
Beryllium	<0.00018		0.0025	0.00018	mg/L			03/25/20 11:00	04/09/20 15:03
Boron	<0.039		0.080	0.039	mg/L			03/25/20 11:00	04/09/20 15:03
Cadmium	<0.00022		0.0025	0.00022	mg/L			03/25/20 11:00	04/09/20 15:03
Calcium	15		0.50	0.13	mg/L			03/25/20 11:00	04/09/20 15:03
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/09/20 15:03
Cobalt	<0.00013		0.0025	0.00013	mg/L			03/25/20 11:00	04/09/20 15:03
Molybdenum	<0.00061		0.015	0.00061	mg/L			03/25/20 11:00	04/09/20 15:03
Lead	0.00016 J		0.0010	0.00013	mg/L			03/25/20 11:00	04/09/20 15:03
Selenium	<0.0015		0.0050	0.0015	mg/L			03/25/20 11:00	04/09/20 15:03
Thallium	<0.00015		0.0010	0.00015	mg/L			03/25/20 11:00	04/09/20 15:03
Lithium	0.0059		0.0050	0.0034	mg/L			03/25/20 11:00	04/09/20 15:03

### **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			03/23/20 17:48	03/24/20 17:14

### **General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		10	10	mg/L			03/20/20 09:14	1

### **Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.83			SU				03/17/20 10:40	1

## **Client Sample ID: WGWA-5**

Date Collected: 03/17/20 12:50  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-5**

Matrix: Water

### **Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.32	mg/L			03/30/20 17:33	1
Fluoride	<0.026		0.10	0.026	mg/L			03/30/20 17:33	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-5**

**Lab Sample ID: 180-103742-5**

Matrix: Water

Date Collected: 03/17/20 12:50

Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	4.0		1.0	0.38	mg/L			03/30/20 17:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			04/09/20 15:05	1
<b>Barium</b>	<b>0.017</b>		0.010	0.0016	mg/L			04/09/20 15:05	1
Beryllium	<0.00018		0.0025	0.00018	mg/L			04/09/20 15:05	1
Boron	<0.039		0.080	0.039	mg/L			04/09/20 15:05	1
Cadmium	<0.00022		0.0025	0.00022	mg/L			04/09/20 15:05	1
<b>Calcium</b>	<b>1.4</b>		0.50	0.13	mg/L			04/09/20 15:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L			04/09/20 15:05	1
<b>Cobalt</b>	<b>0.00066 J</b>		0.0025	0.00013	mg/L			04/09/20 15:05	1
Molybdenum	<0.00061		0.015	0.00061	mg/L			04/09/20 15:05	1
Lead	<0.00013		0.0010	0.00013	mg/L			04/09/20 15:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L			04/09/20 15:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L			04/09/20 15:05	1
Lithium	<0.0034		0.0050	0.0034	mg/L			04/09/20 15:05	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			03/24/20 17:15	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		10	10	mg/L			03/20/20 11:51	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.34			SU				03/17/20 12:50	1

**Client Sample ID: WGWA-6**

**Lab Sample ID: 180-103742-6**

Matrix: Water

Date Collected: 03/17/20 11:15

Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.32	mg/L			03/30/20 17:49	1
Fluoride	0.037 J		0.10	0.026	mg/L			03/30/20 17:49	1
Sulfate	12		1.0	0.38	mg/L			03/30/20 17:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			04/09/20 15:08	1
<b>Barium</b>	<b>0.0081 J</b>		0.010	0.0016	mg/L			04/09/20 15:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L			04/09/20 15:08	1
Boron	<0.039		0.080	0.039	mg/L			04/09/20 15:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L			04/09/20 15:08	1
<b>Calcium</b>	<b>26</b>		0.50	0.13	mg/L			04/09/20 15:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L			04/09/20 15:08	1
<b>Cobalt</b>	<b>0.00014 J</b>		0.0025	0.00013	mg/L			04/09/20 15:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L			04/09/20 15:08	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-6**

**Lab Sample ID: 180-103742-6**

**Matrix: Water**

Date Collected: 03/17/20 11:15  
Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00017	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:08	1
Lithium	0.0055		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:08	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		03/23/20 17:48	03/24/20 17:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120		10	10	mg/L		03/20/20 09:05		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.96			SU			03/17/20 11:15		1

**Client Sample ID: WGWA-7**

**Lab Sample ID: 180-103742-7**

**Matrix: Water**

Date Collected: 03/17/20 14:05  
Date Received: 03/19/20 08:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0	0.32	mg/L		04/01/20 00:43		1
Fluoride	0.044	J	0.10	0.026	mg/L		04/01/20 00:43		1
Sulfate	0.86	J	1.0	0.38	mg/L		04/01/20 00:43		1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/09/20 15:10	1
Barium	0.012		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:10	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:10	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:10	1
Calcium	0.82		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:10	1
Cobalt	0.00065	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:10	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:10	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:10	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:10	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:10	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:10	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		03/23/20 17:48	03/24/20 17:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	19		10	10	mg/L		03/20/20 09:05		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: WGWA-7**

**Lab Sample ID: 180-103742-7**

Matrix: Water

Date Collected: 03/17/20 14:05  
Date Received: 03/19/20 08:30

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.32				SU			03/17/20 14:05	1

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-103742-8**

Matrix: Water

Date Collected: 03/17/20 14:35  
Date Received: 03/19/20 08:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		1.0	0.32	mg/L			04/01/20 00:59	1
Fluoride	<0.026		0.10	0.026	mg/L			04/01/20 00:59	1
Sulfate	8.5		1.0	0.38	mg/L			04/01/20 00:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			03/25/20 11:00	04/09/20 15:13
Barium	0.013		0.010	0.0016	mg/L			03/25/20 11:00	04/09/20 15:13
Beryllium	<0.00018		0.0025	0.00018	mg/L			03/25/20 11:00	04/09/20 15:13
Boron	<0.039		0.080	0.039	mg/L			03/25/20 11:00	04/09/20 15:13
Cadmium	<0.00022		0.0025	0.00022	mg/L			03/25/20 11:00	04/09/20 15:13
Calcium	10		0.50	0.13	mg/L			03/25/20 11:00	04/09/20 15:13
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/09/20 15:13
Cobalt	0.0017 J		0.0025	0.00013	mg/L			03/25/20 11:00	04/09/20 15:13
Molybdenum	<0.00061		0.015	0.00061	mg/L			03/25/20 11:00	04/09/20 15:13
Lead	<0.00013		0.0010	0.00013	mg/L			03/25/20 11:00	04/09/20 15:13
Selenium	<0.0015		0.0050	0.0015	mg/L			03/25/20 11:00	04/09/20 15:13
Thallium	<0.00015		0.0010	0.00015	mg/L			03/25/20 11:00	04/09/20 15:13
Lithium	<0.0034		0.0050	0.0034	mg/L			03/25/20 11:00	04/09/20 15:13

**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			03/23/20 17:48	03/24/20 17:18

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	81		10	10	mg/L			03/20/20 09:14	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.36				SU			03/17/20 14:35	1

**Client Sample ID: EB-1 3-17-20**

**Lab Sample ID: 180-103742-9**

Matrix: Water

Date Collected: 03/17/20 14:00  
Date Received: 03/19/20 08:30

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/01/20 01:15	1
Fluoride	0.036 J		0.10	0.026	mg/L			04/01/20 01:15	1
Sulfate	<0.38		1.0	0.38	mg/L			04/01/20 01:15	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: EB-1 3-17-20**  
Date Collected: 03/17/20 14:00  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-9**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/09/20 15:15	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:15	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:15	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:15	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:15	1
Calcium	<0.13		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:15	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:15	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:15	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:15	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:15	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:15	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:15	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:15	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		03/23/20 17:48	03/24/20 17:19	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L		03/20/20 09:14		1

**Client Sample ID: DUPLICATE 1 3-17-20**

**Lab Sample ID: 180-103742-10**

Matrix: Water

Date Collected: 03/17/20 00:00  
Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.32	mg/L			04/01/20 01:30	1
Fluoride	0.039 J		0.10	0.026	mg/L			04/01/20 01:30	1
Sulfate	1.2		1.0	0.38	mg/L			04/01/20 01:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/09/20 15:18	1
Barium	0.014		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:18	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:18	1
Calcium	1.8		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:18	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:18	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:18	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		03/23/20 17:48	03/24/20 17:20	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-1

**Client Sample ID: DUPLICATE 1 3-17-20**

**Lab Sample ID: 180-103742-10**

**Matrix: Water**

Date Collected: 03/17/20 00:00  
Date Received: 03/19/20 08:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		10	10	mg/L			03/21/20 07:58	1

**Client Sample ID: WGWC-11**

**Lab Sample ID: 180-103742-11**

**Matrix: Water**

Date Collected: 03/18/20 13:05  
Date Received: 03/19/20 08:30

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		1.0	0.32	mg/L			04/01/20 01:46	1
Fluoride	<0.026		0.10	0.026	mg/L			04/01/20 01:46	1
Sulfate	1.6		1.0	0.38	mg/L			04/01/20 01:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			03/25/20 11:00	04/09/20 15:20
Barium	0.038		0.010	0.0016	mg/L			03/25/20 11:00	04/09/20 15:20
Beryllium	<0.00018		0.0025	0.00018	mg/L			03/25/20 11:00	04/09/20 15:20
Boron	<0.039		0.080	0.039	mg/L			03/25/20 11:00	04/09/20 15:20
Cadmium	<0.00022		0.0025	0.00022	mg/L			03/25/20 11:00	04/09/20 15:20
Calcium	1.6		0.50	0.13	mg/L			03/25/20 11:00	04/09/20 15:20
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/09/20 15:20
Cobalt	0.00069 J		0.0025	0.00013	mg/L			03/25/20 11:00	04/09/20 15:20
Molybdenum	<0.00061		0.015	0.00061	mg/L			03/25/20 11:00	04/09/20 15:20
Lead	<0.00013		0.0010	0.00013	mg/L			03/25/20 11:00	04/09/20 15:20
Selenium	<0.0015		0.0050	0.0015	mg/L			03/25/20 11:00	04/09/20 15:20
Thallium	<0.00015		0.0010	0.00015	mg/L			03/25/20 11:00	04/09/20 15:20
Lithium	<0.0034		0.0050	0.0034	mg/L			03/25/20 11:00	04/09/20 15:20

## 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			03/23/20 17:54	03/24/20 17:43

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		10	10	mg/L			03/21/20 08:52	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.89			SU				03/18/20 13:05	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID:** MB 180-311491/37

**Matrix:** Water

**Analysis Batch:** 311491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			03/30/20 14:40	1
Fluoride	<0.026		0.10	0.026	mg/L			03/30/20 14:40	1
Sulfate	<0.38		1.0	0.38	mg/L			03/30/20 14:40	1

**Lab Sample ID:** MB 180-311491/6

**Matrix:** Water

**Analysis Batch:** 311491

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			03/30/20 06:28	1
Fluoride	<0.026		0.10	0.026	mg/L			03/30/20 06:28	1
Sulfate	<0.38		1.0	0.38	mg/L			03/30/20 06:28	1

**Lab Sample ID:** LCS 180-311491/36

**Matrix:** Water

**Analysis Batch:** 311491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
						Limits	
Chloride	50.0	48.1		mg/L		96	90 - 110
Fluoride	2.50	2.33		mg/L		93	90 - 110
Sulfate	50.0	47.6		mg/L		95	90 - 110

**Lab Sample ID:** LCS 180-311491/5

**Matrix:** Water

**Analysis Batch:** 311491

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
						Limits	
Chloride	50.0	48.0		mg/L		96	90 - 110
Fluoride	2.50	2.32		mg/L		93	90 - 110
Sulfate	50.0	47.2		mg/L		94	90 - 110

**Lab Sample ID:** MB 180-311618/46

**Matrix:** Water

**Analysis Batch:** 311618

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			03/31/20 21:49	1
Fluoride	<0.026		0.10	0.026	mg/L			03/31/20 21:49	1
Sulfate	<0.38		1.0	0.38	mg/L			03/31/20 21:49	1

**Lab Sample ID:** LCS 180-311618/45

**Matrix:** Water

**Analysis Batch:** 311618

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
						Limits	
Chloride	50.0	48.9		mg/L		98	90 - 110
Fluoride	2.50	2.37		mg/L		95	90 - 110
Sulfate	50.0	48.4		mg/L		97	90 - 110

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 180-311839/45**

**Matrix: Water**

**Analysis Batch: 311839**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/02/20 19:21	1
Fluoride	<0.026		0.10	0.026	mg/L			04/02/20 19:21	1
Sulfate	<0.38		1.0	0.38	mg/L			04/02/20 19:21	1

**Lab Sample ID: LCS 180-311839/44**

**Matrix: Water**

**Analysis Batch: 311839**

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

Analyte	Spike Added	LCS			%Rec.	Limits
		Result	Qualifier	Unit		
Chloride	50.0	49.7		mg/L	99	90 - 110
Fluoride	2.50	2.42		mg/L	97	90 - 110
Sulfate	50.0	49.2		mg/L	98	90 - 110

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-311070/1-A**

**Matrix: Water**

**Analysis Batch: 312551**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311070**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			04/09/20 14:31	1
Barium	<0.0016		0.010	0.0016	mg/L			04/09/20 14:31	1
Beryllium	<0.00018		0.0025	0.00018	mg/L			04/09/20 14:31	1
Boron	<0.039		0.080	0.039	mg/L			04/09/20 14:31	1
Cadmium	<0.00022		0.0025	0.00022	mg/L			04/09/20 14:31	1
Calcium	<0.13		0.50	0.13	mg/L			04/09/20 14:31	1
Chromium	<0.0015		0.0020	0.0015	mg/L			04/09/20 14:31	1
Cobalt	<0.00013		0.0025	0.00013	mg/L			04/09/20 14:31	1
Molybdenum	<0.00061		0.015	0.00061	mg/L			04/09/20 14:31	1
Lead	<0.00013		0.0010	0.00013	mg/L			04/09/20 14:31	1
Selenium	<0.0015		0.0050	0.00015	mg/L			04/09/20 14:31	1
Thallium	<0.00015		0.0010	0.00015	mg/L			04/09/20 14:31	1
Lithium	<0.0034		0.0050	0.0034	mg/L			04/09/20 14:31	1

**Lab Sample ID: LCS 180-311070/2-A**

**Matrix: Water**

**Analysis Batch: 312551**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311070**

Analyte	Spike Added	LCS			%Rec.	Limits
		Result	Qualifier	Unit		
Arsenic	1.00	0.938		mg/L	94	80 - 120
Barium	1.00	0.997		mg/L	100	80 - 120
Beryllium	0.500	0.479		mg/L	96	80 - 120
Boron	1.25	1.24		mg/L	99	80 - 120
Cadmium	0.500	0.503		mg/L	101	80 - 120
Calcium	25.0	25.7		mg/L	103	80 - 120
Chromium	0.500	0.513		mg/L	103	80 - 120
Cobalt	0.500	0.463		mg/L	93	80 - 120
Molybdenum	0.500	0.506		mg/L	101	80 - 120
Lead	0.500	0.503		mg/L	101	80 - 120

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

Client: Southern Company

Job ID: 180-103742-1

Project/Site: CCR - Plant Wansley Ash Pond

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

**Lab Sample ID: LCS 180-311070/2-A**

**Matrix: Water**

**Analysis Batch: 312551**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 311070**

**5**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Selenium	1.00	1.05		mg/L	105	80 - 120	
Thallium	1.00	1.02		mg/L	102	80 - 120	
Lithium	0.500	0.485		mg/L	97	80 - 120	

**Lab Sample ID: 180-103742-1 MS**

**Matrix: Water**

**Analysis Batch: 312551**

**Client Sample ID: WGWA-1**

**Prep Type: Total Recoverable**

**Prep Batch: 311070**

**9**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	0.00038	J	1.00	0.930		mg/L	93	75 - 125	
Barium	0.046		1.00	1.06		mg/L	101	75 - 125	
Beryllium	0.00071	J	0.500	0.483		mg/L	96	75 - 125	
Boron	<0.039		1.25	1.29		mg/L	103	75 - 125	
Cadmium	<0.00022		0.500	0.509		mg/L	102	75 - 125	
Calcium	1.1		25.0	26.9		mg/L	103	75 - 125	
Chromium	<0.0015		0.500	0.509		mg/L	102	75 - 125	
Cobalt	0.00092	J	0.500	0.451		mg/L	90	75 - 125	
Molybdenum	<0.00061		0.500	0.501		mg/L	100	75 - 125	
Lead	0.00021	J	0.500	0.491		mg/L	98	75 - 125	
Selenium	<0.0015		1.00	1.08		mg/L	108	75 - 125	
Thallium	0.00036	J	1.00	1.01		mg/L	101	75 - 125	
Lithium	0.0053		0.500	0.492		mg/L	97	75 - 125	

**Lab Sample ID: 180-103742-1 MSD**

**Matrix: Water**

**Analysis Batch: 312551**

**Client Sample ID: WGWA-1**

**Prep Type: Total Recoverable**

**Prep Batch: 311070**

**10**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Arsenic	0.00038	J	1.00	0.929		mg/L	93	75 - 125	0	20
Barium	0.046		1.00	1.05		mg/L	100	75 - 125	1	20
Beryllium	0.00071	J	0.500	0.491		mg/L	98	75 - 125	2	20
Boron	<0.039		1.25	1.32		mg/L	106	75 - 125	3	20
Cadmium	<0.00022		0.500	0.518		mg/L	104	75 - 125	2	20
Calcium	1.1		25.0	27.1		mg/L	104	75 - 125	1	20
Chromium	<0.0015		0.500	0.519		mg/L	104	75 - 125	2	20
Cobalt	0.00092	J	0.500	0.454		mg/L	91	75 - 125	1	20
Molybdenum	<0.00061		0.500	0.504		mg/L	101	75 - 125	1	20
Lead	0.00021	J	0.500	0.501		mg/L	100	75 - 125	2	20
Selenium	<0.0015		1.00	1.10		mg/L	110	75 - 125	2	20
Thallium	0.00036	J	1.00	1.00		mg/L	100	75 - 125	0	20
Lithium	0.0053		0.500	0.499		mg/L	99	75 - 125	1	20

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-310885/1-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 310885**

**11**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L	1	03/23/20 17:44	03/24/20 16:29	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-103742-1

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: LCS 180-310885/2-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 310885**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Mercury	0.00250	0.00236		mg/L	94		80 - 120

**Lab Sample ID: MB 180-310886/1-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 310886**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/23/20 17:48	03/24/20 16:58	1

**Lab Sample ID: LCS 180-310886/2-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 310886**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Mercury	0.00450	0.00446		mg/L	99		80 - 120

**Lab Sample ID: MB 180-310888/1-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 310888**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/23/20 17:54	03/24/20 17:26	1

**Lab Sample ID: LCS 180-310888/2-A**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 310888**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Mercury	0.00450	0.00440		mg/L	98		80 - 120

**Lab Sample ID: 180-103742-11 MS**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: WGWC-11**

**Prep Type: Total/NA**

**Prep Batch: 310888**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Mercury	<0.00010		0.00100	0.00100		mg/L	100		75 - 125

**Lab Sample ID: 180-103742-11 MSD**

**Matrix: Water**

**Analysis Batch: 311000**

**Client Sample ID: WGWC-11**

**Prep Type: Total/NA**

**Prep Batch: 310888**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD
Mercury	<0.00010		0.00100	0.000985		mg/L	99		2 / 20

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-103742-1

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

**Lab Sample ID: MB 180-310562/2**

**Matrix: Water**

**Analysis Batch: 310562**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L	-	-	03/20/20 09:05	1

**Lab Sample ID: LCS 180-310562/1**

**Matrix: Water**

**Analysis Batch: 310562**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	236		mg/L	-	98	80 - 120

**Lab Sample ID: MB 180-310565/2**

**Matrix: Water**

**Analysis Batch: 310565**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L	-	-	03/20/20 09:14	1

**Lab Sample ID: LCS 180-310565/1**

**Matrix: Water**

**Analysis Batch: 310565**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	242		mg/L	-	100	80 - 120

**Lab Sample ID: MB 180-310587/2**

**Matrix: Water**

**Analysis Batch: 310587**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L	-	-	03/20/20 11:51	1

**Lab Sample ID: LCS 180-310587/1**

**Matrix: Water**

**Analysis Batch: 310587**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	248		mg/L	-	102	80 - 120

**Lab Sample ID: MB 180-310664/2**

**Matrix: Water**

**Analysis Batch: 310664**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L	-	-	03/21/20 07:58	1

**Lab Sample ID: LCS 180-310664/1**

**Matrix: Water**

**Analysis Batch: 310664**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	236		mg/L	-	98	80 - 120

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

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

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

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

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

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

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

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

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

Client: Southern Company

Job ID: 180-103742-1

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-310666/2

Matrix: Water

Analysis Batch: 310666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/21/20 08:52	1

Lab Sample ID: LCS 180-310666/1

Matrix: Water

Analysis Batch: 310666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	248		mg/L	102	80 - 120	

Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## HPLC/IC

### Analysis Batch: 311491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-4	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-103742-5	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-103742-6	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
MB 180-311491/37	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-311491/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-311491/36	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-311491/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 311618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-103742-2	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-103742-7	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-103742-8	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-103742-9	EB-1 3-17-20	Total/NA	Water	EPA 300.0 R2.1	
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	EPA 300.0 R2.1	
180-103742-11	WGWC-11	Total/NA	Water	EPA 300.0 R2.1	
MB 180-311618/46	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-311618/45	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 311839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-3	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-311839/45	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-311839/44	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 310885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	7470A	
180-103742-2	WGWA-2	Total/NA	Water	7470A	
MB 180-310885/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-310885/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Prep Batch: 310886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-3	WGWA-3	Total/NA	Water	7470A	
180-103742-4	WGWA-4	Total/NA	Water	7470A	
180-103742-5	WGWA-5	Total/NA	Water	7470A	
180-103742-6	WGWA-6	Total/NA	Water	7470A	
180-103742-7	WGWA-7	Total/NA	Water	7470A	
180-103742-8	WGWA-18	Total/NA	Water	7470A	
180-103742-9	EB-1 3-17-20	Total/NA	Water	7470A	
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	7470A	
MB 180-310886/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-310886/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Prep Batch: 310888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-11	WGWC-11	Total/NA	Water	7470A	

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## Metals (Continued)

### Prep Batch: 310888 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-310888/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-310888/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-103742-11 MS	WGWC-11	Total/NA	Water	7470A	
180-103742-11 MSD	WGWC-11	Total/NA	Water	7470A	

### Analysis Batch: 311000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	EPA 7470A	310885
180-103742-2	WGWA-2	Total/NA	Water	EPA 7470A	310885
180-103742-3	WGWA-3	Total/NA	Water	EPA 7470A	310886
180-103742-4	WGWA-4	Total/NA	Water	EPA 7470A	310886
180-103742-5	WGWA-5	Total/NA	Water	EPA 7470A	310886
180-103742-6	WGWA-6	Total/NA	Water	EPA 7470A	310886
180-103742-7	WGWA-7	Total/NA	Water	EPA 7470A	310886
180-103742-8	WGWA-18	Total/NA	Water	EPA 7470A	310886
180-103742-9	EB-1 3-17-20	Total/NA	Water	EPA 7470A	310886
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	EPA 7470A	310886
180-103742-11	WGWC-11	Total/NA	Water	EPA 7470A	310888
MB 180-310885/1-A	Method Blank	Total/NA	Water	EPA 7470A	310885
MB 180-310886/1-A	Method Blank	Total/NA	Water	EPA 7470A	310886
MB 180-310888/1-A	Method Blank	Total/NA	Water	EPA 7470A	310888
LCS 180-310885/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	310885
LCS 180-310886/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	310886
LCS 180-310888/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	310888
180-103742-11 MS	WGWC-11	Total/NA	Water	EPA 7470A	310888
180-103742-11 MSD	WGWC-11	Total/NA	Water	EPA 7470A	310888

### Prep Batch: 311070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total Recoverable	Water	3005A	
180-103742-2	WGWA-2	Total Recoverable	Water	3005A	
180-103742-3	WGWA-3	Total Recoverable	Water	3005A	
180-103742-4	WGWA-4	Total Recoverable	Water	3005A	
180-103742-5	WGWA-5	Total Recoverable	Water	3005A	
180-103742-6	WGWA-6	Total Recoverable	Water	3005A	
180-103742-7	WGWA-7	Total Recoverable	Water	3005A	
180-103742-8	WGWA-18	Total Recoverable	Water	3005A	
180-103742-9	EB-1 3-17-20	Total Recoverable	Water	3005A	
180-103742-10	DUPLICATE 1 3-17-20	Total Recoverable	Water	3005A	
180-103742-11	WGWC-11	Total Recoverable	Water	3005A	
MB 180-311070/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-311070/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-103742-1 MS	WGWA-1	Total Recoverable	Water	3005A	
180-103742-1 MSD	WGWA-1	Total Recoverable	Water	3005A	

### Analysis Batch: 312551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total Recoverable	Water	EPA 6020B	311070
180-103742-2	WGWA-2	Total Recoverable	Water	EPA 6020B	311070
180-103742-3	WGWA-3	Total Recoverable	Water	EPA 6020B	311070
180-103742-4	WGWA-4	Total Recoverable	Water	EPA 6020B	311070

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## Metals (Continued)

### Analysis Batch: 312551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-5	WGWA-5	Total Recoverable	Water	EPA 6020B	311070
180-103742-6	WGWA-6	Total Recoverable	Water	EPA 6020B	311070
180-103742-7	WGWA-7	Total Recoverable	Water	EPA 6020B	311070
180-103742-8	WGWA-18	Total Recoverable	Water	EPA 6020B	311070
180-103742-9	EB-1 3-17-20	Total Recoverable	Water	EPA 6020B	311070
180-103742-10	DUPLICATE 1 3-17-20	Total Recoverable	Water	EPA 6020B	311070
180-103742-11	WGWC-11	Total Recoverable	Water	EPA 6020B	311070
MB 180-311070/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	311070
LCS 180-311070/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	311070
180-103742-1 MS	WGWA-1	Total Recoverable	Water	EPA 6020B	311070
180-103742-1 MSD	WGWA-1	Total Recoverable	Water	EPA 6020B	311070

## General Chemistry

### Analysis Batch: 310562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-6	WGWA-6	Total/NA	Water	SM 2540C	12
180-103742-7	WGWA-7	Total/NA	Water	SM 2540C	13
MB 180-310562/2	Method Blank	Total/NA	Water	SM 2540C	13
LCS 180-310562/1	Lab Control Sample	Total/NA	Water	SM 2540C	13

### Analysis Batch: 310565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	SM 2540C	
180-103742-2	WGWA-2	Total/NA	Water	SM 2540C	
180-103742-3	WGWA-3	Total/NA	Water	SM 2540C	
180-103742-4	WGWA-4	Total/NA	Water	SM 2540C	
180-103742-8	WGWA-18	Total/NA	Water	SM 2540C	
180-103742-9	EB-1 3-17-20	Total/NA	Water	SM 2540C	
MB 180-310565/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310565/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 310587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-5	WGWA-5	Total/NA	Water	SM 2540C	
MB 180-310587/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310587/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 310664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	SM 2540C	
MB 180-310664/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310664/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 310666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-11	WGWC-11	Total/NA	Water	SM 2540C	
MB 180-310666/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310666/1	Lab Control Sample	Total/NA	Water	SM 2540C	

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

## Field Service / Mobile Lab

Analysis Batch: 310781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	Field Sampling	
180-103742-2	WGWA-2	Total/NA	Water	Field Sampling	
180-103742-3	WGWA-3	Total/NA	Water	Field Sampling	
180-103742-4	WGWA-4	Total/NA	Water	Field Sampling	
180-103742-5	WGWA-5	Total/NA	Water	Field Sampling	
180-103742-6	WGWA-6	Total/NA	Water	Field Sampling	
180-103742-7	WGWA-7	Total/NA	Water	Field Sampling	
180-103742-8	WGWA-18	Total/NA	Water	Field Sampling	
180-103742-11	WGWC-11	Total/NA	Water	Field Sampling	

**Client Information**

Sampler: T. Goble/A. Schaffter Lab PM: Veronica Bortot

Phone: 770-594-5948 E-Mail: (Veronica.Bortot@testamericainc.com)

Job #:

Page: 1 of

**Analysis Requested**

Carrier Tracking No(s): ACC TA-A16

COC No: 10

Preservation Codes:

- A - HCl
- B - NaOH
- C - Zn Acetate
- D - Nitric Acid
- E - NaHSO4
- F - MeOH
- G - Ammonium Sulfate
- H - Ascorbic Acid
- I - Ice
- J - DI Water
- K - EDTA
- L - EDA
- Other:

Total Number of Contaminants: 180-103742 Chain of Custody

Detected APP VI Metals (See list below) SW-846 9315/9320

Detected APP VI Metals (See list below) SW-846 226 & 228

Performed MS/MSD (Yes or No) Yes

Field Filtered Sample (Yes or No) No

App. II Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. III Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. IV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. V Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. VI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. VII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. VIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. IX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. X Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XIV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XVIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXIV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXIV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXVIII Metals

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App. XXXX Metals

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App. XXXXI Metals

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App. XXXXII Metals

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Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXIV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVI Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXVIII Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXIX Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) No

App. XXXXXV Metals

Performed MS/MSD (Yes or No) No

Field Filtered Sample (Yes or No) <





## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103742-1

**Login Number:** 103742

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

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.	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	



Environment Testing  
TestAmerica

1  
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## ANALYTICAL REPORT

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

Laboratory Job ID: 180-103742-2  
Client Project/Site: CCR - Plant Wansley Ash Pond

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

Attn: Joju Abraham

Authorized for release by:  
4/28/2020 4:16:03 PM  
Veronica Bortot, Senior Project Manager  
(412)963-2435  
[veronica.bortot@testamericainc.com](mailto:veronica.bortot@testamericainc.com)

Designee for  
Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

### LINKS

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results through

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The  
Expert

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[www.testamericainc.com](http://www.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

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# Case Narrative

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

Job ID: 180-103742-2

**Job ID: 180-103742-2**

**Laboratory: Eurofins TestAmerica, Pittsburgh**

## Narrative

### Job Narrative 180-103742-2

## Comments

No additional comments.

## Receipt

The samples were received on 3/19/2020 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 1.3° C, 1.4° C, 2.9° C and 3.9° C.

## RAD

Methods 903.0, 9315: Ra-226 Prep Batch 160-465458

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 (180-103742-1), WGWA-2 (180-103742-2), WGWA-3 (180-103742-3), WGWA-4 (180-103742-4), WGWA-5 (180-103742-5),  
WGWA-6 (180-103742-6), WGWA-7 (180-103742-7), WGWA-18 (180-103742-8), EB-1 3-17-20 (180-103742-9), DUPLICATE 1 3-17-20  
(180-103742-10), WGWC-11 (180-103742-11), (LCS 160-465458/1-A), (MB 160-465458/22-A), (180-103766-A-3-A) and  
(180-103766-A-3-B DU)

Methods 904.0, 9320: Radium-228 Prep Batch 160-468060

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 (180-103742-1), WGWA-2 (180-103742-2), WGWA-3 (180-103742-3), WGWA-4 (180-103742-4), WGWA-5 (180-103742-5),  
WGWA-6 (180-103742-6), WGWA-7 (180-103742-7), WGWA-18 (180-103742-8), EB-1 3-17-20 (180-103742-9), DUPLICATE 1 3-17-20  
(180-103742-10), WGWC-11 (180-103742-11), (LCS 160-468060/1-A), (LCSD 160-468060/2-A) and (MB 160-468060/20-A)

Method PrecSep\_0: Radium 228 Prep Batch 160-468060:

The following samples were prepared at a reduced aliquot due to limited volume: WGWA-1 (180-103742-1), WGWA-2 (180-103742-2),  
WGWA-3 (180-103742-3), WGWA-4 (180-103742-4), WGWA-5 (180-103742-5), WGWA-6 (180-103742-6), WGWA-7 (180-103742-7),  
WGWA-18 (180-103742-8), EB-1 3-17-20 (180-103742-9), DUPLICATE 1 3-17-20 (180-103742-10) and WGWC-11 (180-103742-11).

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 Ash Pond

Job ID: 180-103742-2

## Qualifiers

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	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 Ash Pond

Job ID: 180-103742-2

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

# Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-2

## 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	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

## Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-103742-1	WGWA-1	Water	03/16/20 14:15	03/19/20 08:30	
180-103742-2	WGWA-2	Water	03/16/20 12:25	03/19/20 08:30	
180-103742-3	WGWA-3	Water	03/17/20 11:35	03/19/20 08:30	
180-103742-4	WGWA-4	Water	03/17/20 10:40	03/19/20 08:30	
180-103742-5	WGWA-5	Water	03/17/20 12:50	03/19/20 08:30	
180-103742-6	WGWA-6	Water	03/17/20 11:15	03/19/20 08:30	
180-103742-7	WGWA-7	Water	03/17/20 14:05	03/19/20 08:30	
180-103742-8	WGWA-18	Water	03/17/20 14:35	03/19/20 08:30	
180-103742-9	EB-1 3-17-20	Water	03/17/20 14:00	03/19/20 08:30	
180-103742-10	DUPLICATE 1 3-17-20	Water	03/17/20 00:00	03/19/20 08:30	
180-103742-11	WGWC-11	Water	03/18/20 13:05	03/19/20 08:30	

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Eurofins TestAmerica, Pittsburgh

## Method Summary

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

Job ID: 180-103742-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
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 Ash Pond

Job ID: 180-103742-2

**Client Sample ID: WGWA-1**  
**Date Collected: 03/16/20 14:15**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-1**  
**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			1000.57 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:18	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.96 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:29	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-2**  
**Date Collected: 03/16/20 12:25**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-2**  
**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			1000.69 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:18	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.86 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:29	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-3**  
**Date Collected: 03/17/20 11:35**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-3**  
**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			1000.67 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:18	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.50 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:29	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWA-4**  
**Date Collected: 03/17/20 10:40**  
**Date Received: 03/19/20 08:30**

**Lab Sample ID: 180-103742-4**  
**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			1000.81 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:18	CJQ	TAL SL
		Instrument ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103742-2

## **Client Sample ID: WGWA-4**

Date Collected: 03/17/20 10:40

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-4**

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			749.29 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:29	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWA-5**

Date Collected: 03/17/20 12:50

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-5**

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			1000.17 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:18	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.27 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:30	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWA-6**

Date Collected: 03/17/20 11:15

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-6**

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			1000.09 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:19	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.73 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:30	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWA-7**

Date Collected: 03/17/20 14:05

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-7**

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			1000.87 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:19	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			750.30 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468602	04/22/20 16:30	AJD	TAL SL
		Instrument ID: GFPCPURPLE								

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# Lab Chronicle

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

Job ID: 180-103742-2

**Client Sample ID: WGWA-7**

**Lab Sample ID: 180-103742-7**

**Matrix: Water**

Date Collected: 03/17/20 14:05

Date Received: 03/19/20 08:30

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			468673	04/23/20 08:09	SMP	TAL SL

**Client Sample ID: WGWA-18**

**Lab Sample ID: 180-103742-8**

**Matrix: Water**

Date Collected: 03/17/20 14:35

Date Received: 03/19/20 08:30

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			1000.50 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 05:19	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.72 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468601	04/22/20 16:35	AJD	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: EB-1 3-17-20**

**Lab Sample ID: 180-103742-9**

**Matrix: Water**

Date Collected: 03/17/20 14:00

Date Received: 03/19/20 08:30

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			1000.61 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 07:24	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			750.78 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468601	04/22/20 16:35	AJD	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: DUPLICATE 1 3-17-20**

**Lab Sample ID: 180-103742-10**

**Matrix: Water**

Date Collected: 03/17/20 00:00

Date Received: 03/19/20 08:30

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			1000.64 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315		1			467823	04/15/20 07:24	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			750.80 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320		1			468601	04/22/20 16:35	AJD	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL
		Instrument ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103742-2

**Client Sample ID: WGWC-11**

**Lab Sample ID: 180-103742-11**

**Matrix: Water**

Date Collected: 03/18/20 13:05

Date Received: 03/19/20 08:30

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			1000.82 mL	1.0 g	465458	03/24/20 13:03	RBR	TAL SL
Total/NA	Analysis	9315 Instrument ID: GFPCBLUE		1			467823	04/15/20 07:24	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.69 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis	9320 Instrument ID: GFPCPROTEAN		1			468601	04/22/20 16:36	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Instrument ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

## 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

MNH = Molly Howard

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano

CJQ = Caleb Quinn

SMP = Siobhan Perry

# Client Sample Results

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

Job ID: 180-103742-2

**Client Sample ID: WGWA-1**  
Date Collected: 03/16/20 14:15  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-1**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0757	U	0.101	0.101	1.00	0.169	pCi/L	03/24/20 13:03	04/15/20 05:18	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	90.9		40 - 110					03/24/20 13:03	04/15/20 05:18	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.318	U	0.351	0.352	1.00	0.576	pCi/L	04/19/20 12:26	04/22/20 16:29	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	85.4		40 - 110					04/19/20 12:26	04/22/20 16:29	1
Y Carrier	90.1		40 - 110					04/19/20 12:26	04/22/20 16:29	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.394	U	0.365	0.366	2.00	0.576	pCi/L		04/23/20 08:09	1

## Client Sample ID: WGWA-2

Date Collected: 03/16/20 12:25  
Date Received: 03/19/20 08:30

**Lab Sample ID: 180-103742-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0310	U	0.0703	0.0703	1.00	0.129	pCi/L	03/24/20 13:03	04/15/20 05:18	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	85.5		40 - 110					03/24/20 13:03	04/15/20 05:18	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.258	U	0.397	0.398	1.00	0.668	pCi/L	04/19/20 12:26	04/22/20 16:29	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	70.1		40 - 110					04/19/20 12:26	04/22/20 16:29	1
Y Carrier	87.9		40 - 110					04/19/20 12:26	04/22/20 16:29	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-2

## **Client Sample ID: WGWA-2**

Date Collected: 03/16/20 12:25

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-2**

Matrix: Water

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.289	U	0.403	0.404	2.00	0.668	pCi/L		04/23/20 08:09	1

## **Client Sample ID: WGWA-3**

Date Collected: 03/17/20 11:35

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-3**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0550	U	0.0725	0.0726	1.00	0.173	pCi/L	03/24/20 13:03	04/15/20 05:18	1
<b>Carrier</b>										
Ba Carrier	88.1		<b>Limits</b>					03/24/20 13:03	04/15/20 05:18	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0840	U	0.314	0.314	1.00	0.579	pCi/L	04/19/20 12:26	04/22/20 16:29	1
<b>Carrier</b>										
Ba Carrier	85.1		<b>Limits</b>					04/19/20 12:26	04/22/20 16:29	1
Y Carrier	89.3		<b>Limits</b>					04/19/20 12:26	04/22/20 16:29	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.139	U	0.322	0.322	2.00	0.579	pCi/L		04/23/20 08:09	1

## **Client Sample ID: WGWA-4**

Date Collected: 03/17/20 10:40

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-4**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.462	U	0.158	0.163	1.00	0.154	pCi/L	03/24/20 13:03	04/15/20 05:18	1
<b>Carrier</b>										
Ba Carrier	83.6		<b>Limits</b>					03/24/20 13:03	04/15/20 05:18	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-2

**Client Sample ID: WGWA-4**

**Lab Sample ID: 180-103742-4**

**Matrix: Water**

Date Collected: 03/17/20 10:40

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.502	U	0.388	0.391	1.00	0.615	pCi/L	04/19/20 12:26	04/22/20 16:29	1
<b>Carrier</b>										
Ba Carrier	84.5		40 - 110					04/19/20 12:26	04/22/20 16:29	1
Y Carrier	90.8		40 - 110					04/19/20 12:26	04/22/20 16:29	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.964		0.419	0.424	2.00	0.615	pCi/L	04/23/20 08:09		1

**Client Sample ID: WGWA-5**

**Lab Sample ID: 180-103742-5**

**Matrix: Water**

Date Collected: 03/17/20 12:50

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00752	U	0.0681	0.0681	1.00	0.137	pCi/L	03/24/20 13:03	04/15/20 05:18	1
<b>Carrier</b>										
Ba Carrier	88.4		40 - 110					03/24/20 13:03	04/15/20 05:18	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.200	U	0.344	0.344	1.00	0.585	pCi/L	04/19/20 12:26	04/22/20 16:30	1
<b>Carrier</b>										
Ba Carrier	75.6		40 - 110					04/19/20 12:26	04/22/20 16:30	1
Y Carrier	89.7		40 - 110					04/19/20 12:26	04/22/20 16:30	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.207	U	0.351	0.351	2.00	0.585	pCi/L	04/23/20 08:09		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-2

## **Client Sample ID: WGWA-6**

Date Collected: 03/17/20 11:15

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-6**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	2.86		0.337	0.424	1.00	0.157	pCi/L	03/24/20 13:03	04/15/20 05:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.6		40 - 110					03/24/20 13:03	04/15/20 05:19	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	6.02		0.689	0.884	1.00	0.548	pCi/L	04/19/20 12:26	04/22/20 16:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		40 - 110					04/19/20 12:26	04/22/20 16:30	1
Y Carrier	91.2		40 - 110					04/19/20 12:26	04/22/20 16:30	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	8.88		0.767	0.980	2.00	0.548	pCi/L		04/23/20 08:09	1

## **Client Sample ID: WGWA-7**

Date Collected: 03/17/20 14:05

Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-7**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.142	U	0.108	0.109	1.00	0.158	pCi/L	03/24/20 13:03	04/15/20 05:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		40 - 110					03/24/20 13:03	04/15/20 05:19	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.117	U	0.362	0.362	1.00	0.626	pCi/L	04/19/20 12:26	04/22/20 16:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		40 - 110					04/19/20 12:26	04/22/20 16:30	1
Y Carrier	93.5		40 - 110					04/19/20 12:26	04/22/20 16:30	1

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# Client Sample Results

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

Job ID: 180-103742-2

## **Client Sample ID: WGWA-7**

Date Collected: 03/17/20 14:05  
Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-7**

Matrix: Water

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.258	U	0.378	0.378	2.00	0.626	pCi/L		04/23/20 08:09	1

## **Client Sample ID: WGWA-18**

Date Collected: 03/17/20 14:35  
Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-8**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.135	U	0.108	0.108	1.00	0.160	pCi/L	03/24/20 13:03	04/15/20 05:19	1
<b>Carrier</b>										
Ba Carrier	89.6		<b>Limits</b>					03/24/20 13:03	04/15/20 05:19	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.465	U	0.436	0.438	1.00	0.707	pCi/L	04/19/20 12:26	04/22/20 16:35	1
<b>Carrier</b>										
Ba Carrier	84.8		<b>Limits</b>					04/19/20 12:26	04/22/20 16:35	1
Y Carrier	92.7		<b>Limits</b>					04/19/20 12:26	04/22/20 16:35	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.600	U	0.449	0.451	2.00	0.707	pCi/L		04/23/20 08:09	1

## **Client Sample ID: EB-1 3-17-20**

Date Collected: 03/17/20 14:00  
Date Received: 03/19/20 08:30

## **Lab Sample ID: 180-103742-9**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00279	U	0.0678	0.0678	1.00	0.141	pCi/L	03/24/20 13:03	04/15/20 07:24	1
<b>Carrier</b>										
Ba Carrier	89.9		<b>Limits</b>					03/24/20 13:03	04/15/20 07:24	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-2

**Client Sample ID: EB-1 3-17-20**

**Lab Sample ID: 180-103742-9**

**Matrix: Water**

Date Collected: 03/17/20 14:00

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.167	U	0.369	0.369	1.00	0.631	pCi/L	04/19/20 12:26	04/22/20 16:35	1
<b>Carrier</b>										
Ba Carrier	82.0		40 - 110					04/19/20 12:26	04/22/20 16:35	1
Y Carrier	92.7		40 - 110					04/19/20 12:26	04/22/20 16:35	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.165	U	0.375	0.375	2.00	0.631	pCi/L	04/23/20 08:09		1

**Client Sample ID: DUPLICATE 1 3-17-20**

**Lab Sample ID: 180-103742-10**

**Matrix: Water**

Date Collected: 03/17/20 00:00

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0290	U	0.0778	0.0779	1.00	0.145	pCi/L	03/24/20 13:03	04/15/20 07:24	1
<b>Carrier</b>										
Ba Carrier	81.8		40 - 110					03/24/20 13:03	04/15/20 07:24	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0390	U	0.358	0.358	1.00	0.639	pCi/L	04/19/20 12:26	04/22/20 16:35	1
<b>Carrier</b>										
Ba Carrier	91.2		40 - 110					04/19/20 12:26	04/22/20 16:35	1
Y Carrier	90.8		40 - 110					04/19/20 12:26	04/22/20 16:35	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0100	U	0.366	0.366	2.00	0.639	pCi/L	04/23/20 08:09		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103742-2

**Client Sample ID: WGWC-11**

**Lab Sample ID: 180-103742-11**

**Matrix: Water**

Date Collected: 03/18/20 13:05

Date Received: 03/19/20 08:30

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0347	U	0.0781	0.0782	1.00	0.142	pCi/L	03/24/20 13:03	04/15/20 07:24	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	93.1		40 - 110					03/24/20 13:03	04/15/20 07:24	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.831		0.435	0.442	1.00	0.660	pCi/L	04/19/20 12:26	04/22/20 16:36	1
<i>Carrier</i>	%Yield	Qualifier	<i>Limits</i>					<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Ba Carrier	91.2		40 - 110					04/19/20 12:26	04/22/20 16:36	1
Y Carrier	91.2		40 - 110					04/19/20 12:26	04/22/20 16:36	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.866		0.442	0.449	2.00	0.660	pCi/L		04/23/20 08:09	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-103742-2

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

**Lab Sample ID:** MB 160-465458/22-A

**Matrix:** Water

**Analysis Batch:** 467823

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 465458

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.02844	U		0.0416	0.0417	1.00	0.112	pCi/L	03/24/20 13:03	04/15/20 07:24	1
<b>Carrier</b>									<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	98.4			40 - 110					03/24/20 13:03	04/15/20 07:24	1

**Lab Sample ID:** LCS 160-465458/1-A

**Matrix:** Water

**Analysis Batch:** 467823

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 465458

Analyte	Spike Added	LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec	%Rec. Limits	
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-226	11.3	9.112		1.02	1.00	0.147	0.147	pCi/L	80	75 - 125	
<b>Carrier</b>											
Ba Carrier	86.5		40 - 110								

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

**Lab Sample ID:** MB 160-468060/20-A

**Matrix:** Water

**Analysis Batch:** 468601

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 468060

Analyte	Result	MB U	MB Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	0.01509	U		0.324	0.324	1.00	0.576	pCi/L	04/19/20 12:26	04/22/20 16:36	1
<b>Carrier</b>									<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	94.2		40 - 110						04/19/20 12:26	04/22/20 16:36	1
Y Carrier	89.3		40 - 110						04/19/20 12:26	04/22/20 16:36	1

**Lab Sample ID:** LCS 160-468060/1-A

**Matrix:** Water

**Analysis Batch:** 468602

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 468060

Analyte	Spike Added	LCS Result	LCS Qual	Total		RL	MDC	Unit	%Rec	%Rec. Limits	
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	11.9	11.88		1.56	1.00	0.792	0.792	pCi/L	100	75 - 125	
<b>Carrier</b>											
Ba Carrier	79.9		40 - 110								
Y Carrier	69.2		40 - 110								

# QC Sample Results

Client: Southern Company

Job ID: 180-103742-2

Project/Site: CCR - Plant Wansley Ash Pond

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

**Lab Sample ID: LCSD 160-468060/2-A**

**Matrix: Water**

**Analysis Batch: 468060**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 468060**

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)		RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
				1.45	1.00							
Radium-228	11.9	11.96				0.590	pCi/L		101	75 - 125	0.03	1
<i>Carrier</i>												
Ba Carrier	81.7		40 - 110									
Y Carrier	91.2		40 - 110									

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-2

**Rad**

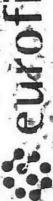
**Prep Batch: 465458**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	PrecSep-21	
180-103742-2	WGWA-2	Total/NA	Water	PrecSep-21	
180-103742-3	WGWA-3	Total/NA	Water	PrecSep-21	
180-103742-4	WGWA-4	Total/NA	Water	PrecSep-21	
180-103742-5	WGWA-5	Total/NA	Water	PrecSep-21	
180-103742-6	WGWA-6	Total/NA	Water	PrecSep-21	
180-103742-7	WGWA-7	Total/NA	Water	PrecSep-21	
180-103742-8	WGWA-18	Total/NA	Water	PrecSep-21	
180-103742-9	EB-1 3-17-20	Total/NA	Water	PrecSep-21	
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	PrecSep-21	
180-103742-11	WGWC-11	Total/NA	Water	PrecSep-21	
MB 160-465458/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-465458/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 468060**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103742-1	WGWA-1	Total/NA	Water	PrecSep_0	
180-103742-2	WGWA-2	Total/NA	Water	PrecSep_0	
180-103742-3	WGWA-3	Total/NA	Water	PrecSep_0	
180-103742-4	WGWA-4	Total/NA	Water	PrecSep_0	
180-103742-5	WGWA-5	Total/NA	Water	PrecSep_0	
180-103742-6	WGWA-6	Total/NA	Water	PrecSep_0	
180-103742-7	WGWA-7	Total/NA	Water	PrecSep_0	
180-103742-8	WGWA-18	Total/NA	Water	PrecSep_0	
180-103742-9	EB-1 3-17-20	Total/NA	Water	PrecSep_0	
180-103742-10	DUPLICATE 1 3-17-20	Total/NA	Water	PrecSep_0	
180-103742-11	WGWC-11	Total/NA	Water	PrecSep_0	
MB 160-468060/20-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-468060/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-468060/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	





Environment Testing  
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ORIGIN ID: LIYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
SUITE C-1  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 18MARCH20  
ACTWT: 59.35 LB  
CAD: 859116/CAFE3312

BILL RECIPIENT

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7068  
REF: ACC

565C2/64F020529

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ORIGIN ID: LYA (628) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 McDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 18MAR20  
ACTWT: 59.35 LB  
CRD: 859116/CFE3312  
BILL RECIPIENT

10 SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7058  
REF: ACC

?8) 966-9991  
ICA  
IVE  
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SHIP DATE: 18MAR20  
ACTWT: 59.35 LB  
CRD: 859116/CFE3312  
BILL RECIPIENT

:CIEVING  
TESTAMERICA PITTSBURGH  
DR.

GH PA 15238

1469-484 RIT EXP 07/20

1991219082001AU

1991219082001AU

J1991219082001AU

### **Chain of Custody Record**

Note: Since laboratory accreditation are subject to change, Eurofins TestAmerica places the ownership of samples held by Eurofins TestAmerica until analysis is completed. 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/Instrument being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica

Possible Hazard Identification

Empty Kit Relin

Relinquished by:

Relinquished by: \_\_\_\_\_

## Chain of Custody Record

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab PM: Bortot, Veronica	Carrier Tracking No(s): 180-388211.2
Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc.		E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia	Page: Page 2 of 2
Address: 13715 Rider Trail North, Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email: Project Name: CCR - Plant Wansley Site: Wansley CCR	Due Date Requested: 4/17/2020 TAT Requested (days):	<b>Analysis Requested</b> Accrediations Required (See note): Job #: 180-103742-2 Preservation Codes: A - HCl M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SC3 F - MeOH R - Na2SO3 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:		
Total Number of containers: 1				
<b>Special Instructions/Note:</b> R2226R2228-GFPC/(MOD) Local Method 9315-R2226/PreSep-21 (MOD) Copy Analytes 9320-R2228/PreSep-0 (MOD) Copy Analytes R2226R2228-GFPC/(MOD) Local Method				
Perform MS/MSD (Yes or No): Field Filtered Sample (Yes or No): Matrix (W=water, S=solid, O=waste/oil, B=tissue, A=Air)				
Field Filtered Sample (Yes or No): Matrix (W=water, S=solid, O=waste/oil, B=tissue, A=Air)				
Sample Identification - Client ID (Lab ID): DUPLICATE 1 3-17-20 (180-103742-10) WGWC-11 (180-103742-11)				
Sample Date Sample Time Sample Type (C=Comp, G=grab) Preservation Code: 3/17/20 Eastern Water X X X 3/18/20 13:05 Water X X X				
Primary Deliverable Rank: 2 Deliverable Requested: I, II, III, IV, Other (specify)				
<b>Possible Hazard Identification</b> Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)				
Empty Kit Relinquished by: Relinquished by: <i>FE</i> Date/Time: <i>3/20/2020 17:00</i> Received by: <i>FE</i> Date/Time: <i>3/21/2020 08:37</i> Received by: <i>MCN</i> Date/Time: <i>3/21/2020 08:37</i> Method of Shipment: Company				
Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Cooler Temperature(s) °C and Other Remarks: _____				

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analytic & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the labo

## Possible Hazard Identification

11

Unconfirmed

Primary Deliverable R

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Date: \_\_\_\_\_

Date/time

1/0/20

Date/Time

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DateTime:

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## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103742-2

**Login Number:** 103742

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

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.	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: 180-103742-2

**Login Number:** 103742

**List Source:** Eurofins TestAmerica, St. Louis

**List Number:** 2

**List Creation:** 03/23/20 01:14 PM

**Creator:** Korrinhizer, Micha L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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: 180-103809-1

**Login Number:** 103809

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

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.	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	



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## ANALYTICAL REPORT

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

Laboratory Job ID: 180-103809-1

Client Project/Site: CCR - Plant Wansley Ash Pond  
Revision: 3

**For:**

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

Attn: Joju Abraham

Authorized for release by:  
6/1/2020 11:46:26 AM

Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

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results through

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Ask  
The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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# Case Narrative

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

Job ID: 180-103809-1

**Job ID: 180-103809-1**

**Laboratory: Eurofins TestAmerica, Pittsburgh**

## Narrative

### Job Narrative

060120 Revised report to remove Antimony per client request. This report replaces the report previously issued on 052920.

**052920** Revised report to remove the following samples at client request: WCWC-19 (180-103809-10) and EB-2 3-10-20 (180-103809-11). Original request and reason is on file. This report replaces the report previously issued on 043020.

04-30-20 Revised : to reanalyze samples 10 and 11

## Receipt

The samples were received on 3/20/2020 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 1.3° C, 1.4° C, 1.4° C and 1.5° C.

## GC Semi VOA

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

## Metals

Method 6020B: The continuing calibration verification (CCV) and the low level continuing calibration verification (CCVL) associated with batch 180-312904 recovered above the upper control limit for boron and the continuing calibration blank (CCB) was also greater than the reporting limit (RL) for boron. The samples associated with this CCV were below the RL for boron; therefore, the data have been reported with this narrative.

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

## Field Service

No analytical or quality issues were noted, other than those described 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 Ash Pond

Job ID: 180-103809-1

## 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
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%R	Listed under the "D" column to designate that the result is reported on a dry weight basis
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)
MQL	Method Quantitation Limit
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 Ash Pond

Job ID: 180-103809-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

Eurofins TestAmerica, Pittsburgh

# Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-103809-1	WGWC-8	Water	03/19/20 12:49	03/20/20 09:00	
180-103809-2	WGWC-9	Water	03/19/20 11:22	03/20/20 09:00	
180-103809-3	WGWC-10	Water	03/18/20 14:55	03/20/20 09:00	
180-103809-4	WGWC-12	Water	03/18/20 11:45	03/20/20 09:00	
180-103809-5	WGWC-13	Water	03/19/20 11:15	03/20/20 09:00	
180-103809-6	WGWC-14A	Water	03/19/20 13:35	03/20/20 09:00	
180-103809-7	WGWC-15	Water	03/18/20 10:35	03/20/20 09:00	
180-103809-8	WGWC-16	Water	03/18/20 11:45	03/20/20 09:00	
180-103809-9	WGWC-17	Water	03/18/20 15:11	03/20/20 09:00	
180-103809-12	DUPPLICATE 2	Water	03/18/20 00:00	03/20/20 09:00	
180-103809-13	FB-1 3-18-20	Water	03/18/20 14:55	03/20/20 09:00	
180-103809-14	FB-2 3-19-20	Water	03/19/20 12:30	03/20/20 09:00	

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# Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

## Protocol References:

EPA = US Environmental Protection Agency

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

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

## Laboratory References:

TAL 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 Ash Pond

Job ID: 180-103809-1

**Client Sample ID: WGWC-8**  
**Date Collected: 03/19/20 12:49**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-1**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			312087	04/05/20 15:24	MJH	TAL PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312254	04/08/20 05:11	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:12	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:23	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 13:43	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:37	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/19/20 12:49	FDS	TAL PIT

**Client Sample ID: WGWC-9**  
**Date Collected: 03/19/20 11:22**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-2**  
**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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			312087	04/05/20 15:55	MJH	TAL PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312254	04/08/20 05:27	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:29	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:35	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 13:55	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:40	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-1

## **Client Sample ID: WGWC-9**

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-2**

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	Field Sampling		1			310781	03/19/20 11:22	FDS	TAL PIT

## **Client Sample ID: WGWC-10**

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-3**

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	EPA 300.0 R2.1		1			312144	04/07/20 01:30	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			312686	04/10/20 15:32	RJR	TAL PIT
		Instrument ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			312904	04/14/20 11:38	RJR	TAL PIT
		Instrument ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313029	04/15/20 13:58	RJR	TAL PIT
		Instrument ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			311297	03/26/20 19:41	NAM	TAL PIT
		Instrument ID: HGZ								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			310781	03/18/20 14:55	FDS	TAL PIT
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-4**

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	EPA 300.0 R2.1		1			312144	04/07/20 03:36	MJH	TAL PIT
		Instrument ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			312686	04/10/20 15:34	RJR	TAL PIT
		Instrument ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			312904	04/14/20 11:40	RJR	TAL PIT
		Instrument ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			313029	04/15/20 14:00	RJR	TAL PIT
		Instrument ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			311297	03/26/20 19:42	NAM	TAL PIT
		Instrument ID: HGZ								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-12**  
**Date Collected: 03/18/20 11:45**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-4**  
**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	SM 2540C		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/18/20 11:45	FDS	TAL PIT

**Client Sample ID: WGWC-13**  
**Date Collected: 03/19/20 11:15**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-5**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312254	04/07/20 21:22	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:37	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:48	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 14:08	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:43	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/19/20 11:15	FDS	TAL PIT

**Client Sample ID: WGWC-14A**  
**Date Collected: 03/19/20 13:35**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-6**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312254	04/07/20 21:38	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:39	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:50	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 14:10	RJR	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-1

## **Client Sample ID: WGWC-14A**

Date Collected: 03/19/20 13:35

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-6**

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	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:44	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/19/20 13:35	FDS	TAL PIT

## **Client Sample ID: WGWC-15**

Date Collected: 03/18/20 10:35

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-7**

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312144	04/07/20 03:52	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:42	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:53	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:45	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/18/20 10:35	FDS	TAL PIT

## **Client Sample ID: WGWC-16**

Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-8**

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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			312143	04/07/20 01:01	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:44	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:55	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 14:13	RJR	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-1

## Client Sample ID: WGWC-16

Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

Lab Sample ID: 180-103809-8

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	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:52	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/18/20 11:45	FDS	TAL PIT

## Client Sample ID: WGWC-17

Date Collected: 03/18/20 15:11

Date Received: 03/20/20 09:00

Lab Sample ID: 180-103809-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312144	04/07/20 04:40	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:46	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 11:57	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			313029	04/15/20 14:15	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:53	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			310781	03/18/20 15:11	FDS	TAL PIT

## Client Sample ID: DUPLICATE 2

Date Collected: 03/18/20 00:00

Date Received: 03/20/20 09:00

Lab Sample ID: 180-103809-12

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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			312143	04/07/20 01:17	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 15:59	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 12:05	RJR	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-1

## Client Sample ID: DUPLICATE 2

Date Collected: 03/18/20 00:00

Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-12

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	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:56	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT

## Client Sample ID: FB-1 3-18-20

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-13

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	EPA 300.0 R2.1 Instrument ID: CHIC2100A		1			312143	04/06/20 21:56	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 16:01	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 12:07	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:57	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT

## Client Sample ID: FB-2 3-19-20

Date Collected: 03/19/20 12:30

Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-14

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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			312254	04/07/20 22:10	SAC	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312686	04/10/20 16:04	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: NEMO		1			312904	04/14/20 12:10	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			311297	03/26/20 19:58	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT

### Laboratory References:

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

Eurofins TestAmerica, Pittsburgh

## Lab Chronicle

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

Job ID: 180-103809-1

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

NAM = Nicole Marfisi

RJR = Ron Rosenbaum

Batch Type: Analysis

AVS = Abbey Smith

FDS = Sampler Field

MJH = Matthew Hartman

NAM = Nicole Marfisi

RJR = Ron Rosenbaum

SAC = Shawn Clemente

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# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-8**

**Lab Sample ID: 180-103809-1**

Matrix: Water

Date Collected: 03/19/20 12:49

Date Received: 03/20/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98		1.0	0.32	mg/L			04/05/20 15:24	1
Fluoride	0.057	J	0.10	0.026	mg/L			04/08/20 05:11	1
Sulfate	200		1.0	0.38	mg/L			04/05/20 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00071	J	0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:12	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:12	1
Beryllium	0.0028		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:23	1
Boron	2.2		0.080	0.039	mg/L		03/25/20 11:00	04/15/20 13:43	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:12	1
Calcium	79		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:12	1
Cobalt	0.00092	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:12	1
Lead	0.00016	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:12	1
Selenium	0.0037	J	0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:12	1
Lithium	0.015		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:23	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		03/24/20 19:39	03/26/20 19:37	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	540		10	10	mg/L			03/24/20 08:03	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.43			SU				03/19/20 12:49	1

**Client Sample ID: WGWC-9**

**Lab Sample ID: 180-103809-2**

Matrix: Water

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		1.0	0.32	mg/L			04/05/20 15:55	1
Fluoride	1.0		0.10	0.026	mg/L			04/08/20 05:27	1
Sulfate	45		1.0	0.38	mg/L			04/05/20 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:29	1
Barium	0.0021	J	0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:29	1
Beryllium	0.00056	J	0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:35	1
Boron	0.55		0.080	0.039	mg/L		03/25/20 11:00	04/15/20 13:55	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:29	1
Calcium	9.3		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:29	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-9**

**Lab Sample ID: 180-103809-2**

**Matrix: Water**

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:29	1
<b>Molybdenum</b>	<b>0.0042 J</b>		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:29	1
<b>Selenium</b>	<b>0.0033 J</b>		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:29	1
Lithium	<b>0.039</b>		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:35	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		03/24/20 19:39	03/26/20 19:40	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<b>160</b>		10	10	mg/L			03/24/20 08:03	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<b>6.64</b>			SU				03/19/20 11:22	1

**Client Sample ID: WGWC-10**

**Lab Sample ID: 180-103809-3**

**Matrix: Water**

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<b>1.5</b>		1.0	0.32	mg/L			04/07/20 01:30	1
Fluoride	<b>0.052 J</b>		0.10	0.026	mg/L			04/07/20 01:30	1
Sulfate	<b>2.1</b>		1.0	0.38	mg/L			04/07/20 01:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:32	1
<b>Barium</b>	<b>0.035</b>		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:32	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:38	1
<b>Boron</b>	<b>0.049 J</b>		0.080	0.039	mg/L		03/25/20 11:00	04/15/20 13:58	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:32	1
<b>Calcium</b>	<b>7.5</b>		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:32	1
<b>Cobalt</b>	<b>0.0012 J</b>		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:32	1
<b>Lead</b>	<b>0.00021 J</b>		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:32	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:32	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:32	1
Lithium	<b>0.0071</b>		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:38	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		03/24/20 19:39	03/26/20 19:41	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

## Client Sample ID: WGWC-10

Date Collected: 03/18/20 14:55  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-3

Matrix: Water

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	58		10	10	mg/L			03/24/20 08:03	1

### Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.40			SU				03/18/20 14:55	1

## Client Sample ID: WGWC-12

Date Collected: 03/18/20 11:45  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-4

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		1.0	0.32	mg/L			04/07/20 03:36	1
Fluoride	0.033	J	0.10	0.026	mg/L			04/07/20 03:36	1
Sulfate	12		1.0	0.38	mg/L			04/07/20 03:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:34	1
Barium	0.016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:34	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:40	1
Boron	0.039	J	0.080	0.039	mg/L		03/25/20 11:00	04/15/20 14:00	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:34	1
Calcium	14		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:34	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:34	1
Cobalt	0.00071	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:34	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:34	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:34	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:34	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:34	1
Lithium	0.0081		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:40	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		03/24/20 19:39	03/26/20 19:42	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	73		10	10	mg/L			03/24/20 08:00	1

### Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.94			SU				03/18/20 11:45	1

## Client Sample ID: WGWC-13

Date Collected: 03/19/20 11:15  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-5

Matrix: Water

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.3		1.0	0.32	mg/L			04/07/20 21:22	1
Fluoride	0.15		0.10	0.026	mg/L			04/07/20 21:22	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-13**

**Lab Sample ID: 180-103809-5**

Matrix: Water

Date Collected: 03/19/20 11:15

Date Received: 03/20/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	4.0		1.0	0.38	mg/L			04/07/20 21:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00039	J	0.0010	0.00031	mg/L			04/10/20 15:37	1
Barium	0.072		0.010	0.0016	mg/L			04/10/20 15:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L			04/14/20 11:48	1
Boron	0.053	J	0.080	0.039	mg/L			04/15/20 14:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L			04/10/20 15:37	1
Calcium	5.0		0.50	0.13	mg/L			04/10/20 15:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L			04/10/20 15:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L			04/10/20 15:37	1
Molybdenum	0.0018	J	0.015	0.00061	mg/L			04/10/20 15:37	1
Lead	0.00060	J	0.0010	0.00013	mg/L			04/10/20 15:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L			04/10/20 15:37	1
Thallium	<0.00015		0.0010	0.00015	mg/L			04/10/20 15:37	1
Lithium	<0.0034		0.0050	0.0034	mg/L			04/14/20 11:48	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			03/26/20 19:43	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	95		10	10	mg/L			03/24/20 08:03	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.56			SU				03/19/20 11:15	1

**Client Sample ID: WGWC-14A**

**Lab Sample ID: 180-103809-6**

Matrix: Water

Date Collected: 03/19/20 13:35

Date Received: 03/20/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.32	mg/L			04/07/20 21:38	1
Fluoride	<0.026		0.10	0.026	mg/L			04/07/20 21:38	1
Sulfate	1.5		1.0	0.38	mg/L			04/07/20 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			04/10/20 15:39	1
Barium	0.031		0.010	0.0016	mg/L			04/10/20 15:39	1
Beryllium	0.00025	J	0.0025	0.00018	mg/L			04/14/20 11:50	1
Boron	0.039	J	0.080	0.039	mg/L			04/15/20 14:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L			04/10/20 15:39	1
Calcium	0.89		0.50	0.13	mg/L			04/10/20 15:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L			04/10/20 15:39	1
Cobalt	0.0039		0.0025	0.00013	mg/L			04/10/20 15:39	1
Molybdenum	<0.00061		0.015	0.00061	mg/L			04/10/20 15:39	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-14A**

**Lab Sample ID: 180-103809-6**

**Matrix: Water**

Date Collected: 03/19/20 13:35  
Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00017	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:39	1
Thallium	0.00017	J	0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:39	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:50	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		03/24/20 19:39	03/26/20 19:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		10	10	mg/L		03/24/20 08:03		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.49			SU			03/19/20 13:35		1

**Client Sample ID: WGWC-15**

**Lab Sample ID: 180-103809-7**

**Matrix: Water**

Date Collected: 03/18/20 10:35  
Date Received: 03/20/20 09:00

**Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.32	mg/L		04/07/20 03:52		1
Fluoride	0.71		0.10	0.026	mg/L		04/07/20 03:52		1
Sulfate	17		1.0	0.38	mg/L		04/07/20 03:52		1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00088	J	0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:42	1
Barium	0.021		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:42	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:53	1
Boron	0.071	J B ^	0.080	0.039	mg/L		03/25/20 11:00	04/14/20 11:53	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:42	1
Calcium	30		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:42	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:42	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:42	1
Molybdenum	0.0020	J	0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:42	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:42	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:42	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:42	1
Lithium	0.0086		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:53	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		03/24/20 19:39	03/26/20 19:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160		10	10	mg/L		03/24/20 08:03		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

## **Client Sample ID: WGWC-15**

Date Collected: 03/18/20 10:35  
Date Received: 03/20/20 09:00

**Lab Sample ID: 180-103809-7**

Matrix: Water

### **Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.73				SU			03/18/20 10:35	1

## **Client Sample ID: WGWC-16**

Date Collected: 03/18/20 11:45  
Date Received: 03/20/20 09:00

**Lab Sample ID: 180-103809-8**

Matrix: Water

### **Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93		1.0	0.32	mg/L			04/07/20 01:01	1
Fluoride	0.084	J	0.10	0.026	mg/L			04/07/20 01:01	1
Sulfate	120		1.0	0.38	mg/L			04/07/20 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			03/25/20 11:00	04/10/20 15:44
Barium	0.034		0.010	0.0016	mg/L			03/25/20 11:00	04/10/20 15:44
Beryllium	<0.00018		0.0025	0.00018	mg/L			03/25/20 11:00	04/14/20 11:55
Boron	2.0		0.080	0.039	mg/L			03/25/20 11:00	04/15/20 14:13
Cadmium	0.00022	J	0.0025	0.00022	mg/L			03/25/20 11:00	04/10/20 15:44
Calcium	66		0.50	0.13	mg/L			03/25/20 11:00	04/10/20 15:44
Chromium	<0.0015		0.0020	0.0015	mg/L			03/25/20 11:00	04/10/20 15:44
Cobalt	0.00016	J	0.0025	0.00013	mg/L			03/25/20 11:00	04/10/20 15:44
Molybdenum	<0.00061		0.015	0.00061	mg/L			03/25/20 11:00	04/10/20 15:44
Lead	<0.00013		0.0010	0.00013	mg/L			03/25/20 11:00	04/10/20 15:44
Selenium	0.0046	J	0.0050	0.0015	mg/L			03/25/20 11:00	04/10/20 15:44
Thallium	<0.00015		0.0010	0.00015	mg/L			03/25/20 11:00	04/10/20 15:44
Lithium	0.0057		0.0050	0.0034	mg/L			03/25/20 11:00	04/14/20 11:55

### **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			03/24/20 19:42	03/26/20 19:52

### **General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370		10	10	mg/L			03/24/20 08:00	1

### **Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.08				SU			03/18/20 11:45	1

## **Client Sample ID: WGWC-17**

Date Collected: 03/18/20 15:11  
Date Received: 03/20/20 09:00

**Lab Sample ID: 180-103809-9**

Matrix: Water

### **Method: EPA 300.0 R2.1 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.32	mg/L			04/07/20 04:40	1
Fluoride	<0.026		0.10	0.026	mg/L			04/07/20 04:40	1
Sulfate	4.2		1.0	0.38	mg/L			04/07/20 04:40	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: WGWC-17**  
Date Collected: 03/18/20 15:11  
Date Received: 03/20/20 09:00

**Lab Sample ID: 180-103809-9**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00054	J	0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:46	1
Barium	0.012		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:46	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:57	1
Boron	0.049	J	0.080	0.039	mg/L		03/25/20 11:00	04/15/20 14:15	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:46	1
Calcium	6.3		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:46	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:46	1
Cobalt	0.00052	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:46	1
Molybdenum	0.0024	J	0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:46	1
Lead	0.00020	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:46	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:46	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:46	1
Lithium	0.0054		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 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		03/24/20 19:42	03/26/20 19:53	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	98		10	10	mg/L		03/24/20 08:03		1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.28				SU		03/18/20 15:11		1

**Client Sample ID: DUPLICATE 2**

**Lab Sample ID: 180-103809-12**

Matrix: Water

Date Collected: 03/18/20 00:00  
Date Received: 03/20/20 09:00

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0	0.32	mg/L		04/07/20 01:17		1
Fluoride	0.26		0.10	0.026	mg/L		04/07/20 01:17		1
Sulfate	3.6		1.0	0.38	mg/L		04/07/20 01:17		1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:59	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:59	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 12:05	1
Boron	0.076	J B ^	0.080	0.039	mg/L		03/25/20 11:00	04/14/20 12:05	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:59	1
Calcium	17		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:59	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:59	1
Cobalt	0.00020	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:59	1
Molybdenum	0.0011	J	0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:59	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:59	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:59	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:59	1
Lithium	0.044		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 12:05	1

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# Client Sample Results

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

Job ID: 180-103809-1

## Client Sample ID: DUPLICATE 2

Lab Sample ID: 180-103809-12

Matrix: Water

Date Collected: 03/18/20 00:00  
Date Received: 03/20/20 09:00

### 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		03/24/20 19:42	03/26/20 19:56	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		10	10	mg/L		03/24/20 08:00		1

## Client Sample ID: FB-1 3-18-20

Lab Sample ID: 180-103809-13

Matrix: Water

Date Collected: 03/18/20 14:55  
Date Received: 03/20/20 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/06/20 21:56	1
Fluoride	0.058 J		0.10	0.026	mg/L			04/06/20 21:56	1
Sulfate	<0.38		1.0	0.38	mg/L			04/06/20 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 16:01	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 16:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 12:07	1
Boron	0.063 J B ^		0.080	0.039	mg/L		03/25/20 11:00	04/14/20 12:07	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 16:01	1
Calcium	<0.13		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 16:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 16:01	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 16:01	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 16:01	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 16:01	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 16:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 16:01	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 12:07	1

### Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00011 J		0.00020	0.00010	mg/L		03/24/20 19:42	03/26/20 19:57	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			03/24/20 08:00	1

## Client Sample ID: FB-2 3-19-20

Lab Sample ID: 180-103809-14

Matrix: Water

Date Collected: 03/19/20 12:30  
Date Received: 03/20/20 09:00

### Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/07/20 22:10	1
Fluoride	<0.026		0.10	0.026	mg/L			04/07/20 22:10	1
Sulfate	<0.38		1.0	0.38	mg/L			04/07/20 22:10	1

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# Client Sample Results

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

Job ID: 180-103809-1

**Client Sample ID: FB-2 3-19-20**

**Lab Sample ID: 180-103809-14**

**Matrix: Water**

Date Collected: 03/19/20 12:30

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 16:04	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 16:04	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 12:10	1
<b>Boron</b>	<b>0.066 JB ^</b>		0.080	0.039	mg/L		03/25/20 11:00	04/14/20 12:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 16:04	1
Calcium	<0.13		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 16:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 16:04	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 16:04	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 16:04	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 16:04	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 16:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 16:04	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 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		03/24/20 19:42	03/26/20 19:58	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L		03/24/20 08:03		1

# QC Sample Results

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

Job ID: 180-103809-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

**Lab Sample ID:** MB 180-312087/37

**Matrix:** Water

**Analysis Batch:** 312087

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/05/20 14:20	1
Fluoride	<0.026		0.10	0.026	mg/L			04/05/20 14:20	1
Sulfate	<0.38		1.0	0.38	mg/L			04/05/20 14:20	1

**Lab Sample ID:** LCS 180-312087/36

**Matrix:** Water

**Analysis Batch:** 312087

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

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits	
Chloride		50.0	50.3		mg/L		101	90 - 110
Fluoride		2.50	2.71		mg/L		108	90 - 110
Sulfate		50.0	49.2		mg/L		98	90 - 110

**Lab Sample ID:** MB 180-312143/6

**Matrix:** Water

**Analysis Batch:** 312143

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/06/20 15:26	1
Fluoride	<0.026		0.10	0.026	mg/L			04/06/20 15:26	1
Sulfate	<0.38		1.0	0.38	mg/L			04/06/20 15:26	1

**Lab Sample ID:** LCS 180-312143/5

**Matrix:** Water

**Analysis Batch:** 312143

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

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits	
Chloride		50.0	50.3		mg/L		101	90 - 110
Fluoride		2.50	2.75		mg/L		110	90 - 110
Sulfate		50.0	49.8		mg/L		100	90 - 110

**Lab Sample ID:** MB 180-312144/6

**Matrix:** Water

**Analysis Batch:** 312144

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/06/20 15:35	1
Fluoride	<0.026		0.10	0.026	mg/L			04/06/20 15:35	1
Sulfate	<0.38		1.0	0.38	mg/L			04/06/20 15:35	1

**Lab Sample ID:** LCS 180-312144/5

**Matrix:** Water

**Analysis Batch:** 312144

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

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits	
Chloride		50.0	51.3		mg/L		103	90 - 110
Fluoride		2.50	2.44		mg/L		98	90 - 110
Sulfate		50.0	50.8		mg/L		102	90 - 110

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# QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 180-103809-3 MS**

**Matrix: Water**

**Analysis Batch: 312144**

**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		
Chloride	1.5		25.0	25.5		mg/L		96	80 - 120		
Fluoride	0.052	J	1.25	1.25		mg/L		96	80 - 120		
Sulfate	2.1		25.0	25.7		mg/L		94	80 - 120		

**Lab Sample ID: 180-103809-3 MSD**

**Matrix: Water**

**Analysis Batch: 312144**

**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
Chloride	1.5		25.0	25.7		mg/L		97	80 - 120	1	20
Fluoride	0.052	J	1.25	1.27		mg/L		98	80 - 120	2	20
Sulfate	2.1		25.0	26.0		mg/L		95	80 - 120	1	20

**Lab Sample ID: MB 180-312254/6**

**Matrix: Water**

**Analysis Batch: 312254**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			04/07/20 17:25	1
Fluoride	<0.026		0.10	0.026	mg/L			04/07/20 17:25	1
Sulfate	<0.38		1.0	0.38	mg/L			04/07/20 17:25	1

**Lab Sample ID: LCS 180-312254/5**

**Matrix: Water**

**Analysis Batch: 312254**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride		50.0	47.6		mg/L		95	90 - 110		
Fluoride		2.50	2.30		mg/L		92	90 - 110		
Sulfate		50.0	47.5		mg/L		95	90 - 110		

## Method: EPA 6020B - Metals (ICP/MS)

**Lab Sample ID: MB 180-311071/1-A**

**Matrix: Water**

**Analysis Batch: 312686**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:08	1
Barium	<0.0016		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:08	1
Calcium	<0.13		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:08	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:08	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:08	1
Antimony	<0.00038		0.0020	0.00038	mg/L		03/25/20 11:00	04/10/20 15:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:08	1

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# QC Sample Results

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

Job ID: 180-103809-1

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

**Lab Sample ID: MB 180-311071/1-A**

**Matrix: Water**

**Analysis Batch: 312904**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:18	1

**Lab Sample ID: MB 180-311071/1-A**

**Matrix: Water**

**Analysis Batch: 313029**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/15/20 13:39	1

**Lab Sample ID: LCS 180-311071/2-A**

**Matrix: Water**

**Analysis Batch: 312686**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Arsenic	1.00	0.996		mg/L		100	80 - 120
Barium	1.00	0.964		mg/L		96	80 - 120
Cadmium	0.500	0.483		mg/L		97	80 - 120
Calcium	25.0	25.4		mg/L		102	80 - 120
Chromium	0.500	0.479		mg/L		96	80 - 120
Cobalt	0.500	0.479		mg/L		96	80 - 120
Molybdenum	0.500	0.502		mg/L		100	80 - 120
Lead	0.500	0.492		mg/L		98	80 - 120
Antimony	0.250	0.234		mg/L		94	80 - 120
Selenium	1.00	1.01		mg/L		101	80 - 120
Thallium	1.00	0.995		mg/L		99	80 - 120

**Lab Sample ID: LCS 180-311071/2-A**

**Matrix: Water**

**Analysis Batch: 312904**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Beryllium	0.500	0.548		mg/L		110	80 - 120
Lithium	0.500	0.553		mg/L		111	80 - 120

**Lab Sample ID: LCS 180-311071/2-A**

**Matrix: Water**

**Analysis Batch: 313029**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Boron	1.25	1.23		mg/L		98	80 - 120

**Lab Sample ID: 180-103809-1 MS**

**Matrix: Water**

**Analysis Batch: 312686**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Arsenic	0.00071	J	1.00	0.984		mg/L		98	75 - 125
Barium	<0.0016		1.00	0.970		mg/L		97	75 - 125
Cadmium	<0.00022		0.500	0.467		mg/L		93	75 - 125

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

**Client Sample ID: WGWC-8**  
**Prep Type: Total Recoverable**  
**Prep Batch: 311071**

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# QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

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

**Lab Sample ID: 180-103809-1 MS**

**Matrix: Water**

**Analysis Batch: 312686**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	79		25.0	108		mg/L		114	75 - 125
Chromium	<0.0015		0.500	0.470		mg/L		94	75 - 125
Cobalt	0.00092	J	0.500	0.469		mg/L		94	75 - 125
Molybdenum	<0.00061		0.500	0.511		mg/L		102	75 - 125
Lead	0.00016	J	0.500	0.481		mg/L		96	75 - 125
Antimony	<0.00038		0.250	0.246		mg/L		99	75 - 125
Selenium	0.0037	J	1.00	0.987		mg/L		98	75 - 125
Thallium	<0.00015		1.00	0.965		mg/L		96	75 - 125

**Lab Sample ID: 180-103809-1 MS**

**Matrix: Water**

**Analysis Batch: 312904**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0028		0.500	0.527		mg/L		105	75 - 125
Lithium	0.015		0.500	0.532		mg/L		103	75 - 125

**Lab Sample ID: 180-103809-1 MS**

**Matrix: Water**

**Analysis Batch: 313029**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	2.2		1.25	3.64		mg/L		111	75 - 125

**Lab Sample ID: 180-103809-1 MSD**

**Matrix: Water**

**Analysis Batch: 312686**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	0.00071	J	1.00	1.05		mg/L		105	75 - 125	6	20
Barium	<0.0016		1.00	1.01		mg/L		101	75 - 125	4	20
Cadmium	<0.00022		0.500	0.495		mg/L		99	75 - 125	6	20
Calcium	79		25.0	108		mg/L		113	75 - 125	0	20
Chromium	<0.0015		0.500	0.491		mg/L		98	75 - 125	4	20
Cobalt	0.00092	J	0.500	0.496		mg/L		99	75 - 125	6	20
Molybdenum	<0.00061		0.500	0.524		mg/L		105	75 - 125	2	20
Lead	0.00016	J	0.500	0.503		mg/L		101	75 - 125	5	20
Antimony	<0.00038		0.250	0.247		mg/L		99	75 - 125	0	20
Selenium	0.0037	J	1.00	1.06		mg/L		106	75 - 125	8	20
Thallium	<0.00015		1.00	0.999		mg/L		100	75 - 125	4	20

**Lab Sample ID: 180-103809-1 MSD**

**Matrix: Water**

**Analysis Batch: 312904**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Beryllium	0.0028		0.500	0.556		mg/L		111	75 - 125	5	20
Lithium	0.015		0.500	0.567		mg/L		110	75 - 125	6	20

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# QC Sample Results

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

Job ID: 180-103809-1

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

**Lab Sample ID: 180-103809-1 MSD**

**Matrix: Water**

**Analysis Batch: 313029**

**Client Sample ID: WGWC-8**

**Prep Type: Total Recoverable**

**Prep Batch: 311071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	2.2		1.25	3.61		mg/L		109	75 - 125	1	20

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-311010/1-A**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 311010**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/24/20 19:39	03/26/20 19:20	1

**Lab Sample ID: LCS 180-311010/2-A**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 311010**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00241		mg/L		97	80 - 120

**Lab Sample ID: 180-103809-7 MS**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: WGWC-15**

**Prep Type: Total/NA**

**Prep Batch: 311010**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.00010		0.00100	0.000884		mg/L		88	75 - 125

**Lab Sample ID: 180-103809-7 MSD**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: WGWC-15**

**Prep Type: Total/NA**

**Prep Batch: 311010**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.00010		0.00100	0.0008847		mg/L		85	75 - 125	4	20

**Lab Sample ID: MB 180-311012/1-A**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 311012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		03/24/20 19:42	03/26/20 19:48	1

**Lab Sample ID: LCS 180-311012/2-A**

**Matrix: Water**

**Analysis Batch: 311297**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 311012**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00238		mg/L		95	80 - 120

# QC Sample Results

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

Job ID: 180-103809-1

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

**Lab Sample ID:** MB 180-310933/2

**Matrix:** Water

**Analysis Batch:** 310933

**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	D		03/24/20 08:00	1

**Lab Sample ID:** LCS 180-310933/1

**Matrix:** Water

**Analysis Batch:** 310933

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	236		mg/L	D	98	80 - 120

**Lab Sample ID:** 180-103809-8 DU

**Matrix:** Water

**Analysis Batch:** 310933

**Client Sample ID:** WGWC-16  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	370		410		mg/L	D	10	10

**Lab Sample ID:** MB 180-310934/2

**Matrix:** Water

**Analysis Batch:** 310934

**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	D		03/24/20 08:03	1

**Lab Sample ID:** LCS 180-310934/1

**Matrix:** Water

**Analysis Batch:** 310934

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	242	258		mg/L	D	107	80 - 120

**Lab Sample ID:** 180-103809-1 DU

**Matrix:** Water

**Analysis Batch:** 310934

**Client Sample ID:** WGWC-8  
**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	540		576		mg/L	D	6	10

**Lab Sample ID:** 180-103809-7 DU

**Matrix:** Water

**Analysis Batch:** 310934

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	160		164		mg/L	D	0.6	10

**Lab Sample ID:** MB 180-310936/2

**Matrix:** Water

**Analysis Batch:** 310936

**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	D		03/24/20 08:08	1

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# QC Sample Results

Client: Southern Company

Job ID: 180-103809-1

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCS 180-310936/1

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 310936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	242	276		mg/L	114	80 - 120	

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

## HPLC/IC

### Analysis Batch: 312087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-103809-2	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 312143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-8	WGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-103809-12	DUPLICATE 2	Total/NA	Water	EPA 300.0 R2.1	
180-103809-13	FB-1 3-18-20	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 312144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-3	WGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-103809-4	WGWC-12	Total/NA	Water	EPA 300.0 R2.1	
180-103809-7	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-103809-9	WGWC-17	Total/NA	Water	EPA 300.0 R2.1	

### Analysis Batch: 312254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-103809-2	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-103809-5	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-103809-6	WGWC-14A	Total/NA	Water	EPA 300.0 R2.1	
180-103809-14	FB-2 3-19-20	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 311010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	7470A	
180-103809-2	WGWC-9	Total/NA	Water	7470A	
180-103809-3	WGWC-10	Total/NA	Water	7470A	
180-103809-4	WGWC-12	Total/NA	Water	7470A	
180-103809-5	WGWC-13	Total/NA	Water	7470A	
180-103809-6	WGWC-14A	Total/NA	Water	7470A	
180-103809-7	WGWC-15	Total/NA	Water	7470A	

### Prep Batch: 311012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-8	WGWC-16	Total/NA	Water	7470A	
180-103809-9	WGWC-17	Total/NA	Water	7470A	
180-103809-12	DUPLICATE 2	Total/NA	Water	7470A	
180-103809-13	FB-1 3-18-20	Total/NA	Water	7470A	
180-103809-14	FB-2 3-19-20	Total/NA	Water	7470A	

### Prep Batch: 311071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total Recoverable	Water	3005A	
180-103809-2	WGWC-9	Total Recoverable	Water	3005A	
180-103809-3	WGWC-10	Total Recoverable	Water	3005A	
180-103809-4	WGWC-12	Total Recoverable	Water	3005A	
180-103809-5	WGWC-13	Total Recoverable	Water	3005A	

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

## Metals (Continued)

### Prep Batch: 311071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-6	WGWC-14A	Total Recoverable	Water	3005A	
180-103809-7	WGWC-15	Total Recoverable	Water	3005A	
180-103809-8	WGWC-16	Total Recoverable	Water	3005A	
180-103809-9	WGWC-17	Total Recoverable	Water	3005A	
180-103809-12	DUPLICATE 2	Total Recoverable	Water	3005A	
180-103809-13	FB-1 3-18-20	Total Recoverable	Water	3005A	
180-103809-14	FB-2 3-19-20	Total Recoverable	Water	3005A	

### Analysis Batch: 311297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	EPA 7470A	311010
180-103809-2	WGWC-9	Total/NA	Water	EPA 7470A	311010
180-103809-3	WGWC-10	Total/NA	Water	EPA 7470A	311010
180-103809-4	WGWC-12	Total/NA	Water	EPA 7470A	311010
180-103809-5	WGWC-13	Total/NA	Water	EPA 7470A	311010
180-103809-6	WGWC-14A	Total/NA	Water	EPA 7470A	311010
180-103809-7	WGWC-15	Total/NA	Water	EPA 7470A	311010
180-103809-8	WGWC-16	Total/NA	Water	EPA 7470A	311012
180-103809-9	WGWC-17	Total/NA	Water	EPA 7470A	311012
180-103809-12	DUPLICATE 2	Total/NA	Water	EPA 7470A	311012
180-103809-13	FB-1 3-18-20	Total/NA	Water	EPA 7470A	311012
180-103809-14	FB-2 3-19-20	Total/NA	Water	EPA 7470A	311012

### Analysis Batch: 312686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total Recoverable	Water	EPA 6020B	311071
180-103809-2	WGWC-9	Total Recoverable	Water	EPA 6020B	311071
180-103809-3	WGWC-10	Total Recoverable	Water	EPA 6020B	311071
180-103809-4	WGWC-12	Total Recoverable	Water	EPA 6020B	311071
180-103809-5	WGWC-13	Total Recoverable	Water	EPA 6020B	311071
180-103809-6	WGWC-14A	Total Recoverable	Water	EPA 6020B	311071
180-103809-7	WGWC-15	Total Recoverable	Water	EPA 6020B	311071
180-103809-8	WGWC-16	Total Recoverable	Water	EPA 6020B	311071
180-103809-9	WGWC-17	Total Recoverable	Water	EPA 6020B	311071
180-103809-12	DUPLICATE 2	Total Recoverable	Water	EPA 6020B	311071
180-103809-13	FB-1 3-18-20	Total Recoverable	Water	EPA 6020B	311071
180-103809-14	FB-2 3-19-20	Total Recoverable	Water	EPA 6020B	311071

### Analysis Batch: 312904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total Recoverable	Water	EPA 6020B	311071
180-103809-2	WGWC-9	Total Recoverable	Water	EPA 6020B	311071
180-103809-3	WGWC-10	Total Recoverable	Water	EPA 6020B	311071
180-103809-4	WGWC-12	Total Recoverable	Water	EPA 6020B	311071
180-103809-5	WGWC-13	Total Recoverable	Water	EPA 6020B	311071
180-103809-6	WGWC-14A	Total Recoverable	Water	EPA 6020B	311071
180-103809-7	WGWC-15	Total Recoverable	Water	EPA 6020B	311071
180-103809-8	WGWC-16	Total Recoverable	Water	EPA 6020B	311071
180-103809-9	WGWC-17	Total Recoverable	Water	EPA 6020B	311071
180-103809-12	DUPLICATE 2	Total Recoverable	Water	EPA 6020B	311071
180-103809-13	FB-1 3-18-20	Total Recoverable	Water	EPA 6020B	311071

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# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-1

## Metals (Continued)

### Analysis Batch: 312904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-14	FB-2 3-19-20	Total Recoverable	Water	EPA 6020B	311071

### Analysis Batch: 313029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total Recoverable	Water	EPA 6020B	311071
180-103809-2	WGWC-9	Total Recoverable	Water	EPA 6020B	311071
180-103809-3	WGWC-10	Total Recoverable	Water	EPA 6020B	311071
180-103809-4	WGWC-12	Total Recoverable	Water	EPA 6020B	311071
180-103809-5	WGWC-13	Total Recoverable	Water	EPA 6020B	311071
180-103809-6	WGWC-14A	Total Recoverable	Water	EPA 6020B	311071
180-103809-8	WGWC-16	Total Recoverable	Water	EPA 6020B	311071
180-103809-9	WGWC-17	Total Recoverable	Water	EPA 6020B	311071

## General Chemistry

### Analysis Batch: 310933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-4	WGWC-12	Total/NA	Water	SM 2540C	
180-103809-8	WGWC-16	Total/NA	Water	SM 2540C	
180-103809-12	DUPLICATE 2	Total/NA	Water	SM 2540C	
180-103809-13	FB-1 3-18-20	Total/NA	Water	SM 2540C	

### Analysis Batch: 310934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	SM 2540C	
180-103809-2	WGWC-9	Total/NA	Water	SM 2540C	
180-103809-3	WGWC-10	Total/NA	Water	SM 2540C	
180-103809-5	WGWC-13	Total/NA	Water	SM 2540C	
180-103809-6	WGWC-14A	Total/NA	Water	SM 2540C	
180-103809-7	WGWC-15	Total/NA	Water	SM 2540C	
180-103809-9	WGWC-17	Total/NA	Water	SM 2540C	
180-103809-14	FB-2 3-19-20	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

### Analysis Batch: 310781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	Field Sampling	
180-103809-2	WGWC-9	Total/NA	Water	Field Sampling	
180-103809-3	WGWC-10	Total/NA	Water	Field Sampling	
180-103809-4	WGWC-12	Total/NA	Water	Field Sampling	
180-103809-5	WGWC-13	Total/NA	Water	Field Sampling	
180-103809-6	WGWC-14A	Total/NA	Water	Field Sampling	
180-103809-7	WGWC-15	Total/NA	Water	Field Sampling	
180-103809-8	WGWC-16	Total/NA	Water	Field Sampling	
180-103809-9	WGWC-17	Total/NA	Water	Field Sampling	



| Client Information   
   
   
  |                | Sampler: <u>J. Goble /A. Schmitz</u> |  | Lab PM: <u>Veronica Bortot</u> |  | Carrier Tracking No(s):             |                                     | COC No:                             |                                     |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
   |             |                              |  |                    |   |   |   |   |     |  |                |          |          |          |                                     |                                     |                                     |                                     |          |             |                |             |          |          |                                     |                                     |                                     |                                     |          |             |                |             |          |          |                                     |                                     |                                     |                                     |          |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |                                     |                                     |                                     |                                     |                                     |  |  |  |          |          |   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| Client Contact:  
   
   
  | Joju Abraham   | Phone:                               | (Veronica.Bortot@testamericanainc.com)                   | E-Mail:                        | (Veronica.Bortot@testamericanainc.com) | Job #:                              |                                     | Page:                               |                                     |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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<input type="checkbox"/> L - EDA <input type="checkbox"/> Z - other (specify) <input type="checkbox"/></p> <p>Other:</p> |             |                              |  |                    |   |   |   |   |     | Special Instructions/Note: <input checked="" type="checkbox"/> |                |          |          |          |                                     |                                     |                                     |                                     |          |             |                |             |          |          |                                     |                                     |                                     |                                     |          |             |                |             |          |          |                                     |                                     |                                     |                                     |          |  |  |  |          |          |                   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| <p>Total Number of containers: <input checked="" type="checkbox"/></p> <p>Preservation Codes: <input type="checkbox"/> A - HCl <input type="checkbox"/> M - Hexane <input type="checkbox"/> N - None<br/> <input type="checkbox"/> B - NaOH <input type="checkbox"/> O - NaN<sub>3</sub><sub>2</sub> <input type="checkbox"/> P - Na2O<sub>4</sub><br/> <input type="checkbox"/> C - Zn Acetate <input type="checkbox"/> Q - Na2S0<sub>3</sub> <input type="checkbox"/> R - Na2S2O<sub>3</sub><br/> <input type="checkbox"/> D - Nitric Acid <input type="checkbox"/> E - NaHSO<sub>4</sub> <input type="checkbox"/> S - H2SO<sub>4</sub><br/> <input type="checkbox"/> F - MeOH <input type="checkbox"/> G - Anchilor <input type="checkbox"/> T - TSP Dodecahydrate<br/> <input type="checkbox"/> H - Ascorbic Acid <input type="checkbox"/> I - I<sub>2</sub> <input type="checkbox"/> U - Acetone <input type="checkbox"/> V - MCAA<br/> <input type="checkbox"/> J - DI Water <input type="checkbox"/> K - EDTA <input type="checkbox"/> W - pH 4-5<br/> <input type="checkbox"/> L - EDA <input type="checkbox"/> Z - other (specify) <input type="checkbox"/></p> <p>Other:</p>   
   
   
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<u>3-18-20</u> | <u>—</u> | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u> | <u>F3-1</u> | <u>3-18-20</u> | <u>1455</u> | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u> | <u>F3-2</u> | <u>3-19-20</u> | <u>1230</u> | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u> |  |  |  | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> |  |  |  | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> |  |  |  | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> |  |  |  | <u>G</u> | <u>W</u> | <input checked="" type="checkbox"/> |  |  |  | <u>G</u> | <u>W</u> | <input checked="" 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| Sample Date  
   
   
  | Sample Time    | Sample Type (C=comp, G=grab)         | Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air) | Preservation Code:             | D                                      | N                                   | D                                   | N                                   | pH=                                 |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <u>Duplicate 2</u>   
   
   
  | <u>3-18-20</u> | <u>—</u>                             | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u>                            |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <u>F3-1</u>  
   
   
  | <u>3-18-20</u> | <u>1455</u>                          | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u>                            |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <u>F3-2</u>  
   
   
  | <u>3-19-20</u> | <u>1230</u>                          | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>3</u>                            |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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  |                |                                      | <u>G</u>   | <u>W</u>                       | <input checked="" type="checkbox"/>    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                       |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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Environment testing  
TestAmerica



BILL RECIPI

ORIGIN ID: LYYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MC DONOUGH DRIVE  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE  
AC 03/05/18  
ORIG \$3  
DOD \$55.00

To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 968-7066  
REF. ACC

SHIPPING: 19MAR20  
ACTUAL: 19 MAR 16 /CAFE3312  
BILL TO: C-10  
RECIPIENT:  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MC DONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

a) 966-9991  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
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RIDC PARK  
PITTSBURGH PA 15238  
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EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
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PITTSBURGH PA 15238  
(412) 968-7066  
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FedEx Express  
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To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 968-7066  
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1 of 4  
TRK# 0201 1516 9323 2097 ## MASTER ##  
Uncorrected temp -13 C  
Thermometer ID -17  
CF  Initials

PT-WI-SR-001 effective 1/18/18

MPS# 0201 1516 9323 2101  
Metr# 1516 9:28 2007

Uncorrected temp  
Thermometer ID

CF  Initials

PT-WI-SR-001 effective 11/8/18

FRI - 20 MAR 3:00P  
STANDARD OVERNIGHT  
19121903200104  
PA-06  
10:30 AM PT  
10:30 AM PT  
10:30 AM PT  
10:30 AM PT

2 of 4  
MPS# 0201 1516 9323 2101  
Metr# 1516 9:28 2007  
Uncorrected temp  
Thermometer ID  
CF  Initials

1.4 C  
1.7  
CF  Initials

ORIGIN ID: ILYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 19MARCH20  
ACTWT: 63.35 LB  
P#D: 859146CAFE331

ORIGIN ID: LI (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP TO RECIPIENT

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7066  
REF: ACC

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7066  
REF: ACC

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7066  
REF: ACC

4 of 4  
MPS# 1516 9323 2123  
Mfr# 1516 9323 2097  
0201  
FRI - 20  
STANDARD 0  
N A G C F A  
Uncorrected temp  
Thermometer ID  
CF ✓ Initials J  
PT-WH-SR-C01 effective 1/1/01/18

165 °C  
12 °C  
FRI - 20  
STANDARD 0  
N A G C F A  
Uncorrected temp  
Thermometer ID  
CF ✓ Initials J  
PT-WH-SR-C01 effective 1/1/01/18

165 °C  
12 °C  
FRI - 20  
STANDARD 0  
N A G C F A  
Uncorrected temp  
Thermometer ID  
CF ✓ Initials J  
PT-WH-SR-C01 effective 1/1/01/18

165 °C  
12 °C  
FRI - 20  
STANDARD 0  
N A G C F A  
Uncorrected temp  
Thermometer ID  
CF ✓ Initials J  
PT-WH-SR-C01 effective 1/1/01/18



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-103809-2

Client Project/Site: CCR - Plant Wansley Ash Pond  
Revision: 1

**For:**

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

Attn: Joju Abraham

Authorized for release by:  
6/10/2020 5:14:22 PM

Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

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

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

PA Lab ID: 02-00416

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# Case Narrative

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

Job ID: 180-103809-2

## Job ID: 180-103809-2

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-103809-2

### Comments

**061020** Revised report to remove the following samples at client request: WCWC-19 (180-103809-10) and EB-2 3-10-20 (180-103809-11). Original request and reason is on file. This report replaces the report previously issued on 042820.

