

Georgia Power Company

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2020 ANNUAL GROUNDWATER MONITORING & CORRECTIVE ACTION REPORT

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

Prepared by



engineers | scientists | innovators

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CERTIFICATION STATEMENT

This 2020 Annual 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], specifically § 257.90(e), 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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<u>January 29, 2021</u>

Date

EXECUTIVE SUMMARY

This summary of the 2020 Annual Groundwater Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program through December 2020 at Georgia Power Company's (Georgia Power's) Plant Wansley Ash Pond 1 (AP-1) (the Site). This summary was prepared by Geosyntec Consultants (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6¹ of the U.S. Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule (40 Code of Federal Regulations [CFR] 257 Subpart D).

Plant Wansley is located 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. 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 Figure 1. Plant Wansley and the Site



bottom ash in 1976. As of April 2019, all process-related flows from the plant to AP-1 have ceased.

Groundwater at the Site is monitored using a monitoring system comprised of 8 upgradient and 11 downgradient wells installed in 2014, 2015, and 2017 that meet federal and state monitoring requirements. Routine sampling and reporting began after the background groundwater conditions were established between May 2016 to September 2017. Based on groundwater conditions at the Site, an assessment monitoring program was established in January 2018. During the 2020 annual reporting period, the Site remained in assessment monitoring.

During the 2020 reporting period, Atlantic Coast Consulting, Inc. (ACC) conducted three groundwater sampling events in February, March, and September. Groundwater samples were submitted to Eurofins TestAmerica, Inc. for analysis. Per the CCR rule, groundwater results for March and September 2020 data were evaluated in accordance

¹ 80 FR 21468, Apr. 17, 2015, as amended at 81 FR 51807, Aug. 5, 2016; 83 FR 36452, July 30, 2018; 85 FR 53561, Aug. 28, 2020

with the certified statistical methods. That evaluation showed statistically significant values of Appendix III² and Appendix IV³ parameters in wells provided in the table below.

Appendix III Parameter	March 2020	September 2020
Boron	WGWC-8, WGWC-9, WGWC-16	WGWC-8, WGWC-9, WGWC-16
Calcium	WGWC-8, WGWC-16	WGWC-8
Chloride	WGWC-8, WGWC-16	WGWC-8, WGWC-16
Fluoride	WGWC-9, WGWC-15, WGWC-19	WGWC-9, WGWC-15
рН	WGWC-16	WGWC-16
Sulfate	WGWC-8, WGWC-9, WGWC-16	WGWC-8, WGWC-9, WGWC-16
Total Dissolved Solids	WGWC-8, WGWC-9, WGWC-15, WGWC-16	WGWC-8, WGWC-16

Appendix IV ⁴ Parameter	March 2020	September 2020
Lithium	Federal and State: WGWC-19	Federal and State: WGWC-19
	State only: WGWC-8, WGWC-9	State only: WGWC-8, WGWC-9

² Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

³ Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

⁴ A state statistically significant level (SSL) related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, or the calculated background interwell prediction limit. A federal SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

An Alternate Source Demonstration (ASD) that presents multiple lines of evidence that the lithium groundwater concentrations detected at AP-1 are not associated with a release from AP-1 but are instead attributed to a natural source of lithium in rock formations at the Site was submitted in January 2019 (ACC, 2019). An ASD Addendum presenting supplemental data which provide additional lines of evidence that lithium groundwater concentrations are associated with naturally occurring lithium within in rock formations at the Site was submitted in November 2020 (Geosyntec, 2020d). The ASD Addendum is provided in **Appendix E**.

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program from January through December 2020, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to the website and provided to EPD semiannually.

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	Plant Wansley Ash Pond 1 (AP-1), Georgia Power Company

LIST OF ACRONYMS

AP ash pond

ASD Alternate Source Demonstration

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

GSC Groundwater Stats Consulting
GWPS Groundwater Protection Standard
HAR Hydrogeologic Assessment Report

K_d Distribution Coefficient

K_h Horizontal Hydraulic Conductivity
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

SEP sequential extraction procedure SSI statistically significant increase SSL statistically significant level

s.u. standard unit

TDS total dissolved solids

TOC Top of Casing

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 has prepared this 2020 Annual Groundwater Monitoring & Corrective Action Report to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Wansley (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 during the 2020 calendar year.

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 semiannual groundwater report documenting activities from January through August 2020 was prepared and submitted to GA EPD in August 2020 (Geosyntec, 2020a). A CCR permit application to comply with GA 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 southeast 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; Geosyntec, 2019) submitted to GA EPD as supporting documents for the closure permit application (Geosyntec, 2018).

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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 factures 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

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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 and 2017, 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. The piezometer network was expanded in 2020 to include PZ-22, PZ-23S, PZ-23D, PZ-24, PZ-25S, PZ-26S, PZ-26D, PZ-27S, PZ-27D, PZ-28, PZ-29S, and PZ-29D. Two groundwater characterization wells (WAMW-1 and WAMW-2) were installed in 2018.

The locations of the compliance monitoring wells, characterization wells, and piezometers are shown on **Figure 2**; well and piezometer 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 December 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 this report's applicable tables and figures. A memorandum was prepared to update and modify well construction details based on the updated survey data and included a copy of the well survey data certified by a Georgia-licensed surveyor, and updated boring and well construction logs for the entire AP-1 well network. The September 2020 Well Installation Addendum was submitted to GA EPD in September 2020 (Geosyntec, 2020c). A copy of the June 2020 certified well survey data is included in Appendix A.

During the reporting period, Georgia Power installed twelve piezometers (PZ-22, PZ-23S, PZ-23D, PZ-24, PZ-25S, PZ-26D, PZ-26S, PZ-27D, PZ-27S, PZ-28, PZ-29S, and PZ-29D) to provide additional data to characterize groundwater flow conditions at AP-1. The piezometers were installed between September and November 2020 per the Piezometer Installation and Field Testing Workplan submitted to GA EPD in September 2020 (Geosyntec, 2020b). The piezometer installation report that includes detailed boring and well construction logs was submitted to GA EPD under separate cover in January 2021 (Geosyntec, 2021), and is provided in **Appendix B**. Data collection from these piezometers is ongoing and recommendations to incorporate any new piezometers into the groundwater monitoring network will be documented in future semiannual reports.

The well and piezometer networks are inspected during each groundwater monitoring event using GA EPD-based inspection criteria. For this reporting period, inspections were conducted in February, March, and September 2020. Any issues identified with the wells (e.g., clogged weep holes within the outer protective casing, faded well

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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 C**.

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.

During the reporting period discussed herein, compliance monitoring wells at AP-1 shown on **Figure 2** were sampled in February, March⁵, and September 2020. Samples collected in February 2020 were analyzed for Appendix IV constituents. Samples collected in March and September 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 reporting period are 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.

⁵ 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, March, and September 2020 sampling event, 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, March, and September 2020 events are presented in **Table 3**. The June 2020 survey data was used to calculate the groundwater elevations for the February, March, and September 2020 events.

The groundwater elevation data were used to prepare potentiometric surface maps for the February, March, and September 2020 events, which are presented on **Figures 3**, **4**, and **5**, 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, March, and September 2020 events. The supporting calculations are presented in Table 4. The general trajectory of the flow paths used in the calculations and associated potentiometric contour lines are shown on Figures 3, 4, and 5. The groundwater flow patterns observed during this reporting period are consistent with historical observations. Groundwater flow across the Site is generally inward towards AP-1 with a slight component of flow to the southeast from AP-1. As presented in Table 4, the average hydraulic gradients along the groundwater flow path lines associated with AP-1 are 0.082 feet per foot (ft/ft) (PZ-1 to WGWC-17) and 0.092 ft/ft (PZ-10 to WGWC-19).

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.

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



where:

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

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

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

 n_e = Effective porosity

The average hydraulic conductivity for AP-1 of 2.4 x 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; 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 three 2020 events, the average calculated flow velocity for 2020 was approximately 0.22 (PZ-1 to WGWC-17) and 0.25 ft/day (PZ-10 to WGWC-19), 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 \pm 0.1 Standard Units (s.u.).
- Conductivity $\pm 10\%$.
- $\pm 10\%$ 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 and equipment calibration forms generated during the 2020 assessment monitoring events are provided in **Appendix D**.

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 D**.

Samples were analyzed for Appendix IV constituents during the February 2020 event. Samples collected in March and September 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, March, and September 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 D**.

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,

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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 data are considered usable for meeting project objectives, and the results are considered valid. The associated data validation report is provided in **Appendix D** 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.

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 2020 assessment monitoring events. The analyses were performed by Groundwater Stats Consulting (GSC); the resulting reports (GSC, 2020, 2021) are provided in **Appendix E**.

4.1 Statistical Methods

Analytical data from the 2020 assessment monitoring events were 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 packages provided in **Appendix E** 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

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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 E**.

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.

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(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 <u>Statistical Analyses Results</u>

Based on review of the Appendix III statistical analysis presented in Figure E of **Appendix E**, Appendix III constituents have not returned to background levels and assessment monitoring should continue. Based on the statistical analyses of Appendix IV constituents as described in Section 4.1.2, during both 2020 assessment monitoring events 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 acknowledging the March 2020 SSLs was placed in the Operating Record on August 7, 2020, pursuant to §257.95(g). The notification for September 2021 SSLs was placed in the Operating Record on January 29, 2021.

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 (ACC, 2019b), which was included in the 2018 Annual Groundwater Monitoring and Corrective Action Report (ACC, 2019a). The ASD presented evidence that the source of lithium in groundwater was naturally-derived from the subsurface rock formations and did not originate from the unit.

An ASD Addendum was submitted to GA EPD under separate cover in November 2020 (Geosyntec, 2020d), and is provided in **Appendix F**. The ASD Addendum presents supplemental data collected since submittal of the 2019 ASD which provide additional lines of evidence that the lithium SSLs identified at AP-1 are associated with naturally occurring lithium within rock formations at the Site. To summarize, the ASD Addendum demonstrated that:

- Where detected (i.e., in wells WGWC-8 and WGWC-9), boron, a CCR indicator parameter, either does not show a correlation with lithium (WGWC-9), or it is negatively correlated (WGWC-8), suggesting different sources for boron and lithium. Groundwater samples from wells WGWC-10 and WGWC-19 are either non-detect for boron or have low-level estimated concentrations consistent with background conditions.
- The lack of boron detections and low concentrations of other CCR indicator parameters at WGWC-19, the well with the highest lithium detections in groundwater, further indicates that lithium in groundwater does not originate from a release of AP-1.
- Laboratory analyses of rock core samples collected from locations with lithium SSLs and from locations in proximity to locations with lithium SSLs indicate substantial total concentrations of naturally occurring lithium in the rock, with lithium concentrations ranging from 17 mg/kg (WGWC-8 and PB-3) to 130 mg/kg (PB-7).
- Laboratory analyses using sequential extraction procedures (SEPs) for rock core samples collected from boreholes corresponding to or in vicinity of wells

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WGWC-8, WGWC-9, WGWC-10, and WGWC-19 indicate lithium in rock cores is associated with hydroxide-phases of iron, manganese and/or aluminum, as well as more recalcitrant fractions that will liberate lithium through natural weathering. This supports a natural occurrence of lithium in the mineral fraction that can be released to groundwater through mineral weathering.

Using a literature-derived distribution coefficient (K_d) of 300 liters per kilogram (L/kg) to calculate predicted groundwater concentrations of lithium based on total lithium concentrations in rock indicates that observed groundwater concentrations, which are generally lower than predicted concentrations, can be explained by lithium originating from weathering of the natural formation.

Additional information will be provided to GA EPD in February 2021 to supplement the ASD Addendum, including a site-specific geologic map updated to reflect geologic data collected since submission of the 2019 ASD and an expanded geochemical discussion.



6.0 MONITORING PROGRAM STATUS

Based on the statistical analyses results, SSIs of Appendix III constituents were identified for the March and September 2020 groundwater data, thereby causing the unit to remain in the assessment monitoring program in accordance with § 257.94(e). The ASD and ASD Addendum 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. Pursuant to § 257.96(b), Georgia Power will continue to monitor the groundwater at AP-1 in accordance with the assessment monitoring program regulations of § 257.95

7.0 CONCLUSIONS & FUTURE ACTIONS

This 2020 Annual 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 and September 2020 groundwater monitoring data for AP-1 confirmed the continued presence of SSLs of lithium in select AP-1 compliance monitoring wells. The 2019 ASD and 2020 ASD Addendum present multiple lines of evidence that illustrate that lithium detections in groundwater are associated with naturally occurring lithium within rock formations at the Site and are not originating from AP-1. Additional information will be provided to GA EPD in February 2021 to supplement the 2020 ASD Addendum.

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 initial annual Appendix IV sampling event is scheduled to occur in February 2021, with the first semiannual assessment monitoring event tentatively planned for March 2021.