### Receipt

The samples were received on 3/20/2020 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 1.3° C, 1.4° C, 1.4° C and 1.5° C.

### RAD

Methods 903.0, 9315: Ra-226 Prep Batch 160-465545

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-8 (180-103809-1), WGWC-9 (180-103809-2), WGWC-10 (180-103809-3), WGWC-12 (180-103809-4), WGWC-13 (180-103809-5), WGWC-14A (180-103809-6), WGWC-15 (180-103809-7), WGWC-16 (180-103809-8), WGWC-17 (180-103809-9), WGWC-19 (180-103809-10), EB-2 3-19-20 (180-103809-11), DUPLICATE 2 (180-103809-12), FB-1 3-18-20 (180-103809-13), FB-2 3-19-20 (180-103809-14), (LCS 160-465545/1-A), (LCSD 160-465545/2-A) and (MB 160-465545/23-A)

Method 9320: Radium-228 Prep Batch 160-465549

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-8 (180-103809-1), WGWC-9 (180-103809-2), WGWC-10 (180-103809-3), WGWC-12 (180-103809-4), WGWC-13 (180-103809-5), WGWC-14A (180-103809-6), WGWC-15 (180-103809-7), WGWC-16 (180-103809-8), WGWC-17 (180-103809-9), WGWC-19 (180-103809-10), EB-2 3-19-20 (180-103809-11), DUPLICATE 2 (180-103809-12), FB-1 3-18-20 (180-103809-13), FB-2 3-19-20 (180-103809-14), (LCS 160-465549/1-A), (LCSD 160-465549/2-A) and (MB 160-465549/23-A)

Method PrecSep\_0: Radium 228 Prep Batch 160-465549:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWC-8 (180-103809-1), WGWC-9 (180-103809-2), WGWC-10 (180-103809-3), WGWC-12 (180-103809-4), WGWC-13 (180-103809-5), WGWC-14A (180-103809-6), WGWC-15 (180-103809-7), WGWC-16 (180-103809-8), WGWC-17 (180-103809-9), WGWC-19 (180-103809-10), EB-2 3-19-20 (180-103809-11), DUPLICATE 2 (180-103809-12), FB-1 3-18-20 (180-103809-13) and FB-2 3-19-20 (180-103809-14). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-465545:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWC-8 (180-103809-1), WGWC-9 (180-103809-2), WGWC-10 (180-103809-3), WGWC-12 (180-103809-4), WGWC-13 (180-103809-5), WGWC-14A (180-103809-6), WGWC-15 (180-103809-7), WGWC-16 (180-103809-8), WGWC-17 (180-103809-9), WGWC-19 (180-103809-10), EB-2 3-19-20 (180-103809-11), DUPLICATE 2 (180-103809-12), FB-1 3-18-20 (180-103809-13) and FB-2 3-19-20 (180-103809-14). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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 Ash Pond

Job ID: 180-103809-2

## Qualifiers

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
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 Ash Pond

Job ID: 180-103809-2

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-20
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-20
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-20
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-20
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-20
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

# Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-2

## 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	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	05-14-20
ANAB	Dept. of Energy	L2305.01	05-14-20
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	04-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

Eurofins TestAmerica, Pittsburgh

# Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID	
180-103809-1	WGWC-8	Water	03/19/20 12:49	03/20/20 09:00		1
180-103809-2	WGWC-9	Water	03/19/20 11:22	03/20/20 09:00		2
180-103809-3	WGWC-10	Water	03/18/20 14:55	03/20/20 09:00		3
180-103809-4	WGWC-12	Water	03/18/20 11:45	03/20/20 09:00		4
180-103809-5	WGWC-13	Water	03/19/20 11:15	03/20/20 09:00		5
180-103809-6	WGWC-14A	Water	03/19/20 13:35	03/20/20 09:00		6
180-103809-7	WGWC-15	Water	03/18/20 10:35	03/20/20 09:00		7
180-103809-8	WGWC-16	Water	03/18/20 11:45	03/20/20 09:00		8
180-103809-9	WGWC-17	Water	03/18/20 15:11	03/20/20 09:00		9
180-103809-12	DUPLICATE 2	Water	03/18/20 00:00	03/20/20 09:00		10
180-103809-13	FB-1 3-18-20	Water	03/18/20 14:55	03/20/20 09:00		11
180-103809-14	FB-2 3-19-20	Water	03/19/20 12:30	03/20/20 09:00		12

## Method Summary

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

Job ID: 180-103809-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
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 Ash Pond

Job ID: 180-103809-2

## **Client Sample ID: WGWC-8**

Date Collected: 03/19/20 12:49

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-1**

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			1000.57 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.57 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-9**

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-2**

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			1000.38 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.38 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-10**

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-3**

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			1000.49 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.49 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-4**

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			1000.85 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-2

## **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-4**

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			1000.85 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-13**

Date Collected: 03/19/20 11:15

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-5**

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			1000.88 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.88 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-14A**

Date Collected: 03/19/20 13:35

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-6**

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			1000.89 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.89 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

## **Client Sample ID: WGWC-15**

Date Collected: 03/18/20 10:35

Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-7**

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			1000.73 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.73 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:43	KLS	TAL SL
		Instrument ID: GFPCPURPLE								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-2

**Client Sample ID: WGWC-15**  
**Date Collected: 03/18/20 10:35**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-7**  
**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			467932	04/16/20 10:11	SMP	TAL SL

**Client Sample ID: WGWC-16**  
**Date Collected: 03/18/20 11:45**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-8**  
**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			1000.63 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.63 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:44	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: WGWC-17**  
**Date Collected: 03/18/20 15:11**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-9**  
**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	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 04:54	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467676	04/14/20 13:44	KLS	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: DUPLICATE 2**  
**Date Collected: 03/18/20 00:00**  
**Date Received: 03/20/20 09:00**

**Lab Sample ID: 180-103809-12**  
**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			1000.24 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315		1			467927	04/16/20 06:43	CJQ	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.24 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320		1			467710	04/14/20 13:39	AJD	TAL SL
		Instrument ID: GFPCPROTEAN								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
		Instrument ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-103809-2

**Client Sample ID: FB-1 3-18-20**

**Lab Sample ID: 180-103809-13**

**Matrix: Water**

**Date Collected: 03/18/20 14:55**

**Date Received: 03/20/20 09:00**

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	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315 Instrument ID: GFPCBLUE		1			467927	04/16/20 06:44	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.47 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320 Instrument ID: GFPCPROTEAN		1			467710	04/14/20 13:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Instrument ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

**Client Sample ID: FB-2 3-19-20**

**Lab Sample ID: 180-103809-14**

**Matrix: Water**

**Date Collected: 03/19/20 12:30**

**Date Received: 03/20/20 09:00**

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			1000.55 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis	9315 Instrument ID: GFPCBLUE		1			467927	04/16/20 06:44	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.55 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis	9320 Instrument ID: GFPCPROTEAN		1			467710	04/14/20 13:39	AJD	TAL SL
Total/NA	Analysis	Ra226_Ra228 Instrument ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

## 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

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano

CJQ = Caleb Quinn

KLS = Kody Saulters

SMP = Siobhan Perry

# Client Sample Results

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

Job ID: 180-103809-2

**Client Sample ID: WGWC-8**

**Lab Sample ID: 180-103809-1**

**Matrix: Water**

Date Collected: 03/19/20 12:49

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.389		0.188	0.192	1.00	0.213	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.817		0.414	0.421	1.00	0.609	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	68.0		40 - 110					03/25/20 12:53	04/14/20 13:43	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	1.21		0.455	0.463	2.00	0.609	pCi/L		04/16/20 10:11	1

**Client Sample ID: WGWC-9**

**Lab Sample ID: 180-103809-2**

**Matrix: Water**

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0849	U	0.147	0.148	1.00	0.257	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.145	U	0.263	0.263	1.00	0.446	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	80.7		40 - 110					03/25/20 12:53	04/14/20 13:43	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-2

## **Client Sample ID: WGWC-9**

Date Collected: 03/19/20 11:22  
 Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-2**

Matrix: Water

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.230	U	0.301	0.302	2.00	0.446	pCi/L		04/16/20 10:11	1

## **Client Sample ID: WGWC-10**

Date Collected: 03/18/20 14:55  
 Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-3**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.165	U	0.137	0.138	1.00	0.200	pCi/L	03/25/20 12:24	04/16/20 04:54	1
<b>Carrier</b>										
Ba Carrier	83.5		<b>Limits</b>					03/25/20 12:24	04/16/20 04:54	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.296	U	0.307	0.308	1.00	0.500	pCi/L	03/25/20 12:53	04/14/20 13:43	1
<b>Carrier</b>										
Ba Carrier	83.5		<b>Limits</b>					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	78.1		<b>Limits</b>					03/25/20 12:53	04/14/20 13:43	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.461	U	0.336	0.338	2.00	0.500	pCi/L		04/16/20 10:11	1

## **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45  
 Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-4**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0230	U	0.128	0.128	1.00	0.244	pCi/L	03/25/20 12:24	04/16/20 04:54	1
<b>Carrier</b>										
Ba Carrier	96.3		<b>Limits</b>					03/25/20 12:24	04/16/20 04:54	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-2

## **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45  
 Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-4**

Matrix: Water

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0492	U	0.260	0.260	1.00	0.474	pCi/L	03/25/20 12:53	04/14/20 13:43	1
<b>Carrier</b>										
Ba Carrier	96.3		<b>Limits</b>					Prepared	Analyzed	Dil Fac
Y Carrier	71.8		40 - 110					03/25/20 12:53	04/14/20 13:43	1
40 - 110										

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0262	U	0.290	0.290	2.00	0.474	pCi/L	04/16/20 10:11		1

## **Client Sample ID: WGWC-13**

Date Collected: 03/19/20 11:15  
 Date Received: 03/20/20 09:00

## **Lab Sample ID: 180-103809-5**

Matrix: Water

### **Method: 9315 - Radium-226 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.107	U	0.132	0.132	1.00	0.217	pCi/L	03/25/20 12:24	04/16/20 04:54	1
<b>Carrier</b>										
Ba Carrier	91.7		<b>Limits</b>					Prepared	Analyzed	Dil Fac
			40 - 110					03/25/20 12:24	04/16/20 04:54	1

### **Method: 9320 - Radium-228 (GFPC)**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.362	U	0.271	0.273	1.00	0.424	pCi/L	03/25/20 12:53	04/14/20 13:43	1
<b>Carrier</b>										
Ba Carrier	91.7		<b>Limits</b>					Prepared	Analyzed	Dil Fac
Y Carrier	78.5		40 - 110					03/25/20 12:53	04/14/20 13:43	1

### **Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.470	U	0.301	0.303	2.00	0.424	pCi/L	04/16/20 10:11		1

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# Client Sample Results

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

Job ID: 180-103809-2

**Client Sample ID: WGWC-14A**

**Lab Sample ID: 180-103809-6**

**Matrix: Water**

Date Collected: 03/19/20 13:35

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.285		0.158	0.160	1.00	0.199	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0917	U	0.244	0.244	1.00	0.422	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.0		40 - 110					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	83.4		40 - 110					03/25/20 12:53	04/14/20 13:43	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.376	U	0.291	0.292	2.00	0.422	pCi/L		04/16/20 10:11	1

**Client Sample ID: WGWC-15**

**Lab Sample ID: 180-103809-7**

**Matrix: Water**

Date Collected: 03/18/20 10:35

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.235		0.161	0.162	1.00	0.228	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0678	U	0.269	0.269	1.00	0.469	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.5		40 - 110					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	78.9		40 - 110					03/25/20 12:53	04/14/20 13:43	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-2

## Client Sample ID: WGWC-15

Date Collected: 03/18/20 10:35  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-7

Matrix: Water

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.303	U	0.313	0.314	2.00	0.469	pCi/L		04/16/20 10:11	1

## Client Sample ID: WGWC-16

Date Collected: 03/18/20 11:45  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-8

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.241		0.162	0.163	1.00	0.221	pCi/L	03/25/20 12:24	04/16/20 04:54	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	<b>Limits</b>					Prepared	Analyzed	Dil Fac
	88.4		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.196	U	0.250	0.251	1.00	0.416	pCi/L	03/25/20 12:53	04/14/20 13:44	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	<b>Limits</b>					Prepared	Analyzed	Dil Fac
	88.4		40 - 110					03/25/20 12:53	04/14/20 13:44	1
Y Carrier	80.0		40 - 110					03/25/20 12:53	04/14/20 13:44	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.437		0.298	0.299	2.00	0.416	pCi/L		04/16/20 10:11	1

## Client Sample ID: WGWC-17

Date Collected: 03/18/20 15:11  
Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-9

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0223	U	0.124	0.124	1.00	0.240	pCi/L	03/25/20 12:24	04/16/20 04:54	1
<b>Carrier</b>										
Ba Carrier	%Yield	Qualifier	<b>Limits</b>					Prepared	Analyzed	Dil Fac
	89.9		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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# Client Sample Results

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

Job ID: 180-103809-2

## Client Sample ID: WGWC-17

Date Collected: 03/18/20 15:11  
 Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-9

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0432	U	0.248	0.248	1.00	0.439	pCi/L	03/25/20 12:53	04/14/20 13:44	1
<b>Carrier</b>										
Ba Carrier	89.9		40 - 110					03/25/20 12:53	04/14/20 13:44	1
Y Carrier	79.6		40 - 110					03/25/20 12:53	04/14/20 13:44	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0655	U	0.277	0.277	2.00	0.439	pCi/L	04/16/20 10:11		1

## Client Sample ID: DUPLICATE 2

Date Collected: 03/18/20 00:00  
 Date Received: 03/20/20 09:00

## Lab Sample ID: 180-103809-12

Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0370	U	0.0993	0.0994	1.00	0.185	pCi/L	03/25/20 12:24	04/16/20 06:43	1
<b>Carrier</b>										
Ba Carrier	99.7		40 - 110					03/25/20 12:24	04/16/20 06:43	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.223	U	0.258	0.259	1.00	0.424	pCi/L	03/25/20 12:53	04/14/20 13:39	1
<b>Carrier</b>										
Ba Carrier	99.7		40 - 110					03/25/20 12:53	04/14/20 13:39	1
Y Carrier	82.6		40 - 110					03/25/20 12:53	04/14/20 13:39	1

### Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.260	U	0.276	0.277	2.00	0.424	pCi/L	04/16/20 10:11		1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-2

**Client Sample ID: FB-1 3-18-20**

**Lab Sample ID: 180-103809-13**

**Matrix: Water**

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0586	U	0.0896	0.0898	1.00	0.217	pCi/L	03/25/20 12:24	04/16/20 06:44	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					03/25/20 12:24	04/16/20 06:44	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0178	U	0.308	0.308	1.00	0.542	pCi/L	03/25/20 12:53	04/14/20 13:39	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					03/25/20 12:53	04/14/20 13:39	1
Y Carrier	77.8		40 - 110					03/25/20 12:53	04/14/20 13:39	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.0408	U	0.321	0.321	2.00	0.542	pCi/L		04/16/20 10:11	1

**Client Sample ID: FB-2 3-19-20**

**Lab Sample ID: 180-103809-14**

**Matrix: Water**

Date Collected: 03/19/20 12:30

Date Received: 03/20/20 09:00

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.00689	U	0.119	0.119	1.00	0.234	pCi/L	03/25/20 12:24	04/16/20 06:44	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					03/25/20 12:24	04/16/20 06:44	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.418	U	0.325	0.327	1.00	0.517	pCi/L	03/25/20 12:53	04/14/20 13:39	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	91.4		40 - 110					03/25/20 12:53	04/14/20 13:39	1
Y Carrier	84.5		40 - 110					03/25/20 12:53	04/14/20 13:39	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-103809-2

**Client Sample ID: FB-2 3-19-20**

**Lab Sample ID: 180-103809-14**

**Matrix: Water**

Date Collected: 03/19/20 12:30

Date Received: 03/20/20 09:00

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	(2σ+/-)						
Combined Radium 226 + 228	0.425	U	0.346	0.348	2.00	0.517	pCi/L		04/16/20 10:11	1

# QC Sample Results

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

Job ID: 180-103809-2

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

**Lab Sample ID:** MB 160-465545/23-A

**Matrix:** Water

**Analysis Batch:** 467927

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 465545

Analyte	Result	MB MB U	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01663		U	0.0885	0.0885	1.00	0.176	pCi/L	03/25/20 12:24	04/16/20 06:44	1
<b>Carrier</b>									<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	95.7			40 - 110					03/25/20 12:24	04/16/20 06:44	1

**Lab Sample ID:** LCS 160-465545/1-A

**Matrix:** Water

**Analysis Batch:** 467927

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 465545

Analyte	Spike Added	LCS Result	LCS Qual	Count	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-226	11.3	9.183		1.09	1.09	1.00	0.205	pCi/L	81	75 - 125	
<b>Carrier</b>											
Ba Carrier	95.7		40 - 110								

**Lab Sample ID:** LCSD 160-465545/2-A

**Matrix:** Water

**Analysis Batch:** 467927

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 465545

Analyte	Spike Added	LCSD Result	LCSD Qual	Count	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-226	11.3	9.005		1.07	1.07	1.00	0.197	pCi/L	79	75 - 125	0.08
<b>Carrier</b>											
Ba Carrier	94.5		40 - 110								

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

**Lab Sample ID:** MB 160-465549/23-A

**Matrix:** Water

**Analysis Batch:** 467710

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 465549

Analyte	Result	MB MB U	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
				Uncert. (2σ+/-)	(2σ+/-)						
Radium-228	0.2261		U	0.288	0.288	1.00	0.477	pCi/L	03/25/20 12:53	04/14/20 13:40	1
<b>Carrier</b>									<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	95.7		40 - 110						03/25/20 12:53	04/14/20 13:40	1
Y Carrier	82.2		40 - 110						03/25/20 12:53	04/14/20 13:40	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

Client: Southern Company

Job ID: 180-103809-2

Project/Site: CCR - Plant Wansley Ash Pond

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

**Lab Sample ID: LCS 160-465549/1-A**

**Matrix: Water**

**Analysis Batch: 467676**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 465549**

Analyte	Spike Added	LCS		LCS		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
		Result	Qual	Result	Qual						
Radium-228	8.93	8.213				1.02	1.00	0.475	pCi/L	92	75 - 125

**LCS LCS**

Carrier	LCS		LCS		Limits
	%Yield	Qualifier			
Ba Carrier	95.7		40 - 110		
Y Carrier	77.0		40 - 110		

**Lab Sample ID: LCSD 160-465549/2-A**

**Matrix: Water**

**Analysis Batch: 467676**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 465549**

Analyte	Spike Added	LCSD		LCSD		Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
		Result	Qual	Result	Qual								
Radium-228	8.93	8.041				0.996	1.00	0.435	pCi/L	90	75 - 125	0.09	1

**LCSD LCSD**

Carrier	LCSD		LCSD		Limits
	%Yield	Qualifier			
Ba Carrier	94.5		40 - 110		
Y Carrier	79.3		40 - 110		

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-2

**Rad**

**Prep Batch: 465545**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	PrecSep-21	1
180-103809-2	WGWC-9	Total/NA	Water	PrecSep-21	2
180-103809-3	WGWC-10	Total/NA	Water	PrecSep-21	3
180-103809-4	WGWC-12	Total/NA	Water	PrecSep-21	4
180-103809-5	WGWC-13	Total/NA	Water	PrecSep-21	5
180-103809-6	WGWC-14A	Total/NA	Water	PrecSep-21	6
180-103809-7	WGWC-15	Total/NA	Water	PrecSep-21	7
180-103809-8	WGWC-16	Total/NA	Water	PrecSep-21	8
180-103809-9	WGWC-17	Total/NA	Water	PrecSep-21	9
180-103809-12	DUPLICATE 2	Total/NA	Water	PrecSep-21	10
180-103809-13	FB-1 3-18-20	Total/NA	Water	PrecSep-21	11
180-103809-14	FB-2 3-19-20	Total/NA	Water	PrecSep-21	12

**Prep Batch: 465549**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-103809-1	WGWC-8	Total/NA	Water	PrecSep_0	13
180-103809-2	WGWC-9	Total/NA	Water	PrecSep_0	12
180-103809-3	WGWC-10	Total/NA	Water	PrecSep_0	11
180-103809-4	WGWC-12	Total/NA	Water	PrecSep_0	10
180-103809-5	WGWC-13	Total/NA	Water	PrecSep_0	9
180-103809-6	WGWC-14A	Total/NA	Water	PrecSep_0	8
180-103809-7	WGWC-15	Total/NA	Water	PrecSep_0	7
180-103809-8	WGWC-16	Total/NA	Water	PrecSep_0	6
180-103809-9	WGWC-17	Total/NA	Water	PrecSep_0	5
180-103809-12	DUPLICATE 2	Total/NA	Water	PrecSep_0	4
180-103809-13	FB-1 3-18-20	Total/NA	Water	PrecSep_0	3
180-103809-14	FB-2 3-19-20	Total/NA	Water	PrecSep_0	2

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

**Chain of Custody Record**

681-Atlanta

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <u>T. Gable /A. Schmitz-Hauer</u>	Lab P.M.: Veronica Bortot	Carrier Tracking No(s):	COC No:																						
Client Contact: Joji Abraham	Phone: (412) 963-7058	E-Mail: (Veronica.Bortot@testamericainc.com)		Page: Job #:																							
<b>Analysis Requested</b>																											
Address: PO BOX 2541 GSC8		Due Date Requested:																									
City: Birmingham		TAT Requested (days):																									
State, Zip: AL, 35291		PO#:																									
Phone:		V/O#:																									
Email: JAbraham@southernco.com		Project #: 40007709																									
Site: Georgia		SSOW#:																									
Preservation Codes:																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">M - Hexane</td> <td style="width: 10%;">A - HCl</td> </tr> <tr> <td>N - None</td> <td>B - NaOH</td> </tr> <tr> <td>O - Ash/o2</td> <td>C - Zn Acetate</td> </tr> <tr> <td>P - Na2CO3</td> <td>D - Nitric Acid</td> </tr> <tr> <td>Q - Na2SO3</td> <td>E - NaHSO4</td> </tr> <tr> <td>R - Na2S2O3</td> <td>F - MeOH</td> </tr> <tr> <td>S - H2SO4</td> <td>G - Amchlor</td> </tr> <tr> <td>T - TSP Dodecahydrate</td> <td>H - Ascorbic Acid</td> </tr> <tr> <td>I - Ice</td> <td>J - DI Water</td> </tr> <tr> <td>K - EDTA</td> <td>L - EDA</td> </tr> <tr> <td>V - pH 4-5</td> <td>Z - other (specify)</td> </tr> </table>						M - Hexane	A - HCl	N - None	B - NaOH	O - Ash/o2	C - Zn Acetate	P - Na2CO3	D - Nitric Acid	Q - Na2SO3	E - NaHSO4	R - Na2S2O3	F - MeOH	S - H2SO4	G - Amchlor	T - TSP Dodecahydrate	H - Ascorbic Acid	I - Ice	J - DI Water	K - EDTA	L - EDA	V - pH 4-5	Z - other (specify)
M - Hexane	A - HCl																										
N - None	B - NaOH																										
O - Ash/o2	C - Zn Acetate																										
P - Na2CO3	D - Nitric Acid																										
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R - Na2S2O3	F - MeOH																										
S - H2SO4	G - Amchlor																										
T - TSP Dodecahydrate	H - Ascorbic Acid																										
I - Ice	J - DI Water																										
K - EDTA	L - EDA																										
V - pH 4-5	Z - other (specify)																										
Total Number of containers																											
180-103809 Chain of Custody																											
Special Instructions/Note:																											
<p>Detected APP VI Metals (See list below) (SW-846 9315/9320)</p> <p>Detected APP VI TDS (EPA 300.0 &amp; SM 2540C)</p> <p>Detected APP VI Metals (See list below) (SW-846 9315/9320)</p> <p>Detected APP VI TDS (EPA 300.0 &amp; SM 2540C)</p> <p>Petroform M/S/MSD (Yes or No)</p> <p>Petroform M/S/MSD (Yes or No)</p> <p>Field Filtered Sample (Yes or No)</p> <p>Field Filtered Sample (Yes or No)</p> <p>Matrix (H=water, S=solid, O=waste oil, B=tissue, A=Ak)</p> <p>Sample Date</p> <p>Sample Time</p> <p>Sample Type (C=Comp, G=grab)</p> <p>Preservation Code:</p>																											
Sample Identification	WGCWC-8	3-19-20	1149	G	W																						
	WGCWC-9	3-19-20	1122	G	W																						
	WGCWC-10	3-18-20	1455	G	W																						
	WGCWC-12	3-18-20	1145	G	W																						
	WGCWC-13	3-19-20	1115	G	W																						
	WGCWC-14K	3-19-20	1335	G	W																						
	WGCWC-15	3-19-20	1035	G	W																						
	WGCWC-16	3-18-20	1145	G	W																						
	WGCWC-17	3-18-20	1511	G	W																						
	WGCWC-19	3-19-20	1320	G	W																						
	EB-2	3-19-20	1310	G	W																						
Possible Hazard Identification	<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown																						
Deliverable Requested: I, II, III, IV, Other (specify)																											
Empty Kit Relinquished by:	Date:	Date:	Time:	Time:	Method of Shipment:																						
Relinquished by: <u>Taylor Gold</u>	Date/Time: <u>3-19-20 / 1610</u>	Company: <u>ACC</u>	Received by: <u>Ray J</u>	Date/Time: <u>3/19/20 16:00</u>	Company: <u>TestAmerica</u>																						
Relinquished by: <u>Ray J</u>	Date/Time: <u>3/20/20 16:20</u>	Company: <u>EDTA</u>	Received by: <u>Ray J</u>	Date/Time: <u>3/20/20 16:00</u>	Company: <u>TestAmerica</u>																						
Custody Seals Intact:						Cooler Temperature(s) °C and Other Remarks:																					
Δ Yes    Δ No																											
Sample Disposal (A fee may be assessed if samples are retained/longer than 1 month)																											
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months																											
Special Instructions/QC Requirements:																											





ORIGIN ID: ILYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 19MARCH20  
ACTWT: 63.35 LB  
P#D: 859146CAFE331

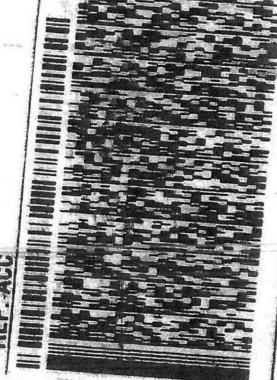
ORIGIN ID: LI (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP TO RECIPIENT

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7066  
REF: ACC

Barcode

TO SAMPLE RECEIVING  
EUROFINS TESTAMERICA  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7066  
REF: ACC



4 of 4  
MPS# 1516 9323 2123 FRI - 20  
0263 Mat# 1516 9323 2097 STANDARD 0  
0201  
N A G C A Uncorrected temp 15 °C  
Thermometer ID 12  
CF Initials J  
PT-WH-SR-C01 effective 1/1/018

Corrected temp 17 °C  
Thermometer ID J  
CF Initials J  
PT-WH-SR-C01 effective 1/1/018

Corrected temp 17 °C  
Thermometer ID J  
CF Initials J  
PT-WH-SR-C01 effective 1/1/018

## Chain of Custody Record

Pittsburgh, PA 15238  
Phone: 412-963-7058 Fax: 412-963-2468

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon our 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/testmatrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica

### Possible Hazard Identification

<input type="checkbox"/> Unconfirmed	<input type="checkbox"/> Deliverable Requested:	<input type="checkbox"/> IV Other (specify)	<input type="checkbox"/> Primary Deliverable, Don't - 2	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	<input type="checkbox"/> Months
							Concurrent Landscaping/OC Requirements

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by:		2020-10-13	10:55	Received by:	FE
Relinquished by:		2020-10-13	10:55	Received by:	FE
Relinquished by:		2020-10-13	10:55	Received by:	FE
Custody Seals Intact:	Yes	Custody Seal No.:		Cooler Temperature(s) °C, and Other Remarks:	
				Company 31/10/2020 08:15 ETA SN	

**Chain of Custody Record**

Pittsburgh, PA 13238  
Phone: 412-963-7058 Fax: 412-963-2468

Note: Since laboratory accreditation are subject to change, Eurofins TestAmerica places the ownership of method, analytic & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the labo

## Possible Hazard Identification

16

*Unconfirmed*

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

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Empty Kit Relinquished by: 

*Relinquished by*

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*Detachment and loss*

EE

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eliminated by

卷之三

Custody Seals Intact:  Custody Seal No.:

Δ Yes Δ No

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-103809-2

**Login Number:** 103809

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

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.	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: 180-103809-2

**Login Number:** 103809

**List Source:** Eurofins TestAmerica, St. Louis

**List Number:** 2

**List Creation:** 03/24/20 06:45 PM

**Creator:** Korrinhizer, Micha L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
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	



Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-105386-1  
Client Project/Site: CCR - Plant Wansley Ash Pond  
Revision: 1

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

Attn: Kristen N Jurinko

Authorized for release by:  
6/1/2020 11:41:07 AM  
Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

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Ask  
The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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# Case Narrative

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

Job ID: 180-105386-1

## Job ID: 180-105386-1

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-105386-1

060120 Revised report to remove Antimony per client request. This report replaces the report previously issued on 051820.

### Receipt

The samples were received on 5/6/2020 9:20 AM; the samples arrived in good condition, properly preserved, and where required, on ice. The temperature of the cooler at receipt time was 2.6°C

### Receipt Exceptions

The reference method requires samples to be preserved to a pH of less than 2. The following sample (180-105386-A-3) was received with insufficient preservation at a pH of 7: WGWC-19 (180-105386-1), EB-1-5-4-2020 (180-105386-2) and Dup-1 (180-105386-3). The sample was preserved to the appropriate pH in the laboratory.

### Department HPLC/IC

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

### Department Metals

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

### Department General Chemistry

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

### Department Field Service / Mobile Lab

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 Ash Pond

Job ID: 180-105386-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
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 Ash Pond

Job ID: 180-105386-1

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20 *
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-20
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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

Eurofins TestAmerica, Pittsburgh

## Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105386-1	WGWC-19	Water	05/04/20 11:15	05/06/20 09:20	
180-105386-2	EB-1-5-4-2020	Water	05/04/20 11:00	05/06/20 09:20	
180-105386-3	Dup-1	Water	05/04/20 00:00	05/06/20 09:20	

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Eurofins TestAmerica, Pittsburgh

# Method Summary

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

Job ID: 180-105386-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	SW846	TAL PIT
EPA 7470A	Mercury (CVAA)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
7470A	Preparation, Mercury	SW846	TAL PIT

## Protocol References:

EPA = US Environmental Protection Agency

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

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

## Laboratory References:

TAL 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 Ash Pond

Job ID: 180-105386-1

**Client Sample ID: WGWC-19**  
**Date Collected: 05/04/20 11:15**  
**Date Received: 05/06/20 09:20**

**Lab Sample ID: 180-105386-1**  
**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	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			315658	05/16/20 18:07	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315496	05/13/20 22:13	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315543	05/14/20 18:39	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	314833	05/07/20 16:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			314888	05/07/20 20:00	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT
Total/NA	Analysis	Field Sampling Instrument ID: NOEQUIP		1			315129	05/04/20 11:15	FDS	TAL PIT

**Client Sample ID: EB-1-5-4-2020**

**Lab Sample ID: 180-105386-2**

**Matrix: Water**

**Date Collected: 05/04/20 11:00**  
**Date Received: 05/06/20 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			315658	05/16/20 18:23	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315496	05/13/20 22:17	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315543	05/14/20 18:50	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	314833	05/07/20 16:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			314888	05/07/20 20:01	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT

**Client Sample ID: Dup-1**

**Lab Sample ID: 180-105386-3**

**Matrix: Water**

**Date Collected: 05/04/20 00:00**  
**Date Received: 05/06/20 09:20**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: CHICS2100B		1			315658	05/16/20 18:39	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315496	05/13/20 22:20	RSK	TAL PIT

Eurofins TestAmerica, Pittsburgh

# Lab Chronicle

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

Job ID: 180-105386-1

## Client Sample ID: Dup-1

Date Collected: 05/04/20 00:00

Date Received: 05/06/20 09:20

## Lab Sample ID: 180-105386-3

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	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B Instrument ID: A		1			315543	05/14/20 18:53	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	314833	05/07/20 16:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A Instrument ID: HGZ		1			314888	05/07/20 20:02	NAM	TAL PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT

### Laboratory References:

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

### Analyst References:

Lab: TAL PIT

Batch Type: Prep

JL = James Lyu

NAM = Nicole Marfisi

Batch Type: Analysis

AVS = Abbey Smith

FDS = Sampler Field

MJH = Matthew Hartman

NAM = Nicole Marfisi

RSK = Robert Kurtz

# Client Sample Results

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

Job ID: 180-105386-1

**Client Sample ID: WGWC-19**  
Date Collected: 05/04/20 11:15  
Date Received: 05/06/20 09:20

**Lab Sample ID: 180-105386-1**  
Matrix: Water

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0	0.32	mg/L			05/16/20 18:07	1
Fluoride	0.36		0.10	0.026	mg/L			05/16/20 18:07	1
Sulfate	4.5		1.0	0.38	mg/L			05/16/20 18:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			05/07/20 16:07	1
Barium	<0.0016		0.010	0.0016	mg/L			05/07/20 16:07	1
Beryllium	<0.00018		0.0010	0.00018	mg/L			05/07/20 16:07	1
Boron	<0.039		0.080	0.039	mg/L			05/07/20 16:07	1
Cadmium	<0.00022		0.0010	0.00022	mg/L			05/07/20 16:07	1
<b>Calcium</b>	<b>15</b>		0.50	0.13	mg/L			05/07/20 16:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L			05/07/20 16:07	1
<b>Cobalt</b>	<b>0.00018 J</b>		0.00050	0.00013	mg/L			05/07/20 16:07	1
Lead	<0.00013		0.0010	0.00013	mg/L			05/07/20 16:07	1
Lithium	0.049		0.0050	0.0034	mg/L			05/07/20 16:07	1
Molybdenum	0.0013 J		0.0050	0.00061	mg/L			05/07/20 16:07	1
Selenium	<0.0015		0.0050	0.0015	mg/L			05/07/20 16:07	1
Thallium	<0.00015		0.0010	0.00015	mg/L			05/07/20 16:07	1

## Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L			05/07/20 16:00	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		10	10	mg/L			05/07/20 09:15	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.90			SU				05/04/20 11:15	1

**Client Sample ID: EB-1-5-4-2020**

**Lab Sample ID: 180-105386-2**

Matrix: Water

Date Collected: 05/04/20 11:00

Date Received: 05/06/20 09:20

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			05/16/20 18:23	1
Fluoride	<0.026		0.10	0.026	mg/L			05/16/20 18:23	1
Sulfate	<0.38		1.0	0.38	mg/L			05/16/20 18:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			05/07/20 16:07	1
Barium	<0.0016		0.010	0.0016	mg/L			05/07/20 16:07	1
Beryllium	<0.00018		0.0010	0.00018	mg/L			05/07/20 16:07	1
Boron	<0.039		0.080	0.039	mg/L			05/07/20 16:07	1
Cadmium	<0.00022		0.0010	0.00022	mg/L			05/07/20 16:07	1
Calcium	<0.13		0.50	0.13	mg/L			05/07/20 16:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L			05/07/20 16:07	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-105386-1

**Client Sample ID: EB-1-5-4-2020**  
Date Collected: 05/04/20 11:00  
Date Received: 05/06/20 09:20

**Lab Sample ID: 180-105386-2**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00013		0.00050	0.00013	mg/L		05/07/20 16:07	05/13/20 22:17	1
Lead	<0.00013		0.0010	0.00013	mg/L		05/07/20 16:07	05/13/20 22:17	1
Lithium	<0.0034		0.0050	0.0034	mg/L		05/07/20 16:07	05/14/20 18:50	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		05/07/20 16:07	05/13/20 22:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		05/07/20 16:07	05/13/20 22:17	1
Thallium	<0.00015		0.0010	0.00015	mg/L		05/07/20 16:07	05/13/20 22:17	1

## Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		05/07/20 16:00	05/07/20 20:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			05/07/20 09:15	1

**Client Sample ID: Dup-1**

Date Collected: 05/04/20 00:00  
Date Received: 05/06/20 09:20

**Lab Sample ID: 180-105386-3**

Matrix: Water

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0	0.32	mg/L			05/16/20 18:39	1
Fluoride	0.29		0.10	0.026	mg/L			05/16/20 18:39	1
Sulfate	4.3		1.0	0.38	mg/L			05/16/20 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		05/07/20 16:07	05/13/20 22:20	1
Barium	<0.0016		0.010	0.0016	mg/L		05/07/20 16:07	05/13/20 22:20	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		05/07/20 16:07	05/13/20 22:20	1
Boron	<0.039		0.080	0.039	mg/L		05/07/20 16:07	05/13/20 22:20	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		05/07/20 16:07	05/13/20 22:20	1
Calcium	15		0.50	0.13	mg/L		05/07/20 16:07	05/13/20 22:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		05/07/20 16:07	05/13/20 22:20	1
Cobalt	0.00017 J		0.00050	0.00013	mg/L		05/07/20 16:07	05/13/20 22:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		05/07/20 16:07	05/13/20 22:20	1
Lithium	0.051		0.0050	0.0034	mg/L		05/07/20 16:07	05/14/20 18:53	1
Molybdenum	0.0013 J		0.0050	0.00061	mg/L		05/07/20 16:07	05/13/20 22:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		05/07/20 16:07	05/13/20 22:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		05/07/20 16:07	05/13/20 22:20	1

## Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		05/07/20 16:00	05/07/20 20:02	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		10	10	mg/L			05/07/20 09:15	1

# QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-1

## Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-315658/6

Matrix: Water

Analysis Batch: 315658

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			05/16/20 10:28	1
Fluoride	<0.026		0.10	0.026	mg/L			05/16/20 10:28	1
Sulfate	<0.38		1.0	0.38	mg/L			05/16/20 10:28	1

Lab Sample ID: LCS 180-315658/5

Matrix: Water

Analysis Batch: 315658

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

Analyte	Spike Added	LCN	LCS	Unit	D	%Rec	Limits	%Rec.
		Result	Qualifier					
Chloride	50.0	48.1		mg/L		96	90 - 110	
Fluoride	2.50	2.43		mg/L		97	90 - 110	
Sulfate	50.0	48.3		mg/L		97	90 - 110	

## Method: EPA 6020B - Metals (ICP/MS)

Lab Sample ID: MB 180-314849/1-A

Matrix: Water

Analysis Batch: 315496

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 314849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L			05/13/20 21:42	1
Barium	<0.0016		0.010	0.0016	mg/L			05/13/20 21:42	1
Beryllium	<0.00018		0.0010	0.00018	mg/L			05/13/20 21:42	1
Boron	<0.039		0.080	0.039	mg/L			05/13/20 21:42	1
Cadmium	<0.00022		0.0010	0.00022	mg/L			05/13/20 21:42	1
Calcium	<0.13		0.50	0.13	mg/L			05/13/20 21:42	1
Chromium	<0.0015		0.0020	0.0015	mg/L			05/13/20 21:42	1
Cobalt	<0.00013		0.00050	0.00013	mg/L			05/13/20 21:42	1
Lead	<0.00013		0.0010	0.00013	mg/L			05/13/20 21:42	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L			05/13/20 21:42	1
Selenium	<0.0015		0.0050	0.00015	mg/L			05/13/20 21:42	1
Thallium	<0.00015		0.0010	0.00015	mg/L			05/13/20 21:42	1

Lab Sample ID: MB 180-314849/1-A

Matrix: Water

Analysis Batch: 315543

Client Sample ID: Method Blank  
Prep Type: Total Recoverable  
Prep Batch: 314849

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.0034		0.0050	0.0034	mg/L			05/14/20 18:29	1

Lab Sample ID: LCS 180-314849/2-A

Matrix: Water

Analysis Batch: 315496

Client Sample ID: Lab Control Sample  
Prep Type: Total Recoverable  
Prep Batch: 314849

Analyte	Spike Added	LCN	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Arsenic	1.00	1.02		mg/L		102	80 - 120
Barium	1.00	1.04		mg/L		104	80 - 120
Beryllium	0.500	0.437		mg/L		87	80 - 120
Boron	1.25	1.13		mg/L		90	80 - 120
Cadmium	0.500	0.522		mg/L		104	80 - 120

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-105386-1

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

**Lab Sample ID: LCS 180-314849/2-A**

**Matrix: Water**

**Analysis Batch: 315496**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 314849**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Calcium	25.0	28.3		mg/L	113	80 - 120	
Chromium	0.500	0.507		mg/L	101	80 - 120	
Cobalt	0.500	0.501		mg/L	100	80 - 120	
Lead	0.500	0.521		mg/L	104	80 - 120	
Molybdenum	0.500	0.509		mg/L	102	80 - 120	
Selenium	1.00	1.02		mg/L	102	80 - 120	
Thallium	1.00	1.11		mg/L	111	80 - 120	

**Lab Sample ID: LCS 180-314849/2-A**

**Matrix: Water**

**Analysis Batch: 315543**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 314849**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lithium	0.500	0.472		mg/L	94	80 - 120	

## Method: EPA 7470A - Mercury (CVAA)

**Lab Sample ID: MB 180-314833/1-A**

**Matrix: Water**

**Analysis Batch: 314888**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 314833**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		05/07/20 16:00	05/07/20 19:53	1

**Lab Sample ID: LCS 180-314833/2-A**

**Matrix: Water**

**Analysis Batch: 314888**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 314833**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00250	0.00263		mg/L	105	80 - 120	

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

**Lab Sample ID: MB 180-314792/2**

**Matrix: Water**

**Analysis Batch: 314792**

**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		05/07/20 09:15		1

**Lab Sample ID: LCS 180-314792/1**

**Matrix: Water**

**Analysis Batch: 314792**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**%Rec.**

**Limits**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	192	202		mg/L	105	80 - 120	

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-1

## HPLC/IC

### Analysis Batch: 315658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	EPA 300.0 R2.1	
180-105386-3	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-315658/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-315658/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

## Metals

### Prep Batch: 314833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	7470A	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	7470A	
180-105386-3	Dup-1	Total/NA	Water	7470A	
MB 180-314833/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-314833/2-A	Lab Control Sample	Total/NA	Water	7470A	

### Prep Batch: 314849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total Recoverable	Water	3005A	
180-105386-2	EB-1-5-4-2020	Total Recoverable	Water	3005A	
180-105386-3	Dup-1	Total Recoverable	Water	3005A	
MB 180-314849/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-314849/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

### Analysis Batch: 314888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	EPA 7470A	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	EPA 7470A	
180-105386-3	Dup-1	Total/NA	Water	EPA 7470A	
MB 180-314833/1-A	Method Blank	Total/NA	Water	EPA 7470A	
LCS 180-314833/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	

### Analysis Batch: 315496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total Recoverable	Water	EPA 6020B	
180-105386-2	EB-1-5-4-2020	Total Recoverable	Water	EPA 6020B	
180-105386-3	Dup-1	Total Recoverable	Water	EPA 6020B	
MB 180-314849/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	
LCS 180-314849/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	

### Analysis Batch: 315543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total Recoverable	Water	EPA 6020B	
180-105386-2	EB-1-5-4-2020	Total Recoverable	Water	EPA 6020B	
180-105386-3	Dup-1	Total Recoverable	Water	EPA 6020B	
MB 180-314849/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	
LCS 180-314849/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-1

## General Chemistry

### Analysis Batch: 314792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	SM 2540C	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	SM 2540C	
180-105386-3	Dup-1	Total/NA	Water	SM 2540C	
MB 180-314792/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-314792/1	Lab Control Sample	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

### Analysis Batch: 315129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	Field Sampling	

681-Atlanta TestAmeric

THE LEADER IN ENVIRONMENTAL TESTING

Phone (412) 963-1038 Fax (412) 963-2488

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

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

ORIGIN ID: ILLYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 05MAY20  
ACTWTG: 54.85 LB  
CAD: 859116/CAFE3313

BILL RECIPIENT

To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7068  
REF: SOUTHERN CO



FedEx  
Express



J1991319082200144



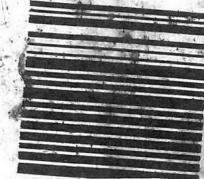
WED - 06 MAY 3:00P  
STANDARD OVERNIGHT

TRK# 1516 9323 4891  
S201

NA AGCA

15238  
PA  
PT

PA - us



26 °C  
17

Uncorrected temp  
Thermometer ID  
CF O Initials R

PT-WISR-001 effective 7/26/13



180-105386 Waybill

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-105386-1

**Login Number:** 105386

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

### Question

### Answer

### Comment

Radioactivity wasn't checked or is </= background as measured by a survey meter.

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Residual Chlorine Checked.



eurofins

Environment Testing  
America



## ANALYTICAL REPORT

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

Laboratory Job ID: 180-105386-2

Client Project/Site: CCR - Plant Wansley Ash Pond

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

Attn: Kristen N Jurinko

Authorized for release by:  
6/5/2020 8:34:02 PM

Shali Brown, Project Manager II  
(615)301-5031  
[shali.brown@testamericainc.com](mailto:shali.brown@testamericainc.com)

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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# Case Narrative

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

Job ID: 180-105386-2

## Job ID: 180-105386-2

Laboratory: Eurofins TestAmerica, Pittsburgh

### Narrative

#### Job Narrative 180-105386-2

### Comments

No additional comments.

### Receipt

The samples were received on 5/6/2020 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6° C.

### Receipt Exceptions

The reference method requires samples to be preserved to a pH of less than 2. The following sample (180-105386-A-3) was received with insufficient preservation at a pH of 7: The sample was preserved to the appropriate pH in the laboratory.

### RAD

Methods 903.0, 9315: Ra-226 Prep Batch 160-470201

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-19 (180-105386-1), EB-1-5-4-2020 (180-105386-2), Dup-1 (180-105386-3), (LCS 160-470201/1-A) and (MB 160-470201/23-A)

Methods 904.0, 9320: Ra-228 Prep Batch 160-470205

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-19 (180-105386-1), EB-1-5-4-2020 (180-105386-2), Dup-1 (180-105386-3), (LCS 160-470205/1-A) and (MB 160-470205/23-A)

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 Ash Pond

Job ID: 180-105386-2

## Qualifiers

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
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 Ash Pond

Job ID: 180-105386-2

## Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-20
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20
Florida	NELAP	E871008	06-30-20
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-20
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-20
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-20
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-20
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	01-01-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-21
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-20
South Carolina	State	89014	04-30-20 *
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Virginia	NELAP	10043	09-15-20
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-20

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

Eurofins TestAmerica, Pittsburgh

# Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-2

## 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	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-22
ANAB	Dept. of Defense ELAP	L2305	04-06-22
ANAB	Dept. of Energy	L2305.01	04-06-22
ANAB	ISO/IEC 17025	L2305	04-06-22
Arizona	State	AZ0813	12-08-20
California	Los Angeles County Sanitation Districts	10259	06-30-20
California	State	2886	06-30-20
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-20
HI - RadChem Recognition	State	n/a	06-30-20
Illinois	NELAP	004553	11-30-20
Iowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-20
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-20
MI - RadChem Recognition	State	9005	06-30-20
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-20
New Jersey	NELAP	MO002	06-30-20
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-20
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-20
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-20
Texas	NELAP	T104704193-19-13	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-20
Virginia	NELAP	10310	06-14-20
Washington	State	C592	08-30-20
West Virginia DEP	State	381	10-31-20

## Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-105386-1	WGWC-19	Water	05/04/20 11:15	05/06/20 09:20	
180-105386-2	EB-1-5-4-2020	Water	05/04/20 11:00	05/06/20 09:20	
180-105386-3	Dup-1	Water	05/04/20 00:00	05/06/20 09:20	

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Eurofins TestAmerica, Pittsburgh

## Method Summary

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

Job ID: 180-105386-2

Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
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 Ash Pond

Job ID: 180-105386-2

**Client Sample ID: WGWC-19**  
**Date Collected: 05/04/20 11:15**  
**Date Received: 05/06/20 09:20**

**Lab Sample ID: 180-105386-1**  
**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			1000.32 mL	1.0 g	470201	05/12/20 09:20	RBR	TAL SL
Total/NA	Analysis	9315		1			471867	06/03/20 04:14	KLS	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.32 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis	9320		1			471096	05/21/20 16:41	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			471874	06/03/20 09:41	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: EB-1-5-4-2020**  
**Date Collected: 05/04/20 11:00**  
**Date Received: 05/06/20 09:20**

**Lab Sample ID: 180-105386-2**  
**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			1000.06 mL	1.0 g	470201	05/12/20 09:20	RBR	TAL SL
Total/NA	Analysis	9315		1			471867	06/03/20 04:14	KLS	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.06 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis	9320		1			471096	05/21/20 16:41	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			471874	06/03/20 09:41	SMP	TAL SL
		Instrument ID: NOEQUIP								

**Client Sample ID: Dup-1**  
**Date Collected: 05/04/20 00:00**  
**Date Received: 05/06/20 09:20**

**Lab Sample ID: 180-105386-3**  
**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			1000.07 mL	1.0 g	470201	05/12/20 09:20	RBR	TAL SL
Total/NA	Analysis	9315		1			471867	06/03/20 04:14	KLS	TAL SL
		Instrument ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis	9320		1			471096	05/21/20 16:41	AJD	TAL SL
		Instrument ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			471874	06/03/20 09:41	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

Eurofins TestAmerica, Pittsburgh

## Lab Chronicle

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

Job ID: 180-105386-2

### Analyst References:

Lab: TAL SL

Batch Type: Prep

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano

KLS = Kody Saulters

SMP = Siobhan Perry

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# Client Sample Results

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

Job ID: 180-105386-2

**Client Sample ID: WGWC-19**  
Date Collected: 05/04/20 11:15  
Date Received: 05/06/20 09:20

**Lab Sample ID: 180-105386-1**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.0224	U	0.0582	0.0583	1.00	0.108	pCi/L	05/12/20 09:20	06/03/20 04:14	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	83.7		40 - 110					05/12/20 09:20	06/03/20 04:14	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0472	U	0.275	0.275	1.00	0.484	pCi/L	05/12/20 10:02	05/21/20 16:41	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	83.7		40 - 110					05/12/20 10:02	05/21/20 16:41	1
Y Carrier	80.7		40 - 110					05/12/20 10:02	05/21/20 16:41	1

## Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0697	U	0.281	0.281	2.00	0.484	pCi/L		06/03/20 09:41	1

**Client Sample ID: EB-1-5-4-2020**

Date Collected: 05/04/20 11:00  
Date Received: 05/06/20 09:20

**Lab Sample ID: 180-105386-2**  
Matrix: Water

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.0337	U	0.0584	0.0585	1.00	0.137	pCi/L	05/12/20 09:20	06/03/20 04:14	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	70.2		40 - 110					05/12/20 09:20	06/03/20 04:14	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	-0.0673	U	0.323	0.323	1.00	0.587	pCi/L	05/12/20 10:02	05/21/20 16:41	1
<b>Carrier</b>	<b>%Yield</b>	<b>Qualifier</b>	<b>Limits</b>					<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Ba Carrier	70.2		40 - 110					05/12/20 10:02	05/21/20 16:41	1
Y Carrier	81.5		40 - 110					05/12/20 10:02	05/21/20 16:41	1

Eurofins TestAmerica, Pittsburgh

# Client Sample Results

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

Job ID: 180-105386-2

**Client Sample ID: EB-1-5-4-2020**

**Lab Sample ID: 180-105386-2**

**Matrix: Water**

Date Collected: 05/04/20 11:00

Date Received: 05/06/20 09:20

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	-0.101	U	0.328	0.328	2.00	0.587	pCi/L		06/03/20 09:41	1

**Client Sample ID: Dup-1**

**Lab Sample ID: 180-105386-3**

**Matrix: Water**

Date Collected: 05/04/20 00:00

Date Received: 05/06/20 09:20

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.00756	U	0.0587	0.0587	1.00	0.125	pCi/L	05/12/20 09:20	06/03/20 04:14	1
<b>Carrier</b>										
Ba Carrier	71.7		<b>Limits</b>					05/12/20 09:20	06/03/20 04:14	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.0433	U	0.289	0.289	1.00	0.511	pCi/L	05/12/20 10:02	05/21/20 16:41	1
<b>Carrier</b>										
Ba Carrier	71.7		<b>Limits</b>					05/12/20 10:02	05/21/20 16:41	1
Y Carrier	84.9		40 - 110					05/12/20 10:02	05/21/20 16:41	1

**Method: Ra226\_Ra228 - Combined Radium-226 and Radium-228**

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Combined Radium 226 + 228	0.0357	U	0.295	0.295	2.00	0.511	pCi/L		06/03/20 09:41	1

Eurofins TestAmerica, Pittsburgh

# QC Sample Results

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

Job ID: 180-105386-2

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

**Lab Sample ID:** MB 160-470201/23-A

**Matrix:** Water

**Analysis Batch:** 471867

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 470201

Analyte	MB		Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	MB									
Radium-226	0.01889	U		0.0404	0.0404	1.00	0.0751	pCi/L	05/12/20 09:20	06/03/20 06:01	1
<b>Carrier</b>											
Ba Carrier	95.5			40 - 110					Prepared	Analyzed	Dil Fac
									05/12/20 09:20	06/03/20 06:01	1

**Lab Sample ID:** LCS 160-470201/1-A

**Matrix:** Water

**Analysis Batch:** 471867

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 470201

Analyte	MB		Qualifier	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec.Limits
	Result	MB									
Radium-226	11.3			11.19			1.17	1.00	0.124	pCi/L	99 75 - 125
<b>Carrier</b>											
Ba Carrier	75.3			40 - 110							

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

**Lab Sample ID:** MB 160-470205/23-A

**Matrix:** Water

**Analysis Batch:** 471097

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 470205

Analyte	MB		Qualifier	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared
	Result	MB									
Radium-228	0.2344	U		0.283			0.284	1.00	0.468	pCi/L	05/12/20 10:02 05/21/20 16:39
<b>Carrier</b>											
Ba Carrier	95.5			40 - 110					Prepared	Analyzed	Dil Fac
Y Carrier	86.0			40 - 110					05/12/20 10:02	05/21/20 16:39	1

**Lab Sample ID:** LCS 160-470205/1-A

**Matrix:** Water

**Analysis Batch:** 471096

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 470205

Analyte	MB		Qualifier	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec.Limits
	Result	MB									
Radium-228	8.82			9.366			1.17	1.00	0.544	pCi/L	106 75 - 125
<b>Carrier</b>											
Ba Carrier	75.3			40 - 110							
Y Carrier	81.5			40 - 110							

Eurofins TestAmerica, Pittsburgh

# QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-105386-2

**Rad**

**Prep Batch: 470201**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	PrecSep-21	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	PrecSep-21	
180-105386-3	Dup-1	Total/NA	Water	PrecSep-21	
MB 160-470201/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-470201/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 470205**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-105386-1	WGWC-19	Total/NA	Water	PrecSep_0	
180-105386-2	EB-1-5-4-2020	Total/NA	Water	PrecSep_0	
180-105386-3	Dup-1	Total/NA	Water	PrecSep_0	
MB 160-470205/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-470205/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

**681-Atlanta TestAmeric**

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ORIGIN ID: ILLYA (678) 966-9991  
GEORGE TAYLOR  
EUROFINS TESTAMERICA  
6500 MCDONOUGH DRIVE  
SUITE C-10  
NORCROSS, GA 30093  
UNITED STATES US

SHIP DATE: 05MAY20  
ACTWTG: 54.85 LB  
CAD: 859116/CAFE3313

BILL RECIPIENT

To SAMPLE RECEIVING  
EUROFINS TESTAMERICA PITTSBURGH  
301 ALPHA DR.  
RIDC PARK  
PITTSBURGH PA 15238  
(412) 963-7068  
REF: SOUTHERN CO



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WED - 06 MAY 3:00P  
STANDARD OVERNIGHT

TRK# 1516 9323 4891  
S201

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15238  
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Uncorrected temp  
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PT-WISR-001 effective 7/26/13



180-105386 Waybill



### **Chain of Custody Record**

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analytic & accreditation compliance upon our 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/test/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification

1160 confirmed

DALLAS COMMUNITY COLLEGE DISTRICT

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

Emergency Kit Bolted in by

Elliott published by.

Relinquished by:

卷之三

**FEDEX**  
Relinquished by:

Relinquished by:

Custody Seals Intact:  Custody Seal No.:

Δ Yes Δ No

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-105386-2

**Login Number:** 105386

**List Source:** Eurofins TestAmerica, Pittsburgh

**List Number:** 1

**Creator:** Say, Thomas C

### Question

### Answer

### Comment

Radioactivity wasn't checked or is </= background as measured by a survey meter.

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler's name present on COC?

There are no discrepancies between the containers received and the COC.

Samples are received within Holding Time (excluding tests with immediate HTs)

Sample containers have legible labels.

Containers are not broken or leaking.

Sample collection date/times are provided.

Appropriate sample containers are used.

Sample bottles are completely filled.

Sample Preservation Verified.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Residual Chlorine Checked.

## Login Sample Receipt Checklist

Client: Southern Company

Job Number: 180-105386-2

**Login Number:** 105386

**List Source:** Eurofins TestAmerica, St. Louis

**List Number:** 2

**List Creation:** 05/07/20 12:56 PM

**Creator:** Mazariegos, Leonel A

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	
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	180-105386-A-3 received unprserved. Preserved upon arrival to lab.
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	

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**Plant Wansley Ash Pond**

**Scan Event February 2020**

## **Georgia Power Company – Plant Wansley Ash Pond**

### **Quality Control Review of Analytical Data – February 2020**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins TestAmerica, Pittsburgh and St. Louis for groundwater samples collected at Plant Wansley Ash Pond (AP) between February 3, 2020 and February 7, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## **DATA QUALITY OBJECTIVES**

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met.

## **QUALIFICATIONS**

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

- J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample
- U:** The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Lead and Thallium results in SDG 102004 were qualified as non-detect (U) due to these analytes being detected at similar concentration in the associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the method detection limit (MDL) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Wansley AP sampled between February 3, 2020 and February 7, 2020 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## **REFERENCES**

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1  
 Georgia Power Company – Plant Wansley Ash Pond  
 Sample Summary Table – February 2020

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM2540C)	Radium-226/-228 (9315, 9320)
102004	WGWA-2	2/3/2020	180-102004-1	GW		X	X		X
102004	WGWA-4	2/4/2020	180-102004-2	GW		X	X		X
102004	WGWA-3	2/4/2020	180-102004-3	GW		X	X		X
102004	WGWA-5	2/4/2020	180-102004-4	GW		X	X		X
102004	WGWA-6	2/4/2020	180-102004-5	GW		X	X		X
102004	WGWA-1	2/3/2020	180-102004-6	GW		X	X		X
102004	DUP-1	2/4/2020	180-102004-7	GW	FD (WGWA-3)	X	X		X
102004	FB-1-2-4-20	2/4/2020	180-102004-8	WQ	FB	X	X		X
102004	EB-1-2-4-20	2/4/2020	180-102004-9	WQ	EB	X	X		X
102169	WGWA-7	2/5/2020	180-102169-1	GW		X	X		X
102169	FB-2-2-7-20	2/7/2020	180-102169-2	WQ	FB	X	X		X
102169	DUP-2	2/7/2020	180-102169-3	GW	FD (WGWC-19)	X	X		X
102169	WGWA-18	2/5/2020	180-102169-4	GW		X	X		X
102169	EB-2-2-7-20	2/7/2020	180-102169-5	WQ	EB	X	X		X
102169	WGWC-10	2/5/2020	180-102169-6	GW		X	X		X
102169	WGWC-12	2/5/2020	180-102169-7	GW		X	X		X
102169	WGWC-11	2/5/2020	180-102169-8	GW		X	X		X
102169	WGWC-15	2/7/2020	180-102169-9	GW		X	X		X
102169	WGWC-16	2/7/2020	180-102169-10	GW		X	X		X
102169	WGWC-19	2/7/2020	180-102169-11	GW		X	X		X
102169	WGWC-13	2/5/2020	180-102169-12	GW		X	X		X
102169	WGWC-14A	2/5/2020	180-102169-13	GW		X	X		X
102169	WGWC-9	2/5/2020	180-102169-14	GW		X	X		X
102169	WGWC-8	2/7/2020	180-102169-15	GW		X	X		X
102169	WGWC-17	2/7/2020	180-102169-16	GW		X	X		X

Abbreviations:

EB – Equipment Blank  
 FB – Field Blank  
 FD – Field Duplicate  
 GW – Groundwater  
 QC – Quality Control

SW – Surface Water  
 TDS – Total Dissolved Solids  
 WQ – Water Quality Control

TABLE 2  
 Georgia Power Company – Plant Wansley Ash Pond  
 Qualifier Summary Table – February 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
102004	WGWA-2	Lead		0.00013	U	Blank detection
102004	WGWA-4	Lead		0.00019	U	Blank detection
102004	WGWA-3	Lead		0.00013	U	Blank detection
102004	WGWA-5	Lead		0.00024	U	Blank detection
102004	WGWA-2	Thallium		0.0002	U	Blank detection

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result  
 U – Non-Detect Result

**LEVEL 2A LABORATORY DATA VALIDATIONS**

**Plant Wansley Ash Pond**

**March 2020**

## **Georgia Power Company – Plant Wansley Ash Pond**

### **Quality Control Review of Analytical Data – March 2020**

This narrative presents results of the Quality Control (QC) data review performed on analytical data submitted by Eurofins TestAmerica, Pittsburgh for groundwater samples collected at Plant Wansley Ash Pond (AP) between March 16, 2020 and May 4, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision-making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1 of this Appendix. SDGs 180-103742, 180-103809, and 180-105386 were revised by the laboratory to remove a target analyte that was not required for the first semi-annual event. SDG 180-103809 was revised by the laboratory to remove data for WGWC-19 and EB-2-3-10-20 which demonstrated a switching of sample containers; WGWC-19 and an equipment blank were resampled and reported from SDG 180-105386.

In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detected monitoring constituents listed in 40 CFR, Part 257, Appendix III and assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma – Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (Standard Methods 2540C), Radium-226 (USEPA 9315), and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0)<sup>1</sup> and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)<sup>2</sup>. The review included an assessment of the results for completeness, precision (laboratory duplicate recoveries and matrix spike/matrix spike duplicate recoveries), accuracy (laboratory control samples and matrix spike samples), and blank contamination (field, equipment, and laboratory blanks). Sample receipt conditions, holding times, and chains of custody (COCs) were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytical methodology, method-specific criteria or professional judgment were used.

## DATA QUALITY OBJECTIVES

**Laboratory Precision:** Laboratory goals for precision were met.

**Field Precision:** Field goals for precision were met, with the exception of Total Dissolved Solids (TDS) on WGWA-3 (180-103742-3) as described in the qualifications section below.

**Accuracy:** Laboratory goals for accuracy were met.

**Detection Limits:** Project goals for detection limits were met.

**Completeness:** There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** Holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the site were qualified on the basis of low precision or low accuracy or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the validation process:

**J:** The analyte was positively identified above the method detection limit; however, the associated numerical value is the approximate concentration of the analyte in the sample

**U:** The analyte was not detected above the method detection limit

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. The applied qualifications may not have been required for all samples collected at the site. A summary of sample qualifications can be found in Table 2 of this Appendix.

- Samples WGWA-3 (180-103742-3) and DUPLICATE 1 (180-103742-10) were qualified as estimated (J) for TDS as the field relative percent difference (RPD) exceeded QC criteria (33.33% above limit of 25).

- Boron results in SDG 103809 were qualified as non-detect (U) due to this analyte being detected at a similar concentration in the associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the method detection limit (MDL) was raised to the sample result as part of the qualification process.

Atlantic Coast Consulting, Inc. reviewed the laboratory data from the Plant Wansley AP sampled between March 16, 2020 and May 4, 2020 in accordance with the analytical methods, the laboratory-specified QC criteria, and the guidelines. As described above, the results were acceptable for project use.

## REFERENCES

<sup>1</sup>USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy, Revision 2.0

<sup>2</sup>USEPA, January 2017, National Office of Superfund Remediation and Technology Innovation, National Functional Guidelines for Inorganic Superfund Methods Data Review, Revision 0.0

TABLE 1  
Georgia Power Company – Plant Wansley Ash Pond  
Sample Summary Table – March 2020

SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analyses			
						Metals (6020B, 7470A)	Anions (300.0)	TDS (SM2540C)	Radium-226/-228 (9315, 9320)
103742	WGWA-1	3/16/2020	180-103742-1	GW		X	X	X	X
103742	WGWA-2	3/16/2020	180-103742-2	GW		X	X	X	X
103742	WGWA-3	3/17/2020	180-103742-3	GW		X	X	X	X
103742	WGWA-4	3/17/2020	180-103742-4	GW		X	X	X	X
103742	WGWA-5	3/17/2020	180-103742-5	GW		X	X	X	X
103742	WGWA-6	3/17/2020	180-103742-6	GW		X	X	X	X
103742	WGWA-7	3/17/2020	180-103742-7	GW		X	X	X	X
103742	WGWA-18	3/17/2020	180-103742-8	GW		X	X	X	X
103742	EB-1 3-17-20	3/17/2020	180-103742-9	WQ	EB	X	X	X	X
103742	DUPLICATE 1 3-17-20	3/17/2020	180-103742-10	GW	FD (WGWA-3)	X	X	X	X
103742	WGWC-11	3/18/2020	180-103742-11	GW		X	X	X	X
103809	WGWC-8	3/19/2020	180-103809-1	GW		X	X	X	X
103809	WGWC-9	3/19/2020	180-103809-2	GW		X	X	X	X
103809	WGWC-10	3/18/2020	180-103809-3	GW		X	X	X	X
103809	WGWC-12	3/18/2020	180-103809-4	GW		X	X	X	X
103809	WGWC-13	3/19/2020	180-103809-5	GW		X	X	X	X
103809	WGWC-14A	3/19/2020	180-103809-6	GW		X	X	X	X
103809	WGWC-15	3/18/2020	180-103809-7	GW		X	X	X	X
103809	WGWC-16	3/18/2020	180-103809-8	GW		X	X	X	X
103809	WGWC-17	3/18/2020	180-103809-9	GW		X	X	X	X
103809	DUPLICATE 2	3/18/2020	180-103809-12	GW	FD (WGWC-19)	X	X	X	X
103809	FB-1 3-18-20	3/18/2020	180-103809-13	WQ	FB	X	X	X	X
103809	FB-2 3-19-20	3/19/2020	180-103809-14	WQ	FB	X	X	X	X
105386	WGWC-19	5/4/2020	180-105386-1	GW		X	X	X	X
105386	EB-1-5-4-2020	5/4/2020	180-105386-2	WQ	EB	X	X	X	X
105386	DUP-1	5/4/2020	180-105386-3	GW	FD (WGWC-19)	X	X	X	X

Abbreviations:

EB – Equipment Blank

SW – Surface Water

FB – Field Blank

TDS – Total Dissolved Solids

FD – Field Duplicate

WQ – Water Quality Control

GW – Groundwater

QC – Quality Control

TABLE 2  
 Georgia Power Company – Plant Wansley Ash Pond  
 Qualifier Summary Table – March 2020

SDG	Field Identification	Constituent	New RL	New MDL or MDC	Qualifier	Reason
103809	WGWC-15	Boron		0.071	U	Blank detection
103742	WGWA-3	TDS			J	RPD exceeds field goal
103742	DUPLICATE 1	TDS			J	RPD exceeds field goal

Abbreviations:

MDC – Minimum Detectable Concentration  
 MS/MSD – Matrix Spike / Matrix Spike Duplicate  
 MDL – Method Detection Limit  
 RL – Reporting Limit  
 RPD – Relative Percent Difference  
 SDG – Sample Delivery Group  
 TDS – Total Dissolved Solids

Qualifiers:

J – Estimated Result  
 U – Non-Detect Result

## APPENDIX C2

### Field Sampling Forms

# Low-Flow Test Report:

Test Date / Time: 2/3/2020 3:02:21 PM

Project: Plant Wansley AP

Operator Name: Hunter Auld

Location Name: WGWA-1 Well Diameter: 2 in Casing Type: PVC Screen Length: 50 ft Top of Screen: 79.6 ft Total Depth: 129.6 ft Initial Depth to Water: 23.35 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 104 ft Estimated Total Volume Pumped: 2.3 liter Flow Cell Volume: 90 ml Final Flow Rate: 75 ml/min Final Draw Down: 0.6 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sampled at 1530 on 2-3-20.

## Weather Conditions:

Sunny, 70s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/3/2020 3:02 PM	00:00	5.74 pH	22.09 °C	45.51 µS/cm	3.98 mg/L		146.1 mV	23.35 ft	75.00 ml/min
2/3/2020 3:03 PM	00:40	5.72 pH	21.60 °C	39.43 µS/cm	2.73 mg/L		184.6 mV	23.35 ft	75.00 ml/min
2/3/2020 3:08 PM	05:40	5.61 pH	20.80 °C	32.12 µS/cm	0.44 mg/L	1.10 NTU	113.1 mV	23.40 ft	75.00 ml/min
2/3/2020 3:13 PM	10:40	5.52 pH	20.22 °C	31.82 µS/cm	0.35 mg/L	1.10 NTU	88.9 mV	23.40 ft	75.00 ml/min
2/3/2020 3:18 PM	15:40	5.46 pH	20.47 °C	31.58 µS/cm	0.37 mg/L	0.80 NTU	82.6 mV	23.40 ft	75.00 ml/min
2/3/2020 3:23 PM	20:40	5.41 pH	20.82 °C	31.15 µS/cm	0.51 mg/L	1.00 NTU	77.8 mV	23.40 ft	75.00 ml/min
2/3/2020 3:28 PM	25:40	5.40 pH	20.70 °C	31.11 µS/cm	0.68 mg/L	0.70 NTU	73.0 mV	23.40 ft	75.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 2/3/2020 2:52:35 PM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

Location Name: WGWA-2 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 92.65 ft Total Depth: 102.65 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 97.65 ft Estimated Total Volume Pumped: 7.25 liter Flow Cell Volume: 90 ml Final Flow Rate: 130 ml/min Final Draw Down: 4 in	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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## Test Notes:

Sampled at 1318. Clear 72F.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/3/2020 2:52 PM	00:00	6.04 pH	17.63 °C	123.86 µS/cm	1.75 mg/L		110.0 mV		130.00 ml/min
2/3/2020 2:53 PM	01:08	6.05 pH	17.57 °C	123.62 µS/cm	1.75 mg/L	0.64 NTU	129.8 mV	8.60 ft	130.00 ml/min
2/3/2020 2:58 PM	06:08	6.07 pH	17.36 °C	123.06 µS/cm	1.56 mg/L	0.64 NTU	79.7 mV	8.70 ft	130.00 ml/min
2/3/2020 3:03 PM	11:08	6.08 pH	17.36 °C	123.69 µS/cm	1.46 mg/L	0.45 NTU	72.2 mV	8.70 ft	130.00 ml/min
2/3/2020 3:08 PM	16:08	6.07 pH	17.45 °C	123.75 µS/cm	1.34 mg/L	0.37 NTU	66.3 mV	8.70 ft	130.00 ml/min
2/3/2020 3:13 PM	21:08	6.08 pH	17.42 °C	124.23 µS/cm	1.24 mg/L	0.45 NTU	63.3 mV	8.70 ft	130.00 ml/min
2/3/2020 3:18 PM	26:08	6.09 pH	17.49 °C	124.73 µS/cm	1.19 mg/L	0.34 NTU	60.1 mV	8.70 ft	130.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 2/4/2020 11:16:54 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

Location Name: WGWA-3 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 9 ft Total Depth: 19 ft Initial Depth to Water: 2.64 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 14 ft Estimated Total Volume Pumped: 7.5 liter Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0.96 ft	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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## Test Notes:

Collected at 1142. 63F cloudy.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/4/2020 11:16 AM	00:00	5.69 pH	16.43 °C	33.48 µS/cm	8.14 mg/L		61.4 mV	2.64 ft	300.00 ml/min
2/4/2020 11:21 AM	05:00	5.67 pH	16.46 °C	33.15 µS/cm	7.77 mg/L	0.55 NTU	70.8 mV	3.40 ft	300.00 ml/min
2/4/2020 11:26 AM	10:00	5.65 pH	16.55 °C	33.04 µS/cm	7.53 mg/L	0.49 NTU	78.4 mV	3.60 ft	300.00 ml/min
2/4/2020 11:31 AM	15:00	5.65 pH	16.73 °C	33.15 µS/cm	7.32 mg/L	0.57 NTU	82.7 mV	3.60 ft	300.00 ml/min
2/4/2020 11:36 AM	20:00	5.65 pH	16.87 °C	33.30 µS/cm	7.05 mg/L	0.46 NTU	83.9 mV	3.60 ft	300.00 ml/min
2/4/2020 11:41 AM	25:00	5.66 pH	16.96 °C	33.33 µS/cm	6.93 mg/L	0.64 NTU	83.8 mV	3.60 ft	300.00 ml/min

## Samples

Sample ID:	Description:
WGWA-3	@ 1142

# Low-Flow Test Report:

Test Date / Time: 2/4/2020 10:18:16 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

<b>Location Name:</b> WGWA-4 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 63.9 ft <b>Total Depth:</b> 73.9 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 68.9 ft <b>Estimated Total Volume Pumped:</b> 4.01 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 150 ml/min <b>Final Draw Down:</b> 7 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

Collected at 1045. 60F overcast.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/4/2020 10:18 AM	00:00	8.03 pH	14.62 °C	259.05 µS/cm	5.64 mg/L		180.1 mV		150.00 ml/min
2/4/2020 10:20 AM	02:18	7.30 pH	15.07 °C	159.18 µS/cm	0.52 mg/L		15.7 mV		150.00 ml/min
2/4/2020 10:25 AM	07:18	7.33 pH	15.21 °C	151.70 µS/cm	0.19 mg/L	3.16 NTU	-28.9 mV	4.00 ft	150.00 ml/min
2/4/2020 10:30 AM	12:18	7.32 pH	15.33 °C	149.12 µS/cm	0.17 mg/L	2.20 NTU	-37.1 mV	4.10 ft	150.00 ml/min
2/4/2020 10:35 AM	17:18	7.30 pH	15.43 °C	147.20 µS/cm	0.16 mg/L	1.80 NTU	-38.4 mV	4.10 ft	150.00 ml/min
2/4/2020 10:40 AM	22:18	7.29 pH	15.56 °C	145.54 µS/cm	0.16 mg/L	1.50 NTU	-70.1 mV	4.10 ft	150.00 ml/min
2/4/2020 10:45 AM	27:18	7.29 pH	15.56 °C	145.58 µS/cm	0.16 mg/L	1.64 NTU	-39.1 mV	4.20 ft	150.00 ml/min

## Samples

Sample ID:	Description:
WGWA-4	@ 1045

# Low-Flow Test Report:

**Test Date / Time:** 2/4/2020 12:15:19 PM

**Project:** Plant Wansley AP

**Operator Name:** Owens Fuquea

<b>Location Name:</b> WGWA-5 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 13.6 ft <b>Total Depth:</b> 23.6 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 21.5 ft <b>Estimated Total Volume Pumped:</b> <b>54.5 liter</b> <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 300 ml/min <b>Final Draw Down:</b> 4 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/4/2020 12:15 PM	00:00	5.54 pH	18.27 °C	30.82 µS/cm	5.83 mg/L		96.0 mV		300.00 ml/min
2/4/2020 12:16 PM	01:39	5.52 pH	17.14 °C	31.42 µS/cm	5.81 mg/L		122.7 mV		300.00 ml/min
2/4/2020 12:21 PM	06:39	5.42 pH	16.42 °C	27.86 µS/cm	5.85 mg/L	8.28 NTU	85.5 mV	11.40 ft	300.00 ml/min
2/4/2020 12:26 PM	11:39	5.35 pH	16.37 °C	24.81 µS/cm	5.97 mg/L	7.62 NTU	86.0 mV	11.60 ft	300.00 ml/min
2/4/2020 12:31 PM	16:39	5.33 pH	16.47 °C	24.26 µS/cm	6.04 mg/L	7.93 NTU	127.0 mV	11.60 ft	300.00 ml/min
2/4/2020 12:36 PM	21:39	5.34 pH	16.48 °C	24.16 µS/cm	6.06 mg/L	9.22 NTU	128.0 mV	11.60 ft	300.00 ml/min
2/4/2020 12:41 PM	26:39	5.33 pH	16.60 °C	23.71 µS/cm	6.00 mg/L	8.60 NTU	128.6 mV	11.60 ft	300.00 ml/min
2/4/2020 12:46 PM	31:39	5.33 pH	16.69 °C	23.69 µS/cm	6.02 mg/L	9.47 NTU	128.6 mV	11.60 ft	300.00 ml/min
2/4/2020 12:51 PM	36:39	5.32 pH	16.65 °C	23.06 µS/cm	5.96 mg/L	9.53 NTU	129.2 mV	11.60 ft	300.00 ml/min
2/4/2020 12:56 PM	41:39	5.34 pH	16.67 °C	24.04 µS/cm	6.12 mg/L	9.42 NTU	127.1 mV	11.60 ft	300.00 ml/min
2/4/2020 1:01 PM	46:39	5.31 pH	16.65 °C	22.38 µS/cm	6.09 mg/L	9.31 NTU	84.2 mV	11.60 ft	300.00 ml/min
2/4/2020 1:06 PM	51:39	5.32 pH	16.68 °C	22.37 µS/cm	5.99 mg/L	10.00 NTU	83.0 mV	11.60 ft	300.00 ml/min
2/4/2020 1:11 PM	56:39	5.30 pH	16.73 °C	22.47 µS/cm	6.12 mg/L	10.00 NTU	83.3 mV	11.60 ft	300.00 ml/min
2/4/2020 1:16 PM	01:01:39	5.30 pH	16.80 °C	22.34 µS/cm	5.96 mg/L	10.00 NTU	127.1 mV	11.60 ft	300.00 ml/min
2/4/2020 1:21 PM	01:06:39	5.30 pH	16.84 °C	21.65 µS/cm	6.14 mg/L	10.20 NTU	83.7 mV	11.60 ft	300.00 ml/min

2/4/2020 1:26 PM	01:11:39	5.30 pH	16.91 °C	21.82 µS/cm	6.10 mg/L	10.20 NTU	83.0 mV	11.60 ft	300.00 ml/min
2/4/2020 1:31 PM	01:16:39	5.34 pH	16.93 °C	23.32 µS/cm	6.27 mg/L	10.20 NTU	83.0 mV	11.60 ft	300.00 ml/min
2/4/2020 1:36 PM	01:21:39	5.29 pH	16.95 °C	20.94 µS/cm	6.20 mg/L	10.30 NTU	83.5 mV	11.60 ft	300.00 ml/min
2/4/2020 1:41 PM	01:26:39	5.29 pH	16.94 °C	21.05 µS/cm	6.23 mg/L	10.10 NTU	83.5 mV	11.60 ft	300.00 ml/min
2/4/2020 1:46 PM	01:31:39	5.29 pH	16.91 °C	21.06 µS/cm	6.09 mg/L	9.93 NTU	83.1 mV	11.60 ft	300.00 ml/min
2/4/2020 1:51 PM	01:36:39	5.30 pH	16.80 °C	20.83 µS/cm	6.25 mg/L	10.50 NTU	82.9 mV	11.60 ft	300.00 ml/min
2/4/2020 1:56 PM	01:41:39	5.29 pH	16.77 °C	20.67 µS/cm	6.25 mg/L	10.00 NTU	83.1 mV	11.60 ft	300.00 ml/min
2/4/2020 2:01 PM	01:46:39	5.30 pH	16.80 °C	20.64 µS/cm	6.40 mg/L	10.50 NTU	83.3 mV	11.60 ft	300.00 ml/min
2/4/2020 2:06 PM	01:51:39	5.29 pH	16.77 °C	20.79 µS/cm	6.47 mg/L	10.30 NTU	83.4 mV	11.60 ft	300.00 ml/min
2/4/2020 2:11 PM	01:56:39	5.29 pH	16.82 °C	20.56 µS/cm	6.50 mg/L	10.10 NTU	83.5 mV	11.60 ft	300.00 ml/min
2/4/2020 2:16 PM	02:01:39	5.29 pH	16.88 °C	20.63 µS/cm	6.38 mg/L	10.20 NTU	83.4 mV	11.60 ft	300.00 ml/min
2/4/2020 2:21 PM	02:06:39	5.29 pH	16.91 °C	20.17 µS/cm	6.40 mg/L	9.49 NTU	82.4 mV	11.60 ft	300.00 ml/min
2/4/2020 2:26 PM	02:11:39	5.30 pH	16.87 °C	19.83 µS/cm	6.38 mg/L	10.30 NTU	82.0 mV	11.60 ft	300.00 ml/min
2/4/2020 2:31 PM	02:16:39	5.30 pH	16.83 °C	19.63 µS/cm	6.36 mg/L	10.10 NTU	81.8 mV	11.60 ft	300.00 ml/min
2/4/2020 2:36 PM	02:21:39	5.31 pH	16.87 °C	19.45 µS/cm	6.44 mg/L	10.10 NTU	129.1 mV	11.60 ft	300.00 ml/min
2/4/2020 2:41 PM	02:26:39	5.31 pH	16.85 °C	19.13 µS/cm	6.44 mg/L	9.92 NTU	83.2 mV	11.60 ft	300.00 ml/min
2/4/2020 2:46 PM	02:31:39	5.31 pH	16.82 °C	19.10 µS/cm	6.41 mg/L	9.82 NTU	82.3 mV	11.60 ft	300.00 ml/min
2/4/2020 2:51 PM	02:36:39	5.31 pH	16.79 °C	18.88 µS/cm	6.36 mg/L	10.00 NTU	82.3 mV	11.60 ft	300.00 ml/min
2/4/2020 2:56 PM	02:41:39	5.31 pH	16.90 °C	18.71 µS/cm	6.30 mg/L	9.94 NTU	81.4 mV	11.60 ft	300.00 ml/min
2/4/2020 3:01 PM	02:46:39	5.31 pH	16.91 °C	18.96 µS/cm	6.48 mg/L	10.00 NTU	81.2 mV	11.60 ft	300.00 ml/min
2/4/2020 3:06 PM	02:51:39	5.31 pH	16.83 °C	19.86 µS/cm	6.19 mg/L	10.00 NTU	82.5 mV	11.60 ft	300.00 ml/min
2/4/2020 3:11 PM	02:56:39	5.31 pH	16.89 °C	19.75 µS/cm	6.49 mg/L	9.83 NTU	82.6 mV	11.60 ft	300.00 ml/min
2/4/2020 3:16 PM	03:01:39	5.31 pH	16.82 °C	19.68 µS/cm	6.46 mg/L	9.90 NTU	82.3 mV	11.60 ft	300.00 ml/min

## Samples

Sample ID:	Description:
WGWA-5	Collect at 1517. 69F cloudy.

# Low-Flow Test Report:

Test Date / Time: 2/4/2020 2:26:41 PM

Project: Plant Wansley AP

Operator Name: Hunter Auld

<b>Location Name:</b> WGWA-6 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 50 ft <b>Top of Screen:</b> 54.5 ft <b>Total Depth:</b> 104.5 ft <b>Initial Depth to Water:</b> 12.9 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 79.5 ft <b>Estimated Total Volume Pumped:</b> 5.5 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 100 ml/min <b>Final Draw Down:</b> 0.9 ft	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714293
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## Test Notes:

Sampled at 1455 on 2-4-20.

## Weather Conditions:

Cloudy, 60s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/4/2020 2:26 PM	00:00	7.68 pH	18.17 °C	153.78 µS/cm	0.38 mg/L		85.6 mV	12.90 ft	100.00 ml/min
2/4/2020 2:27 PM	00:51	7.67 pH	17.90 °C	152.09 µS/cm	0.28 mg/L		86.6 mV	12.90 ft	100.00 ml/min
2/4/2020 2:32 PM	05:51	7.66 pH	17.57 °C	151.80 µS/cm	0.21 mg/L	0.70 NTU	45.8 mV	13.80 ft	100.00 ml/min
2/4/2020 2:37 PM	10:51	7.68 pH	17.55 °C	152.23 µS/cm	0.21 mg/L	0.80 NTU	15.5 mV	13.80 ft	100.00 ml/min
2/4/2020 2:42 PM	15:51	7.69 pH	17.46 °C	152.62 µS/cm	0.22 mg/L	0.80 NTU	-10.6 mV	13.80 ft	100.00 ml/min
2/4/2020 2:47 PM	20:51	7.71 pH	17.41 °C	152.44 µS/cm	0.23 mg/L	0.80 NTU	-17.5 mV	13.80 ft	100.00 ml/min
2/4/2020 2:52 PM	25:51	7.74 pH	17.41 °C	152.40 µS/cm	0.23 mg/L	0.60 NTU	-19.5 mV	13.80 ft	100.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 2/5/2020 12:01:37 PM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

<b>Location Name:</b> WGWA-7 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 29.6 ft <b>Total Depth:</b> 39.6 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 34.6 ft <b>Estimated Total Volume Pumped:</b> 3.86 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 125 ml/min <b>Final Draw Down:</b> 0 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/5/2020 12:01 PM	00:00	5.55 pH	17.63 °C	22.95 µS/cm	7.88 mg/L		135.4 mV		125.00 ml/min
2/5/2020 12:02 PM	01:22	5.54 pH	17.27 °C	22.74 µS/cm	7.88 mg/L	2.11 NTU	162.0 mV	22.40 ft	125.00 ml/min
2/5/2020 12:07 PM	06:22	5.54 pH	16.96 °C	22.07 µS/cm	9.08 mg/L	0.56 NTU	97.8 mV	22.40 ft	125.00 ml/min
2/5/2020 12:12 PM	11:22	5.54 pH	16.93 °C	22.40 µS/cm	8.97 mg/L	0.75 NTU	95.8 mV	22.40 ft	125.00 ml/min
2/5/2020 12:17 PM	16:22	5.52 pH	16.91 °C	22.23 µS/cm	9.28 mg/L	0.55 NTU	95.1 mV	22.40 ft	125.00 ml/min
2/5/2020 12:22 PM	21:22	5.53 pH	16.92 °C	22.14 µS/cm	9.06 mg/L	0.63 NTU	94.3 mV	22.40 ft	125.00 ml/min
2/5/2020 12:27 PM	26:22	5.53 pH	16.91 °C	21.99 µS/cm	9.13 mg/L	0.26 NTU	93.7 mV	22.40 ft	125.00 ml/min
2/5/2020 12:32 PM	31:22	5.54 pH	16.91 °C	22.32 µS/cm	8.93 mg/L	0.63 NTU	92.2 mV	22.40 ft	125.00 ml/min

## Samples

Sample ID:	Description:
WGWA-7	Collected at 1233. 65F overcast.

# Low-Flow Test Report:

**Test Date / Time:** 2/5/2020 11:05:44 AM

**Project:** Plant Wansley AP

**Operator Name:** Hunter Auld

<b>Location Name:</b> WGWA-18 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 30 ft <b>Total Depth:</b> 40 ft <b>Initial Depth to Water:</b> 18.04 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 35 ft <b>Estimated Total Volume Pumped:</b> <b>7 liter</b> <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 100 ml/min <b>Final Draw Down:</b> 21.1 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714293
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**Test Notes:**

Sampled at 1205 on 2-5-20.

**Weather Conditions:**

Cloudy, 60s.

**Low-Flow Readings:**

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/5/2020 11:05 AM	00:00	7.99 pH	16.95 °C	133.14 µS/cm	1.76 mg/L		84.8 mV	18.04 ft	100.00 ml/min
2/5/2020 11:10 AM	05:00	8.07 pH	16.72 °C	129.05 µS/cm	0.79 mg/L	1.20 NTU	64.8 mV	19.00 ft	100.00 ml/min
2/5/2020 11:15 AM	10:00	8.28 pH	16.52 °C	131.07 µS/cm	0.46 mg/L	1.30 NTU	43.1 mV	19.10 ft	100.00 ml/min
2/5/2020 11:20 AM	15:00	8.31 pH	16.52 °C	131.24 µS/cm	0.36 mg/L	0.90 NTU	29.2 mV	19.20 ft	100.00 ml/min
2/5/2020 11:25 AM	20:00	8.08 pH	16.56 °C	130.68 µS/cm	0.37 mg/L	0.60 NTU	21.8 mV	19.20 ft	100.00 ml/min
2/5/2020 11:30 AM	25:00	7.61 pH	16.56 °C	129.18 µS/cm	0.37 mg/L	1.20 NTU	18.1 mV	19.25 ft	100.00 ml/min
2/5/2020 11:35 AM	30:00	7.16 pH	16.61 °C	125.22 µS/cm	0.45 mg/L	0.60 NTU	16.5 mV	19.30 ft	100.00 ml/min
2/5/2020 11:40 AM	35:00	6.97 pH	16.66 °C	121.42 µS/cm	0.69 mg/L	0.60 NTU	17.9 mV	19.40 ft	100.00 ml/min
2/5/2020 11:45 AM	40:00	6.87 pH	16.67 °C	120.25 µS/cm	0.61 mg/L	0.60 NTU	18.9 mV	19.50 ft	100.00 ml/min
2/5/2020 11:50 AM	45:00	6.82 pH	16.70 °C	118.91 µS/cm	0.45 mg/L	0.60 NTU	19.8 mV	19.60 ft	100.00 ml/min
2/5/2020 11:55 AM	50:00	6.77 pH	16.70 °C	116.72 µS/cm	0.37 mg/L	0.70 NTU	20.8 mV	19.70 ft	100.00 ml/min
2/5/2020 12:00 PM	55:00	6.73 pH	16.73 °C	114.62 µS/cm	0.36 mg/L	0.60 NTU	21.5 mV	19.80 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 2/7/2020 10:02:43 AM

Project: Plant Wansley AP

Operator Name: Hunter Auld

<b>Location Name:</b> WGWC-8 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 49.4 ft <b>Total Depth:</b> 59.4 ft <b>Initial Depth to Water:</b> 1.13 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 54 ft <b>Estimated Total Volume Pumped:</b> 4.5 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 100 ml/min <b>Final Draw Down:</b> 11.64 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714293
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## Test Notes:

Sampled at 1035 on 2-7-20.

## Weather Conditions:

Cloudy, 30s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/7/2020 10:02 AM	00:00	5.46 pH	8.43 °C	657.32 µS/cm	4.14 mg/L		162.3 mV	1.13 ft	100.00 ml/min
2/7/2020 10:07 AM	05:00	5.41 pH	9.80 °C	614.54 µS/cm	1.43 mg/L	1.10 NTU	147.1 mV	1.80 ft	100.00 ml/min
2/7/2020 10:12 AM	10:00	5.40 pH	9.75 °C	617.40 µS/cm	1.79 mg/L	0.80 NTU	174.2 mV	1.80 ft	100.00 ml/min
2/7/2020 10:14 AM	11:24	5.39 pH	9.84 °C	620.56 µS/cm	1.77 mg/L	0.80 NTU	141.9 mV	1.80 ft	100.00 ml/min
2/7/2020 10:15 AM	12:44	5.39 pH	9.96 °C	624.96 µS/cm	1.78 mg/L	0.80 NTU	139.9 mV	1.80 ft	100.00 ml/min
2/7/2020 10:20 AM	17:44	5.38 pH	10.58 °C	631.94 µS/cm	1.67 mg/L	1.10 NTU	160.6 mV	1.90 ft	100.00 ml/min
2/7/2020 10:25 AM	22:44	5.37 pH	10.78 °C	636.31 µS/cm	1.59 mg/L	1.25 NTU	133.9 mV	2.00 ft	100.00 ml/min
2/7/2020 10:30 AM	27:44	5.38 pH	10.99 °C	634.84 µS/cm	1.59 mg/L	1.20 NTU	131.0 mV	2.10 ft	100.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 2/5/2020 3:13:50 PM

Project: Plant Wansley AP

Operator Name: Hunter Auld

Location Name: WGWC-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 51.42 ft Total Depth: 61.42 ft Initial Depth to Water: 18.15 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 55 ft Estimated Total Volume Pumped: 5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 30.6 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sampled at 1600 on 2-5-20.

## Weather Conditions:

Cloudy, 60s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/5/2020 3:13 PM	00:00	5.88 pH	19.77 °C	0.00 µS/cm	8.76 mg/L		137.5 mV	18.15 ft	100.00 ml/min
2/5/2020 3:18 PM	05:00	6.71 pH	19.17 °C	137.86 µS/cm	7.17 mg/L	1.00 NTU	107.6 mV	19.60 ft	100.00 ml/min
2/5/2020 3:21 PM	07:25	6.70 pH	19.10 °C	139.18 µS/cm	6.89 mg/L	1.00 NTU	107.5 mV	19.60 ft	100.00 ml/min
2/5/2020 3:26 PM	12:25	6.63 pH	19.02 °C	138.60 µS/cm	5.91 mg/L	1.30 NTU	103.1 mV	20.10 ft	100.00 ml/min
2/5/2020 3:31 PM	17:25	6.60 pH	18.98 °C	138.01 µS/cm	5.64 mg/L	1.00 NTU	100.5 mV	20.20 ft	100.00 ml/min
2/5/2020 3:36 PM	22:25	6.59 pH	18.97 °C	137.75 µS/cm	5.43 mg/L	1.10 NTU	98.7 mV	20.30 ft	100.00 ml/min
2/5/2020 3:41 PM	27:25	6.54 pH	18.96 °C	138.48 µS/cm	4.96 mg/L	1.10 NTU	94.6 mV	20.40 ft	100.00 ml/min
2/5/2020 3:46 PM	32:25	6.53 pH	18.91 °C	137.65 µS/cm	4.49 mg/L	1.00 NTU	94.9 mV	20.50 ft	100.00 ml/min
2/5/2020 3:51 PM	37:25	6.55 pH	18.95 °C	136.36 µS/cm	4.54 mg/L	1.40 NTU	94.2 mV	20.60 ft	100.00 ml/min
2/5/2020 3:56 PM	42:25	6.54 pH	18.97 °C	136.12 µS/cm	4.51 mg/L	1.20 NTU	93.4 mV	20.70 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/5/2020 10:52:08 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

<b>Location Name:</b> WGWC-10 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 138.95 ft <b>Total Depth:</b> 148.95 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 143.95 ft <b>Estimated Total Volume Pumped:</b> 3.62 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 115 ml/min <b>Final Draw Down:</b> 29 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/5/2020 10:52 AM	00:00	6.81 pH	17.21 °C	187.47 µS/cm	6.51 mg/L		174.0 mV		115.00 ml/min
2/5/2020 10:53 AM	01:44	6.43 pH	17.08 °C	127.61 µS/cm	5.26 mg/L		201.3 mV		115.00 ml/min
2/5/2020 10:58 AM	06:44	6.42 pH	16.72 °C	76.98 µS/cm	5.04 mg/L	7.30 NTU	138.0 mV	17.10 ft	115.00 ml/min
2/5/2020 11:03 AM	11:44	6.42 pH	16.64 °C	72.62 µS/cm	5.02 mg/L	4.47 NTU	116.1 mV	17.20 ft	115.00 ml/min
2/5/2020 11:08 AM	16:44	6.42 pH	16.64 °C	71.74 µS/cm	5.00 mg/L	3.47 NTU	98.1 mV	17.30 ft	115.00 ml/min
2/5/2020 11:13 AM	21:44	6.42 pH	16.63 °C	71.88 µS/cm	4.99 mg/L	3.98 NTU	87.7 mV	17.40 ft	115.00 ml/min
2/5/2020 11:18 AM	26:44	6.41 pH	16.64 °C	71.65 µS/cm	4.95 mg/L	2.35 NTU	84.4 mV	17.40 ft	115.00 ml/min
2/5/2020 11:23 AM	31:44	6.42 pH	16.69 °C	71.70 µS/cm	4.93 mg/L	2.15 NTU	81.5 mV	17.40 ft	115.00 ml/min

## Samples

Sample ID:	Description:
WGWC-10	Collected at 1124. 63F overcast.

# Low-Flow Test Report:

Test Date / Time: 2/5/2020 2:37:48 PM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

Location Name: WGWC-11 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 39.5 ft Total Depth: 49.5 ft Initial Depth to Water: 17.6 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 44.5 ft Estimated Total Volume Pumped: 4.50 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 48 in	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/5/2020 2:37 PM	00:00	5.87 pH	17.18 °C	36.13 µS/cm	7.19 mg/L		99.0 mV	17.60 ft	150.00 ml/min
2/5/2020 2:42 PM	05:00	5.84 pH	17.12 °C	35.43 µS/cm	6.80 mg/L	2.48 NTU	93.0 mV	24.60 ft	150.00 ml/min
2/5/2020 2:47 PM	10:00	5.85 pH	17.31 °C	36.71 µS/cm	6.90 mg/L	1.59 NTU	92.0 mV	22.50 ft	150.00 ml/min
2/5/2020 2:52 PM	15:00	5.87 pH	17.36 °C	37.55 µS/cm	6.94 mg/L	1.08 NTU	90.7 mV	22.10 ft	150.00 ml/min
2/5/2020 2:57 PM	20:00	5.88 pH	17.35 °C	37.99 µS/cm	6.89 mg/L	1.54 NTU	89.0 mV	21.80 ft	150.00 ml/min
2/5/2020 3:02 PM	25:00	5.88 pH	17.27 °C	38.40 µS/cm	6.87 mg/L	0.66 NTU	89.1 mV	21.70 ft	150.00 ml/min
2/5/2020 3:07 PM	30:00	5.89 pH	17.22 °C	38.60 µS/cm	6.87 mg/L	2.00 NTU	88.2 mV	21.70 ft	150.00 ml/min

## Samples

Sample ID:	Description:
WGWC-11	Collected at 1507. 69F overcast.

# Low-Flow Test Report:

**Test Date / Time:** 2/5/2020 1:10:22 PM

**Project:** Plant Wansley AP

**Operator Name:** Owens Fuquea

<b>Location Name:</b> WGWC-12 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 66.57 ft <b>Total Depth:</b> 76.57 ft <b>Initial Depth to Water:</b> 17.29 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 71.57 ft <b>Estimated Total Volume Pumped:</b> <b>9.93 liter</b> <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 150 ml/min <b>Final Draw Down:</b> 5 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/5/2020 1:10 PM	00:00	6.53 pH	17.51 °C	115.51 µS/cm	6.96 mg/L		61.7 mV	17.29 ft	150.00 ml/min
2/5/2020 1:11 PM	01:11	6.57 pH	17.45 °C	119.17 µS/cm	4.96 mg/L		22.5 mV	17.29 ft	150.00 ml/min
2/5/2020 1:16 PM	06:11	6.62 pH	17.56 °C	106.46 µS/cm	5.80 mg/L	594.00 NTU	26.3 mV	17.50 ft	150.00 ml/min
2/5/2020 1:21 PM	11:11	6.62 pH	17.57 °C	104.51 µS/cm	3.29 mg/L	321.00 NTU	28.8 mV	17.50 ft	150.00 ml/min
2/5/2020 1:26 PM	16:11	6.64 pH	17.63 °C	107.04 µS/cm	3.86 mg/L	173.00 NTU	27.7 mV	17.50 ft	150.00 ml/min
2/5/2020 1:31 PM	21:11	6.67 pH	17.62 °C	106.54 µS/cm	3.76 mg/L	81.70 NTU	26.3 mV	17.60 ft	150.00 ml/min
2/5/2020 1:36 PM	26:11	6.71 pH	17.46 °C	104.82 µS/cm	3.22 mg/L	28.80 NTU	23.9 mV	17.70 ft	150.00 ml/min
2/5/2020 1:41 PM	31:11	6.72 pH	17.49 °C	108.10 µS/cm	3.63 mg/L	27.30 NTU	24.0 mV	17.70 ft	150.00 ml/min
2/5/2020 1:46 PM	36:11	6.75 pH	17.58 °C	106.96 µS/cm	3.83 mg/L	18.30 NTU	23.4 mV	17.70 ft	150.00 ml/min
2/5/2020 1:51 PM	41:11	6.76 pH	17.54 °C	110.49 µS/cm	3.65 mg/L	14.10 NTU	23.0 mV	17.70 ft	150.00 ml/min
2/5/2020 1:56 PM	46:11	6.76 pH	17.49 °C	109.64 µS/cm	3.30 mg/L	11.50 NTU	23.0 mV	17.70 ft	150.00 ml/min
2/5/2020 2:01 PM	51:11	6.76 pH	17.40 °C	109.47 µS/cm	3.14 mg/L	9.60 NTU	23.2 mV	17.70 ft	150.00 ml/min
2/5/2020 2:06 PM	56:11	6.76 pH	17.44 °C	108.79 µS/cm	3.04 mg/L	9.07 NTU	24.8 mV	17.70 ft	150.00 ml/min
2/5/2020 2:11 PM	01:01:11	6.76 pH	17.48 °C	108.46 µS/cm	2.82 mg/L	8.76 NTU	24.9 mV	17.70 ft	150.00 ml/min
2/5/2020 2:16 PM	01:06:11	6.76 pH	17.45 °C	107.23 µS/cm	2.70 mg/L	4.82 NTU	24.8 mV	17.70 ft	150.00 ml/min

## Samples

Sample ID:	Description:
WGWC-12	Collected at 1416. 68F overcast.

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 2/5/2020 12:45:45 PM

Project: Plant Wansley AP

Operator Name: Hunter Auld

Location Name: WGWC-13 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 85.55 ft Total Depth: 95.55 ft Initial Depth to Water: 16.97 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 90 ft Estimated Total Volume Pumped: 5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 23.2 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sampled at 1335 on 2-5-20.

## Weather Conditions:

Cloudy, 60s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/5/2020 12:45 PM	00:00	6.96 pH	16.61 °C	77.96 µS/cm	8.71 mg/L		18.5 mV	16.97 ft	100.00 ml/min
2/5/2020 12:50 PM	05:00	6.56 pH	16.81 °C	76.79 µS/cm	3.73 mg/L	3.00 NTU	16.4 mV	17.80 ft	100.00 ml/min
2/5/2020 12:55 PM	10:00	6.51 pH	17.01 °C	71.79 µS/cm	3.73 mg/L	5.70 NTU	17.1 mV	18.00 ft	100.00 ml/min
2/5/2020 1:00 PM	15:00	6.47 pH	17.07 °C	66.16 µS/cm	2.94 mg/L	6.50 NTU	23.0 mV	18.40 ft	100.00 ml/min
2/5/2020 1:05 PM	20:00	6.45 pH	17.19 °C	65.19 µS/cm	3.33 mg/L	5.30 NTU	29.0 mV	18.50 ft	100.00 ml/min
2/5/2020 1:10 PM	25:00	6.45 pH	17.22 °C	64.91 µS/cm	2.12 mg/L	5.50 NTU	36.1 mV	18.60 ft	100.00 ml/min
2/5/2020 1:15 PM	30:00	6.45 pH	17.30 °C	64.86 µS/cm	1.89 mg/L	5.70 NTU	42.1 mV	18.70 ft	100.00 ml/min
2/5/2020 1:20 PM	35:00	6.43 pH	17.34 °C	64.65 µS/cm	2.01 mg/L	5.70 NTU	47.5 mV	18.80 ft	100.00 ml/min
2/5/2020 1:25 PM	40:00	6.45 pH	17.37 °C	65.38 µS/cm	1.81 mg/L	5.20 NTU	55.2 mV	18.85 ft	100.00 ml/min
2/5/2020 1:30 PM	45:00	6.44 pH	17.35 °C	65.10 µS/cm	2.00 mg/L	4.90 NTU	59.5 mV	18.90 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/5/2020 1:58:48 PM

Project: Plant Wansley AP

Operator Name: Hunter Auld

Location Name: WGWC-14A Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.08 ft Total Depth: 43.08 ft Initial Depth to Water: 15.4 ft	Pump Type: Peristaltic Pump Tubing Type: Poly Pump Intake From TOC: 37 ft Estimated Total Volume Pumped: 5.6 liter Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 22.2 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sampled at 1440 on 2-5-20.

## Weather Conditions:

Cloudy, 60s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/5/2020 1:58 PM	00:00	5.64 pH	18.13 °C	26.54 µS/cm	4.64 mg/L	1.50 NTU	89.9 mV	15.40 ft	125.00 ml/min
2/5/2020 2:03 PM	05:00	5.46 pH	17.77 °C	25.24 µS/cm	1.50 mg/L	1.50 NTU	109.9 mV	16.60 ft	125.00 ml/min
2/5/2020 2:08 PM	10:00	5.42 pH	17.77 °C	25.09 µS/cm	0.92 mg/L	1.40 NTU	121.5 mV	16.70 ft	125.00 ml/min
2/5/2020 2:13 PM	15:00	5.41 pH	17.78 °C	25.04 µS/cm	0.60 mg/L	1.20 NTU	126.6 mV	16.80 ft	125.00 ml/min
2/5/2020 2:18 PM	20:00	5.45 pH	17.73 °C	26.02 µS/cm	0.71 mg/L	0.90 NTU	129.1 mV	16.90 ft	125.00 ml/min
2/5/2020 2:23 PM	25:00	5.50 pH	17.69 °C	29.86 µS/cm	0.59 mg/L	0.90 NTU	128.7 mV	17.00 ft	125.00 ml/min
2/5/2020 2:28 PM	30:00	5.53 pH	17.64 °C	31.80 µS/cm	0.49 mg/L	1.00 NTU	123.8 mV	17.10 ft	125.00 ml/min
2/5/2020 2:33 PM	35:00	5.52 pH	17.64 °C	31.72 µS/cm	0.31 mg/L	1.10 NTU	121.8 mV	17.20 ft	125.00 ml/min
2/5/2020 2:38 PM	40:00	5.52 pH	17.60 °C	32.12 µS/cm	0.23 mg/L	1.10 NTU	120.3 mV	17.25 ft	125.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2020 10:03:01 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

<b>Location Name:</b> WGWC-15 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 43.36 ft <b>Total Depth:</b> 53.36 ft <b>Initial Depth to Water:</b> 17.5 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 48.36 ft <b>Estimated Total Volume Pumped:</b> 2.80 liter <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 80 ml/min <b>Final Draw Down:</b> 60 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/7/2020 10:03 AM	00:00	7.63 pH	10.07 °C	256.27 µS/cm	3.59 mg/L		128.1 mV	17.50 ft	80.00 ml/min
2/7/2020 10:08 AM	05:00	7.63 pH	11.29 °C	245.27 µS/cm	3.16 mg/L	0.59 NTU	65.3 mV	20.90 ft	80.00 ml/min
2/7/2020 10:13 AM	10:00	7.63 pH	11.15 °C	240.61 µS/cm	3.14 mg/L	0.58 NTU	53.0 mV	21.40 ft	80.00 ml/min
2/7/2020 10:18 AM	15:00	7.64 pH	11.24 °C	239.49 µS/cm	3.10 mg/L	0.58 NTU	46.4 mV	21.80 ft	80.00 ml/min
2/7/2020 10:23 AM	20:00	7.64 pH	11.56 °C	240.03 µS/cm	3.09 mg/L	0.57 NTU	42.3 mV	22.10 ft	80.00 ml/min
2/7/2020 10:28 AM	25:00	7.65 pH	11.47 °C	236.27 µS/cm	3.02 mg/L	0.60 NTU	45.8 mV	22.30 ft	80.00 ml/min
2/7/2020 10:33 AM	30:00	7.65 pH	11.93 °C	239.16 µS/cm	3.04 mg/L	0.59 NTU	42.0 mV	22.40 ft	80.00 ml/min
2/7/2020 10:38 AM	35:00	7.66 pH	11.60 °C	238.75 µS/cm	3.00 mg/L	0.60 NTU	34.1 mV	22.50 ft	80.00 ml/min

## Samples

Sample ID:	Description:
WGWC-15	Called at 1038. 38F cloudy.

# Low-Flow Test Report:

Test Date / Time: 2/7/2020 10:56:42 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

Location Name: WGWC-16 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 24.78 ft Total Depth: 34.78 ft Initial Depth to Water: 34.78 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 29.78 ft Estimated Total Volume Pumped: 4.11 liter Flow Cell Volume: 90 ml Final Flow Rate: 130 ml/min Final Draw Down: 2 in	Instrument Used: Aqua TROLL 400 Serial Number: 714344
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## Test Notes:

Starting WL 16.41

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/7/2020 10:56 AM	00:00	5.58 pH	11.10 °C	621.69 µS/cm	6.12 mg/L		81.4 mV	16.41 ft	130.00 ml/min
2/7/2020 11:01 AM	05:00	5.17 pH	15.21 °C	509.55 µS/cm	5.45 mg/L		102.5 mV	16.50 ft	130.00 ml/min
2/7/2020 11:03 AM	06:18	5.16 pH	15.31 °C	509.62 µS/cm	5.35 mg/L	0.78 NTU	147.9 mV	16.50 ft	130.00 ml/min
2/7/2020 11:03 AM	07:05	5.16 pH	15.34 °C	504.87 µS/cm	5.32 mg/L	0.77 NTU	110.3 mV	16.50 ft	130.00 ml/min
2/7/2020 11:08 AM	12:05	5.16 pH	15.27 °C	500.11 µS/cm	5.19 mg/L	0.50 NTU	105.7 mV	16.50 ft	130.00 ml/min
2/7/2020 11:13 AM	17:05	5.16 pH	15.16 °C	500.65 µS/cm	5.22 mg/L	0.41 NTU	101.4 mV	16.50 ft	130.00 ml/min
2/7/2020 11:18 AM	22:05	5.16 pH	15.34 °C	501.37 µS/cm	5.30 mg/L	0.52 NTU	148.8 mV	16.50 ft	130.00 ml/min
2/7/2020 11:23 AM	27:05	5.17 pH	15.31 °C	498.63 µS/cm	5.28 mg/L	0.43 NTU	148.3 mV	16.50 ft	130.00 ml/min
2/7/2020 11:28 AM	31:37	5.17 pH	15.43 °C	491.79 µS/cm	5.34 mg/L	0.91 NTU	102.9 mV	16.50 ft	130.00 ml/min

## Samples

Sample ID:	Description:
WGWC-16	Collected at 1128. 38F cloudy.



# Low-Flow Test Report:

Test Date / Time: 2/7/2020 11:30:31 AM

Project: Plant Wansley AP

Operator Name: Hunter Auld

Location Name: WGWC-17 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 85.94 ft Total Depth: 95.94 ft Initial Depth to Water: 27.52 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 90 ft Estimated Total Volume Pumped: 7.50 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 14.2 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sampled at 1220 on 2-7-20.

## Weather Conditions:

Cloudy, 30s.

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
2/7/2020 11:30 AM	00:00	6.34 pH	12.72 °C	87.39 µS/cm	2.95 mg/L		71.5 mV	27.52 ft	150.00 ml/min
2/7/2020 11:35 AM	05:00	6.30 pH	14.33 °C	83.22 µS/cm	1.63 mg/L	4.10 NTU	61.5 mV	28.60 ft	150.00 ml/min
2/7/2020 11:40 AM	10:00	6.30 pH	14.32 °C	85.60 µS/cm	1.23 mg/L	5.90 NTU	58.7 mV	28.60 ft	150.00 ml/min
2/7/2020 11:45 AM	15:00	6.32 pH	14.46 °C	86.07 µS/cm	1.33 mg/L	4.20 NTU	54.2 mV	28.60 ft	150.00 ml/min
2/7/2020 11:50 AM	20:00	6.32 pH	14.43 °C	86.79 µS/cm	2.23 mg/L	2.80 NTU	50.3 mV	28.70 ft	150.00 ml/min
2/7/2020 11:55 AM	25:00	6.32 pH	14.70 °C	88.24 µS/cm	1.43 mg/L	2.70 NTU	46.5 mV	28.70 ft	150.00 ml/min
2/7/2020 12:00 PM	30:00	6.32 pH	14.68 °C	89.69 µS/cm	0.71 mg/L	2.60 NTU	43.9 mV	28.70 ft	150.00 ml/min
2/7/2020 12:05 PM	35:00	6.33 pH	14.76 °C	89.78 µS/cm	0.19 mg/L	2.40 NTU	41.1 mV	28.70 ft	150.00 ml/min
2/7/2020 12:10 PM	40:00	6.34 pH	14.76 °C	90.64 µS/cm	0.24 mg/L	1.80 NTU	38.4 mV	28.70 ft	150.00 ml/min
2/7/2020 12:15 PM	45:00	6.34 pH	14.68 °C	92.48 µS/cm	0.20 mg/L	2.30 NTU	36.1 mV	28.70 ft	150.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 2/7/2020 11:48:44 AM

Project: Plant Wansley AP

Operator Name: Owens Fuquea

Location Name: WGWC-19  Well Diameter: 2 in  Casing Type: PVC  Screen Length: 10 ft  Top of Screen: 84.84 ft  Total Depth: 94.84 ft  Initial Depth to Water: 18.32 ft	Pump Type: QED Bladder Pump  Tubing Type: Poly  Pump Intake From TOC: 89.4 ft  Estimated Total Volume Pumped: 6.00 liter  Flow Cell Volume: 90 ml  Final Flow Rate: 200 ml/min Final Draw Down: 6 in	Instrument Used: Aqua TROLL 400  Serial Number: 714344
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/7/2020 11:48 AM	00:00	6.76 pH	13.30 °C	143.30 µS/cm	1.22 mg/L		6.1 mV	18.32 ft	200.00 ml/min
2/7/2020 11:53 AM	05:00	6.93 pH	14.35 °C	167.74 µS/cm	0.23 mg/L	0.80 NTU	5.3 mV	18.70 ft	200.00 ml/min
2/7/2020 11:58 AM	10:00	6.95 pH	14.69 °C	171.33 µS/cm	0.17 mg/L	0.78 NTU	15.3 mV	18.70 ft	200.00 ml/min
2/7/2020 12:03 PM	15:00	6.99 pH	14.53 °C	173.79 µS/cm	0.14 mg/L	1.47 NTU	15.6 mV	18.80 ft	200.00 ml/min
2/7/2020 12:08 PM	20:00	7.03 pH	14.67 °C	179.73 µS/cm	0.14 mg/L	1.08 NTU	16.8 mV	18.80 ft	200.00 ml/min
2/7/2020 12:13 PM	25:00	7.06 pH	14.56 °C	184.47 µS/cm	0.15 mg/L	1.11 NTU	15.5 mV	18.80 ft	200.00 ml/min
2/7/2020 12:18 PM	30:00	7.08 pH	14.53 °C	187.43 µS/cm	0.16 mg/L	0.98 NTU	15.3 mV	18.80 ft	200.00 ml/min

## Samples

Sample ID:	Description:
WGWC-19	Collected at 1220. 38F cloudy.

# Low-Flow Test Report:

Test Date / Time: 3/16/2020 1:21:25 PM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWA-1 Well Diameter: 2 cm Casing Type: PVC Screen Length: 50 ft Top of Screen: 79 ft Total Depth: 129.6 ft Initial Depth to Water: 19.49 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 105 ft Estimated Total Volume Pumped: 0.9 liter Flow Cell Volume: 90 ml Final Flow Rate: 75 ml/min Final Draw Down: 1 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 14:15

Weather: cloudy 50s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/16/2020 1:21 PM	00:00	6.01 pH	14.67 °C	34.58 µS/cm	7.92 mg/L		98.2 mV	19.49 ft	75.00 ml/min
3/16/2020 1:26 PM	05:00	5.86 pH	15.11 °C	35.51 µS/cm	1.28 mg/L	0.60 NTU	98.9 mV	19.60 ft	75.00 ml/min
3/16/2020 1:31 PM	10:00	5.81 pH	15.57 °C	35.07 µS/cm	0.84 mg/L	0.60 NTU	99.8 mV	19.60 ft	75.00 ml/min
3/16/2020 1:36 PM	15:00	5.80 pH	15.74 °C	35.14 µS/cm	0.96 mg/L	0.70 NTU	99.2 mV	19.60 ft	75.00 ml/min
3/16/2020 1:41 PM	20:00	5.72 pH	15.42 °C	34.58 µS/cm	1.21 mg/L	0.70 NTU	96.1 mV	19.60 ft	75.00 ml/min
3/16/2020 1:46 PM	25:00	5.58 pH	15.58 °C	35.19 µS/cm	1.55 mg/L	0.70 NTU	94.9 mV	19.60 ft	75.00 ml/min
3/16/2020 1:51 PM	30:00	5.50 pH	15.98 °C	35.40 µS/cm	2.14 mg/L	0.60 NTU	93.8 mV	19.60 ft	75.00 ml/min
3/16/2020 1:56 PM	35:00	5.43 pH	16.15 °C	35.43 µS/cm	2.29 mg/L	0.50 NTU	93.6 mV	19.60 ft	75.00 ml/min
3/16/2020 2:01 PM	40:00	5.37 pH	16.25 °C	35.39 µS/cm	2.28 mg/L	0.40 NTU	92.3 mV	19.60 ft	75.00 ml/min
3/16/2020 2:06 PM	45:00	5.32 pH	16.19 °C	35.33 µS/cm	2.22 mg/L	0.40 NTU	92.4 mV	19.60 ft	75.00 ml/min
3/16/2020 2:11 PM	50:00	5.29 pH	16.31 °C	35.42 µS/cm	2.14 mg/L	0.40 NTU	91.5 mV	19.60 ft	75.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

Test Date / Time: 3/16/2020 11:47:23 AM

Project: Plant Wansley AP

Operator Name: Anna

Location Name: WGWA-2 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 92.7 ft Total Depth: 102.65 ft Initial Depth to Water: 7.88 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 97 ft Estimated Total Volume Pumped: 3.8 liter Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 2.6 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 12:25

Weather: Cloudy 50s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/16/2020 11:47 AM	00:00	6.38 pH	15.50 °C	134.31 µS/cm	3.59 mg/L		108.9 mV	7.88 ft	125.00 ml/min
3/16/2020 11:52 AM	05:00	6.05 pH	15.31 °C	127.35 µS/cm	1.11 mg/L	0.40 NTU	99.4 mV	8.10 ft	125.00 ml/min
3/16/2020 11:57 AM	10:00	6.02 pH	14.95 °C	125.46 µS/cm	1.04 mg/L	0.40 NTU	99.3 mV	8.10 ft	125.00 ml/min
3/16/2020 12:02 PM	15:00	6.01 pH	14.85 °C	123.14 µS/cm	0.80 mg/L	0.50 NTU	98.2 mV	8.10 ft	125.00 ml/min
3/16/2020 12:07 PM	20:00	6.01 pH	14.82 °C	122.82 µS/cm	0.55 mg/L	0.50 NTU	97.6 mV	8.10 ft	125.00 ml/min
3/16/2020 12:12 PM	25:00	6.01 pH	14.86 °C	122.49 µS/cm	0.47 mg/L	0.40 NTU	97.4 mV	8.10 ft	125.00 ml/min
3/16/2020 12:17 PM	30:00	6.01 pH	14.86 °C	123.55 µS/cm	0.42 mg/L	0.40 NTU	97.6 mV	8.10 ft	125.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 3/17/2020 11:00:51 AM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWA-3 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 9 ft Total Depth: 19 ft Initial Depth to Water: 1.94 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 14 ft Estimated Total Volume Pumped: 9 liter Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 1 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 11:35. Dup 1 here

Weather: Cloudy 60s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/17/2020 11:00 AM	00:00	6.90 pH	16.07 °C	35.48 µS/cm	8.55 mg/L		-11.1 mV	1.94 ft	300.00 ml/min
3/17/2020 11:05 AM	05:00	5.86 pH	16.43 °C	31.95 µS/cm	6.14 mg/L	3.50 NTU	33.8 mV	2.00 ft	300.00 ml/min
3/17/2020 11:10 AM	10:00	5.75 pH	16.48 °C	31.69 µS/cm	6.03 mg/L	1.50 NTU	57.7 mV	2.00 ft	300.00 ml/min
3/17/2020 11:15 AM	15:00	5.66 pH	16.49 °C	31.73 µS/cm	6.02 mg/L	0.90 NTU	72.2 mV	2.00 ft	300.00 ml/min
3/17/2020 11:20 AM	20:00	5.63 pH	16.51 °C	31.70 µS/cm	6.02 mg/L	0.40 NTU	78.2 mV	2.00 ft	300.00 ml/min
3/17/2020 11:25 AM	25:00	5.62 pH	16.51 °C	31.68 µS/cm	6.02 mg/L	0.30 NTU	81.4 mV	2.00 ft	300.00 ml/min
3/17/2020 11:30 AM	30:00	5.61 pH	16.51 °C	31.51 µS/cm	6.02 mg/L	0.20 NTU	83.4 mV	2.00 ft	300.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 3/17/2020 10:05:09 AM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWA-4 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 64 ft Total Depth: 73.9 ft Initial Depth to Water: 1.15 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 69 ft Estimated Total Volume Pumped: 1.2 liter Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 7 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 10:40

Weather: Cloudy, light precipitation

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/17/2020 10:05 AM	00:00	6.83 pH	14.09 °C	155.17 µS/cm	4.85 mg/L		115.4 mV	1.15 ft	150.00 ml/min
3/17/2020 10:10 AM	05:00	6.72 pH	15.04 °C	131.75 µS/cm	1.00 mg/L	3.70 NTU	57.9 mV	1.70 ft	150.00 ml/min
3/17/2020 10:15 AM	10:00	6.68 pH	15.13 °C	130.70 µS/cm	0.53 mg/L	3.60 NTU	40.5 mV	1.80 ft	150.00 ml/min
3/17/2020 10:20 AM	15:00	6.73 pH	15.21 °C	130.41 µS/cm	0.33 mg/L	3.50 NTU	25.4 mV	1.70 ft	150.00 ml/min
3/17/2020 10:25 AM	20:00	6.76 pH	15.24 °C	129.97 µS/cm	0.26 mg/L	3.60 NTU	13.0 mV	1.70 ft	150.00 ml/min
3/17/2020 10:30 AM	25:00	6.80 pH	15.30 °C	129.05 µS/cm	0.21 mg/L	3.60 NTU	1.7 mV	1.70 ft	150.00 ml/min
3/17/2020 10:35 AM	30:00	6.83 pH	15.34 °C	128.88 µS/cm	0.20 mg/L	1.90 NTU	-7.9 mV	1.70 ft	150.00 ml/min

## Samples

Sample ID:	Description:

Product Name: Low-Flow System

Date: 2020-03-17 12:43:19

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Ponds  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model HACH

## Pump Information:

Pump Model/Type QED Bladder Pump  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 23 ft

Pump placement from TOC 18 ft

## Well Information:

Well ID WGWA-5  
 Well diameter 2 in  
 Well Total Depth 23.19 ft  
 Screen Length 10 ft  
 Depth to Water 7.08 ft

## Pumping Information:

Final Pumping Rate 200 mL/min  
 Total System Volume 0.1926587 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 5 in  
 Total Volume Pumped 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			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:22:10	1500.02	15.62	5.61	24.38	5.07	7.39	5.61	203.41
Last 5	12:27:10	1800.02	15.65	5.50	24.14	4.81	7.44	5.60	200.96
Last 5	12:32:10	2100.02	15.71	5.42	23.97	4.77	7.48	5.62	199.23
Last 5	12:37:10	2400.02	15.68	5.39	23.86	4.60	7.52	5.63	195.24
Last 5	12:42:10	2700.03	15.80	5.34	23.76	4.64	7.56	5.68	193.21
Variance 0		0.06	-0.07		-0.17			0.02	-1.73
Variance 1		-0.02	-0.04		-0.11			0.01	-3.99
Variance 2		0.12	-0.05		-0.10			0.05	-2.03

## Notes

Sampled at 1250. Cloudy 63 degrees

## Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 11:17:32

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 104.5 ft  
 Pump placement from TOC 99 ft

## Well Information:

Well ID WGWA6  
 Well diameter 2 in  
 Well Total Depth 104.5 ft  
 Screen Length 10 ft  
 Depth to Water 8.00 ft

## Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.5564277 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 6 in  
 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			+/- 1	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 25
Last 5	10:55:17	1200.03	15.66	8.14	169.09	3.40	8.50	0.93	-135.36
Last 5	11:00:17	1500.03	15.85	8.06	169.14	3.75	8.56	0.86	-138.85
Last 5	11:05:17	1800.02	15.93	8.02	169.11	3.91	8.61	0.85	-138.80
Last 5	11:10:18	2101.03	16.02	7.98	169.32	4.03	8.67	0.80	-139.16
Last 5	11:15:18	2401.02	16.17	7.95	169.27	4.22	8.73	0.73	-140.55
Variance 0		0.09	-0.05		-0.04			-0.01	0.05
Variance 1		0.09	-0.03		0.22			-0.06	-0.35
Variance 2		0.15	-0.03		-0.05			-0.07	-1.40

## Notes

Sampled at 1115. Cloudy 58 degrees

## Grab Samples

Product Name: Low-Flow System

Date: 2020-03-17 14:07:00

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model HACH

## Pump Information:

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

Pump placement from TOC 35 ft

## Well Information:

Well ID WGWA-7  
 Well diameter 2 in  
 Well Total Depth 39.60 ft  
 Screen Length 10 ft  
 Depth to Water 15.43 ft

## Pumping Information:

Final Pumping Rate 140 mL/min  
 Total System Volume 0.1703416 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 2 in  
 Total Volume Pumped 10 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 25
Last 5	13:45:42	600.02	16.69	5.35	21.96	0.97	15.50	7.64	193.51
Last 5	13:50:42	900.03	16.81	5.33	21.94	0.88	15.55	7.62	187.24
Last 5	13:55:42	1200.03	16.83	5.32	21.99	0.78	15.59	7.62	181.65
Last 5	14:00:42	1500.02	16.92	5.32	22.03	0.72	15.64	7.61	176.91
Last 5	14:05:42	1800.03	16.92	5.32	22.03	0.67	15.69	7.61	172.14
Variance 0		0.02	-0.01		0.04			-0.00	-5.59
Variance 1		0.09	0.00		0.04			-0.01	-4.74
Variance 2		0.00	0.00		0.00			-0.00	-4.76

## Notes

Sampled at 1405. Cloudy 64 degrees

## Grab Samples

# Low-Flow Test Report:

**Test Date / Time:** 3/17/2020 12:51:34 PM

**Project:** Plant Wansley AP

**Operator Name:** Anna Schnittker

<b>Location Name:</b> WGWA-18 <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 30 ft <b>Total Depth:</b> 40 ft <b>Initial Depth to Water:</b> 10.22 ft	<b>Pump Type:</b> QED Bladder Pump <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 35 ft <b>Estimated Total Volume Pumped:</b> <b>9.5 liter</b> <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 100 ml/min <b>Final Draw Down:</b> 22.6 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714293
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## Test Notes:

Sample time: 14:35

Weather: Cloudy 60s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/17/2020 12:51 PM	00:00	6.72 pH	16.93 °C	143.34 µS/cm	7.92 mg/L		106.0 mV	10.22 ft	100.00 ml/min
3/17/2020 12:56 PM	05:00	7.21 pH	15.97 °C	153.03 µS/cm	2.59 mg/L	4.70 NTU	101.2 mV	12.10 ft	100.00 ml/min
3/17/2020 1:01 PM	10:00	7.30 pH	15.98 °C	154.27 µS/cm	2.25 mg/L	4.10 NTU	99.5 mV	12.10 ft	100.00 ml/min
3/17/2020 1:06 PM	15:00	7.32 pH	15.88 °C	154.31 µS/cm	2.19 mg/L	3.20 NTU	98.5 mV	12.10 ft	100.00 ml/min
3/17/2020 1:11 PM	20:00	7.41 pH	15.80 °C	155.74 µS/cm	1.63 mg/L	3.10 NTU	97.0 mV	12.10 ft	100.00 ml/min
3/17/2020 1:16 PM	25:00	7.31 pH	15.93 °C	153.81 µS/cm	1.84 mg/L	2.70 NTU	95.7 mV	12.10 ft	100.00 ml/min
3/17/2020 1:21 PM	30:00	7.18 pH	15.96 °C	150.18 µS/cm	1.75 mg/L	2.50 NTU	94.6 mV	12.10 ft	100.00 ml/min
3/17/2020 1:26 PM	35:00	7.06 pH	16.04 °C	146.43 µS/cm	1.63 mg/L	2.40 NTU	93.1 mV	12.10 ft	100.00 ml/min
3/17/2020 1:31 PM	40:00	6.99 pH	16.12 °C	143.90 µS/cm	1.57 mg/L	2.00 NTU	91.5 mV	12.10 ft	100.00 ml/min
3/17/2020 1:36 PM	45:00	6.92 pH	16.14 °C	141.07 µS/cm	1.51 mg/L	1.20 NTU	89.7 mV	12.10 ft	100.00 ml/min
3/17/2020 1:41 PM	50:00	6.85 pH	16.21 °C	138.31 µS/cm	1.50 mg/L	1.20 NTU	88.0 mV	12.10 ft	100.00 ml/min
3/17/2020 1:46 PM	55:00	6.80 pH	16.18 °C	133.74 µS/cm	1.49 mg/L	1.30 NTU	86.3 mV	12.10 ft	100.00 ml/min
3/17/2020 1:51 PM	01:00:00	6.72 pH	16.20 °C	128.70 µS/cm	1.55 mg/L	1.30 NTU	85.1 mV	12.10 ft	100.00 ml/min
3/17/2020 1:56 PM	01:05:00	6.66 pH	16.14 °C	124.25 µS/cm	1.60 mg/L	1.30 NTU	84.5 mV	12.10 ft	100.00 ml/min
3/17/2020 2:01 PM	01:10:00	6.62 pH	16.16 °C	121.24 µS/cm	1.63 mg/L	1.00 NTU	83.8 mV	12.10 ft	100.00 ml/min

3/17/2020 2:06 PM	01:15:00	6.54 pH	16.16 °C	115.10 µS/cm	1.77 mg/L	0.90 NTU	83.6 mV	12.10 ft	100.00 ml/min
3/17/2020 2:11 PM	01:20:00	6.49 pH	16.14 °C	109.98 µS/cm	1.87 mg/L	0.70 NTU	83.5 mV	12.10 ft	100.00 ml/min
3/17/2020 2:16 PM	01:25:00	6.42 pH	16.14 °C	104.89 µS/cm	1.99 mg/L	0.70 NTU	84.0 mV	12.10 ft	100.00 ml/min
3/17/2020 2:21 PM	01:30:00	6.37 pH	16.14 °C	100.23 µS/cm	2.08 mg/L	0.70 NTU	83.7 mV	12.10 ft	100.00 ml/min
3/17/2020 2:26 PM	01:35:00	6.36 pH	16.11 °C	99.89 µS/cm	2.17 mg/L	0.70 NTU	84.4 mV	12.10 ft	100.00 ml/min

## Samples

Sample ID:	Description:

Created using VuSitu from In-Situ, Inc.

Product Name: Low-Flow System

Date: 2020-03-19 13:52:06

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 407447  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 60 ft  
 Pump placement from TOC 55 ft

## Well Information:

Well ID WGWC-8  
 Well diameter 2 in  
 Well Total Depth 59.40 ft  
 Screen Length 10 ft  
 Depth to Water 2.28 ft

## Pumping Information:

Final Pumping Rate 100 mL/min  
 Total System Volume 0.3578054 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 12 in  
 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			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	13:31:27	600.03	17.63	6.98	658.96	2.94	2.73	1.35	158.59
Last 5	13:36:27	900.03	17.32	6.63	719.22	2.77	2.85	1.30	169.20
Last 5	13:41:27	1200.02	17.30	6.45	728.95	2.52	2.93	1.25	170.40
Last 5	13:46:27	1500.02	17.31	6.44	730.99	2.22	3.06	1.26	172.95
Last 5	13:51:27	1800.02	17.32	6.43	732.57	2.10	3.17	1.25	169.90
Variance 0		-0.02	-0.19		9.73			-0.05	1.20
Variance 1		0.00	-0.01		2.04			0.01	2.54
Variance 2		0.01	-0.01		1.57			-0.01	-3.04

## Notes

Sampled at 1249. Sunny 75 degrees

## Grab Samples

Product Name: Low-Flow System

Date: 2020-03-19 12:25:51

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 61 ft  
 Pump placement from TOC 56 ft

## Well Information:

Well ID WGWC-9  
 Well diameter 2 in  
 Well Total Depth 61.42 ft  
 Screen Length 10 ft  
 Depth to Water 16.45 ft

## Pumping Information:

Final Pumping Rate 80 mL/min  
 Total System Volume 0.1792685 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 25 in  
 Total Volume Pumped 0 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 25
Last 5	12:04:55	3301.03	22.94	6.81	171.07	0.68	18.88	6.10	106.95
Last 5	12:09:55	3601.03	21.71	6.79	161.76	0.66	18.86	6.07	103.31
Last 5	12:14:55	3901.03	20.97	6.72	166.75	0.39	18.83	5.95	102.08
Last 5	12:19:56	4202.03	21.32	6.66	166.44	0.38	18.80	5.88	100.50
Last 5	12:24:56	4502.03	21.19	6.64	166.10	0.45	18.75	5.83	100.51
Variance 0		-0.74	-0.07		5.00			-0.12	-1.22
Variance 1		0.36	-0.06		-0.31			-0.07	-1.58
Variance 2		-0.13	-0.03		-0.34			-0.05	0.01

## Notes

Sampled at 1122. Sunny 69 degrees

## Grab Samples

# Low-Flow Test Report:

Test Date / Time: 3/18/2020 2:20:02 PM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWC-10 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 137 ft Total Depth: 147.16 ft Initial Depth to Water: 10.95 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 142 ft Estimated Total Volume Pumped: 3 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 25 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 14:55

Weather: Cloudy 70s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/18/2020 2:20 PM	00:00	7.01 pH	23.67 °C	68.72 µS/cm	4.44 mg/L		71.1 mV	10.95 ft	100.00 ml/min
3/18/2020 2:25 PM	05:00	6.32 pH	18.30 °C	70.58 µS/cm	1.27 mg/L	4.60 NTU	74.3 mV	13.00 ft	100.00 ml/min
3/18/2020 2:30 PM	10:00	6.35 pH	17.95 °C	70.73 µS/cm	3.56 mg/L	4.50 NTU	75.6 mV	13.00 ft	100.00 ml/min
3/18/2020 2:35 PM	15:00	6.40 pH	17.88 °C	71.76 µS/cm	4.79 mg/L	3.00 NTU	76.0 mV	13.00 ft	100.00 ml/min
3/18/2020 2:40 PM	20:00	6.41 pH	17.79 °C	71.80 µS/cm	5.02 mg/L	2.70 NTU	76.6 mV	13.00 ft	100.00 ml/min
3/18/2020 2:45 PM	25:00	6.40 pH	17.90 °C	71.48 µS/cm	5.01 mg/L	2.50 NTU	77.0 mV	13.00 ft	100.00 ml/min
3/18/2020 2:50 PM	30:00	6.40 pH	17.90 °C	71.20 µS/cm	5.02 mg/L	1.80 NTU	77.4 mV	13.00 ft	100.00 ml/min

## Samples

Sample ID:	Description:

Product Name: Low-Flow System

Date: 2020-03-18 13:05:52

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 50 ft  
 Pump placement from TOC 45 ft

## Well Information:

Well ID WGWC-11  
 Well diameter 2 in  
 Well Total Depth 49.50 ft  
 Screen Length 10 ft  
 Depth to Water 12.58 ft

## Pumping Information:

Final Pumping Rate 150 mL/min  
 Total System Volume 0.3131711 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 13 in  
 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			+/- 1	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 25
Last 5	12:45:10	1200.03	18.57	6.13	34.39	0.82	13.85	7.64	153.67
Last 5	12:50:10	1500.03	18.81	6.03	34.36	0.88	13.79	7.63	153.16
Last 5	12:55:10	1800.03	19.07	5.96	34.65	0.83	13.75	7.61	151.92
Last 5	13:00:10	2100.03	19.45	5.92	34.75	0.95	13.70	7.57	151.59
Last 5	13:05:10	2400.03	19.79	5.89	34.76	0.89	13.65	7.51	150.15
Variance 0		0.26	-0.07	0.29				-0.02	-1.24
Variance 1		0.39	-0.04	0.10				-0.04	-0.33
Variance 2		0.34	-0.03	0.01				-0.06	-1.44

## Notes

Sampled at 1305. Cloudy 69 degrees

## Grab Samples

Product Name: Low-Flow System

Date: 2020-03-18 11:45:50

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 77 ft  
 Pump placement from TOC 71 ft

## Well Information:

Well ID WGWC-12  
 Well diameter 2 in  
 Well Total Depth 76.57 ft  
 Screen Length 10 ft  
 Depth to Water 12.45 ft

## Pumping Information:

Final Pumping Rate 150 mL/min  
 Total System Volume 0.4336836 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 3 in  
 Total Volume Pumped 17 L

## Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 1	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 25
Last 5	11:25:14	4500.03	17.76	6.96	126.57	7.40	12.75	0.37	-20.34
Last 5	11:30:14	4800.02	17.81	6.94	126.30	6.80	12.75	0.35	-19.22
Last 5	11:35:15	5101.03	17.78	6.93	125.87	6.00	12.75	0.36	-18.22
Last 5	11:40:15	5401.03	17.84	6.94	125.13	5.50	12.75	0.33	-18.75
Last 5	11:45:15	5701.03	17.83	6.93	124.86	4.70	12.75	0.30	-17.84
Variance 0		-0.03	-0.01	-0.43				0.00	1.01
Variance 1		0.07	0.01	-0.74				-0.02	-0.53
Variance 2		-0.01	-0.01	-0.27				-0.03	0.91

## Notes

Sampled at 1145. Cloudy 64 degrees

## Grab Samples

# Low-Flow Test Report:

Test Date / Time: 3/19/2020 10:20:03 AM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWC-13 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 85 ft Total Depth: 95.55 ft Initial Depth to Water: 14.74 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 90 ft Estimated Total Volume Pumped: 5 liter Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 35 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 11:15

Weather: Cloudy 70s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/19/2020 10:20 AM	00:00	7.01 pH	18.67 °C	80.64 µS/cm	6.87 mg/L		82.5 mV	14.74 ft	100.00 ml/min
3/19/2020 10:25 AM	05:00	6.35 pH	17.30 °C	70.51 µS/cm	2.58 mg/L	7.00 NTU	58.0 mV	17.70 ft	100.00 ml/min
3/19/2020 10:30 AM	10:00	6.54 pH	17.35 °C	94.78 µS/cm	2.32 mg/L	6.90 NTU	57.2 mV	17.70 ft	100.00 ml/min
3/19/2020 10:35 AM	15:00	6.56 pH	17.50 °C	96.77 µS/cm	2.05 mg/L	6.10 NTU	55.7 mV	17.70 ft	100.00 ml/min
3/19/2020 10:40 AM	20:00	6.57 pH	17.70 °C	97.27 µS/cm	1.97 mg/L	5.80 NTU	54.7 mV	17.70 ft	100.00 ml/min
3/19/2020 10:45 AM	25:00	6.56 pH	17.72 °C	98.65 µS/cm	1.89 mg/L	6.20 NTU	54.6 mV	17.70 ft	100.00 ml/min
3/19/2020 10:50 AM	30:00	6.56 pH	17.68 °C	99.72 µS/cm	1.78 mg/L	5.90 NTU	54.6 mV	17.70 ft	100.00 ml/min
3/19/2020 10:55 AM	35:00	6.56 pH	17.77 °C	100.07 µS/cm	1.71 mg/L	5.80 NTU	54.5 mV	17.70 ft	100.00 ml/min
3/19/2020 11:00 AM	40:00	6.56 pH	17.79 °C	99.92 µS/cm	1.66 mg/L	5.20 NTU	54.6 mV	17.70 ft	100.00 ml/min
3/19/2020 11:05 AM	45:00	6.56 pH	18.11 °C	99.66 µS/cm	1.65 mg/L	5.10 NTU	54.2 mV	17.70 ft	100.00 ml/min
3/19/2020 11:10 AM	50:00	6.56 pH	18.27 °C	98.92 µS/cm	1.64 mg/L	4.70 NTU	54.5 mV	17.70 ft	100.00 ml/min

## Samples

Sample ID:	Description:
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# Low-Flow Test Report:

**Test Date / Time:** 3/19/2020 12:26:37 PM

**Project:** Plant Wansley AP

**Operator Name:** Anna Schnittker

<b>Location Name:</b> WGWC-14A <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 33 ft <b>Total Depth:</b> 43.08 ft <b>Initial Depth to Water:</b> 12.93 ft	<b>Pump Type:</b> Peri <b>Tubing Type:</b> Poly <b>Pump Intake From TOC:</b> 38 ft <b>Estimated Total Volume Pumped:</b> <b>6 liter</b> <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 100 ml/min <b>Final Draw Down:</b> 18 in	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 714293
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## Test Notes:

Sample time: 13:35

Weather: Cloudy 70s

EB-2 here. 13:10

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/19/2020 12:26 PM	00:00	5.56 pH	20.55 °C	30.50 µS/cm	4.46 mg/L		53.0 mV	12.93 ft	100.00 ml/min
3/19/2020 12:31 PM	05:00	5.53 pH	19.37 °C	30.98 µS/cm	3.65 mg/L	4.50 NTU	57.1 mV	14.40 ft	100.00 ml/min
3/19/2020 12:36 PM	10:00	5.51 pH	19.51 °C	31.22 µS/cm	3.21 mg/L	3.60 NTU	59.2 mV	14.40 ft	100.00 ml/min
3/19/2020 12:41 PM	15:00	5.49 pH	19.43 °C	31.08 µS/cm	2.81 mg/L	2.20 NTU	61.4 mV	14.40 ft	100.00 ml/min
3/19/2020 12:46 PM	20:00	5.49 pH	19.42 °C	30.89 µS/cm	2.25 mg/L	1.50 NTU	62.9 mV	14.40 ft	100.00 ml/min
3/19/2020 12:51 PM	25:00	5.49 pH	19.46 °C	31.38 µS/cm	2.21 mg/L	1.50 NTU	64.4 mV	14.40 ft	100.00 ml/min
3/19/2020 12:56 PM	30:00	5.48 pH	19.85 °C	31.30 µS/cm	1.80 mg/L	1.60 NTU	64.9 mV	14.40 ft	100.00 ml/min
3/19/2020 1:01 PM	35:00	5.48 pH	19.57 °C	31.73 µS/cm	1.75 mg/L	1.60 NTU	66.3 mV	14.40 ft	100.00 ml/min
3/19/2020 1:06 PM	40:00	5.49 pH	20.22 °C	32.16 µS/cm	1.57 mg/L	1.50 NTU	66.3 mV	14.40 ft	100.00 ml/min
3/19/2020 1:11 PM	45:00	5.49 pH	20.16 °C	32.57 µS/cm	1.52 mg/L	1.50 NTU	67.3 mV	14.40 ft	100.00 ml/min
3/19/2020 1:16 PM	50:00	5.48 pH	20.49 °C	32.26 µS/cm	1.35 mg/L	1.50 NTU	67.2 mV	14.40 ft	100.00 ml/min
3/19/2020 1:21 PM	55:00	5.50 pH	20.44 °C	32.66 µS/cm	1.30 mg/L	1.50 NTU	68.4 mV	14.40 ft	100.00 ml/min
3/19/2020 1:26 PM	01:00:00	5.49 pH	20.53 °C	32.86 µS/cm	1.38 mg/L	1.50 NTU	68.4 mV	14.40 ft	100.00 ml/min

## Samples

Sample ID:	Description:
------------	--------------

Created using VuSitu from In-Situ, Inc.

# Low-Flow Test Report:

Test Date / Time: 3/18/2020 10:05:07 AM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGWC-15 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43 ft Total Depth: 53.36 ft Initial Depth to Water: 15.62 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 48 ft Estimated Total Volume Pumped: 2.5 L Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 51 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
--	--	--

## Test Notes:

Sample time: 10:35

Weather: Cloudy 60s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/18/2020 10:05 AM	00:00	7.37 pH	15.58 °C	250.95 µS/cm	7.16 mg/L		117.4 mV	15.62 ft	100.00 ml/min
3/18/2020 10:10 AM	05:00	7.64 pH	16.12 °C	248.68 µS/cm	3.52 mg/L	0.50 NTU	97.2 mV	19.90 ft	100.00 ml/min
3/18/2020 10:15 AM	10:00	7.71 pH	16.38 °C	239.00 µS/cm	2.90 mg/L	0.50 NTU	90.6 mV	19.90 ft	100.00 ml/min
3/18/2020 10:20 AM	15:00	7.72 pH	16.44 °C	237.43 µS/cm	3.48 mg/L	0.60 NTU	88.5 mV	19.90 ft	100.00 ml/min
3/18/2020 10:25 AM	20:00	7.73 pH	16.50 °C	232.26 µS/cm	3.55 mg/L	0.60 NTU	87.2 mV	19.90 ft	100.00 ml/min
3/18/2020 10:30 AM	25:00	7.73 pH	16.52 °C	236.74 µS/cm	3.57 mg/L	0.60 NTU	86.0 mV	19.90 ft	100.00 ml/min

## Samples

Sample ID:	Description:

# Low-Flow Test Report:

Test Date / Time: 3/18/2020 11:09:54 AM

Project: Plant Wansley AP

Operator Name: Anna Schnittker

Location Name: WGCC-16 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 24 ft Total Depth: 34.78 ft Initial Depth to Water: 14.54 ft	Pump Type: QED Bladder Pump Tubing Type: Poly Pump Intake From TOC: 30 ft Estimated Total Volume Pumped: 3.8 liter Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 2 in	Instrument Used: Aqua TROLL 400 Serial Number: 714293
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## Test Notes:

Sample time: 11:45

Weather: Cloudy 60s

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
3/18/2020 11:09 AM	00:00	5.20 pH	16.65 °C	574.76 µS/cm	7.15 mg/L		115.9 mV	14.54 ft	125.00 ml/min
3/18/2020 11:14 AM	05:00	5.11 pH	16.55 °C	613.12 µS/cm	6.28 mg/L	0.20 NTU	122.3 mV	14.70 ft	125.00 ml/min
3/18/2020 11:20 AM	10:39	5.09 pH	16.56 °C	621.79 µS/cm	6.11 mg/L	0.20 NTU	127.0 mV	14.70 ft	125.00 ml/min
3/18/2020 11:25 AM	15:39	5.08 pH	16.58 °C	627.00 µS/cm	6.09 mg/L	0.20 NTU	129.1 mV	14.70 ft	125.00 ml/min
3/18/2020 11:30 AM	20:39	5.08 pH	16.61 °C	626.26 µS/cm	6.10 mg/L	0.20 NTU	130.9 mV	14.70 ft	125.00 ml/min
3/18/2020 11:35 AM	25:39	5.08 pH	16.65 °C	626.63 µS/cm	6.09 mg/L	0.20 NTU	132.5 mV	14.70 ft	125.00 ml/min
3/18/2020 11:40 AM	30:39	5.08 pH	16.65 °C	626.00 µS/cm	6.09 mg/L	0.20 NTU	133.4 mV	14.70 ft	125.00 ml/min

## Samples

Sample ID:	Description:

## Product Name: Low-Flow System

Date: 2020-03-18 15:12:41

## Project Information:

Operator Name Taylor Goble  
 Company Name ACC  
 Project Name Plant Wansley Ash Pond  
 Site Name Plant Wansley  
 Latitude 0° 0' 0"  
 Longitude 0° 0' 0"  
 Sonde SN 445707  
 Turbidity Make/Model Hach

## Pump Information:

Pump Model/Type QED Bladder  
 Tubing Type poly  
 Tubing Diameter .17 in  
 Tubing Length 96 ft  
 Pump placement from TOC 91 ft

## Well Information:

Well ID WGWC-17  
 Well diameter 2 in  
 Well Total Depth 95.94 ft  
 Screen Length 10 ft  
 Depth to Water 25.05 ft

## Pumping Information:

Final Pumping Rate 150 mL/min  
 Total System Volume 0.5184886 L  
 Calculated Sample Rate 300 sec  
 Stabilization Drawdown 6 in  
 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			+/- 1	+/- 0.1	+/- 3%	+/- 10		+/- 10%	+/- 25
Last 5	14:51:59	600.03	20.59	6.26	99.60	1.45	25.50	0.98	-54.08
Last 5	14:56:59	900.03	19.98	6.28	97.68	1.22	25.52	0.30	-30.18
Last 5	15:01:59	1200.03	19.42	6.28	99.19	0.86	25.57	0.38	-32.34
Last 5	15:06:59	1500.03	19.18	6.28	100.72	0.75	25.62	0.28	-40.90
Last 5	15:11:59	1800.03	19.15	6.30	103.25	0.75	25.62	0.14	-53.12
Variance 0			-0.57	0.01	1.50			0.08	-2.17
Variance 1			-0.24	-0.01	1.53			-0.10	-8.55
Variance 2			-0.03	0.02	2.54			-0.13	-12.23

## Notes

Sampled at 1511. Sunny 76 degrees

## Grab Samples

# Low-Flow Test Report:

Test Date / Time: 5/4/2020 10:50:05 AM

Project: Plant Wansley AP

Operator Name: O. Fuquea

Location Name: WGWC-19  Well Diameter: 2 in  Casing Type: PVC  Screen Length: 10 ft  Top of Screen: 85 ft  Total Depth: 94.84 ft  Initial Depth to Water: 18.31 ft	Pump Type: QED Bladder Pump  Tubing Type: Poly  Pump Intake From TOC: 97 ft  Estimated Total Volume Pumped: 10 liter  Flow Cell Volume: 90 ml  Final Flow Rate: 200 ml/min  Final Draw Down: 0 ft	Instrument Used: Aqua TROLL 400  Serial Number: 714302
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## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 300	+/- 0.3	
5/4/2020 10:50 AM	00:00	7.00 pH	18.06 °C	157.73 µS/cm	0.29 mg/L		128.0 mV	18.31 ft	100.00 ml/min
5/4/2020 10:55 AM	05:00	6.88 pH	17.72 °C	159.64 µS/cm	0.24 mg/L	2.05 NTU	96.9 mV	18.31 ft	100.00 ml/min
5/4/2020 11:00 AM	10:00	6.88 pH	17.71 °C	161.82 µS/cm	0.22 mg/L	1.33 NTU	93.7 mV	18.31 ft	100.00 ml/min
5/4/2020 11:05 AM	15:00	6.90 pH	17.76 °C	163.67 µS/cm	0.21 mg/L	1.23 NTU	90.3 mV	18.31 ft	100.00 ml/min
5/4/2020 11:10 AM	20:00	6.91 pH	18.03 °C	166.12 µS/cm	0.23 mg/L	1.52 NTU	86.7 mV	18.31 ft	100.00 ml/min
5/4/2020 11:15 AM	25:00	6.90 pH	18.96 °C	168.46 µS/cm	0.31 mg/L	1.64 NTU	89.1 mV	18.31 ft	100.00 ml/min

## Samples

Sample ID:	Description:
WGWC-19	Sampled at 1115. Clear 76F.

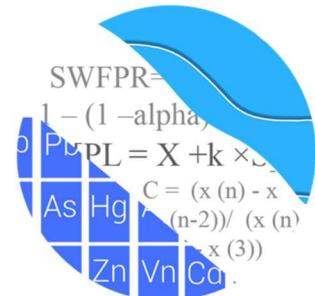
## APPENDIX D

### Statistical Analyses

GROUNDWATER STATS  
CONSULTING

August 26, 2020

Southern Company Services  
Attn: Ms. Kristen Jurinko  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308



Re: Plant Wansley Ash Pond  
Statistical Analysis – March 2020 1<sup>st</sup> Semi-Annual Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2020 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant Wansley Ash Pond. The analysis complies with the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009). The site is in Assessment Monitoring.

Sampling began for Appendix III and IV parameters in 2016 and at least 8 background samples have been collected at each of the groundwater monitoring wells. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** WGWA-1, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, WGWA-18
- **Downgradient wells:** WGWC-8, WGWC-9, WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Kristina Rayner, Groundwater Statistician and Founder of Groundwater Stats Consulting. The analysis is prepared according to the recommended statistical methodology provided in the Fall 2017 by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance.

The CCR program consists of the following constituents:

- **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

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

During the background screening conducted by MacStat Consulting in 2017, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on site characteristics of groundwater data upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves were provided to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

### **Summary of Statistical Methods – Appendix III Parameters:**

Based on the earlier evaluation described above, the following method was selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background

sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the most recent reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. While this was not required for this analysis, in some cases, the earlier portion of data record may require deselecting prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

### **Evaluation of Appendix III Parameters – March 2020**

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through March 2020. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent (Figure D). The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). It was noted that the reporting limit for boron, as provided by the laboratory, has fluctuated over the years from 0.05 mg/L to 0.1 mg/L. The current reporting limit is 0.08 mg/L and, therefore,

is substituted for all historical reporting limits as a result of substitution method discussed earlier.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When resamples confirm the initial exceedance, a statistically significant increase is identified, and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Prediction limit exceedances were noted for Appendix III parameters. A summary table of the background prediction limits and exceedances follows this letter.

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. Statistically significant increasing trends were noted for calcium, chloride, sulfate, and TDS in well WGWC-8. Statistically significant decreasing trends were noted for fluoride in well WGWC-9 and pH in well WGWC-16. A summary of the trend test results follows this letter.

### **Evaluation of Appendix IV Parameters – March 2020**

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title

- Where an MCL has not been established for a constituent, CCR-rule specified level have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the March 2020 sample event for the federal and state rules (Figure G).

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in accordance with the federal and state requirements in each downgradient well (Figures H and I, respectively). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the CCR Rules for the federal requirements and the Georgia EPD Rules 391-3-4-.10(6)(a) for the State requirements. Only when the entire confidence interval is above a GWPS is the downgradient well/constituent pair considered to exceed its respective standard. If there is an exceedance of the GWPS, a statistically significant level (SSL) exceedance is identified. Summaries of the confidence intervals follow this letter.

For the federal confidence intervals, the following exceedances were noted:

- Lithium: WGCC-19

For the state confidence intervals, the following exceedances were noted:

- Lithium: WGCC-8, WGCC-9, WGCC-19

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Wansley Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Easton T. Rayner  
Groundwater Analyst



Kristina L. Rayner  
Groundwater Statistician

**100% ND**

Page 1

Date: 7/22/2020 1:34 PM  
Plant Wansley Client: Southern Company Data: Wansley AP

Antimony (mg/L)

WGWA-18, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, 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)

WGWA-18, WGWA-4, WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19

Cadmium (mg/L)

WGWA-1, WGWA-18, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Chromium (mg/L)

WGWA-3, WGWA-7, WGWC-12, WGWC-16, WGWC-17, WGWC-19, WGWC-8

Cobalt (mg/L)

WGWA-3, WGWC-15

Lead (mg/L)

WGWA-18, WGWA-7, WGWC-12, WGWC-15, WGWC-19

Mercury (mg/L)

WGWA-1

Molybdenum (mg/L)

WGWA-2, WGWA-4, WGWC-16, WGWC-8

Selenium (mg/L)

WGWA-6, WGWA-7, WGWC-13, WGWC-17

Thallium (mg/L)

WGWA-18, WGWA-3, WGWA-4, WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

## Interwell Prediction Limit - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	3/18/2020	2	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	3/19/2020	2.2	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	3/19/2020	0.55	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-16	52	n/a	3/18/2020	66	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-8	52	n/a	3/19/2020	79	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-16	6.05	n/a	3/18/2020	93	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-8	6.05	n/a	3/19/2020	98	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/18/2020	0.71	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-19	0.284	n/a	5/4/2020	0.36	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-9	0.284	n/a	3/19/2020	1	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-16	7.96	5.13	3/18/2020	5.08	Yes	134	0	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-16	21	n/a	3/18/2020	120	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-8	21	n/a	3/19/2020	200	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-9	21	n/a	3/19/2020	45	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-15	150	n/a	3/18/2020	160	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-16	150	n/a	3/18/2020	370	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-8	150	n/a	3/19/2020	540	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-9	150	n/a	3/19/2020	160	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...

# Interwell Prediction Limit - All Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-10	0.08	n/a	3/18/2020	0.049J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.08	n/a	3/18/2020	0.08ND	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	0.08	n/a	3/18/2020	0.039J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-13	0.08	n/a	3/19/2020	0.053J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-14A	0.08	n/a	3/19/2020	0.039J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-15	0.08	n/a	3/18/2020	0.071J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>WGWC-16</b>	<b>0.08</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>2</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	WGWC-17	0.08	n/a	3/18/2020	0.049J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-19	0.08	n/a	5/4/2020	0.08ND	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>WGWC-8</b>	<b>0.08</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>2.2</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>WGWC-9</b>	<b>0.08</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>0.55</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	WGWC-10	52	n/a	3/18/2020	7.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-11	52	n/a	3/18/2020	1.6	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-12	52	n/a	3/18/2020	14	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-13	52	n/a	3/19/2020	5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14A	52	n/a	3/19/2020	0.89	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-15	52	n/a	3/18/2020	30	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Calcium (mg/L)</b>	<b>WGWC-16</b>	<b>52</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>66</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Calcium (mg/L)	WGWC-17	52	n/a	3/18/2020	6.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-19	52	n/a	5/4/2020	15	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Calcium (mg/L)</b>	<b>WGWC-8</b>	<b>52</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>79</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Calcium (mg/L)	WGWC-9	52	n/a	3/19/2020	9.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-10	6.05	n/a	3/18/2020	1.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-11	6.05	n/a	3/18/2020	3.2	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-12	6.05	n/a	3/18/2020	3.2	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-13	6.05	n/a	3/19/2020	1.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14A	6.05	n/a	3/19/2020	1.9	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-15	6.05	n/a	3/18/2020	1.7	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Chloride (mg/L)</b>	<b>WGWC-16</b>	<b>6.05</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>93</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Chloride (mg/L)	WGWC-17	6.05	n/a	3/18/2020	1.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-19	6.05	n/a	5/4/2020	2.8	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Chloride (mg/L)</b>	<b>WGWC-8</b>	<b>6.05</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>98</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Chloride (mg/L)	WGWC-9	6.05	n/a	3/19/2020	2.1	No	111	0	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-10	0.284	n/a	3/18/2020	0.052J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-11	0.284	n/a	3/18/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-12	0.284	n/a	3/18/2020	0.033J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-13	0.284	n/a	3/19/2020	0.15	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-14A	0.284	n/a	3/19/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-15</b>	<b>0.284</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>0.71</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	WGWC-16	0.284	n/a	3/18/2020	0.084J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-17	0.284	n/a	3/18/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-19</b>	<b>0.284</b>	<b>n/a</b>	<b>5/4/2020</b>	<b>0.36</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	WGWC-8	0.284	n/a	3/19/2020	0.057J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-9</b>	<b>0.284</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>1</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
pH (S.U.)	WGWC-10	7.96	5.13	3/18/2020	6.4	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-11	7.96	5.13	3/18/2020	5.89	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-12	7.96	5.13	3/18/2020	6.94	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-13	7.96	5.13	3/19/2020	6.56	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-14A	7.96	5.13	3/19/2020	5.49	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-15	7.96	5.13	3/18/2020	7.73	No	134	0	n/a	0.000...	NP Inter (normality) ...
<b>pH (S.U.)</b>	<b>WGWC-16</b>	<b>7.96</b>	<b>5.13</b>	<b>3/18/2020</b>	<b>5.08</b>	<b>Yes</b>	<b>134</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
pH (S.U.)	WGWC-17	7.96	5.13	3/18/2020	6.28	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-19	7.96	5.13	5/4/2020	6.9	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-8	7.96	5.13	3/19/2020	6.43	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-9	7.96	5.13	3/19/2020	6.64	No	134	0	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-10	21	n/a	3/18/2020	2.1	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-11	21	n/a	3/18/2020	1.6	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-12	21	n/a	3/18/2020	12	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-13	21	n/a	3/19/2020	4	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14A	21	n/a	3/19/2020	1.5	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-15	21	n/a	3/18/2020	17	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
<b>Sulfate (mg/L)</b>	<b>WGWC-16</b>	<b>21</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>120</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Sulfate (mg/L)	WGWC-17	21	n/a	3/18/2020	4.2	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-19	21	n/a	5/4/2020	4.5	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
<b>Sulfate (mg/L)</b>	<b>WGWC-8</b>	<b>21</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>200</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Sulfate (mg/L)</b>	<b>WGWC-9</b>	<b>21</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>45</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Total Dissolved Solids (mg/L)	WGWC-10	150	n/a	3/18/2020	58	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-11	150	n/a	3/18/2020	26	No	111	9.009	n/a	0.000...	NP Inter (normality) ...

# Interwell Prediction Limit - All Results

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Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	WGWC-12	150	n/a	3/18/2020	73	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-13	150	n/a	3/19/2020	95	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14A	150	n/a	3/19/2020	18	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-15</b>	<b>150</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>160</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-16</b>	<b>150</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>370</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Total Dissolved Solids (mg/L)	WGWC-17	150	n/a	3/18/2020	98	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-19	150	n/a	5/4/2020	110	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-8</b>	<b>150</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>540</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-9</b>	<b>150</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>160</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>

## Trend Test - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	WGWC-8	12.62	69	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8	21.55	81	48	Yes	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9	-0.09709	-69	-63	Yes	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWC-16	-0.1745	-111	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	15.7	60	48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	63.11	74	48	Yes	14	0	n/a	n/a	0.01	NP

## Trend Test - All Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDS</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	-0.5536	-22	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8	0.1578	36	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9	0.02355	23	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-16	-6.426	-2	-48	No	14	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>WGWC-8</b>	<b>12.62</b>	<b>69</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	WGWC-16	-16.32	-13	-48	No	14	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>WGWC-8</b>	<b>21.55</b>	<b>81</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	WGWC-15	-0.04225	-50	-63	No	17	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19	-0.01651	-45	-63	No	17	0	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>WGWC-9</b>	<b>-0.09709</b>	<b>-69</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (S.U.)	WGWC-16	-0.1745	-111	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16	0	0	48	No	14	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>WGWC-8</b>	<b>15.7</b>	<b>60</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	WGWC-9	1.022	30	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-15	-7.918	-28	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-16	0	3	48	No	14	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-8</b>	<b>63.11</b>	<b>74</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	WGWC-9	0	-6	-48	No	14	0	n/a	n/a	0.01	NP

## Upper Tolerance Limits

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 12:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Bg N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.0022	n/a	n/a	n/a	87	n/a	98.85	n/a	0.01153	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a	127	n/a	75.59	n/a	0.001482	NP Inter(NDs)
Barium (mg/L)	n/a	0.062	n/a	n/a	n/a	127	n/a	0	n/a	0.001482	NP Inter(normal...)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	127	n/a	93.7	n/a	0.001482	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	127	n/a	100	n/a	0.001482	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0049	n/a	n/a	n/a	127	n/a	93.7	n/a	0.001482	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	n/a	n/a	126	n/a	46.83	n/a	0.00156	NP Inter(normal...)
Combined Radium 226 + 228 (pCi/L)	n/a	10.4	n/a	n/a	n/a	124	n/a	4.839	n/a	0.001729	NP Inter(normal...)
Fluoride (mg/L)	n/a	0.284	n/a	n/a	n/a	135	n/a	49.63	n/a	0.000...	NP Inter(normal...)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	111	n/a	88.29	n/a	0.003368	NP Inter(NDs)
Lithium (mg/L)	n/a	0.009	n/a	n/a	n/a	117	n/a	48.72	n/a	0.002475	NP Inter(normal...)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	111	n/a	87.39	n/a	0.003368	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	126	n/a	88.89	n/a	0.00156	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	127	n/a	92.91	n/a	0.001482	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	127	n/a	94.49	n/a	0.001482	NP Inter(NDs)

WANSLEY AP GWPS					
Constituent Name	MCL	CCR-Rule Specified	Background	Federal GWPS	State GWPS
Antimony, Total (mg/L)	0.006		0.0022	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.0014	0.01	0.01
Barium, Total (mg/L)	2		0.062	2	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0049	0.1	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.013	0.013	0.013
Combined Radium, Total (pCi/L)	5		10.4	10.4	10.4
Fluoride, Total (mg/L)	4		0.284	4	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015	0.001
Lithium, Total (mg/L)	n/a	0.04	0.009	0.04	0.009
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1	0.015
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

GWPS = Groundwater Protection Standard

MCL = Maximum Contaminant Level

Highlighted cells indicate background is higher than established limit.

## Confidence Interval Summary Table - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method	
Lithium (mg/L)	WGWC-19	0.056	0.045		0.04	Yes	16	0	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	WGWC-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.0005	0.01	No	16	75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	16	43.75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0019	0.00095	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002399	0.00153	0.01	No	16	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001383	0.0007201	0.01	No	16	37.5	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0375	0.03062	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-12	0.02034	0.01523	2	No	16	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05852	0.04661	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05072	0.03115	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02237	0.01933	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01846	0.01315	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No	16	18.75	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.00098	2	No	16	25	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.005	0.0007	2	No	16	25	No	0.01	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No	16	75	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	16	93.75	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002025	0.001431	0.004	No	16	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No	16	56.25	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No	16	93.75	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.00082	0.000362	0.005	No	16	18.75	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-10	0.002394	0.001593	0.1	No	16	18.75	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No	16	81.25	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No	16	93.75	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001829	0.0008657	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00052	0.013	No	16	37.5	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001337	0.0005416	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No	16	75	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01161	0.006248	0.013	No	16	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	16	0	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.00186	0.0008579	0.013	No	16	6.25	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0028	0.0011	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	16	93.75	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4506	0.1287	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5856	0.1074	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.612	0.1183	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7925	0.4593	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8713	0.4652	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6722	0.249	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.141	0.9315	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5548	0.04796	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.441	0.1309	10.4	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.913	1.173	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3833	0.1276	10.4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1841	0.1322	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.047	4	No	17	70.59	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-12	0.11	0.089	4	No	17	23.53	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-13	0.3081	0.2371	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.048	4	No	17	82.35	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.8825	0.7903	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084	4	No	17	11.76	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.148	0.09745	4	No	17	5.882	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.3845	0.3343	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3781	0.2142	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00023	0.015	No	14	71.43	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

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Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.015	No	14	50	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00017	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.015	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01678	0.008384	0.04	No	16	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No	16	81.25	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007805	0.005802	0.04	No	16	6.25	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0025	0.04	No	16	75	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0018	0.04	No	16	62.5	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.006833	0.005229	0.04	No	16	12.5	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01134	0.00728	0.04	No	16	6.25	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005758	0.00464	0.04	No	16	6.25	ln(x)	0.01	Param.
<b>Lithium (mg/L)</b>	<b>WGWC-19</b>	<b>0.056</b>	<b>0.045</b>	<b>0.04</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.04	No	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.03929	0.03253	0.04	No	16	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.0002	0.000085	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-11	0.0002	0.00011	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-12	0.0002	0.00011	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-13	0.0002	0.000083	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0002	0.000086	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-16	0.0002	0.00019	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-17	0.0002	0.000074	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0002	0.00012	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-8	0.0002	0.00013	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-9	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No	16	87.5	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0011	0.1	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.1	No	16	68.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0018	0.1	No	16	12.5	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.00764	0.00364	0.1	No	16	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.006345	0.002894	0.1	No	16	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No	16	43.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.007015	0.00392	0.1	No	16	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01218	0.00699	0.05	No	16	0	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.0031	0.05	No	16	0	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-9	0.002725	0.002073	0.05	No	16	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	16	93.75	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	16	43.75	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	16	25	No	0.01	NP (normality)

## Confidence Interval Summary Table - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	WGWC-19	0.056	0.045	0.009	Yes	16	0	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.009	Yes	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.03929	0.03253	0.009	Yes	16	0	No	0.01	Param.