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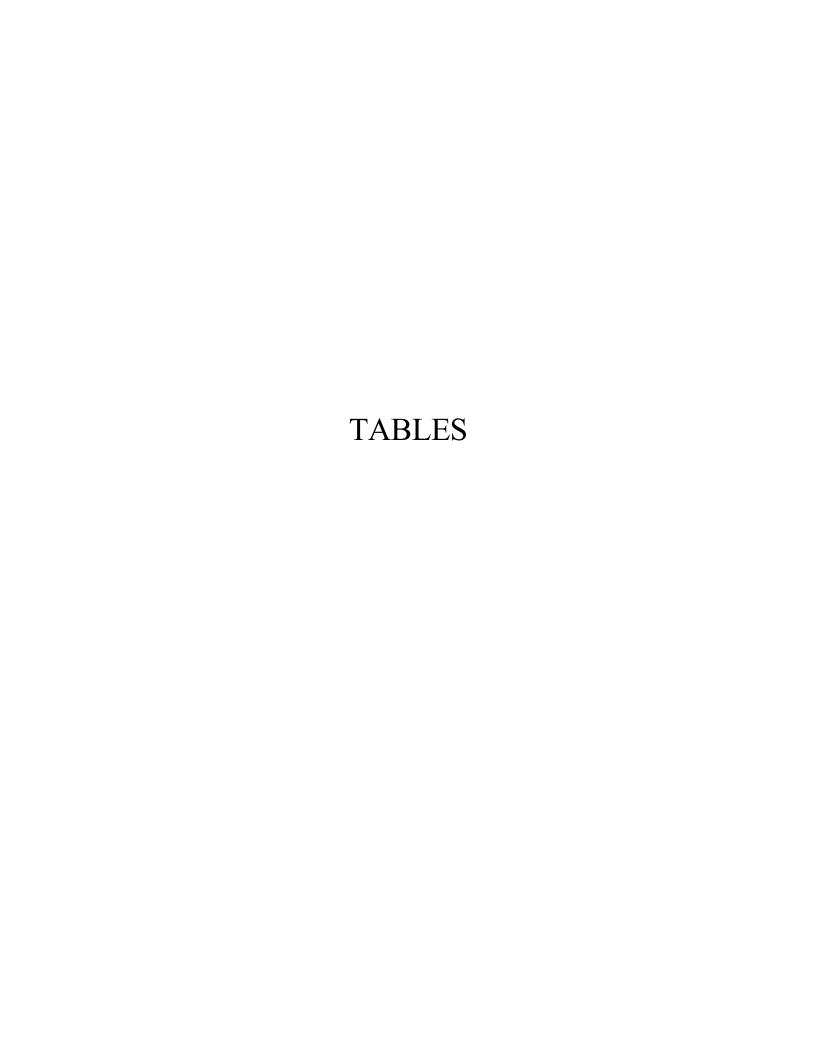


Table 1
Monitoring Well Network Summary
Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Well ID	Hydraulic Location/ Purpose Date Northing (1) Easting (1) Elevation (2) (ft NAVD88)			Top of Casing Elevation ⁽²⁾ (ft NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation (2) (ft NAVD88)	Bottom of Screen Elevation ⁽²⁾ (ft NAVD88)	Well Depth (ft BTOC) (3)	Screen Interval Length (ft)		
Compliance Monitoring We	ell										
WGWA-1	Upgradient	10/21/2015	1250656.10	2035580.71	780.37	782.93	119.56	663.37	653.37	130.56	10
WGWA-2	Upgradient	10/16/2015	1251556.40	2035590.11	755.77	758.23	92.46	665.77	655.77	102.46	10
WGWA-3	Upgradient	12/15/2014	1240848.21	2022350.10	826.63	828.91	8.68	820.23	810.23	19.08	10
WGWA-4	Upgradient	01/13/2015	1240879.58	2022339.66	831.33	834.34	53.91	780.43	760.43	74.31	20
WGWA-5	Upgradient	12/23/2014	1241997.94	2022368.85	899.28	902.15	13.27	888.88	878.88	23.66	10
WGWA-6	Upgradient	01/13/2015	1241932.02	2022360.58	894.62	897.13	74.51	822.62	792.62	104.91	30
WGWA-7	Upgradient	12/22/2014	1243338.63	2023843.81	894.49	897.33	29.64	867.69	857.69	40.04	10
WGWA-18	Upgradient	12/16/2014	1244592.56	2025580.71	875.47	878.02	29.55	848.47	838.47	39.95	10
WGWC-8	Downgradient	10/29/2015	1242929.40	2029644.58	777.70	780.08	49.38	730.70	720.70	59.38	10
WGWC-9	Downgradient	12/4/2014	1242801.12	2029115.75	809.33	812.03	51.10	760.93	750.93	61.50	10
WGWC-10	Downgradient	10/27/2015	1240971.96	2026725.61	809.61	812.38	138.77	673.61	663.61	148.77	10
WGWC-11	Downgradient	12/8/2014	1240860.18	2025773.39	821.44	823.96	40.82	783.14	773.14	51.22	10
WGWC-12	Downgradient	10/22/2015	1240827.68	2025755.99	820.57	823.04	66.47	756.57	746.57	76.47	10
WGWC-13	Downgradient	11/4/2015	1240610.93	2024585.91	807.32	809.78	75.46	734.32	714.32	95.46	20
WGWC-14A	Downgradient	01/31/2017	1240604.54	2024599.63	808.20	810.94	32.74	778.20	768.20	42.74	10
WGWC-15	Downgradient	11/11/2015	1240483.16	2023912.92	802.03	804.69	46.16	758.53	748.53	56.16	10
WGWC-16	Downgradient	11/11/2015	1240480.46	2023903.77	801.72	804.21	24.49	779.72	769.72	34.50	10
WGWC-17	Downgradient	11/06/2015	1240052.06	2022623.82	813.36	816.00	85.94	730.06	720.06	95.64	10
WGWC-19	Downgradient	10/28/2015	1241851.51	2028949.19	780.60	783.42	84.82	698.60	688.60	94.82	10
Piezometer									•		1
PZ-1	Piezometer	12/12/2014	1240249.86	2022319.93	853.91	856.72	38.91	817.81	807.81	49.31	10
PZ-4	Piezometer	12/22/2014	1242592.03	2023595.91	886.13	889.01	10.08	878.93	868.93	20.48	10
PZ-6	Piezometer	12/17/2014	1244382.89	2024661.39	912.30	915.15	16.55	898.60	888.60	26.95	10
PZ-8	Piezometer	12/15/2014	1245514.59	2026807.30	864.65	867.29	30.44	836.85	826.85	40.84	10
PZ-10	Piezometer	12/05/2014	1242058.41	2028554.29	829.26	832.02	21.56	810.46	800.46	31.96	10
PZ-11	Piezometer	12/05/2014	1240578.87	2026933.09	820.21	823.09	23.38	799.71	789.71	33.78	10
PZ-12	Piezometer	12/08/2014	1240837.96	2026731.01	816.17	818.74	39.37	779.37	769.37	49.77	10
PZ-15	Piezometer	12/10/2014	1240457.61	2025105.38	824.59	826.86	31.07	795.79	785.79	41.47	10
PZ-16	Piezometer	12/11/2014	1239419.77	2023662.22	798.05	800.70	15.65	785.05	775.05	26.15	10
PZ-17	Piezometer	12/11/2014	1239270.02	2023086.50	828.54	831.01	41.17	789.84	779.84	51.57	10
PZ-18	Piezometer	12/11/2014	1239569.52	2022299.20	812.10	814.51	26.31	788.20	778.20	36.71	10
PZ-20	Piezometer	01/31/2017	1243496.86	2030132.73	784.45	787.30	27.85	759.45	749.45	37.85	10
PZ-22	Piezometer	09/29/2020	1243350.76	2029769.43	804.88	807.95	32.77	775.18	765.18	43.17	10
PZ-23S	Piezometer	10/02/2020	1242139.33	2028512.65	831.79	834.41	61.30	773.11	763.11	71.70	10
PZ-23D	Piezometer	10/02/2020	1242139.53	2028520.87	831.89	834.32	84.40	749.92	739.92	94.80	10
PZ-24	Piezometer	10/18/2020	1241695.25	2028116.05	807.00	810.37	33.45	776.92	766.92	43.85	10
PZ-25S	Piezometer	10/04/2020	1240769.79	2027414.58	820.50	823.80	43.40	780.40	770.40	53.80	10
PZ-26S	Piezometer	10/17/2020	1239916.68	2024139.82	802.22	804.80	30.37	774.43	764.43	40.77	10
PZ-26D	Piezometer	10/12/2020	1239919.45	2024146.35	802.31	804.93	69.70	735.23	725.23	80.10	10
PZ-27S	Piezometer	10/28/2020	1240184.18	2023616.69	805.98	808.98	29.47	779.51	769.51	39.87	10
PZ-27D	Piezometer	10/15/2020	1240190.93	2023620.36	806.22	809.28	71.32	737.96	727.96	81.72	10
PZ-28	Piezometer	10/29/2020	1240066.02	2022624.73	813.57	816.18	62.50	753.68	743.68	72.90	10
PZ-29S	Piezometer	10/31/2020	1244317.13	2028839.68	805.80	805.30	35.02	770.28	760.28	45.42	10
PZ-29D	Piezometer	11/01/2020	1244304.90	2028853.29	805.77	805.24	116.55	688.69	678.69	126.95	10
Characterization Monitorin					332.77	300.2.		300.07	5,5.07		
WAMW-1	Characterization	09/16/2018	1241843.66	2028944.63	780.05	782.66	114.26	668.40	658.40	124.55	10
WAMW-2	Characterization	09/14/2018	1241547.56	2028806.27	768.39	770.82	76.63	694.19	684.19	86.91	10

ft = feet

ft BTOC = feet below top of casing

⁽¹⁾ Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Surevy data obtained June 16, 2020.

⁽²⁾ Elevations referenced to the North Amervican Vertical Datum of 1988 (NAVD88). Survey data obtained in June 16, 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	Sept 21 - 24, 2020	Status of Monitoring Well
	Purpose of Sampling Event:	Appendix IV Annual	Assessment	Assessment	
Compliance Monitoring Well					
WGWA-1	Upgradient	S03	A05	A06	Assessment
WGWA-2	Upgradient	S03	A05	A06	Assessment
WGWA-3	Upgradient	S03	A05	A06	Assessment
WGWA-4	Upgradient	S03	A05	A06	Assessment
WGWA-5	Upgradient	S03	A05	A06	Assessment
WGWA-6	Upgradient	S03	A05	A06	Assessment
WGWA-7	Upgradient	S03	A05	A06	Assessment
WGWA-18	Upgradient	S03	A05	A06	Assessment
WGWC-8	Downgradient	S03	A05	A06	Assessment
WGWC-9	Downgradient	S03	A05	A06	Assessment
WGWC-10	Downgradient	S03	A05	A06	Assessment
WGWC-11	Downgradient	S03	A05	A06	Assessment
WGWC-12	Downgradient	S03	A05	A06	Assessment
WGWC-13	Downgradient	S03	A05	A06	Assessment
WGWC-14A	Downgradient	S03	A05	A06	Assessment
WGWC-15	Downgradient	S03	A05	A06	Assessment
WGWC-16	Downgradient	S03	A05	A06	Assessment
WGWC-17	Downgradient	S03	A05	A06	Assessment
WGWC-19	Downgradient	S03	A05	A06	Assessment

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

A## = Semiannual assessment monitoring event number since program initiation in January 2018.

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

Well ID	Top of Casing Elevation (1)	Februar	y 3, 2020	March 1	16, 2020	September 8, 2020		
weii 1D	(ft NADV88)	Depth to Water (ft BTOC)	Groundwater Elevations (ft NAVD88)	Depth to Water (ft BTOC)	Groundwater Elevations (ft NAVD88)	Depth to Water (ft BTOC)	Groundwater Elevations (ft NAVD88	
npliance Monitoring Well								
WGWA-1	782.93	23.35	759.58	19.49	763.44	27.86	755.07	
WGWA-2	758.23	8.29	749.94	7.88	750.35	11.72	746.51	
WGWA-3	828.91	2.64	826.27	2.04	826.87	4.43	824.48	
WGWA-4	834.34	3.47	830.87	1.18	833.16	7.12	827.22	
WGWA-5	902.15	11.17	890.98	7.04	895.11	17.89	884.26	
WGWA-6	897.13	13.05	884.08	7.95	889.18	17.81	879.32	
WGWA-7	897.33	22.55	874.78	15.29	882.04	28.16	869.17	
WGWA-18	878.02	18.05	859.97	10.25	867.77	21.24	856.78	
WGWC-8	780.08	2.51	777.57	1.95	778.13	6.29	773.79	
WGWC-9	812.03	18.20	793.83	16.31	795.72	20.59	791.44	
WGWC-10	812.38	14.95	797.43	11.00	801.38	16.70	795.68	
WGWC-11	823.96	17.60	806.36	12.20	811.76	24.82	799.14	
WGWC-12	823.04	17.31	805.73	12.14	810.90	24.49	798.55	
WGWC-13	809.78	16.81	792.97	14.48	795.30	23.33	786.45	
WGWC-14A	810.94	15.26	795.68	12.28	798.66	24.27	786.67	
WGWC-15	804.69	17.50	787.19	15.56	789.13	19.51	785.18	
WGWC-16	804.21	19.96	784.25	14.46	789.75	18.95	785.26	
WGWC-17	816.00	27.79	788.21	25.00	791.00	29.23	786.77	
WGWC-19	783.42	18.32	765.10	15.73	767.69	20.02	763.40	
ometer		l		l .		l l		
PZ-1	856.72	38.09	818.63	35.80	820.92	38.14	818.58	
PZ-4	889.01	14.46	874.55	14.90	874.11	19.99	869.02	
PZ-6	915.15	17.18	897.97	16.23	898.92	24.65	890.50	
PZ-8	867.29	30.78	836.51	28.28	839.01	29.49	837.80	
PZ-10	832.02	24.67	807.35	23.33	808.69	28.93	803.09	
PZ-11	823.09	18.88	804.21	16.60	806.49	23.09	800.00	
PZ-12	818.74	24.55	794.19	21.08	797.66	26.98	791.76	
PZ-15	826.86	25.8	801.06	18.07	808.79	26.83	800.03	
PZ-16	800.70	10.37	790.33	9.60	791.10	12.83	787.87	
PZ-17	831.01	35.16	795.85	32.54	798.47	36.65	794.36	
PZ-18	814.51	13.31	801.20	10.76	803.75	18.87	795.64	
PZ-20	787.30	11.55	775.75	8.07	779.23	16.78	770.52	
racterization Monitoring V			,,,,,,,		, , , ,		, , , , , , ,	
WAMW-1	782.66	19.24	763.42	16.96	765.70	20.41	762.25	
WAMW-2	770.82	12.31	758.51	10.61	760.21	13.76	757.06	

ft = feet

ft BTOC = feet below top of casing

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

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

	February 3, 2020				March 16, 2020				September 8, 2020								
Flow Path Direction	K _h (ft/d)	n	h ₁ (ft)	h ₂ (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d) ⁽¹⁾	h ₁ (ft)	h ₂ (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d) ⁽¹⁾	h ₁ (ft)	h ₂ (ft)	Δl (ft)	Δh/Δl (ft/ft)	V (ft/d) ⁽¹⁾
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	818.58	786.77	373	0.085	0.23
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	803.09	763.40	446	0.089	0.24