## Confidence Interval Summary Table - All Results

	Plant	Wansley	Client:	Southern Company	Data:	Wansley AP	Printed 7/22/2020, 1:49 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	WGWC-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.0005	0.01	No	16	75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	16	43.75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0019	0.00095	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002399	0.00153	0.01	No	16	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001383	0.0007201	0.01	No	16	37.5	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0375	0.03062	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-12	0.02034	0.01523	2	No	16	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05852	0.04661	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05072	0.03115	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02237	0.01933	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01846	0.01315	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No	16	18.75	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.00098	2	No	16	25	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.005	0.0007	2	No	16	25	No	0.01	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No	16	75	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	16	93.75	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002025	0.001431	0.004	No	16	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No	16	56.25	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No	16	93.75	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.00082	0.000362	0.005	No	16	18.75	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-10	0.002394	0.001593	0.1	No	16	18.75	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No	16	81.25	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No	16	93.75	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001829	0.0008657	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00052	0.013	No	16	37.5	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001337	0.0005416	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No	16	75	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01161	0.006248	0.013	No	16	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	16	0	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.00186	0.0008579	0.013	No	16	6.25	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0028	0.0011	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	16	93.75	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4506	0.1287	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5856	0.1074	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.612	0.1183	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7925	0.4593	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8713	0.4652	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6722	0.249	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.141	0.9315	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5548	0.04796	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.441	0.1309	10.4	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.913	1.173	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3833	0.1276	10.4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1841	0.1322	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.047	4	No	17	70.59	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-12	0.11	0.089	4	No	17	23.53	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-13	0.3081	0.2371	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.048	4	No	17	82.35	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.8825	0.7903	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084	4	No	17	11.76	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.148	0.09745	4	No	17	5.882	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.3845	0.3343	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3781	0.2142	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00023	0.001	No	14	71.43	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

Page 2

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.001	No	14	50	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00017	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.001	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01678	0.008384	0.009	No	16	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No	16	81.25	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007805	0.005802	0.009	No	16	6.25	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0025	0.009	No	16	75	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0018	0.009	No	16	62.5	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.006833	0.005229	0.009	No	16	12.5	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01134	0.00728	0.009	No	16	6.25	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005758	0.00464	0.009	No	16	6.25	ln(x)	0.01	Param.
Lithium (mg/L)	<b>WGWC-19</b>	<b>0.056</b>	<b>0.045</b>	<b>0.009</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.009	Yes	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	<b>WGWC-9</b>	<b>0.03929</b>	<b>0.03253</b>	<b>0.009</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Mercury (mg/L)	WGWC-10	0.0002	0.000085	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-11	0.0002	0.00011	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-12	0.0002	0.00011	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-13	0.0002	0.000083	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0002	0.000086	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-16	0.0002	0.00019	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-17	0.0002	0.000074	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0002	0.00012	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-8	0.0002	0.00013	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-9	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.015	No	16	87.5	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0011	0.015	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.015	No	16	68.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0018	0.015	No	16	12.5	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.015	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.00764	0.00364	0.015	No	16	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.006345	0.002894	0.015	No	16	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.015	No	16	43.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.007015	0.00392	0.015	No	16	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01218	0.00699	0.05	No	16	0	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.0031	0.05	No	16	0	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-9	0.002725	0.002073	0.05	No	16	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	16	93.75	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	16	43.75	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	16	25	No	0.01	NP (normality)

# Outlier

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 9:09 PM

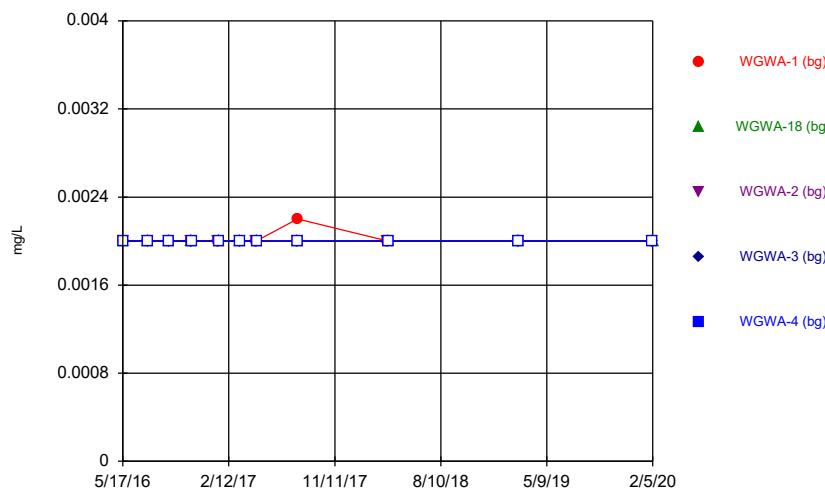
	WGWC-12 Calcium (mg/L)	WGWA-5 Cobalt (mg/L)	WGWA-1 Combined Radium 226 + 228 (pCi/L)	WGWA-6 Combined Radium 226 + 228 (pCi/L)	WGWA-1 Lithium (mg/L)	WGWA-18 Lithium (mg/L)	WGWA-2 Lithium (mg/L)	WGWA-3 Lithium (mg/L)	WGWA-4 Lithium (mg/L)	WGWA-5 Lithium (mg/L)
5/17/2016			<0.005 (o)		<0.005 (o)		<0.05 (o)			
5/18/2016							<0.005 (o)	<0.05 (o)	<0.005 (o)	
7/19/2016		7.25 (o)								
9/14/2016										
1/19/2017		0.064 (O)								
3/14/2017			0.589 (O)							
4/26/2017	3 (o)									

	WGWA-6 Lithium (mg/L)	WGWA-7 Lithium (mg/L)	WGWA-5 Molybdenum (mg/L)
5/17/2016			
5/18/2016	<0.005 (o)	<0.005 (o)	
7/19/2016			
9/14/2016		0.016 (o)	
1/19/2017			
3/14/2017			
4/26/2017			

# FIGURE A.

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

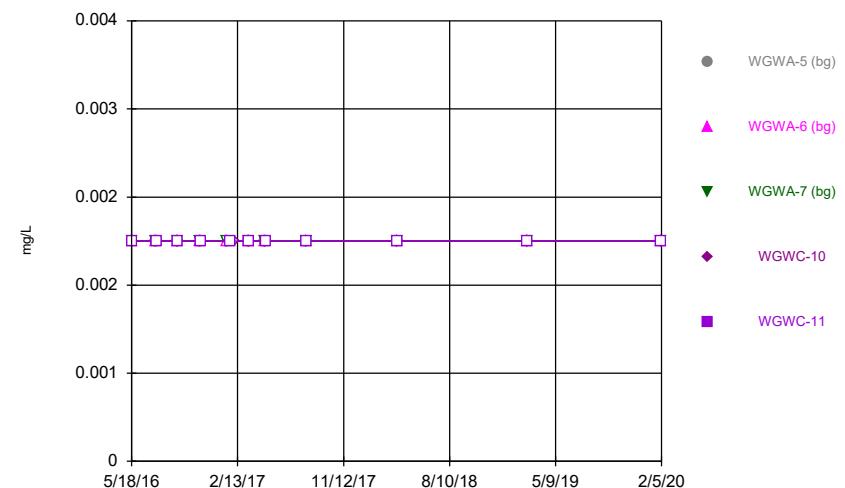
### Time Series



Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

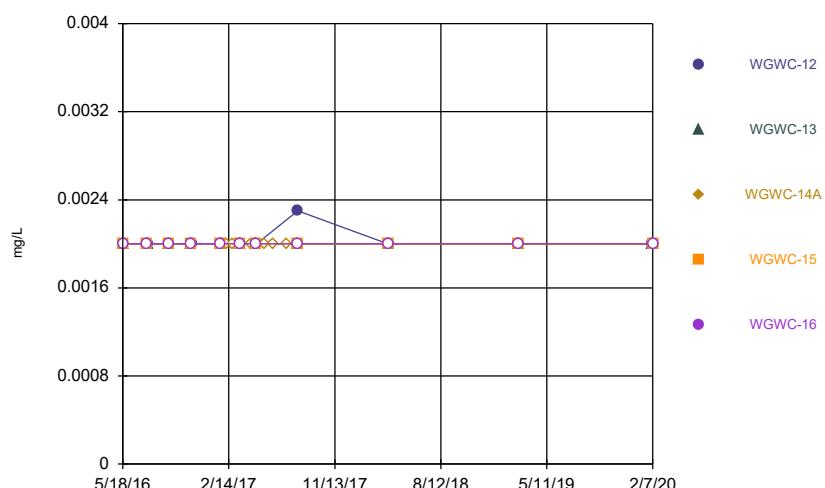
### Time Series



Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

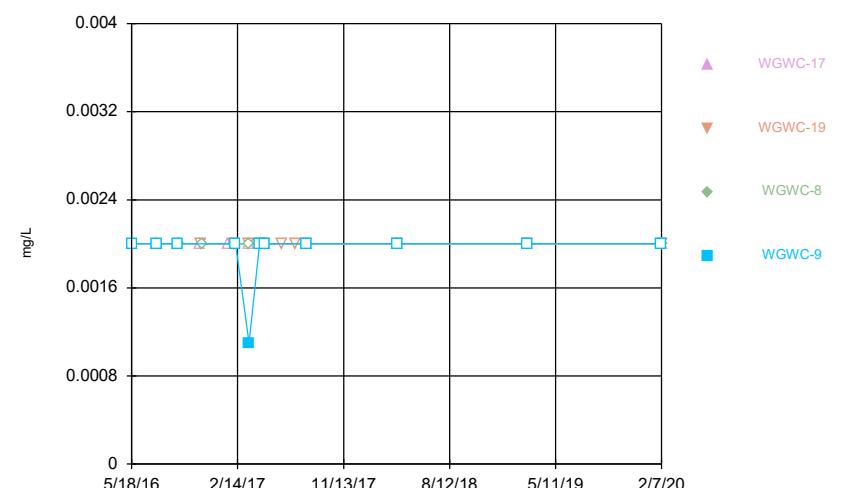
### Time Series



Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.002	<0.002	<0.002		
5/18/2016				<0.002	<0.002
7/19/2016	<0.002	<0.002	<0.002		
7/20/2016				<0.002	<0.002
9/13/2016	<0.002	<0.002	<0.002	<0.002	<0.002
11/9/2016	<0.002	<0.002	<0.002		
11/10/2016				<0.002	<0.002
1/17/2017	<0.002		<0.002		
1/18/2017				<0.002	<0.002
1/19/2017		<0.002			
3/13/2017	<0.002		<0.002		
3/14/2017		<0.002		<0.002	<0.002
4/24/2017	<0.002		<0.002		
4/25/2017		<0.002		<0.002	<0.002
8/8/2017	0.0022 (J)	<0.002	<0.002	<0.002	
8/9/2017					<0.002
3/27/2018	<0.002		<0.002		
3/28/2018		<0.002		<0.002	<0.002
2/25/2019	<0.002		<0.002		
2/26/2019		<0.002		<0.002	<0.002
2/3/2020	<0.002		<0.002		
2/4/2020				<0.002	<0.002
2/5/2020		<0.002			

## Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.002	<0.002	<0.002	<0.002	
5/19/2016					<0.002
7/19/2016	<0.002	<0.002	<0.002		
7/20/2016				<0.002	<0.002
9/13/2016		<0.002	<0.002		
9/14/2016	<0.002			<0.002	<0.002
11/9/2016		<0.002			
11/10/2016			<0.002		
11/11/2016				<0.002	<0.002
1/18/2017		<0.002	<0.002		
1/19/2017	<0.002				<0.002
1/27/2017					<0.002
2/6/2017				<0.002	
3/14/2017	<0.002	<0.002	<0.002		
3/15/2017				<0.002	<0.002
4/25/2017	<0.002	<0.002	<0.002		
4/26/2017				<0.002	<0.002
8/8/2017		<0.002	<0.002		
8/9/2017	<0.002				
8/10/2017				<0.002	<0.002
3/28/2018	<0.002	<0.002	<0.002		
3/29/2018					<0.002
3/30/2018				<0.002	
2/26/2019	<0.002	<0.002	<0.002		
2/27/2019				<0.002	<0.002
2/4/2020	<0.002	<0.002		<0.002	
2/5/2020			<0.002	<0.002	<0.002

## Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.002	<0.002
5/19/2016	<0.002	<0.002			
7/19/2016				<0.002	<0.002
7/20/2016	<0.002	<0.002			
9/14/2016	<0.002	<0.002		<0.002	<0.002
11/10/2016		<0.002		<0.002	<0.002
11/11/2016	<0.002				
1/24/2017				<0.002	<0.002
1/27/2017	<0.002	<0.002			
2/8/2017			<0.002		
2/23/2017			<0.002		
3/14/2017				<0.002	
3/15/2017	<0.002	<0.002			<0.002
3/17/2017			<0.002		
4/11/2017			<0.002		
4/25/2017				<0.002	<0.002
4/26/2017	<0.002	<0.002	<0.002		
5/17/2017			<0.002		
6/7/2017			<0.002		
7/11/2017			<0.002		
8/9/2017		<0.002		<0.002	<0.002
8/10/2017	0.0023 (J)				
3/29/2018	<0.002	<0.002	<0.002		<0.002
3/30/2018				<0.002	
2/27/2019	<0.002	<0.002	<0.002	<0.002	<0.002
2/5/2020	<0.002	<0.002	<0.002		
2/7/2020				<0.002	<0.002

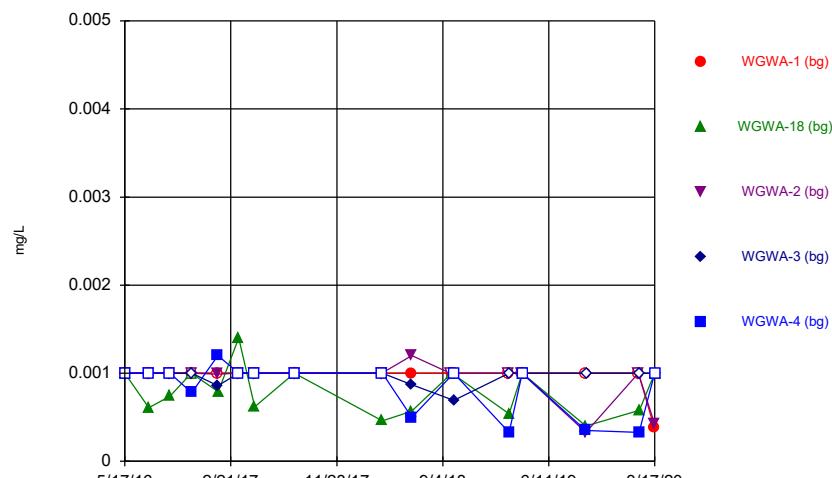
## Time Series

Constituent: Antimony (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.002			
5/19/2016		<0.002	<0.002	
7/20/2016	<0.002		<0.002	<0.002
9/14/2016	<0.002			<0.002
9/15/2016			<0.002	
11/10/2016	<0.002			
11/11/2016		<0.002		
11/14/2016			<0.002	
1/20/2017	<0.002			
2/6/2017		<0.002	<0.002	
2/9/2017			<0.002	
3/14/2017	<0.002			
3/15/2017		<0.002	<0.002	0.0011 (J)
4/11/2017		<0.002		<0.002
4/25/2017	<0.002			
4/26/2017		<0.002	<0.002	<0.002
6/7/2017		<0.002		
7/11/2017		<0.002		
8/9/2017	<0.002			
8/10/2017		<0.002	<0.002	<0.002
3/29/2018		<0.002	<0.002	<0.002
3/30/2018	<0.002			
2/26/2019	<0.002			
2/27/2019			<0.002	
2/28/2019		<0.002		<0.002
2/5/2020				<0.002
2/7/2020	<0.002	<0.002	<0.002	

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

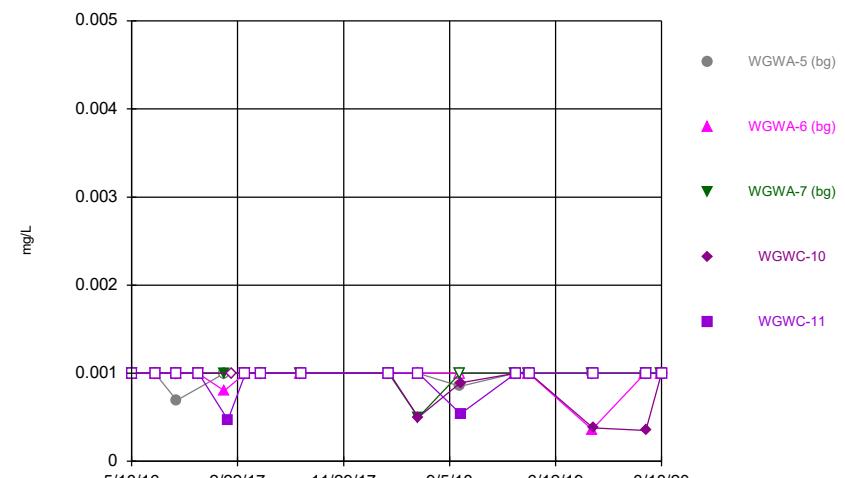
### Time Series



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

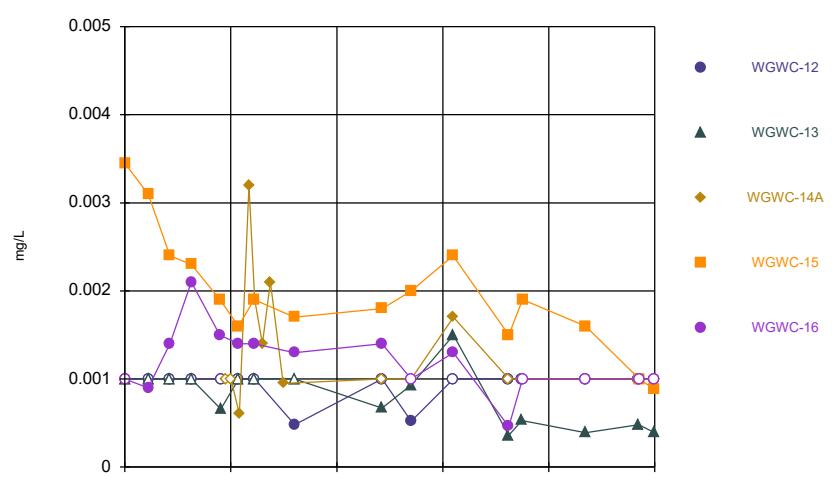
### Time Series



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

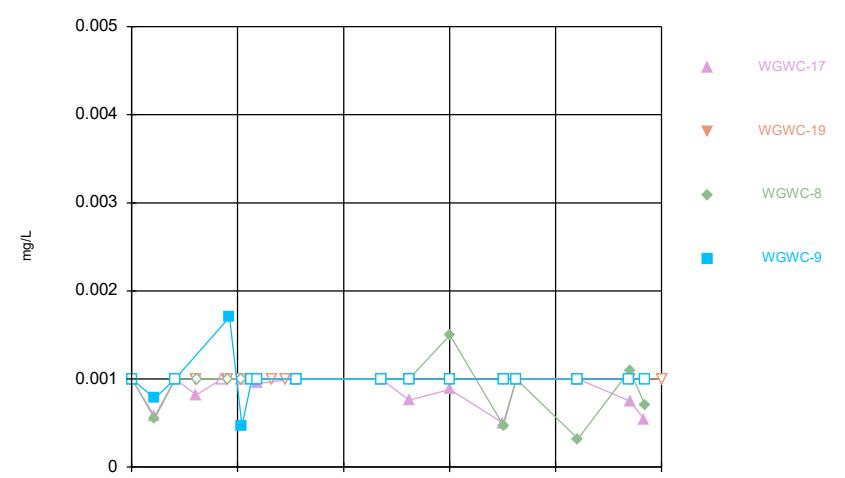
### Time Series



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	0.00061 (J)	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	0.00074 (J)	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	0.00078 (J)
1/17/2017	<0.001		0.00099 (J)		
1/18/2017				0.00086 (J)	0.0012 (J)
1/19/2017		0.00079 (J)			
3/13/2017	<0.001		<0.001		
3/14/2017		0.0014		<0.001	<0.001
4/24/2017	<0.001		<0.001		
4/25/2017		0.00062 (J)		<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001	
8/9/2017					<0.001
3/27/2018	<0.001		<0.001		
3/28/2018		0.00046 (J)		<0.001	<0.001
6/13/2018	0.001 (J)	0.00057 (J)			
6/14/2018			0.0012 (J)	0.00087 (J)	0.0005 (J)
9/24/2018			<0.001		
9/27/2018	<0.001				
9/28/2018		<0.001			
10/3/2018				0.00069 (J)	<0.001
2/25/2019	<0.001		<0.001		
2/26/2019		0.00054 (J)		<0.001	0.00033 (J)
4/1/2019	<0.001		<0.001		
4/2/2019		<0.001		<0.001	<0.001
9/16/2019	<0.001				
9/17/2019		0.0004 (J)	0.00033 (J)		0.00035 (J)
9/18/2019				<0.001	
2/3/2020	<0.001		<0.001		
2/4/2020				<0.001	0.00033 (J)
2/5/2020		0.00058 (J)			
3/16/2020	0.00038 (J)		0.00043 (J)		
3/17/2020		<0.001		<0.001	<0.001

## Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	0.00069 (J)			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		0.0008 (J)	0.001 (J)		
1/19/2017	<0.001				
1/27/2017					0.00047 (J)
2/6/2017				<0.001	
3/14/2017	<0.001	<0.001	<0.001		
3/15/2017				<0.001	<0.001
4/25/2017	<0.001	<0.001	<0.001		
4/26/2017				<0.001	<0.001
8/8/2017		<0.001	<0.001		
8/9/2017	<0.001				
8/10/2017				<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001		
3/29/2018					<0.001
3/30/2018				<0.001	
6/13/2018	<0.001	<0.001			
6/14/2018			0.0005 (J)	0.0005 (J)	<0.001
10/2/2018		<0.001			
10/3/2018	0.00085 (J)		<0.001		
10/4/2018				0.00089 (J)	0.00054 (J)
2/26/2019	<0.001	<0.001	<0.001		
2/27/2019				<0.001	<0.001
4/2/2019	<0.001	<0.001	<0.001		
4/3/2019					<0.001
4/4/2019				<0.001	
9/16/2019	<0.001	0.00036 (J)			
9/18/2019			<0.001		
9/19/2019				0.00038 (J)	<0.001
2/4/2020	<0.001	<0.001			
2/5/2020			<0.001	0.00035 (J)	<0.001
3/17/2020	<0.001	<0.001	<0.001		
3/18/2020				<0.001	<0.001

## Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

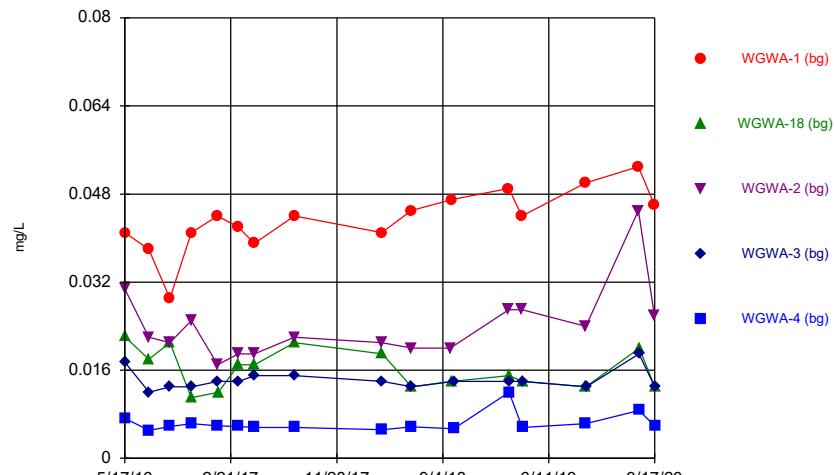
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.00345	<0.001
5/19/2016	<0.001	<0.001			
7/19/2016				0.0031	0.0009 (J)
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		0.0024	0.0014
11/10/2016		<0.001		0.0023	0.0021
11/11/2016	<0.001				
1/24/2017				0.0019	0.0015
1/27/2017	<0.001	0.00066 (J)			
2/8/2017			<0.001		
2/23/2017			<0.001		
3/14/2017				0.0016	
3/15/2017	<0.001	<0.001			0.0014
3/17/2017			0.0006 (J)		
4/11/2017			0.0032		
4/25/2017				0.0019	0.0014
4/26/2017	<0.001	<0.001	0.0019		
5/17/2017			0.0014		
6/7/2017			0.0021		
7/11/2017			0.00095 (J)		
8/9/2017		<0.001		0.0017	0.0013
8/10/2017	0.00048 (J)				
3/29/2018	<0.001	0.00067 (J)	<0.001		0.0014
3/30/2018				0.0018	
6/14/2018	0.00052 (J)	0.00093 (J)	<0.001	0.002	<0.001
10/3/2018				0.0024	
10/4/2018	<0.001	0.0015	0.0017		0.0013
2/27/2019	<0.001	0.00036 (J)	<0.001	0.0015	0.00046 (J)
4/3/2019	<0.001	0.00053 (J)	<0.001		
4/4/2019				0.0019	<0.001
9/18/2019		0.00039 (J)	<0.001	0.0016	<0.001
9/19/2019	<0.001				
2/5/2020	<0.001	0.00048 (J)	<0.001		
2/7/2020				0.001	<0.001
3/18/2020	<0.001			0.00088 (J)	<0.001
3/19/2020		0.00039 (J)	<0.001		

## Time Series

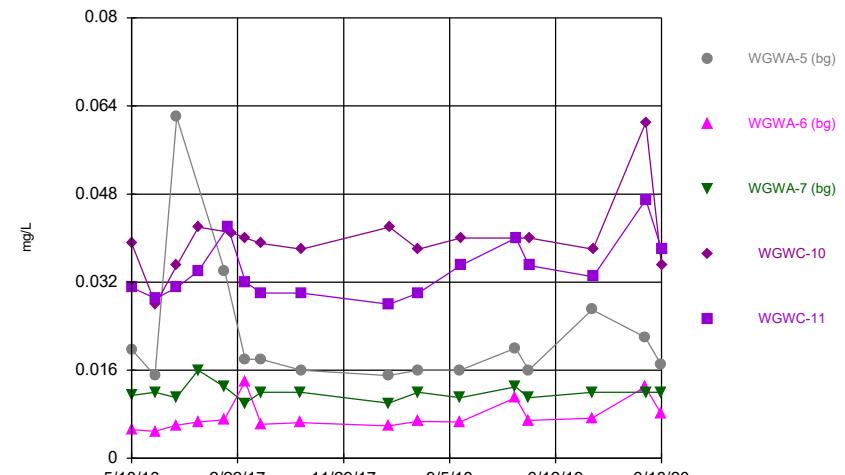
Constituent: Arsenic (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			<0.001	<0.001
7/20/2016	0.00058 (J)		0.00055 (J)	0.00078 (J)
9/14/2016	<0.001			<0.001
9/15/2016				<0.001
11/10/2016	0.00082 (J)			
11/11/2016		<0.001		
11/14/2016			<0.001	
1/20/2017	<0.001			
2/6/2017		<0.001	<0.001	
2/9/2017			0.0017	
3/14/2017	<0.001			
3/15/2017		<0.001	<0.001	0.00047 (J)
4/11/2017		<0.001		<0.001
4/25/2017	0.00095 (J)			
4/26/2017		<0.001	<0.001	<0.001
6/7/2017		<0.001		
7/11/2017		<0.001		
8/9/2017	<0.001			
8/10/2017		<0.001	<0.001	<0.001
3/29/2018		<0.001	<0.001	<0.001
3/30/2018	<0.001			
6/14/2018	0.00076 (J)	<0.001	<0.001	<0.001
10/4/2018	0.00088 (J)	<0.001	0.0015	<0.001
2/26/2019	0.0005 (J)			
2/27/2019			0.00047 (J)	
2/28/2019		<0.001		<0.001
4/2/2019		<0.001		
4/3/2019			<0.001	<0.001
4/4/2019	<0.001			
9/18/2019	<0.001	<0.001		
9/19/2019			0.00032 (J)	<0.001
2/5/2020				<0.001
2/7/2020	0.00075 (J)	<0.001	0.0011	
3/18/2020	0.00054 (J)			
3/19/2020			0.00071 (J)	<0.001
5/4/2020		<0.001		

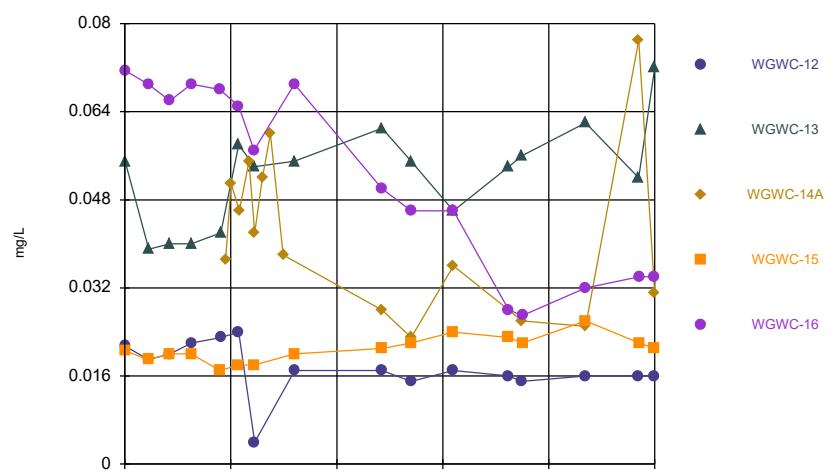
## Time Series



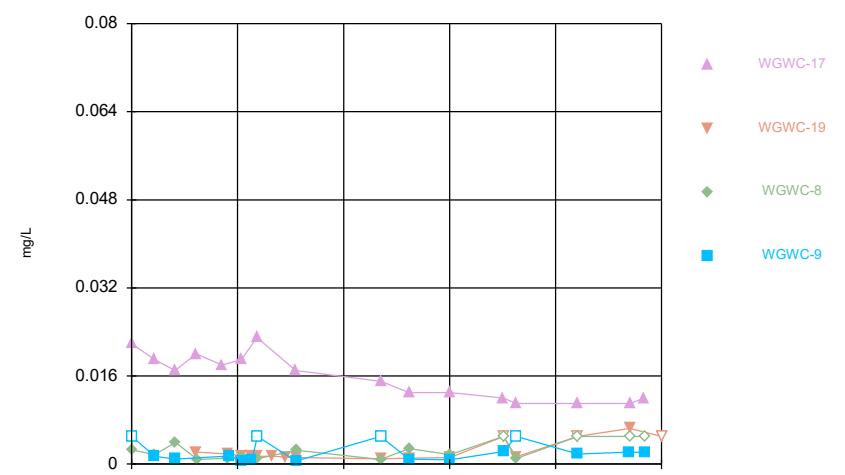
## Time Series



## Time Series



## Time Series



## Time Series

Constituent: Barium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.041	0.0221	0.0308		
5/18/2016				0.0174	0.00723
7/19/2016	0.038	0.018	0.022		
7/20/2016				0.012	0.0051
9/13/2016	0.029	0.021	0.021	0.013	0.0058
11/9/2016	0.041	0.011	0.025		
11/10/2016				0.013	0.0063
1/17/2017	0.044		0.017		
1/18/2017				0.014	0.0059
1/19/2017		0.012			
3/13/2017	0.042		0.019		
3/14/2017		0.017		0.014	0.0058
4/24/2017	0.039		0.019		
4/25/2017		0.017		0.015	0.0056
8/8/2017	0.044	0.021	0.022	0.015	
8/9/2017					0.0056
3/27/2018	0.041		0.021		
3/28/2018		0.019		0.014	0.0052
6/13/2018	0.045	0.013			
6/14/2018			0.02	0.013	0.0057
9/24/2018			0.02		
9/27/2018	0.047				
9/28/2018		0.014			
10/3/2018				0.014	0.0054
2/25/2019	0.049		0.027		
2/26/2019		0.015		0.014	0.012
4/1/2019	0.044		0.027		
4/2/2019		0.014		0.014	0.0056
9/16/2019	0.05				
9/17/2019		0.013	0.024		0.0063 (J)
9/18/2019				0.013	
2/3/2020	0.053		0.045		
2/4/2020				0.019	0.0087 (J)
2/5/2020		0.02			
3/16/2020	0.046		0.026		
3/17/2020		0.013		0.013	0.0059 (J)

## Time Series

Constituent: Barium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	0.0198	0.00518	0.0114	0.0391	
5/19/2016					0.031
7/19/2016	0.015	0.0049	0.012		
7/20/2016				0.028	0.029
9/13/2016		0.006	0.011		
9/14/2016	0.062			0.035	0.031
11/9/2016		0.0066			
11/10/2016			0.016		
11/11/2016				0.042	0.034
1/18/2017		0.007	0.013		
1/19/2017	0.034				0.042
1/27/2017					
2/6/2017				0.041	
3/14/2017	0.018	0.014	0.01		
3/15/2017				0.04	0.032
4/25/2017	0.018	0.0062	0.012		
4/26/2017				0.039	0.03
8/8/2017		0.0065	0.012		
8/9/2017	0.016				
8/10/2017				0.038	0.03
3/28/2018	0.015	0.0059	0.01		
3/29/2018					0.028
3/30/2018				0.042	
6/13/2018	0.016	0.0067			
6/14/2018			0.012	0.038	0.03
10/2/2018		0.0066			
10/3/2018	0.016		0.011		
10/4/2018				0.04	0.035
2/26/2019	0.02	0.011	0.013		
2/27/2019				0.04	0.04
4/2/2019	0.016	0.0069	0.011		
4/3/2019					0.035
4/4/2019				0.04	
9/16/2019	0.027	0.0073 (J)			
9/18/2019			0.012		
9/19/2019				0.038	0.033
2/4/2020	0.022	0.013			
2/5/2020			0.012	0.061	0.047
3/17/2020	0.017	0.0081 (J)	0.012		
3/18/2020				0.035	0.038

## Time Series

Constituent: Barium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.0206	0.0715
5/19/2016	0.0214	0.055			
7/19/2016				0.019	0.069
7/20/2016	0.019	0.039			
9/14/2016	0.02	0.04		0.02	0.066
11/10/2016		0.04		0.02	0.069
11/11/2016	0.022				
1/24/2017				0.017	0.068
1/27/2017	0.023	0.042			
2/8/2017				0.037	
2/23/2017				0.051	
3/14/2017				0.018	
3/15/2017	0.024	0.058			0.065
3/17/2017				0.046	
4/11/2017				0.055	
4/25/2017				0.018	0.057
4/26/2017	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	0.069
8/10/2017	0.017				
3/29/2018	0.017	0.061	0.028		0.05
3/30/2018				0.021	
6/14/2018	0.015	0.055	0.023	0.022	0.046
10/3/2018				0.024	
10/4/2018	0.017	0.046	0.036		0.046
2/27/2019	0.016	0.054	0.028	0.023	0.028
4/3/2019	0.015	0.056	0.026		
4/4/2019				0.022	0.027
9/18/2019		0.062	0.025	0.026	0.032
9/19/2019	0.016				
2/5/2020	0.016	0.052	0.077		
2/7/2020				0.022	0.034
3/18/2020	0.016			0.021	0.034
3/19/2020		0.072	0.031		

## Time Series

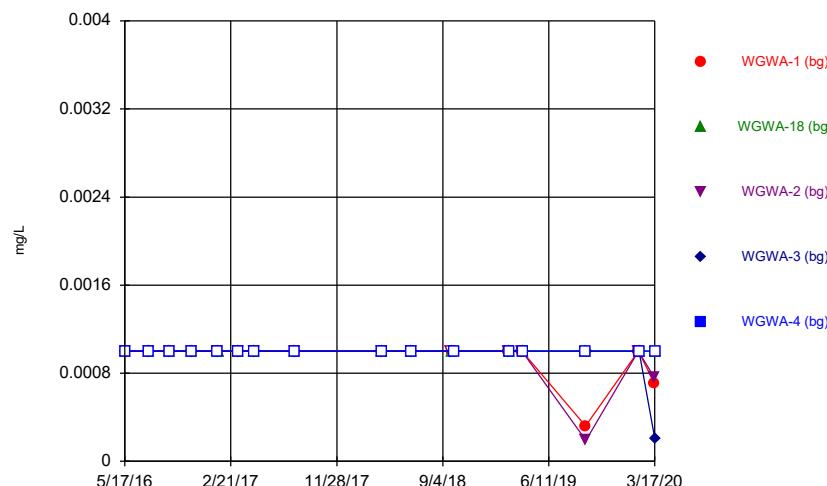
Constituent: Barium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0219			
5/19/2016			0.0026	<0.01
7/20/2016	0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.017			0.00092 (J)
9/15/2016				0.0039
11/10/2016	0.02			
11/11/2016		0.0022 (J)		
11/14/2016			0.00085 (J)	
1/20/2017	0.018			
2/6/2017		0.0018 (J)	0.0011 (J)	
2/9/2017				0.0015 (J)
3/14/2017	0.019			
3/15/2017		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017		0.0014 (J)		0.0007 (J)
4/25/2017	0.023			
4/26/2017		0.0014 (J)	0.00098 (J)	<0.01
6/7/2017		0.0014 (J)		
7/11/2017		0.0013 (J)		
8/9/2017	0.017			
8/10/2017		0.0012 (J)	0.0025	0.00053 (J)
3/29/2018		0.00097 (J)	0.00085 (J)	<0.01
3/30/2018	0.015			
6/14/2018	0.013	0.0011 (J)	0.0028	0.00088 (J)
10/4/2018	0.013	0.0012 (J)	0.0017 (J)	0.00076 (J)
2/26/2019	0.012			
2/27/2019			<0.01	
2/28/2019		<0.01		0.0023 (J)
4/2/2019		0.0013 (J)		
4/3/2019			0.001 (J)	<0.01
4/4/2019	0.011			
9/18/2019	0.011	<0.01		
9/19/2019			<0.01	0.0018 (J)
2/5/2020				0.0022 (J)
2/7/2020	0.011	0.0065 (J)	<0.01	
3/18/2020	0.012			
3/19/2020			<0.01	0.0021 (J)
5/4/2020		<0.01		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

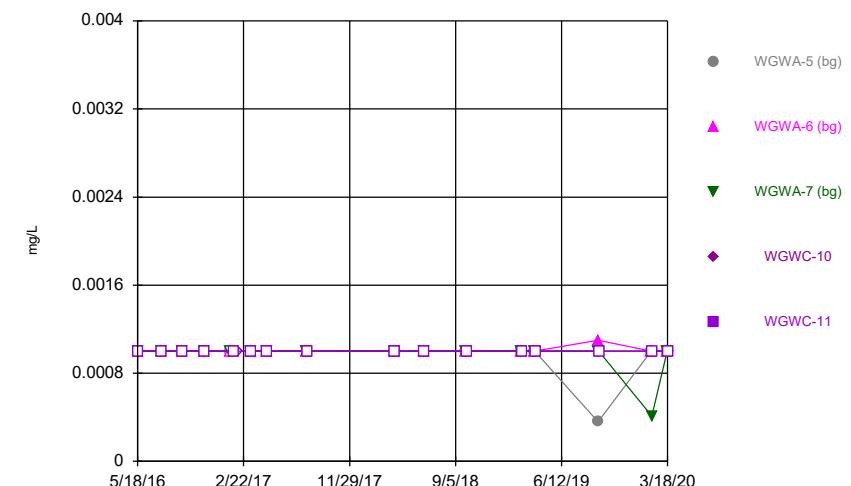
### Time Series



Constituent: Beryllium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

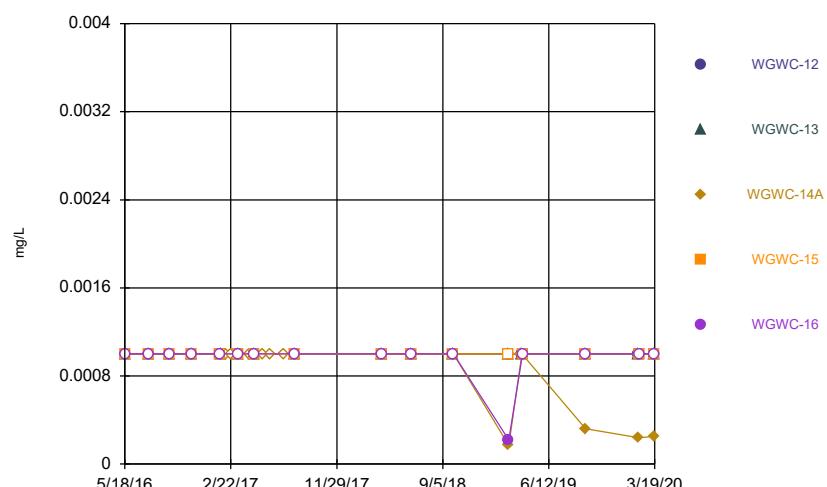
### Time Series



Constituent: Beryllium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

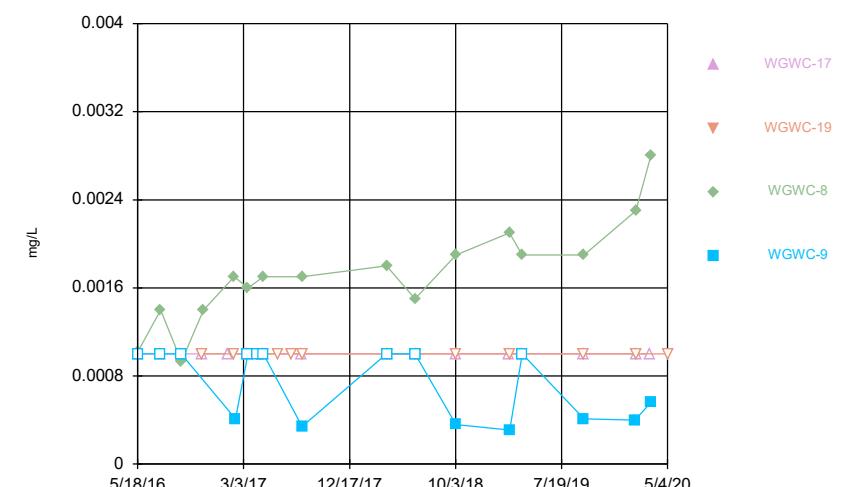
### Time Series



Constituent: Beryllium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Beryllium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<0.001		
1/18/2017				<0.001	<0.001
1/19/2017		<0.001			
3/13/2017	<0.001		<0.001		
3/14/2017			<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001		
4/25/2017			<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001	
8/9/2017					<0.001
3/27/2018	<0.001		<0.001		
3/28/2018			<0.001	<0.001	<0.001
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	<0.001
9/24/2018			<0.001		
9/27/2018	<0.001				
9/28/2018		<0.001			
10/3/2018				<0.001	<0.001
2/25/2019	<0.001		<0.001		
2/26/2019			<0.001	<0.001	<0.001
4/1/2019	<0.001		<0.001		
4/2/2019			<0.001	<0.001	<0.001
9/16/2019	0.00032 (J)				
9/17/2019		<0.001	0.00019 (J)		<0.001
9/18/2019				<0.001	
2/3/2020	<0.001		<0.001		
2/4/2020				<0.001	<0.001
2/5/2020		<0.001			
3/16/2020	0.00071 (J)		0.00076 (J)		
3/17/2020		<0.001		0.00021 (J)	<0.001

## Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	<0.001			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				<0.001
1/27/2017					<0.001
2/6/2017				<0.001	
3/14/2017	<0.001	<0.001	<0.001		
3/15/2017				<0.001	<0.001
4/25/2017	<0.001	<0.001	<0.001		
4/26/2017				<0.001	<0.001
8/8/2017		<0.001	<0.001		
8/9/2017	<0.001				
8/10/2017				<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001		
3/29/2018					<0.001
3/30/2018				<0.001	
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	<0.001
10/2/2018		<0.001			
10/3/2018	<0.001		<0.001		
10/4/2018				<0.001	<0.001
2/26/2019	<0.001	<0.001	<0.001		
2/27/2019				<0.001	<0.001
4/2/2019	<0.001	<0.001	<0.001		
4/3/2019					<0.001
4/4/2019				<0.001	
9/16/2019	0.00036 (J)	0.0011			
9/18/2019			<0.001		
9/19/2019				<0.001	<0.001
2/4/2020	<0.001	<0.001			
2/5/2020			0.00041 (J)	<0.001	<0.001
3/17/2020	<0.001	<0.001	<0.001		
3/18/2020				<0.001	<0.001

## Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.001	<0.001
5/19/2016	<0.001	<0.001			
7/19/2016				<0.001	<0.001
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		<0.001	<0.001
11/10/2016		<0.001		<0.001	<0.001
11/11/2016	<0.001				
1/24/2017				<0.001	<0.001
1/27/2017	<0.001	<0.001			
2/8/2017			<0.001		
2/23/2017			<0.001		
3/14/2017				<0.001	
3/15/2017	<0.001	<0.001			<0.001
3/17/2017			<0.001		
4/11/2017			<0.001		
4/25/2017				<0.001	<0.001
4/26/2017	<0.001	<0.001	<0.001		
5/17/2017			<0.001		
6/7/2017			<0.001		
7/11/2017			<0.001		
8/9/2017		<0.001		<0.001	<0.001
8/10/2017	<0.001				
3/29/2018	<0.001	<0.001	<0.001		<0.001
3/30/2018				<0.001	
6/14/2018	<0.001	<0.001	<0.001	<0.001	<0.001
10/3/2018				<0.001	
10/4/2018	<0.001	<0.001	<0.001		<0.001
2/27/2019	<0.001	<0.001	0.00017 (J)	<0.001	0.00022 (J)
4/3/2019	<0.001	<0.001	<0.001		
4/4/2019				<0.001	<0.001
9/18/2019		<0.001	0.00032 (J)	<0.001	<0.001
9/19/2019	<0.001				
2/5/2020	<0.001	<0.001	0.00024 (J)		
2/7/2020				<0.001	<0.001
3/18/2020	<0.001			<0.001	<0.001
3/19/2020		<0.001	0.00025 (J)		

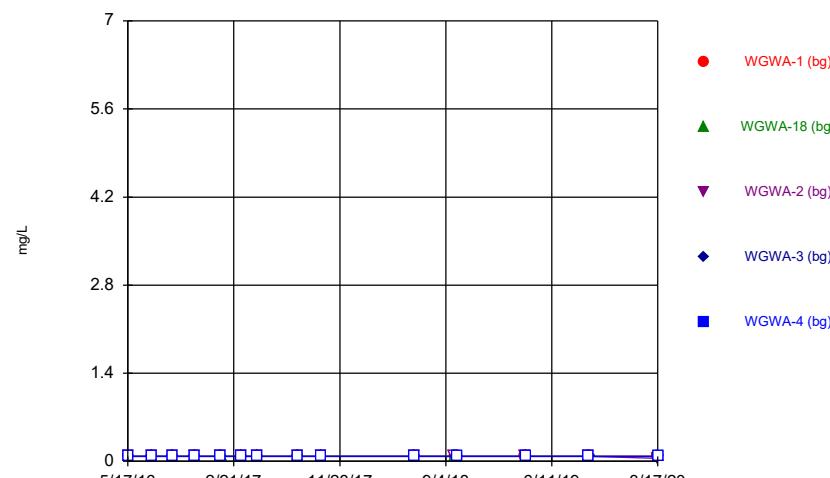
## Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			0.00102 (J)	<0.001
7/20/2016	<0.001		0.0014 (J)	<0.001
9/14/2016	<0.001			<0.001
9/15/2016				0.00093 (J)
11/10/2016	<0.001			
11/11/2016		<0.001		
11/14/2016			0.0014 (J)	
1/20/2017	<0.001			
2/6/2017		<0.001	0.0017 (J)	
2/9/2017				0.00041 (J)
3/14/2017	<0.001			
3/15/2017		<0.001	0.0016 (J)	<0.001
4/11/2017		<0.001		<0.001
4/25/2017	<0.001			
4/26/2017		<0.001	0.0017 (J)	<0.001
6/7/2017		<0.001		
7/11/2017		<0.001		
8/9/2017	<0.001			
8/10/2017		<0.001	0.0017 (J)	0.00034 (J)
3/29/2018		<0.001	0.0018 (J)	<0.001
3/30/2018	<0.001			
6/14/2018	<0.001	<0.001	0.0015 (J)	<0.001
10/4/2018	<0.001	<0.001	0.0019 (J)	0.00036 (J)
2/26/2019	<0.001			
2/27/2019			0.0021 (J)	
2/28/2019		<0.001		0.00031 (J)
4/2/2019		<0.001		
4/3/2019			0.0019 (J)	<0.001
4/4/2019	<0.001			
9/18/2019	<0.001	<0.001		
9/19/2019			0.0019	0.00041 (J)
2/5/2020				0.0004 (J)
2/7/2020	<0.001	<0.001	0.0023	
3/18/2020	<0.001			
3/19/2020			0.0028	0.00056 (J)
5/4/2020		<0.001		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

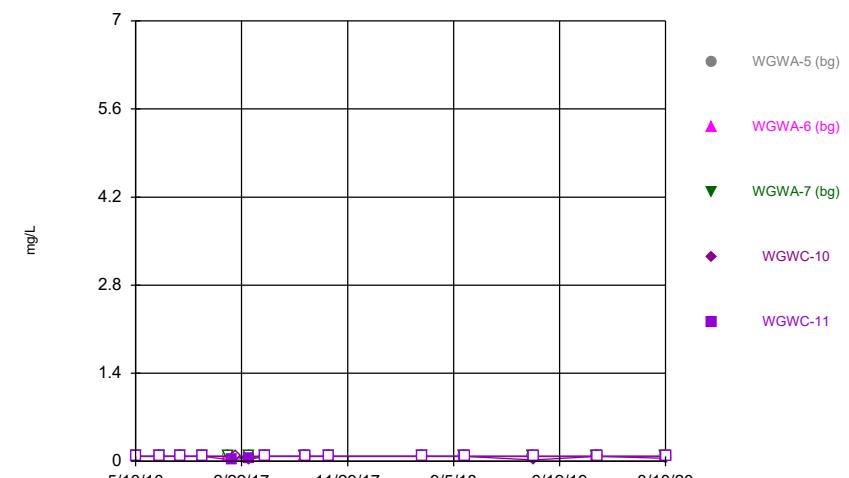
### Time Series



Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

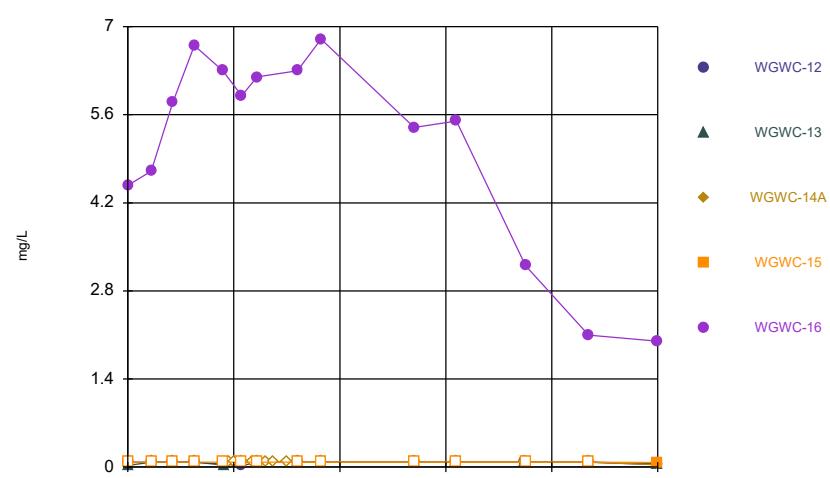
### Time Series



Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

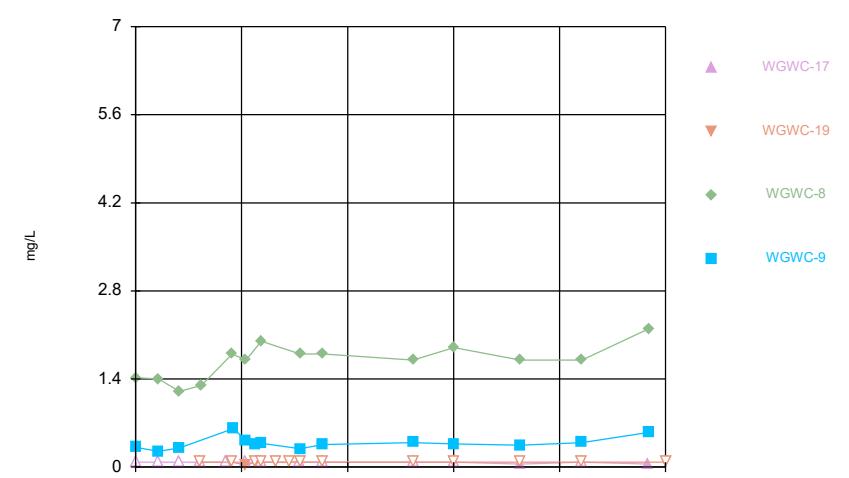
### Time Series



Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Boron (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.08	<0.08	<0.08		
5/18/2016				<0.08	<0.08
7/19/2016	<0.08	<0.08	<0.08		
7/20/2016				<0.08	<0.08
9/13/2016	<0.08	<0.08	<0.08	<0.08	<0.08
11/9/2016	<0.08	<0.08	<0.08		
11/10/2016				<0.08	<0.08
1/17/2017	<0.08		<0.08		
1/18/2017				<0.08	<0.08
1/19/2017		<0.08			
3/13/2017	<0.08		<0.08		
3/14/2017		<0.08		<0.08	<0.08
4/24/2017	<0.08		<0.08		
4/25/2017		<0.08		<0.08	<0.08
8/8/2017	<0.08	<0.08	<0.08	<0.08	
8/9/2017					<0.08
10/10/2017	<0.08		<0.08		
10/11/2017		<0.08		<0.08	<0.08
6/13/2018	<0.08	<0.08			
6/14/2018			<0.08	<0.08	<0.08
9/24/2018			<0.08		
9/27/2018	<0.08				
9/28/2018		<0.08			
10/3/2018				<0.08	<0.08
4/1/2019	<0.08		<0.08		
4/2/2019		<0.08		<0.08	<0.08
9/16/2019	<0.08				
9/17/2019		<0.08	<0.08		<0.08
9/18/2019				<0.08	
3/16/2020	<0.08		0.048 (J)		
3/17/2020		<0.08		<0.08	<0.08

## Time Series

Constituent: Boron (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.08	<0.08	<0.08	<0.08	
5/19/2016					<0.08
7/19/2016	<0.08	<0.08	<0.08		
7/20/2016				<0.08	<0.08
9/13/2016		<0.08	<0.08		
9/14/2016	<0.08			<0.08	<0.08
11/9/2016		<0.08			
11/10/2016			<0.08		
11/11/2016				<0.08	<0.08
1/18/2017		<0.08	<0.08		
1/19/2017	<0.08				
1/27/2017					0.021 (J)
2/6/2017				<0.08	
3/14/2017	<0.08	<0.08	<0.08		
3/15/2017				0.032 (J)	0.058
4/25/2017	<0.08	<0.08	<0.08		
4/26/2017				<0.08	<0.08
8/8/2017		<0.08	<0.08		
8/9/2017	<0.08				
8/10/2017				<0.08	<0.08
10/11/2017	<0.08	<0.08	<0.08		
10/12/2017				<0.08	<0.08
6/13/2018	<0.08	<0.08			
6/14/2018			<0.08	<0.08	<0.08
10/2/2018		<0.08			
10/3/2018	<0.08		<0.08		
10/4/2018				<0.08	<0.08
4/2/2019	<0.08	<0.08	<0.08		
4/3/2019					<0.08
4/4/2019				0.024 (J)	
9/16/2019	<0.08	<0.08			
9/18/2019			<0.08		
9/19/2019				<0.08	<0.08
3/17/2020	<0.08	<0.08	<0.08		
3/18/2020				0.049 (J)	<0.08

## Time Series

Constituent: Boron (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.08	4.48
5/19/2016	<0.08	0.0252 (J)		<0.08	4.7
7/19/2016				<0.08	5.8
7/20/2016	<0.08	<0.08		<0.08	6.7
9/14/2016	<0.08	<0.08		<0.08	6.3
11/10/2016		<0.08		<0.08	
11/11/2016	<0.08				
1/24/2017				<0.08	
1/27/2017	0.047 (J)	0.033 (J)			
2/8/2017				<0.08	
2/23/2017				<0.08	
3/14/2017				<0.08	
3/15/2017	0.024 (J)	<0.08			5.9
3/17/2017				<0.08	
4/11/2017				<0.08	
4/25/2017				<0.08	6.2
4/26/2017	<0.08	<0.08	<0.08		
5/17/2017				<0.08	
6/7/2017				<0.08	
7/11/2017				<0.08	
8/9/2017		<0.08		<0.08	6.3
8/10/2017	<0.08				
10/11/2017			<0.08	<0.08	6.8
10/12/2017	<0.08	<0.08			
6/14/2018	<0.08	<0.08	<0.08	<0.08	5.4
10/3/2018				<0.08	
10/4/2018	<0.08	<0.08	<0.08		5.5
4/3/2019	<0.08	<0.08	<0.08		
4/4/2019				<0.08	3.2
9/18/2019		<0.08	<0.08	<0.08	2.1
9/19/2019	<0.08				
3/18/2020	0.039 (J)			0.071 (J)	2
3/19/2020		0.053 (J)	0.039 (J)		

## Time Series

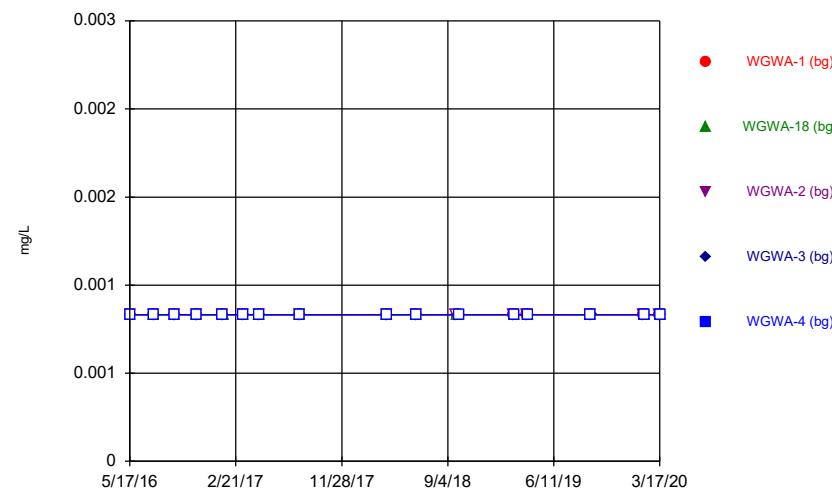
Constituent: Boron (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.08			
5/19/2016			1.42	0.314
7/20/2016	<0.08		1.4	0.25
9/14/2016	<0.08			0.3
9/15/2016				1.2
11/10/2016	<0.08			
11/11/2016		<0.08		
11/14/2016			1.3	
1/20/2017	<0.08			
2/6/2017		<0.08	1.8	
2/9/2017				0.61
3/14/2017	<0.08			
3/15/2017		0.034 (J)	1.7	0.42
4/11/2017		<0.08		0.37
4/25/2017	<0.08			
4/26/2017		<0.08	2	0.38
6/7/2017		<0.08		
7/11/2017		<0.08		
8/9/2017	<0.08			
8/10/2017		<0.08	1.8	0.29
10/11/2017	<0.08			
10/12/2017		<0.08	1.8	0.36
6/14/2018	<0.08	<0.08	1.7	0.39
10/4/2018	<0.08	<0.08	1.9	0.37
4/2/2019		<0.08		
4/3/2019			1.7	0.35
4/4/2019	0.049 (J)			
9/18/2019	<0.08	<0.08		
9/19/2019			1.7	0.39
3/18/2020	0.049 (J)			
3/19/2020			2.2	0.55
5/4/2020		<0.08		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

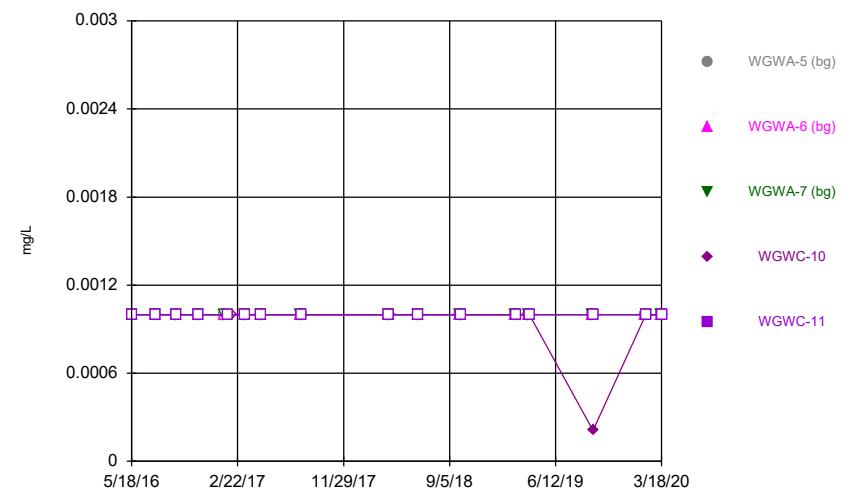
### Time Series



Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

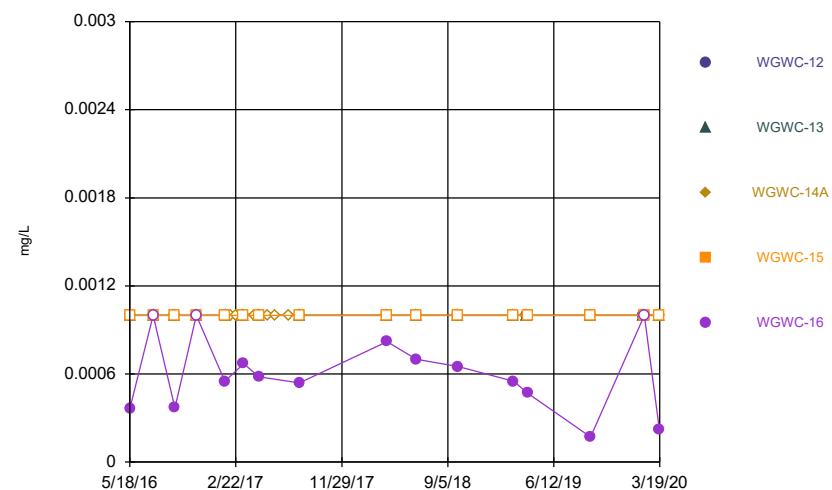
### Time Series



Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

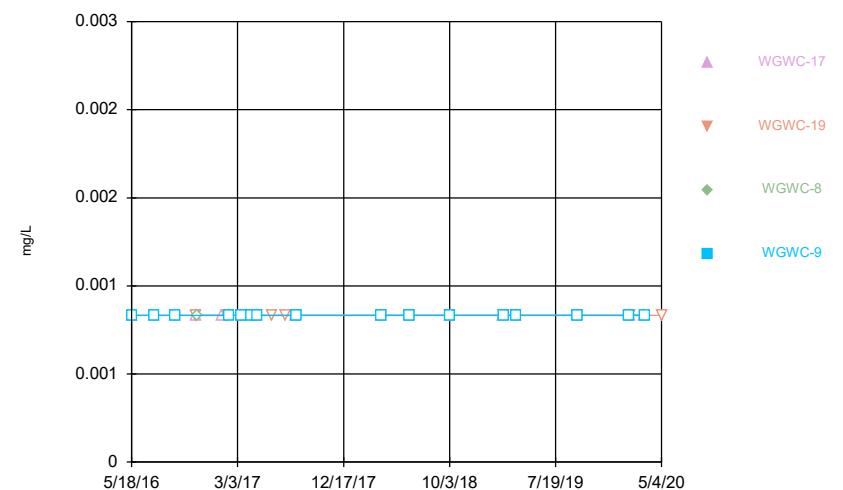
### Time Series



Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<0.001		
1/18/2017				<0.001	<0.001
1/19/2017		<0.001			
3/13/2017	<0.001		<0.001		
3/14/2017			<0.001	<0.001	
4/24/2017	<0.001		<0.001		
4/25/2017			<0.001	<0.001	
8/8/2017	<0.001	<0.001	<0.001	<0.001	
8/9/2017					<0.001
3/27/2018	<0.001		<0.001		
3/28/2018			<0.001	<0.001	
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	
9/24/2018			<0.001		
9/27/2018	<0.001				
9/28/2018		<0.001			
10/3/2018				<0.001	<0.001
2/25/2019	<0.001		<0.001		
2/26/2019			<0.001	<0.001	
4/1/2019	<0.001		<0.001		
4/2/2019			<0.001	<0.001	
9/16/2019	<0.001				
9/17/2019			<0.001		<0.001
9/18/2019				<0.001	
2/3/2020	<0.001		<0.001		
2/4/2020				<0.001	<0.001
2/5/2020		<0.001			
3/16/2020	<0.001		<0.001		
3/17/2020			<0.001	<0.001	

## Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	<0.001			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				<0.001
1/27/2017					<0.001
2/6/2017				<0.001	
3/14/2017	<0.001	<0.001	<0.001		
3/15/2017				<0.001	<0.001
4/25/2017	<0.001	<0.001	<0.001		
4/26/2017				<0.001	<0.001
8/8/2017		<0.001	<0.001		
8/9/2017	<0.001				
8/10/2017				<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001		
3/29/2018					<0.001
3/30/2018				<0.001	
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	<0.001
10/2/2018		<0.001			
10/3/2018	<0.001		<0.001		
10/4/2018				<0.001	<0.001
2/26/2019	<0.001	<0.001	<0.001		
2/27/2019				<0.001	<0.001
4/2/2019	<0.001	<0.001	<0.001		
4/3/2019					<0.001
4/4/2019				<0.001	
9/16/2019	<0.001	<0.001			
9/18/2019			<0.001		
9/19/2019				0.00021 (J)	<0.001
2/4/2020	<0.001	<0.001			
2/5/2020			<0.001	<0.001	<0.001
3/17/2020	<0.001	<0.001	<0.001		
3/18/2020				<0.001	<0.001

## Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

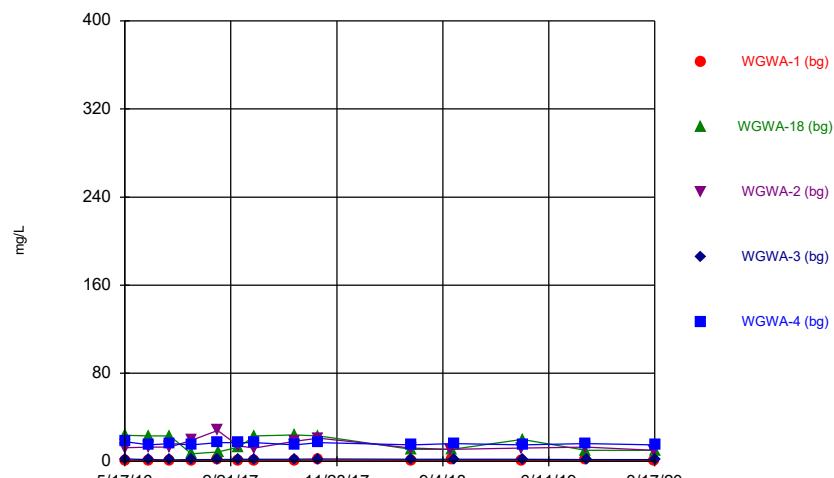
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.001	0.000362 (J)
5/19/2016	<0.001	<0.001			
7/19/2016				<0.001	<0.001
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		<0.001	0.00037 (J)
11/10/2016		<0.001		<0.001	<0.001
11/11/2016	<0.001				
1/24/2017				<0.001	0.00055 (J)
1/27/2017	<0.001	<0.001			
2/8/2017			<0.001		
2/23/2017			<0.001		
3/14/2017				<0.001	
3/15/2017	<0.001	<0.001			0.00067 (J)
3/17/2017			<0.001		
4/11/2017			<0.001		
4/25/2017				<0.001	0.00058 (J)
4/26/2017	<0.001	<0.001	<0.001		
5/17/2017			<0.001		
6/7/2017			<0.001		
7/11/2017			<0.001		
8/9/2017		<0.001		<0.001	0.00054 (J)
8/10/2017	<0.001				
3/29/2018	<0.001	<0.001	<0.001		0.00082 (J)
3/30/2018				<0.001	
6/14/2018	<0.001	<0.001	<0.001	<0.001	0.0007 (J)
10/3/2018				<0.001	
10/4/2018	<0.001	<0.001	<0.001		0.00065 (J)
2/27/2019	<0.001	<0.001	<0.001	<0.001	0.00055 (J)
4/3/2019	<0.001	<0.001	<0.001		
4/4/2019				<0.001	0.00047 (J)
9/18/2019		<0.001	<0.001	<0.001	0.00017 (J)
9/19/2019	<0.001				
2/5/2020	<0.001	<0.001	<0.001		
2/7/2020				<0.001	<0.001
3/18/2020	<0.001			<0.001	0.00022 (J)
3/19/2020		<0.001	<0.001		

## Time Series

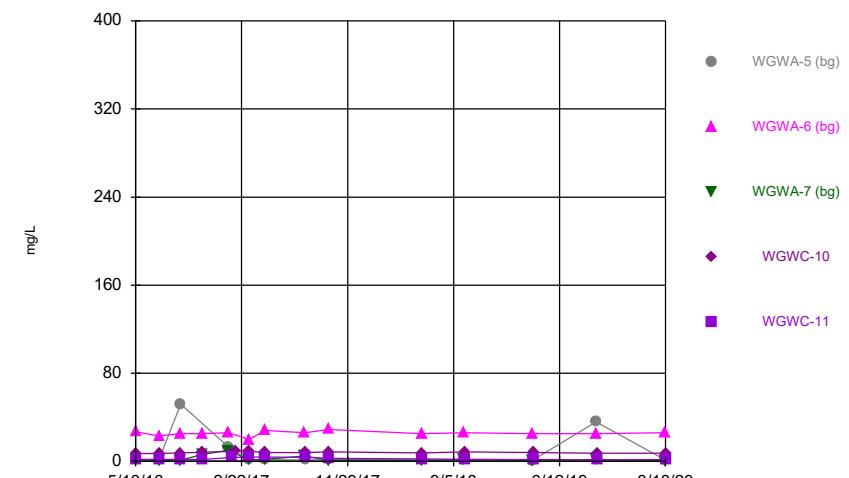
Constituent: Cadmium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			<0.001	<0.001
7/20/2016	<0.001		<0.001	<0.001
9/14/2016	<0.001			<0.001
9/15/2016				<0.001
11/10/2016	<0.001			
11/11/2016		<0.001		
11/14/2016			<0.001	
1/20/2017	<0.001			
2/6/2017		<0.001	<0.001	
2/9/2017				<0.001
3/14/2017	<0.001			
3/15/2017		<0.001	<0.001	<0.001
4/11/2017		<0.001		<0.001
4/25/2017	<0.001			
4/26/2017		<0.001	<0.001	<0.001
6/7/2017		<0.001		
7/11/2017		<0.001		
8/9/2017	<0.001			
8/10/2017		<0.001	<0.001	<0.001
3/29/2018		<0.001	<0.001	<0.001
3/30/2018	<0.001			
6/14/2018	<0.001	<0.001	<0.001	<0.001
10/4/2018	<0.001	<0.001	<0.001	<0.001
2/26/2019	<0.001			
2/27/2019			<0.001	
2/28/2019		<0.001		<0.001
4/2/2019		<0.001		
4/3/2019			<0.001	<0.001
4/4/2019	<0.001			
9/18/2019	<0.001	<0.001		
9/19/2019			<0.001	<0.001
2/5/2020				<0.001
2/7/2020	<0.001	<0.001	<0.001	
3/18/2020	<0.001			
3/19/2020			<0.001	<0.001
5/4/2020		<0.001		

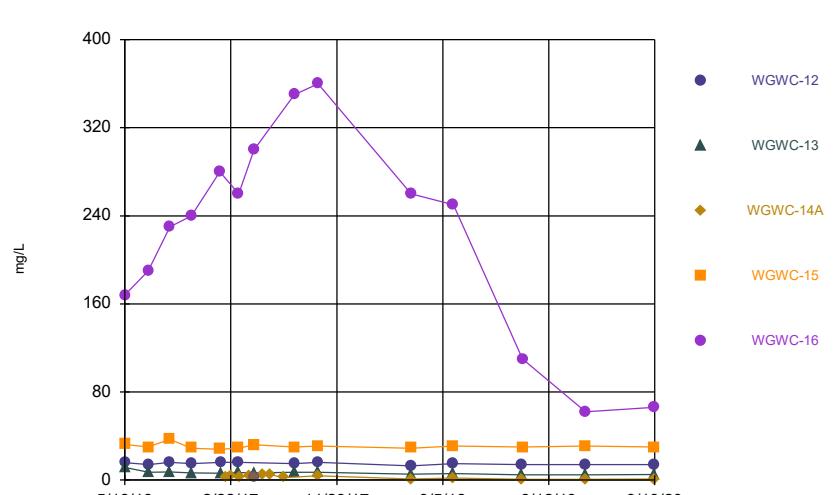
## Time Series



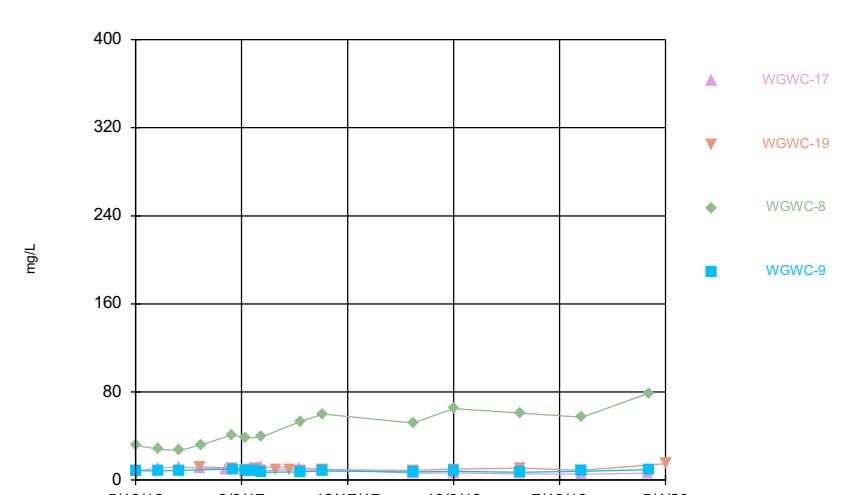
## Time Series



## Time Series



## Time Series



## Time Series

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.927	23.7	12.2		
5/18/2016				2.1	17.9
7/19/2016	1	23	13		
7/20/2016				1.7	15
9/13/2016	0.44	23	13	1.3	16
11/9/2016	1.1	6.7	19		
11/10/2016				1.6	15
1/17/2017	1.4		28		
1/18/2017				1.7	17
1/19/2017		8.5			
3/13/2017	1.1		14		
3/14/2017		13		1.8	17
4/24/2017	1.1		12		
4/25/2017		23		2	17
8/8/2017	1.1	24	18	2	
8/9/2017					15
10/10/2017	1.2		21		
10/11/2017		23		2.1	17
6/13/2018	1.1	11			
6/14/2018			12	2	15
9/24/2018			11		
9/27/2018	1.2				
9/28/2018		11			
10/3/2018				1.8	16
4/1/2019	1		12		
4/2/2019		20		1.8	15
9/16/2019	1.3				16
9/17/2019		10	13		
9/18/2019				1.6	
3/16/2020	1.1		10		
3/17/2020		10		1.7	15

## Time Series

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	1.7	27	1.36	7.17	
5/19/2016					1.95
7/19/2016	1.5	23	0.88		
7/20/2016				7	1.5
9/13/2016		25	0.93		
9/14/2016	52			7.7	1.8
11/9/2016		25			
11/10/2016			6.1		
11/11/2016				8.2	1.7
1/18/2017		26	10		
1/19/2017	13				
1/27/2017					3.5
2/6/2017			9.1		
3/14/2017	1.6	20	1.3		
3/15/2017				9	3.8
4/25/2017	1.5	28	1.9		
4/26/2017				8.1	4
8/8/2017		26	4.8		
8/9/2017	1.3				
8/10/2017				8.1	3.5
10/11/2017	1.5	29	0.93		
10/12/2017				8.6	2.7
6/13/2018	1.2	25			
6/14/2018			0.94	7.7	2.2
10/2/2018		26			
10/3/2018	1.4		1.2		
10/4/2018				8.5	2
4/2/2019	1.1	25	1.1		
4/3/2019					1.7
4/4/2019			7.9		
9/16/2019	36	25			
9/18/2019			1.5		
9/19/2019				7.5	1.4
3/17/2020	1.4	26	0.82		
3/18/2020				7.5	1.6

## Time Series

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

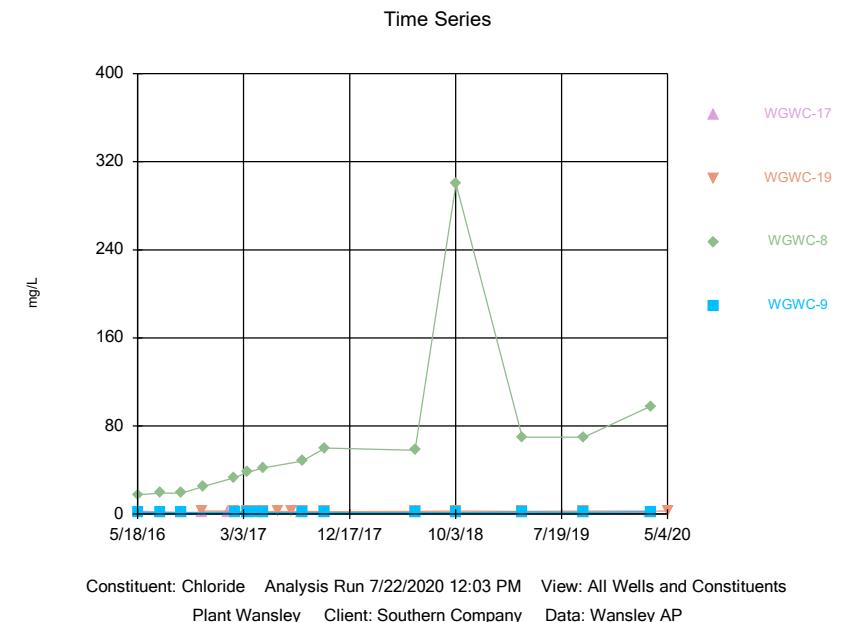
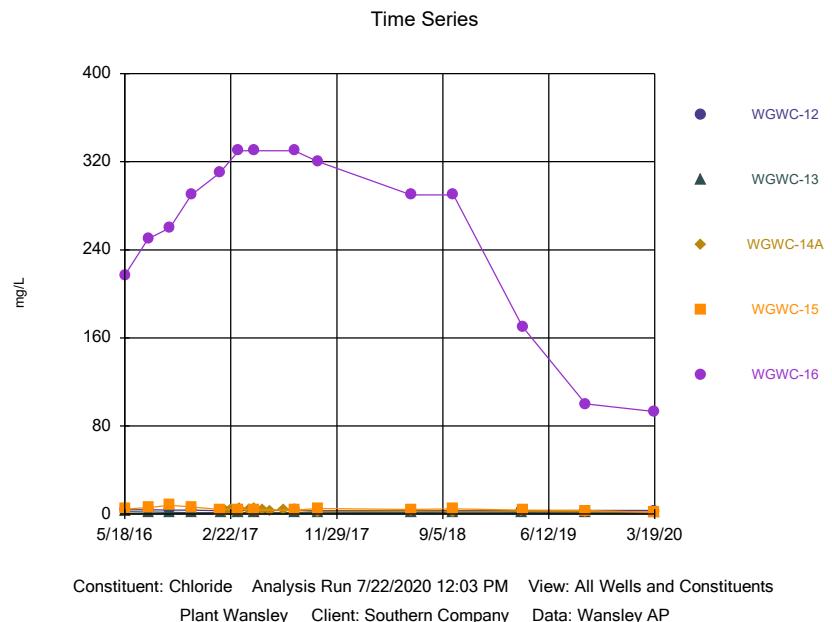
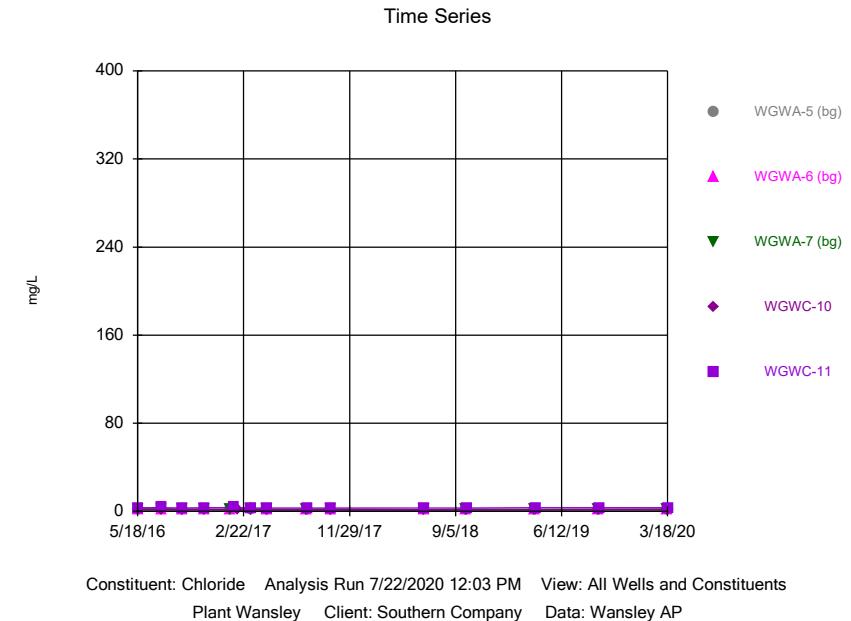
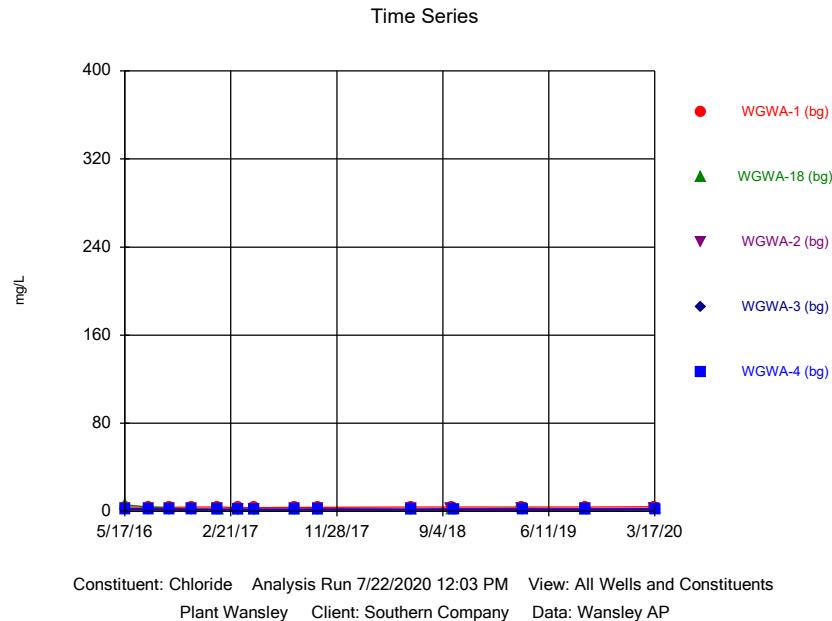
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				32.5	168
5/19/2016	15.8	11.4			
7/19/2016				30	190
7/20/2016	14	7.1			
9/14/2016	16	7.4		37	230
11/10/2016		6.4		29	240
11/11/2016	15				
1/24/2017				28	280
1/27/2017	16	6.2			
2/8/2017				3.2	
2/23/2017				4.1	
3/14/2017				29	
3/15/2017	16	6.7			260
3/17/2017				2.4	
4/11/2017				4.1	
4/25/2017				32	300
4/26/2017	3 (o)	6.5	2.5		
5/17/2017				5.2	
6/7/2017				5.2	
7/11/2017				2.3	
8/9/2017		7		30	350
8/10/2017	15				
10/11/2017				3.8	31
10/12/2017	16	7			360
6/14/2018	13	5.5	1.1	29	260
10/3/2018				31	
10/4/2018	15	5.9	2		250
4/3/2019	14	4.7	0.84		
4/4/2019				30	110
9/18/2019		4.9	0.85	31	62
9/19/2019	14				
3/18/2020	14			30	66
3/19/2020		5	0.89		

## Time Series

Constituent: Calcium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	8.24			
5/19/2016			31.4	8.53
7/20/2016	11		28	8.2
9/14/2016	12			8.8
9/15/2016			27	
11/10/2016	11			
11/11/2016		12		
11/14/2016			32	
1/20/2017	10			
2/6/2017		11	41	
2/9/2017				10
3/14/2017	8.8			
3/15/2017		10	38	8.6
4/11/2017		11		8.6
4/25/2017	12			
4/26/2017		8.4	39	7.1
6/7/2017		9		
7/11/2017		9.5		
8/9/2017	11			
8/10/2017		8.8	53	7.5
10/11/2017	10			
10/12/2017		9.5	60	8.2
6/14/2018	6.2	8.9	52	7.5
10/4/2018	6.4	10	65	8
4/2/2019		11		
4/3/2019			61	7.2
4/4/2019	5.6			
9/18/2019	5.5	8.8		
9/19/2019			57	8.1
3/18/2020	6.3			
3/19/2020			79	9.3
5/4/2020		15		



## Time Series

Constituent: Chloride (mg/L)   Analysis Run 7/22/2020 12:04 PM   View: All Wells and Constituents  
 Plant Wansley   Client: Southern Company   Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	3.8	6.05	2.5		
5/18/2016				1.92	1.45
7/19/2016	3.9	4	2.6		
7/20/2016				1.8	1.4
9/13/2016	3.6	3.1	2.4	1.7	1.4
11/9/2016	3.9	2.3	2.3		
11/10/2016				1.6	1.3
1/17/2017	3.8		2.3		
1/18/2017				1.7	1.3
1/19/2017		2			
3/13/2017	3.4		2.2		
3/14/2017		1.9		1.6	1.2
4/24/2017	3.4		2.2		
4/25/2017		1.9		1.6	1.2
8/8/2017	3.6	2	2.3	1.7	
8/9/2017					1.2
10/10/2017	3.6		2.5		
10/11/2017		1.9		1.6	1.2
6/13/2018	3.8	2			
6/14/2018			2.3	1.6	1.2
9/24/2018			2.4		
9/27/2018	4				
9/28/2018		2.1			
10/3/2018				1.6	1.2
4/1/2019	4		2.4		
4/2/2019		2.6		1.7	1.2
9/16/2019	4				
9/17/2019		2	2.4		1.2
9/18/2019				1.7	
3/16/2020	4.3		2.7		
3/17/2020		2.3		1.8	1.4

## Time Series

Constituent: Chloride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	2.14	1.58	2.06	1.45	
5/19/2016					3.21
7/19/2016	2.4	1.6	2.1		
7/20/2016				1.6	3.4
9/13/2016		1.4	2		
9/14/2016	2.1			1.5	3.1
11/9/2016		1.5			
11/10/2016			1.8		
11/11/2016				1.5	3.2
1/18/2017		1.5	1.8		
1/19/2017	1.8				
1/27/2017					3.4
2/6/2017			1.4		
3/14/2017	2	2.5	1.8		
3/15/2017				1.4	3.1
4/25/2017	1.8	1.3	1.8		
4/26/2017				1.3	3.1
8/8/2017		1.4	1.9		
8/9/2017	1.9				
8/10/2017				1.4	3.1
10/11/2017	2.1	1.3	1.8		
10/12/2017				1.3	3
6/13/2018	1.7	1.4			
6/14/2018			1.7	1.3	3
10/2/2018		1.4			
10/3/2018	1.8		1.8		
10/4/2018				1.3	3.1
4/2/2019	1.7	1.5	1.9		
4/3/2019					3.3
4/4/2019				1.4	
9/16/2019	1.8	1.5			
9/18/2019			2		
9/19/2019				1.5	3.2
3/17/2020	1.6	1.7	2.2		
3/18/2020				1.5	3.2

## Time Series

Constituent: Chloride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				4.59	217
5/19/2016	3.8	2.26			
7/19/2016				5.9	250
7/20/2016	3.8	1.9			
9/14/2016	3.7	1.6		7.9	260
11/10/2016		1.4		6.5	290
11/11/2016	3.5				
1/24/2017				4.1	310
1/27/2017	3.1	1.4			
2/8/2017				2.5	
2/23/2017				4.3	
3/14/2017				4.4	
3/15/2017	3.2	1.4			330
3/17/2017				4.8	
4/11/2017				3.8	
4/25/2017				4	330
4/26/2017	3.2	1.3		4.8	
5/17/2017				3.9	
6/7/2017				3.2	
7/11/2017				4.1	
8/9/2017		1.4		3.6	330
8/10/2017	3.4				
10/11/2017				2.2	5 320
10/12/2017	3.1	1.2			
6/14/2018	3	1.2		2.8	4.3 290
10/3/2018					4.8
10/4/2018	3.1	1.2		2.2	
4/3/2019	3	1.2		2.4	
4/4/2019					3.7 170
9/18/2019		1.2		2.2	3.2 100
9/19/2019	3.2				
3/18/2020	3.2				1.7 93
3/19/2020		1.3		1.9	

## Time Series

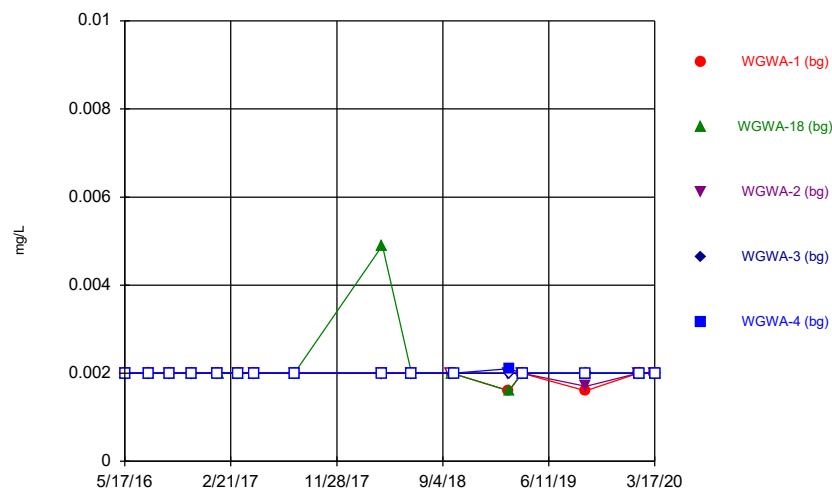
Constituent: Chloride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	2.72			
5/19/2016			17.5	1.46
7/20/2016	1.9		19	1.5
9/14/2016	1.6			1.4
9/15/2016			19	
11/10/2016	1.6			
11/11/2016		2.6		
11/14/2016			25	
1/20/2017	1.5			
2/6/2017		2.6	33	
2/9/2017				1.5
3/14/2017	1.5			
3/15/2017		2.4	38	1.3
4/11/2017		2.3		1.2
4/25/2017	1.8			
4/26/2017		2.3	42	1.2
6/7/2017		2.5		
7/11/2017		2.3		
8/9/2017	1.4			
8/10/2017		2.5	48	1.3
10/11/2017	1.5			
10/12/2017		2.3	60	1.4
6/14/2018	1.5	2.4	58	1.2
10/4/2018	1.5	2.6	300	1.2
4/2/2019		2.5		
4/3/2019			70	2
4/4/2019	1.4			
9/18/2019	1.5	2.7		
9/19/2019			70	1.5
3/18/2020	1.5			
3/19/2020			98	2.1
5/4/2020		2.8		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

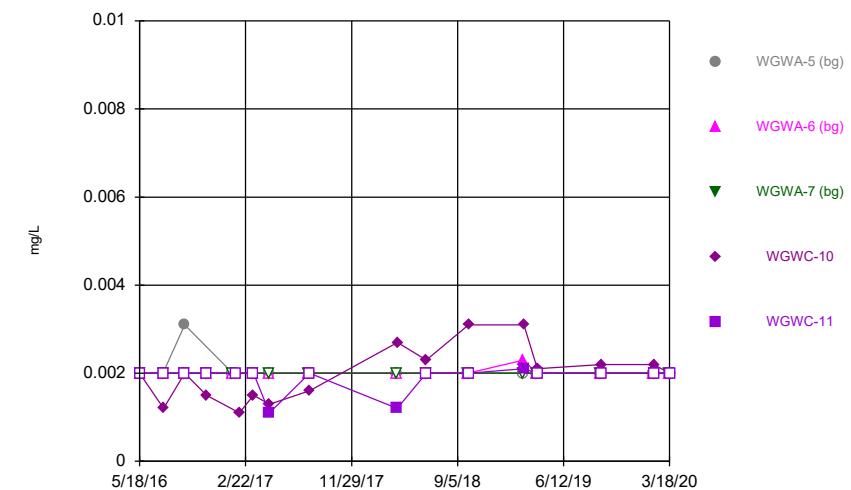
### Time Series



Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

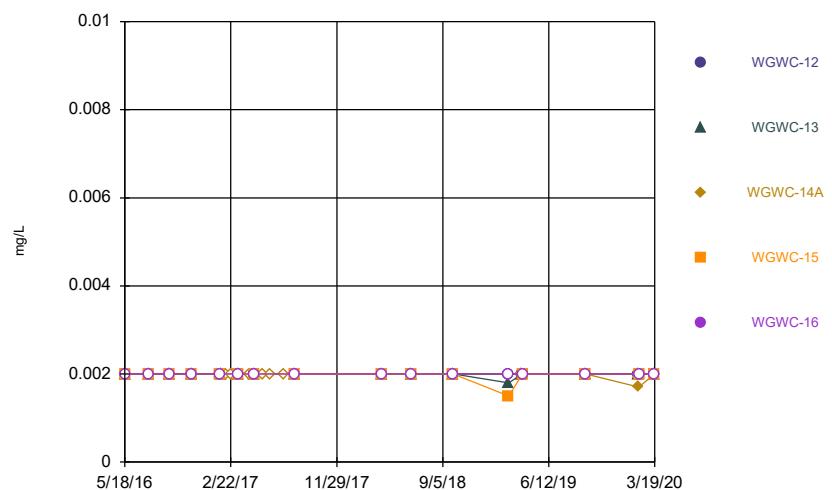
### Time Series



Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

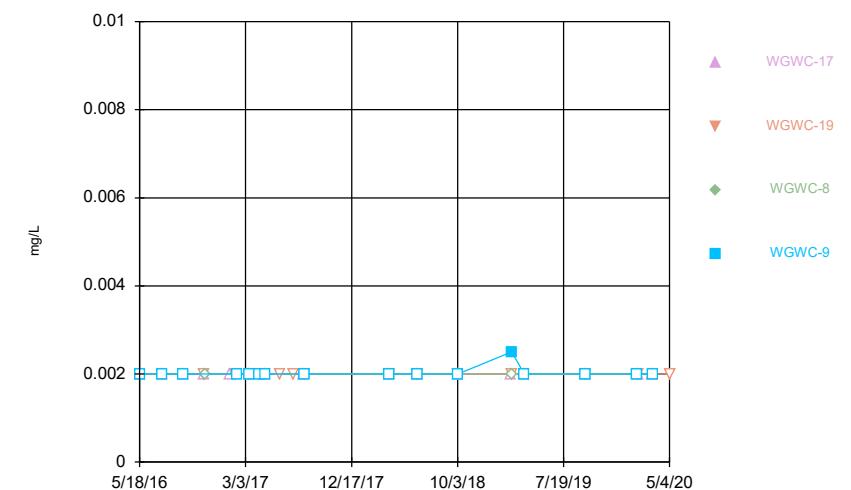
### Time Series



Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.002	<0.002	<0.002		
5/18/2016				<0.002	<0.002
7/19/2016	<0.002	<0.002	<0.002		
7/20/2016				<0.002	<0.002
9/13/2016	<0.002	<0.002	<0.002	<0.002	<0.002
11/9/2016	<0.002	<0.002	<0.002		
11/10/2016				<0.002	<0.002
1/17/2017	<0.002		<0.002		
1/18/2017				<0.002	<0.002
1/19/2017		<0.002			
3/13/2017	<0.002		<0.002		
3/14/2017			<0.002	<0.002	
4/24/2017	<0.002		<0.002		
4/25/2017			<0.002	<0.002	
8/8/2017	<0.002	<0.002	<0.002	<0.002	
8/9/2017					<0.002
3/27/2018	<0.002		<0.002		
3/28/2018		0.0049		<0.002	<0.002
6/13/2018	<0.002	<0.002			
6/14/2018			<0.002	<0.002	<0.002
9/24/2018			<0.002		
9/27/2018	<0.002				
9/28/2018		<0.002			
10/3/2018				<0.002	<0.002
2/25/2019	0.0016 (J)		<0.002		
2/26/2019		0.0016 (J)		<0.002	0.0021 (J)
4/1/2019	<0.002		<0.002		
4/2/2019			<0.002	<0.002	
9/16/2019	0.0016 (J)				
9/17/2019		<0.002	0.0017 (J)		<0.002
9/18/2019				<0.002	
2/3/2020	<0.002		<0.002		
2/4/2020				<0.002	<0.002
2/5/2020		<0.002			
3/16/2020	<0.002		<0.002		
3/17/2020		<0.002		<0.002	<0.002

## Time Series

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.002	<0.002	<0.002	<0.002	
5/19/2016					<0.002
7/19/2016	<0.002	<0.002	<0.002		
7/20/2016				0.0012 (J)	<0.002
9/13/2016		<0.002	<0.002		
9/14/2016	0.0031			<0.002	<0.002
11/9/2016		<0.002			
11/10/2016			<0.002		
11/11/2016				0.0015 (J)	<0.002
1/18/2017		<0.002	<0.002		
1/19/2017	<0.002				<0.002
1/27/2017					0.0011 (J)
2/6/2017	<0.002	<0.002	<0.002		
3/14/2017				0.0015 (J)	<0.002
3/15/2017					
4/25/2017	<0.002	<0.002	<0.002		
4/26/2017				0.0013 (J)	0.0011 (J)
8/8/2017		<0.002	<0.002		
8/9/2017	<0.002				
8/10/2017				0.0016 (J)	<0.002
3/28/2018	<0.002	<0.002	<0.002		
3/29/2018					0.0012 (J)
3/30/2018				0.0027	
6/13/2018	<0.002	<0.002			
6/14/2018			<0.002	0.0023 (J)	<0.002
10/2/2018		<0.002			
10/3/2018	<0.002		<0.002		
10/4/2018				0.0031	<0.002
2/26/2019	<0.002	0.0023 (J)	<0.002		
2/27/2019				0.0031	0.0021 (J)
4/2/2019	<0.002	<0.002	<0.002		
4/3/2019					<0.002
4/4/2019				0.0021 (J)	
9/16/2019	<0.002	<0.002			
9/18/2019			<0.002		
9/19/2019				0.0022	<0.002
2/4/2020	<0.002	<0.002			
2/5/2020			<0.002	0.0022	<0.002
3/17/2020	<0.002	<0.002	<0.002		
3/18/2020				<0.002	<0.002

## Time Series

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.002	<0.002
5/19/2016	<0.002	<0.002			
7/19/2016				<0.002	<0.002
7/20/2016	<0.002	<0.002			
9/14/2016	<0.002	<0.002		<0.002	<0.002
11/10/2016		<0.002		<0.002	<0.002
11/11/2016	<0.002				
1/24/2017				<0.002	<0.002
1/27/2017	<0.002	<0.002			
2/8/2017			<0.002		
2/23/2017			<0.002		
3/14/2017				<0.002	
3/15/2017	<0.002	<0.002			<0.002
3/17/2017			<0.002		
4/11/2017			<0.002		
4/25/2017				<0.002	<0.002
4/26/2017	<0.002	<0.002	<0.002		
5/17/2017			<0.002		
6/7/2017			<0.002		
7/11/2017			<0.002		
8/9/2017		<0.002		<0.002	<0.002
8/10/2017	<0.002				
3/29/2018	<0.002	<0.002	<0.002		<0.002
3/30/2018				<0.002	
6/14/2018	<0.002	<0.002	<0.002	<0.002	<0.002
10/3/2018				<0.002	
10/4/2018	<0.002	<0.002	<0.002		<0.002
2/27/2019	<0.002	0.0018 (J)	<0.002	0.0015 (J)	<0.002
4/3/2019	<0.002	<0.002	<0.002		
4/4/2019				<0.002	<0.002
9/18/2019		<0.002	<0.002	<0.002	<0.002
9/19/2019	<0.002				
2/5/2020	<0.002	<0.002	0.0017 (J)		
2/7/2020				<0.002	<0.002
3/18/2020	<0.002			<0.002	<0.002
3/19/2020		<0.002	<0.002		

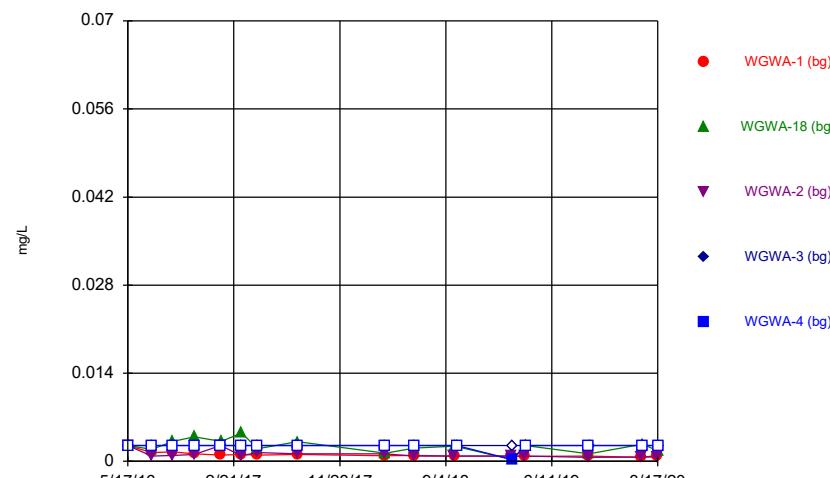
## Time Series

Constituent: Chromium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.002			
5/19/2016			<0.002	<0.002
7/20/2016	<0.002		<0.002	<0.002
9/14/2016	<0.002			<0.002
9/15/2016				<0.002
11/10/2016	<0.002			
11/11/2016		<0.002		
11/14/2016			<0.002	
1/20/2017	<0.002			
2/6/2017		<0.002	<0.002	
2/9/2017				<0.002
3/14/2017	<0.002			
3/15/2017		<0.002	<0.002	<0.002
4/11/2017		<0.002		<0.002
4/25/2017	<0.002			
4/26/2017		<0.002	<0.002	<0.002
6/7/2017		<0.002		
7/11/2017		<0.002		
8/9/2017	<0.002			
8/10/2017		<0.002	<0.002	<0.002
3/29/2018		<0.002	<0.002	<0.002
3/30/2018	<0.002			
6/14/2018	<0.002	<0.002	<0.002	<0.002
10/4/2018	<0.002	<0.002	<0.002	<0.002
2/26/2019	<0.002			
2/27/2019			<0.002	
2/28/2019		<0.002		0.0025
4/2/2019		<0.002		
4/3/2019			<0.002	<0.002
4/4/2019	<0.002			
9/18/2019	<0.002	<0.002		
9/19/2019			<0.002	<0.002
2/5/2020				<0.002
2/7/2020	<0.002	<0.002	<0.002	
3/18/2020	<0.002			
3/19/2020			<0.002	<0.002
5/4/2020		<0.002		

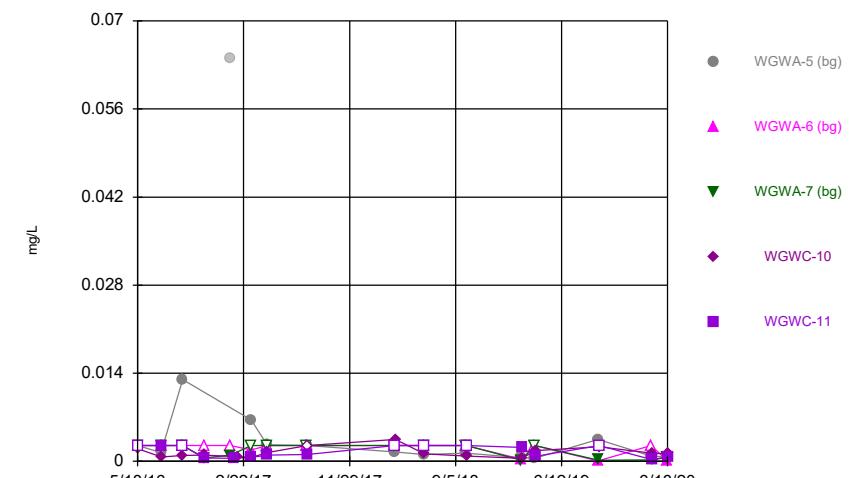
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



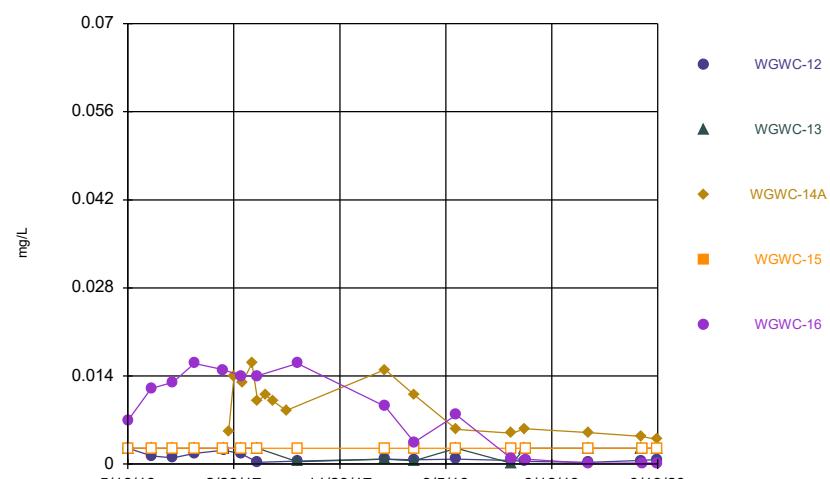
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



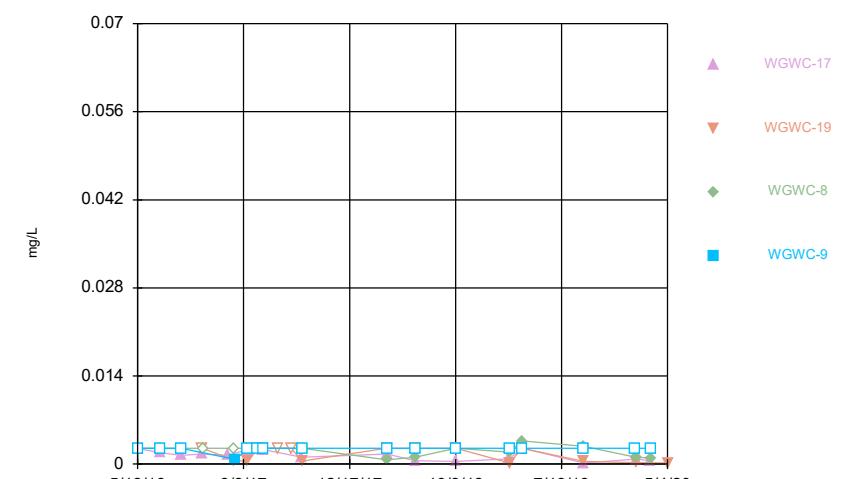
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



## Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025		
5/18/2016				<0.0025	<0.0025
7/19/2016	0.0014 (J)	0.0019 (J)	0.00086 (J)		
7/20/2016				<0.0025	<0.0025
9/13/2016	0.0015 (J)	0.0032	0.00095 (J)	<0.0025	<0.0025
11/9/2016	0.0012 (J)	0.0039	0.0011 (J)		
11/10/2016				<0.0025	<0.0025
1/17/2017	0.001 (J)		<0.0025		
1/18/2017				<0.0025	<0.0025
1/19/2017		0.0032			
3/13/2017	0.0011 (J)		0.00087 (J)		
3/14/2017		0.0045		<0.0025	<0.0025
4/24/2017	0.001 (J)		0.0014 (J)		
4/25/2017		0.002 (J)		<0.0025	<0.0025
8/8/2017	0.0011 (J)	0.0031	0.0012 (J)	<0.0025	
8/9/2017					<0.0025
3/27/2018	0.00091 (J)		0.0012 (J)		
3/28/2018		0.0013 (J)		<0.0025	<0.0025
6/13/2018	0.00094 (J)	0.0021 (J)			
6/14/2018			0.00085 (J)	<0.0025	<0.0025
9/24/2018			0.00085 (J)		
9/27/2018	0.00085 (J)				
9/28/2018		0.0024 (J)			
10/3/2018				<0.0025	<0.0025
2/25/2019	0.00085 (J)		0.00083 (J)		
2/26/2019		0.00026 (J)		<0.0025	0.00029 (J)
4/1/2019	0.00079 (J)		0.00082 (J)		
4/2/2019		<0.0025		<0.0025	<0.0025
9/16/2019	0.00082				
9/17/2019		0.0012	0.00063		<0.0025
9/18/2019					<0.0025
2/3/2020	0.00062		0.00068		
2/4/2020				<0.0025	<0.0025
2/5/2020		0.0027			
3/16/2020	0.00092 (J)		0.00066 (J)		
3/17/2020		0.0017 (J)		<0.0025	<0.0025

## Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.0025	<0.0025	<0.0025	0.00201 (J)	
5/19/2016					<0.0025
7/19/2016	0.0014 (J)	<0.0025	<0.0025		
7/20/2016				0.00066 (J)	0.0025
9/13/2016		<0.0025	<0.0025		
9/14/2016	0.013			0.00095 (J)	<0.0025
11/9/2016		<0.0025			
11/10/2016			0.00055 (J)		
11/11/2016				0.001 (J)	0.00052 (J)
1/18/2017		<0.0025	0.00097 (J)		
1/19/2017	0.064 (O)				
1/27/2017					0.00049 (J)
2/6/2017			0.00072 (J)		
3/14/2017	0.0066	0.0018 (J)	<0.0025		
3/15/2017				0.00062 (J)	0.00064 (J)
4/25/2017	0.0026	<0.0025	<0.0025		
4/26/2017				0.0014 (J)	0.001 (J)
8/8/2017		<0.0025	<0.0025		
8/9/2017	0.0025				
8/10/2017				<0.0025	0.0011 (J)
3/28/2018	0.0015 (J)	<0.0025	<0.0025		
3/29/2018					<0.0025
3/30/2018				0.0035	
6/13/2018	0.0011 (J)	<0.0025			
6/14/2018			<0.0025	0.0012 (J)	<0.0025
10/2/2018		<0.0025			
10/3/2018	0.0013 (J)		<0.0025		
10/4/2018				0.00086 (J)	<0.0025
2/26/2019	0.0006 (J)	0.00031 (J)	0.00017 (J)		
2/27/2019				0.0005 (J)	0.0022 (J)
4/2/2019	0.00046 (J)	<0.0025	<0.0025		
4/3/2019					0.00081 (J)
4/4/2019			0.0017 (J)		
9/16/2019	0.0035	9.1E-05 (J)			
9/18/2019			0.0002 (J)		
9/19/2019				0.0023	<0.0025
2/4/2020	0.00082	<0.0025			
2/5/2020			0.00021 (J)	0.0013	0.00026 (J)
3/17/2020	0.00066 (J)	0.00014 (J)	0.00065 (J)		
3/18/2020				0.0012 (J)	0.00069 (J)

## Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.0025	0.0069
5/19/2016	<0.0025	<0.0025			
7/19/2016				<0.0025	0.012
7/20/2016	0.0013 (J)	<0.0025			
9/14/2016	0.00098 (J)	<0.0025		<0.0025	0.013
11/10/2016		<0.0025		<0.0025	0.016
11/11/2016	0.0017 (J)				
1/24/2017				<0.0025	0.015
1/27/2017	0.0022 (J)	<0.0025			
2/8/2017			0.0051		
2/23/2017			0.014		
3/14/2017				<0.0025	
3/15/2017	0.0016 (J)	<0.0025			0.014
3/17/2017			0.013		
4/11/2017			0.016		
4/25/2017				<0.0025	0.014
4/26/2017	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	0.016
8/10/2017	0.00049 (J)				
3/29/2018	0.0008 (J)	0.0008 (J)	0.015		0.0092
3/30/2018				<0.0025	
6/14/2018	0.00067 (J)	0.00054 (J)	0.011	<0.0025	0.0035
10/3/2018				<0.0025	
10/4/2018	0.00079 (J)	<0.0025	0.0055		0.0078
2/27/2019	0.0006 (J)	0.00013 (J)	0.0049	<0.0025	0.00084 (J)
4/3/2019	0.00043 (J)	<0.0025	0.0056		
4/4/2019				<0.0025	0.00077 (J)
9/18/2019		<0.0025	0.005	<0.0025	0.00011 (J)
9/19/2019	0.00028 (J)				
2/5/2020	0.00058	<0.0025	0.0044		
2/7/2020				<0.0025	0.00016 (J)
3/18/2020	0.00071 (J)			<0.0025	0.00016 (J)
3/19/2020		<0.0025	0.0039		

## Time Series

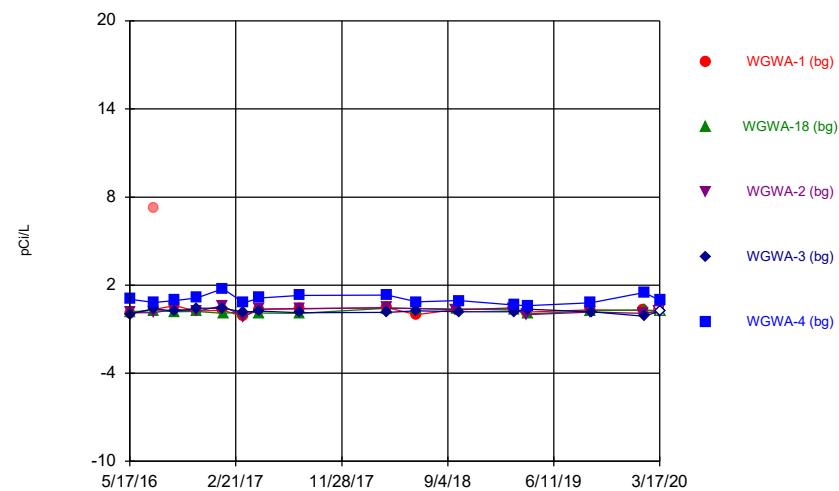
Constituent: Cobalt (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00245 (J)			
5/19/2016			<0.0025	<0.0025
7/20/2016	0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.0014 (J)			<0.0025
9/15/2016				<0.0025
11/10/2016	0.0016 (J)			
11/11/2016		<0.0025		
11/14/2016			<0.0025	
1/20/2017	0.0014 (J)			
2/6/2017		0.00058 (J)	<0.0025	
2/9/2017			0.00073 (J)	
3/14/2017	0.0023 (J)			
3/15/2017		0.00045 (J)	<0.0025	<0.0025
4/11/2017		<0.0025		<0.0025
4/25/2017	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	0.0011 (J)			
8/10/2017		0.00049 (J)	<0.0025	<0.0025
3/29/2018		<0.0025	0.00066 (J)	<0.0025
3/30/2018	0.0016 (J)			
6/14/2018	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
10/4/2018	0.00041 (J)	<0.0025	<0.0025	<0.0025
2/26/2019	0.00086 (J)			
2/27/2019			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	<0.0025			
9/18/2019	0.00018 (J)	0.00045 (J)		
9/19/2019			0.0028	<0.0025
2/5/2020				<0.0025
2/7/2020	0.00077	0.00024 (J)	0.0011	
3/18/2020	0.00052 (J)			
3/19/2020			0.00092 (J)	<0.0025
5/4/2020		0.00018 (J)		

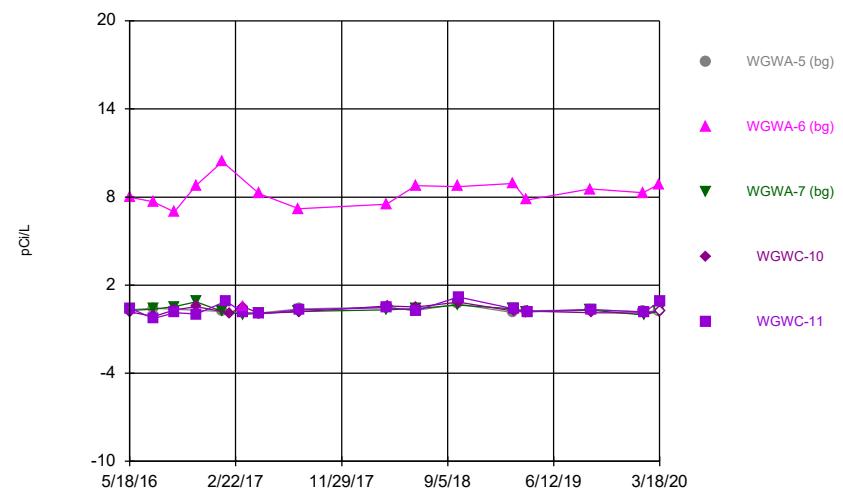
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



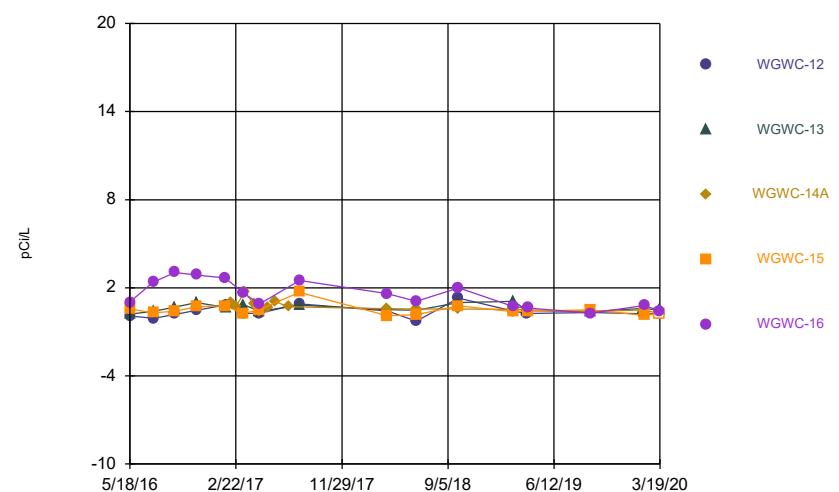
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



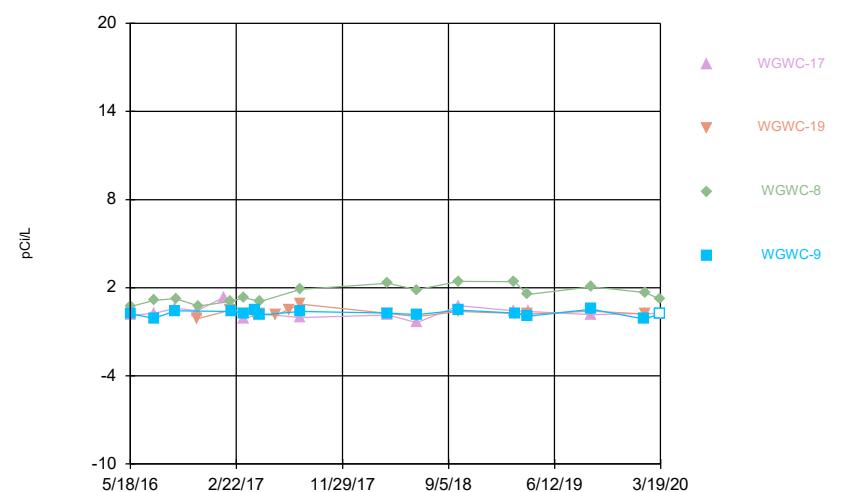
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.0525 (U)	0.184 (U)	0.13 (U)		
5/18/2016				0.025 (U)	1.04
7/19/2016	7.25 (o)	0.27 (U)	0.121 (U)		
7/20/2016				0.398 (U)	0.812
9/13/2016	0.592 (U)	0.194 (U)	0.372 (U)	0.215 (U)	0.958
11/9/2016	0.221 (U)	0.219 (U)	0.217 (U)		
11/10/2016				0.421	1.13
1/17/2017	0.295 (U)		0.595		
1/18/2017				0.434 (U)	1.76
1/19/2017		0.0745 (U)			
3/13/2017	-0.13 (U)		-0.147 (U)		
3/14/2017		0.194 (U)		0.167 (U)	0.788
4/24/2017	0.36 (U)		0.367		
4/25/2017		0.109 (U)		0.224 (U)	1.13
8/8/2017	0.382	0.0842 (U)	0.402	0.127 (U)	
8/9/2017					1.31
3/27/2018	0.475		0.453		
3/28/2018		0.424		0.15 (U)	1.32
6/13/2018	-0.0181 (U)	0.401			
6/14/2018			0.402	0.258 (U)	0.857
9/24/2018			0.318		
9/27/2018	0.342				
9/28/2018		0.381			
10/3/2018				0.178 (U)	0.943
2/25/2019	0.394		0.44		
2/26/2019		0.307 (U)		0.179 (U)	0.65
4/1/2019	0.169 (U)		-0.00216 (U)		
4/2/2019		0.0436 (U)		0.361	0.602
9/16/2019	0.31 (U)				
9/17/2019		0.263 (U)	0.165 (U)		0.788
9/18/2019				0.189 (U)	
2/3/2020	0.283 (U)		0.0879 (U)		
2/4/2020				-0.107 (U)	1.49
2/5/2020		0.327 (U)			
3/16/2020	<0.446		<0.446		
3/17/2020		<0.446		<0.446	0.964

## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	0.325 (U)	8	0.268 (U)	0.182 (U)	
5/19/2016					0.431 (U)
7/19/2016	0.433 (U)	7.69	0.369 (U)		
7/20/2016				-0.135 (U)	-0.263 (U)
9/13/2016		6.98	0.527 (U)		
9/14/2016				0.311 (U)	0.13 (U)
11/9/2016		8.78			
11/10/2016			0.871		
11/11/2016				0.542	0.0257 (U)
1/18/2017		10.4	0.213 (U)		
1/19/2017	0.216 (U)				0.898
1/27/2017				0.104 (U)	
2/6/2017					
3/14/2017	0.119 (U)	0.589 (O)	0.0192 (U)		
3/15/2017				0.523	0.121 (U)
4/25/2017	0.105 (U)	8.22	0.0872 (U)		
4/26/2017				0.069 (U)	0.0309 (U)
8/8/2017		7.21	0.219 (U)		
8/9/2017	0.385 (U)				
8/10/2017				0.189 (U)	0.326 (U)
3/28/2018	0.492	7.52	0.315 (U)		
3/29/2018					0.461
3/30/2018				0.575	
6/13/2018	0.275 (U)	8.77			
6/14/2018			0.41	0.523	0.275 (U)
10/2/2018		8.72			
10/3/2018	0.72		0.65		
10/4/2018				0.84	1.18
2/26/2019	0.113 (U)	8.93	0.395		
2/27/2019				0.236 (U)	0.374
4/2/2019	0.255 (U)	7.8	0.182 (U)		
4/3/2019					0.187 (U)
4/4/2019				0.233 (U)	
9/16/2019	0.318 (U)	8.55			
9/18/2019			0.299 (U)		
9/19/2019				0.124 (U)	0.338 (U)
2/4/2020	0.198 (U)	8.3			
2/5/2020			-0.0263 (U)	0.0961 (U)	0.163 (U)
3/17/2020	<0.446	8.88	<0.446		
3/18/2020				<0.446	0.866

## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.569	1.03
5/19/2016	0.0698 (U)	0.219 (U)			
7/19/2016				0.29 (U)	2.39
7/20/2016	-0.0646 (U)	0.404 (U)			
9/14/2016	0.199 (U)	0.692		0.412 (U)	3.05
11/10/2016		1		0.709	2.87
11/11/2016	0.467				
1/24/2017				0.779	2.68
1/27/2017	0.836	0.668			
2/8/2017				0.958	
2/23/2017				0.771	
3/14/2017					0.247 (U)
3/15/2017	0.254 (U)	0.847			1.64
3/17/2017				1.7	
4/11/2017				0.901	
4/25/2017				0.515	0.878
4/26/2017	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	2.5
8/10/2017	0.912				
3/29/2018	0.419	0.51	0.58		1.6
3/30/2018				0.0985 (U)	
6/14/2018	-0.263 (U)	0.463	0.55	0.171 (U)	1.09
10/3/2018				0.766	
10/4/2018	1.29	0.99	0.563		1.99
2/27/2019	0.415	1.08	0.538	0.363 (U)	0.721
4/3/2019	0.264 (U)	0.446	0.497		
4/4/2019				0.418	0.632
9/18/2019		0.392	0.376 (U)	0.484	0.278 (U)
9/19/2019	0.329 (U)				
2/5/2020	0.225 (U)	0.609	0.5		
2/7/2020				0.125 (U)	0.797
3/18/2020	<0.446			<0.446	0.437
3/19/2020		0.47	<0.446		

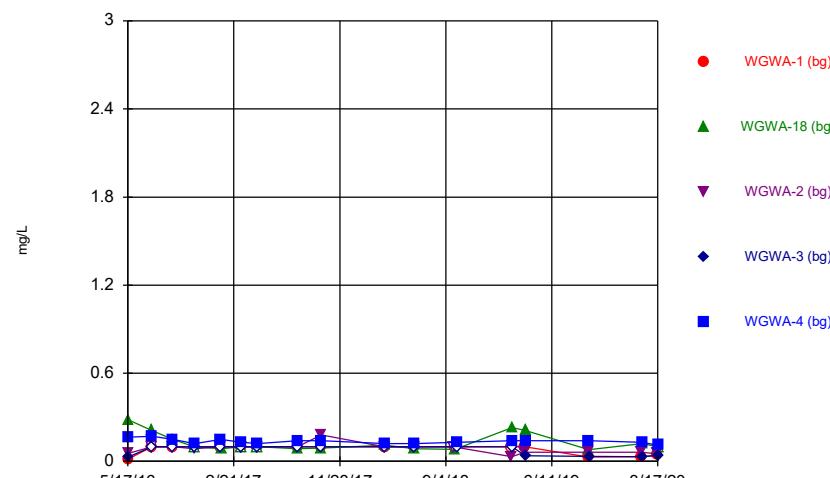
## Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.116 (U)			
5/19/2016			0.711 (U)	0.209 (U)
7/20/2016	0.247 (U)		1.14	-0.084 (U)
9/14/2016	0.594			0.42 (U)
9/15/2016			1.26	
11/10/2016	0.431			
11/11/2016		-0.11 (U)		
11/14/2016			0.749	
1/20/2017	1.35			
2/6/2017		0.471	1.05	
2/9/2017			0.393	
3/14/2017	-0.107 (U)			
3/15/2017		0.255 (U)	1.32	0.271 (U)
4/11/2017		0.19 (U)		0.488 (U)
4/25/2017	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	-0.0246 (U)			
8/10/2017		0.882	1.88	0.379
3/29/2018		0.252 (U)	2.31	0.278 (U)
3/30/2018	0.135 (U)			
6/14/2018	-0.373 (U)	0.0458 (U)	1.86	0.157 (U)
10/4/2018	0.775	0.381	2.44	0.48
2/26/2019	0.431			
2/27/2019			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	0.386			
9/18/2019	0.167 (U)	0.403 (U)		
9/19/2019			2.06	0.537
2/5/2020				-0.137 (U)
2/7/2020	0.244 (U)	0.2 (U)	1.66	
3/18/2020	<0.446			
3/19/2020			1.21	<0.446

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Hollow symbols indicate censored values.

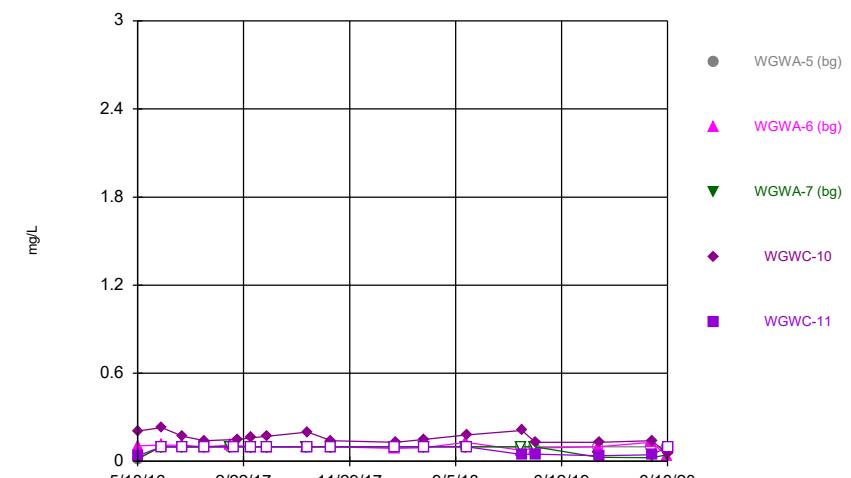
### Time Series



Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

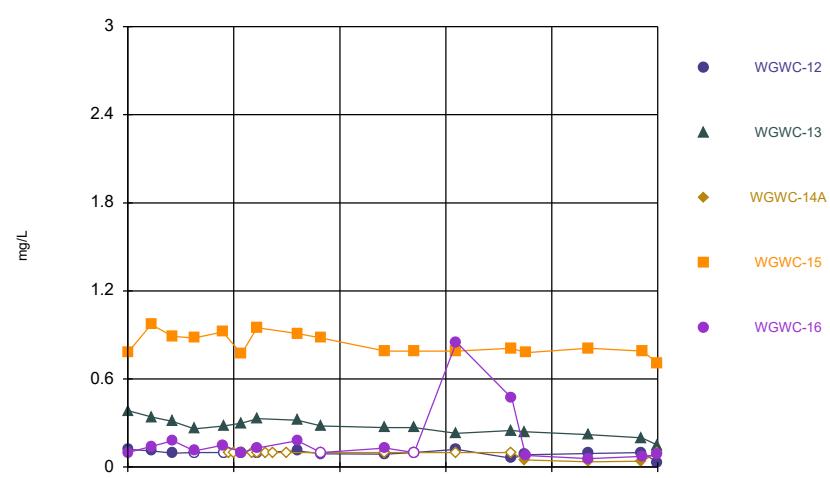
### Time Series



Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

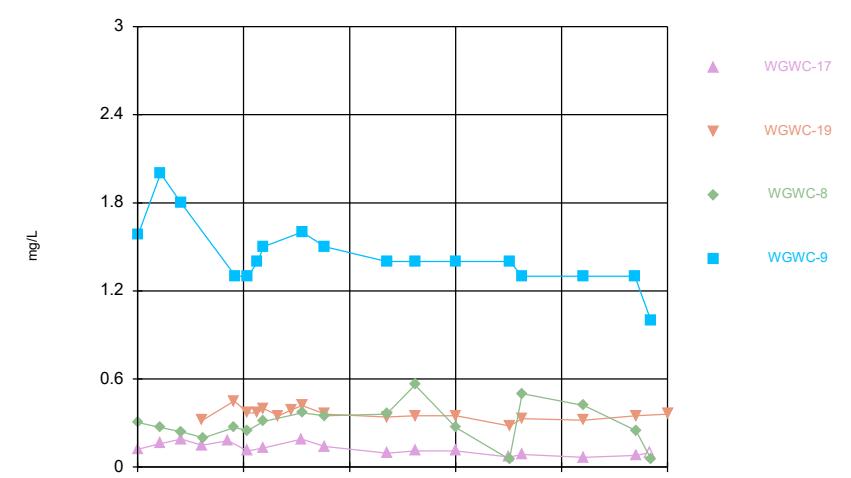
### Time Series



Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.0131 (J)	0.284 (J)	0.0538 (J)		
5/18/2016				0.029 (J)	0.164 (J)
7/19/2016	<0.1	0.21	<0.1		
7/20/2016				<0.1	0.17 (J)
9/13/2016	<0.1	0.15 (J)	<0.1	<0.1	0.15 (J)
11/9/2016	<0.1	<0.1	0.085 (J)		
11/10/2016				<0.1	0.12 (J)
1/17/2017	<0.1		<0.1		
1/18/2017				<0.1	0.15 (J)
1/19/2017		0.087 (J)			
3/13/2017	<0.1		<0.1		
3/14/2017		<0.1		<0.1	0.13 (J)
4/24/2017	<0.1		<0.1		
4/25/2017		<0.1		<0.1	0.12 (J)
8/8/2017	<0.1	0.087 (J)	<0.1	<0.1	
8/9/2017					0.14 (J)
10/10/2017	<0.1		0.18 (J)		
10/11/2017		0.09 (J)		<0.1	0.14 (J)
3/27/2018	<0.1		<0.1		
3/28/2018		0.11 (J)		<0.1	0.12 (J)
6/13/2018	<0.1	0.085 (J)			
6/14/2018			<0.1	<0.1	0.12 (J)
9/24/2018			<0.1		
9/27/2018	<0.1				
9/28/2018		0.082 (J)			
10/3/2018				<0.1	0.13 (J)
2/25/2019	<0.1		0.032 (J)		
2/26/2019		0.23		<0.1	0.14 (J)
4/1/2019	<0.1		0.061 (J)		
4/2/2019		0.21		0.039 (J)	0.14 (J)
9/16/2019	0.03 (J)				
9/17/2019		0.079 (J)	0.061 (J)		0.14 (J)
9/18/2019				0.033 (J)	
2/3/2020	0.032 (J)		0.061 (J)		
2/4/2020				0.031 (J)	0.13
2/5/2020		0.12			
3/16/2020	0.042 (J)		0.052 (J)		
3/17/2020		<0.1		0.04 (J)	0.11

## Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	0.014 (J)	0.106 (J)	0.018 (J)	0.206	
5/19/2016					0.039 (J)
7/19/2016	<0.1	0.11 (J)	<0.1		
7/20/2016				0.23	<0.1
9/13/2016		0.11 (J)	<0.1		
9/14/2016	0.095 (J)			0.17 (J)	<0.1
11/9/2016		0.1 (J)			
11/10/2016			<0.1		
11/11/2016				0.14 (J)	<0.1
1/18/2017		0.11 (J)	<0.1		
1/19/2017	<0.1				
1/27/2017					<0.1
2/6/2017				0.15 (J)	
3/14/2017	<0.1	<0.1	<0.1		
3/15/2017				0.16 (J)	<0.1
4/25/2017	<0.1	<0.1	<0.1		
4/26/2017				0.17 (J)	<0.1
8/8/2017		0.099 (J)	<0.1		
8/9/2017	<0.1				
8/10/2017				0.2	<0.1
10/11/2017	<0.1	0.098 (J)	<0.1		
10/12/2017				0.14 (J)	<0.1
3/28/2018	<0.1	0.088 (J)	<0.1		
3/29/2018					<0.1
3/30/2018				0.13 (J)	
6/13/2018	<0.1	0.093 (J)			
6/14/2018			<0.1	0.15 (J)	<0.1
10/2/2018		0.13 (J)			
10/3/2018	<0.1		<0.1		
10/4/2018				0.18 (J)	<0.1
2/26/2019	<0.1	0.074 (J)	<0.1		
2/27/2019				0.21	0.047 (J)
4/2/2019	<0.1	0.09 (J)	<0.1		
4/3/2019					0.048 (J)
4/4/2019				0.13 (J)	
9/16/2019	<0.1	0.1 (J)			
9/18/2019			0.027 (J)		
9/19/2019				0.13 (J)	0.037 (J)
2/4/2020	<0.1	0.13			
2/5/2020			0.026 (J)	0.14	0.045 (J)
3/17/2020	<0.1	0.037 (J)	0.044 (J)		
3/18/2020				0.052 (J)	<0.1

## Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.779	0.1 (J)
5/19/2016	0.12 (J)	0.384		0.97	0.14 (J)
7/19/2016	0.11 (J)	0.34		0.89	0.18 (J)
9/14/2016	0.095 (J)	0.31		0.88	0.11 (J)
11/10/2016		0.26			
11/11/2016	<0.1				
1/24/2017				0.92	0.15 (J)
1/27/2017	<0.1	0.28			
2/8/2017			<0.1		
2/23/2017			<0.1		
3/14/2017				0.77	
3/15/2017	<0.1	0.3			0.1 (J)
3/17/2017			<0.1		
4/11/2017			<0.1		
4/25/2017				0.95	0.13 (J)
4/26/2017	<0.1	0.33	<0.1		
5/17/2017			<0.1		
6/7/2017			<0.1		
7/11/2017			<0.1		
8/9/2017		0.32		0.91	0.18 (J)
8/10/2017	0.11 (J)				
10/11/2017			<0.1	0.88	<0.1
10/12/2017	0.091 (J)	0.28			
3/29/2018	0.089 (J)	0.27	<0.1		0.13 (J)
3/30/2018				0.79	
6/14/2018	0.1 (J)	0.27	<0.1	0.79	<0.1
10/3/2018				0.79	
10/4/2018	0.12 (J)	0.23	<0.1		0.85 (J)
2/27/2019	0.06 (J)	0.25	<0.1	0.81	0.47
4/3/2019	0.084 (J)	0.24	0.048 (J)		
4/4/2019				0.78	0.08 (J)
9/18/2019		0.22	0.035 (J)	0.81	0.058 (J)
9/19/2019	0.093 (J)				
2/5/2020	0.098 (J)	0.2	0.04 (J)		
2/7/2020				0.79	0.072 (J)
3/18/2020	0.033 (J)			0.71	0.084 (J)
3/19/2020		0.15	<0.1		

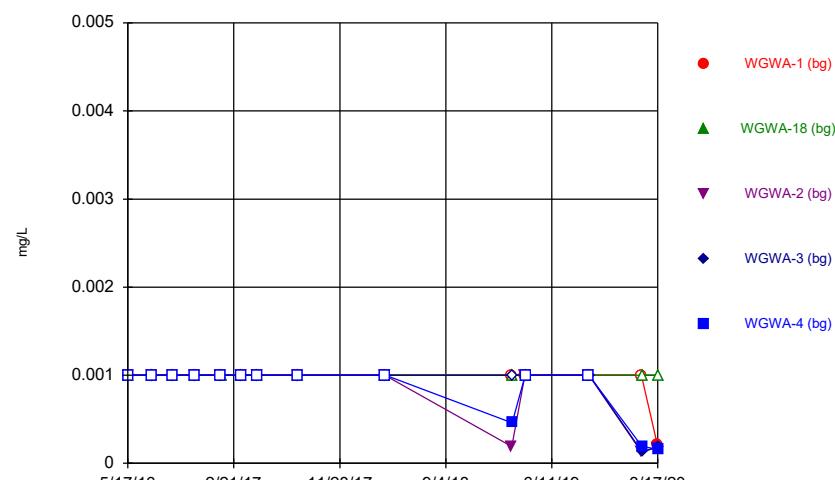
## Time Series

Constituent: Fluoride (mg/L)   Analysis Run 7/22/2020 12:04 PM   View: All Wells and Constituents  
 Plant Wansley   Client: Southern Company   Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.121 (J)			
5/19/2016			0.304	1.58
7/20/2016	0.16 (J)		0.27	2
9/14/2016	0.19 (J)			1.8
9/15/2016			0.24	
11/10/2016	0.15 (J)			
11/11/2016		0.32		
11/14/2016			0.2	
1/20/2017	0.18 (J)			
2/6/2017		0.45	0.27	
2/9/2017				1.3
3/14/2017	0.11 (J)			
3/15/2017		0.37	0.25	1.3
4/11/2017		0.37		1.4
4/25/2017	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	0.19 (J)			
8/10/2017		0.42	0.37	1.6
10/11/2017	0.14 (J)			
10/12/2017		0.36	0.35	1.5
3/29/2018		0.34	0.36	1.4
3/30/2018	0.095 (J)			
6/14/2018	0.11 (J)	0.35	0.56	1.4
10/4/2018	0.11 (J)	0.35	0.27	1.4
2/26/2019	0.068 (J)			
2/27/2019			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	0.087 (J)			
9/18/2019	0.066 (J)	0.32		
9/19/2019			0.42	1.3
2/5/2020				1.3
2/7/2020	0.079 (J)	0.35	0.25	
3/18/2020	<0.1			
3/19/2020			0.057 (J)	1
5/4/2020		0.36		

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Hollow symbols indicate censored values.

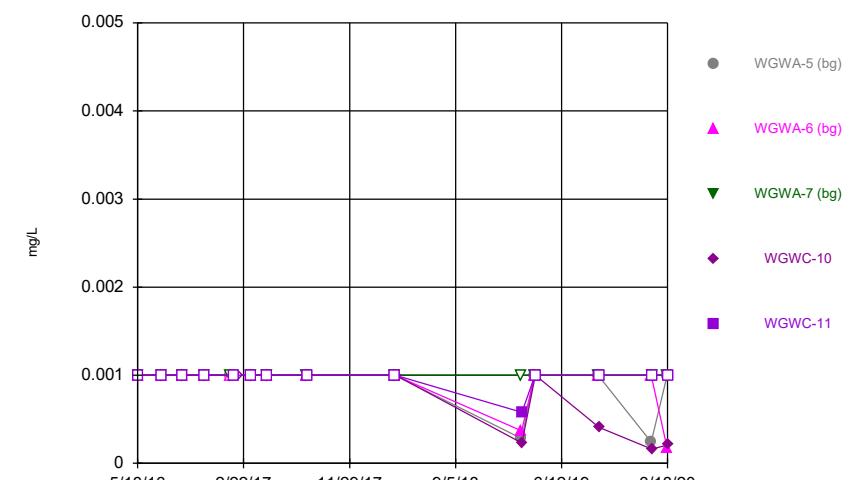
### Time Series



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

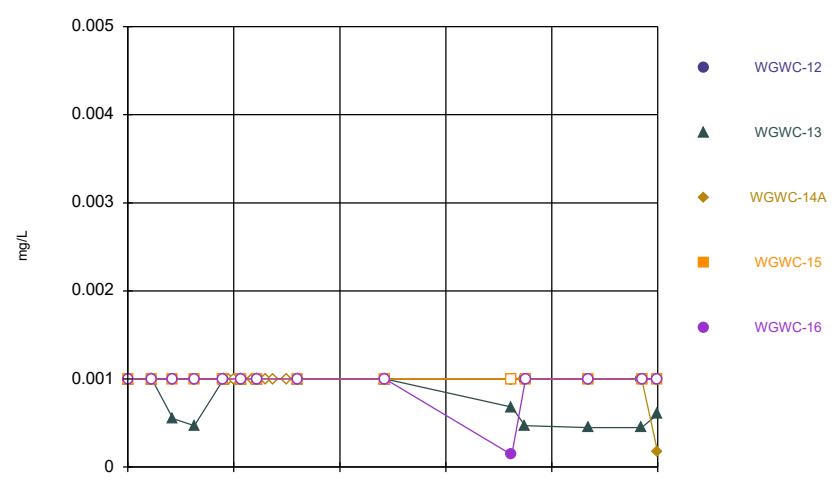
### Time Series



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

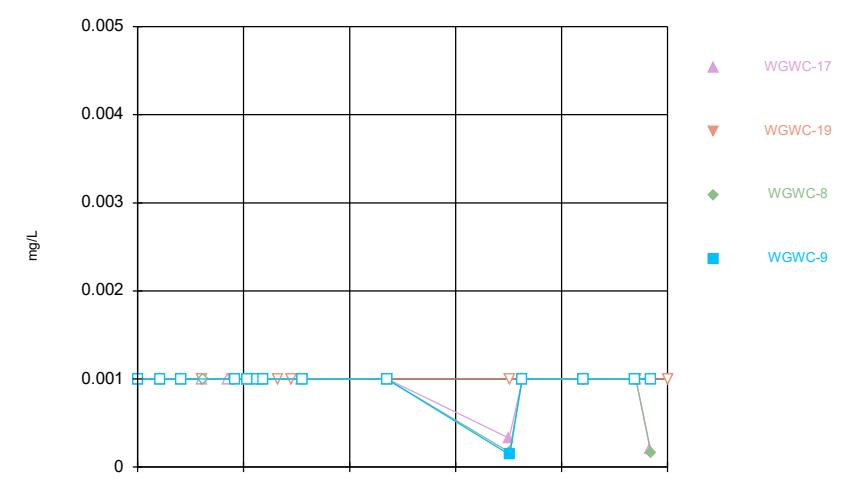
### Time Series



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Lead (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<0.001		
1/18/2017				<0.001	<0.001
1/19/2017		<0.001			
3/13/2017	<0.001		<0.001		
3/14/2017		<0.001		<0.001	<0.001
4/24/2017	<0.001		<0.001		
4/25/2017		<0.001		<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001	
8/9/2017					<0.001
3/27/2018	<0.001		<0.001		
3/28/2018		<0.001		<0.001	<0.001
2/25/2019	<0.001		0.00019 (J)		
2/26/2019		<0.001		<0.001	0.00046 (J)
4/1/2019	<0.001		<0.001		
4/2/2019		<0.001		<0.001	<0.001
9/16/2019	<0.001				<0.001
9/17/2019		<0.001	<0.001		
9/18/2019				<0.001	
2/3/2020	<0.001		0.00013 (J)		
2/4/2020				0.00013 (J)	0.00019 (J)
2/5/2020		<0.001			
3/16/2020	0.00021 (J)		0.00018 (J)		
3/17/2020		<0.001		0.00019 (J)	0.00016 (J)

## Time Series

Constituent: Lead (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	<0.001			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				<0.001
1/27/2017					<0.001
2/6/2017				<0.001	
3/14/2017	<0.001	<0.001	<0.001		
3/15/2017				<0.001	<0.001
4/25/2017	<0.001	<0.001	<0.001		
4/26/2017				<0.001	<0.001
8/8/2017		<0.001	<0.001		
8/9/2017	<0.001				
8/10/2017				<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001		
3/29/2018					<0.001
3/30/2018				<0.001	
2/26/2019	0.00028 (J)	0.00037 (J)	<0.001		
2/27/2019				0.00023 (J)	0.00058 (J)
4/2/2019	<0.001	<0.001	<0.001		
4/3/2019					<0.001
4/4/2019				<0.001	
9/16/2019	<0.001	<0.001			
9/18/2019			<0.001		
9/19/2019				0.00041 (J)	<0.001
2/4/2020	0.00024 (J)	<0.001			
2/5/2020			<0.001	0.00016 (J)	<0.001
3/17/2020	<0.001	0.00017 (J)	<0.001		
3/18/2020				0.00021 (J)	<0.001

## Time Series

Constituent: Lead (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.001	<0.001
5/19/2016	<0.001	<0.001			
7/19/2016				<0.001	<0.001
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	0.00055 (J)		<0.001	<0.001
11/10/2016		0.00047 (J)		<0.001	<0.001
11/11/2016	<0.001				
1/24/2017				<0.001	<0.001
1/27/2017	<0.001	<0.001			
2/8/2017			<0.001		
2/23/2017			<0.001		
3/14/2017				<0.001	
3/15/2017	<0.001	<0.001			<0.001
3/17/2017			<0.001		
4/11/2017			<0.001		
4/25/2017				<0.001	<0.001
4/26/2017	<0.001	<0.001	<0.001		
5/17/2017			<0.001		
6/7/2017			<0.001		
7/11/2017			<0.001		
8/9/2017		<0.001		<0.001	<0.001
8/10/2017	<0.001				
3/29/2018	<0.001	<0.001	<0.001		<0.001
3/30/2018				<0.001	
2/27/2019	<0.001	0.00068 (J)	<0.001	<0.001	0.00014 (J)
4/3/2019	<0.001	0.00047 (J)	<0.001		
4/4/2019				<0.001	<0.001
9/18/2019		0.00045 (J)	<0.001	<0.001	<0.001
9/19/2019	<0.001				
2/5/2020	<0.001	0.00045 (J)	<0.001		
2/7/2020				<0.001	<0.001
3/18/2020	<0.001			<0.001	<0.001
3/19/2020		0.0006 (J)	0.00017 (J)		

## Time Series

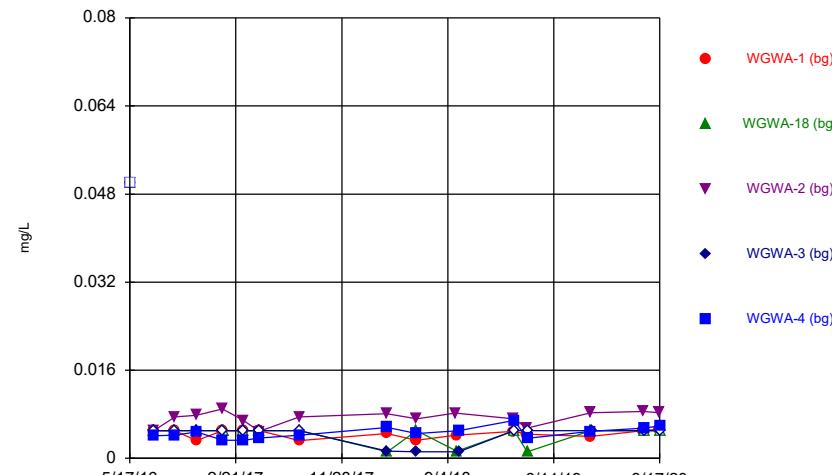
Constituent: Lead (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			<0.001	<0.001
7/20/2016	<0.001		<0.001	<0.001
9/14/2016	<0.001			<0.001
9/15/2016				<0.001
11/10/2016	<0.001			
11/11/2016		<0.001		
11/14/2016			<0.001	
1/20/2017	<0.001			
2/6/2017		<0.001	<0.001	
2/9/2017				<0.001
3/14/2017	<0.001			
3/15/2017		<0.001	<0.001	<0.001
4/11/2017		<0.001		<0.001
4/25/2017	<0.001			
4/26/2017		<0.001	<0.001	<0.001
6/7/2017		<0.001		
7/11/2017		<0.001		
8/9/2017	<0.001			
8/10/2017		<0.001	<0.001	<0.001
3/29/2018		<0.001	<0.001	<0.001
3/30/2018	<0.001			
2/26/2019	0.00033 (J)			
2/27/2019		0.00017 (J)		
2/28/2019		<0.001		0.00014 (J)
4/2/2019		<0.001		
4/3/2019			<0.001	<0.001
4/4/2019	<0.001			
9/18/2019	<0.001	<0.001		
9/19/2019			<0.001	<0.001
2/5/2020				<0.001
2/7/2020	<0.001	<0.001	<0.001	
3/18/2020	0.0002 (J)			
3/19/2020			0.00016 (J)	<0.001
5/4/2020		<0.001		

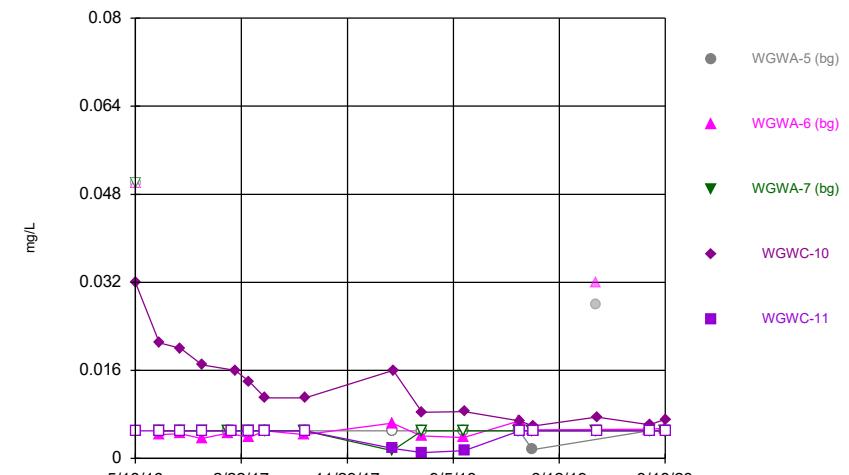
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



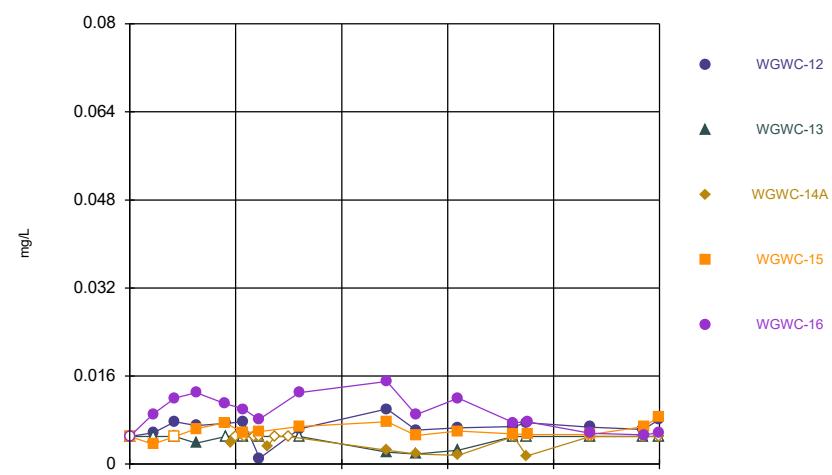
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



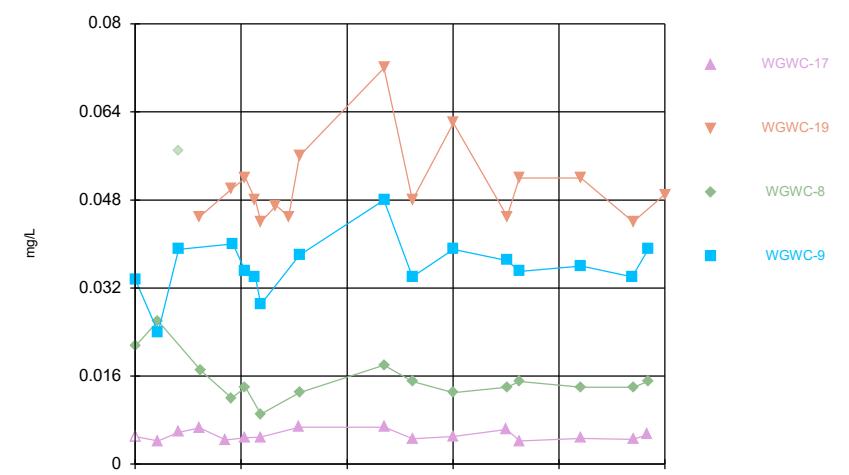
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



## Time Series

Constituent: Lithium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.05 (o)	<0.05 (o)	<0.05 (o)		
5/18/2016				<0.05 (o)	<0.05 (o)
7/19/2016	<0.005	<0.005	0.005		
7/20/2016				<0.005	0.0041 (J)
9/13/2016	<0.005	<0.005	0.0075	<0.005	0.0042 (J)
11/9/2016	0.0032 (J)	<0.005	0.0078		
11/10/2016				<0.005	0.0048 (J)
1/17/2017	<0.005		0.009		
1/18/2017				<0.005	0.0033 (J)
1/19/2017		<0.005			
3/13/2017	<0.005		0.0069		
3/14/2017		<0.005		<0.005	0.0033 (J)
4/24/2017	<0.005		0.0049 (J)		
4/25/2017		<0.005		<0.005	0.0037 (J)
8/8/2017	0.0032 (J)	<0.005	0.0075	<0.005	
8/9/2017					0.0042 (J)
3/27/2018	0.0045 (J)		0.0081		
3/28/2018		0.0012 (J)		0.0013 (J)	0.0056
6/13/2018	0.0033 (J)	<0.005			
6/14/2018			0.0072	0.0012 (J)	0.0045 (J)
9/24/2018			0.0082		
9/27/2018	0.0042 (J)				
9/28/2018		0.0013 (J)			
10/3/2018				0.0012 (J)	0.005
2/25/2019	0.0049 (J)		0.0072		
2/26/2019		<0.005		<0.005	0.0069
4/1/2019	0.0044 (J)		0.0055		
4/2/2019		0.0012 (J)		<0.005	0.0036 (J)
9/16/2019	0.004 (J)				
9/17/2019		<0.005	0.0083		0.0049 (J)
9/18/2019				<0.005	
2/3/2020	<0.005		0.0085		
2/4/2020				<0.005	0.0055
2/5/2020		<0.005			
3/16/2020	0.0053		0.0083		
3/17/2020		<0.005		<0.005	0.0059

## Time Series

Constituent: Lithium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.05 (o)	<0.05 (o)	<0.05 (o)	0.032	
5/19/2016					<0.005
7/19/2016	<0.005	0.0043 (J)	<0.005		
7/20/2016				0.021	<0.005
9/13/2016		0.0045 (J)	<0.005		
9/14/2016	<0.005			0.02	<0.005
11/9/2016		0.0036 (J)			
11/10/2016			<0.005		
11/11/2016				0.017	<0.005
1/18/2017		0.0046 (J)	<0.005		
1/19/2017	<0.005				<0.005
1/27/2017					
2/6/2017				0.016	
3/14/2017	<0.005	0.0038 (J)	<0.005		
3/15/2017				0.014	<0.005
4/25/2017	<0.005	<0.005	<0.005		
4/26/2017				0.011	<0.005
8/8/2017		0.0043 (J)	<0.005		
8/9/2017	<0.005				
8/10/2017				0.011	<0.005
3/28/2018	<0.005	0.0064	0.0014 (J)		
3/29/2018					0.0018 (J)
3/30/2018				0.016	
6/13/2018	<0.005	0.0041 (J)			
6/14/2018			<0.005	0.0084	0.0011 (J)
10/2/2018		0.0038 (J)			
10/3/2018	<0.005		<0.005		
10/4/2018				0.0085	0.0014 (J)
2/26/2019	<0.005	0.0068	<0.005		
2/27/2019				0.0068	<0.005
4/2/2019	0.0016 (J)	0.0052	<0.005		
4/3/2019					<0.005
4/4/2019				0.0059	
9/16/2019	0.028 (o)	0.032 (o)			
9/18/2019			<0.005		
9/19/2019				0.0075	<0.005
2/4/2020	<0.005	0.0053			
2/5/2020			<0.005	0.0061	<0.005
3/17/2020	<0.005	0.0055	<0.005		
3/18/2020				0.0071	<0.005

## Time Series

Constituent: Lithium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.005	<0.005
5/19/2016	<0.005	<0.005			
7/19/2016				0.0036 (J)	0.0091
7/20/2016	0.0057	<0.005			
9/14/2016	0.0077	<0.005		<0.005	0.012
11/10/2016		0.0038 (J)		0.0064	0.013
11/11/2016	0.007				
1/24/2017				0.0075	0.011
1/27/2017	0.0074	<0.005			
2/8/2017			0.0039 (J)		
2/23/2017			<0.005		
3/14/2017				0.0057	
3/15/2017	0.0077	<0.005			0.01
3/17/2017			<0.005		
4/11/2017			<0.005		
4/25/2017				0.0059	0.0081
4/26/2017	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	0.013
8/10/2017	0.0064				
3/29/2018	0.01	0.0022 (J)	0.0025 (J)		0.015
3/30/2018				0.0077	
6/14/2018	0.0062	0.0018 (J)	0.0018 (J)	0.0052	0.009
10/3/2018				0.006	
10/4/2018	0.0066	0.0025 (J)	0.0016 (J)		0.012
2/27/2019	0.0068	<0.005	<0.005	0.0055	0.0075
4/3/2019	0.0075	<0.005	0.0015 (J)		
4/4/2019				0.0054	0.0077
9/18/2019		<0.005	<0.005	0.0054	0.0056
9/19/2019	0.0067				
2/5/2020	0.0063	<0.005	<0.005		
2/7/2020				0.0068	0.0053
3/18/2020	0.0081			0.0086	0.0057
3/19/2020		<0.005	<0.005		

## Time Series

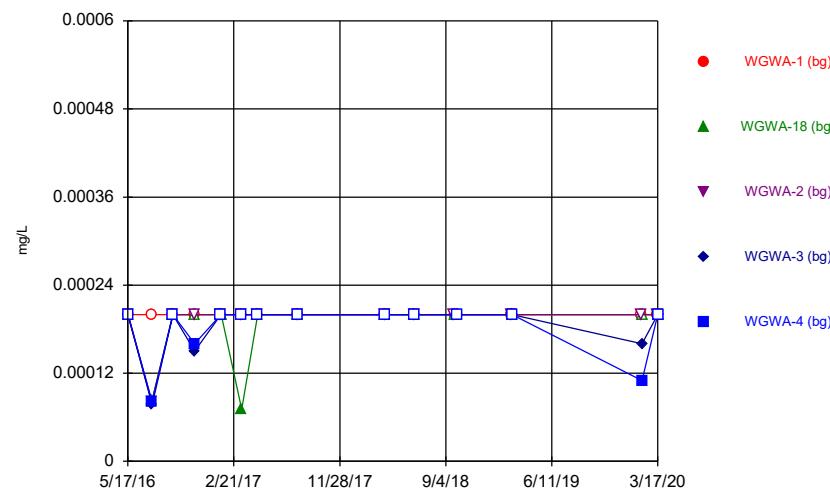
Constituent: Lithium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005			
5/19/2016			0.0215	0.0335
7/20/2016	0.0042 (J)		0.026	0.024
9/14/2016	0.0058			0.039
9/15/2016				0.057 (o)
11/10/2016	0.0066			
11/11/2016		0.045		
11/14/2016			0.017	
1/20/2017	0.0044 (J)			
2/6/2017		0.05	0.012	
2/9/2017				0.04
3/14/2017	0.0048 (J)			
3/15/2017		0.052	0.014	0.035
4/11/2017		0.048		0.034
4/25/2017	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	0.0067			
8/10/2017		0.056	0.013	0.038
3/29/2018		0.072	0.018	0.048
3/30/2018	0.0067			
6/14/2018	0.0046 (J)	0.048	0.015	0.034
10/4/2018	0.005	0.062	0.013	0.039
2/26/2019	0.0063			
2/27/2019			0.014	
2/28/2019		0.045		0.037
4/2/2019		0.052		
4/3/2019			0.015	0.035
4/4/2019	0.0042 (J)			
9/18/2019	0.0047 (J)	0.052		
9/19/2019			0.014	0.036
2/5/2020				0.034
2/7/2020	0.0045 (J)	0.044	0.014	
3/18/2020	0.0054			
3/19/2020			0.015	0.039
5/4/2020		0.049		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

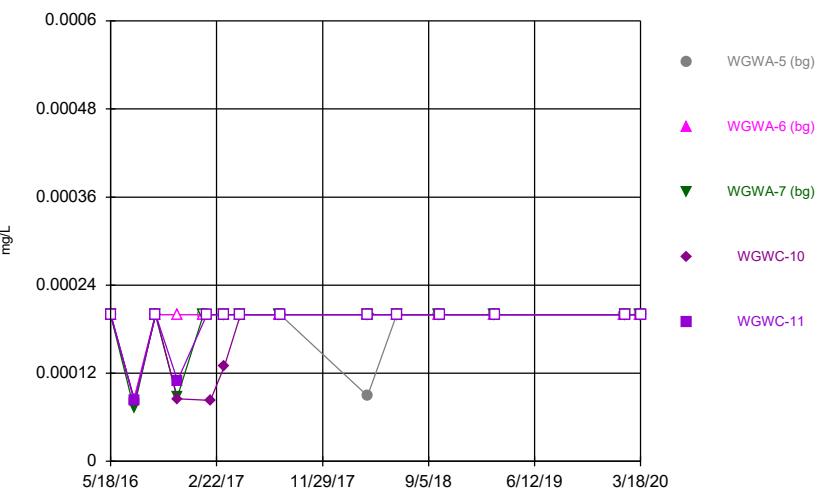
### Time Series



Constituent: Mercury Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

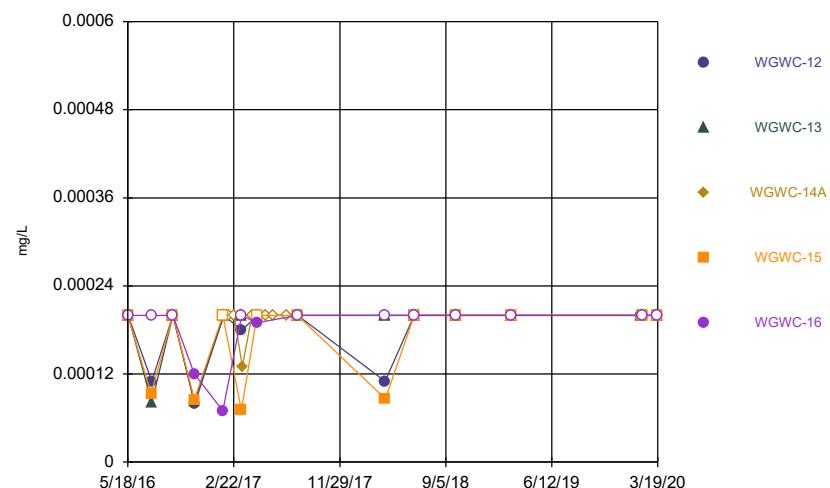
### Time Series



Constituent: Mercury Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

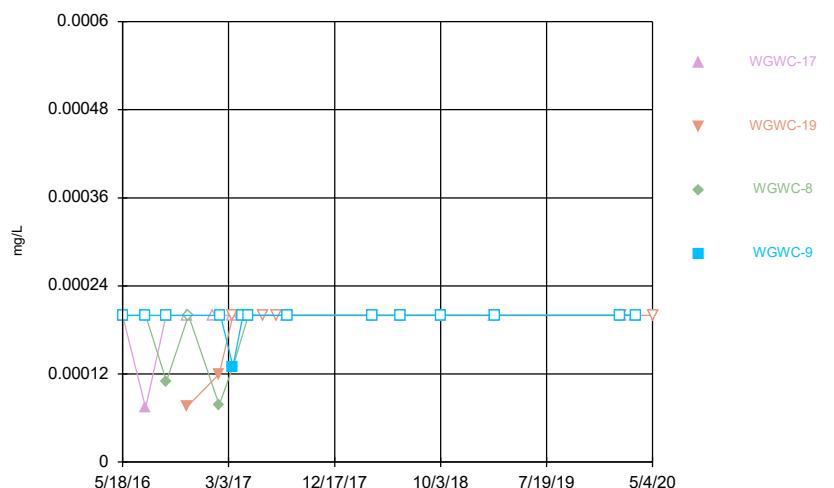
### Time Series



Constituent: Mercury Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Mercury Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Mercury (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.0002	<0.0002	<0.0002		
5/18/2016				<0.0002	<0.0002
7/19/2016	<0.0002	8.2E-05 (J)	8.1E-05 (J)		
7/20/2016				7.7E-05 (J)	8.1E-05 (J)
9/13/2016	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
11/9/2016	<0.0002	<0.0002	<0.0002		
11/10/2016				0.00015 (J)	0.00016 (J)
1/17/2017	<0.0002		<0.0002		
1/18/2017				<0.0002	<0.0002
1/19/2017		<0.0002			
3/13/2017	<0.0002		<0.0002		
3/14/2017		7.1E-05 (J)		<0.0002	<0.0002
4/24/2017	<0.0002		<0.0002		
4/25/2017		<0.0002		<0.0002	<0.0002
8/8/2017	<0.0002	<0.0002	<0.0002	<0.0002	
8/9/2017					<0.0002
3/27/2018	<0.0002		<0.0002		
3/28/2018		<0.0002		<0.0002	<0.0002
6/13/2018	<0.0002	<0.0002			
6/14/2018			<0.0002	<0.0002	<0.0002
9/24/2018			<0.0002		
9/27/2018	<0.0002				
9/28/2018		<0.0002			
10/3/2018				<0.0002	<0.0002
2/25/2019	<0.0002		<0.0002		
2/26/2019		<0.0002		<0.0002	<0.0002
2/3/2020	<0.0002		<0.0002		
2/4/2020				0.00016 (J)	0.00011 (J)
2/5/2020		<0.0002			
3/16/2020	<0.0002		<0.0002		
3/17/2020		<0.0002		<0.0002	<0.0002

## Time Series

Constituent: Mercury (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.0002	<0.0002	<0.0002	<0.0002	
5/19/2016					<0.0002
7/19/2016	8.5E-05 (J)	8.4E-05 (J)	7.2E-05 (J)		
7/20/2016				8.2E-05 (J)	8.2E-05 (J)
9/13/2016		<0.0002	<0.0002		
9/14/2016	<0.0002			<0.0002	<0.0002
11/9/2016		<0.0002			
11/10/2016			8.7E-05 (J)		
11/11/2016				8.5E-05 (J)	0.00011 (J)
1/18/2017		<0.0002	<0.0002		
1/19/2017	<0.0002				<0.0002
1/27/2017					
2/6/2017			8.3E-05 (J)		
3/14/2017	<0.0002	<0.0002	<0.0002		
3/15/2017				0.00013 (J)	<0.0002
4/25/2017	<0.0002	<0.0002	<0.0002		
4/26/2017				<0.0002	<0.0002
8/8/2017		<0.0002	<0.0002		
8/9/2017	<0.0002				
8/10/2017				<0.0002	<0.0002
3/28/2018	8.9E-05 (J)	<0.0002	<0.0002		
3/29/2018					<0.0002
3/30/2018				<0.0002	
6/13/2018	<0.0002	<0.0002			
6/14/2018			<0.0002	<0.0002	<0.0002
10/2/2018		<0.0002			
10/3/2018	<0.0002		<0.0002		
10/4/2018				<0.0002	<0.0002
2/26/2019	<0.0002	<0.0002	<0.0002		
2/27/2019				<0.0002	<0.0002
2/4/2020	<0.0002	<0.0002			
2/5/2020			<0.0002	<0.0002	<0.0002
3/17/2020	<0.0002	<0.0002	<0.0002		
3/18/2020				<0.0002	<0.0002

## Time Series

Constituent: Mercury (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.0002	<0.0002
5/19/2016	<0.0002	<0.0002			
7/19/2016				9.3E-05 (J)	<0.0002
7/20/2016	0.00011 (J)	8.1E-05 (J)			
9/14/2016	<0.0002	<0.0002		<0.0002	<0.0002
11/10/2016		8.3E-05 (J)		8.5E-05 (J)	0.00012 (J)
11/11/2016	7.9E-05 (J)				
1/24/2017				<0.0002	7E-05 (J)
1/27/2017	<0.0002	<0.0002			
2/8/2017				<0.0002	
2/23/2017				<0.0002	
3/14/2017					7.1E-05 (J)
3/15/2017	0.00018 (J)	<0.0002			<0.0002
3/17/2017				0.00013 (J)	
4/11/2017				<0.0002	
4/25/2017				<0.0002	0.00019 (J)
4/26/2017	<0.0002	<0.0002	<0.0002		
5/17/2017				<0.0002	
6/7/2017				<0.0002	
7/11/2017				<0.0002	
8/9/2017		<0.0002		<0.0002	<0.0002
8/10/2017	<0.0002				
3/29/2018	0.00011 (J)	<0.0002	<0.0002		<0.0002
3/30/2018					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/3/2018					<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002		<0.0002
2/27/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2020	<0.0002	<0.0002	<0.0002		
2/7/2020				<0.0002	<0.0002
3/18/2020	<0.0002			<0.0002	<0.0002
3/19/2020		<0.0002	<0.0002		

## Time Series

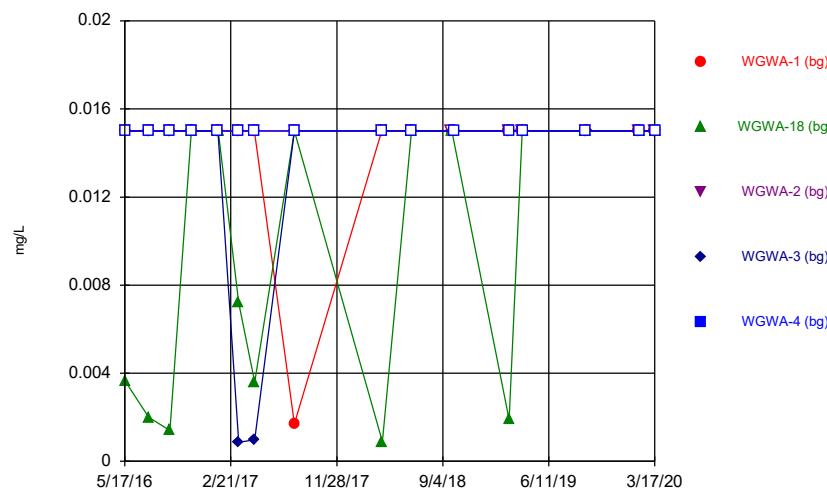
Constituent: Mercury (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0002			
5/19/2016			<0.0002	<0.0002
7/20/2016	7.4E-05 (J)		<0.0002	<0.0002
9/14/2016	<0.0002			<0.0002
9/15/2016			0.00011 (J)	
11/10/2016	<0.0002			
11/11/2016		7.6E-05 (J)		
11/14/2016			<0.0002	
1/20/2017	<0.0002			
2/6/2017		0.00012 (J)	7.8E-05 (J)	
2/9/2017				<0.0002
3/14/2017	<0.0002			
3/15/2017		<0.0002	0.00013 (J)	0.00013 (J)
4/11/2017		<0.0002		<0.0002
4/25/2017	<0.0002			
4/26/2017		<0.0002	<0.0002	<0.0002
6/7/2017		<0.0002		
7/11/2017		<0.0002		
8/9/2017	<0.0002			
8/10/2017		<0.0002	<0.0002	<0.0002
3/29/2018		<0.0002	<0.0002	<0.0002
3/30/2018	<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002
2/26/2019	<0.0002			
2/27/2019			<0.0002	
2/28/2019		<0.0002		<0.0002
2/5/2020				<0.0002
2/7/2020	<0.0002	<0.0002	<0.0002	
3/18/2020	<0.0002			
3/19/2020			<0.0002	<0.0002
5/4/2020		<0.0002		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

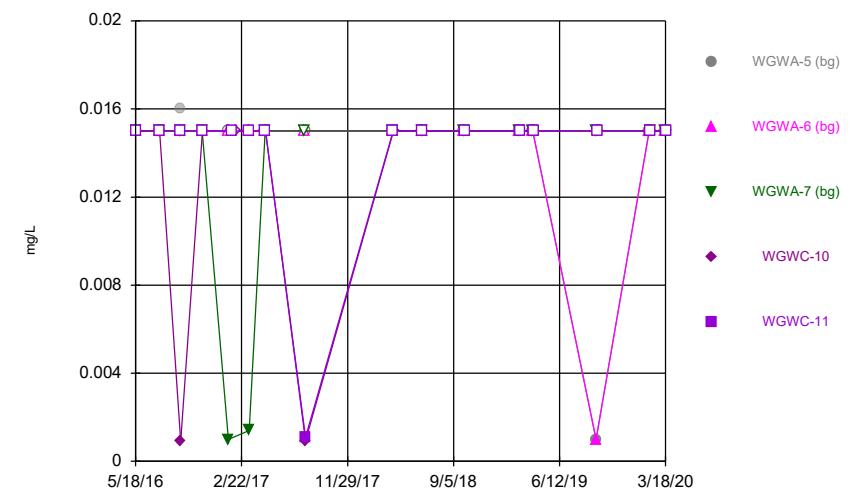
### Time Series



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

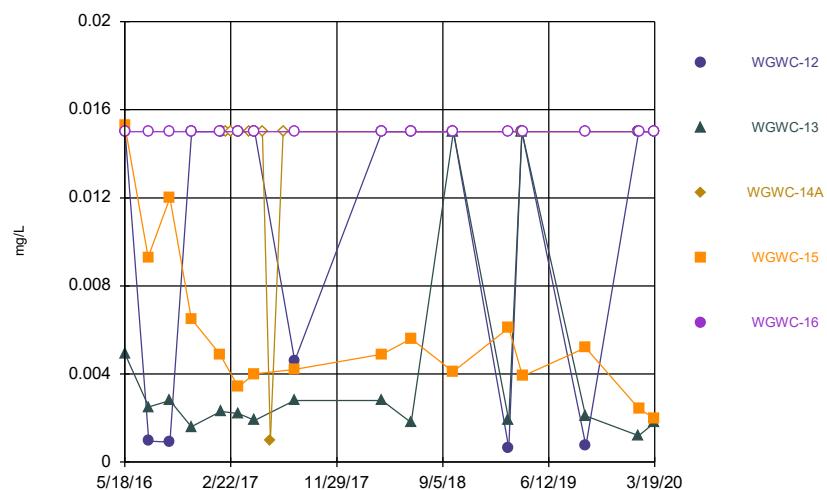
### Time Series



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

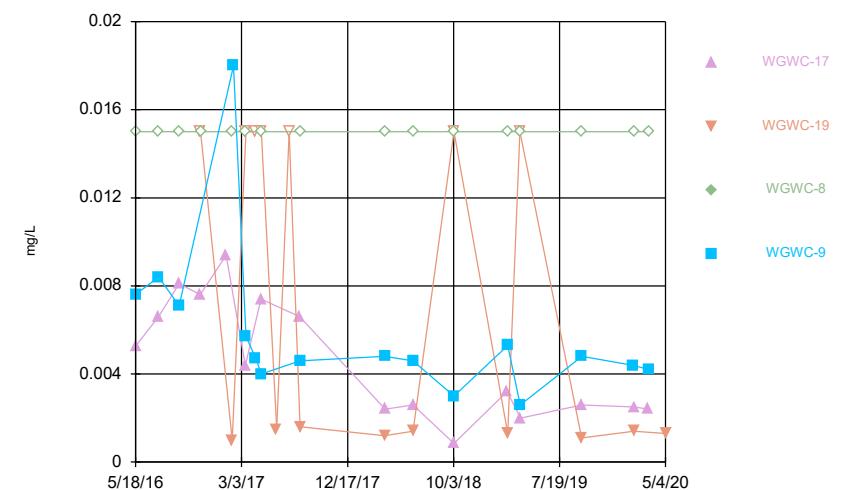
### Time Series



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant: Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.015	0.00367 (J)	<0.015		
5/18/2016				<0.015	<0.015
7/19/2016	<0.015	0.002 (J)	<0.015		
7/20/2016				<0.015	<0.015
9/13/2016	<0.015	0.0014 (J)	<0.015	<0.015	<0.015
11/9/2016	<0.015	<0.015	<0.015		
11/10/2016				<0.015	<0.015
1/17/2017	<0.015		<0.015		
1/18/2017				<0.015	<0.015
1/19/2017		<0.015			
3/13/2017	<0.015		<0.015		
3/14/2017		0.0072 (J)		0.00087 (J)	<0.015
4/24/2017	<0.015		<0.015		
4/25/2017		0.0036 (J)		0.00098 (J)	<0.015
8/8/2017	0.0017 (J)	<0.015	<0.015	<0.015	
8/9/2017					<0.015
3/27/2018	<0.015		<0.015		
3/28/2018		0.00089 (J)		<0.015	<0.015
6/13/2018	<0.015	<0.015			
6/14/2018			<0.015	<0.015	<0.015
9/24/2018			<0.015		
9/27/2018	<0.015				
9/28/2018		<0.015			
10/3/2018				<0.015	<0.015
2/25/2019	<0.015		<0.015		
2/26/2019		0.0019 (J)		<0.015	<0.015
4/1/2019	<0.015		<0.015		
4/2/2019		<0.015		<0.015	<0.015
9/16/2019	<0.015				
9/17/2019		<0.015	<0.015		<0.015
9/18/2019				<0.015	
2/3/2020	<0.015		<0.015		
2/4/2020				<0.015	<0.015
2/5/2020		<0.015			
3/16/2020	<0.015		<0.015		
3/17/2020		<0.015		<0.015	<0.015

## Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.015	<0.015	<0.015	<0.015	
5/19/2016					<0.015
7/19/2016	<0.015	<0.015	<0.015		
7/20/2016				<0.015	<0.015
9/13/2016		<0.015	<0.015		
9/14/2016	0.016 (o)			0.00091 (J)	<0.015
11/9/2016		<0.015			
11/10/2016			<0.015		
11/11/2016				<0.015	<0.015
1/18/2017		<0.015	0.001 (J)		
1/19/2017	<0.015				<0.015
1/27/2017					<0.015
2/6/2017				<0.015	
3/14/2017	<0.015	<0.015	0.0014 (J)		
3/15/2017				<0.015	<0.015
4/25/2017	<0.015	<0.015	<0.015		
4/26/2017				<0.015	<0.015
8/8/2017		<0.015	<0.015		
8/9/2017	<0.015				
8/10/2017				0.00093 (J)	0.0011 (J)
3/28/2018	<0.015	<0.015	<0.015		
3/29/2018					<0.015
3/30/2018				<0.015	
6/13/2018	<0.015	<0.015			
6/14/2018			<0.015	<0.015	<0.015
10/2/2018		<0.015			
10/3/2018	<0.015		<0.015		
10/4/2018				<0.015	<0.015
2/26/2019	<0.015	<0.015	<0.015		
2/27/2019				<0.015	<0.015
4/2/2019	<0.015	<0.015	<0.015		
4/3/2019					<0.015
4/4/2019				<0.015	
9/16/2019	0.001 (J)	0.001 (J)			
9/18/2019			<0.015		
9/19/2019				<0.015	<0.015
2/4/2020	<0.015	<0.015			
2/5/2020			<0.015	<0.015	<0.015
3/17/2020	<0.015	<0.015	<0.015		
3/18/2020				<0.015	<0.015

## Time Series

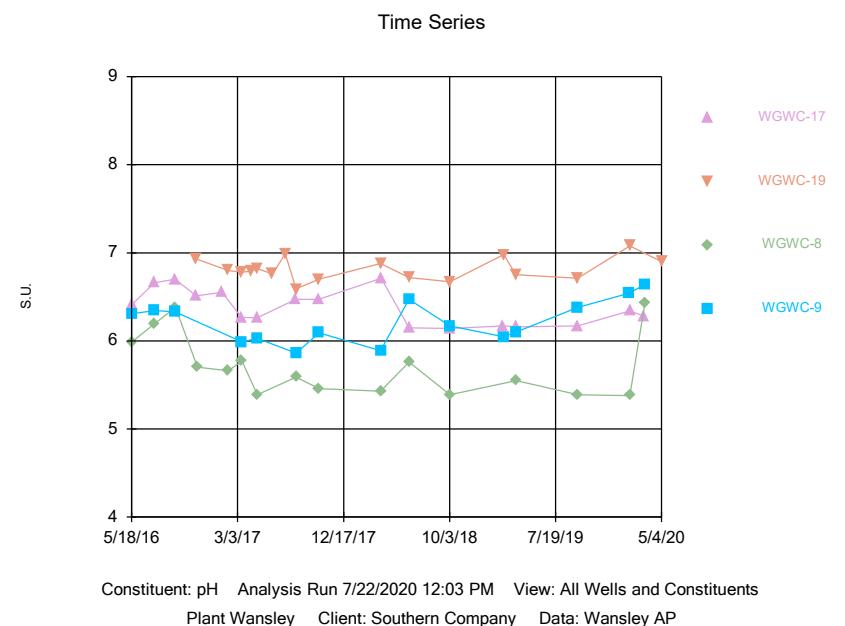
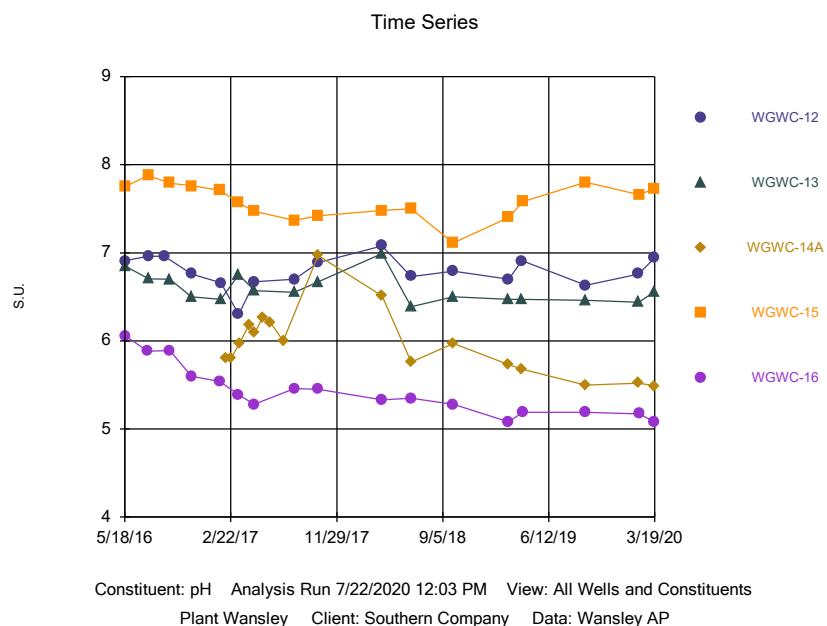
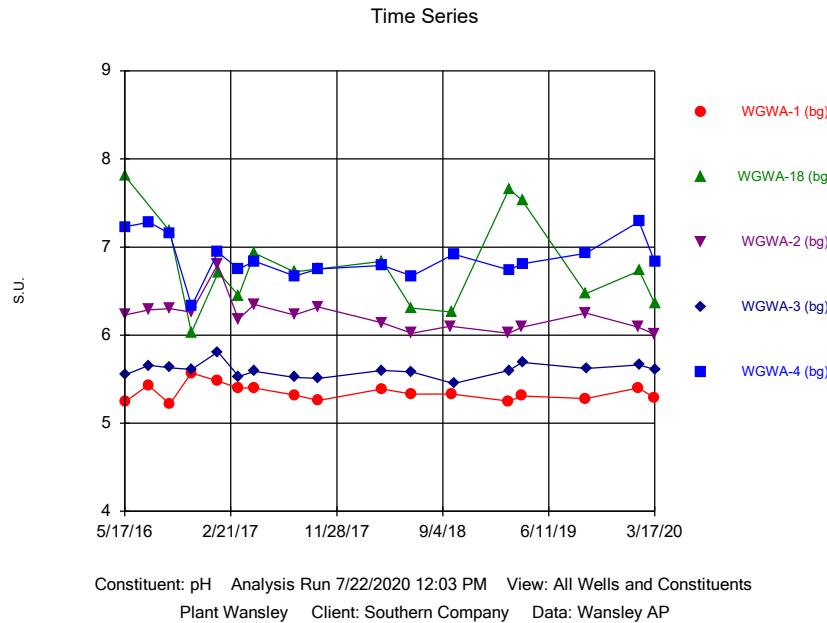
Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.0153	<0.015
5/19/2016	<0.015	0.00491 (J)			
7/19/2016				0.0093 (J)	<0.015
7/20/2016	0.00095 (J)	0.0025 (J)			
9/14/2016	0.0009 (J)	0.0028 (J)		0.012 (J)	<0.015
11/10/2016		0.0016 (J)		0.0065 (J)	<0.015
11/11/2016	<0.015				
1/24/2017				0.0049 (J)	<0.015
1/27/2017	<0.015	0.0023 (J)			
2/8/2017			<0.015		
2/23/2017			<0.015		
3/14/2017				0.0034 (J)	
3/15/2017	<0.015	0.0022 (J)			<0.015
3/17/2017			<0.015		
4/11/2017			<0.015		
4/25/2017				0.004 (J)	<0.015
4/26/2017	<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)	<0.015
8/10/2017	0.0046 (J)				
3/29/2018	<0.015	0.0028 (J)	<0.015		<0.015
3/30/2018				0.0049 (J)	
6/14/2018	<0.015	0.0018 (J)	<0.015	0.0056 (J)	<0.015
10/3/2018				0.0041 (J)	
10/4/2018	<0.015	<0.015	<0.015		<0.015
2/27/2019	0.00063 (J)	0.0019 (J)	<0.015	0.0061	<0.015
4/3/2019	<0.015	<0.015	<0.015		
4/4/2019				0.0039 (J)	<0.015
9/18/2019		0.0021 (J)	<0.015	0.0052	<0.015
9/19/2019	0.00073 (J)				
2/5/2020	<0.015	0.0012 (J)	<0.015		
2/7/2020				0.0024 (J)	<0.015
3/18/2020	<0.015			0.002 (J)	<0.015
3/19/2020		0.0018 (J)	<0.015		

## Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00526 (J)			
5/19/2016		<0.015		0.00762 (J)
7/20/2016	0.0066 (J)		<0.015	0.0084 (J)
9/14/2016	0.0081 (J)			0.0071 (J)
9/15/2016		<0.015		
11/10/2016	0.0076 (J)			
11/11/2016		<0.015		
11/14/2016		<0.015		
1/20/2017	0.0094 (J)			
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	0.0057 (J)
4/11/2017		<0.015		0.0047 (J)
4/25/2017	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	0.0066 (J)			
8/10/2017		0.0016 (J)	<0.015	0.0046 (J)
3/29/2018		0.0012 (J)	<0.015	0.0048 (J)
3/30/2018	0.0024 (J)			
6/14/2018	0.0026 (J)	0.0014 (J)	<0.015	0.0046 (J)
10/4/2018	0.00085 (J)	<0.015	<0.015	0.003 (J)
2/26/2019	0.0032 (J)			
2/27/2019		<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	0.002 (J)			
9/18/2019	0.0026 (J)	0.0011 (J)		
9/19/2019			<0.015	0.0048 (J)
2/5/2020				0.0044 (J)
2/7/2020	0.0025 (J)	0.0014 (J)	<0.015	
3/18/2020	0.0024 (J)			
3/19/2020		<0.015		0.0042 (J)
5/4/2020		0.0013 (J)		



## Time Series

Constituent: pH (S.U.) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	5.24	7.81	6.23		
5/18/2016				5.55	7.23
7/18/2016	5.434038				
7/19/2016		6.285413			
7/20/2016			5.656628	7.281557	
9/13/2016	5.22	7.18	6.3	5.63	7.15
11/9/2016	5.57	6.03	6.26		
11/10/2016				5.61	6.33
1/17/2017	5.48		6.8		
1/18/2017				5.81	6.94
1/19/2017		6.71			
3/13/2017	5.4		6.18		
3/14/2017		6.45		5.53	6.75
4/24/2017	5.4		6.35		
4/25/2017		6.93		5.59	6.84
8/8/2017	5.32	6.72	6.23	5.52	
8/9/2017					6.67
10/10/2017	5.26		6.32		
10/11/2017		6.75		5.51	6.75
3/27/2018	5.39		6.14		
3/28/2018		6.84		5.6	6.79
6/13/2018	5.33	6.31			
6/14/2018			6.02	5.58	6.67
9/24/2018			6.1		
9/27/2018	5.33				
9/28/2018		6.26			
10/3/2018				5.45	6.92
2/25/2019	5.25		6.02		
2/26/2019		7.66		5.6	6.74
4/1/2019	5.31		6.09		
4/2/2019		7.53		5.69	6.81
9/16/2019	5.28				
9/17/2019		6.47	6.25		6.93
9/18/2019				5.62	
2/3/2020	5.4		6.09		
2/4/2020				5.66	7.29
2/5/2020		6.73			
3/16/2020	5.29		6.01		
3/17/2020		6.36		5.61	6.83

## Time Series

Constituent: pH (S.U.) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	5.47	7.92	5.5	8.96	
5/19/2016					5.93
7/18/2016					5.9661
7/19/2016	5.336672	7.154587	5.43		
7/20/2016				8.56774	
9/13/2016		7.96	5.57		
9/14/2016	7.29				
11/9/2016		7.27			
11/10/2016			6.93		
11/11/2016				6.96	6.03
1/18/2017		7.72	7.16		
1/19/2017	6.59				
1/27/2017				6.21	
2/6/2017			6.93		
3/14/2017	5.86		5.82		
3/15/2017				6.82	5.97
4/25/2017	5.35	7.73	5.57		
4/26/2017				6.73	6.17
8/8/2017		7.74	5.6		
8/9/2017	5.25				
8/10/2017				6.66	6.05
8/25/2017	5.44				
10/11/2017	6.99	7.71	5.43		
10/12/2017				6.67	6.89
3/28/2018	5.95	7.28	5.29		
3/29/2018					6.85
3/30/2018				6.98	
6/13/2018	5.13	7.78			
6/14/2018			5.39	6.56	5.89
10/2/2018		7.52			
10/3/2018	5.22		5.33		
10/4/2018				6.4	5.81
2/26/2019	5.21	7.87	5.62		
2/27/2019				6.23	5.78
4/2/2019	5.25	7.94	5.6		
4/3/2019					6.07
4/4/2019				6.46	
9/16/2019	6.94	7.55			
9/18/2019			5.6		
9/19/2019				6.45	5.82
2/4/2020	5.31	7.74			
2/5/2020			5.54	6.42	5.89
3/17/2020	5.34	7.96	5.32		
3/18/2020				6.4	5.89

## Time Series

Constituent: pH (S.U.) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				7.75	6.06
5/19/2016	6.91	6.85			
7/18/2016					5.884339
7/19/2016				7.876073	
7/20/2016	6.962608	6.705264			
9/1/2016	6.96				
9/14/2016		6.7		7.79	5.89
11/10/2016		6.5		7.76	5.6
11/11/2016	6.76				
1/24/2017				7.71	5.54
1/27/2017	6.66	6.47			
2/8/2017				5.81	
2/23/2017				5.8	
3/14/2017				7.57	
3/15/2017	6.3	6.75			5.39
3/17/2017				5.97	
4/11/2017				6.18	
4/25/2017				7.47	5.28
4/26/2017	6.67	6.57	6.09		
5/17/2017				6.26	
6/7/2017				6.21	
7/11/2017				6	
8/9/2017		6.55		7.37	5.46
8/10/2017	6.7				
10/11/2017			6.97	7.42	5.45
10/12/2017	6.89	6.67			
3/29/2018	7.08	6.99	6.51		5.33
3/30/2018				7.48	
6/14/2018	6.73	6.39	5.76	7.5	5.35
10/3/2018				7.11	
10/4/2018	6.79	6.5	5.97		5.28
2/27/2019	6.7	6.47	5.73	7.4	5.08
4/3/2019	6.91	6.47	5.68		
4/4/2019				7.58	5.19
9/18/2019		6.46	5.5	7.8	5.19
9/19/2019	6.63				
2/5/2020	6.76	6.44	5.52		
2/7/2020				7.66	5.17
3/18/2020	6.94			7.73	5.08
3/19/2020		6.56	5.49		