	Averaged for 2020					
Flow Path Direction	K _h (ft/d)	n	Δh/Δl (ft/ft)	V (ft/d) ⁽¹⁾	V (ft/d) ⁽²⁾	
PZ-1 to WGWC-17	0.67	0.25	0.082	0.22	0.23	
PZ-10 to WGWC-19	0.67	0.25	0.092	0.25	0.23	

ft = feet

ft/d = feet per day

ft/ft = feet per foot

K_h = horizontal hydraulic conductivity

n = effective porosity

h₁, h₂ = groundwater elevation at identified wells

 $\Delta h/\Delta l = hydraulic gradient$

 Δh = change in groundwater elevation between identified wells

 Δl = distance between identified wells

V = groundwater flow velocity

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

(2) Average groundwater flow velocity for unit.

l of l January 2021

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

	Well ID:	WGWA-1	WGWA-1	WGWA-1	WGWA-2	WGWA-2	WGWA-2	WGWA-3	WGWA-3	WGWA-3	WGWA-4	WGWA-4	WGWA-4
	Sample Date:	2/3/2020	3/16/2020	9/22/2020	2/3/2020	3/16/2020	9/21/2020	2/4/2020	3/17/2020	9/21/2020	2/4/2020	3/17/2020	9/21/2020
	Parameter (1,2,4,5)												
	Boron		<0.039	<0.039		0.048 J	<0.039		<0.039	< 0.039		<0.039	<0.039
I ≡	Calcium*		1.1	1.2		10	13		1.7	1.8		15	16
<u>×</u>	Chloride*		4.3	4.0		2.7	2.5		1.8	1.5		1.4	1.2
endix	Fluoride	0.032 J	0.042 J	<0.026	0.061 J	0.052 J	0.037 J	0.031 J	0.040 J	<0.026	0.13	0.11	0.091 J
Арр	рН ⁽³⁾	5.40	5.29	5.09	6.09	6.01	6.05	5.66	5.61	5.35	7.29	6.83	6.81
`	Sulfate*		0.42 J	<0.38		1.3	1.1		1.2	0.77 J		12	7.7
	TDS*		23	24		90	100		20	22		100	92
	Antimony	<0.00038			<0.00038			<0.00038			<0.00038		
	Arsenic	<0.00031	0.00038 J	<0.00031	<0.00031	0.00043 J	<0.00031	<0.00031	<0.00031	<0.00031	0.00033 J	<0.00031	<0.00031
	Barium	0.053	0.046	0.048	0.045	0.026	0.024	0.019	0.013	0.015	0.0087 J	0.0059 J	0.0060 J
	Beryllium	<0.00018	0.00071 J	<0.00018	<0.00018	0.00076 J	<0.00018	<0.00018	0.00021 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	<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	<0.0015	<0.0015	<0.0015	<0.0015
<u>×</u>	Cobalt	0.00062	0.00092 J	0.00072 J	0.00068	0.00066 J	0.00054 J	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
end	Fluoride	0.032 J	0.042 J	<0.026	0.061 J	0.052 J	0.037 J	0.031 J	0.040 J	<0.026	0.13	0.11	0.091 J
Appendix	Lead	<0.00013	0.00021 J	<0.00013	0.00013 J	0.00018 J	<0.00013	0.00013 J	0.00019 J	<0.00013	0.00019 J	0.00016 J	<0.00013
`	Lithium⁺	<0.0034	0.0053	0.0036 J	0.0085	0.0083	0.0075	<0.0034	<0.0034	<0.0034	0.0055	0.0059	0.0050
	Mercury	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	< 0.00013	0.00016 J	<0.00010	<0.00013	0.00011 J	<0.00010	<0.00013
	Molybdenum	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	< 0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061
	Comb. Radium 226/228	0.283 U	0.394 U	0.729	0.0879 U	0.289 U	0.418 U	-0.107 U	-0.139 U	0.0688 U	1.49	0.964	1.07
	Selenium	<0.0015	<0.0015	<0.0015	<0.0015	0.0026 J	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Thallium	<0.00015	0.00036 J	<0.00015	0.00020 J	0.00030 J	<0.00015	<0.00015	<0.00015	<0.00015	<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 and September 2020 assessment monitoring events.
- (5) Appendix IV parameters with a "+" exhibited statistically significant levels (SSLs) over established Groundwater Protection Standards (GWPS) at WGWC-9, and WGWC-19 during
- during the March 2020 and Sptember 2020 assessment monitoring events.

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

	Well ID:	WGWA-5	WGWA-5	WGWA-5	WGWA-6	WGWA-6	WGWA-6	WGWA-7	WGWA-7	WGWA-7	WGWA-18	WGWA-18	WGWA-18
	Sample Date:	2/4/2020	3/17/2020	9/21/2020	2/4/2020	3/17/2020	9/22/2020	2/5/2020	3/17/2020	9/22/2020	2/5/2020	3/17/2020	9/22/2020
	Parameter (1,2,4,5)												
	Boron		<0.039	<0.039		<0.039	<0.039		<0.039	<0.039		<0.039	<0.039
≡	Calcium*		1.4	58		26	25		0.82	0.89		10	19
i X	Chloride*		1.6	1.5		1.7	1.4		2.2	1.8		2.3	2.1
endix	Fluoride	<0.026	<0.026	<0.026	0.13	0.037 J	0.068 J	0.026 J	0.044 J	<0.026	0.12	<0.026	0.10
Арр	рН ⁽³⁾	5.3	5.34	6.78	7.74	7.95	7.4	5.54	5.32	5.36	6.73	6.36	7.18
`	Sulfate*		4.0	1.5		12	8.0		0.86 J	0.38 J		8.5	9.0
	TDS*		18	190		120	130		19	15		81	96
	Antimony	<0.00038			<0.00038			<0.00038			<0.00038		
	Arsenic	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	0.00058 J	<0.00031	<0.00031
	Barium	0.022	0.017	0.032	0.013	0.0081 J	0.0079 J	0.012	0.012	0.013	0.020	0.013	0.015
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0.00041 J	<0.00018	<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	<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	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00082	0.00066 J	0.0065	<0.00013	0.00014 J	<0.00013	0.00021 J	0.00065 J	0.00015 J	0.0027	0.0017 J	0.00033 J
end	Fluoride	<0.026	<0.026	<0.026	0.13	0.037 J	0.068 J	0.026 J	0.044 J	<0.026	0.12	<0.026	0.10
Appendix	Lead	0.00024 J	<0.00013	<0.00013	<0.00013	0.00017 J	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
	Lithium ⁺	< 0.0034	<0.0034	<0.0034	0.0053	0.0055	0.0049 J	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034
	Mercury	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013
	Molybdenum	<0.00061	<0.00061	0.0025 J	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	0.00097 J
	Comb. Radium 226/228	0.198 U	0.207 U	0.954	8.30	8.88	7.65	-0.0263 U	0.258 U	0.0523 U	0.327 U	0.600 U	0.557 U
	Selenium	<0.0015	<0.0015	<0.0015	<0.0015	<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	<0.00015	<0.00015	0.00026 J	<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-8	WGWC-8	WGWC-8	WGWC-9	WGWC-9	WGWC-9	WGWC-10	WGWC-10	WGWC-10	WGWC-11	WGWC-11	WGWC-11
	Sample Date:	2/7/2020	3/19/2020	9/22/2020	2/5/2020	3/19/2020	9/23/2020	2/5/2020	3/18/2020	9/23/2020	2/5/2020	3/18/2020	9/24/2020
	Parameter (1,2,4,5)												
ï.	Boron		2.2	2.5		0.55	0.68		0.049 J	<0.039		<0.039	<0.039
	Calcium*		79	81		9.3	10		7.5	7.7		1.6	5.2
	Chloride*		98	100		2.1	2.4		1.5	1.3		3.2	1.0
end	Fluoride	0.25	0.057 J	0.14	1.3	1.0	0.82	0.14	0.052 J	0.090 J	0.045 J	<0.026	0.18
Арр	рН ⁽³⁾	5.38	6.43	5.17	6.54	6.6	5.8	6.42	6.40	6.14	5.89	5.89	5.5
`	Sulfate*		200	200		45	54		2.1	1.8		1.6	2.7
	TDS*		540	600		160	150		58	50		26	60
	Antimony	<0.00038			<0.00038			<0.00038			<0.00038		
	Arsenic	0.0011	0.00071 J	0.0011	<0.00031	<0.00031	<0.00031	0.00035 J	<0.00031	<0.00031	<0.00031	<0.00031	0.00051 J
	Barium	<0.0016	<0.0016	<0.0016	0.0022 J	0.0021 J	<0.0016	0.061	0.035	0.035	0.047	0.038	0.061
	Beryllium	0.0023	0.0028	0.0025	0.00040 J	0.00056 J	0.00034 J	<0.00018	<0.00018	<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	<0.00022	<0.00022	<0.00022	<0.00022
≥	Chromium	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.0022	<0.0015	0.0018 J	<0.0015	<0.0015	<0.0015
dix	Cobalt	0.0011	0.00092 J	0.00065 J	<0.00013	<0.00013	<0.00013	0.0013	0.0012 J	0.00062 J	0.00026 J	0.00069 J	<0.00013
L O	Fluoride	0.25	0.057 J	0.14	1.3	1.0	0.82	0.14	0.052 J	0.090 J	0.045 J	<0.026	0.18
Арре	Lead	<0.00013	0.00016 J	0.00013 J	<0.00013	<0.00013	<0.00013	0.00016 J	0.00021 J	0.00013 J	<0.00013	<0.00013	0.00037 J
`	Lithium⁺	0.014	0.015	0.013	0.034	0.039	0.033	0.0061	0.0071	0.0054	<0.0034	<0.0034	<0.0034
	Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013
	Molybdenum	<0.00061	<0.00061	<0.00061	0.0044 J	0.0042 J	0.0027 J	<0.00061	<0.00061	<0.00061	<0.00061	<0.00061	0.0017 J
	Comb. Radium 226/228	1.66	1.21	1.75	-0.137 U	0.230 U	0.0587 U	0.0961 U	0.461 U	0.442 U	0.163 U	0.866	1.20
	Selenium	0.0048 J	0.0037 J	0.0039 J	0.0033 J	0.0033 J	0.0029 J	<0.0015	<0.0015	<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	<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-12	WGWC-13	WGWC-13	WGWC-13	WGWC-14A	WGWC-14A	WGWC-14A	WGWC-15	WGWC-15	WGWC-15
	Sample Date:	2/5/2020	3/18/2020	9/23/2020	2/5/2020	3/19/2020	9/24/2020	2/5/2020	3/19/2020	9/24/2020	2/7/2020	3/18/2020	9/23/2020
	Parameter (1,2,4,5)												
	Boron		0.039 J	<0.039		0.053 J	<0.039		0.039 J	<0.039		0.071 J	<0.039
i ×	Calcium*		14	13		5.0	1.4		0.89	0.99		30	32
	Chloride*		3.2	2.8		1.3	1.6		1.9	3.1		1.7	1.5
endix	Fluoride	0.098 J	0.033 J	0.064 J	0.20	0.15	<0.026	0.040 J	<0.026	0.028 J	0.79	0.71	0.63
Арр	рН ⁽³⁾	6.76	6.93	6.42	6.44	6.56	6.29	5.52	5.49	5.16	7.66	7.73	7.35
`	Sulfate*		12	12		4.0	0.63 J		1.5	1.2		17	21
	TDS*		73	90		95	21		18	24		160	150
	Antimony	<0.00038			<0.00038			<0.00038			<0.00038		
	Arsenic	<0.00031	<0.00031	<0.00031	0.00048 J	0.00039 J	<0.00031	<0.00031	<0.00031	<0.00031	0.0010	0.00088 J	0.00061 J
	Barium	0.016	0.016	0.016	0.052	0.072	0.038	0.077	0.031	0.034	0.022	0.021	0.027
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0.00024 J	0.00025 J	0.00024 J	<0.00018	<0.00018	<0.00018
	Cadmium	<0.00022	<0.00022	<0.00022	<0.00022	<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	0.0017 J	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015
	Cobalt	0.00058	0.00071 J	0.00039 J	<0.00013	<0.00013	0.00032 J	0.0044	0.0039	0.0035	<0.00013	<0.00013	<0.00013
Appendix	Fluoride	0.098 J	0.033 J	0.064 J	0.20	0.15	<0.026	0.040 J	<0.026	0.028 J	0.79	0.71	0.63
γpp	Lead	<0.00013	<0.00013	<0.00013	0.00045 J	0.00060 J	<0.00013	<0.00013	0.00017 J	0.00018 J	<0.00013	<0.00013	<0.00013
`	Lithium⁺	0.0063	0.0081	0.0070	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	<0.0034	0.0068	0.0086	0.0071
	Mercury	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013
	Molybdenum	<0.00061	<0.00061	<0.00061	0.0012 J	0.0018 J	<0.00061	<0.00061	<0.00061	<0.00061	0.0024 J	0.0020 J	0.0031 J
	Comb. Radium 226/228	0.225 U	-0.0262 U	0.785	0.609	0.470	1.02	0.500	0.376 U	0.796	0.125 U	0.303 U	0.448 U
	Selenium	<0.0015	<0.0015	<0.0015	<0.0015	<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	<0.00015	<0.00015	0.00022 J	0.00017 J	<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-16	WGWC-16	WGWC-16	WGWC-17	WGWC-17	WGWC-17	WGWC-19	WGWC-19	WGWC-19
	Sample Date:	2/7/2020	3/18/2020	9/23/2020	2/7/2020	3/18/2020	9/23/2020	2/7/2020	5/4/2020	9/23/2020
	Parameter (1,2,4,5)									
	Boron		2.0	1.5		0.049 J	<0.039		<0.039	<0.039
■	Calcium*		66	43		6.3	5.9		15	13
= .≚	Chloride*		93	58		1.5	1.2		2.8	2.6
Appendix	Fluoride	0.072 J	0.084 J	0.049 J	0.079 J	<0.026	0.050 J	0.35	0.36	0.25
dd\	рН ⁽³⁾	5.17	5.08	5.05	6.34	6.30	5.89	7.08	7.11	6.59
"	Sulfate*		120	85		4.2	4.4		4.5	3.0
	TDS*		370	250		98	60		110	94
	Antimony	<0.00038			<0.00038			<0.00038		
	Arsenic	<0.00031	<0.00031	<0.00031	0.00075 J	0.00054 J	0.00067 J	<0.00031	<0.00031	<0.00031
	Barium	0.034	0.034	0.037	0.011	0.012	0.012	0.0065 J	<0.0016	<0.0016
	Beryllium	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018
	Cadmium	<0.00022	0.00022 J	0.00022 J	<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	<0.0015
Appendix IV	Cobalt	0.00016 J	0.00016 J	<0.00013	0.00077	0.00052 J	0.00090 J	0.00024 J	0.00018 J	0.00024 J
end	Fluoride	0.072 J	0.084 J	0.049 J	0.079 J	<0.026	0.050 J	0.35	0.36	0.25
dd	Lead	<0.00013	<0.00013	<0.00013	<0.00013	0.00020 J	<0.00013	<0.00013	<0.00013	<0.00013
~	Lithium [†]	0.0053	0.0057	0.0059	0.0045 J	0.0054	0.0056	0.044	0.049	0.056
	Mercury	<0.00010	<0.00010	<0.00013	<0.00010	<0.00010	<0.00013	<0.00010	<0.00013	<0.00013
	Molybdenum	<0.00061	<0.00061	<0.00061	0.0025 J	0.0024 J	0.0027 J	0.0014 J	0.0013 J	0.0013 J
	Comb. Radium 226/228	0.797	0.437	0.276 U	0.244 U	0.0655 U	0.643	0.200 U	0.0697 U	1.18
	Selenium	0.0036 J	0.0046 J	0.0028 J	<0.0015	<0.0015	<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	<0.00015