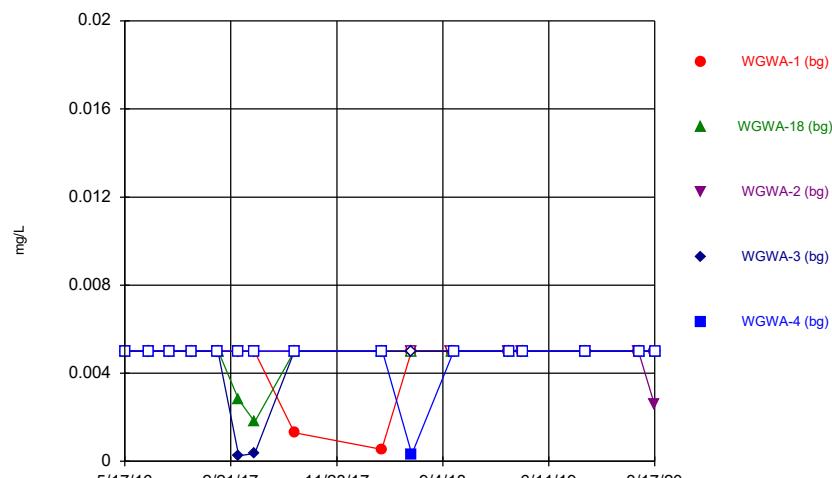
## Time Series

Constituent: pH (S.U.) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	6.41			
5/19/2016			5.99	6.31
7/20/2016	6.662463		6.194334	6.345061
9/14/2016	6.7			6.33
9/15/2016				6.38
11/10/2016	6.51			
11/11/2016		6.93		
11/14/2016			5.7	
1/20/2017	6.55			
2/6/2017		6.8	5.66	
3/14/2017	6.27			
3/15/2017		6.78	5.77	5.99
4/11/2017		6.79		
4/25/2017	6.26			
4/26/2017		6.82	5.39	6.03
6/7/2017		6.76		
7/11/2017		6.99		
8/9/2017	6.47			
8/10/2017		6.59	5.59	5.86
10/11/2017	6.47			
10/12/2017		6.7	5.46	6.09
3/29/2018		6.88	5.43	5.89
3/30/2018	6.71			
6/14/2018	6.15	6.72	5.76	6.47
10/4/2018	6.14	6.67	5.39	6.17
2/26/2019	6.17			
2/28/2019		6.98		6.045 (D)
4/2/2019		6.75		
4/3/2019			5.55	6.1
4/4/2019	6.16			
9/18/2019	6.17	6.71		
9/19/2019			5.39	6.38
2/5/2020				6.54
2/7/2020	6.34	7.08	5.38	
3/18/2020	6.28			
3/19/2020			6.43	6.64
5/4/2020		6.9		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

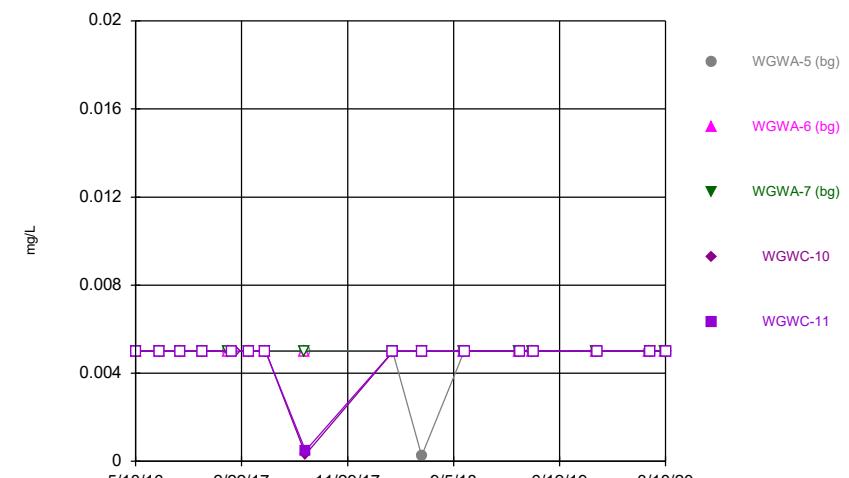
### Time Series



Constituent: Selenium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

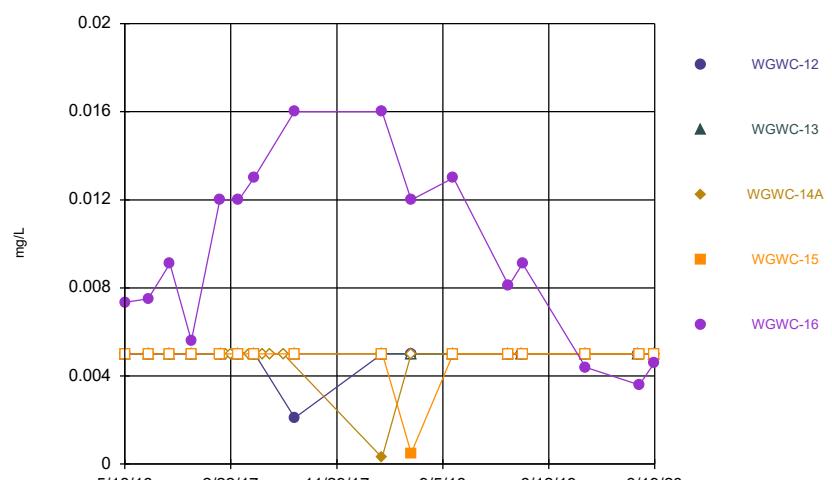
### Time Series



Constituent: Selenium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

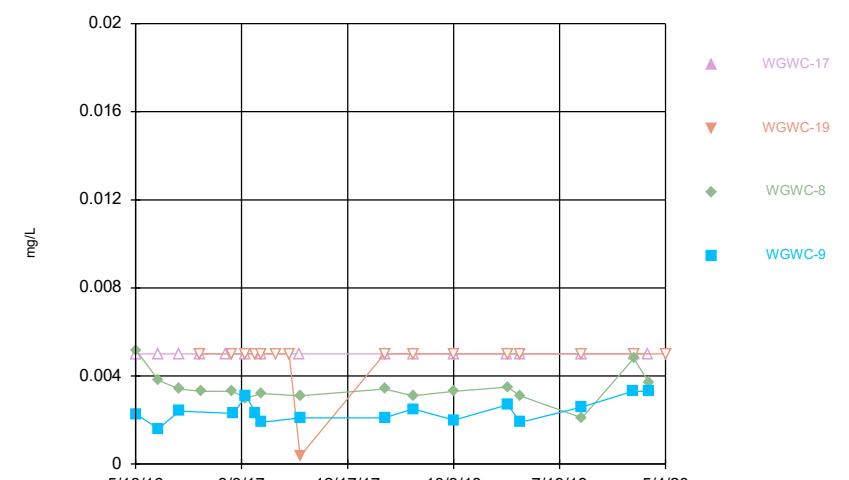
### Time Series



Constituent: Selenium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Selenium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Selenium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.005	<0.005	<0.005		
5/18/2016				<0.005	<0.005
7/19/2016	<0.005	<0.005	<0.005		
7/20/2016				<0.005	<0.005
9/13/2016	<0.005	<0.005	<0.005	<0.005	<0.005
11/9/2016	<0.005	<0.005	<0.005		
11/10/2016				<0.005	<0.005
1/17/2017	<0.005		<0.005		
1/18/2017				<0.005	<0.005
1/19/2017		<0.005			
3/13/2017	<0.005		<0.005		
3/14/2017		0.0028		0.00026 (J)	<0.005
4/24/2017	<0.005		<0.005		
4/25/2017		0.0018		0.00035 (J)	<0.005
8/8/2017	0.0013	<0.005	<0.005	<0.005	
8/9/2017					<0.005
3/27/2018	0.00055 (J)		<0.005		
3/28/2018		<0.005		<0.005	<0.005
6/13/2018	<0.005	<0.005			
6/14/2018			<0.005	<0.005	0.00032 (J)
9/24/2018			<0.005		
9/27/2018	<0.005				
9/28/2018		<0.005			
10/3/2018				<0.005	<0.005
2/25/2019	<0.005		<0.005		
2/26/2019		<0.005		<0.005	<0.005
4/1/2019	<0.005		<0.005		
4/2/2019		<0.005		<0.005	<0.005
9/16/2019	<0.005				
9/17/2019		<0.005	<0.005		<0.005
9/18/2019					<0.005
2/3/2020	<0.005		<0.005		
2/4/2020				<0.005	<0.005
2/5/2020		<0.005			
3/16/2020	<0.005		0.0026 (J)		
3/17/2020		<0.005		<0.005	<0.005

## Time Series

Constituent: Selenium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.005	<0.005	<0.005	<0.005	
5/19/2016					<0.005
7/19/2016	<0.005	<0.005	<0.005		
7/20/2016				<0.005	<0.005
9/13/2016		<0.005	<0.005		
9/14/2016	<0.005			<0.005	<0.005
11/9/2016		<0.005			
11/10/2016			<0.005		
11/11/2016				<0.005	<0.005
1/18/2017		<0.005	<0.005		
1/19/2017	<0.005				<0.005
1/27/2017					<0.005
2/6/2017				<0.005	
3/14/2017	<0.005	<0.005	<0.005		
3/15/2017				<0.005	<0.005
4/25/2017	<0.005	<0.005	<0.005		
4/26/2017				<0.005	<0.005
8/8/2017		<0.005	<0.005		
8/9/2017	<0.005				
8/10/2017				0.00031 (J)	0.00049 (J)
3/28/2018	<0.005	<0.005	<0.005		
3/29/2018					<0.005
3/30/2018				<0.005	
6/13/2018	0.00025 (J)	<0.005			
6/14/2018			<0.005	<0.005	<0.005
10/2/2018		<0.005			
10/3/2018	<0.005		<0.005		
10/4/2018				<0.005	<0.005
2/26/2019	<0.005	<0.005	<0.005		
2/27/2019				<0.005	<0.005
4/2/2019	<0.005	<0.005	<0.005		
4/3/2019					<0.005
4/4/2019				<0.005	
9/16/2019	<0.005	<0.005			
9/18/2019			<0.005		
9/19/2019				<0.005	<0.005
2/4/2020	<0.005	<0.005			
2/5/2020			<0.005	<0.005	<0.005
3/17/2020	<0.005	<0.005	<0.005		
3/18/2020				<0.005	<0.005

## Time Series

Constituent: Selenium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.005	0.00735
5/19/2016	<0.005	<0.005			
7/19/2016				<0.005	0.0075
7/20/2016	<0.005	<0.005			
9/14/2016	<0.005	<0.005		<0.005	0.0091
11/10/2016		<0.005		<0.005	0.0056
11/11/2016	<0.005				
1/24/2017				<0.005	0.012
1/27/2017	<0.005	<0.005			
2/8/2017			<0.005		
2/23/2017			<0.005		
3/14/2017				<0.005	
3/15/2017	<0.005	<0.005			0.012
3/17/2017			<0.005		
4/11/2017			<0.005		
4/25/2017				<0.005	0.013
4/26/2017	<0.005	<0.005	<0.005		
5/17/2017			<0.005		
6/7/2017			<0.005		
7/11/2017			<0.005		
8/9/2017		<0.005		<0.005	0.016
8/10/2017	0.0021				
3/29/2018	<0.005	<0.005	0.0003 (J)		0.016
3/30/2018				<0.005	
6/14/2018	<0.005	<0.005	<0.005	0.0005 (J)	0.012
10/3/2018				<0.005	
10/4/2018	<0.005	<0.005	<0.005		0.013
2/27/2019	<0.005	<0.005	<0.005	<0.005	0.0081
4/3/2019	<0.005	<0.005	<0.005		
4/4/2019				<0.005	0.0091
9/18/2019		<0.005	<0.005	<0.005	0.0044 (J)
9/19/2019	<0.005				
2/5/2020	<0.005	<0.005	<0.005		
2/7/2020				<0.005	0.0036 (J)
3/18/2020	<0.005			<0.005	0.0046 (J)
3/19/2020		<0.005	<0.005		

## Time Series

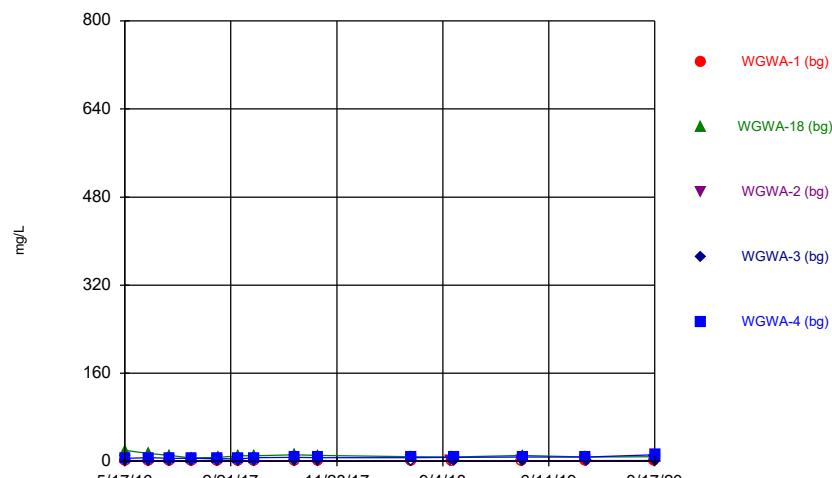
Constituent: Selenium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005			
5/19/2016			0.00518	0.00228
7/20/2016	<0.005		0.0038	0.0016
9/14/2016	<0.005			0.0024
9/15/2016				0.0034
11/10/2016	<0.005			
11/11/2016		<0.005		
11/14/2016			0.0033	
1/20/2017	<0.005			
2/6/2017		<0.005	0.0033	
2/9/2017				0.0023
3/14/2017	<0.005			
3/15/2017		<0.005	0.003	0.0031
4/11/2017		<0.005		0.0023
4/25/2017	<0.005			
4/26/2017		<0.005	0.0032	0.0019
6/7/2017		<0.005		
7/11/2017		<0.005		
8/9/2017	<0.005			
8/10/2017		0.00036 (J)	0.0031	0.0021
3/29/2018		<0.005	0.0034	0.0021
3/30/2018	<0.005			
6/14/2018	<0.005	<0.005	0.0031	0.0025
10/4/2018	<0.005	<0.005	0.0033	0.002
2/26/2019	<0.005			
2/27/2019			0.0035	
2/28/2019		<0.005		0.0027
4/2/2019		<0.005		
4/3/2019			0.0031	0.0019
4/4/2019	<0.005			
9/18/2019	<0.005	<0.005		
9/19/2019			0.0021 (J)	0.0026 (J)
2/5/2020				0.0033 (J)
2/7/2020	<0.005	<0.005	0.0048 (J)	
3/18/2020	<0.005			
3/19/2020			0.0037 (J)	0.0033 (J)
5/4/2020		<0.005		

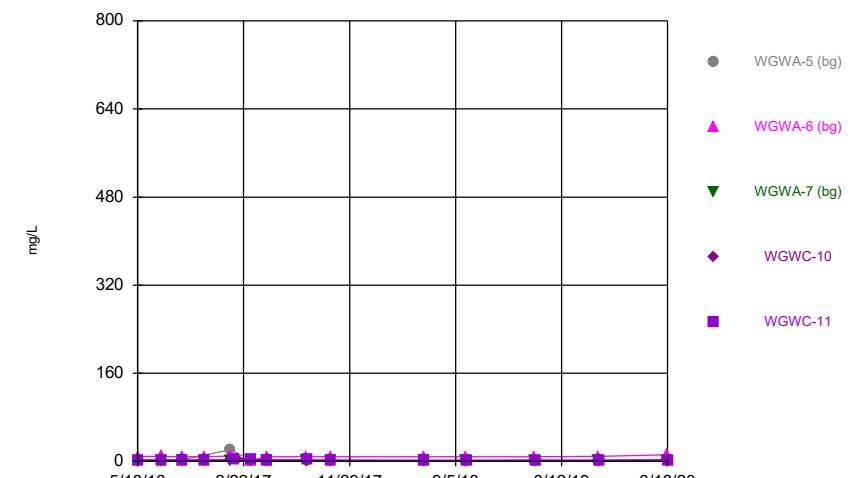
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



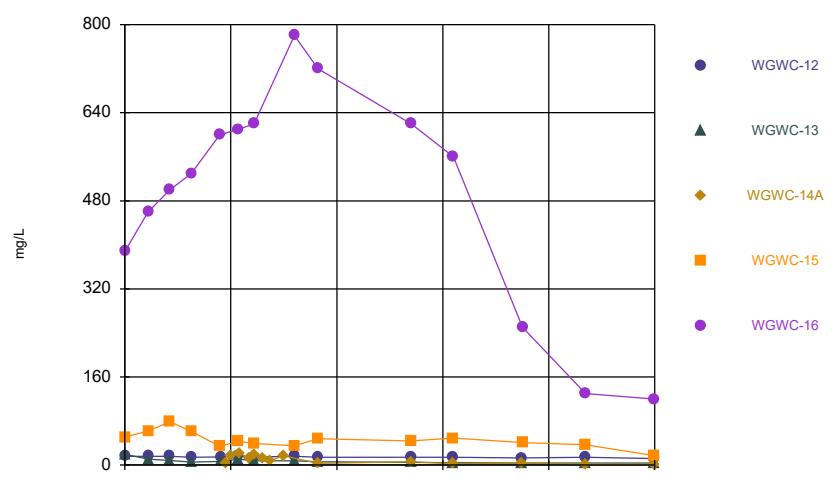
Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



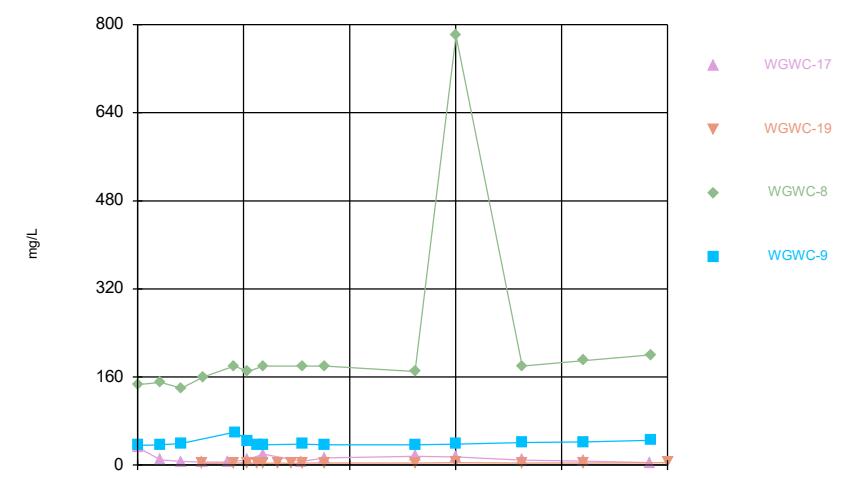
Sanitas™ v.9.6.26 , UG

### Time Series



Sanitas™ v.9.6.26 , UG

### Time Series



## Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<1	19.9	1.14		
5/18/2016				0.821 (J)	5.32
7/19/2016	<1	14	1.4		
7/20/2016				0.82 (J)	6.5
9/13/2016	<1	11	1.1	0.81 (J)	5.6
11/9/2016	<1	6.3	1.1		
11/10/2016				0.73 (J)	5.4
1/17/2017	<1		2.1		
1/18/2017				0.99 (J)	5.1
1/19/2017		7.4			
3/13/2017	<1		0.97 (J)		
3/14/2017		10		0.83 (J)	4.6
4/24/2017	<1		0.75 (J)		
4/25/2017		10		0.7 (J)	6.6
8/8/2017	<1	12	1.1	0.82 (J)	
8/9/2017					7.3
10/10/2017	<1		1.3		
10/11/2017		11		0.72 (J)	6.8
6/13/2018	<1	8.2			
6/14/2018			0.84 (J)	<1	6.9
9/24/2018			0.79 (J)		
9/27/2018	<1				
9/28/2018		7.6			
10/3/2018				0.73 (J)	7
4/1/2019	<1		1		
4/2/2019		11		1.1	8.1
9/16/2019	0.49 (J)				
9/17/2019		8	1.3		8.1
9/18/2019				0.78 (J)	
3/16/2020	0.42 (J)		1.3		
3/17/2020		8.5		1.2	12

## Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	0.955 (J)	8.88	0.368 (J)	2.84	
5/19/2016					1.83
7/19/2016	0.76 (J)	9	<1		
7/20/2016				2.8	1.6
9/13/2016		8.5	<1		
9/14/2016	3.4			2.8	1.5
11/9/2016		8.2			
11/10/2016			<1		
11/11/2016				2.6	1.4
1/18/2017		9.4	1.4		
1/19/2017	21				
1/27/2017					2.5
2/6/2017			2.7		
3/14/2017	1.4	2	<1		
3/15/2017				2.7	2.5
4/25/2017	0.89 (J)	8.2	<1		
4/26/2017				2.5	2.2
8/8/2017		8.5	<1		
8/9/2017	0.75 (J)				
8/10/2017				2.2	2.3
10/11/2017	<1	8.3	<1		
10/12/2017				1.9	1.9
6/13/2018	<1	8.3			
6/14/2018			<1	2	1.7
10/2/2018		8.3			
10/3/2018	<1		<1		
10/4/2018				1.9	1.6
4/2/2019	0.94 (J)	8.5	0.4 (J)		
4/3/2019					1.9
4/4/2019				2.2	
9/16/2019	2.2	8.9			
9/18/2019			<1		
9/19/2019				2.1	1.3
3/17/2020	4	12	0.86 (J)		
3/18/2020				2.1	1.6

## Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				50.7	388
5/19/2016	15.8	19.2			
7/19/2016				62	460
7/20/2016	16	11			
9/14/2016	16	8.6		79	500
11/10/2016		5.7		61	530
11/11/2016	14				
1/24/2017				34	600
1/27/2017	15	6.8			
2/8/2017				4.3	
2/23/2017				16	
3/14/2017				43	
3/15/2017	17	11			610
3/17/2017				22	
4/11/2017				13	
4/25/2017				39	620
4/26/2017	15	8.1	20		
5/17/2017				12	
6/7/2017				8.1	
7/11/2017				17	
8/9/2017		8.1		35	780
8/10/2017	16				
10/11/2017				3.4	48
10/12/2017	14	6.1			720
6/14/2018	14	5	5.8	44	620
10/3/2018				49	
10/4/2018	14	4.3	2.8		560
4/3/2019	13	3.8	3.8		
4/4/2019				41	250
9/18/2019		3.9	1.7	37	130
9/19/2019	14				
3/18/2020	12			17	120
3/19/2020		4	1.5		

## Time Series

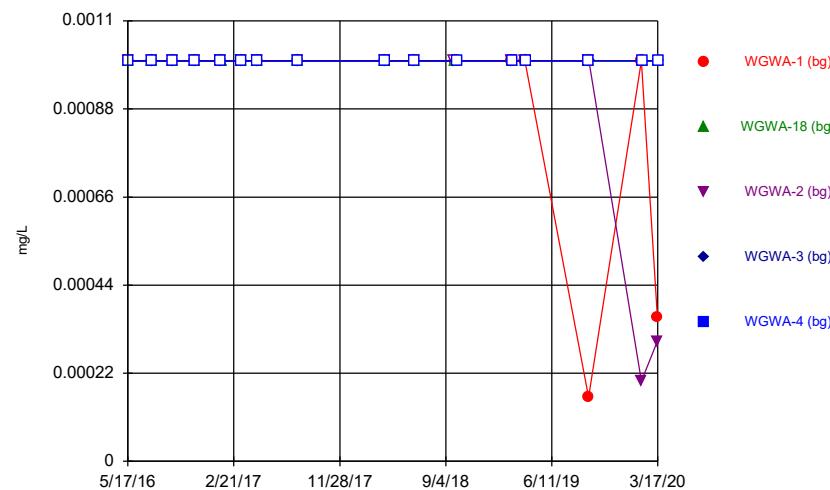
Constituent: Sulfate (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	32.1			
5/19/2016			146	35.9
7/20/2016	9.7		150	37
9/14/2016	6.6			39
9/15/2016			140	
11/10/2016	5.2			
11/11/2016		3.4		
11/14/2016			160	
1/20/2017	5.3			
2/6/2017		3.7	180	
2/9/2017				60
3/14/2017	9.6			
3/15/2017		3.6	170	44
4/11/2017		3.2		36
4/25/2017	20			
4/26/2017		3.3	180	37
6/7/2017		3.8		
7/11/2017		3.3		
8/9/2017	6.5			
8/10/2017		3.7	180	38
10/11/2017	13			
10/12/2017		3.6	180	37
6/14/2018	16	3.5	170	37
10/4/2018	15	4.6	780	38
4/2/2019		3.8		
4/3/2019			180	41
4/4/2019	9.1			
9/18/2019	7.3	3.6		
9/19/2019			190	42
3/18/2020	4.2			
3/19/2020			200	45
5/4/2020		4.5		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

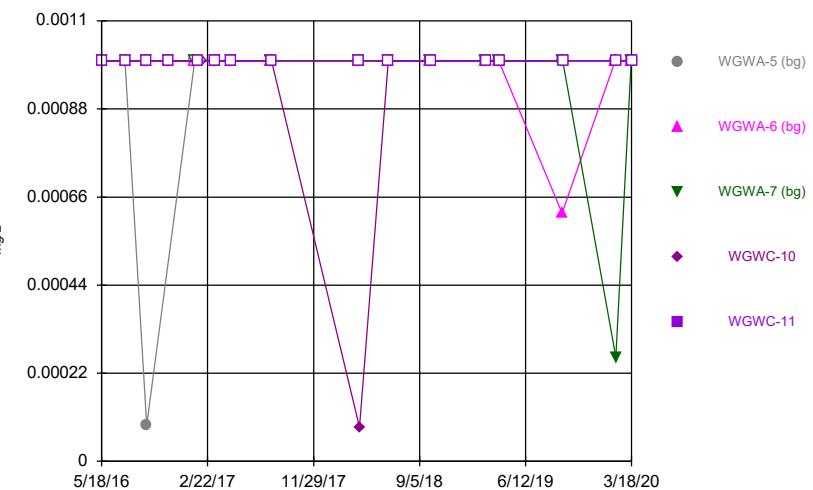
### Time Series



Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

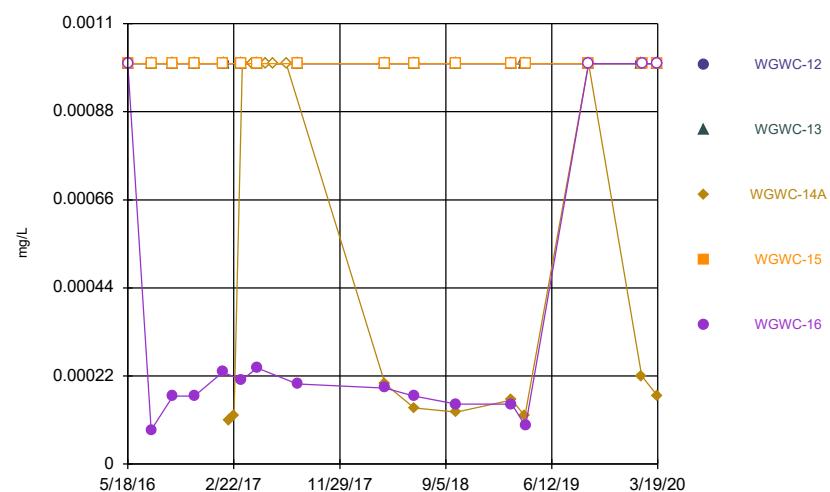
### Time Series



Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

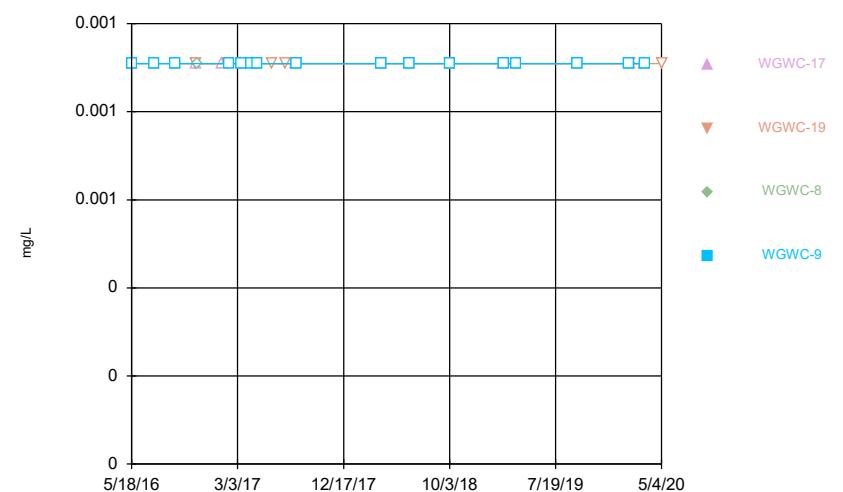
### Time Series



Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

### Time Series



Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Thallium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<0.001		
1/18/2017				<0.001	<0.001
1/19/2017		<0.001			
3/13/2017	<0.001		<0.001		
3/14/2017			<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001		
4/25/2017			<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001	
8/9/2017					<0.001
3/27/2018	<0.001		<0.001		
3/28/2018			<0.001	<0.001	<0.001
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	<0.001
9/24/2018			<0.001		
9/27/2018	<0.001				
9/28/2018		<0.001			
10/3/2018				<0.001	<0.001
2/25/2019	<0.001		<0.001		
2/26/2019			<0.001	<0.001	<0.001
4/1/2019	<0.001		<0.001		
4/2/2019			<0.001	<0.001	<0.001
9/16/2019	0.00016 (J)				
9/17/2019		<0.001	<0.001		<0.001
9/18/2019				<0.001	
2/3/2020	<0.001		0.0002 (J)		
2/4/2020				<0.001	<0.001
2/5/2020		<0.001			
3/16/2020	0.00036 (J)		0.0003 (J)		
3/17/2020		<0.001		<0.001	<0.001

## Time Series

Constituent: Thallium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	9E-05 (J)			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				<0.001
1/27/2017					<0.001
2/6/2017				<0.001	
3/14/2017	<0.001	<0.001	<0.001		
3/15/2017				<0.001	<0.001
4/25/2017	<0.001	<0.001	<0.001		
4/26/2017				<0.001	<0.001
8/8/2017		<0.001	<0.001		
8/9/2017	<0.001				
8/10/2017				<0.001	<0.001
3/28/2018	<0.001	<0.001	<0.001		
3/29/2018					<0.001
3/30/2018				8.5E-05 (J)	
6/13/2018	<0.001	<0.001			
6/14/2018			<0.001	<0.001	<0.001
10/2/2018		<0.001			
10/3/2018	<0.001		<0.001		
10/4/2018				<0.001	<0.001
2/26/2019	<0.001	<0.001	<0.001		
2/27/2019				<0.001	<0.001
4/2/2019	<0.001	<0.001	<0.001		
4/3/2019					<0.001
4/4/2019				<0.001	
9/16/2019	<0.001	0.00062 (J)			
9/18/2019			<0.001		
9/19/2019				<0.001	<0.001
2/4/2020	<0.001	<0.001			
2/5/2020			0.00026 (J)	<0.001	<0.001
3/17/2020	<0.001	<0.001	<0.001		
3/18/2020				<0.001	<0.001

## Time Series

Constituent: Thallium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.001	<0.001
5/19/2016	<0.001	<0.001			
7/19/2016				<0.001	8.5E-05 (J)
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		<0.001	0.00017 (J)
11/10/2016		<0.001		<0.001	0.00017 (J)
11/11/2016	<0.001				
1/24/2017				<0.001	0.00023 (J)
1/27/2017	<0.001	<0.001			
2/8/2017				0.00011 (J)	
2/23/2017				0.00012 (J)	
3/14/2017				<0.001	
3/15/2017	<0.001	<0.001			0.00021 (J)
3/17/2017				<0.001	
4/11/2017				<0.001	
4/25/2017				<0.001	0.00024 (J)
4/26/2017	<0.001	<0.001	<0.001		
5/17/2017				<0.001	
6/7/2017				<0.001	
7/11/2017				<0.001	
8/9/2017		<0.001		<0.001	0.0002 (J)
8/10/2017	<0.001				
3/29/2018	<0.001	<0.001	0.0002 (J)		0.00019 (J)
3/30/2018				<0.001	
6/14/2018	<0.001	<0.001	0.00014 (J)	<0.001	0.00017 (J)
10/3/2018				<0.001	
10/4/2018	<0.001	<0.001	0.00013 (J)		0.00015 (J)
2/27/2019	<0.001	<0.001	0.00016 (J)	<0.001	0.00015 (J)
4/3/2019	<0.001	<0.001	0.00012 (J)		
4/4/2019				<0.001	9.5E-05 (J)
9/18/2019		<0.001	<0.001	<0.001	<0.001
9/19/2019	<0.001				
2/5/2020	<0.001	<0.001	0.00022 (J)		
2/7/2020				<0.001	<0.001
3/18/2020	<0.001			<0.001	<0.001
3/19/2020		<0.001	0.00017 (J)		

## Time Series

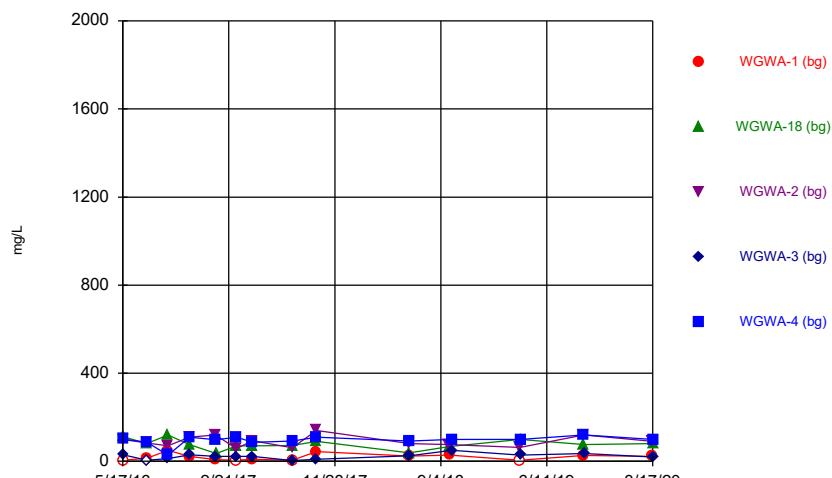
Constituent: Thallium (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			<0.001	<0.001
7/20/2016	<0.001		<0.001	<0.001
9/14/2016	<0.001			<0.001
9/15/2016				<0.001
11/10/2016	<0.001			
11/11/2016		<0.001		
11/14/2016			<0.001	
1/20/2017	<0.001			
2/6/2017		<0.001	<0.001	
2/9/2017				<0.001
3/14/2017	<0.001			
3/15/2017		<0.001	<0.001	<0.001
4/11/2017		<0.001		<0.001
4/25/2017	<0.001			
4/26/2017		<0.001	<0.001	<0.001
6/7/2017		<0.001		
7/11/2017		<0.001		
8/9/2017	<0.001			
8/10/2017		<0.001	<0.001	<0.001
3/29/2018		<0.001	<0.001	<0.001
3/30/2018	<0.001			
6/14/2018	<0.001	<0.001	<0.001	<0.001
10/4/2018	<0.001	<0.001	<0.001	<0.001
2/26/2019	<0.001			
2/27/2019			<0.001	
2/28/2019		<0.001		<0.001
4/2/2019		<0.001		
4/3/2019			<0.001	<0.001
4/4/2019	<0.001			
9/18/2019	<0.001	<0.001		
9/19/2019			<0.001	<0.001
2/5/2020				<0.001
2/7/2020	<0.001	<0.001	<0.001	
3/18/2020	<0.001			
3/19/2020			<0.001	<0.001
5/4/2020		<0.001		

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

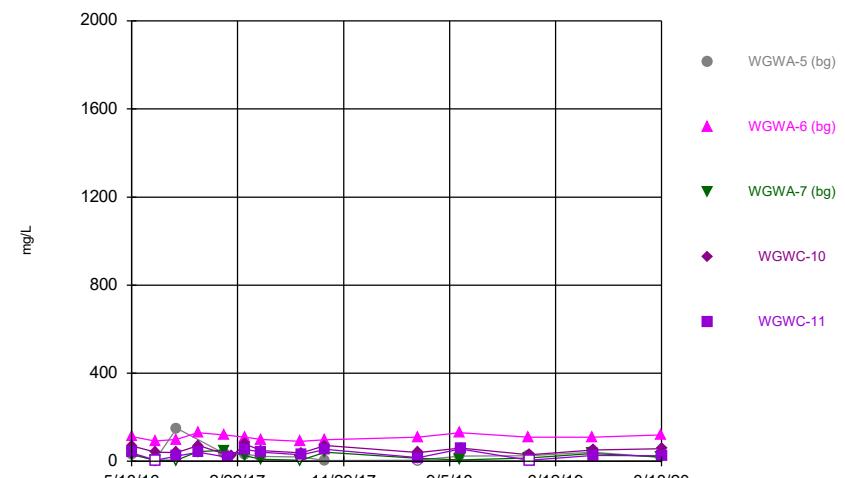
### Time Series



Constituent: Total Dissolved Solids Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG  
Hollow symbols indicate censored values.

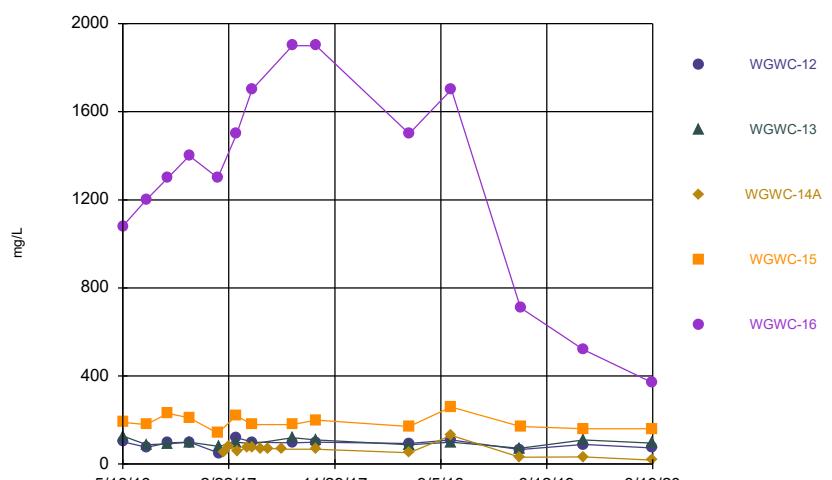
### Time Series



Constituent: Total Dissolved Solids Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG

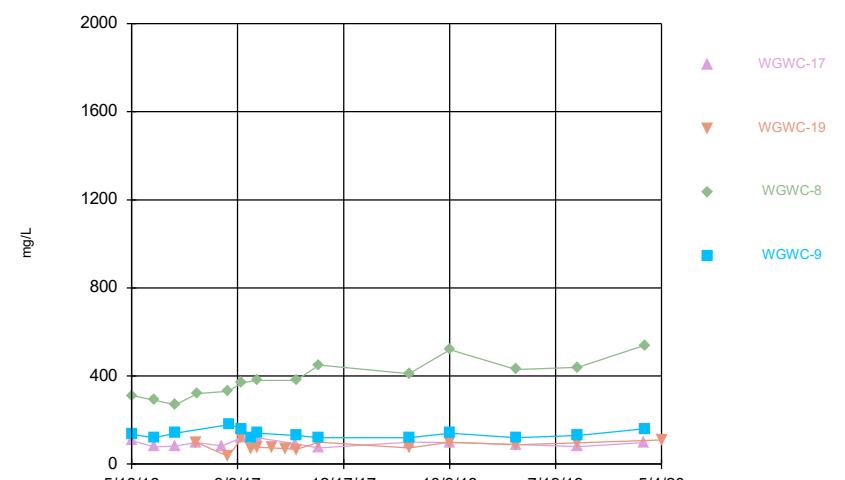
### Time Series



Constituent: Total Dissolved Solids Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 , UG

### Time Series



Constituent: Total Dissolved Solids Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<10	112	100		
5/18/2016				29	101
7/19/2016	14	80	84		
7/20/2016				<10	86
9/13/2016	50	120	70	12	28
11/9/2016	22	76	110		
11/10/2016				30	110
1/17/2017	8		120		
1/18/2017				22	98
1/19/2017		36			
3/13/2017	<10		58		
3/14/2017		70		22	110
4/24/2017	10		94		
4/25/2017		70		22	86
8/8/2017	<10	72	62	4 (J)	
8/9/2017					92
10/10/2017	44		140		
10/11/2017		90		10	110
6/13/2018	24	38			
6/14/2018			80	26	92
9/24/2018			76		
9/27/2018	28				
9/28/2018		68			
10/3/2018				50	100
4/1/2019	<10		63		
4/2/2019		100		28	100
9/16/2019	27				
9/17/2019		76	120		120
9/18/2019				36	
3/16/2020	23		90		
3/17/2020		81		20	100

## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	33	113	31	70	
5/19/2016					39
7/19/2016	<10	92	<10		
7/20/2016				42	<10
9/13/2016		100	<10		
9/14/2016	150			40	24
11/9/2016		130			
11/10/2016			44		
11/11/2016				72	42
1/18/2017		120	50		
1/19/2017	34				18
1/27/2017				24	
2/6/2017					
3/14/2017	32	110	26		
3/15/2017				78	54
4/25/2017	22	100	10		
4/26/2017				48	42
8/8/2017		90	<10		
8/9/2017	20				
8/10/2017				38	30
10/11/2017	4 (J)	98	42		
10/12/2017				72	54
6/13/2018	<10	110			
6/14/2018			14	40	16
10/2/2018		130			
10/3/2018	24		6		
10/4/2018				60	56
4/2/2019	25	110	15		
4/3/2019					<10
4/4/2019				30	
9/16/2019	41	110			
9/18/2019			35		
9/19/2019				52	27
3/17/2020	18	120	19		
3/18/2020				58	26

## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				190	1080
5/19/2016	101	127		180	1200
7/19/2016				230	1300
7/20/2016	76	88		210	1400
9/14/2016	96	92			
11/10/2016		100			
11/11/2016	100				
1/24/2017				140	1300
1/27/2017	50	80			
2/8/2017			54		
2/23/2017			78		
3/14/2017			220		
3/15/2017	120	100			1500
3/17/2017			56		
4/11/2017			76		
4/25/2017				180	1700
4/26/2017	100	92	76		
5/17/2017			68		
6/7/2017			72		
7/11/2017			68		
8/9/2017		120		180	1900
8/10/2017	96				
10/11/2017			68	200	1900
10/12/2017	100	110			
6/14/2018	94	88	52	170	1500
10/3/2018				260	
10/4/2018	110	100	130		1700
4/3/2019	66	72	31		
4/4/2019				170	710
9/18/2019		110	33	160	520
9/19/2019	89				
3/18/2020	73			160	370
3/19/2020		95	18		

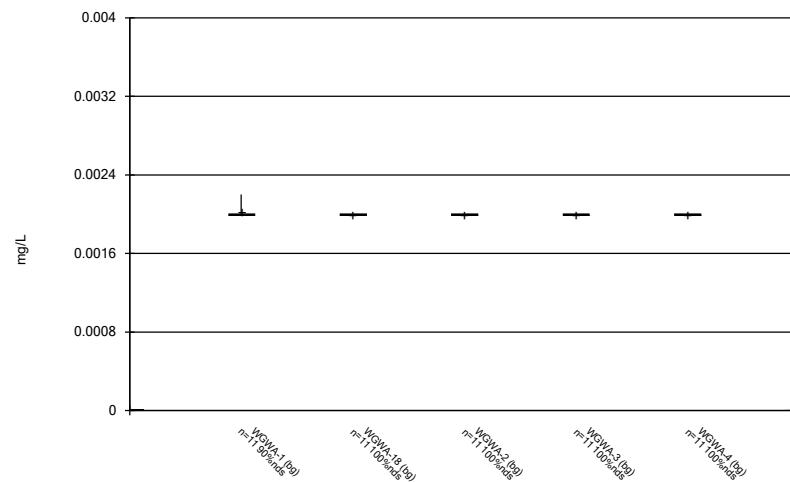
## Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents  
 Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	107			
5/19/2016			311	134
7/20/2016	78		290	120
9/14/2016	82			140
9/15/2016			270	
11/10/2016	98			
11/11/2016		98		
11/14/2016			320	
1/20/2017	82			
2/6/2017		36	330	
2/9/2017				180
3/14/2017	120			
3/15/2017		120	370	160
4/11/2017		68		120
4/25/2017	120			
4/26/2017		76	380	140
6/7/2017		74		
7/11/2017		70		
8/9/2017	92			
8/10/2017		66	380	130
10/11/2017	74			
10/12/2017		100	450	120
6/14/2018	100	74	410	120
10/4/2018	98	100	520	140
4/2/2019		88		
4/3/2019			430	120
4/4/2019	89			
9/18/2019	79	96		
9/19/2019			440	130
3/18/2020	98			
3/19/2020			540	160
5/4/2020		110		

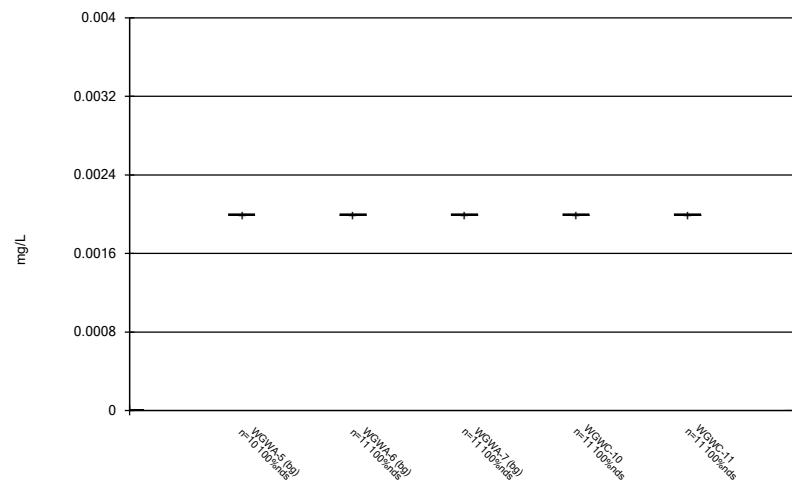
## FIGURE B.

## Box &amp; Whiskers Plot



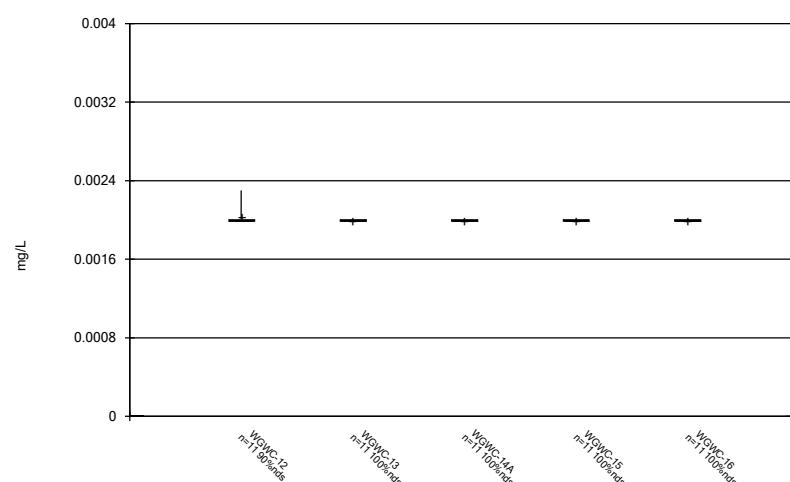
Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



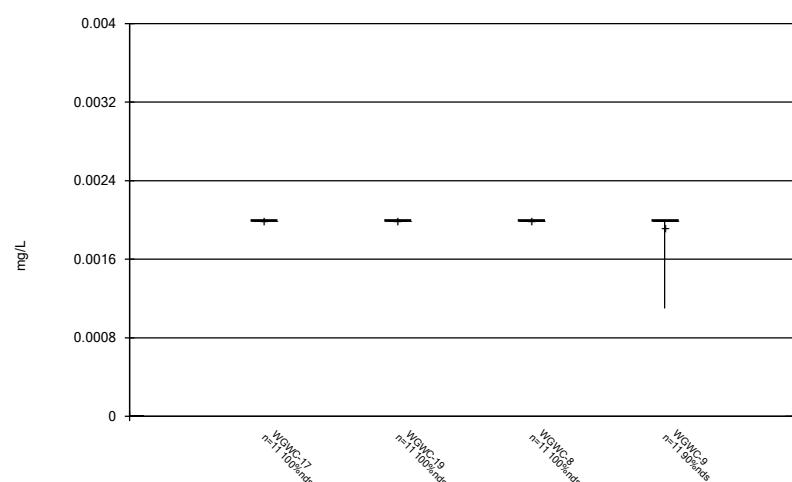
Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



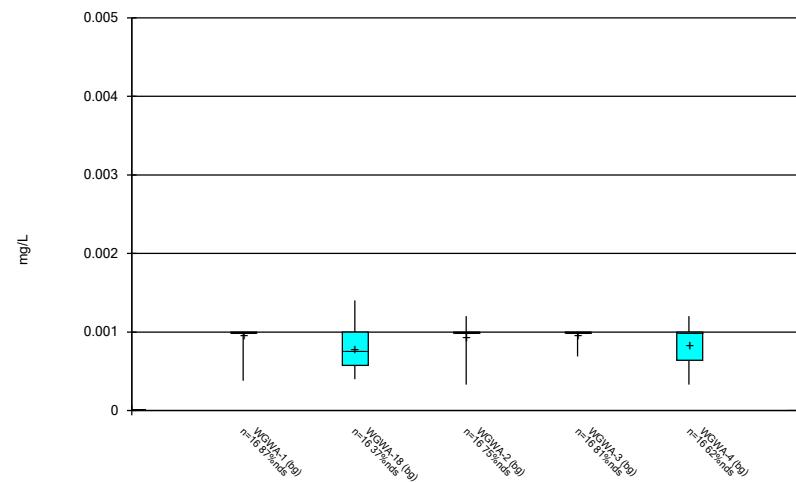
Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



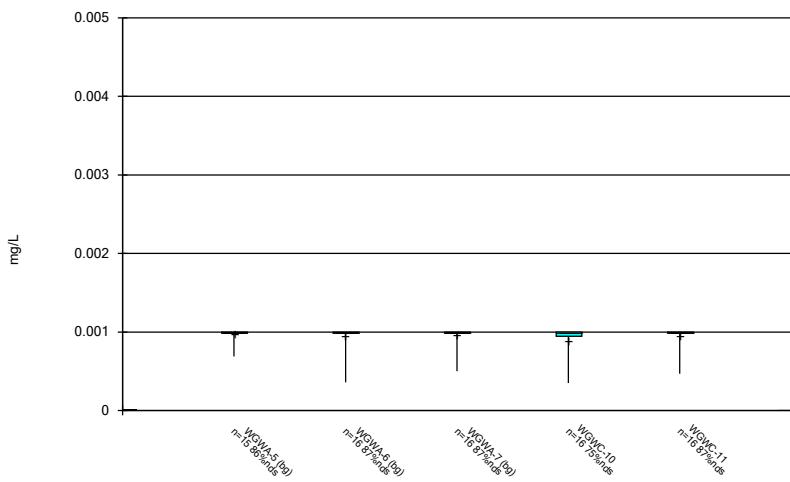
Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



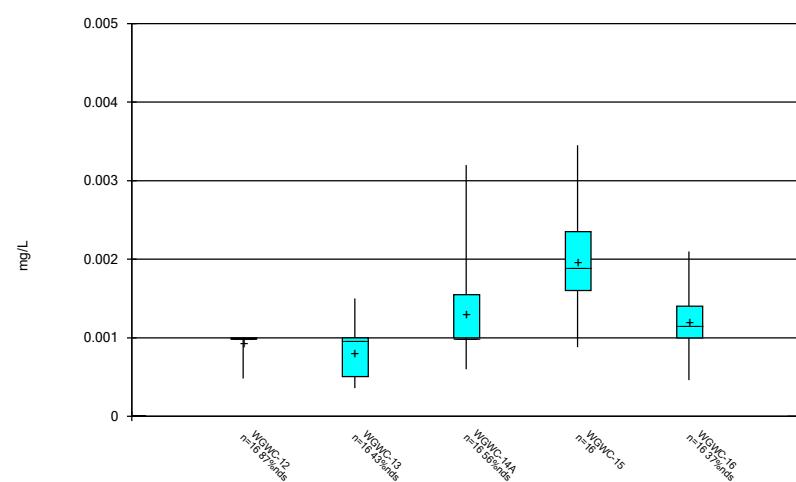
Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



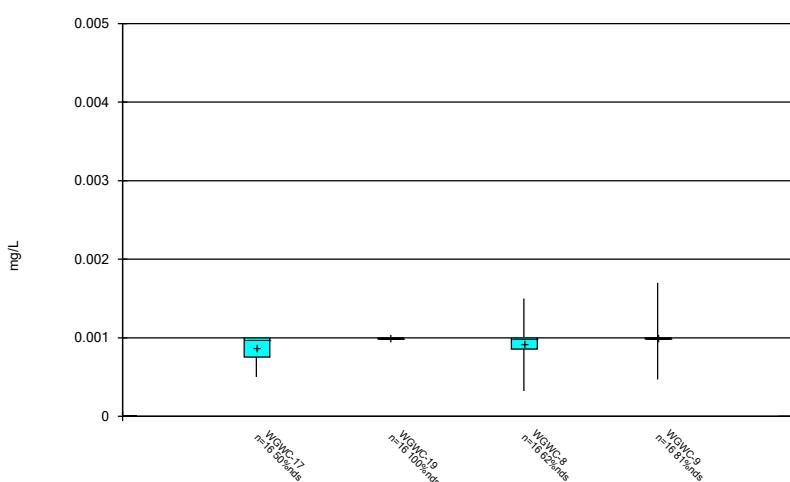
Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



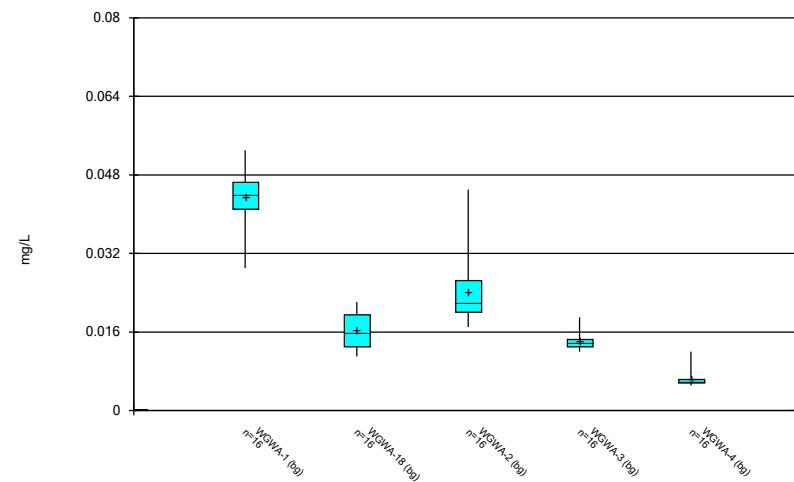
Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



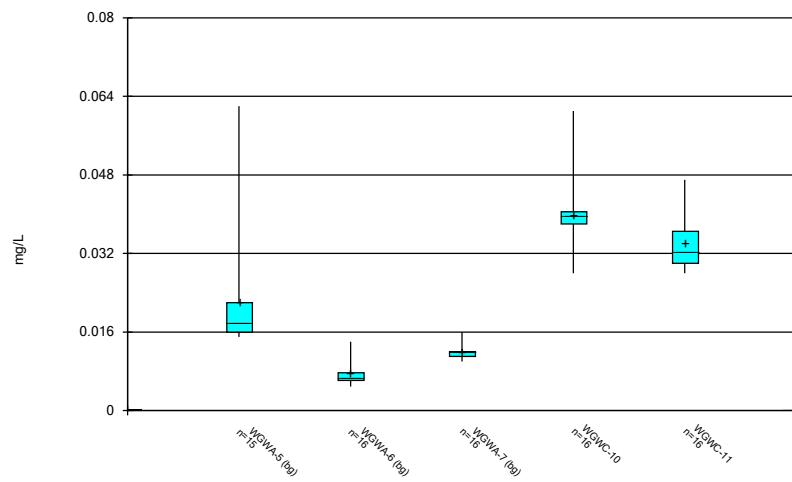
Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



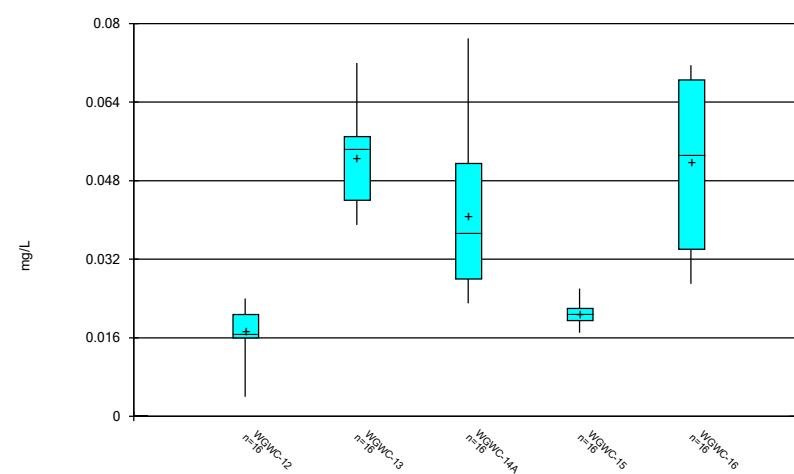
Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



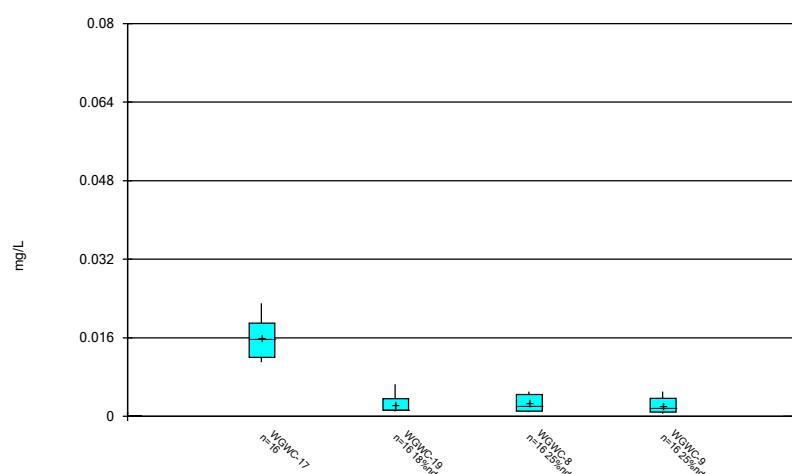
Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



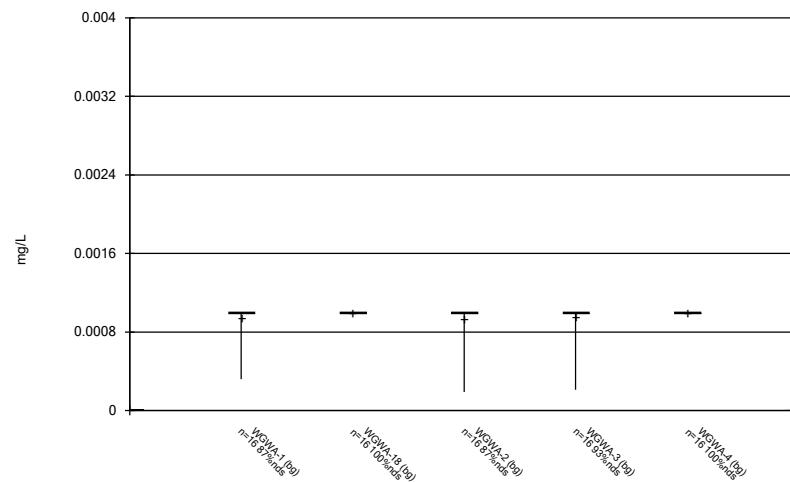
Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



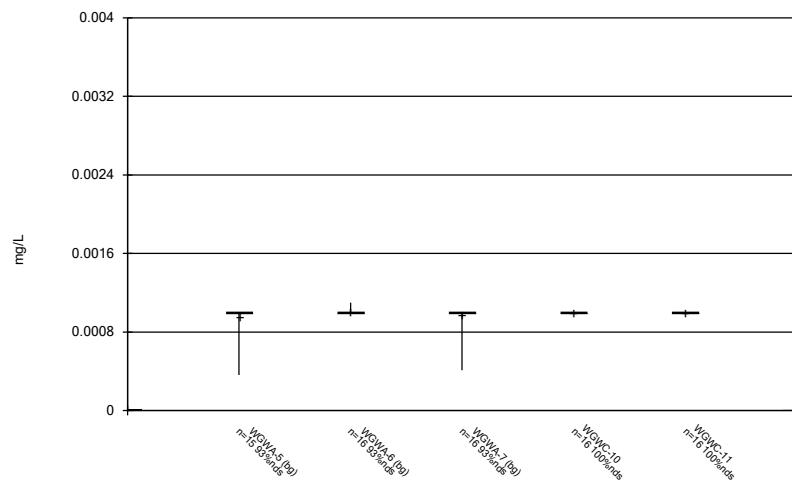
Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



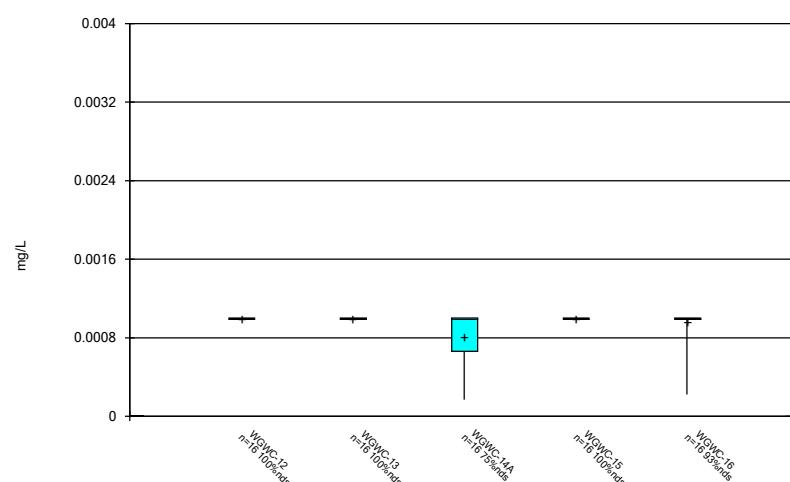
Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



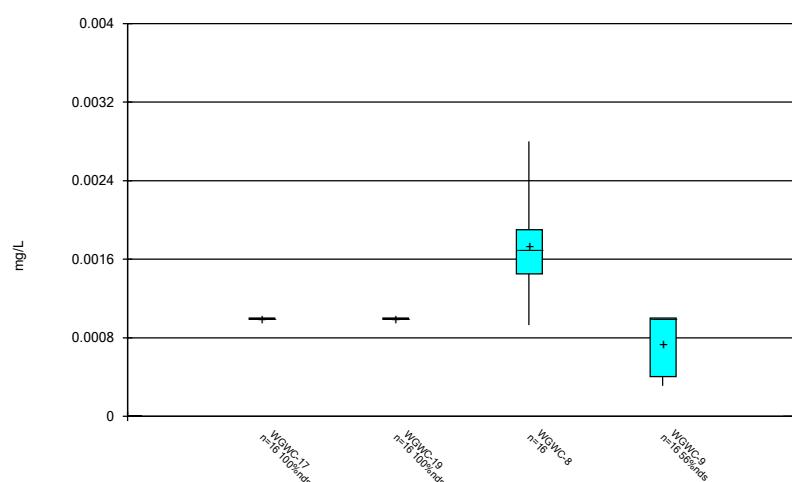
Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



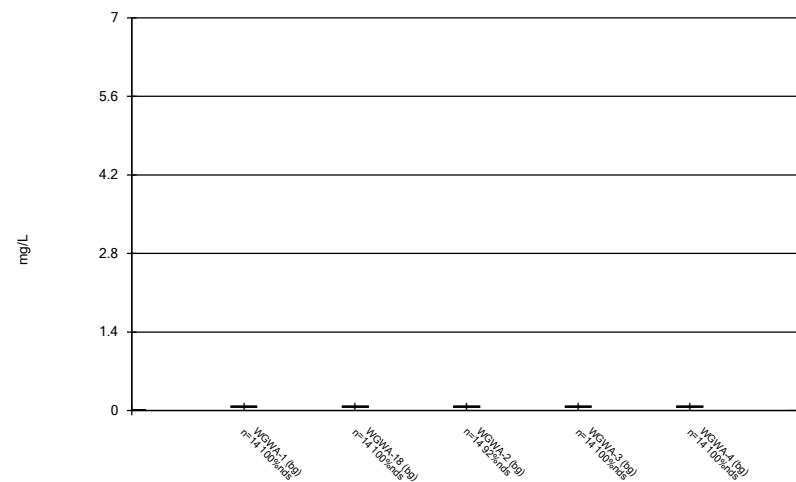
Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



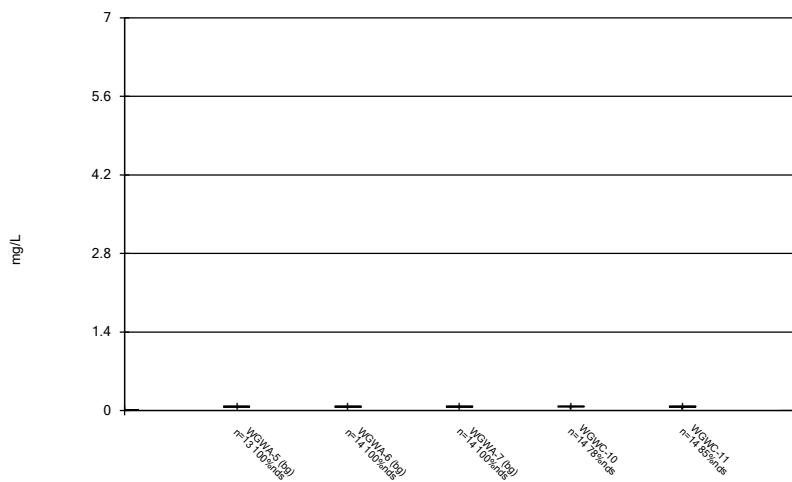
Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



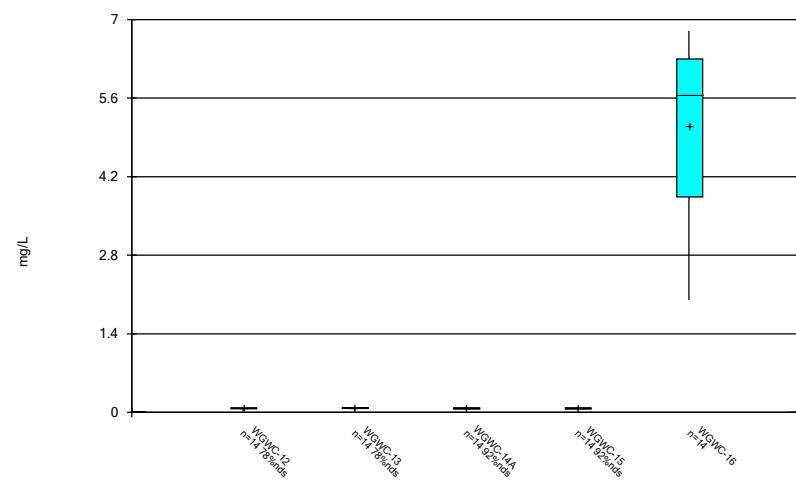
Constituent: Boron Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



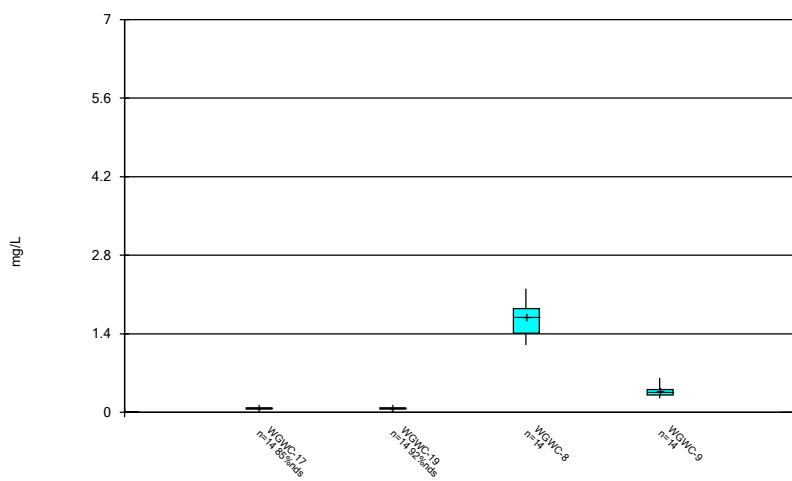
Constituent: Boron Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



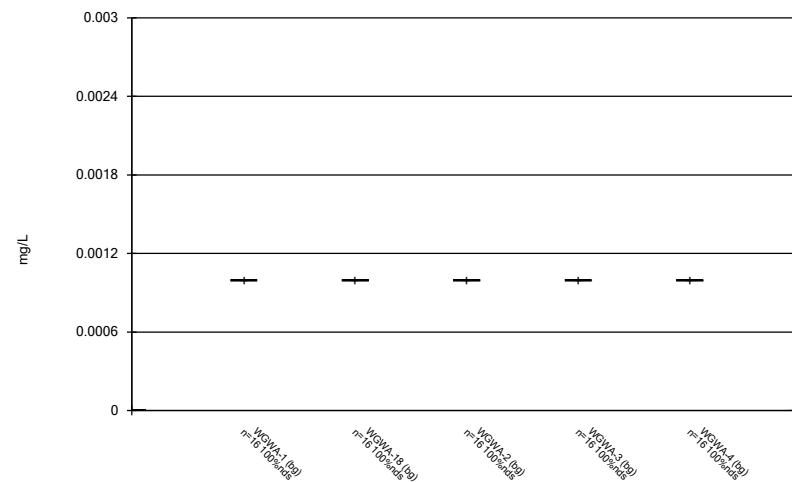
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



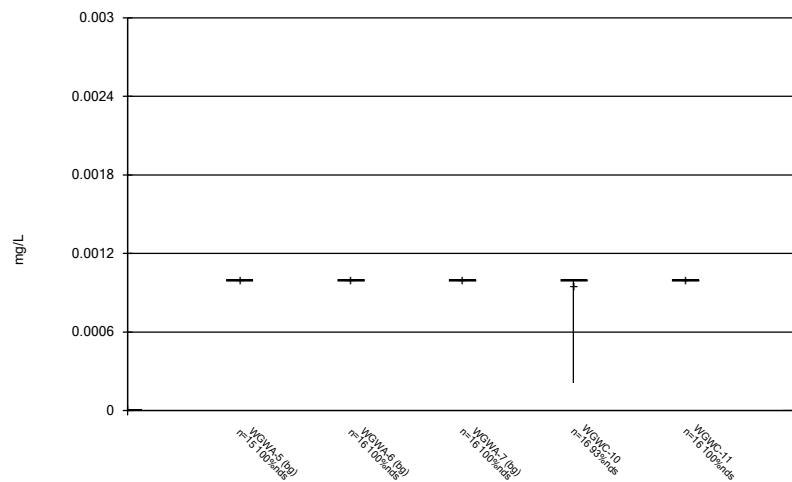
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



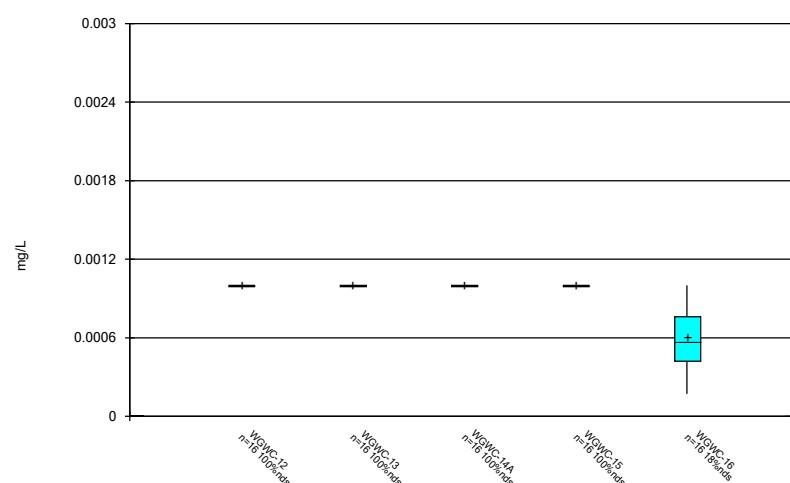
Constituent: Cadmium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



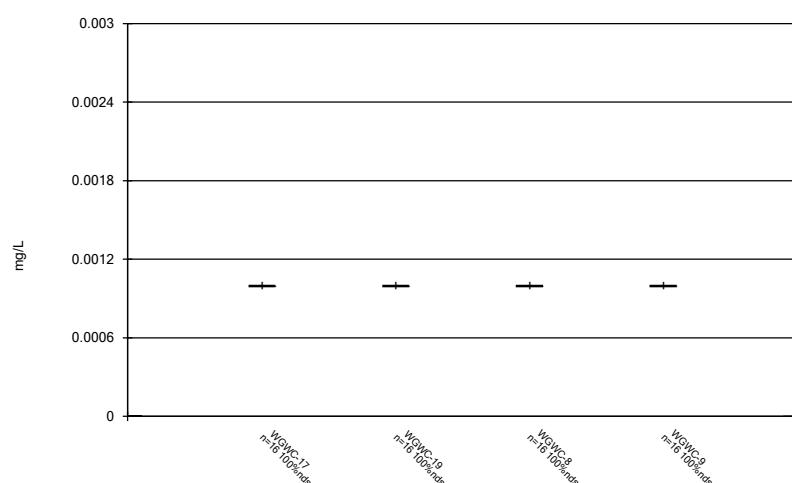
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



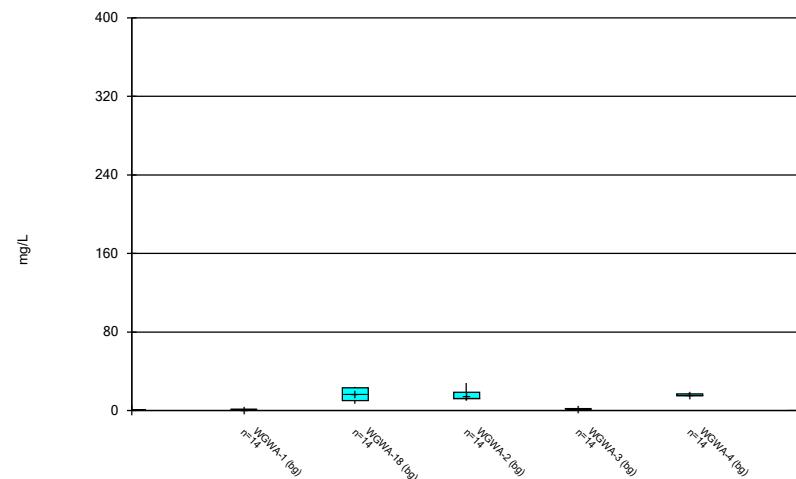
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## Box &amp; Whiskers Plot



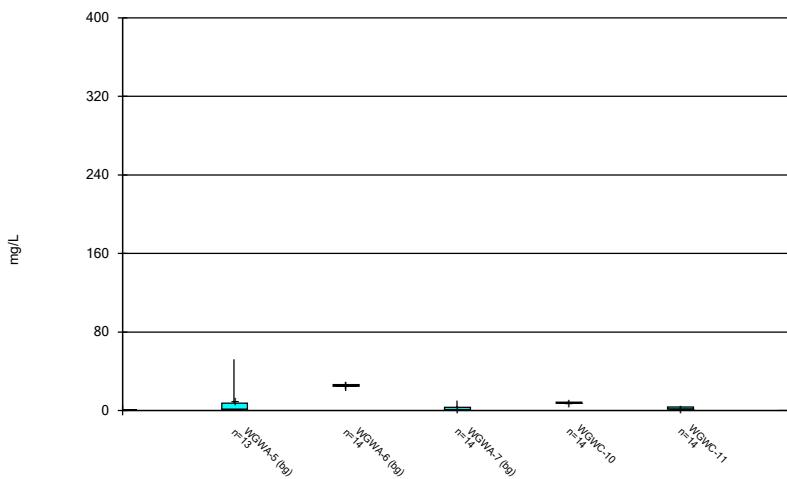
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



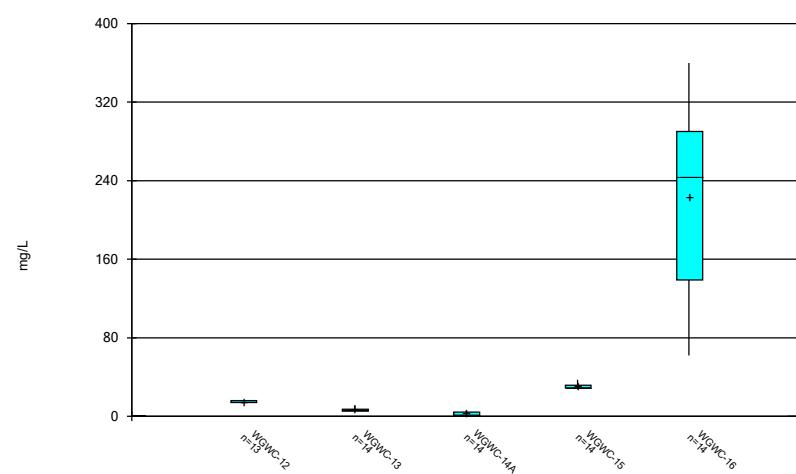
Constituent: Calcium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



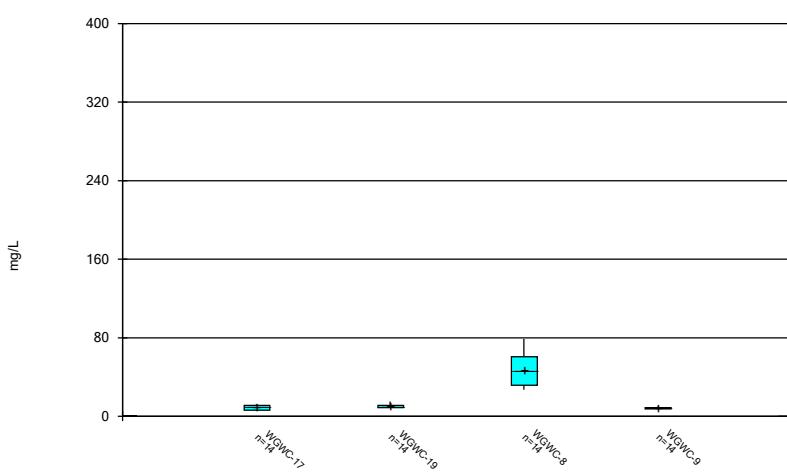
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## Box &amp; Whiskers Plot



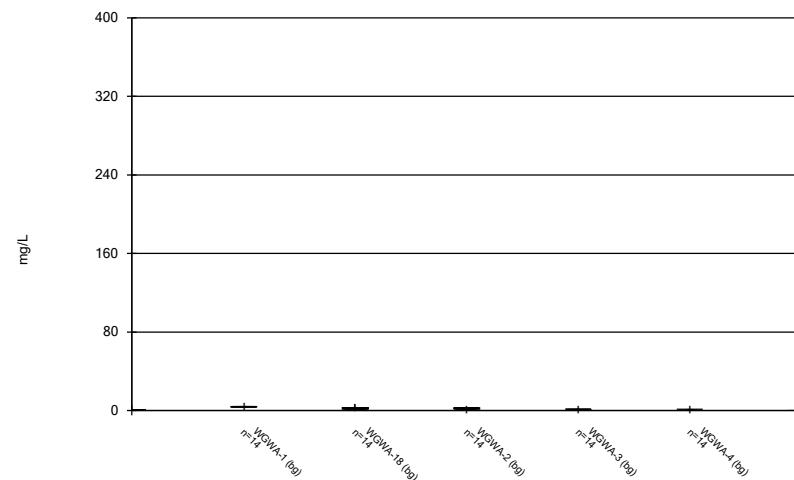
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## Box &amp; Whiskers Plot



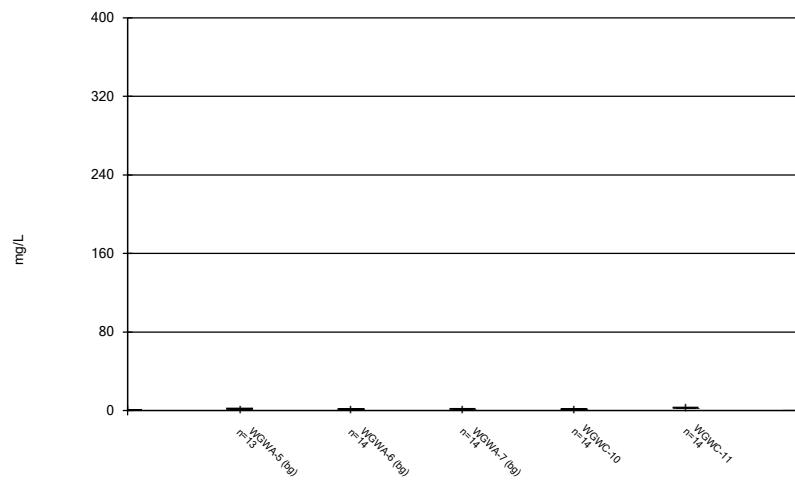
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



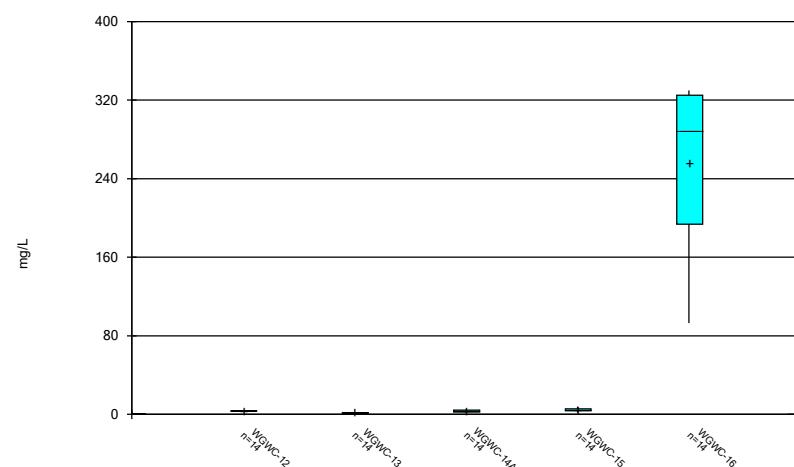
Constituent: Chloride Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



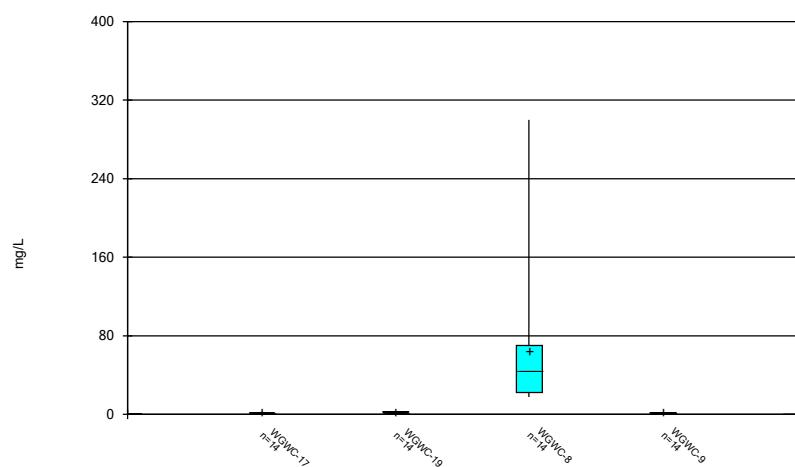
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



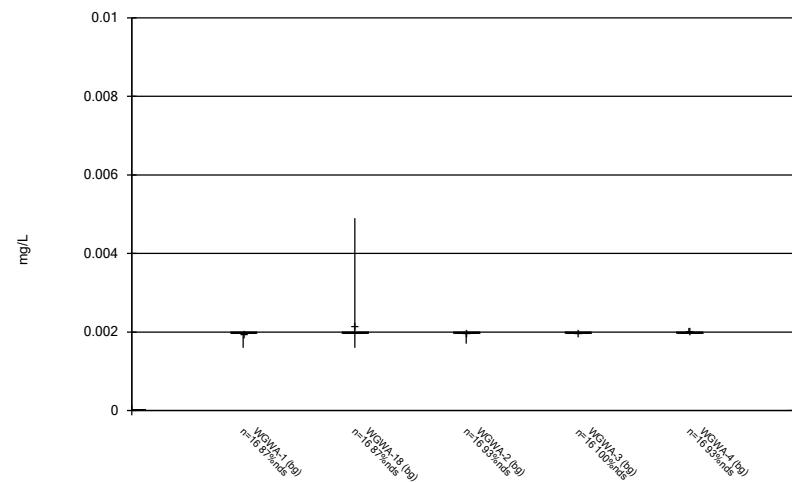
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## Box &amp; Whiskers Plot



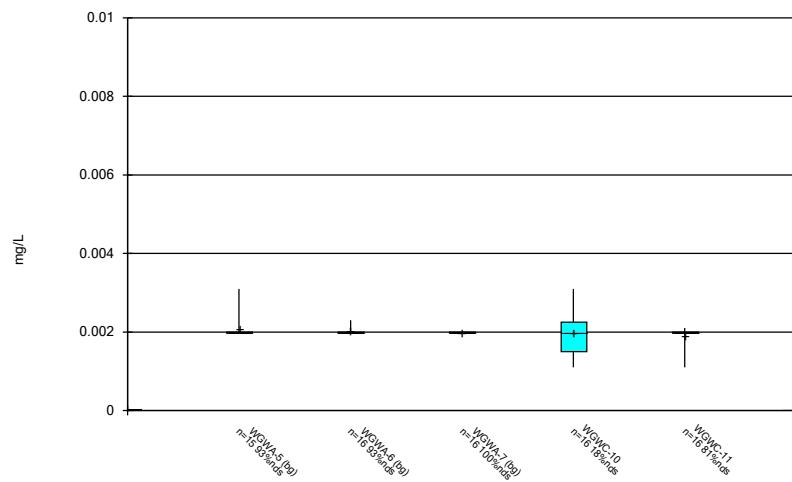
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## Box &amp; Whiskers Plot



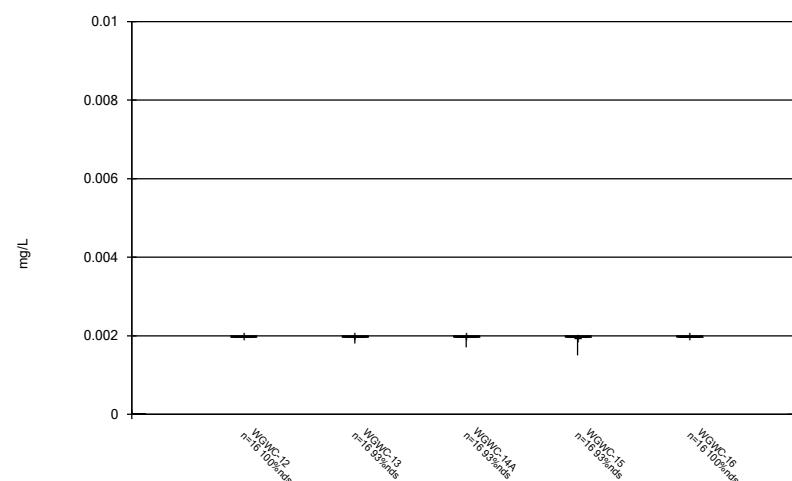
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



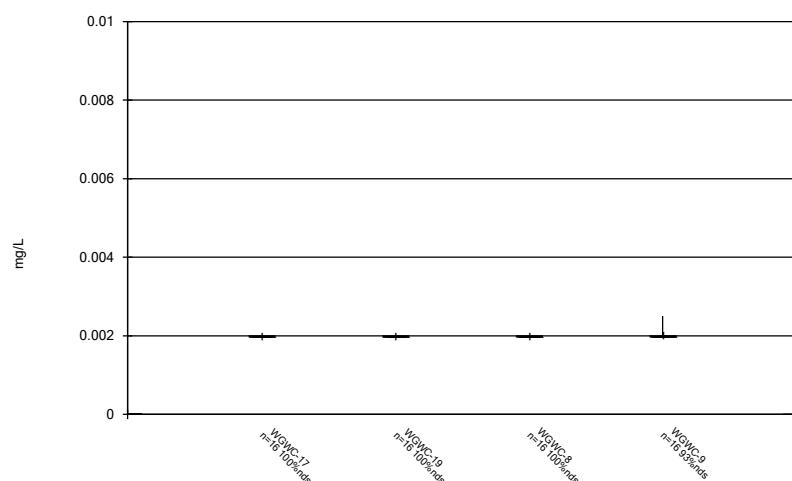
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



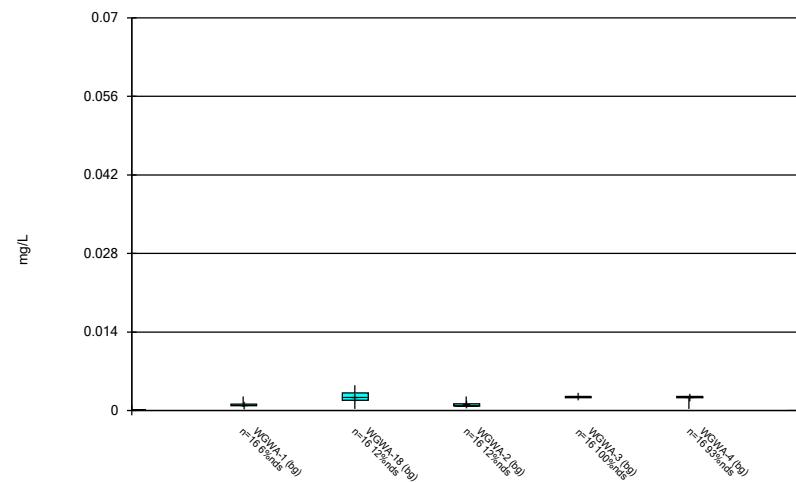
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



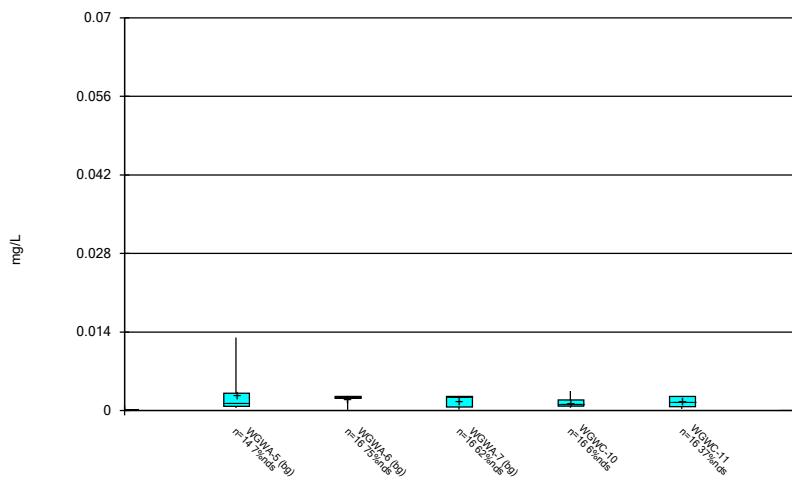
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



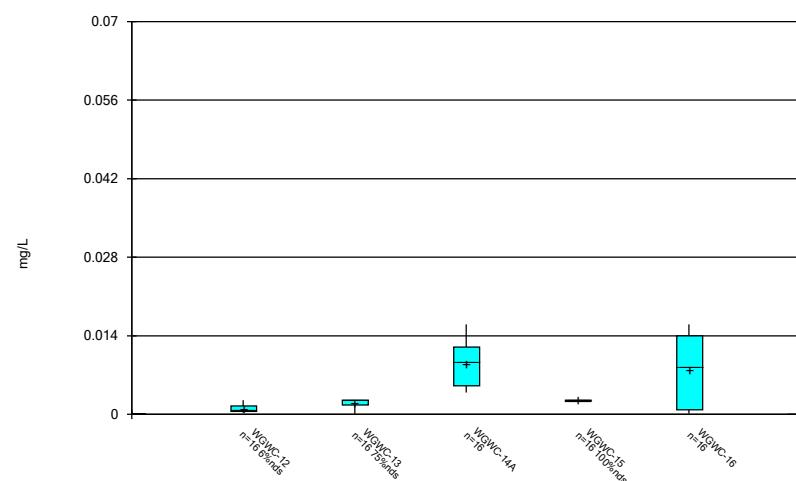
Constituent: Cobalt Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