5 of 5

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

Analyte	Units	Background (1,2)	Federal GWPS ^(1,3)	State GWPS ^(1,4)	
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:

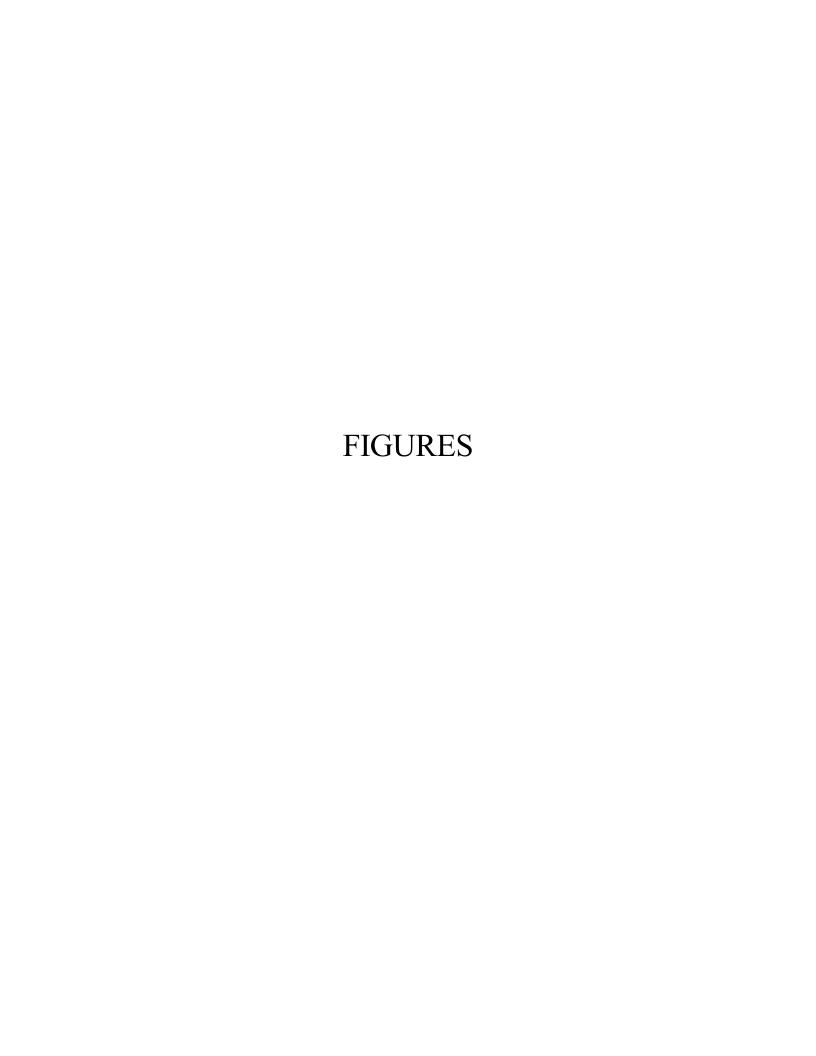
"mg/L" = milligrams per liter

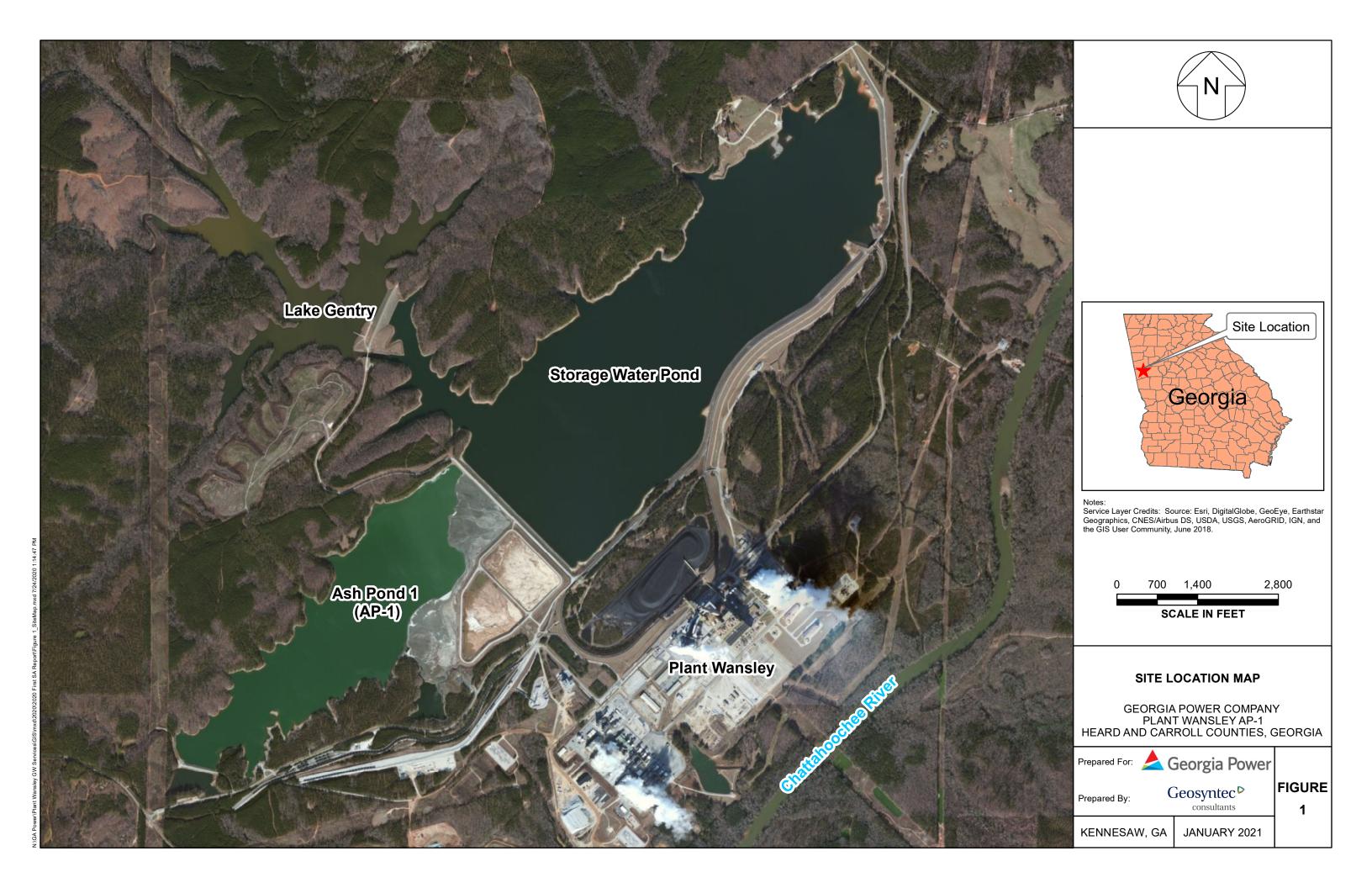
"pCi/L" = picocuries per liter

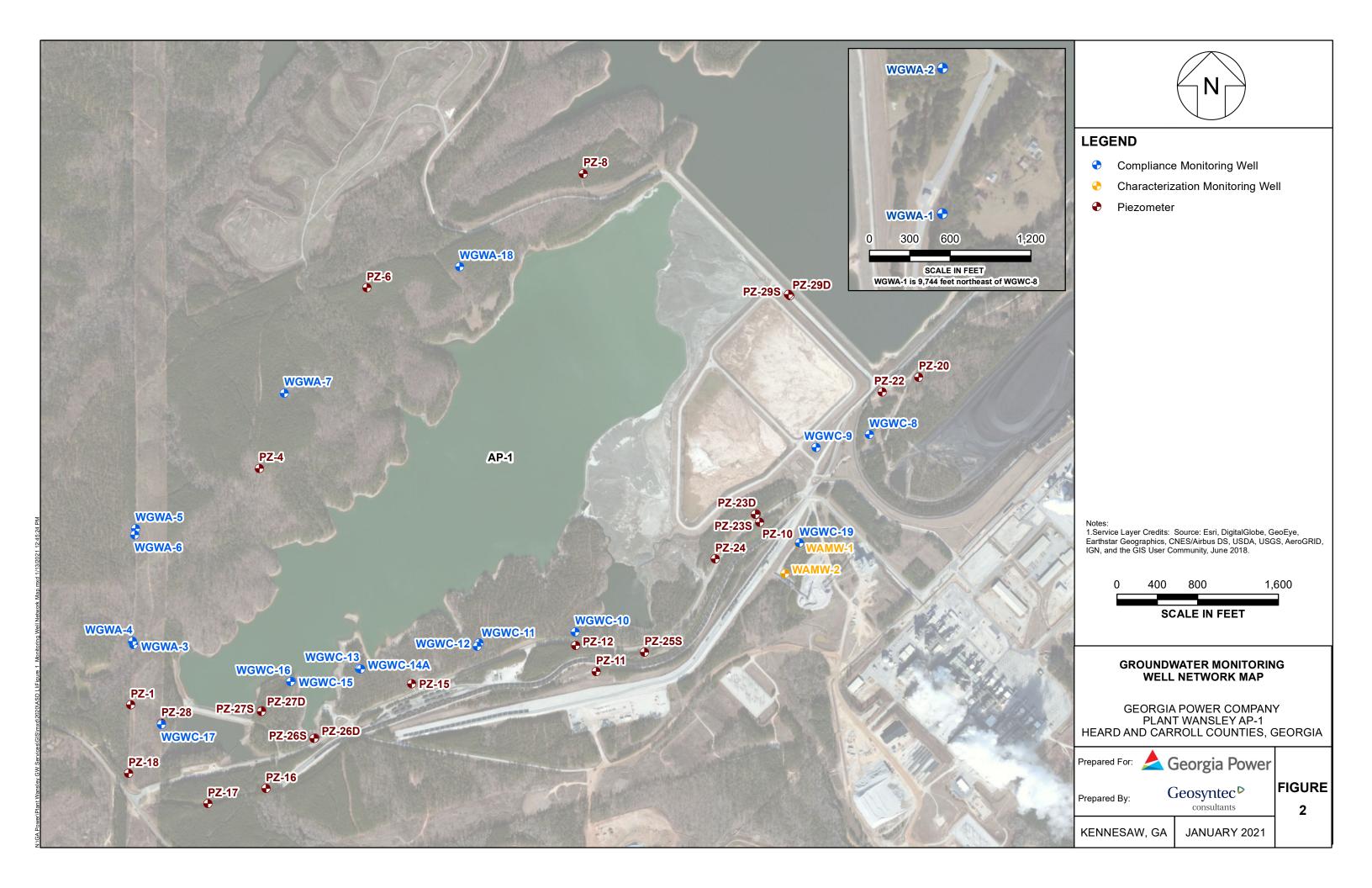
"GWPS" = Groundwater Protection Standard