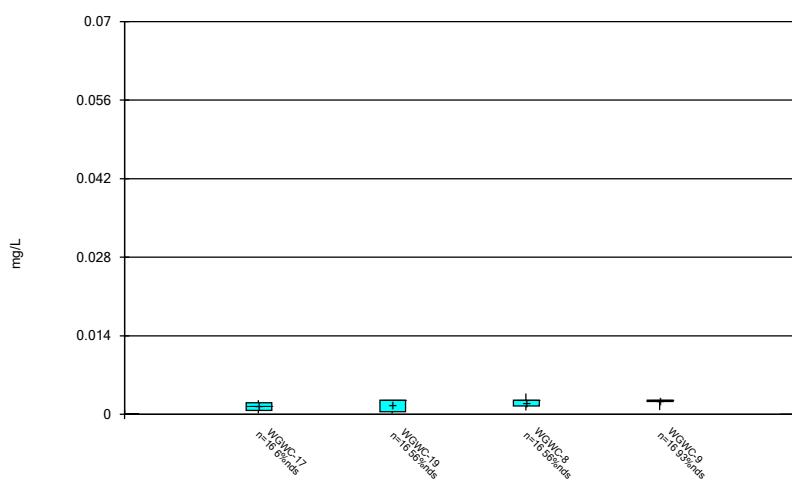
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



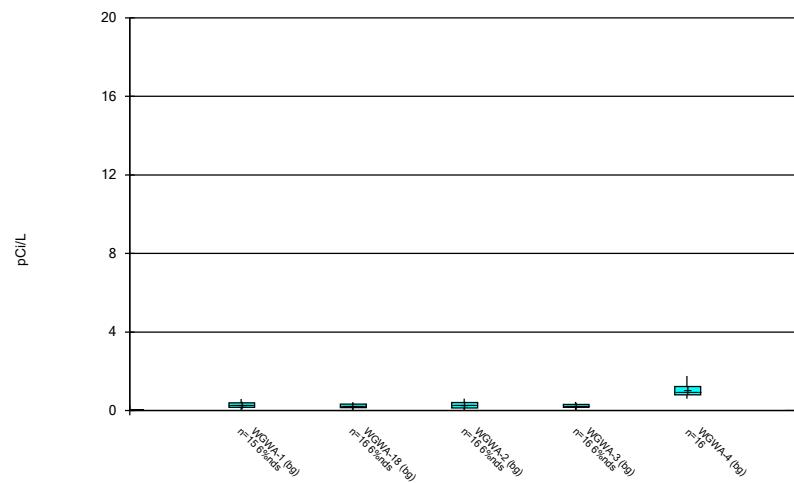
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## Box &amp; Whiskers Plot



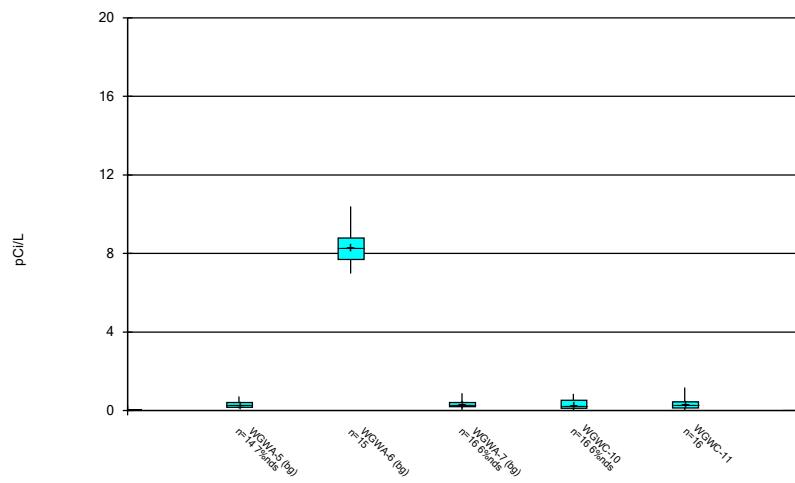
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## Box &amp; Whiskers Plot



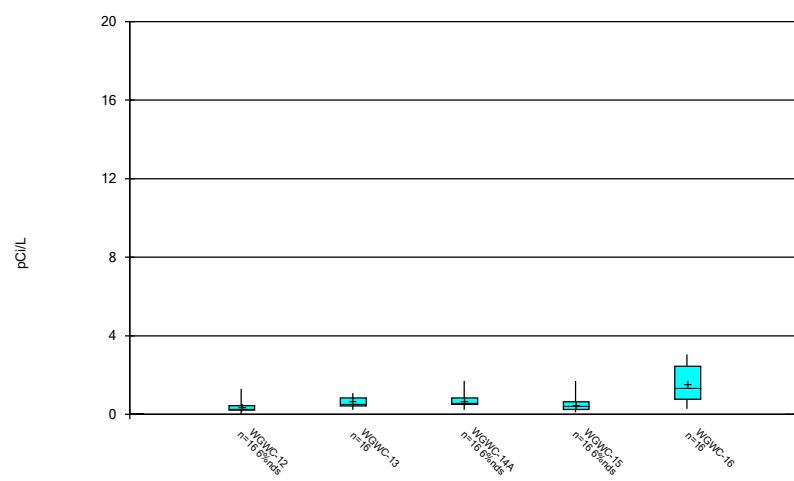
Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



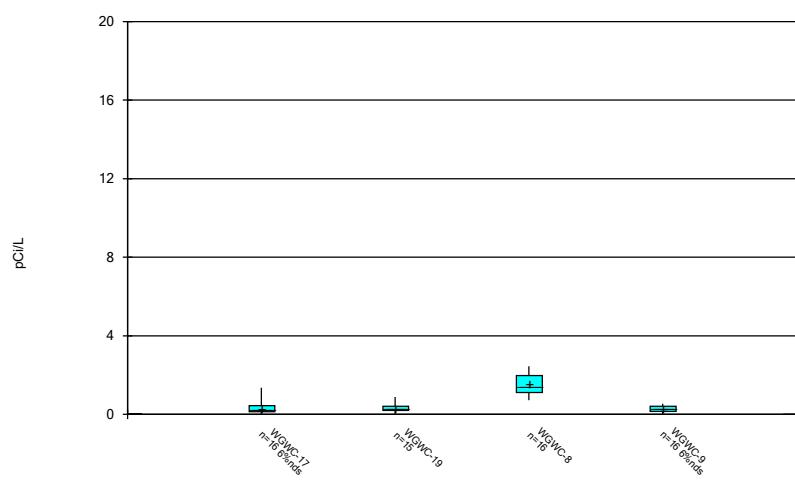
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



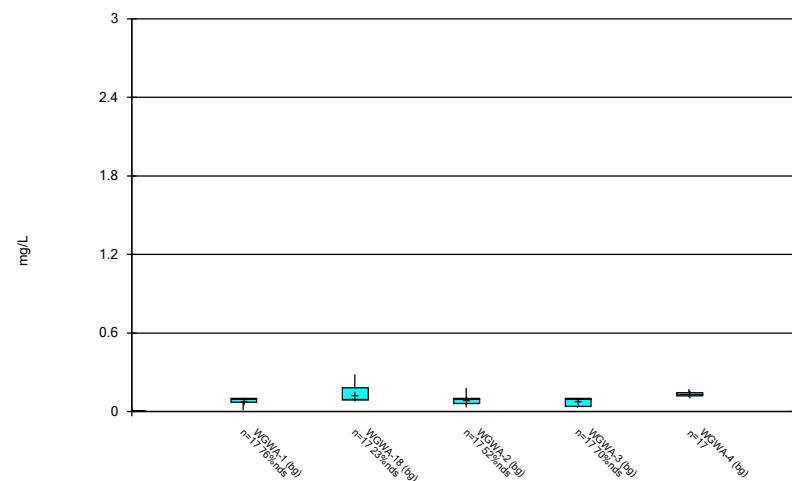
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



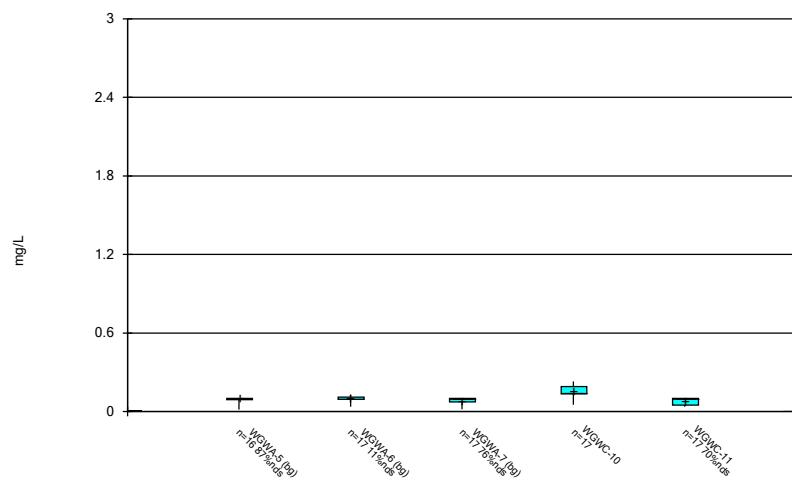
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



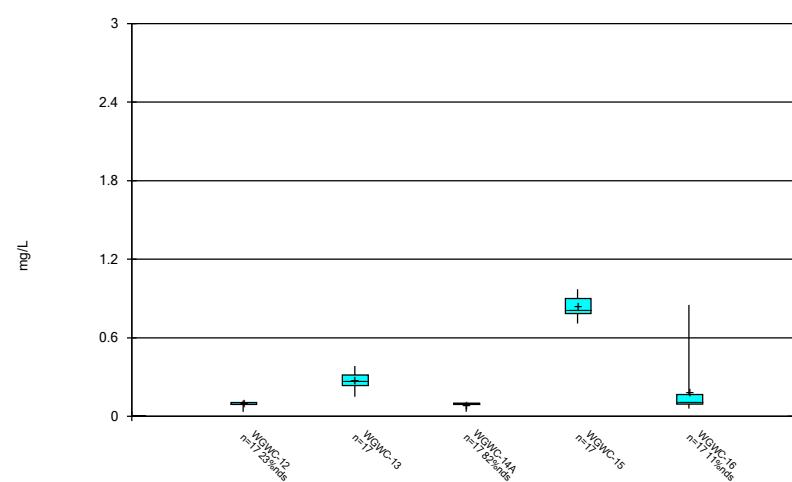
Constituent: Fluoride Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



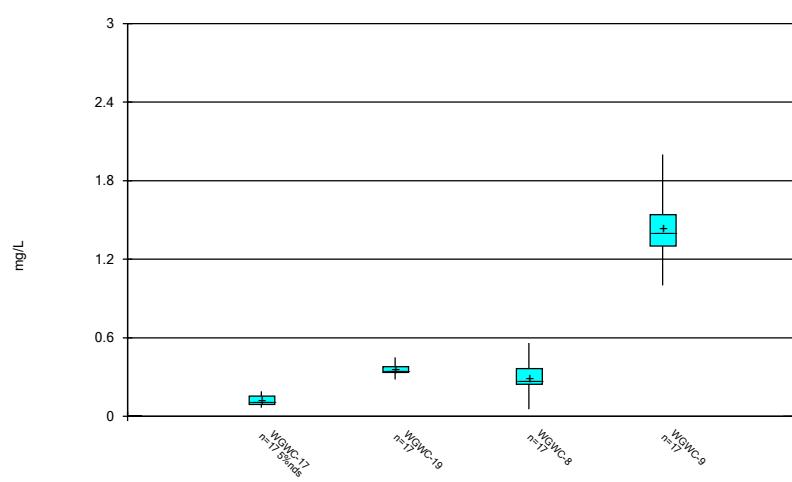
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



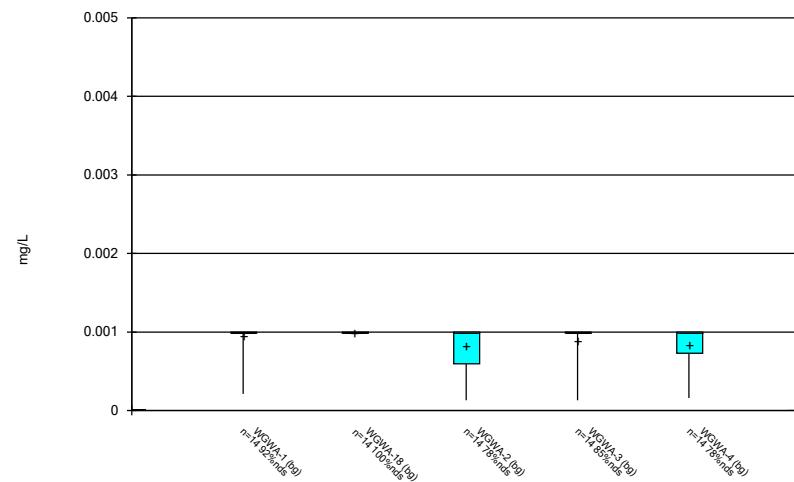
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



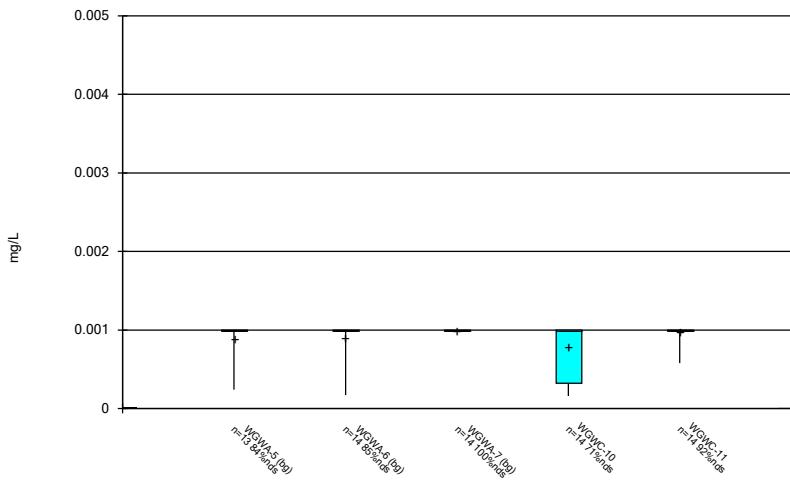
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



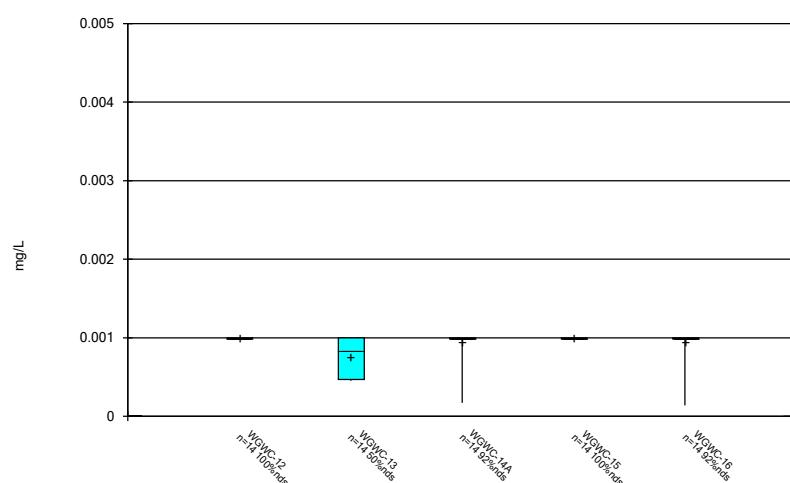
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 Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



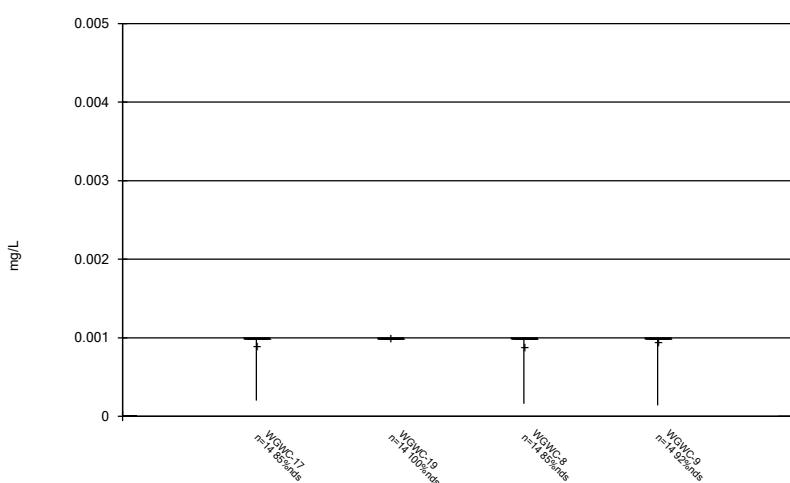
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 Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



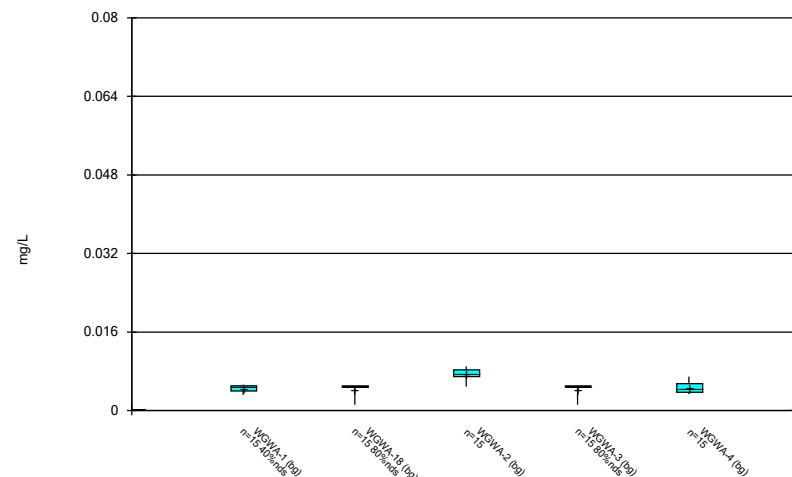
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 Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



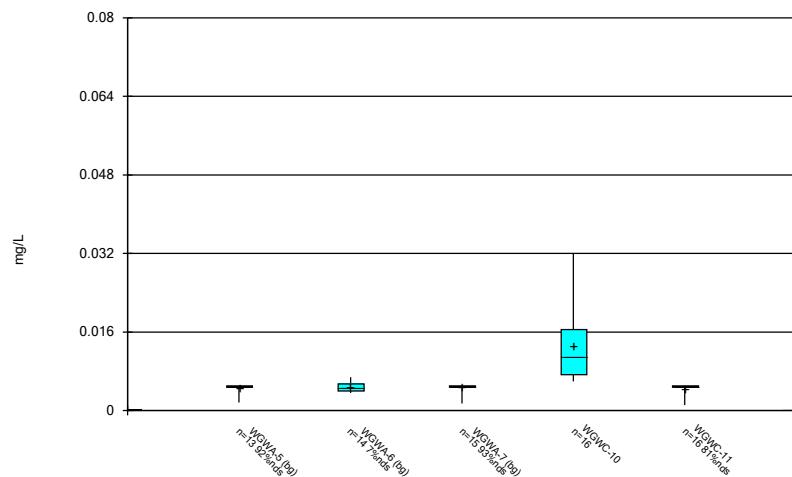
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 Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



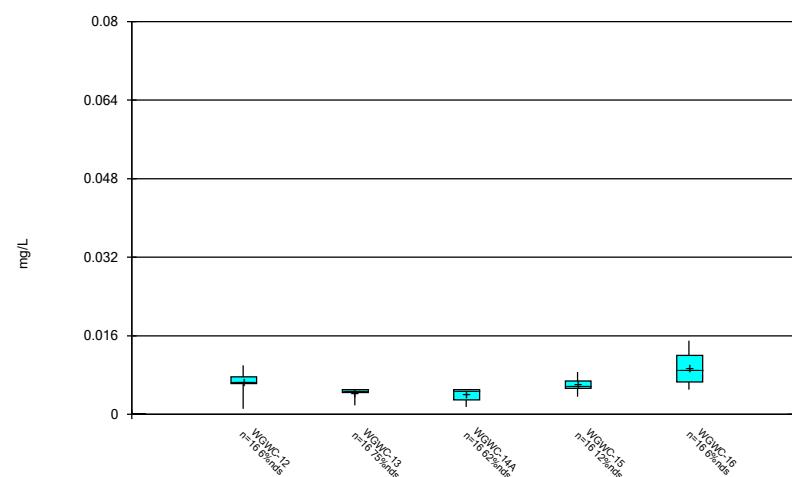
Constituent: Lithium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



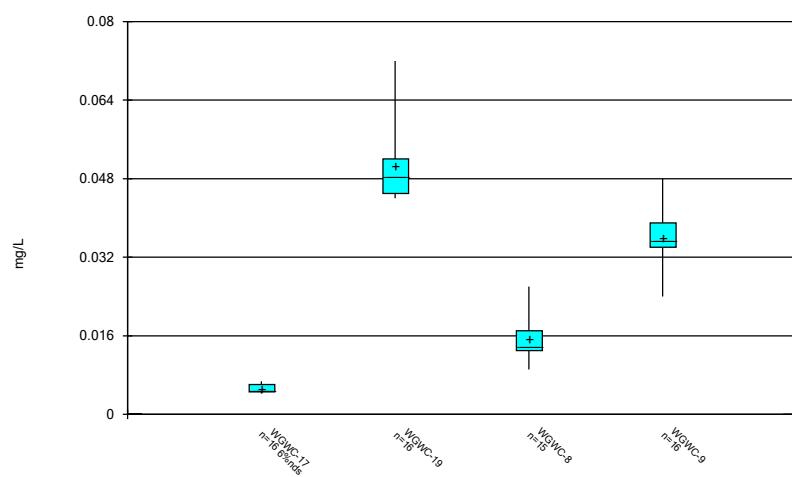
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



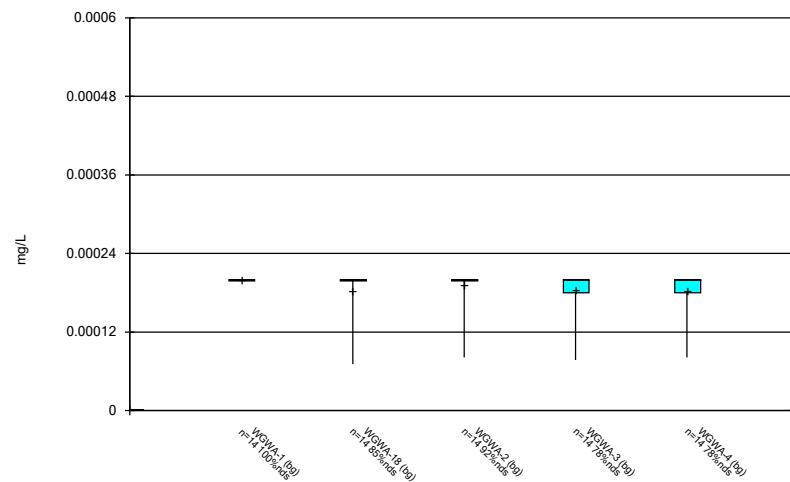
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



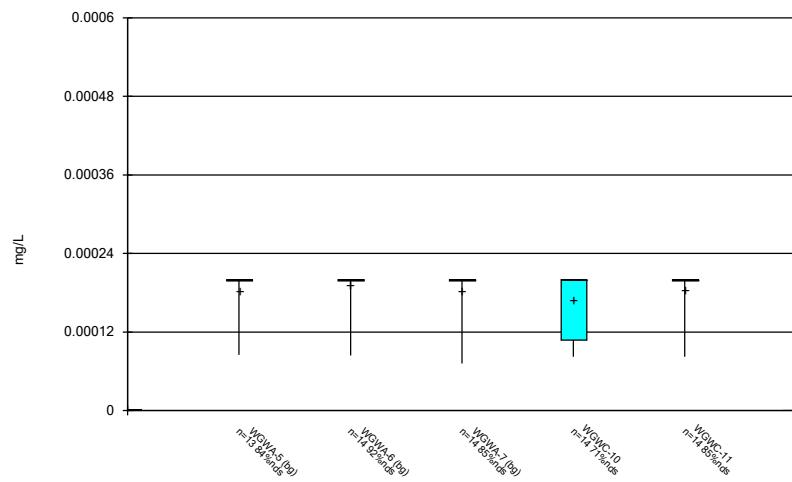
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



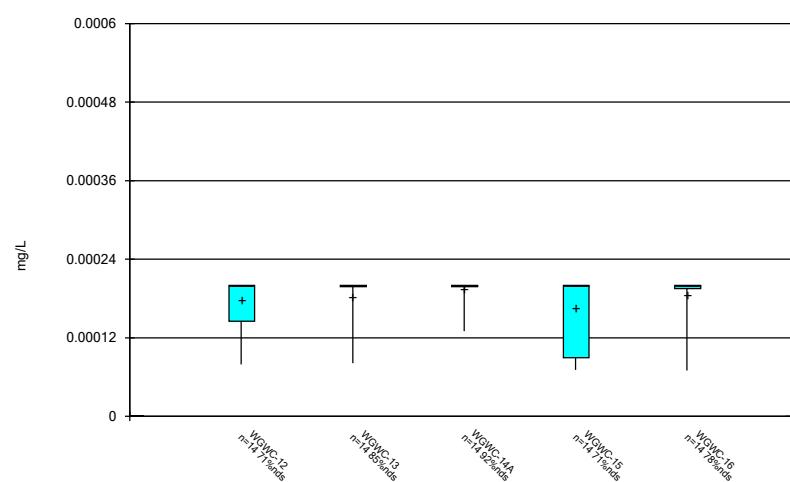
Constituent: Mercury Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



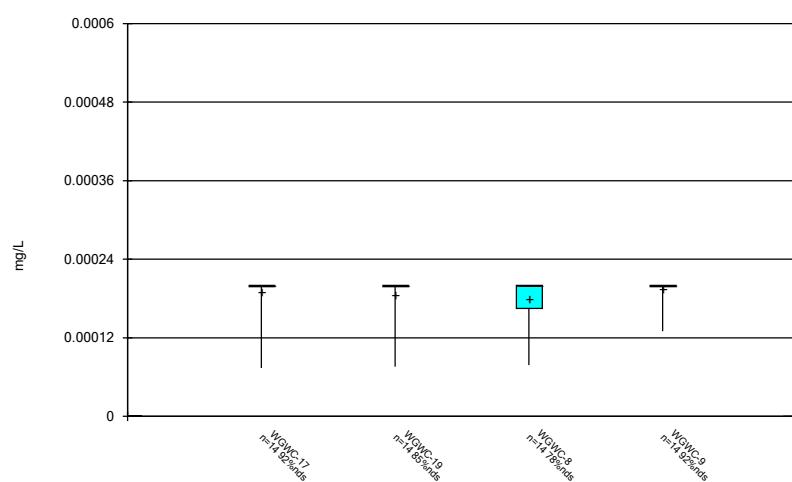
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



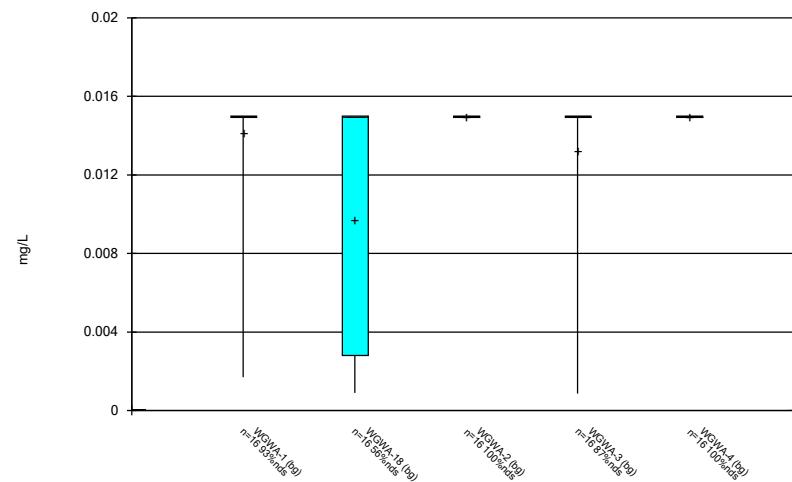
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



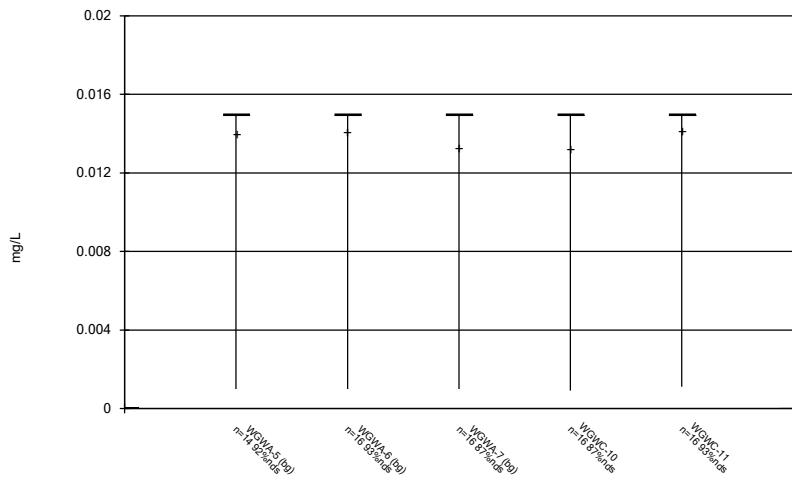
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



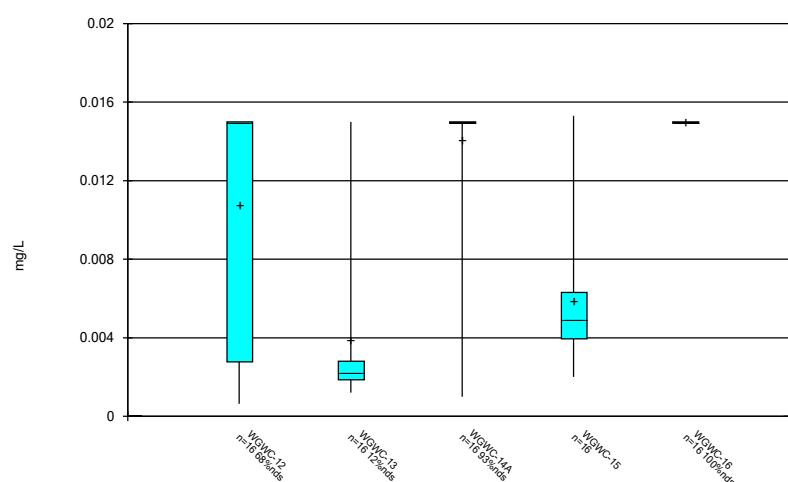
Constituent: Molybdenum Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



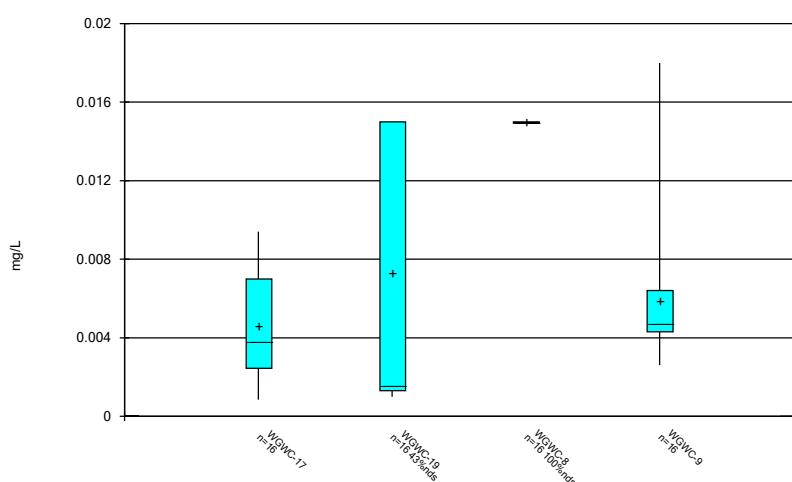
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



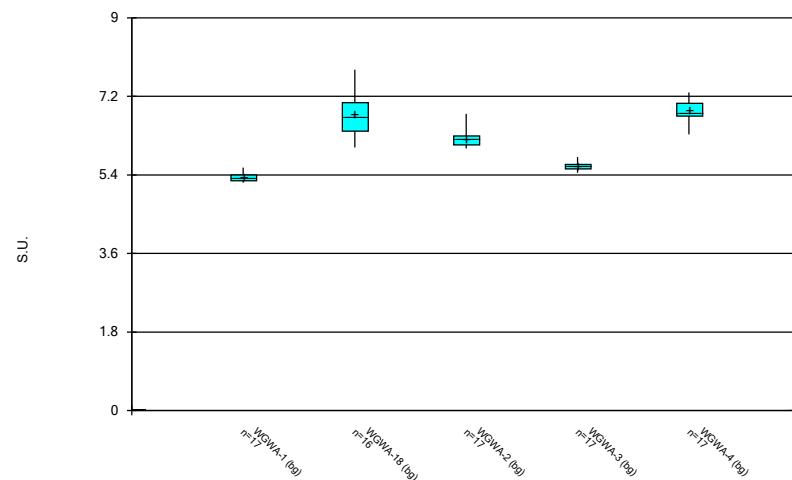
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



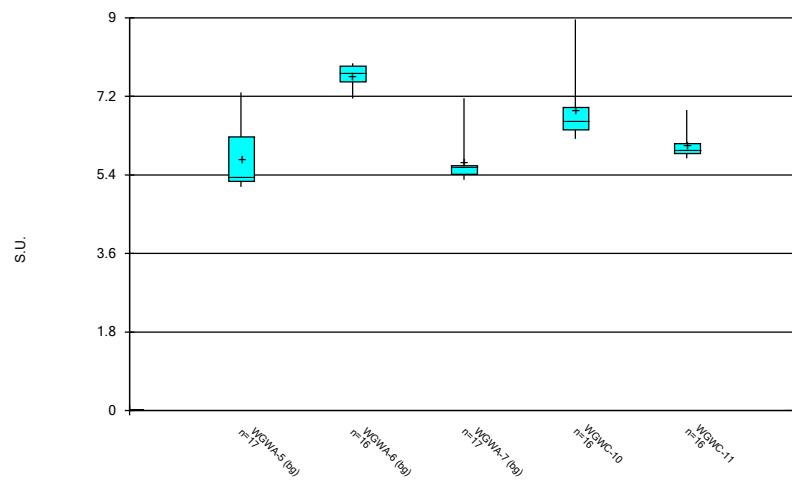
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



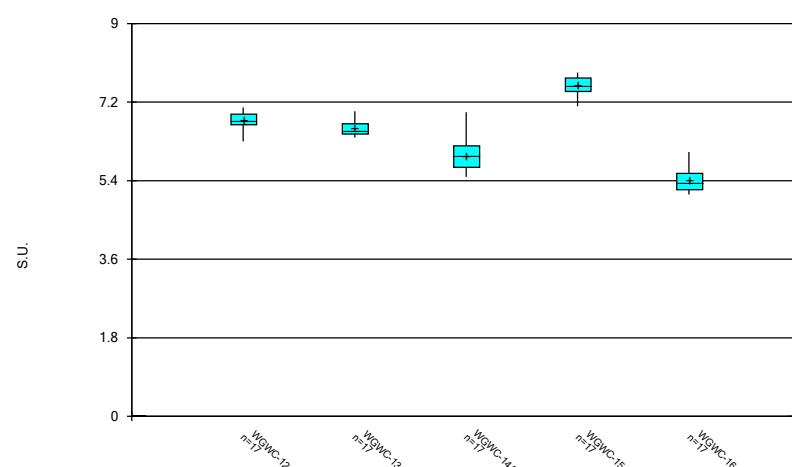
Constituent: pH Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



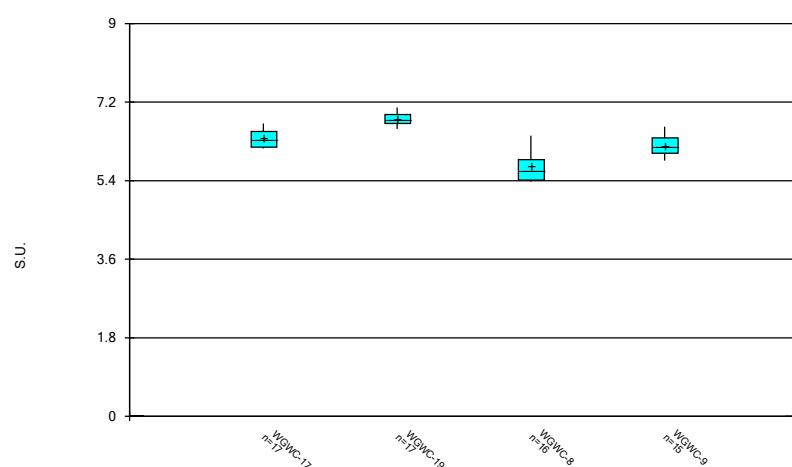
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



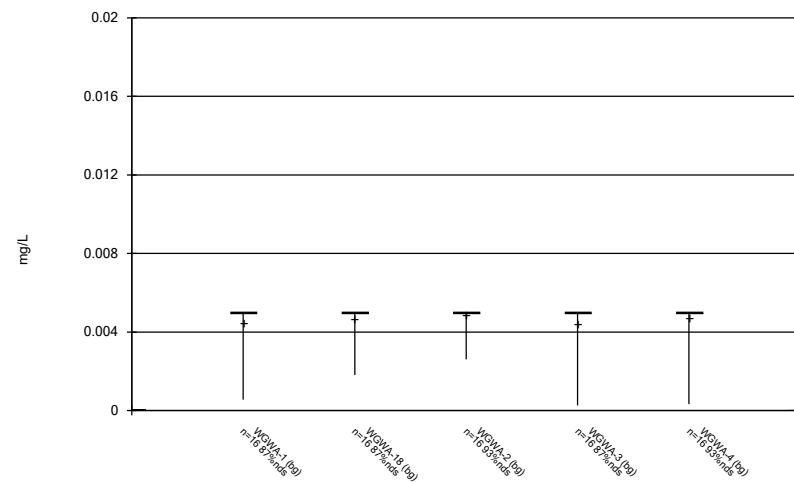
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



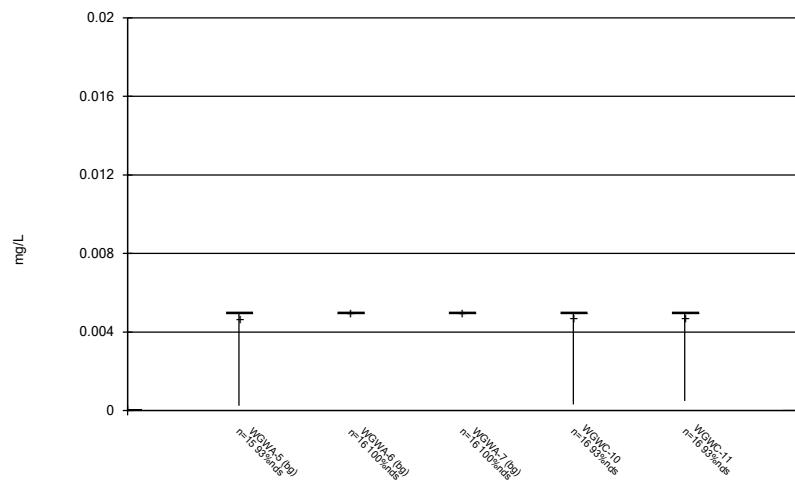
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



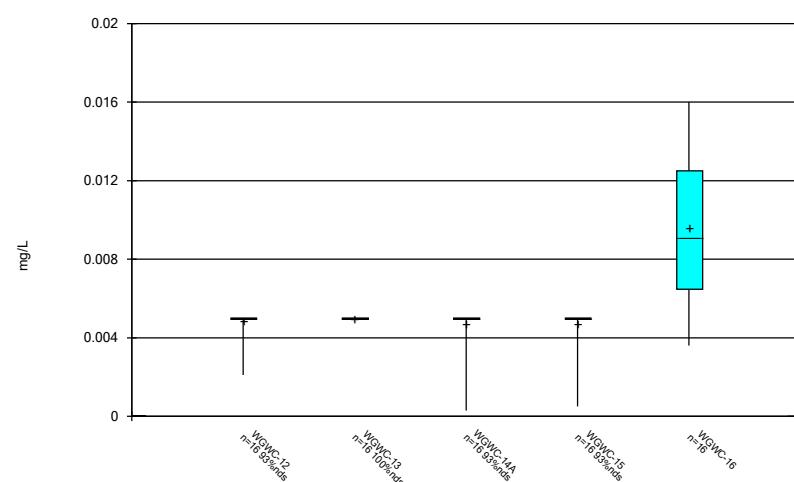
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



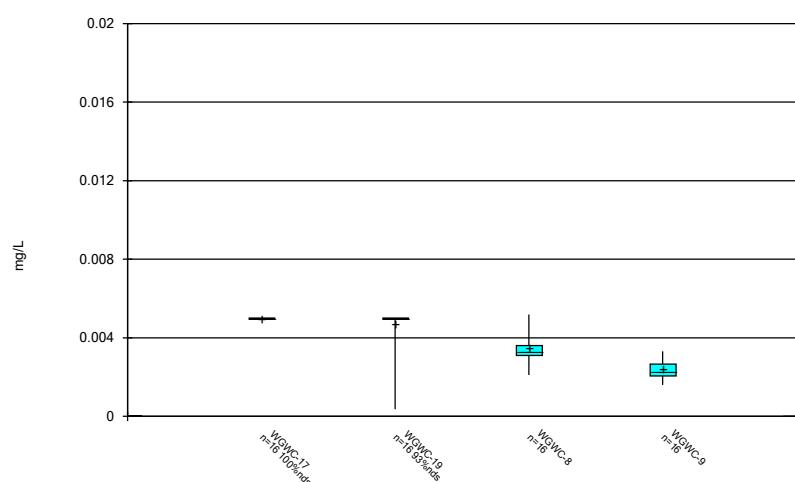
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



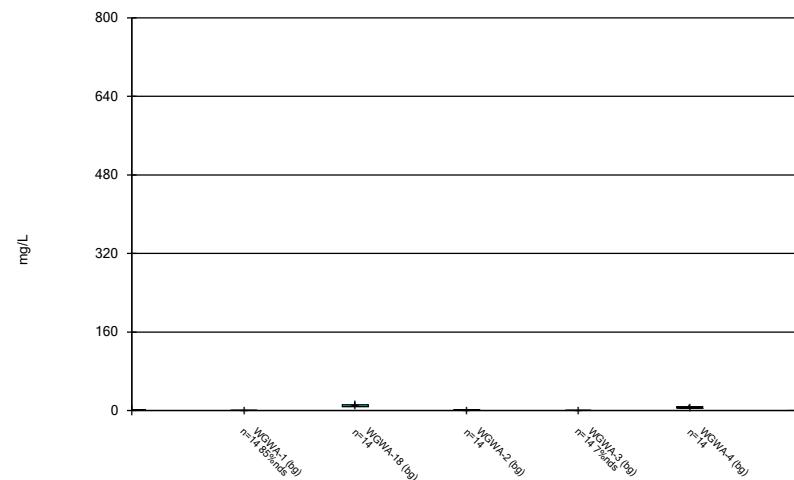
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



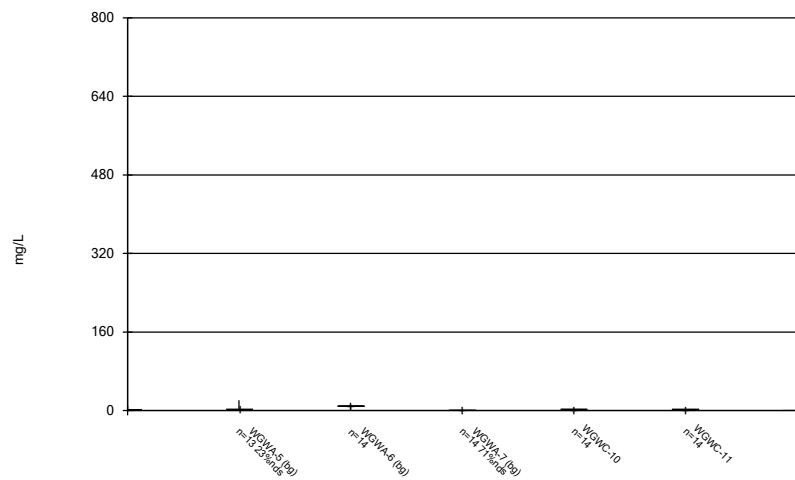
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



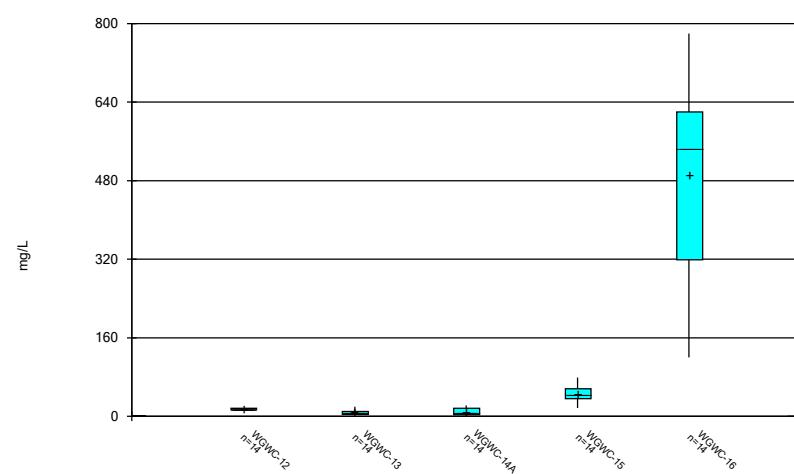
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



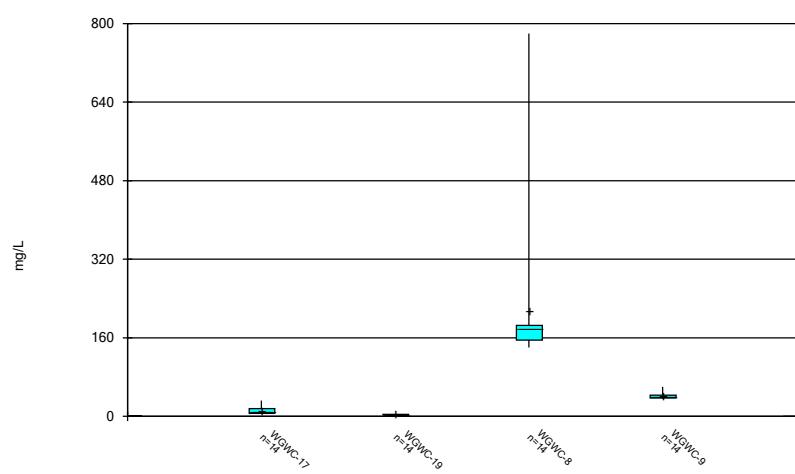
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



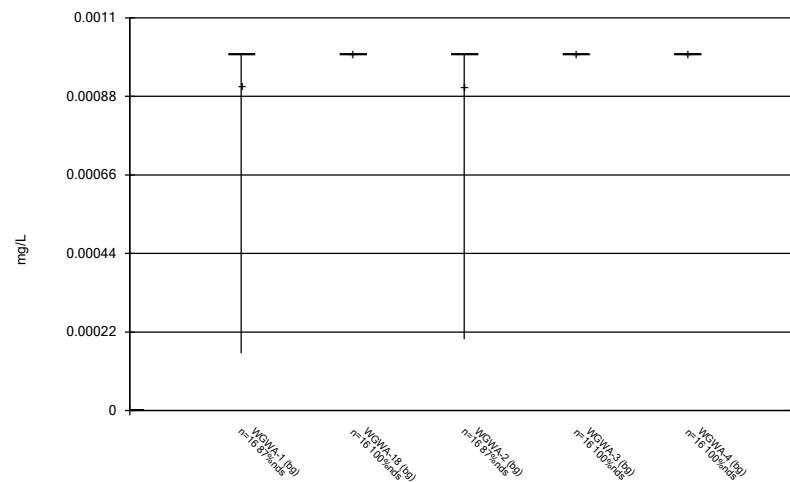
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



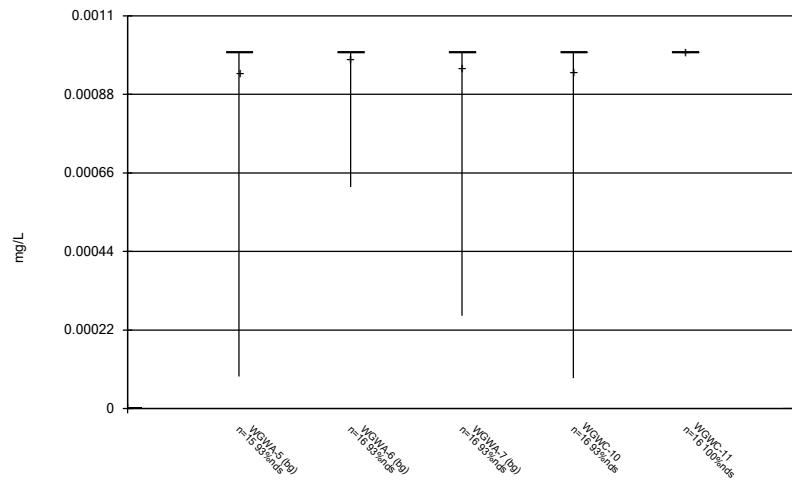
Constituent: Sulfate Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



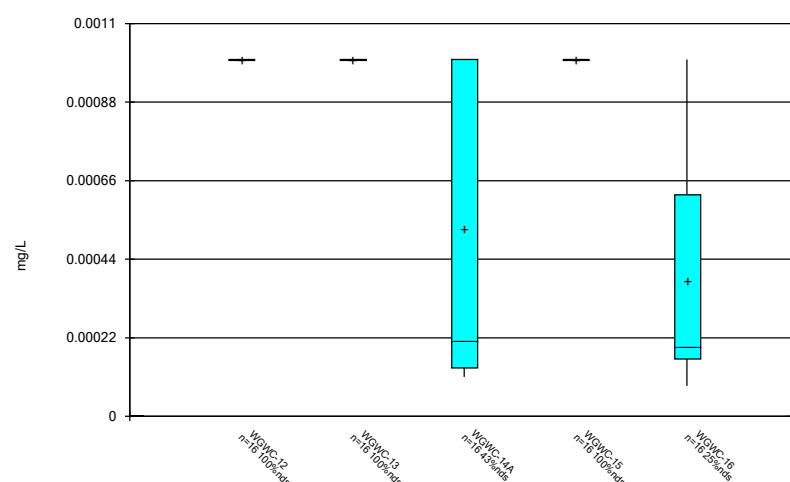
Constituent: Thallium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



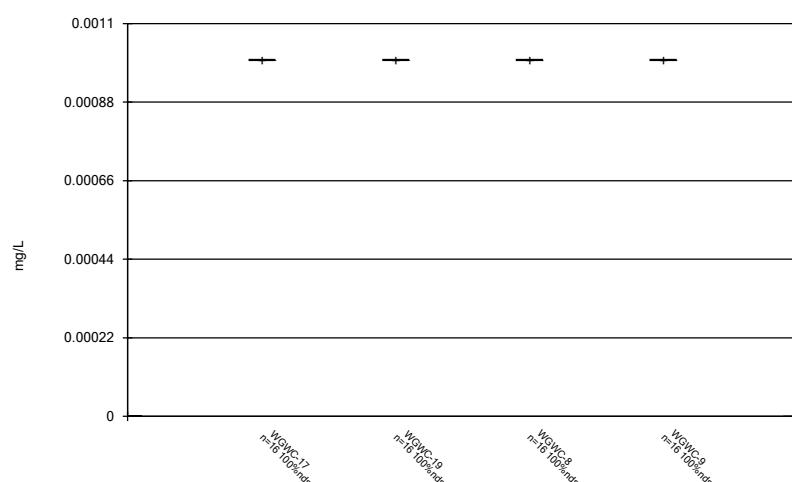
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



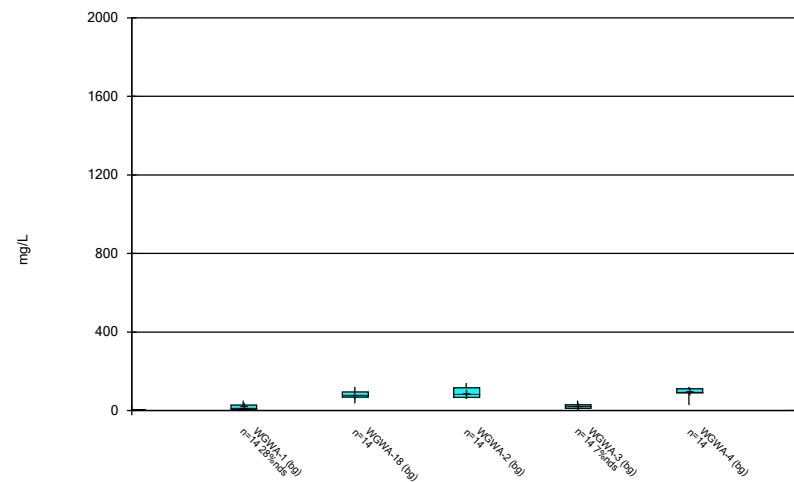
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Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



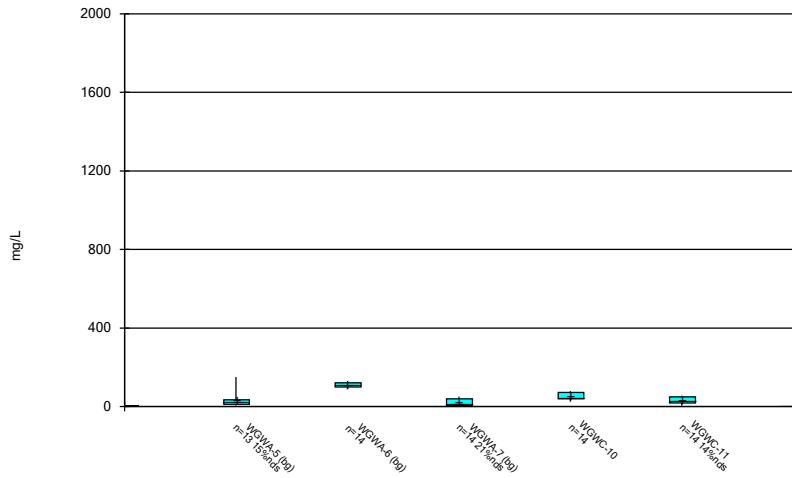
Constituent: Thallium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents  
Plant Wansley Client: Southern Company Data: Wansley AP

## Box &amp; Whiskers Plot



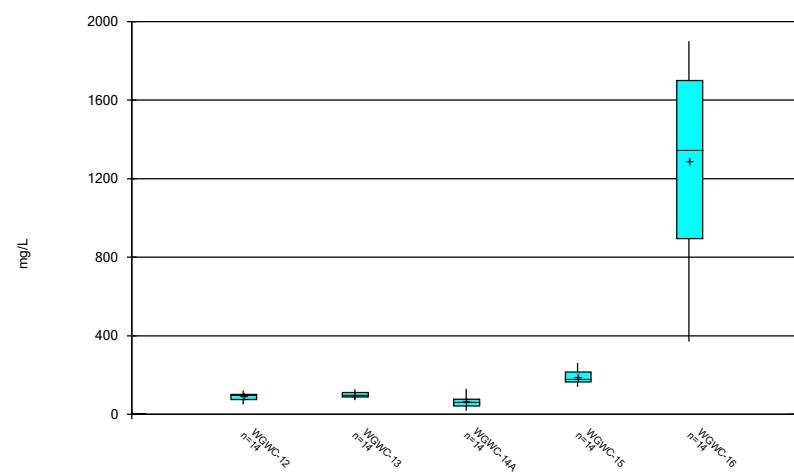
Constituent: Total Dissolved Solids   Analysis Run 7/22/2020 12:06 PM   View: All Wells and Constituents  
Plant Wansley   Client: Southern Company   Data: Wansley AP

## Box &amp; Whiskers Plot



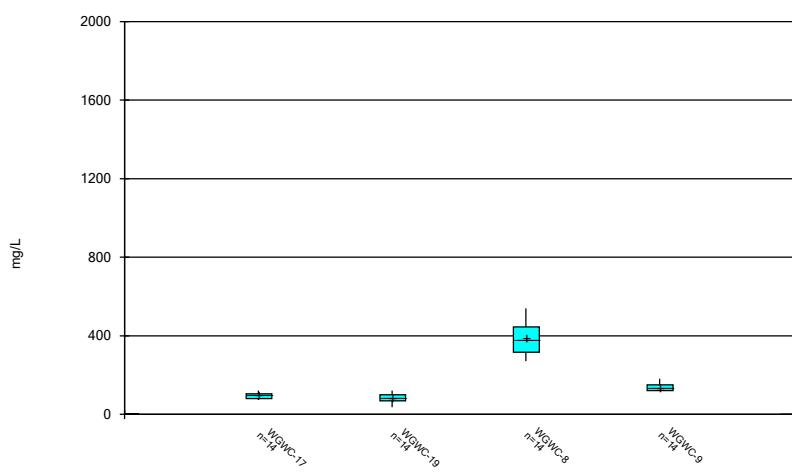
Constituent: Total Dissolved Solids   Analysis Run 7/22/2020 12:06 PM   View: All Wells and Constituents  
Plant Wansley   Client: Southern Company   Data: Wansley AP

## Box &amp; Whiskers Plot



Constituent: Total Dissolved Solids   Analysis Run 7/22/2020 12:06 PM   View: All Wells and Constituents  
Plant Wansley   Client: Southern Company   Data: Wansley AP

## Box &amp; Whiskers Plot



Constituent: Total Dissolved Solids   Analysis Run 7/22/2020 12:06 PM   View: All Wells and Constituents  
Plant Wansley   Client: Southern Company   Data: Wansley AP

# FIGURE C.

# Outlier

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 9:09 PM

WGWC-12 Calcium (mg/L) WGWA-5 Cobalt (mg/L) WGWA-1 Combined Radium 226 + 228 (pCi/L)  
WGWA-6 Combined Radium 226 + 228 (pCi/L) WGWA-1 Lithium (mg/L) WGWA-18 Lithium (mg/L)  
WGWA-2 Lithium (mg/L) WGWA-3 Lithium (mg/L) WGWA-4 Lithium (mg/L) WGWA-5 Lithium (mg/L)

5/17/2016		<0.005 (o)	<0.005 (o)	<0.05 (o)			
5/18/2016					<0.005 (o)	<0.05 (o)	<0.005 (o)
7/19/2016		7.25 (o)					
9/14/2016							
1/19/2017		0.064 (O)					
3/14/2017		0.589 (O)					
4/26/2017	3 (o)						

WGWA-6 Lithium (mg/L) WGWA-7 Lithium (mg/L) WGWA-5 Molybdenum (mg/L)

5/17/2016			
5/18/2016	<0.005 (o)	<0.005 (o)	
7/19/2016			
9/14/2016		0.016 (o)	
1/19/2017			
3/14/2017			
4/26/2017			

# FIGURE D.

## Interwell Prediction Limit - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	3/18/2020	2	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	3/19/2020	2.2	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	3/19/2020	0.55	Yes	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-16	52	n/a	3/18/2020	66	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-8	52	n/a	3/19/2020	79	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-16	6.05	n/a	3/18/2020	93	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-8	6.05	n/a	3/19/2020	98	Yes	111	0	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/18/2020	0.71	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-19	0.284	n/a	5/4/2020	0.36	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-9	0.284	n/a	3/19/2020	1	Yes	135	49.63	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-16	7.96	5.13	3/18/2020	5.08	Yes	134	0	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-16	21	n/a	3/18/2020	120	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-8	21	n/a	3/19/2020	200	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-9	21	n/a	3/19/2020	45	Yes	111	23.42	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-15	150	n/a	3/18/2020	160	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-16	150	n/a	3/18/2020	370	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-8	150	n/a	3/19/2020	540	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-9	150	n/a	3/19/2020	160	Yes	111	9.009	n/a	0.000...	NP Inter (normality) ...

# Interwell Prediction Limit - All Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-10	0.08	n/a	3/18/2020	0.049J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.08	n/a	3/18/2020	0.08ND	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	0.08	n/a	3/18/2020	0.039J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-13	0.08	n/a	3/19/2020	0.053J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-14A	0.08	n/a	3/19/2020	0.039J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-15	0.08	n/a	3/18/2020	0.071J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>WGWC-16</b>	<b>0.08</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>2</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	WGWC-17	0.08	n/a	3/18/2020	0.049J	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-19	0.08	n/a	5/4/2020	0.08ND	No	111	99.1	n/a	0.000...	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>WGWC-8</b>	<b>0.08</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>2.2</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
<b>Boron (mg/L)</b>	<b>WGWC-9</b>	<b>0.08</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>0.55</b>	<b>Yes</b>	<b>111</b>	<b>99.1</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (NDs) 1 of 2</b>
Calcium (mg/L)	WGWC-10	52	n/a	3/18/2020	7.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-11	52	n/a	3/18/2020	1.6	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-12	52	n/a	3/18/2020	14	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-13	52	n/a	3/19/2020	5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-14A	52	n/a	3/19/2020	0.89	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-15	52	n/a	3/18/2020	30	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Calcium (mg/L)</b>	<b>WGWC-16</b>	<b>52</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>66</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Calcium (mg/L)	WGWC-17	52	n/a	3/18/2020	6.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Calcium (mg/L)	WGWC-19	52	n/a	5/4/2020	15	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Calcium (mg/L)</b>	<b>WGWC-8</b>	<b>52</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>79</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Calcium (mg/L)	WGWC-9	52	n/a	3/19/2020	9.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-10	6.05	n/a	3/18/2020	1.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-11	6.05	n/a	3/18/2020	3.2	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-12	6.05	n/a	3/18/2020	3.2	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-13	6.05	n/a	3/19/2020	1.3	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-14A	6.05	n/a	3/19/2020	1.9	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-15	6.05	n/a	3/18/2020	1.7	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Chloride (mg/L)</b>	<b>WGWC-16</b>	<b>6.05</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>93</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Chloride (mg/L)	WGWC-17	6.05	n/a	3/18/2020	1.5	No	111	0	n/a	0.000...	NP Inter (normality) ...
Chloride (mg/L)	WGWC-19	6.05	n/a	5/4/2020	2.8	No	111	0	n/a	0.000...	NP Inter (normality) ...
<b>Chloride (mg/L)</b>	<b>WGWC-8</b>	<b>6.05</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>98</b>	<b>Yes</b>	<b>111</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Chloride (mg/L)	WGWC-9	6.05	n/a	3/19/2020	2.1	No	111	0	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-10	0.284	n/a	3/18/2020	0.052J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-11	0.284	n/a	3/18/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-12	0.284	n/a	3/18/2020	0.033J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-13	0.284	n/a	3/19/2020	0.15	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-14A	0.284	n/a	3/19/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-15</b>	<b>0.284</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>0.71</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	WGWC-16	0.284	n/a	3/18/2020	0.084J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
Fluoride (mg/L)	WGWC-17	0.284	n/a	3/18/2020	0.1ND	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-19</b>	<b>0.284</b>	<b>n/a</b>	<b>5/4/2020</b>	<b>0.36</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Fluoride (mg/L)	WGWC-8	0.284	n/a	3/19/2020	0.057J	No	135	49.63	n/a	0.000...	NP Inter (normality) ...
<b>Fluoride (mg/L)</b>	<b>WGWC-9</b>	<b>0.284</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>1</b>	<b>Yes</b>	<b>135</b>	<b>49.63</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
pH (S.U.)	WGWC-10	7.96	5.13	3/18/2020	6.4	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-11	7.96	5.13	3/18/2020	5.89	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-12	7.96	5.13	3/18/2020	6.94	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-13	7.96	5.13	3/19/2020	6.56	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-14A	7.96	5.13	3/19/2020	5.49	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-15	7.96	5.13	3/18/2020	7.73	No	134	0	n/a	0.000...	NP Inter (normality) ...
<b>pH (S.U.)</b>	<b>WGWC-16</b>	<b>7.96</b>	<b>5.13</b>	<b>3/18/2020</b>	<b>5.08</b>	<b>Yes</b>	<b>134</b>	<b>0</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
pH (S.U.)	WGWC-17	7.96	5.13	3/18/2020	6.28	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-19	7.96	5.13	5/4/2020	6.9	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-8	7.96	5.13	3/19/2020	6.43	No	134	0	n/a	0.000...	NP Inter (normality) ...
pH (S.U.)	WGWC-9	7.96	5.13	3/19/2020	6.64	No	134	0	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-10	21	n/a	3/18/2020	2.1	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-11	21	n/a	3/18/2020	1.6	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-12	21	n/a	3/18/2020	12	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-13	21	n/a	3/19/2020	4	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-14A	21	n/a	3/19/2020	1.5	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-15	21	n/a	3/18/2020	17	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
<b>Sulfate (mg/L)</b>	<b>WGWC-16</b>	<b>21</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>120</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Sulfate (mg/L)	WGWC-17	21	n/a	3/18/2020	4.2	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
Sulfate (mg/L)	WGWC-19	21	n/a	5/4/2020	4.5	No	111	23.42	n/a	0.000...	NP Inter (normality) ...
<b>Sulfate (mg/L)</b>	<b>WGWC-8</b>	<b>21</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>200</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Sulfate (mg/L)</b>	<b>WGWC-9</b>	<b>21</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>45</b>	<b>Yes</b>	<b>111</b>	<b>23.42</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Total Dissolved Solids (mg/L)	WGWC-10	150	n/a	3/18/2020	58	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-11	150	n/a	3/18/2020	26	No	111	9.009	n/a	0.000...	NP Inter (normality) ...

# Interwell Prediction Limit - All Results

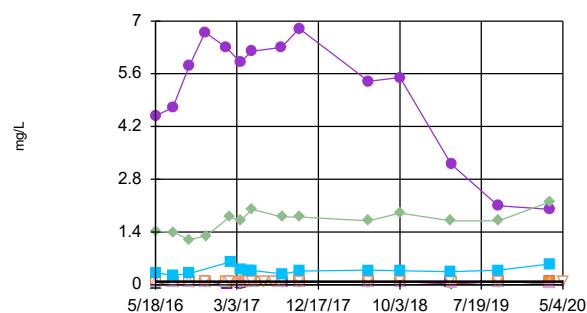
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Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bg N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Total Dissolved Solids (mg/L)	WGWC-12	150	n/a	3/18/2020	73	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-13	150	n/a	3/19/2020	95	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-14A	150	n/a	3/19/2020	18	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-15</b>	<b>150</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>160</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-16</b>	<b>150</b>	<b>n/a</b>	<b>3/18/2020</b>	<b>370</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
Total Dissolved Solids (mg/L)	WGWC-17	150	n/a	3/18/2020	98	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
Total Dissolved Solids (mg/L)	WGWC-19	150	n/a	5/4/2020	110	No	111	9.009	n/a	0.000...	NP Inter (normality) ...
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-8</b>	<b>150</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>540</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-9</b>	<b>150</b>	<b>n/a</b>	<b>3/19/2020</b>	<b>160</b>	<b>Yes</b>	<b>111</b>	<b>9.009</b>	<b>n/a</b>	<b>0.000...</b>	<b>NP Inter (normality) ...</b>

Sanitas™ v.9.6.26 . UG  
Hollow symbols indicate censored values.  
Exceeds Limit: WGWC-16, WGWC-8,  
WGWC-9

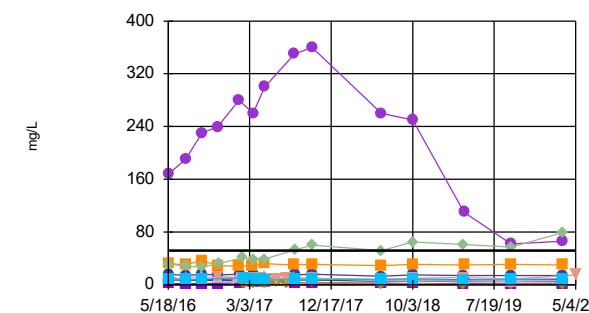
### Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 111 background values. 99.1% NDs. Annual per-constituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

Sanitas™ v.9.6.26 . UG  
Exceeds Limit: WGWC-16, WGWC-8

### Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 111 background values. Annual per-constituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

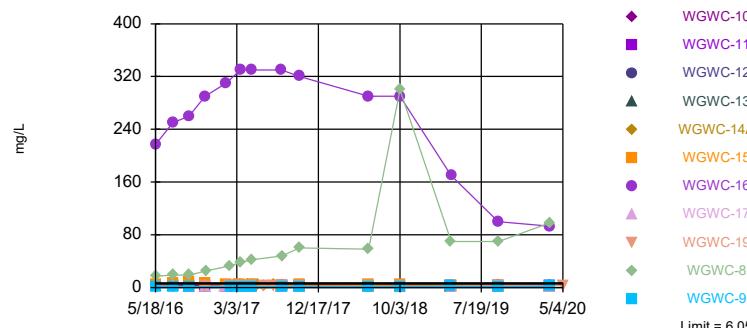
Constituent: Boron Analysis Run 6/18/2020 7:38 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

Constituent: Calcium Analysis Run 6/18/2020 7:38 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Exceeds Limit: WGWC-16, WGWC-8

### Prediction Limit Interwell Non-parametric

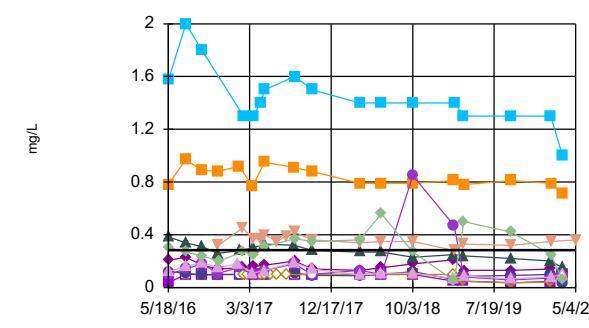


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 111 background values. Annual per-constituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

Sanitas™ v.9.6.26 . UG  
Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-19,  
WGWC-9

### Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 49.63% NDs. Annual per-constituent alpha = 0.002377. Individual comparison alpha = 0.0001082 (1 of 2). Comparing 11 points to limit.

Constituent: Chloride Analysis Run 6/18/2020 7:39 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

Constituent: Fluoride Analysis Run 6/18/2020 7:39 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	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	<0.08	<0.08	<0.08						
5/18/2016				<0.08	<0.08	<0.08	4.48	<0.08	<0.08
5/19/2016									
7/19/2016	<0.08	<0.08	<0.08		<0.08	<0.08	4.7	<0.08	
7/20/2016				<0.08					<0.08
9/13/2016	<0.08	<0.08	<0.08			<0.08		<0.08	
9/14/2016				<0.08	<0.08		5.8		<0.08
9/15/2016									
11/9/2016	<0.08	<0.08	<0.08					<0.08	
11/10/2016					<0.08	<0.08	6.7		<0.08
11/11/2016				<0.08					
11/14/2016									
1/17/2017	<0.08	<0.08				<0.08		<0.08	
1/18/2017									
1/19/2017			<0.08						
1/20/2017									<0.08
1/24/2017					<0.08		6.3		
1/27/2017									
2/6/2017				<0.08					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<0.08	<0.08							
3/14/2017			<0.08		<0.08	<0.08		<0.08	<0.08
3/15/2017				0.032 (J)			5.9		
3/17/2017									
4/11/2017									
4/24/2017	<0.08	<0.08							
4/25/2017			<0.08		<0.08	<0.08	6.2	<0.08	<0.08
4/26/2017				<0.08					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.08	<0.08	<0.08			<0.08		<0.08	
8/9/2017						<0.08	6.3		<0.08
8/10/2017				<0.08					
10/10/2017	<0.08	<0.08							
10/11/2017			<0.08		<0.08	<0.08	6.8	<0.08	<0.08
10/12/2017				<0.08					
6/13/2018	<0.08		<0.08					<0.08	
6/14/2018		<0.08		<0.08	<0.08	<0.08	5.4		<0.08
9/24/2018		<0.08							
9/27/2018	<0.08								
9/28/2018			<0.08						
10/2/2018								<0.08	
10/3/2018					<0.08	<0.08			
10/4/2018				<0.08			5.5		<0.08
4/1/2019	<0.08	<0.08							
4/2/2019			<0.08			<0.08		<0.08	
4/3/2019									
4/4/2019				0.024 (J)	<0.08		3.2		0.049 (J)
9/16/2019	<0.08							<0.08	

## Prediction Limit

Page 2

Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

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Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

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Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

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	<0.08
2/9/2017	
2/23/2017	<0.08
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	<0.08
4/11/2017	<0.08
4/24/2017	
4/25/2017	
4/26/2017	<0.08
5/17/2017	<0.08
6/7/2017	<0.08
7/11/2017	<0.08
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	<0.08
10/12/2017	
6/13/2018	
6/14/2018	<0.08
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	<0.08
4/1/2019	
4/2/2019	
4/3/2019	<0.08
4/4/2019	
9/16/2019	

# Prediction Limit

Page 6

Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

9/17/2019	
9/18/2019	<0.08
9/19/2019	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	0.039 (J)
5/4/2020	

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-6 (bg)	WGWC-15	WGWA-5 (bg)	WGWC-16
5/17/2016	0.927	12.2	23.7						
5/18/2016				7.17	1.36	27	32.5	1.7	168
5/19/2016									
7/19/2016	1	13	23		0.88	23	30	1.5	190
7/20/2016				7					
9/13/2016	0.44	13	23		0.93	25			
9/14/2016				7.7			37	52	230
9/15/2016									
11/9/2016	1.1	19	6.7			25			
11/10/2016					6.1		29		240
11/11/2016				8.2					
11/14/2016									
1/17/2017	1.4	28				26			
1/18/2017					10				
1/19/2017			8.5					13	
1/20/2017									
1/24/2017							28		280
1/27/2017									
2/6/2017				9.1					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	1.1	14							
3/14/2017			13		1.3	20	29	1.6	
3/15/2017				9					260
3/17/2017									
4/11/2017									
4/24/2017	1.1	12							
4/25/2017			23		1.9	28	32	1.5	300
4/26/2017				8.1					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.1	18	24		4.8	26			
8/9/2017							30	1.3	350
8/10/2017				8.1					
10/10/2017	1.2	21							
10/11/2017			23		0.93	29	31	1.5	360
10/12/2017				8.6					
6/13/2018	1.1		11			25		1.2	
6/14/2018		12		7.7	0.94		29		260
9/24/2018		11							
9/27/2018	1.2								
9/28/2018			11						
10/2/2018					26				
10/3/2018					1.2		31	1.4	
10/4/2018				8.5					250
4/1/2019	1	12						1.1	
4/2/2019			20		1.1	25			
4/3/2019									
4/4/2019				7.9			30		110
9/16/2019	1.3					25		36	

## Prediction Limit

Page 2

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 3

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

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	
9/16/2019	

## Prediction Limit

Page 6

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

9/17/2019	
9/18/2019	0.85
9/19/2019	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	0.89
5/4/2020	

## Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	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	3.8	2.5	6.05						
5/18/2016				1.45	4.59	2.06	217	1.58	2.72
5/19/2016									
7/19/2016	3.9	2.6	4		5.9	2.1	250	1.6	
7/20/2016				1.6					1.9
9/13/2016	3.6	2.4	3.1			2		1.4	
9/14/2016				1.5	7.9		260		1.6
9/15/2016									
11/9/2016	3.9	2.3	2.3					1.5	
11/10/2016					6.5	1.8	290		1.6
11/11/2016				1.5					
11/14/2016									
1/17/2017	3.8	2.3				1.8		1.5	
1/18/2017									
1/19/2017		2							
1/20/2017									1.5
1/24/2017					4.1		310		
1/27/2017									
2/6/2017			1.4						
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	3.4	2.2						2.5	
3/14/2017			1.9		4.4	1.8			1.5
3/15/2017				1.4			330		
3/17/2017									
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017			1.9		4	1.8	330	1.3	1.8
4/26/2017				1.3					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2			1.9		1.4	
8/9/2017					3.6		330		1.4
8/10/2017				1.4					
10/10/2017	3.6	2.5							
10/11/2017			1.9		5	1.8	320	1.3	1.5
10/12/2017				1.3					
6/13/2018	3.8		2					1.4	
6/14/2018		2.3			1.3	4.3	1.7	290	
9/24/2018		2.4							1.5
9/27/2018	4								
9/28/2018			2.1						
10/2/2018								1.4	
10/3/2018					4.8	1.8			
10/4/2018				1.3			290		1.5
4/1/2019	4	2.4							
4/2/2019			2.6			1.9		1.5	
4/3/2019									
4/4/2019					1.4	3.7			1.4
9/16/2019	4						170		1.5

## Prediction Limit

Page 2

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 3

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 4

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

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	
9/16/2019	

## Prediction Limit

Page 6

Constituent: Chloride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

9/17/2019	
9/18/2019	2.2
9/19/2019	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	1.9
5/4/2020	

## Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
5/17/2016	0.0131 (J)	0.0538 (J)	0.284 (J)						
5/18/2016				0.206	0.018 (J)	0.779	0.106 (J)	0.1 (J)	0.014 (J)
5/19/2016									
7/19/2016	<0.1	<0.1	0.21		<0.1	0.97	0.11 (J)	0.14 (J)	<0.1
7/20/2016				0.23					
9/13/2016	<0.1	<0.1	0.15 (J)		<0.1		0.11 (J)		
9/14/2016				0.17 (J)		0.89		0.18 (J)	0.095 (J)
9/15/2016									
11/9/2016	<0.1	0.085 (J)	<0.1				0.1 (J)		
11/10/2016					<0.1	0.88		0.11 (J)	
11/11/2016				0.14 (J)					
11/14/2016									
1/17/2017	<0.1	<0.1							
1/18/2017					<0.1		0.11 (J)		
1/19/2017			0.087 (J)						<0.1
1/20/2017									
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	<0.1	<0.1							
3/14/2017			<0.1		<0.1	0.77	<0.1		<0.1
3/15/2017				0.16 (J)				0.1 (J)	
3/17/2017									
4/11/2017									
4/24/2017	<0.1	<0.1							
4/25/2017			<0.1		<0.1	0.95	<0.1	0.13 (J)	<0.1
4/26/2017				0.17 (J)					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.1	<0.1	0.087 (J)		<0.1		0.099 (J)		
8/9/2017						0.91		0.18 (J)	<0.1
8/10/2017				0.2					
10/10/2017	<0.1	0.18 (J)							
10/11/2017			0.09 (J)		<0.1	0.88	0.098 (J)	<0.1	<0.1
10/12/2017				0.14 (J)					
3/27/2018	<0.1	<0.1							
3/28/2018			0.11 (J)		<0.1		0.088 (J)		<0.1
3/29/2018								0.13 (J)	
3/30/2018				0.13 (J)		0.79			
6/13/2018	<0.1		0.085 (J)				0.093 (J)		<0.1
6/14/2018		<0.1		0.15 (J)	<0.1	0.79		<0.1	
9/24/2018		<0.1							
9/27/2018	<0.1								
9/28/2018			0.082 (J)						
10/2/2018						0.13 (J)			
10/3/2018					<0.1	0.79			<0.1
10/4/2018				0.18 (J)				0.85 (J)	
2/25/2019	<0.1	0.032 (J)							

## Prediction Limit

Page 2

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 3

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 4

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

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	<0.1
2/9/2017	
2/23/2017	<0.1
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	<0.1
4/11/2017	<0.1
4/24/2017	
4/25/2017	
4/26/2017	<0.1
5/17/2017	<0.1
6/7/2017	<0.1
7/11/2017	<0.1
8/8/2017	
8/9/2017	
8/10/2017	
10/10/2017	
10/11/2017	<0.1
10/12/2017	
3/27/2018	
3/28/2018	
3/29/2018	<0.1
3/30/2018	
6/13/2018	
6/14/2018	<0.1
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	
10/4/2018	<0.1
2/25/2019	

## Prediction Limit

Page 6

Constituent: Fluoride (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

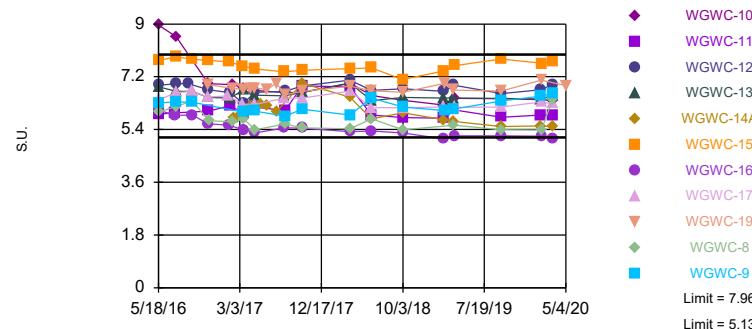
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

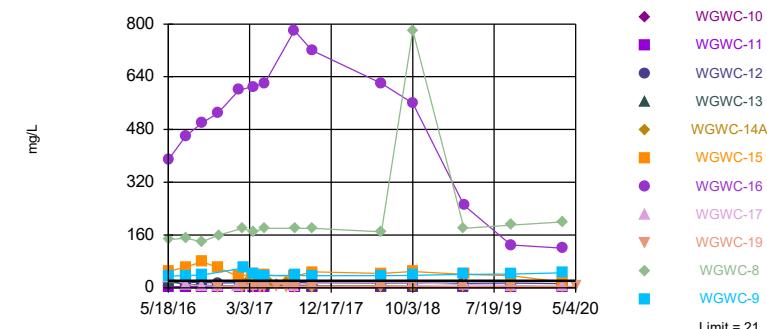
2/26/2019	
2/27/2019	<0.1
2/28/2019	
4/1/2019	
4/2/2019	
4/3/2019	0.048 (J)
4/4/2019	
9/16/2019	
9/17/2019	
9/18/2019	0.035 (J)
9/19/2019	
2/3/2020	
2/4/2020	
2/5/2020	0.04 (J)
2/7/2020	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	<0.1
5/4/2020	

Exceeds Limits: WGWC-16

### Prediction Limit Interwell Non-parametric

Exceeds Limits: WGWC-16, WGWC-8,  
WGWC-9

### Prediction Limit Interwell Non-parametric



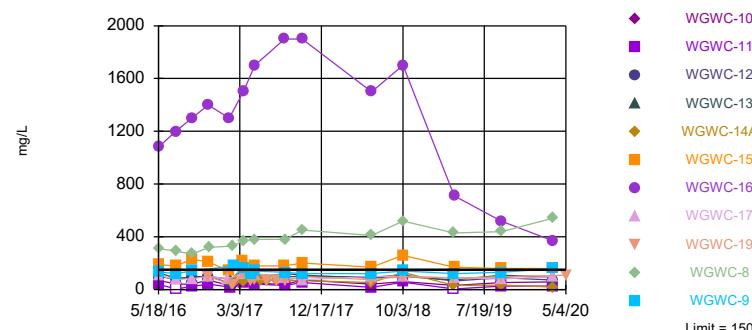
Constituent: pH Analysis Run 6/18/2020 7:39 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

Constituent: Sulfate Analysis Run 6/18/2020 7:39 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-16,  
WGWC-8, WGWC-9

### Prediction Limit Interwell Non-parametric



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:39 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
5/17/2016	5.24	6.23	7.81						
5/18/2016				8.96	5.5	7.75	7.92	6.06	5.47
5/19/2016									
7/18/2016	5.434038							5.884339	
7/19/2016		6.285413			5.43	7.876073	7.154587		5.336672
7/20/2016				8.56774					
9/1/2016									
9/13/2016	5.22	6.3	7.18		5.57		7.96		
9/14/2016						7.79		5.89	7.29
9/15/2016									
11/9/2016	5.57	6.26	6.03				7.27		
11/10/2016					6.93	7.76		5.6	
11/11/2016				6.96					
11/14/2016									
1/17/2017	5.48	6.8					7.72		
1/18/2017					7.16				
1/19/2017			6.71						6.59
1/20/2017									
1/24/2017						7.71		5.54	
1/27/2017									
2/6/2017			6.93						
2/8/2017									
2/23/2017									
3/13/2017	5.4	6.18							
3/14/2017			6.45		5.82	7.57			5.86
3/15/2017				6.82				5.39	
3/17/2017									
4/11/2017									
4/24/2017	5.4	6.35							
4/25/2017			6.93		5.57	7.47	7.73	5.28	5.35
4/26/2017				6.73					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	5.32	6.23	6.72		5.6		7.74		
8/9/2017						7.37		5.46	5.25
8/10/2017				6.66					
8/25/2017									5.44
10/10/2017	5.26	6.32							
10/11/2017			6.75		5.43	7.42	7.71	5.45	6.99
10/12/2017				6.67					
3/27/2018	5.39	6.14							
3/28/2018			6.84		5.29		7.28		5.95
3/29/2018								5.33	
3/30/2018				6.98		7.48			
6/13/2018	5.33		6.31				7.78		5.13
6/14/2018		6.02		6.56	5.39	7.5		5.35	
9/24/2018		6.1							
9/27/2018	5.33								
9/28/2018			6.26						
10/2/2018							7.52		
10/3/2018					5.33	7.11			5.22

## Prediction Limit

Page 2

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 3

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-12	WGWC-9	WGWC-19
5/17/2016									
5/18/2016	6.41	7.23	5.55						
5/19/2016				5.93	6.85	5.99	6.91	6.31	
7/18/2016				5.9661					
7/19/2016									
7/20/2016	6.662463	7.281557	5.656628		6.705264	6.194334	6.962608	6.345061	
9/1/2016							6.96		
9/13/2016		7.15	5.63			6.7		6.33	
9/14/2016	6.7						6.38		
9/15/2016									
11/9/2016									
11/10/2016	6.51	6.33	5.61		6.5				
11/11/2016				6.03			6.76		6.93
11/14/2016						5.7			
1/17/2017									
1/18/2017		6.94	5.81						
1/19/2017									
1/20/2017	6.55								
1/24/2017									
1/27/2017				6.21	6.47		6.66		
2/6/2017						5.66			6.8
2/8/2017									
2/23/2017									
3/13/2017									
3/14/2017	6.27	6.75	5.53						
3/15/2017				5.97	6.75	5.77	6.3	5.99	6.78
3/17/2017									
4/11/2017									6.79
4/24/2017									
4/25/2017	6.26	6.84	5.59						
4/26/2017				6.17	6.57	5.39	6.67	6.03	6.82
5/17/2017									
6/7/2017									6.76
7/11/2017									6.99
8/8/2017			5.52						
8/9/2017	6.47	6.67			6.55				
8/10/2017				6.05		5.59	6.7	5.86	6.59
8/25/2017									
10/10/2017									
10/11/2017	6.47	6.75	5.51						
10/12/2017				6.89	6.67	5.46	6.89	6.09	6.7
3/27/2018									
3/28/2018		6.79	5.6						
3/29/2018				6.85	6.99	5.43	7.08	5.89	6.88
3/30/2018	6.71								
6/13/2018									
6/14/2018	6.15	6.67	5.58	5.89	6.39	5.76	6.73	6.47	6.72
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		6.92	5.45						

## Prediction Limit

Page 4

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

5/17/2016	
5/18/2016	
5/19/2016	
7/18/2016	
7/19/2016	
7/20/2016	
9/1/2016	
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	5.81
2/23/2017	5.8
3/13/2017	
3/14/2017	
3/15/2017	
3/17/2017	5.97
4/11/2017	6.18
4/24/2017	
4/25/2017	
4/26/2017	6.09
5/17/2017	6.26
6/7/2017	6.21
7/11/2017	6
8/8/2017	
8/9/2017	
8/10/2017	
8/25/2017	
10/10/2017	
10/11/2017	6.97
10/12/2017	
3/27/2018	
3/28/2018	
3/29/2018	6.51
3/30/2018	
6/13/2018	
6/14/2018	5.76
9/24/2018	
9/27/2018	
9/28/2018	
10/2/2018	
10/3/2018	

## Prediction Limit

Page 6

Constituent: pH (S.U.) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A	
10/4/2018	5.97
2/25/2019	
2/26/2019	
2/27/2019	5.73
2/28/2019	
4/1/2019	
4/2/2019	
4/3/2019	5.68
4/4/2019	
9/16/2019	
9/17/2019	
9/18/2019	5.5
9/19/2019	
2/3/2020	
2/4/2020	
2/5/2020	5.52
2/7/2020	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	5.49
5/4/2020	

## Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 2

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 3

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 4

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

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	
9/16/2019	

## Prediction Limit

Page 6

Constituent: Sulfate (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

9/17/2019	
9/18/2019	1.7
9/19/2019	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	1.5
5/4/2020	

## Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 2

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 3

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

## Prediction Limit

Page 4

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

# Prediction Limit

Page 5

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All  
Plant Wansley Client: Southern Company Data: Wansley AP

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	
9/16/2019	

# Prediction Limit

Page 6

Constituent: Total Dissolved Solids (mg/L) Analysis Run 6/18/2020 7:42 PM View: All

Plant Wansley Client: Southern Company Data: Wansley AP

WGWC-14A

9/17/2019	
9/18/2019	33
9/19/2019	
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	18
5/4/2020	

# FIGURE E.

## Trend Test - Significant Results

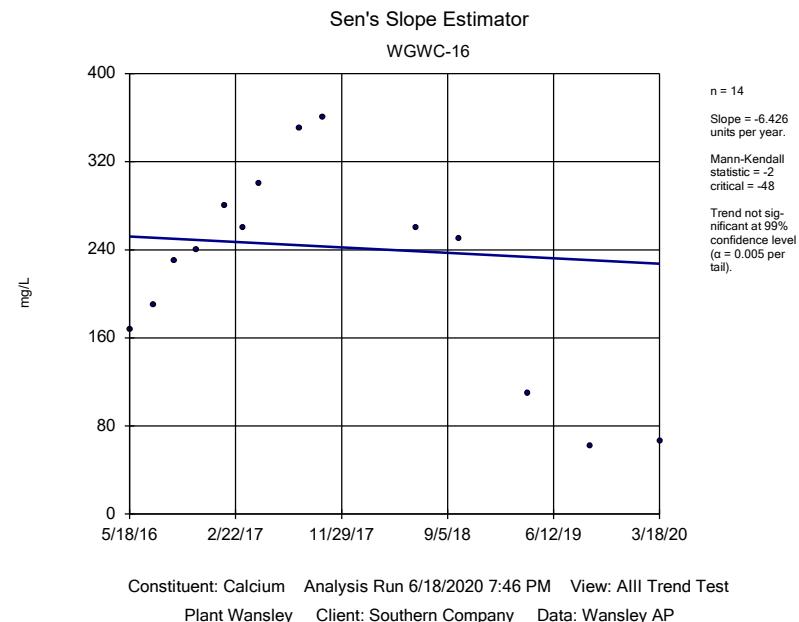
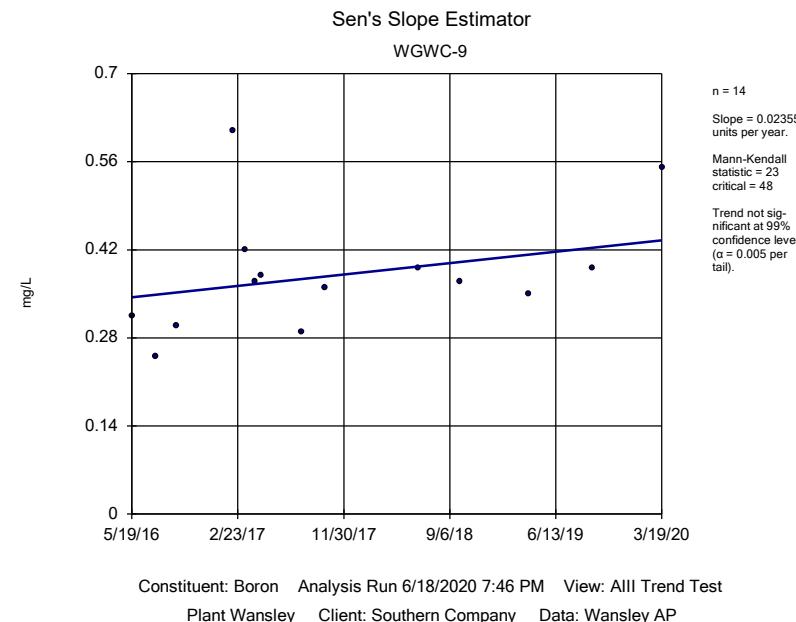
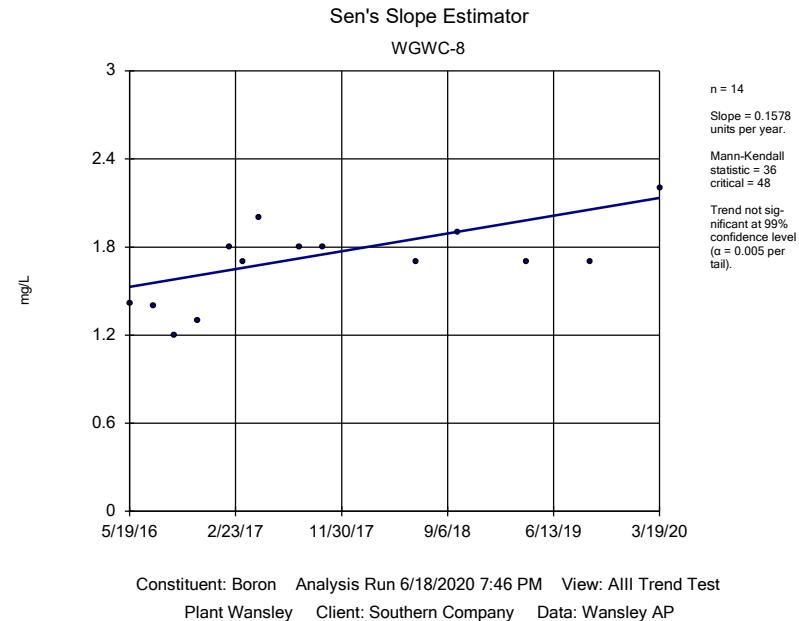
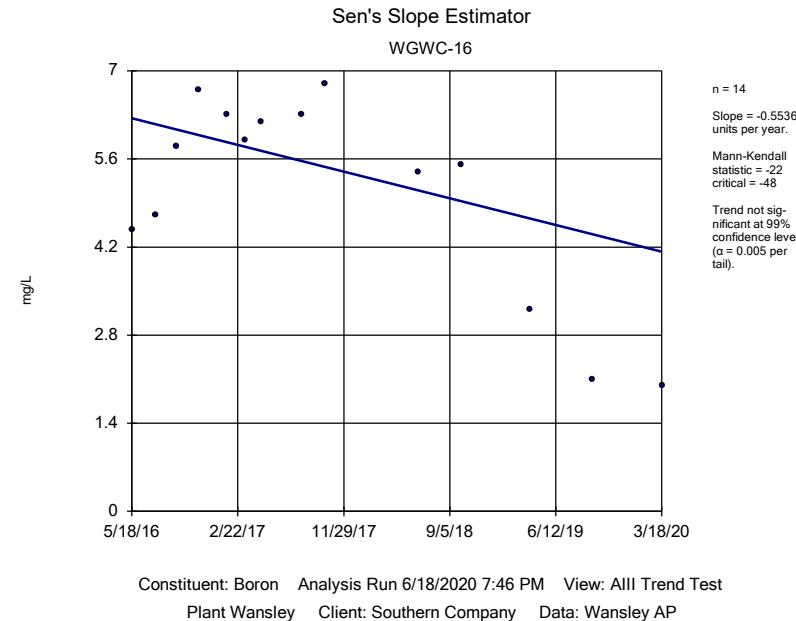
Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:49 PM