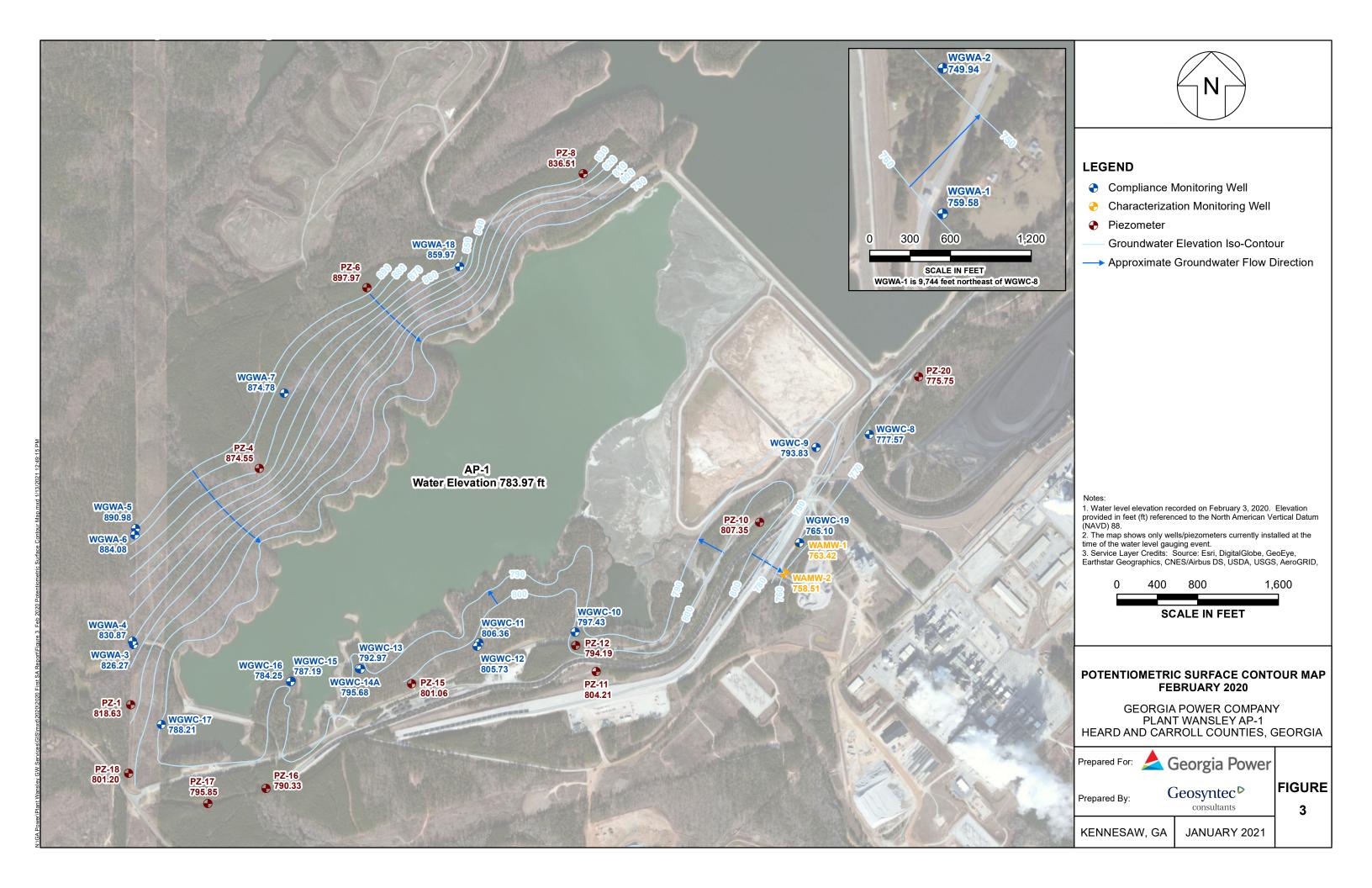
- 1. Stastical analyses were performed on semiannual monitoring events for data through May 2020 and data through November 2020. Background concentrations and Groundwater Protection Standards are applicable to both 2020 semiannual events.
- 2. The background limits were used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia Environmental Protection Division (EPD) Rule 391-3-4-.10(6)(a).
- 3. 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.
- 4. 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.

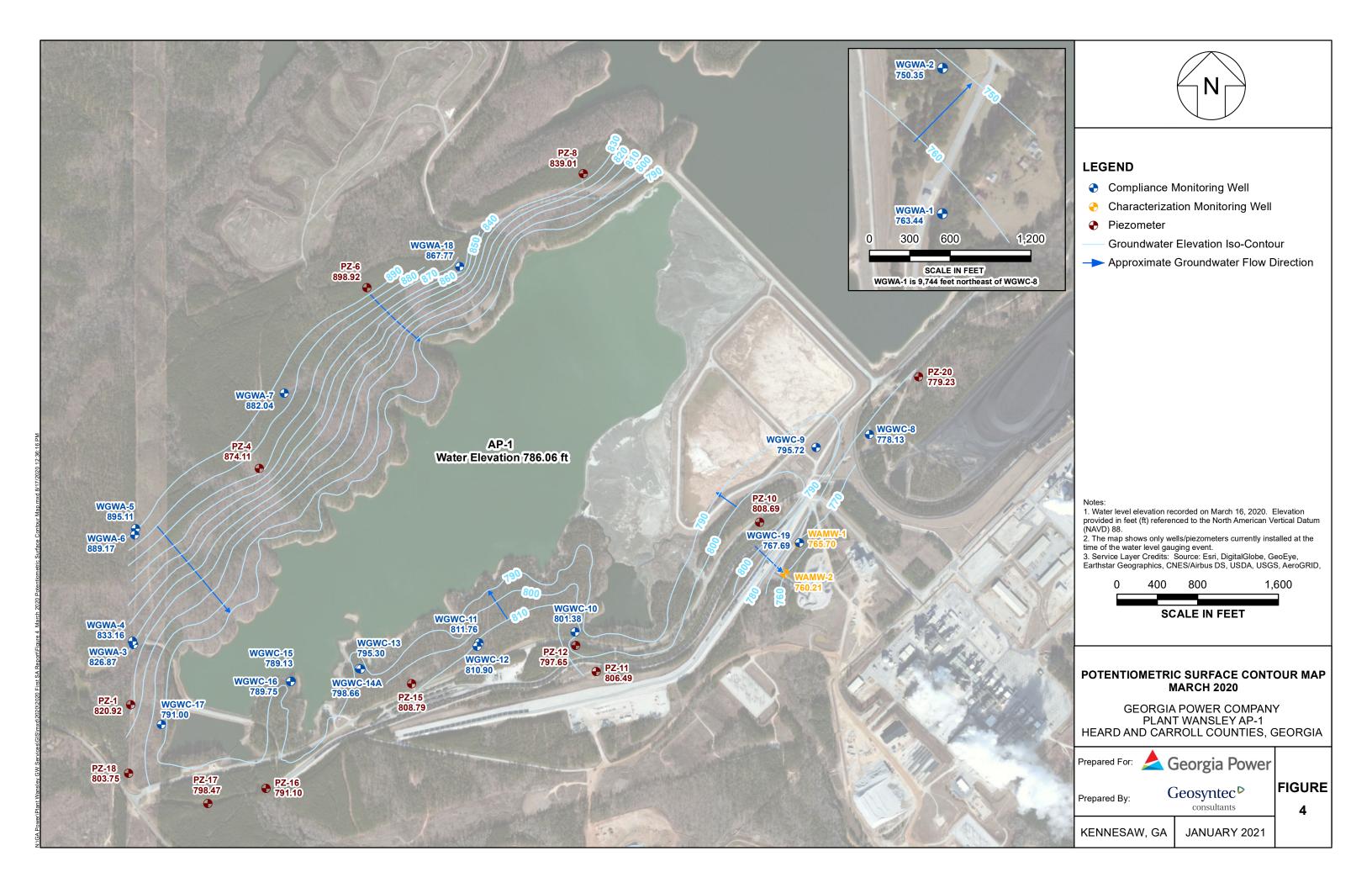
1 of 1 January 2021

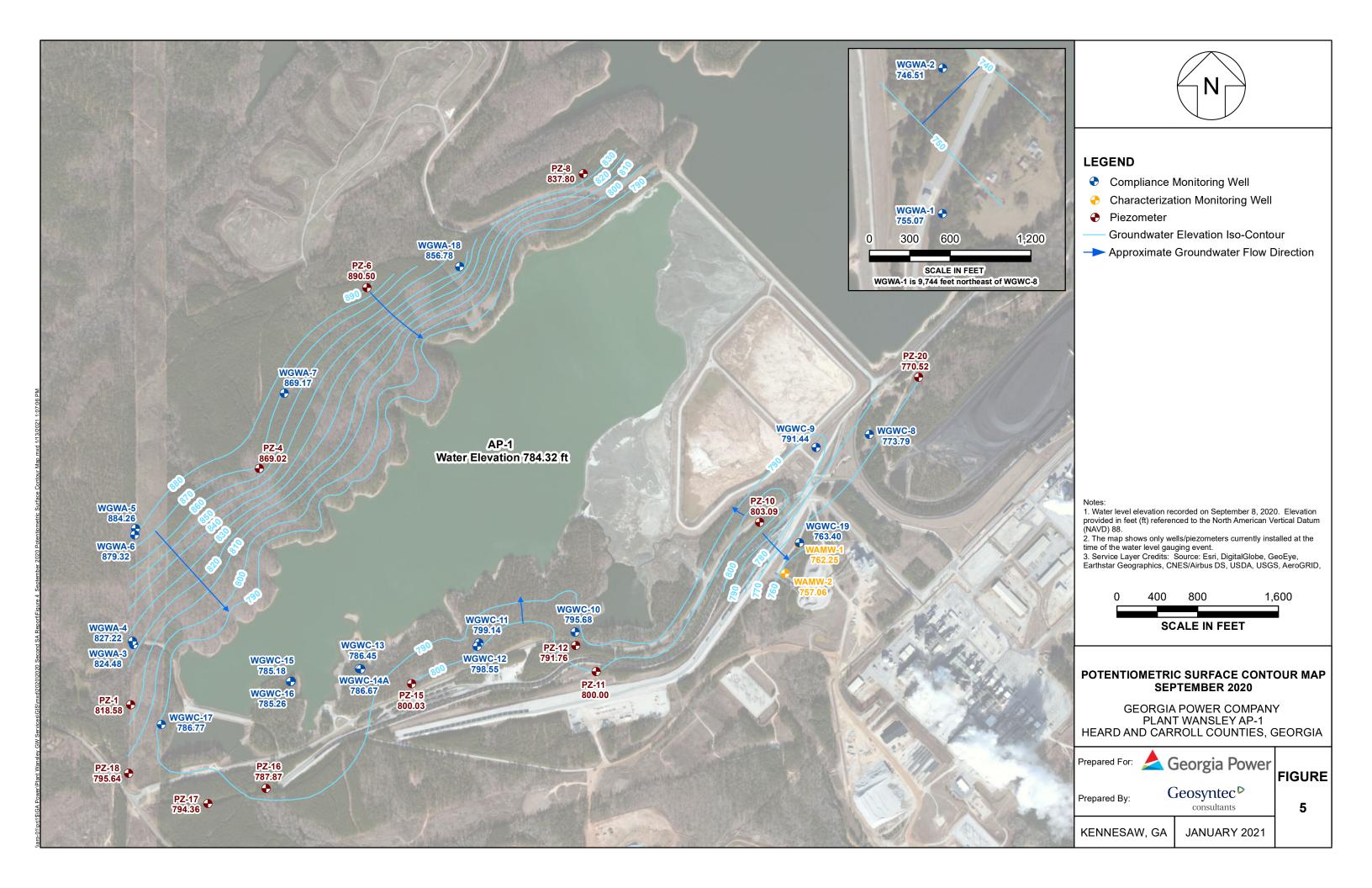














APPENDIX A Certified Well Survey Data (June 2020)

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 2023595.914		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



In RIL

06/16/2020

APPENDIX B

January 2021 Piezometer Design, Installation, and Development Report Plant Wansley Ash Pond 1 (AP-1) Georgia Power Company

Prepared for

Georgia Power Company

241 Ralph McGill Blvd NE Atlanta, Georgia 30308

PIEZOMETER DESIGN, INSTALLATION, AND DEVELOPMENT REPORT PLANT WANSLEY ASH POND 1 (AP-1)

Geosyntec consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200 Kennesaw, Georgia 30144

Project Number GW7327

January 2021



PIEZOMETER DESIGN, INSTALLATION, AND DEVELOPMENT REPORT

Plant Wansley Ash Pond 1 January 15, 2021

Adria Reimer, P.G.

Project Manager

Geosyntec Consultants



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LIST OF ACRONYMS

ACC Atlantic Coast Consulting, Inc.

AP Ash Pond

ASTM American Society for Testing and Materials

CCR coal combustion residual CFR Code of Federal Regulations

CFS Civil Field Services
DO dissolved oxygen

GA EPD Georgia Environmental Protection Division

Georgia Power Company

NAD83 North America Datum of 1983

NAVD88 North American Vertical Datum of 1988

NSF National Sanitation Foundation
NTU nephelometric turbidity unit
ORP oxygen reduction potential
PG professional geologist
PVC polyvinyl chloride

SCS Southern Company Services

TOC top of casing

US EPA United States Environmental Protection Agency

1. INTRODUCTION

This report provides details regarding the design, installation, and development of 12 piezometers at Georgia Power Company (Georgia Power) Plant Wansley (Site) Ash Pond 1 (AP-1). The piezometers were installed for the collection of hydrogeologic data which will be used to refine the current conceptual hydrogeologic model for the Site. This report meets the requirements promulgated in the United States Environmental Protection Agency (US EPA) coal combustion residual (CCR) rule [40 Code of Federal Regulations (CFR) Part 257, Subpart D], specifically 40 CFR § 257.91(e)(1) and Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10.

Plant Wansley is located on approximately 5,200 acres about 12 miles southeast of the City of Carrollton, Georgia. The groundwater monitoring system at AP-1 consists of 19 wells associated with the CCR compliance monitoring well network, and a secondary network of two groundwater characterization wells and 12 groundwater level monitoring piezometers that are used to gauge groundwater levels in the vicinity of AP-1 to refine groundwater flow direction and gradients. The locations of the compliance monitoring wells, characterization wells, and piezometers are shown on **Figure 1**.

1

2. DRILLING AND PIEZOMETER INSTALLATION

A Piezometer Installation and Field Testing Workplan (Workplan) was submitted to the GA EPD on September 22, 2020 (Geosyntec, 2020). Piezometer installation and development activities were performed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD, 1991) and in accordance with the Workplan. Piezometer drilling, installation, and surface completion activities were performed by Cascade Drilling, Inc. of New Ellenton, South Carolina, under contact with, and the supervision of, Southern Company Services (SCS) Civil Field Services (CFS) personnel. In accordance with the Georgia Water Well Standards Act, the driller was required to have an insurance bond on file with the State of Georgia at the time of drilling. A copy of this bond is provided in Appendix A. A geologist under the supervision of a professional geologist (PG) registered to practice in the State of Georgia, both employed with Geosyntec Consultants (Geosyntec), documented the drilling and installation efforts to record observations, soil and rock descriptions, subsurface stratigraphy, water elevations, and other field activities. Atlantic Coast Consulting, Inc. (ACC) was responsible for the development of the newly installed piezometers.

This report presents the details for the drilling, installation, and development of AP-1 area piezometers PZ-22, PZ-23S, PZ-23D, PZ-24, PZ-25S, PZ-26D, PZ-26S, PZ-27D, PZ-27S, PZ-28 as proposed in the Workplan. Piezometer PZ-25D was proposed in the Workplan; however, based on observations during borehole drilling and results of borehole geophysical logging which indicated a lack of hydraulically-active fractures in the bedrock zone, PZ-25D was not installed. PZ-25S was installed at the Workplan proposed PZ-25D location and the second PZ-25 borehole was abandoned using sodium bentonite grout placed via tremie pipe from the bottom of the borehole to ground surface. Two additional piezometers not included in the Workplan (PZ-29S and PZ-29D) were installed during this field investigation following the same methods and procedures described in the Workplan to provide supplementary hydrogeologic data at the Site.

The locations of these piezometers and abandoned borehole are shown on **Figure 1**. Piezometer construction details are provided in **Table 1**; the boring and piezometer construction logs are included in **Appendix B**. The boring log for abandoned borehole PZ-25 is also included in **Appendix B**.

2.1 Drilling Method

The boreholes were advanced using rotosonic drilling techniques with continuous core collection. A Terra Sonic full-size drill rig with a 6-inch sonic drill rod was used to install the piezometers. Care was taken so that the drilling methods did not introduce contamination of the groundwater from surface activities. Drilling equipment was cleaned prior to mobilizing to the Site.

2.2 Borehole Geophysics

Borehole geophysical logging of boreholes drilled into rock units was conducted by GEL Solutions (GEL) of Marietta, Georgia, under the supervision of a Geosyntec geologist. The purpose of the geophysical logging was to characterize and evaluate potential waterbearing bedrock fractures and groundwater flow in the open-hole sections of the boreholes to support decisions on the appropriate screen interval for each bedrock piezometer. The geophysical logging consisted of a combination of:

- acoustic televiewer;
- three-arm caliper;
- fluid temperature and fluid resistivity under ambient flow conditions in all piezometers and induced flow (pumping) conditions at select piezometer locations; and
- spontaneous potential and single point resistance.

Geophysical logging was conducted at boreholes PZ-22, PZ-23S, PZ-23D, PZ-25, and PZ-26D. Geophysical logging was not conducted at PZ-27D due to the fractured nature of the formation at the borehole, and the potential for the borehole to collapse and damage the downhole logging equipment. A geophysical testing report prepared by GEL is provided in **Appendix C**.

2.3 Screened Interval

Details regarding the piezometer screen intervals are provided in **Table 1**. The new piezometers are screened from approximately 780 to 679 feet [referenced to the North American Vertical Data of 1988 (NAVD88)]. The piezometers were constructed with 10 feet of well screen.

2.4 Piezometer Casings and Screens

The piezometers were constructed of 2-inch inner diameter Schedule 40 polyvinyl chloride (PVC) casing with flush-threaded fittings and were installed with a 10-foot nominal length pre-packed well screen with 0.010-inch slots. The casings and pre-packed screens arrived pre-cleaned and packaged by the manufacturer. The pre-packed screen was constructed onsite by packing sand between slotted PVC and the screen. Piezometer construction materials are sufficiently durable to resist chemical and physical degradation and not interfere with the quality of groundwater samples. Casing and screens are flush-threaded. Solvent or glue was not used to construct the piezometers. A threaded bottom cap was attached to the bottom of the screen. The PVC products used were American Society for Testing and Materials (ASTM) and National Sanitation Foundation (NSF) rated. Construction details are provided in **Table 1**.

2.5 <u>Piezometer Intake Design</u>

The piezometers were designed and constructed to: (1) allow sufficient groundwater flow to the piezometer for gauging; (2) minimize the passage of formation materials (turbidity) into the piezometer; and (3) ensure sufficient structural integrity to prevent collapse of the piezometer. The annular space between the face of the formation and the screen was filled to minimize passage of formation materials into the piezometers. A filter pack of clean, well-rounded, quartz sand was installed in the piezometer. The 0.01-inch slot size was selected to minimize the inflow of formation material without impairing influent groundwater flow.

2.6 Filter Pack

Highly Pure Quartzite of Southern Products & Silica Co. silica sand filter pack was used as the appropriate gradation for all the piezometers. Highly Pure Quartzite meets the ASTM D5092 uniformity coefficient specification of 2.5 or less, with a uniformity coefficient of 1.6.

Filter pack material was placed within the pre-packed dual-wall well screens and in the annular space between the outside of the pre-packed screen and borehole wall to ensure an adequate thickness of filter pack material between the piezometer and the formation. Filter pack material placed in the annular space outside of the screen extended approximately two feet above the top of screen. No bridging occurred during filter pack placement.



Upon placement of the filter pack, the piezometer was pumped with a submersible pump to assure settlement of the filter pack. The top of filter pack depth was measured following pumping to ensure appropriate extension of filter sand above the screen. The depth of top of filter pack was measured and recorded on the piezometer construction logs provided in **Appendix B**.

2.7 <u>Annular Seal</u>

A minimum of two feet of bentonite chips (PelPlug 3/8-inch bentonite pellets) were placed immediately above the filter pack by gravity-pouring into the annular space and hydrated per manufacture's specifications. A tremie pipe was used to probe the annular space to ensure that no bridging occurred. The bentonite was hydrated with potable water for a duration meeting the manufacture's specifications prior to grouting the remaining annulus.

The annulus above the bentonite seal was grouted with Aqua Guard bentonite grout placed via tremie pipe from the top of the bentonite seal. During grouting, care was taken to assure that the bentonite seal was not disturbed by locating the base of the tremie pipe approximately two feet above the bentonite seal and injecting grout at low pressure/velocity. A cement apron measuring 4-feet square by 4-inches high was poured around each piezometer. The pad was mounded slightly outward to direct surface drainage away from the piezometer.

2.8 Cap and Protective Casing

Piezometers were completed with a flush mount or stick up surface completion. For stick up completions, the piezometer risers were fitted with a locking cap and a lockable cover. A one-quarter inch vent hole was drilled into the PVC riser to provide a means for gas to escape. The protective cap guards the casing from damage and the locking cap serves as a security device to prevent piezometer tampering. Bollards were installed around the four corners of the concrete pad to protect the piezometer. A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. Piezometers were clearly marked with the proper identification number on the stand-up casing. For flush mount completions, the PVC riser was cut down to just below ground surface, and a concrete pad with a manhole cover and locking cap were installed. Construction details are documented on the piezometer construction log provided in **Appendix C**.



3. PIEZOMETER DEVELOPMENT

Piezometers were developed using a combination of surging and pumping to (1) restore the natural hydraulic conductivity of the formation, and (2) to remove fine-grained sediment. Piezometers were alternately surged and purged until visually clear of particulates. The goal of piezometer development was to achieve a turbidity of less than 5 nephelometric turbidity units (NTUs). Turbidity, pH, temperature, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) measurements were recorded to ensure that each piezometer was fully developed. Development objectives were achieved at each piezometer. The development forms are included in **Appendix D**.

All equipment and tubing placed in the piezometer was decontaminated or disposed of between piezometers.



4. SURVEY

Upon completion of the piezometer installation, the horizontal locations and vertical elevations were surveyed by a Georgia-licensed surveyor. The top of the PVC casing [top of casing (TOC) elevation] and the survey pin installed in the 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) with the vertical elevation recorded in feet relative NAVD88. Certified survey data are provided in the piezometer construction table (**Table 1**). A copy of the certified survey data for the new AP-1 piezometers is provided in **Appendix E**.



5. REFERENCES

Georgia Environmental Protection Division (GA EPD), Georgia Department of Natural Resources, 1991. *Manual for Groundwater Monitoring*. September 1991.

Geosyntec Consultants, 2020. Piezometer Installation and Field Testing Workplan – Plant Wansley Ash Pond 1 (AP-1). September 2020.

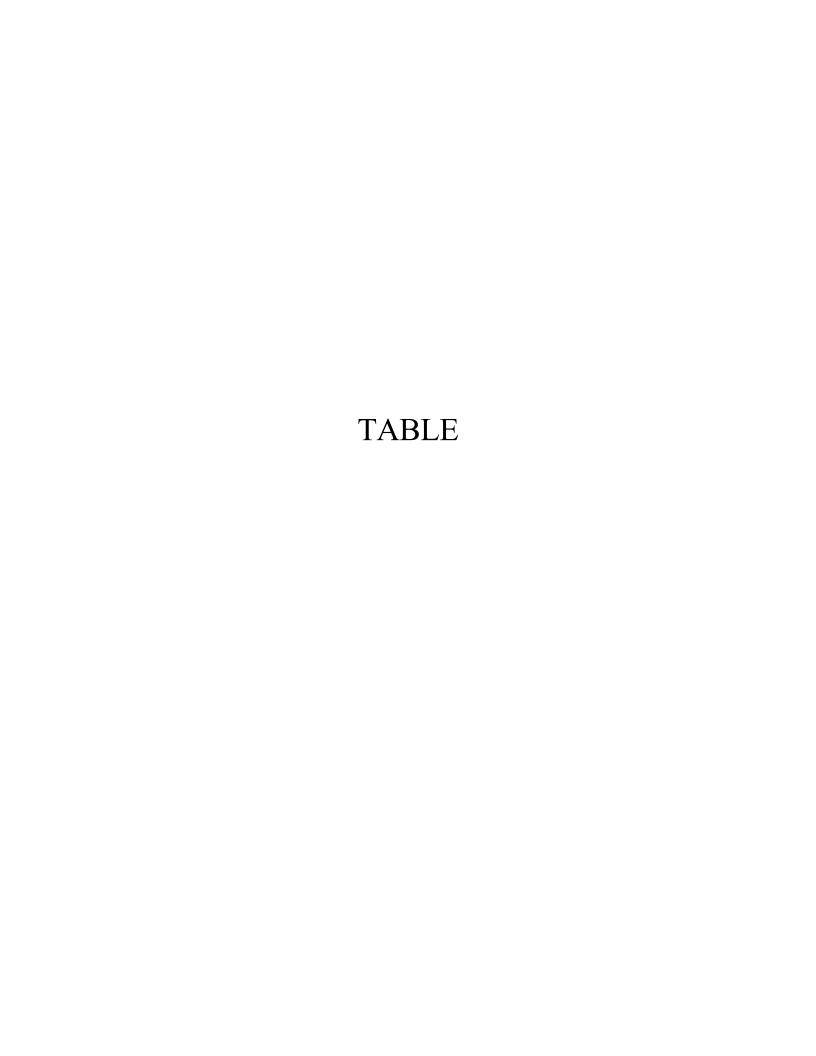


Table 1 Summary of Piezometer Construction Details Plant Wansley AP-1, Heard and Carroll Counties, Georgia

Well ID	Purpose	Installation Date	Northing (1)	Easting (1)	Ground Surface Elevation ⁽²⁾ (ft NAVD88)	Top of Casing Elevation ⁽²⁾ (ft NAVD88)	Depth to Top of Screen (ft BTOC)	Top of Screen Elevation ⁽²⁾ (ft NAVD88)	Depth to Bottom of Screen (ft BTOC)	Bottom of Screen Elevation ⁽²⁾ (ft NAVD88)	Well Depth (ft BTOC) (3)	Well Depth (ft bgs) (3)	Bottom of Well Elevation ⁽²⁾ (ft NAVD88)	Screen Interval Length (ft)
Piezometer														
PZ-22	Piezometer	9/29/2020	1243350.76	2029769.43	804.88	807.95	32.77	775.18	42.77	765.18	43.17	40.10	764.78	10
PZ-23S	Piezometer	10/2/2020	1242139.33	2028512.65	831.79	834.41	61.30	773.11	71.30	763.11	71.70	69.09	762.71	10
PZ-23D	Piezometer	10/2/2020	1242139.53	2028520.87	831.89	834.32	84.40	749.92	94.40	739.92	94.80	92.37	739.52	10
PZ-24	Piezometer	10/18/2020	1241695.25	2028116.05	807.00	810.37	33.45	776.92	43.45	766.92	43.85	40.48	766.52	10
PZ-25S	Piezometer	10/4/2020	1240769.79	2027414.58	820.50	823.80	43.40	780.40	53.40	770.40	53.80	50.50	770.00	10
PZ-26S	Piezometer	10/17/2020	1239916.68	2024139.82	802.22	804.80	30.37	774.43	40.37	764.43	40.77	38.19	764.03	10
PZ-26D	Piezometer	10/12/2020	1239919.45	2024146.35	802.31	804.93	69.70	735.23	79.70	725.23	80.10	77.47	724.83	10
PZ-27S	Piezometer	10/28/2020	1240184.18	2023616.69	805.98	808.98	29.47	779.51	39.47	769.51	39.87	36.87	769.11	10
PZ-27D	Piezometer	10/15/2020	1240190.93	2023620.36	806.22	809.28	71.32	737.96	81.32	727.96	81.72	78.65	727.56	10
PZ-28	Piezometer	10/29/2020	1240066.02	2022624.73	813.57	816.18	62.50	753.68	72.50	743.68	72.90	70.29	743.28	10
PZ-29S	Piezometer	10/31/2020	1244317.13	2028839.68	805.80	805.30	35.02	770.28	45.02	760.28	45.42	45.92	759.88	10
PZ-29D	Piezometer	11/1/2020	1244304.90	2028853.29	805.77	805.24	116.55	688.69	126.55	678.69	126.95	127.48	678.29	10