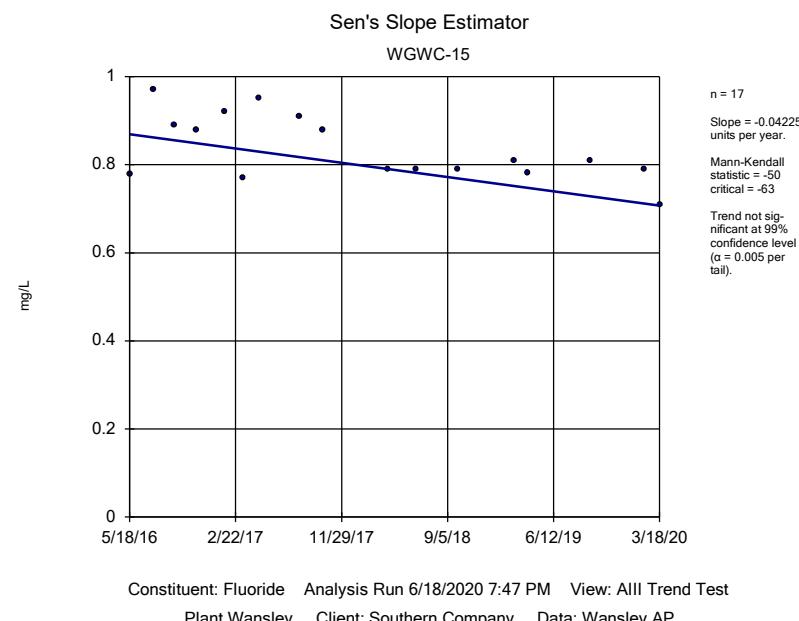
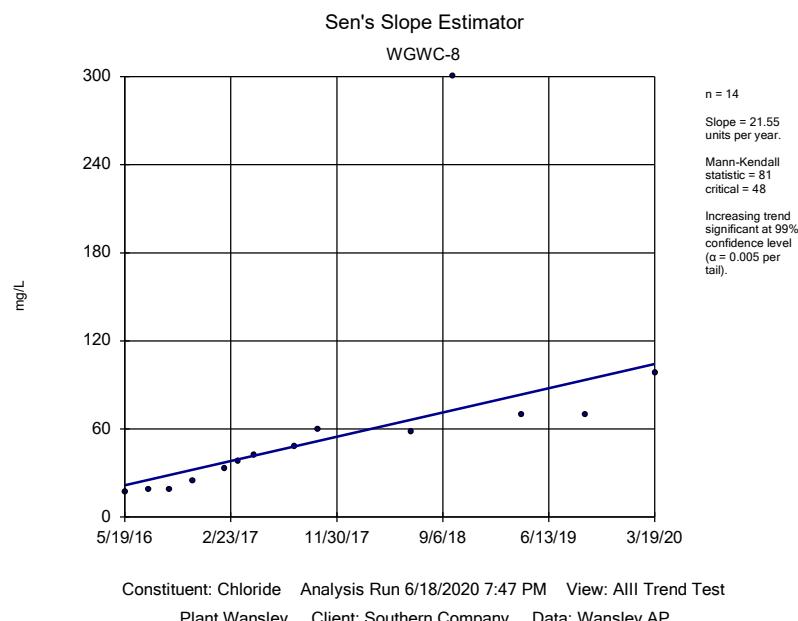
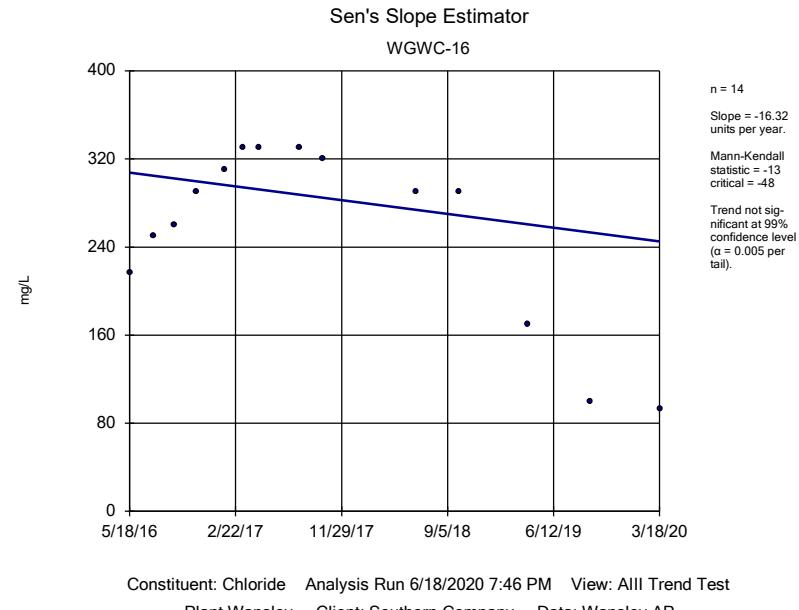
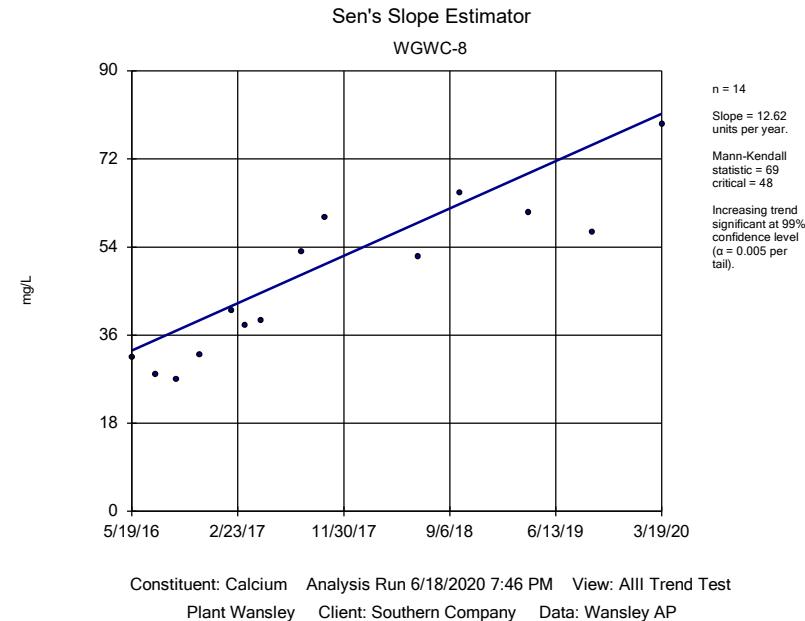
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	WGWC-8	12.62	69	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8	21.55	81	48	Yes	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9	-0.09709	-69	-63	Yes	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWC-16	-0.1745	-111	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	15.7	60	48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	63.11	74	48	Yes	14	0	n/a	n/a	0.01	NP

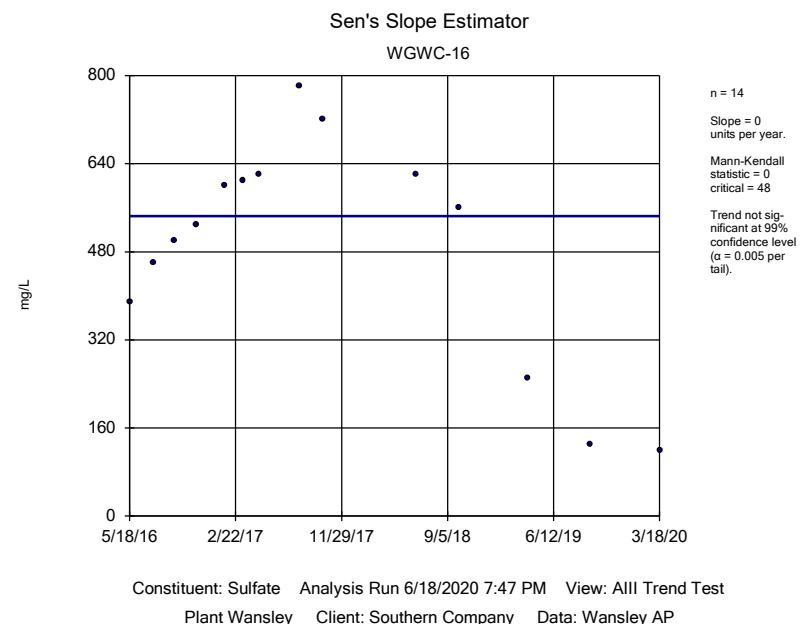
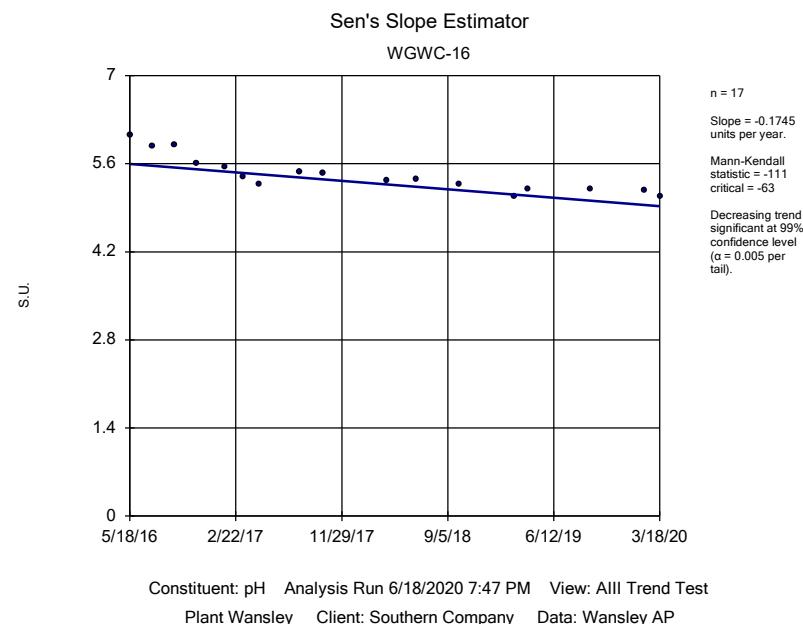
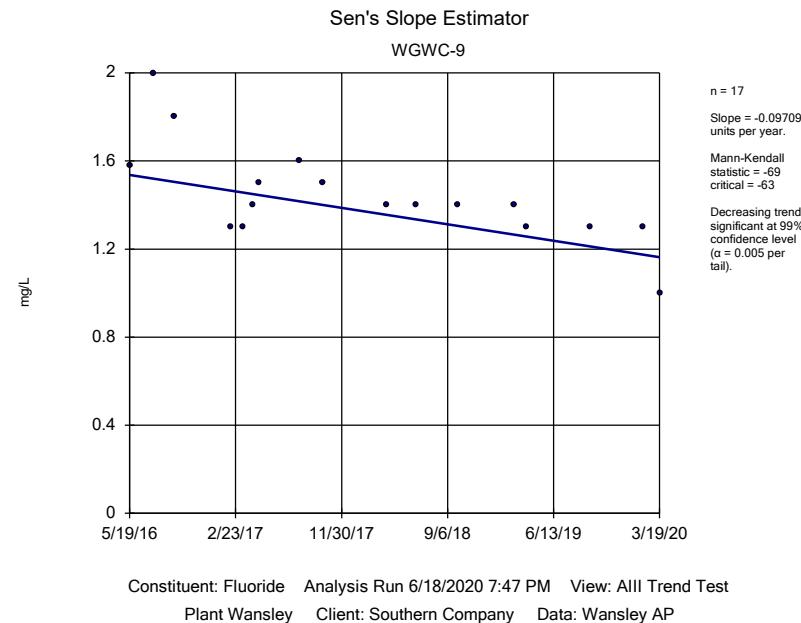
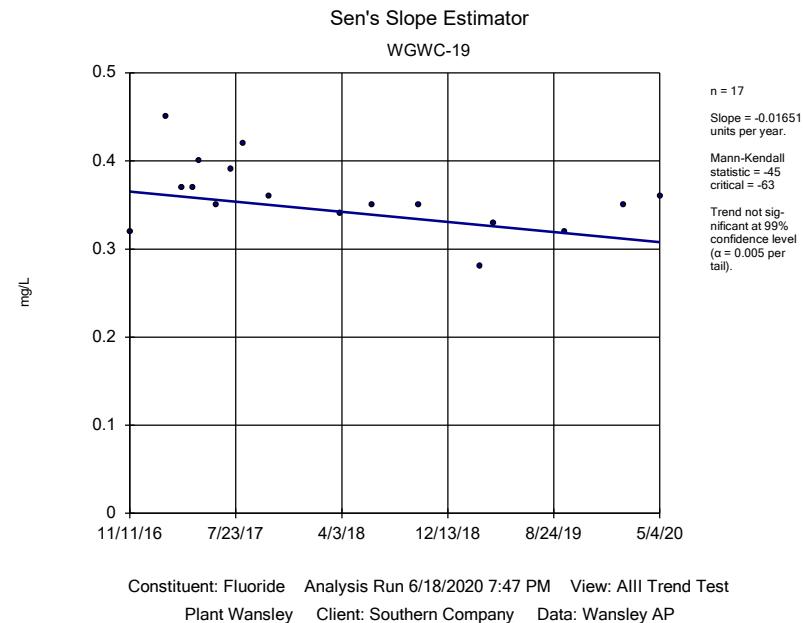
## Trend Test - All Results

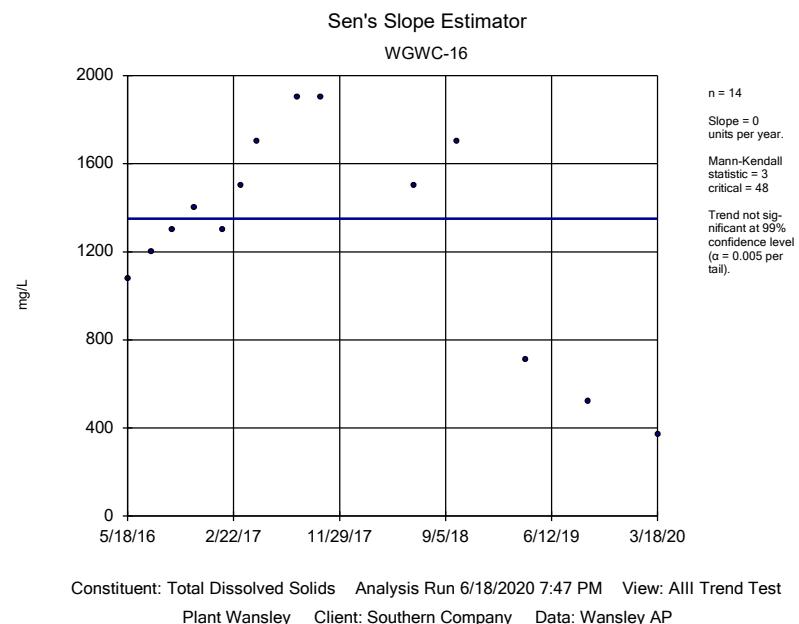
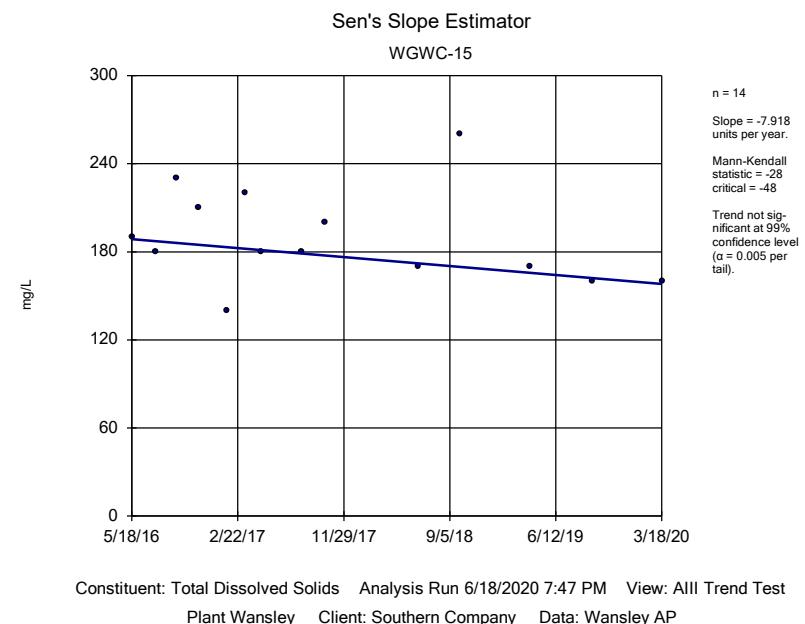
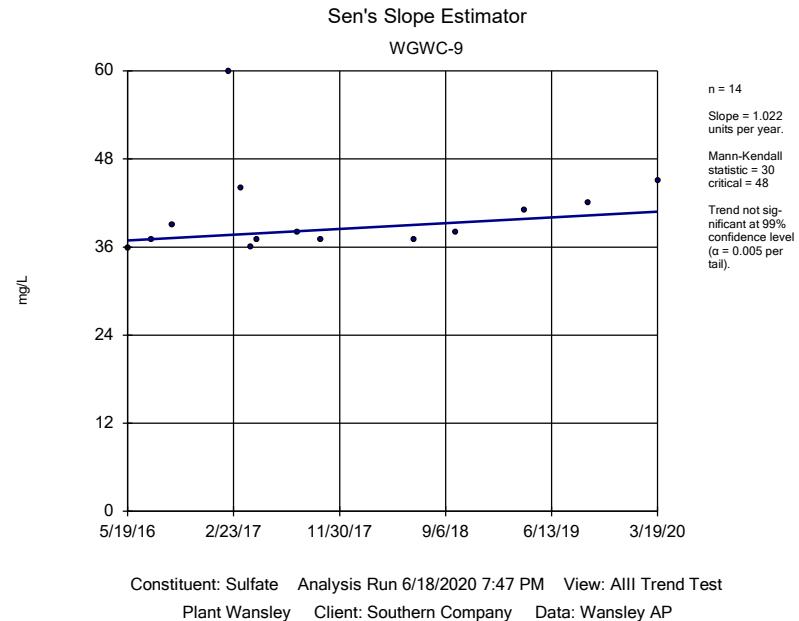
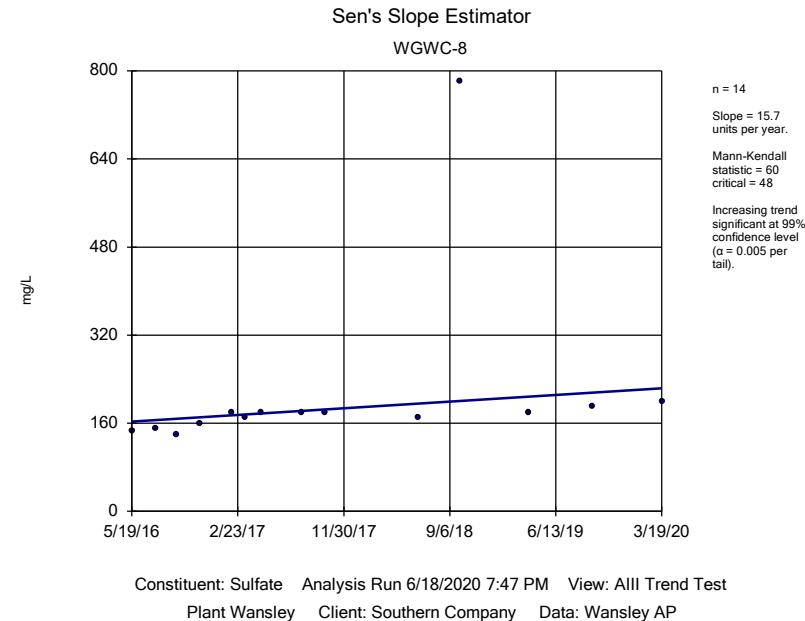
Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:49 PM

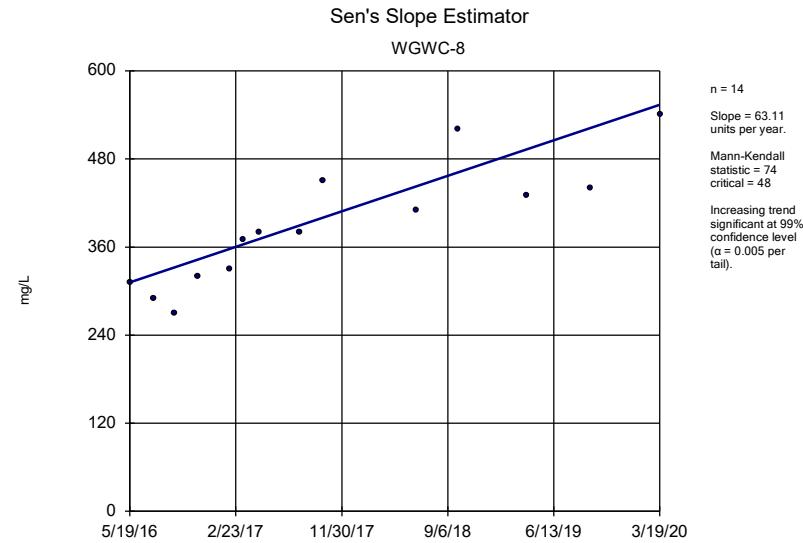
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDS</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	-0.5536	-22	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8	0.1578	36	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9	0.02355	23	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-16	-6.426	-2	-48	No	14	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>WGWC-8</b>	<b>12.62</b>	<b>69</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride (mg/L)	WGWC-16	-16.32	-13	-48	No	14	0	n/a	n/a	0.01	NP
<b>Chloride (mg/L)</b>	<b>WGWC-8</b>	<b>21.55</b>	<b>81</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Fluoride (mg/L)	WGWC-15	-0.04225	-50	-63	No	17	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19	-0.01651	-45	-63	No	17	0	n/a	n/a	0.01	NP
<b>Fluoride (mg/L)</b>	<b>WGWC-9</b>	<b>-0.09709</b>	<b>-69</b>	<b>-63</b>	<b>Yes</b>	<b>17</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH (S.U.)	WGWC-16	-0.1745	-111	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16	0	0	48	No	14	0	n/a	n/a	0.01	NP
<b>Sulfate (mg/L)</b>	<b>WGWC-8</b>	<b>15.7</b>	<b>60</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate (mg/L)	WGWC-9	1.022	30	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-15	-7.918	-28	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-16	0	3	48	No	14	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids (mg/L)</b>	<b>WGWC-8</b>	<b>63.11</b>	<b>74</b>	<b>48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids (mg/L)	WGWC-9	0	-6	-48	No	14	0	n/a	n/a	0.01	NP



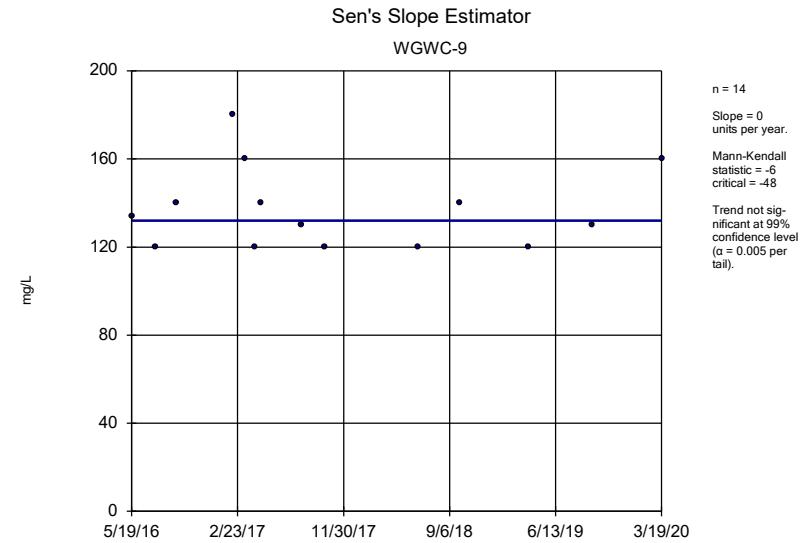








Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:47 PM View: All Trend Test  
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:47 PM View: All Trend Test  
Plant Wansley Client: Southern Company Data: Wansley AP

# FIGURE F.

## Upper Tolerance Limits

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 12:08 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Bg N</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.0022	n/a	n/a	n/a	87	n/a	98.85	n/a	0.01153	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a	127	n/a	75.59	n/a	0.001482	NP Inter(NDs)
Barium (mg/L)	n/a	0.062	n/a	n/a	n/a	127	n/a	0	n/a	0.001482	NP Inter(normal...)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a	127	n/a	93.7	n/a	0.001482	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	127	n/a	100	n/a	0.001482	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0049	n/a	n/a	n/a	127	n/a	93.7	n/a	0.001482	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	n/a	n/a	126	n/a	46.83	n/a	0.00156	NP Inter(normal...)
Combined Radium 226 + 228 (pCi/L)	n/a	10.4	n/a	n/a	n/a	124	n/a	4.839	n/a	0.001729	NP Inter(normal...)
Fluoride (mg/L)	n/a	0.284	n/a	n/a	n/a	135	n/a	49.63	n/a	0.000...	NP Inter(normal...)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a	111	n/a	88.29	n/a	0.003368	NP Inter(NDs)
Lithium (mg/L)	n/a	0.009	n/a	n/a	n/a	117	n/a	48.72	n/a	0.002475	NP Inter(normal...)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	111	n/a	87.39	n/a	0.003368	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a	126	n/a	88.89	n/a	0.00156	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	127	n/a	92.91	n/a	0.001482	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	127	n/a	94.49	n/a	0.001482	NP Inter(NDs)

FIGURE G.

WANSLEY AP GWPS					
Constituent Name	MCL	CCR-Rule Specified	Background	Federal GWPS	State GWPS
Antimony, Total (mg/L)	0.006		0.0022	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.0014	0.01	0.01
Barium, Total (mg/L)	2		0.062	2	2
Beryllium, Total (mg/L)	0.004		0.0025	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0025	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0049	0.1	0.1
Cobalt, Total (mg/L)	n/a	0.006	0.013	0.013	0.013
Combined Radium, Total (pCi/L)	5		10.4	10.4	10.4
Fluoride, Total (mg/L)	4		0.284	4	4
Lead, Total (mg/L)	n/a	0.015	0.001	0.015	0.001
Lithium, Total (mg/L)	n/a	0.04	0.009	0.04	0.009
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)	n/a	0.1	0.015	0.1	0.015
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

GWPS = Groundwater Protection Standard

MCL = Maximum Contaminant Level

Highlighted cells indicate background is higher than established limit.

# FIGURE H.

## Confidence Interval Summary Table - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	WGWC-19	0.056	0.045	0.009	Yes	16	0	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.009	Yes	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.03929	0.03253	0.009	Yes	16	0	No	0.01	Param.

# Confidence Interval Summary Table - All Results

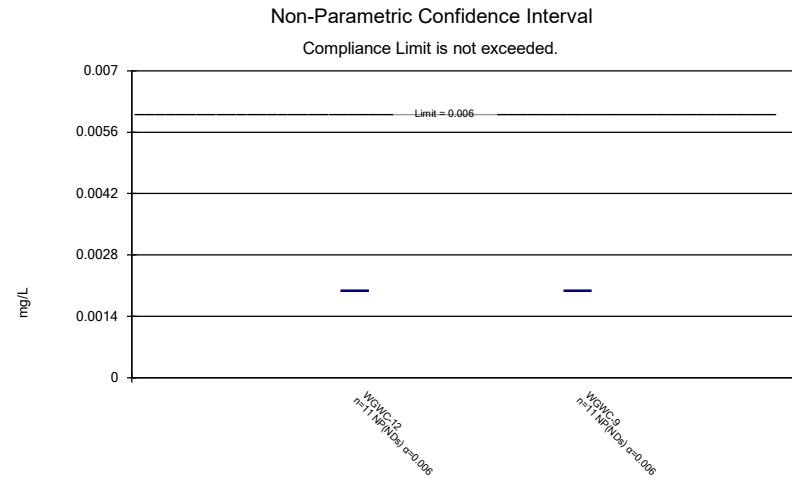
	Plant	Wansley	Client:	Southern Company	Data:	Wansley AP	Printed 7/22/2020, 1:49 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	WGWC-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.0005	0.01	No	16	75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	16	43.75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0019	0.00095	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002399	0.00153	0.01	No	16	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001383	0.0007201	0.01	No	16	37.5	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0375	0.03062	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-12	0.02034	0.01523	2	No	16	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05852	0.04661	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05072	0.03115	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02237	0.01933	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01846	0.01315	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No	16	18.75	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.00098	2	No	16	25	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.005	0.0007	2	No	16	25	No	0.01	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No	16	75	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	16	93.75	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002025	0.001431	0.004	No	16	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No	16	56.25	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No	16	93.75	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.00082	0.000362	0.005	No	16	18.75	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-10	0.002394	0.001593	0.1	No	16	18.75	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No	16	81.25	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No	16	93.75	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001829	0.0008657	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00052	0.013	No	16	37.5	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001337	0.0005416	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No	16	75	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01161	0.006248	0.013	No	16	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	16	0	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.00186	0.0008579	0.013	No	16	6.25	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0028	0.0011	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	16	93.75	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4506	0.1287	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5856	0.1074	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.612	0.1183	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7925	0.4593	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8713	0.4652	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6722	0.249	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.141	0.9315	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5548	0.04796	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.441	0.1309	10.4	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.913	1.173	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3833	0.1276	10.4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1841	0.1322	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.047	4	No	17	70.59	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-12	0.11	0.089	4	No	17	23.53	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-13	0.3081	0.2371	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.048	4	No	17	82.35	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.8825	0.7903	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084	4	No	17	11.76	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.148	0.09745	4	No	17	5.882	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.3845	0.3343	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3781	0.2142	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00023	0.001	No	14	71.43	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

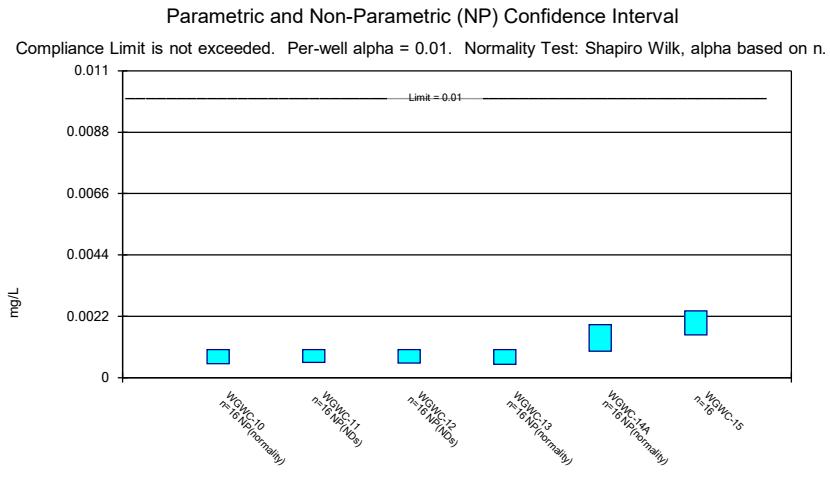
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Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

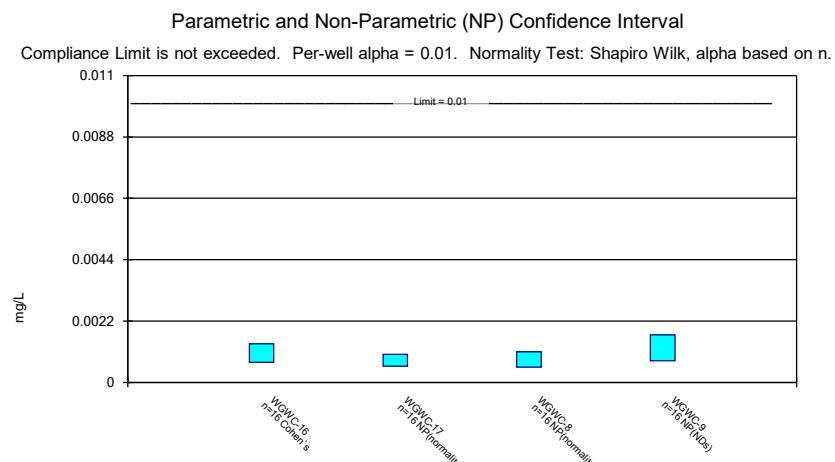
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.001	No	14	50	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00017	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.001	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01678	0.008384	0.009	No	16	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No	16	81.25	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007805	0.005802	0.009	No	16	6.25	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0025	0.009	No	16	75	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0018	0.009	No	16	62.5	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.006833	0.005229	0.009	No	16	12.5	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01134	0.00728	0.009	No	16	6.25	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005758	0.00464	0.009	No	16	6.25	ln(x)	0.01	Param.
Lithium (mg/L)	<b>WGWC-19</b>	<b>0.056</b>	<b>0.045</b>	<b>0.009</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.009	Yes	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	<b>WGWC-9</b>	<b>0.03929</b>	<b>0.03253</b>	<b>0.009</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Mercury (mg/L)	WGWC-10	0.0002	0.000085	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-11	0.0002	0.00011	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-12	0.0002	0.00011	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-13	0.0002	0.000083	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0002	0.000086	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-16	0.0002	0.00019	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-17	0.0002	0.000074	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0002	0.00012	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-8	0.0002	0.00013	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-9	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.015	No	16	87.5	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0011	0.015	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.015	No	16	68.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0018	0.015	No	16	12.5	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.015	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.00764	0.00364	0.015	No	16	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.006345	0.002894	0.015	No	16	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.015	No	16	43.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.007015	0.00392	0.015	No	16	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01218	0.00699	0.05	No	16	0	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.0031	0.05	No	16	0	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-9	0.002725	0.002073	0.05	No	16	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	16	93.75	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	16	43.75	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	16	25	No	0.01	NP (normality)



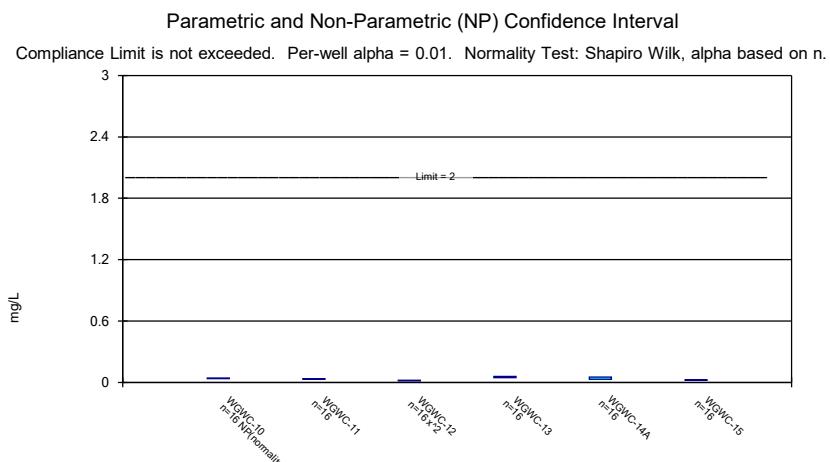
Constituent: Antimony Analysis Run 7/22/2020 1:48 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Arsenic Analysis Run 7/22/2020 1:48 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP



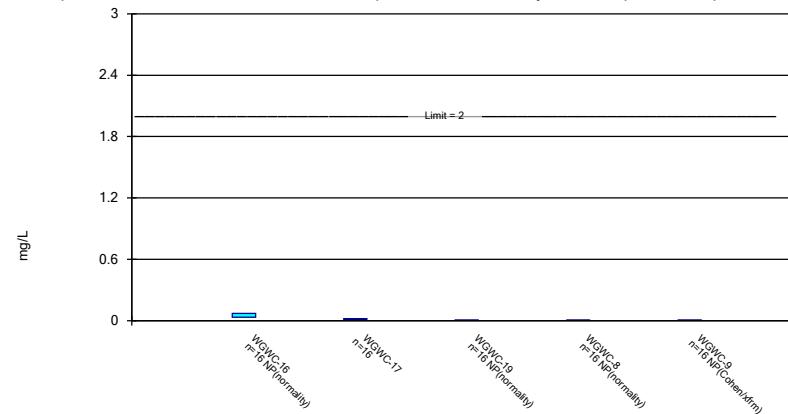
Constituent: Arsenic Analysis Run 7/22/2020 1:48 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Barium Analysis Run 7/22/2020 1:48 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

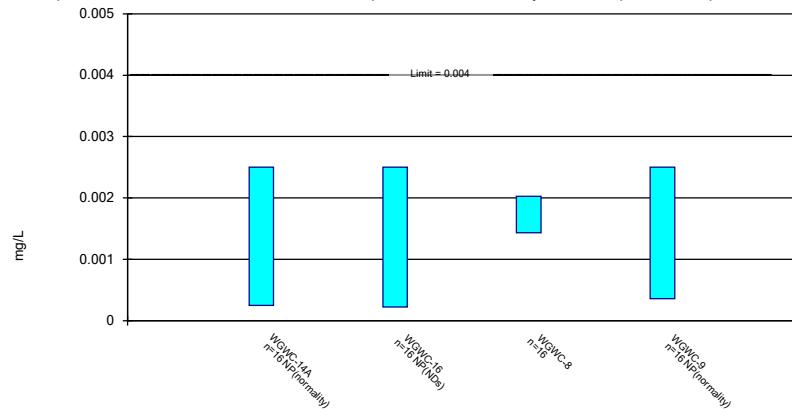


Constituent: Barium Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

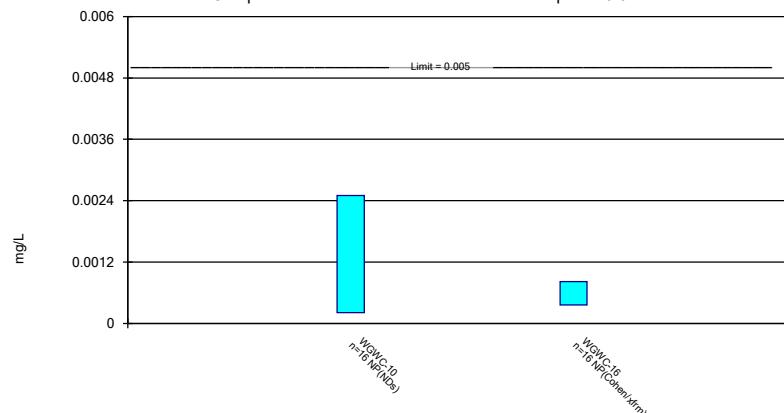


Constituent: Beryllium Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

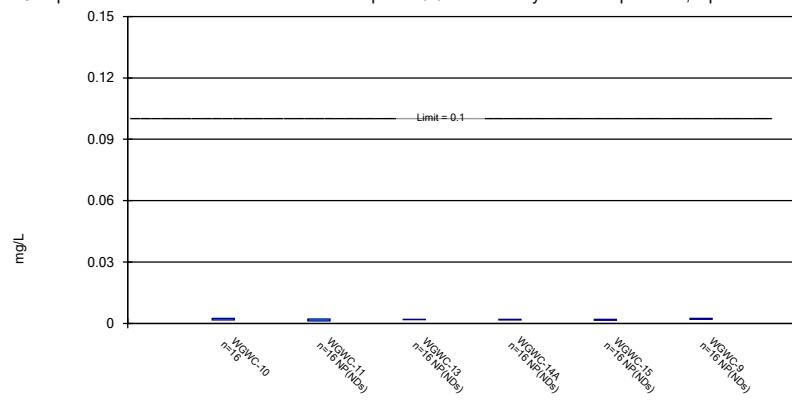


Constituent: Cadmium Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

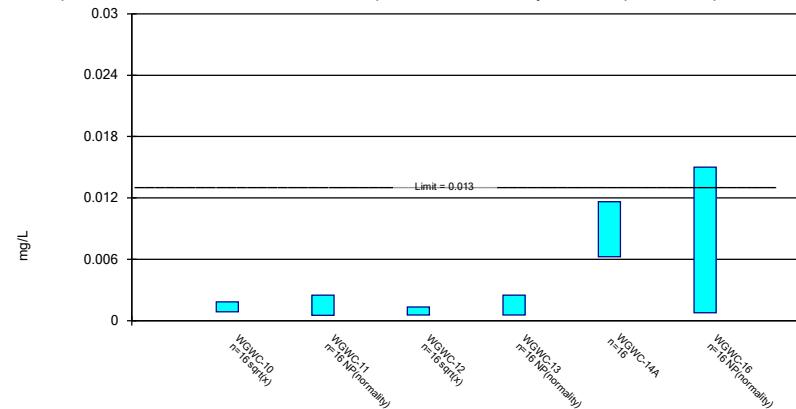


Constituent: Chromium Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

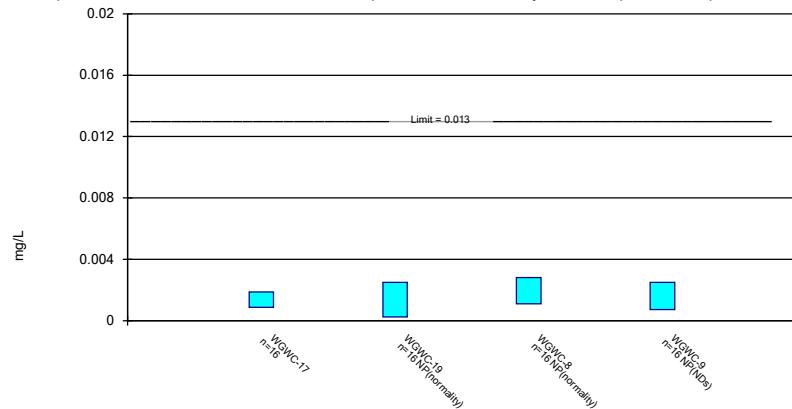


Constituent: Cobalt Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

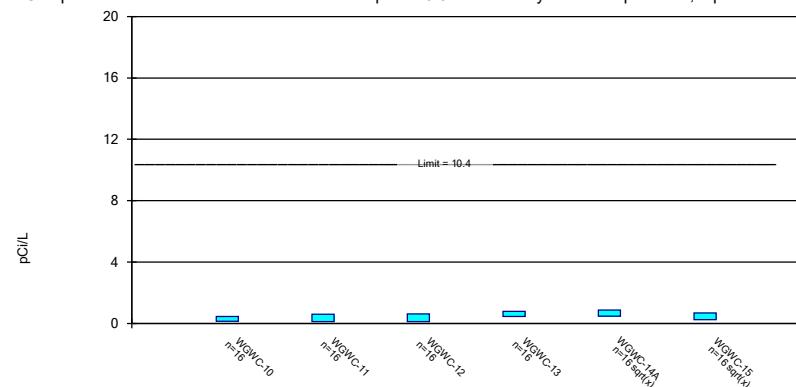


Constituent: Cobalt Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

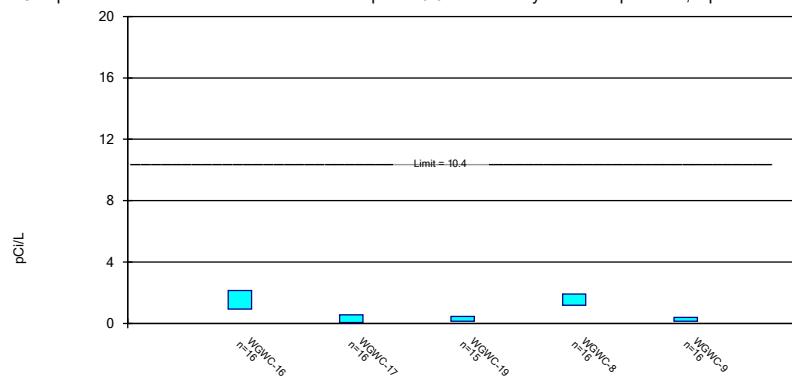


Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

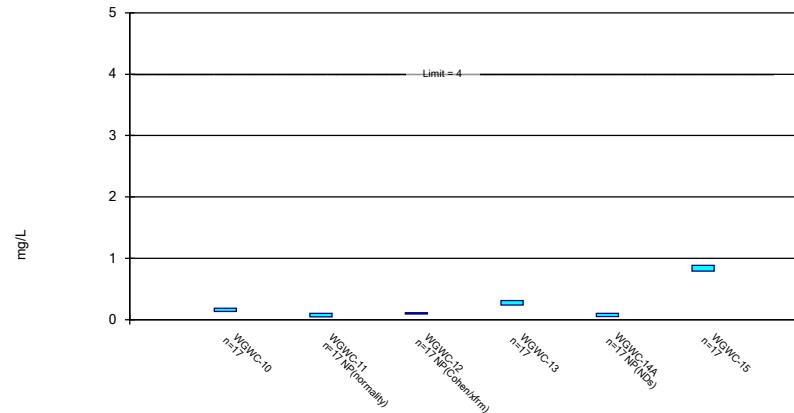


Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 1:48 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

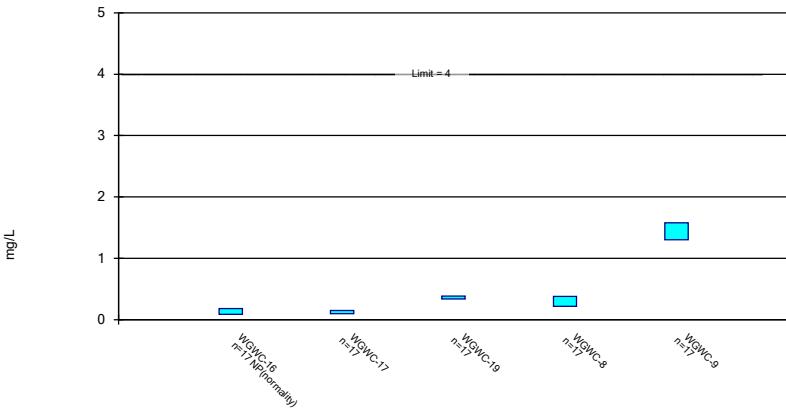
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/22/2020 1:48 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

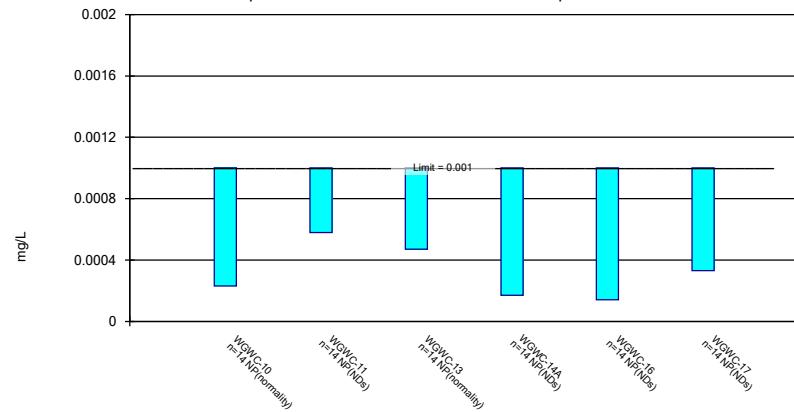
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

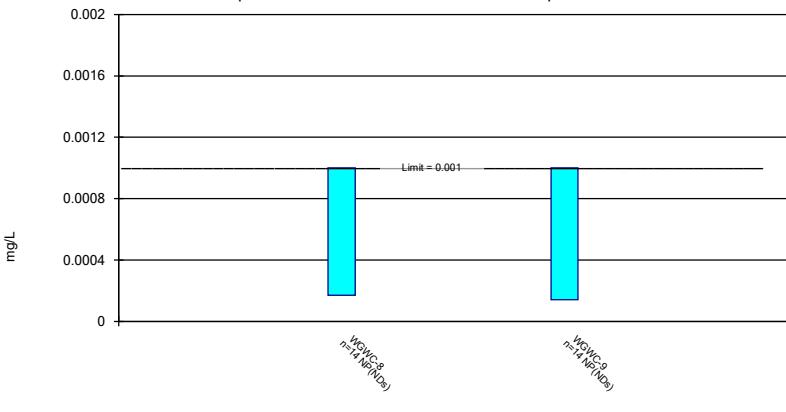
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

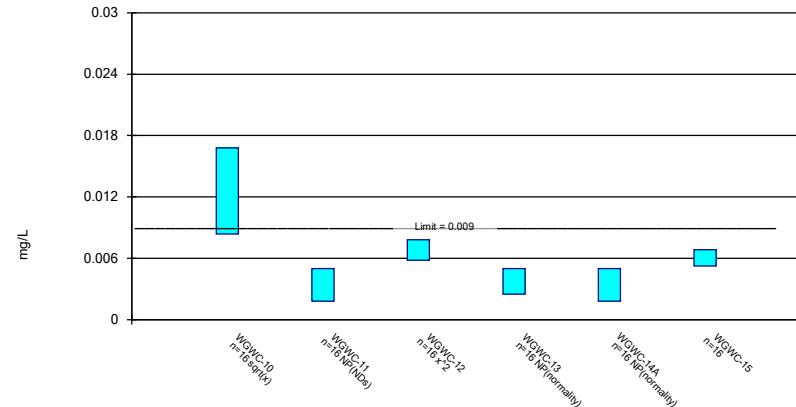
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

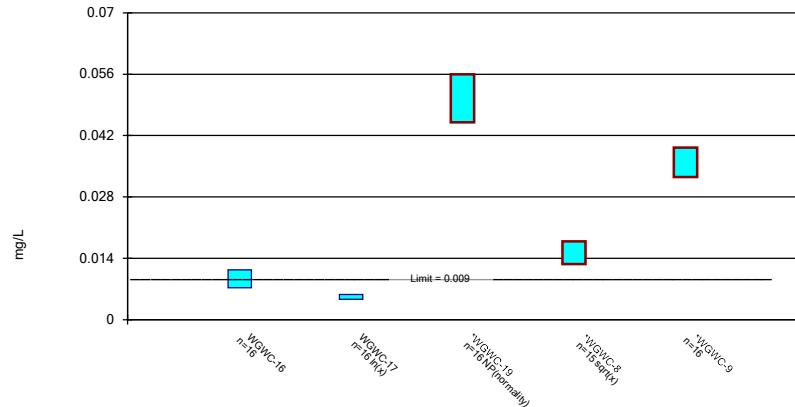
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

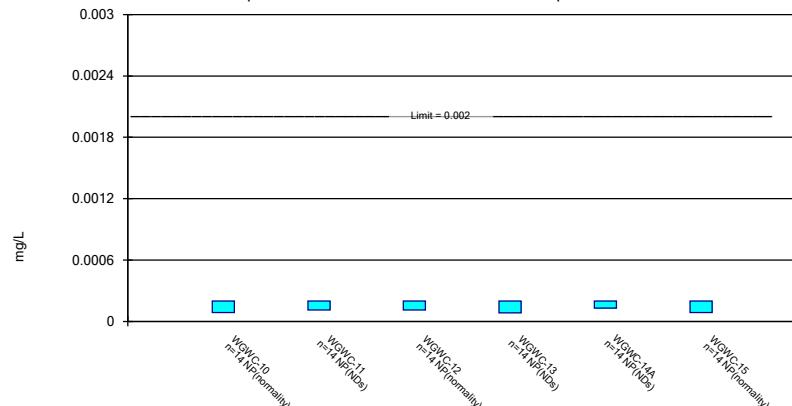
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

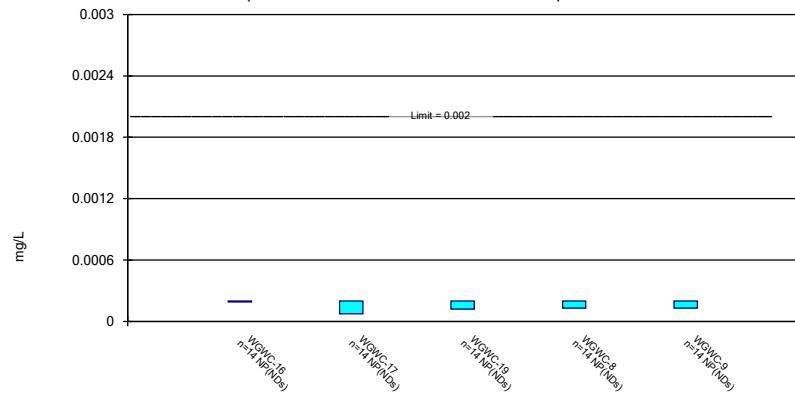
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

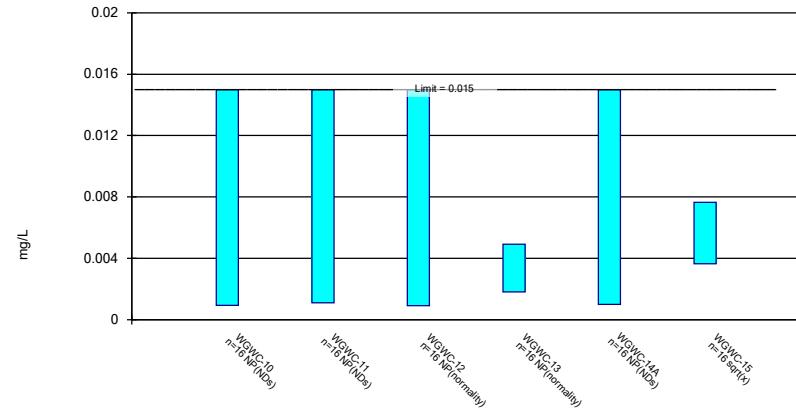
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 7/22/2020 1:49 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

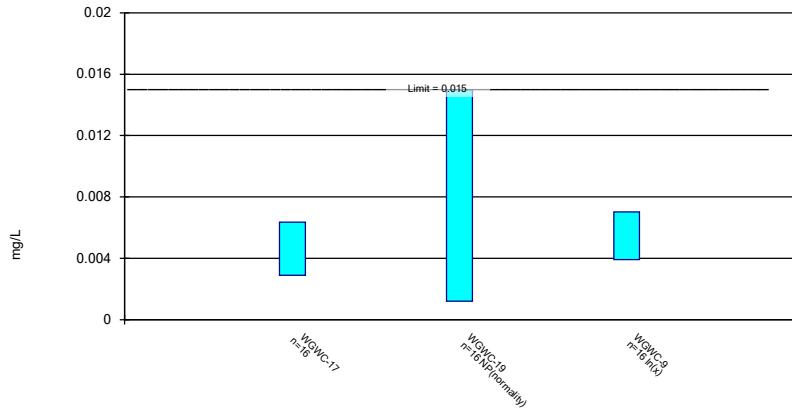


Constituent: Molybdenum Analysis Run 7/22/2020 1:49 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

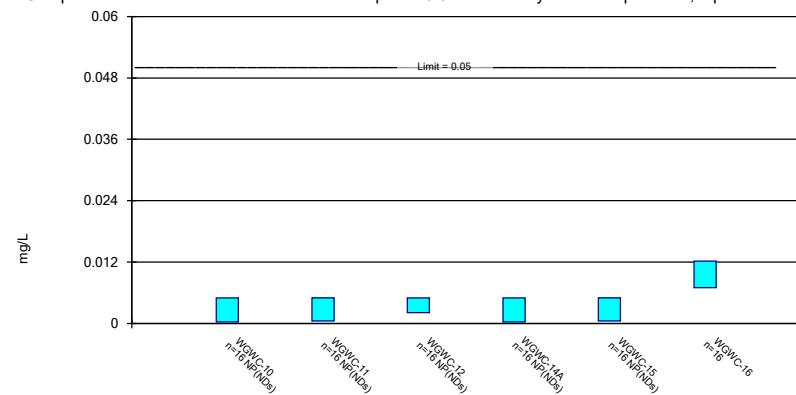


Constituent: Molybdenum Analysis Run 7/22/2020 1:49 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

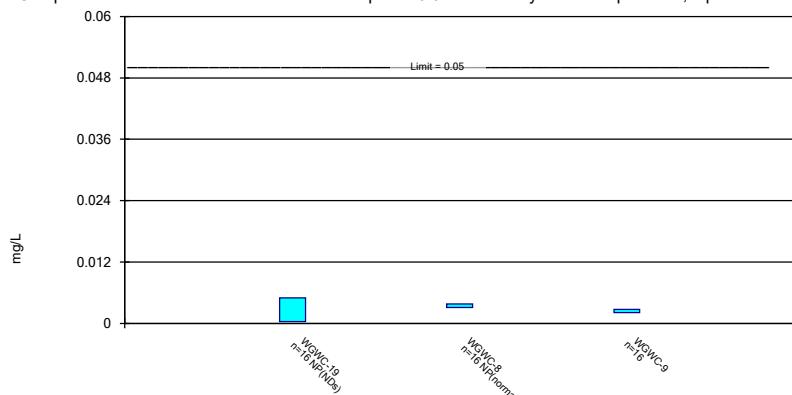


Constituent: Selenium Analysis Run 7/22/2020 1:49 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

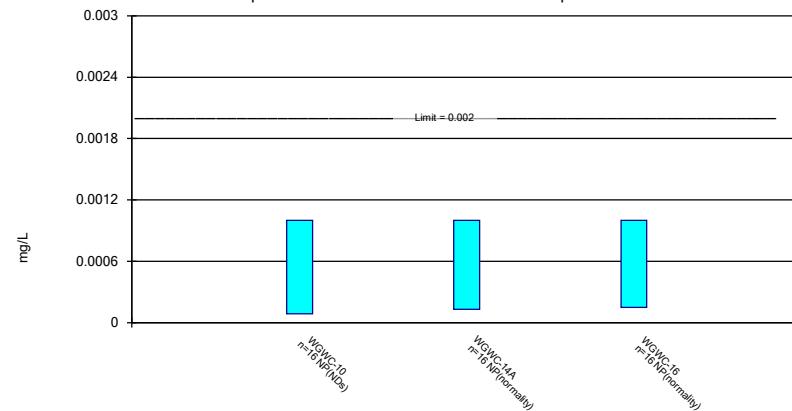


Constituent: Selenium Analysis Run 7/22/2020 1:49 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 7/22/2020 1:49 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

FIGURE I.

## Confidence Interval Summary Table - Significant Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method	
Lithium (mg/L)	WGWC-19	0.056	0.045		0.04	Yes	16	0	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

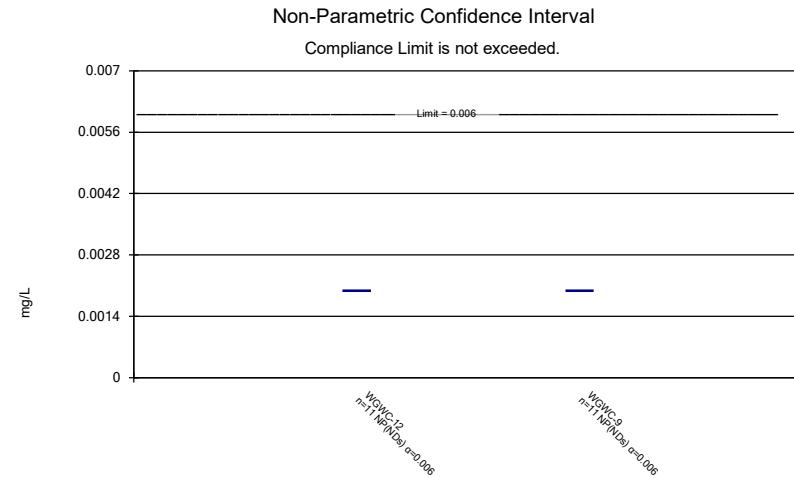
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	WGWC-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.0005	0.01	No	16	75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	16	87.5	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	16	43.75	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0019	0.00095	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.002399	0.00153	0.01	No	16	0	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001383	0.0007201	0.01	No	16	37.5	No	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0375	0.03062	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-12	0.02034	0.01523	2	No	16	0	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05852	0.04661	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.05072	0.03115	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02237	0.01933	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No	16	0	No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01846	0.01315	2	No	16	0	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No	16	18.75	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.00098	2	No	16	25	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.005	0.0007	2	No	16	25	No	0.01	NP (Cohens/xfrm)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No	16	75	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	16	93.75	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002025	0.001431	0.004	No	16	0	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No	16	56.25	No	0.01	NP (normality)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No	16	93.75	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.00082	0.000362	0.005	No	16	18.75	No	0.01	NP (Cohens/xfrm)
Chromium (mg/L)	WGWC-10	0.002394	0.001593	0.1	No	16	18.75	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No	16	81.25	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No	16	93.75	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No	16	93.75	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001829	0.0008657	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00052	0.013	No	16	37.5	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001337	0.0005416	0.013	No	16	6.25	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No	16	75	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01161	0.006248	0.013	No	16	0	No	0.01	Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	16	0	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.00186	0.0008579	0.013	No	16	6.25	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0028	0.0011	0.013	No	16	56.25	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	16	93.75	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4506	0.1287	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.5856	0.1074	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.612	0.1183	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7925	0.4593	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8713	0.4652	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6722	0.249	10.4	No	16	6.25	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.141	0.9315	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5548	0.04796	10.4	No	16	6.25	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.441	0.1309	10.4	No	15	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.913	1.173	10.4	No	16	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3833	0.1276	10.4	No	16	6.25	No	0.01	Param.
Fluoride (mg/L)	WGWC-10	0.1841	0.1322	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.047	4	No	17	70.59	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-12	0.11	0.089	4	No	17	23.53	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	WGWC-13	0.3081	0.2371	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.048	4	No	17	82.35	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.8825	0.7903	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084	4	No	17	11.76	No	0.01	NP (normality)
Fluoride (mg/L)	WGWC-17	0.148	0.09745	4	No	17	5.882	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.3845	0.3343	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3781	0.2142	4	No	17	0	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00023	0.015	No	14	71.43	No	0.01	NP (normality)

# Confidence Interval Summary Table - All Results

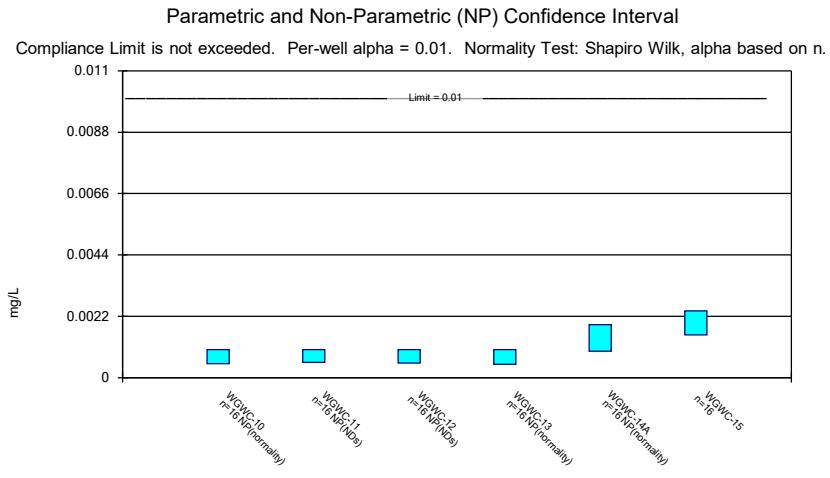
Page 2

Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

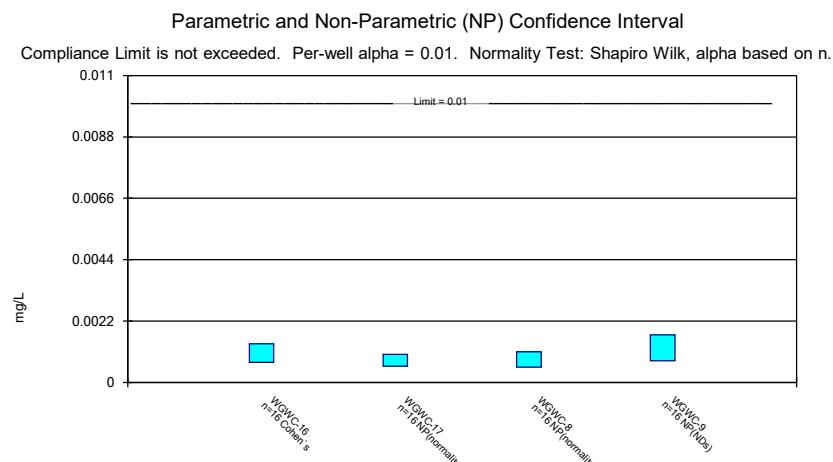
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.015	No	14	50	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00017	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	14	92.86	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.015	No	14	85.71	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	14	92.86	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01678	0.008384	0.04	No	16	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No	16	81.25	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007805	0.005802	0.04	No	16	6.25	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0025	0.04	No	16	75	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0018	0.04	No	16	62.5	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.006833	0.005229	0.04	No	16	12.5	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01134	0.00728	0.04	No	16	6.25	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005758	0.00464	0.04	No	16	6.25	ln(x)	0.01	Param.
<b>Lithium (mg/L)</b>	<b>WGWC-19</b>	<b>0.056</b>	<b>0.045</b>	<b>0.04</b>	<b>Yes</b>	<b>16</b>	<b>0</b>	<b>No</b>	<b>0.01</b>	<b>NP (normality)</b>
Lithium (mg/L)	WGWC-8	0.01786	0.01266	0.04	No	15	0	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-9	0.03929	0.03253	0.04	No	16	0	No	0.01	Param.
Mercury (mg/L)	WGWC-10	0.0002	0.000085	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-11	0.0002	0.00011	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-12	0.0002	0.00011	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-13	0.0002	0.000083	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-14A	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-15	0.0002	0.000086	0.002	No	14	71.43	No	0.01	NP (normality)
Mercury (mg/L)	WGWC-16	0.0002	0.00019	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-17	0.0002	0.000074	0.002	No	14	92.86	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-19	0.0002	0.00012	0.002	No	14	85.71	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-8	0.0002	0.00013	0.002	No	14	78.57	No	0.01	NP (NDs)
Mercury (mg/L)	WGWC-9	0.0002	0.00013	0.002	No	14	92.86	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No	16	87.5	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0011	0.1	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.1	No	16	68.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0018	0.1	No	16	12.5	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No	16	93.75	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.00764	0.00364	0.1	No	16	0	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.006345	0.002894	0.1	No	16	0	No	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No	16	43.75	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.007015	0.00392	0.1	No	16	0	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01218	0.00699	0.05	No	16	0	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	16	93.75	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.0038	0.0031	0.05	No	16	0	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-9	0.002725	0.002073	0.05	No	16	0	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	16	93.75	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	16	43.75	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	16	25	No	0.01	NP (normality)



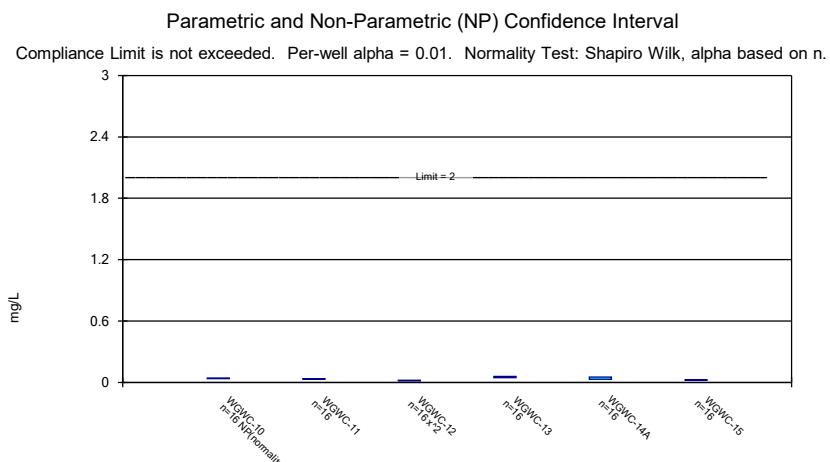
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Plant Wansley Client: Southern Company Data: Wansley AP



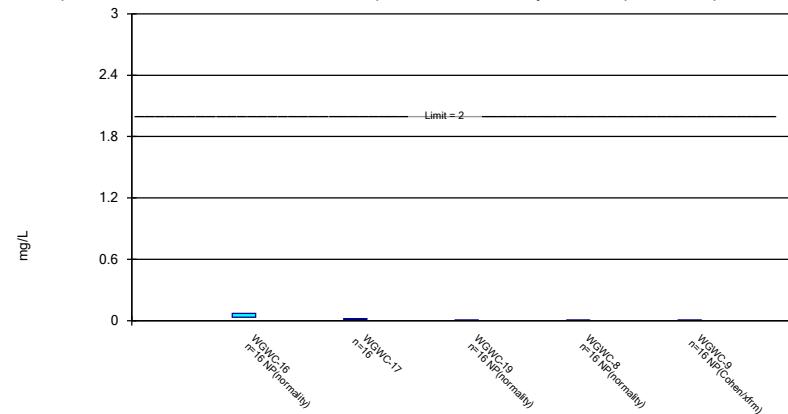
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Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Barium Analysis Run 7/22/2020 1:38 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

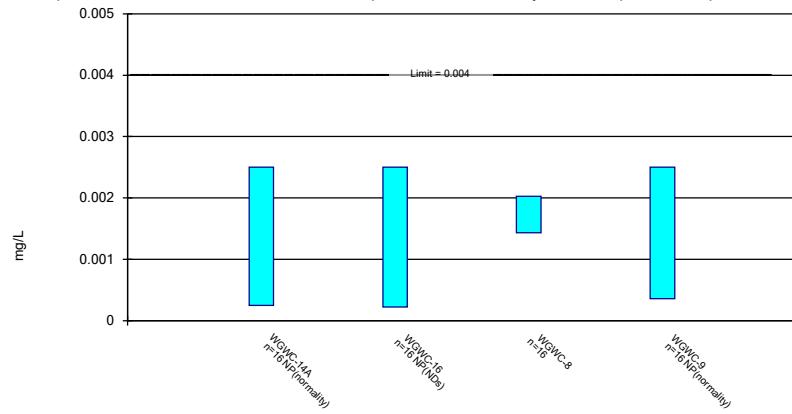


Constituent: Barium Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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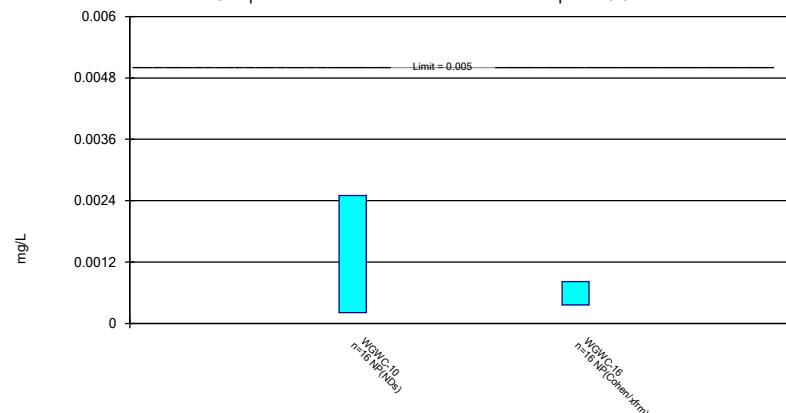


Constituent: Beryllium Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

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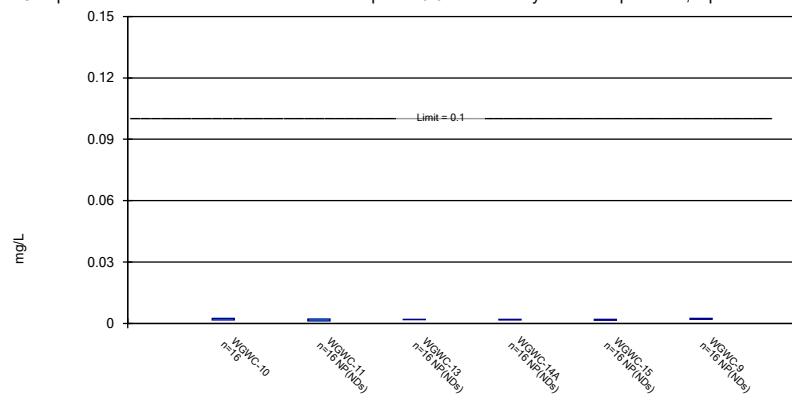


Constituent: Cadmium Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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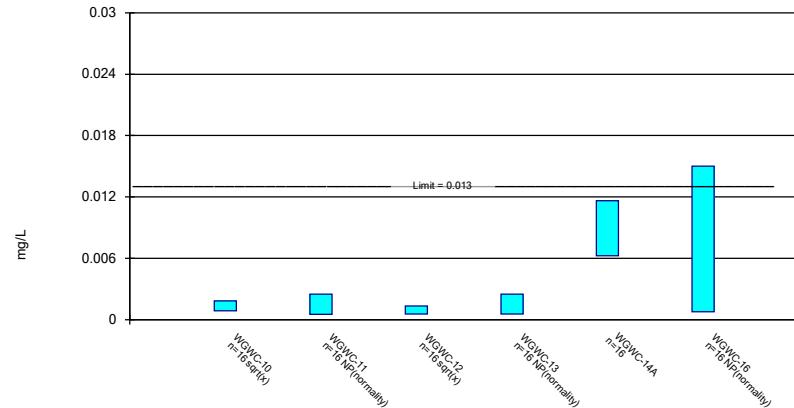


Constituent: Chromium Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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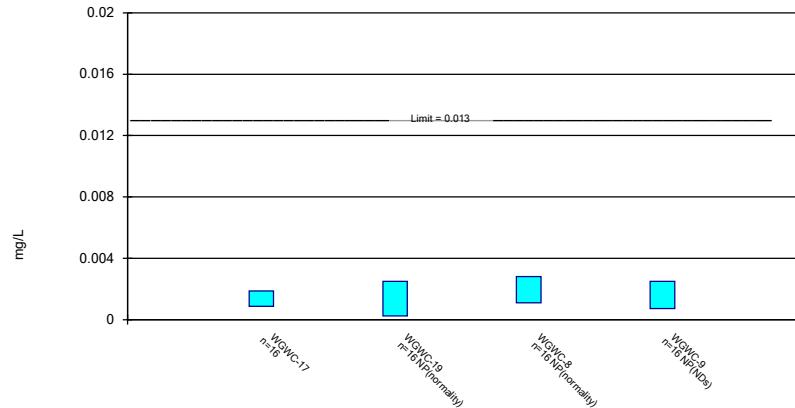


Constituent: Cobalt Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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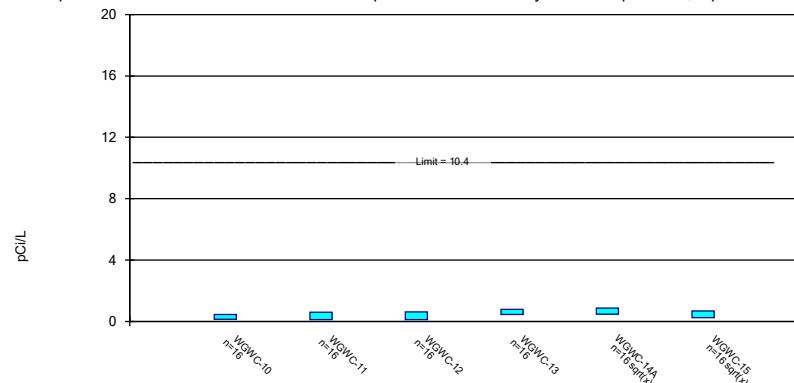


Constituent: Cobalt Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric Confidence Interval

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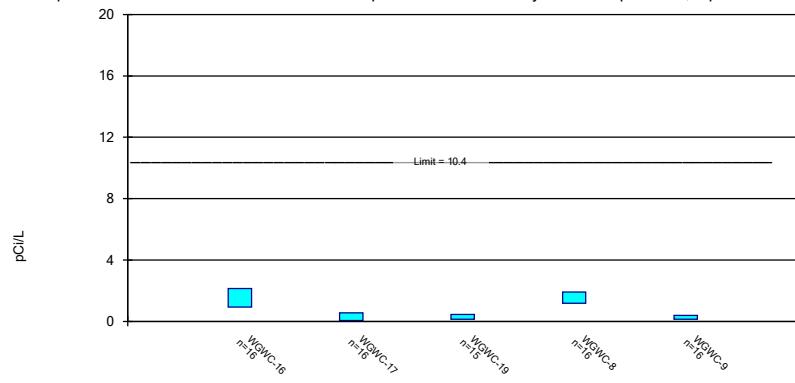


Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric Confidence Interval

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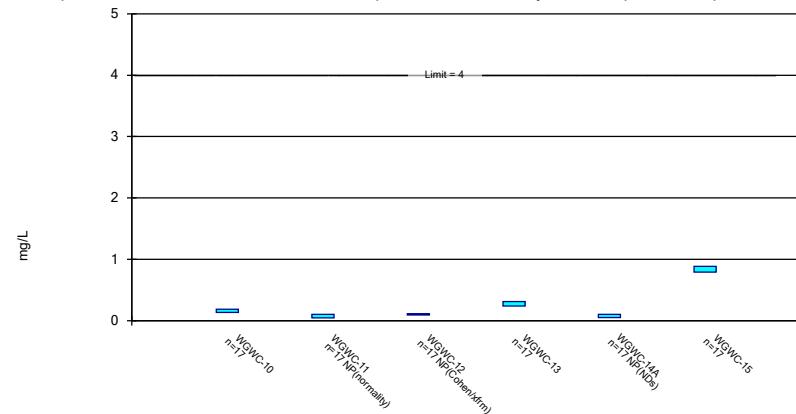


Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 1:38 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

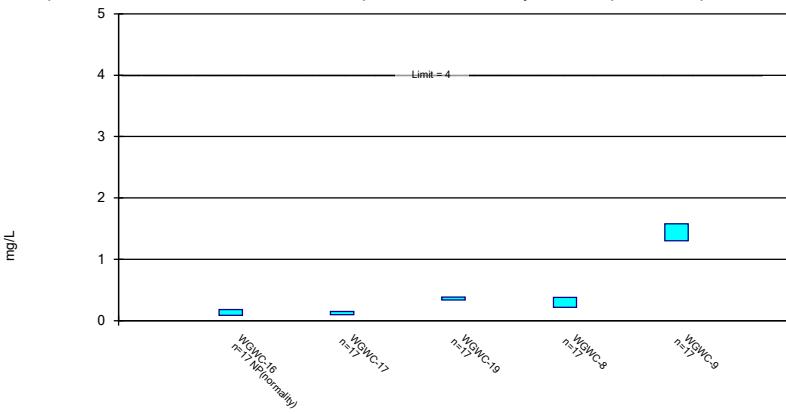
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Constituent: Fluoride Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

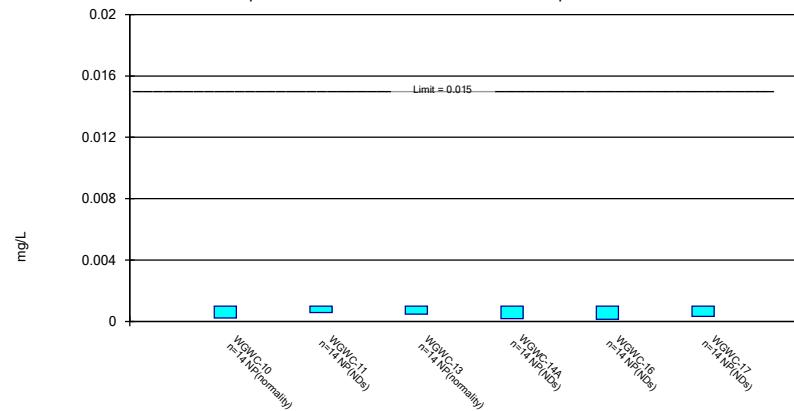
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Constituent: Fluoride Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

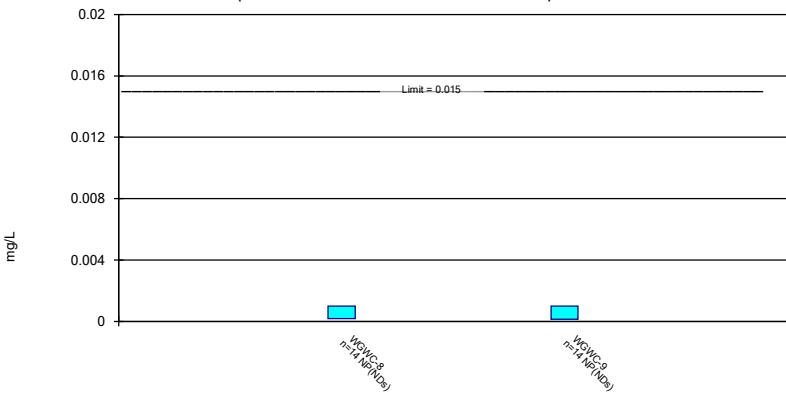
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Constituent: Lead Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

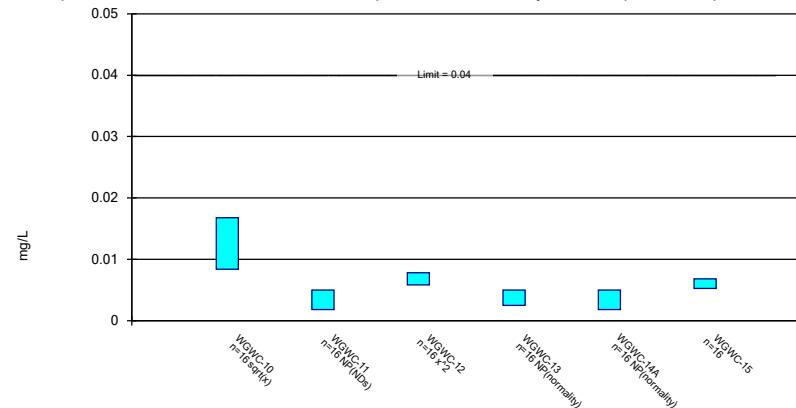
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Constituent: Lead Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

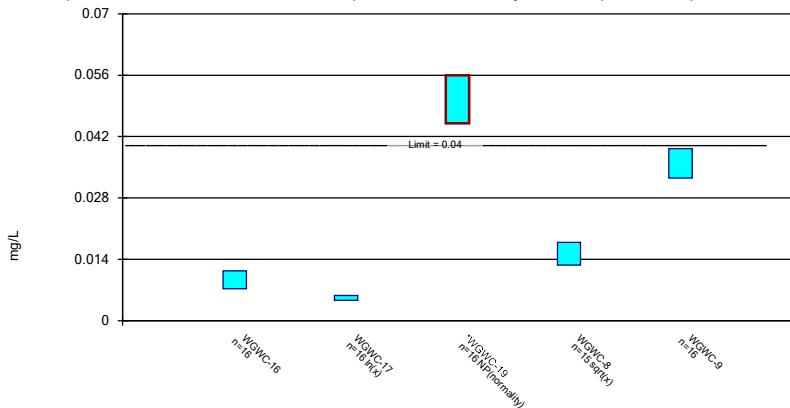
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Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

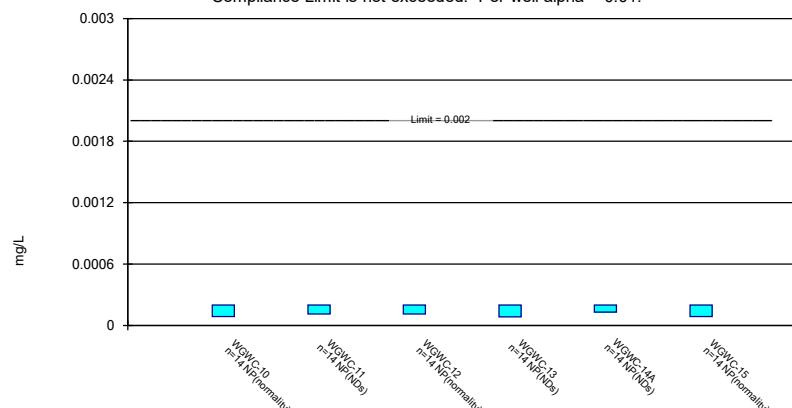
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Constituent: Lithium Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

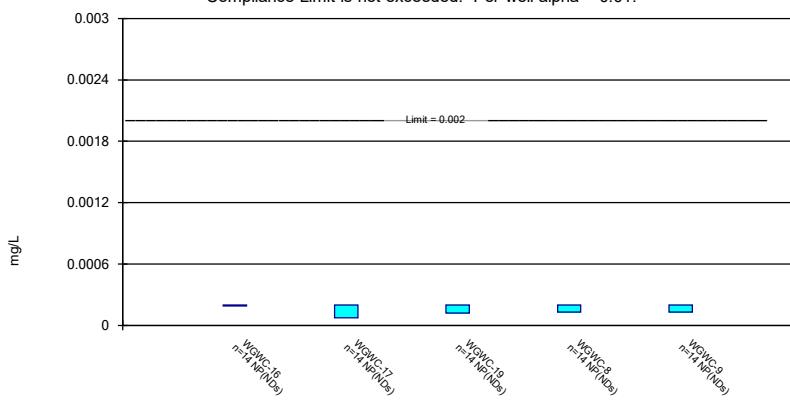
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Constituent: Mercury Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

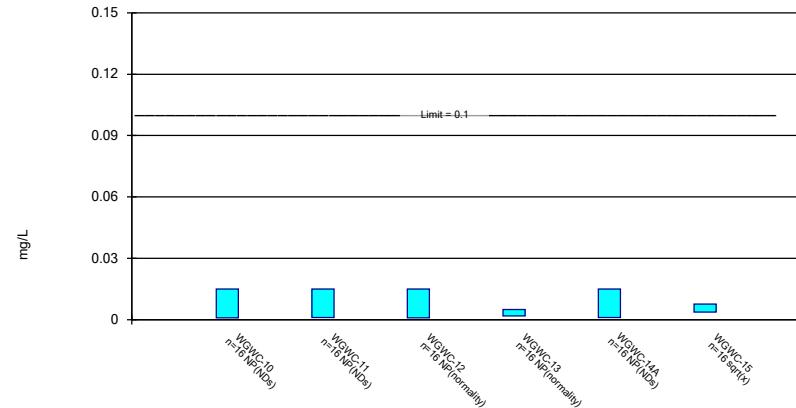
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Mercury Analysis Run 7/22/2020 1:39 PM View: AIV  
Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

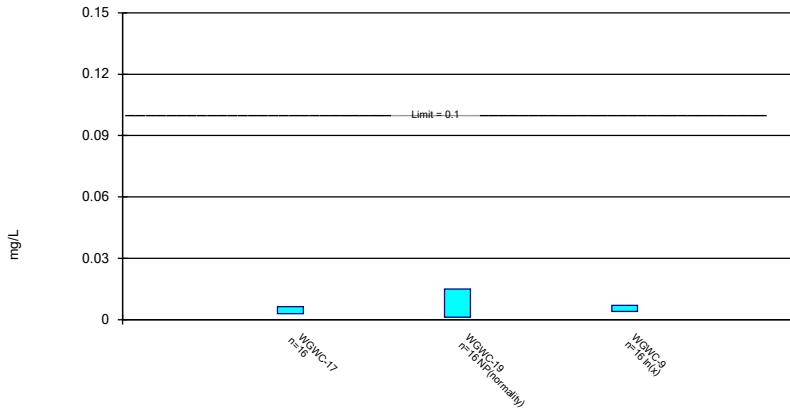


Constituent: Molybdenum Analysis Run 7/22/2020 1:39 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### 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.

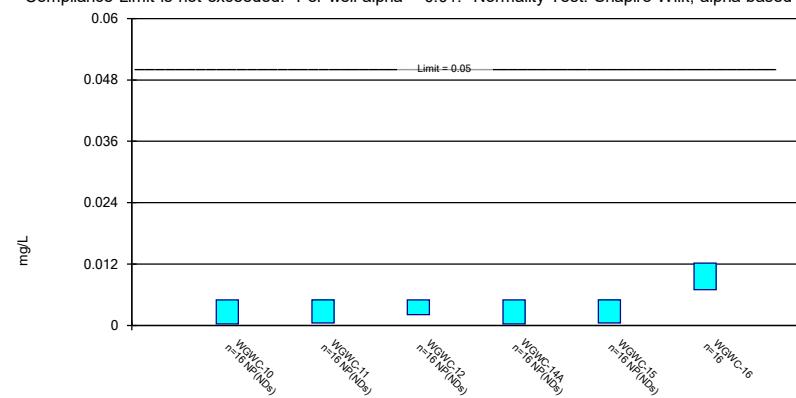


Constituent: Molybdenum Analysis Run 7/22/2020 1:39 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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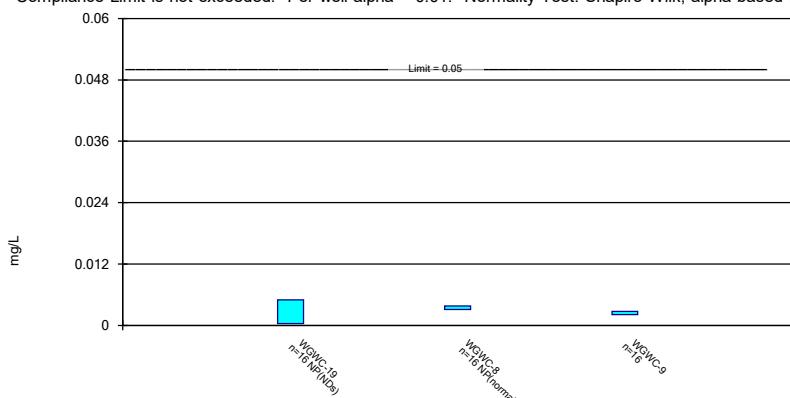


Constituent: Selenium Analysis Run 7/22/2020 1:39 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Parametric and Non-Parametric (NP) Confidence Interval

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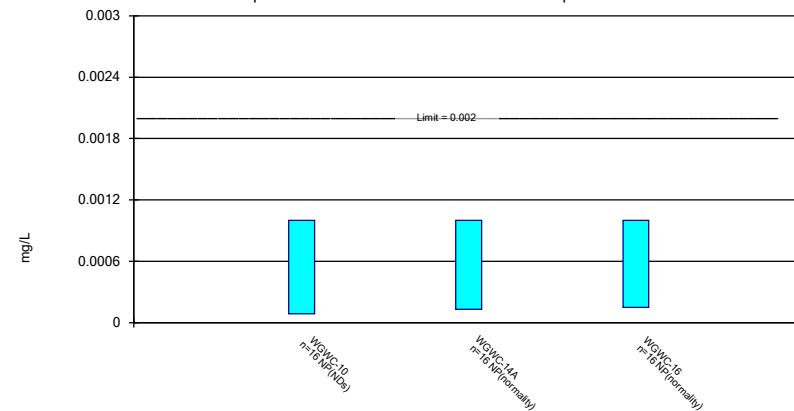


Constituent: Selenium Analysis Run 7/22/2020 1:39 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 7/22/2020 1:39 PM View: AIV

Plant Wansley Client: Southern Company Data: Wansley AP