Notes:

ft = feet

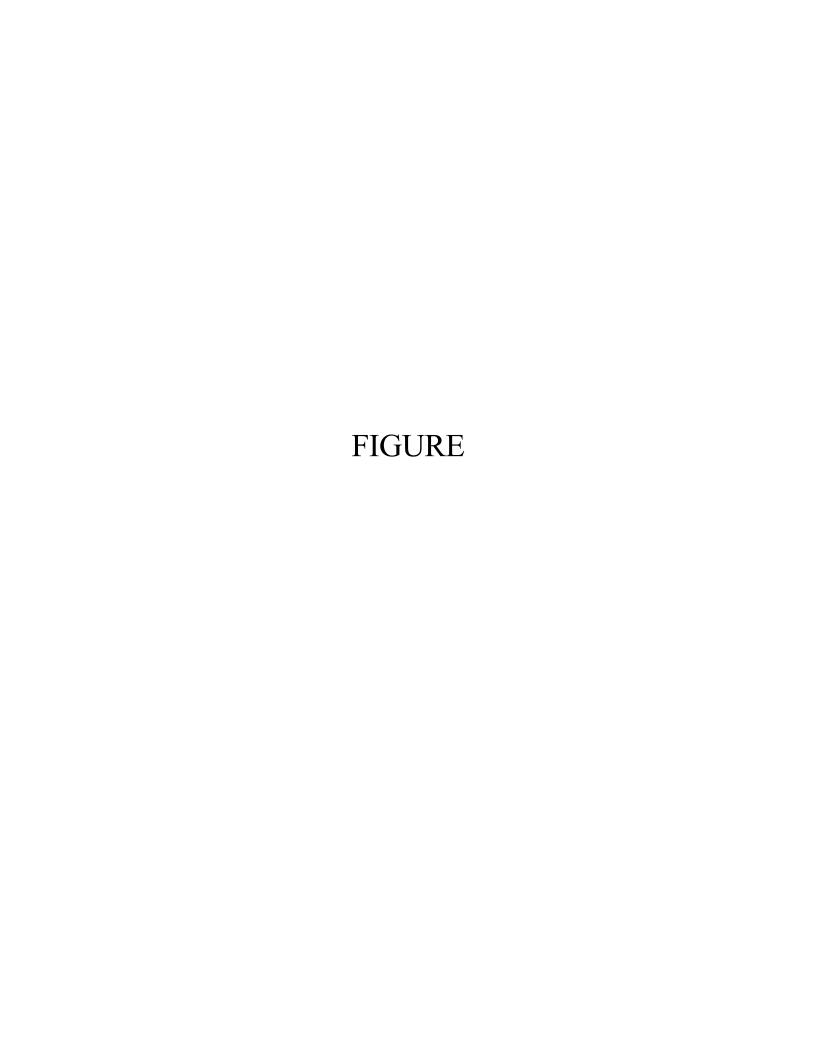
ft BTOC = feet below top of casing

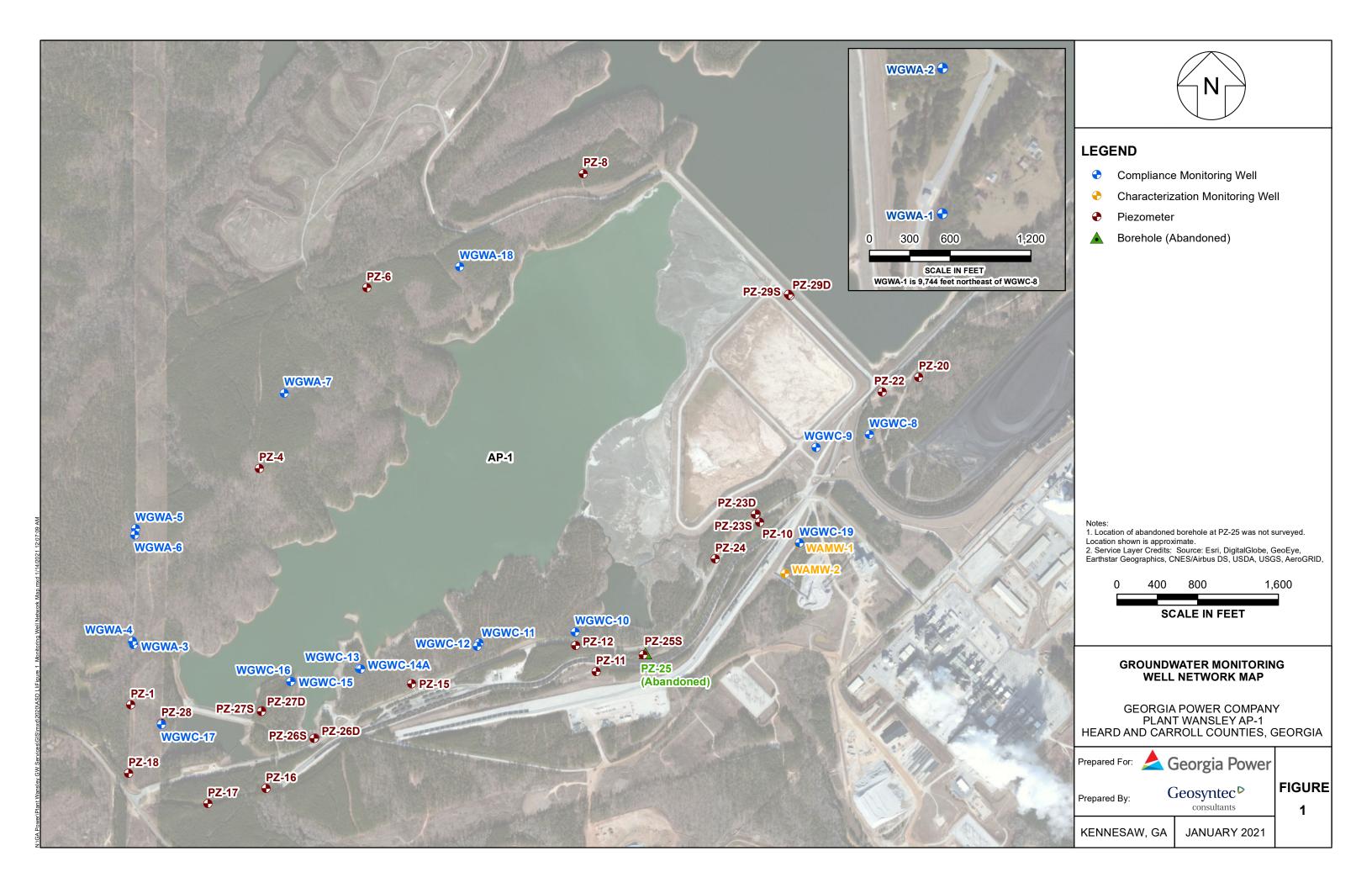
ft bgs = feet below ground surface

- (1) Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey data obtained November 4-5, 2020.
- (2) Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey data obtained in November 4-5, 2020.

(3) Total well depth accounts for sump.

l of l January 2021





APPENDIX A

Well Driller Performance Bonds

CONTINUATION CERTIFICATE

Atlantic Specialty Insurance Company

, Surety upon

Issued on 9/27/2017 Expires on 6/30/2019

Renewed on 3/4/2019

Expires on 6/30/2021

a certain Bond No. 800033976

dated effective

09/27/2017

(MONTH-DAY-YEAR)

on behalf of

Ricky Davis / Cascade Drilling, L.P.

(PRINCIPAL)

and in favor of

Department of Natural Resources, State of Georgia

(OBLIGEE)

does hereby continue said bond in force for the further period

beginning on

06/30/2019

(MONTH-DAY-YEAR)

and ending on

06/30/2021

(MONTH-DAY-YEAR)

Amount of bond

Thirty Thousand and 00/100 Dollars (\$30,000.00)

Description of bond

Performance Bond for Water Well Contractors

Premium:

\$1200.00

PROVIDED: That this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and this and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period (regardless of the number of years) said bond had been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and dated on

March 4th, 2019

(MONTH-DAY-YEAR)

Atlantic Specialty Insurance Company

Attorney-in-Fact Andrew P. Larser

Parker, Smith & Feek, Inc.

2233 112th Ave NE Bellevue, WA 98004

Address of Agent

425-709-3600

Telephone Number of Agent

S-0157/GE 8/08

APPENDIX B

Boring and Piezometer Construction Logs

MONITORING WELLS WANSLEY PIEZOMETER INSTALL 2020.GPJ ACP GINT LIBRARY CH.GLB

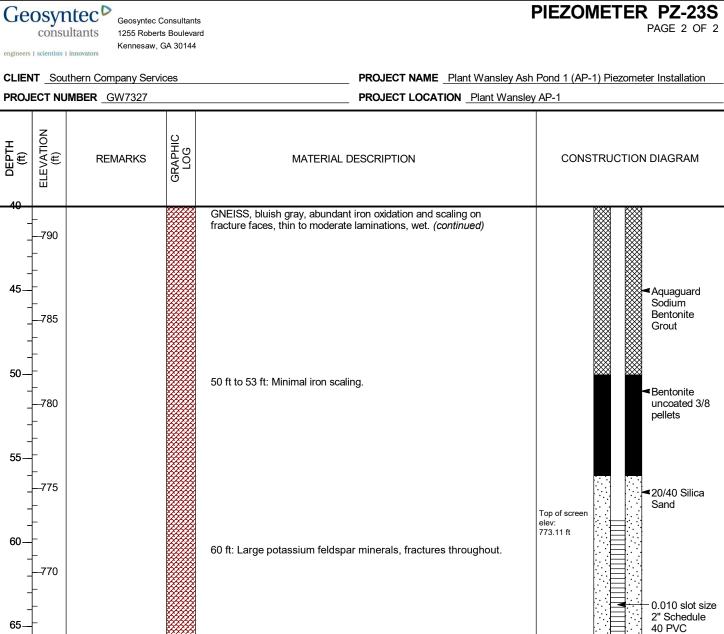
SCS MONITORING WELLS WANSLEY PIEZOMETER INSTALL 2020.GPJ ACP GINT LIBRARY CH.GLB 1/5/21

SCS MONITORING WELLS WANSLEY PIEZOMETER INSTALL 2020.GPJ ACP GINT LIBRARY CH.GLB 1/5/21

70

765

760



Bottom of borehole at 75.0 feet.

Screen

Bottom of well: 69.09 ft

20/40 Silica Sand

Bottom of screen elev: 763.11 ft

Bottom of well elev: 762.71 ft

756.8

SCS MONITORING WELLS WANSLEY PIEZOMETER INSTALL 2020.GPJ ACP GINT LIBRARY CH.GLB

PIEZOMETER PZ-23D

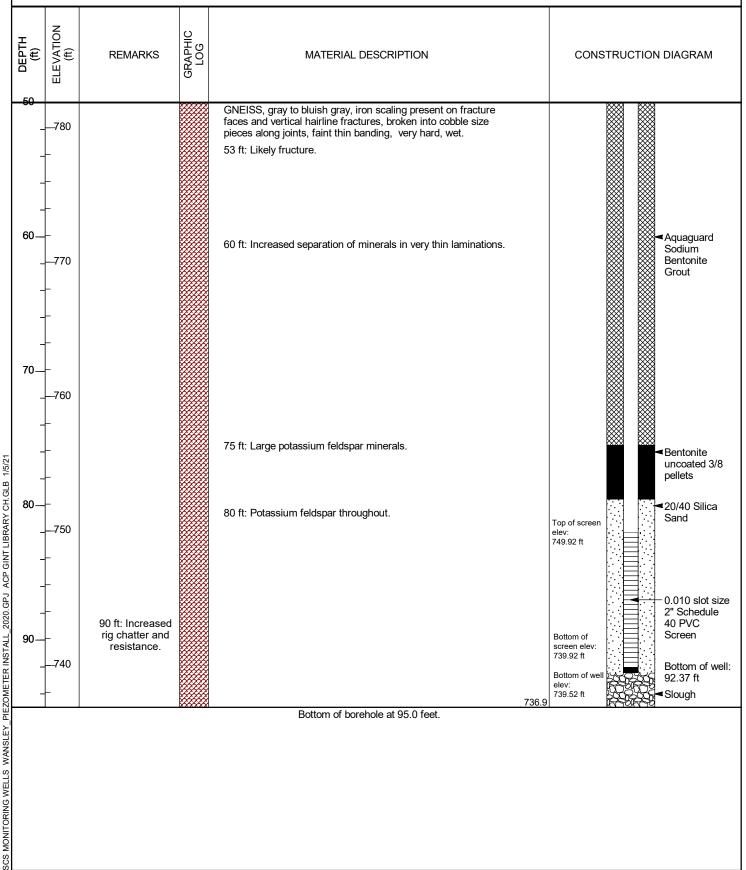
PAGE 2 OF 2

CLIENT Southern Company Services

engineers | scientists | innovators

PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation

PROJECT NUMBER GW7327 PROJECT LOCATION Plant Wansley AP-1



SCS MONITORING WELLS WANSLEY PIEZOMETER INSTALL 2020.GPJ ACP GINT LIBRARY CH.GLB 1/6/21

Geosyntec consultants

Geosyntec Consultants 1255 Roberts Boulevard

Borehole abandoned with sodium

BORING PZ-25 (Abandoned) PAGE 1 OF 1

engineers	scientists	Kennesaw, C	GA 30144	bentonite grout			
CLIEN	CLIENT Southern Company Services			PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation			
	PROJECT NUMBER GW7327			PROJECT LOCATION Plant Wansley AP-1			
	DATE STARTED 10/20/20 COMPLETED 10/20/20			NORTHING	nknown	EASTING Unknown	
DRILLER Cascade Drilling			GROUND ELEV	ATION	BORING DIAMETER 6 in.		
DRILL	DRILLING METHOD Sonic			TOP OF CASING	ELEVATION		
SAMP	SAMPLING METHOD 4 in. core 6 in. override		GEOPHYSICAL CONTRACTOR				
RIG T	YPE _T	errasonic 1051181			LOGGED BY _T	. Wilson	CHECKED BY A. Reimer
DEPTH (ft)	ELEVATION (ft)	REMARKS	GRAPHIC LOG		MATE	RIAL DESCRIPTION	
- 0 -		Boring abandoned due to jammed rods.		Air Knife Excavation (0 ft to 10 NO SAMPLE	ft)		
10—				relic rock structure throughout	, soft, dry. DCK (PWR), reddis	h yellow, soft, silts and fi	ron staining between 18 ft and 19 ft, ne sands, medium plasticity, iron
20 —				20 ft: Strong brown.			
20.GPJ ACP GINT LIBRARY C				PARTIALLY WEATHERED R medium plasticity, with large 30 ft: Strong brown.			red, silty sand, fine grained,
SCS MONITORING WELLS WANSLEY_PIEZOMETER INSTALL_2020.GPJ ACP GINIT LIBRARY CH.GLB 1/5/21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				PARTIALLY WEATHERED R fine to coarse grained, large r			rayish brown, weathered, silty sand, ft, dry.
SN 50—				MUSCOVITE SCHIST, black	, thin laminations, I	nard.	
WELLS							
IONITORING				GNEISS, pink, pale brown, ma	ssive, with thin lam	inations, some hard, wea	ak foliations.
<u>8</u> <u>60</u>					Bottom (of borehole at 60.0 feet.	

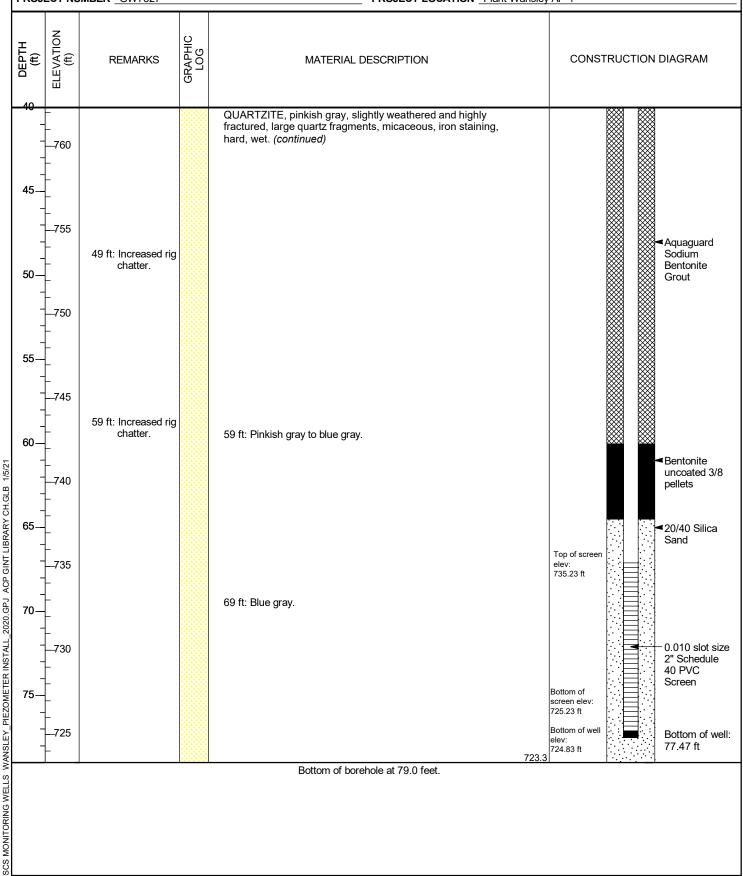
PIEZOMETER PZ-26D

PAGE 2 OF 2

CLIENT Southern Company Services

PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation

PROJECT NUMBER GW7327 PROJECT LOCATION Plant Wansley AP-1



PIEZOMETER PZ-27D

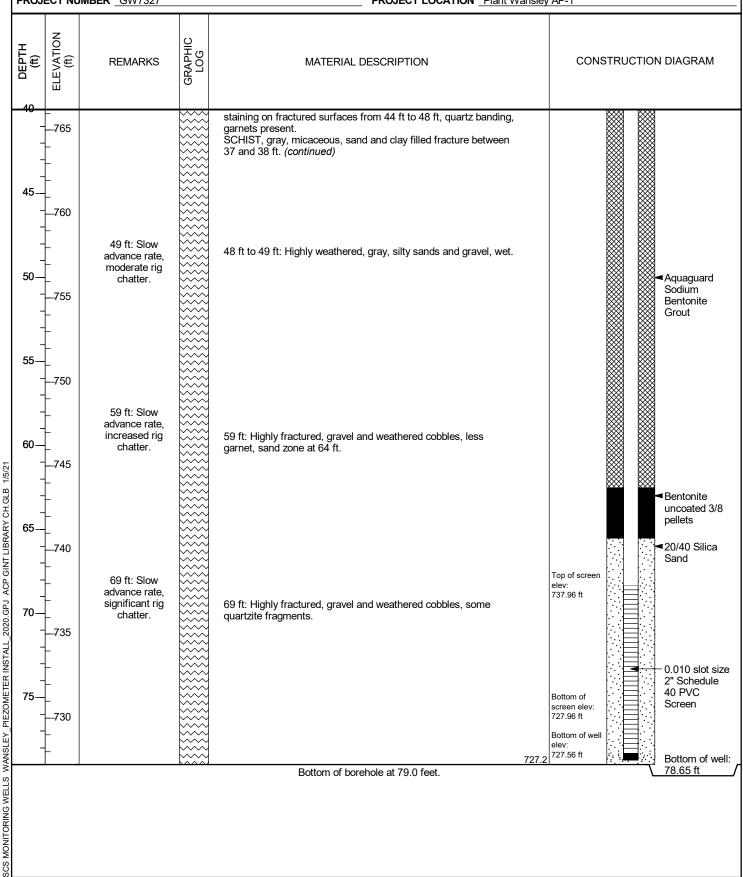
PAGE 2 OF 2

CLIENT Southern Company Services

engineers | scientists | innovators

PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation

PROJECT NUMBER GW7327 PROJECT LOCATION Plant Wansley AP-1



55

60

65

70

SCS MONITORING WELLS WANSLEY_PIEZOMETER INSTALL_2020.GPJ ACP GINT LIBRARY CH.GLB 1/5/21

755

745

PIEZOMETER PZ-28

uncoated 3/8

20/40 Silica

0.010 slot size 2" Schedule 40 PVC

Bottom of well:

Screen

70.29 ft

Sand

Top of screen

elev: 753.68 ft

Bottom of screen elev:

743.68 ft

743.28 ft

Bottom of well

751.6

pellets

PAGE 2 OF 2 1255 Roberts Boulevard Kennesaw, GA 30144 PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation CLIENT Southern Company Services PROJECT NUMBER GW7327 **PROJECT LOCATION** Plant Wansley AP-1 ELEVATION (ft) GRAPHIC LOG DEPTH (ft) **REMARKS** MATERIAL DESCRIPTION CONSTRUCTION DIAGRAM SAPROLITE, sandy silt, reddish yellow, stiff, non plastic, iron concretions and staining, faint rock fabric visible, moist. 770 45 Aquaguard Sodium Bentonite Grout -765 50 51 ft: Dense, well graded, trace gravel, increasing gravel content with depth. 760 Bentonite

PARTIALLY WEATHERED ROCK (PWR), silty sand and gravel, very pale brown, fine to coarse grained, relic rock structure, iron staining, increasing gravel with depth, moist.

Bottom of borehole at 70.5 feet.

PIEZOMETER PZ-29D

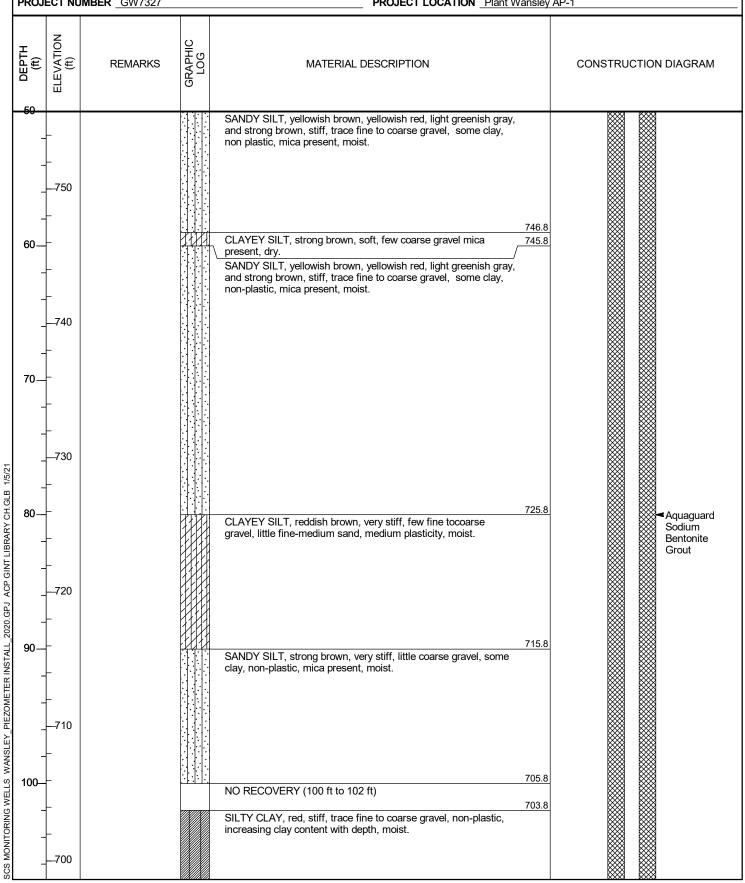
PAGE 2 OF 3

CLIENT Southern Company Services

engineers | scientists | innovators

PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation

PROJECT NUMBER GW7327 **PROJECT LOCATION** Plant Wansley AP-1



PIEZOMETER PZ-29D

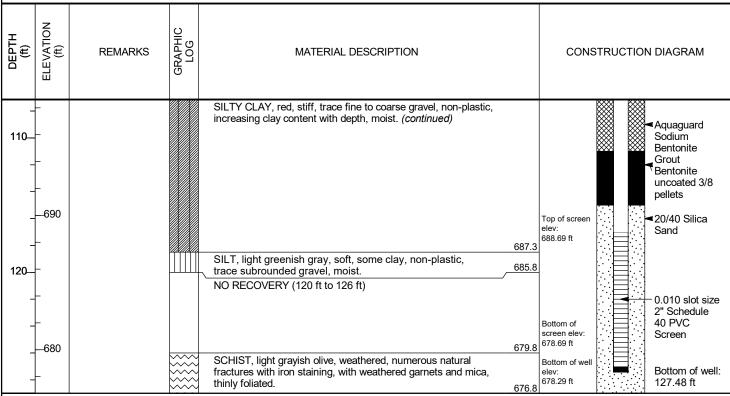
PAGE 3 OF 3

CLIENT Southern Company Services

PROJECT NAME Plant Wansley Ash Pond 1 (AP-1) Piezometer Installation

 PROJECT NUMBER
 GW7327

 PROJECT LOCATION
 Plant Wansley AP-1



Bottom of borehole at 129.0 feet.

APPENDIX C

Geophysical Logging Report



Geophysical Logging Report

PZ – 22, PZ – 23D, PZ – 23S, PZ – 25, PZ – 26D

Georgia Power Plant Wansley, Carrollton, Georgia

Performed for:

Geosyntec

November 11, 2020

Geophysical Logging Report: PZ – 22, PZ – 23D, PZ – 23S, PZ – 25, PZ – 26D Georgia Power Plant Wansley, Carrollton, Georgia

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	2.3	Fluid Temperature
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	2.5	Single Point Resistance (SPR)
	2.6	Spontaneous Potential (SP)
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SIGNATURE PAGE

This report, entitled "Geophysical Logging Report: Geophysical Logging Report: PZ – 22, PZ – 23D, PZ – 23S, PZ – 25, PZ – 26D Georgia Power Plant Wansley, Carrollton, Georgia" has been prepared for Geosyntec located in Kennesaw, Georgia. It has been prepared under the supervision of Mr. Jorgen Bergstrom at the request of and the exclusive use of Geosyntec. This report has been prepared in accordance with accepted quality control practices and has been reviewed by the undersigned.

GEL Solutions, LLC

A Member of the GEL Group, Inc.

echdos Rebman

Jorgen Bergstrom, P.Gp. Senior Geophysicist

Nicholas Rebman Geophysical Specialist

November 11, 2020

Date

EXECUTIVE SUMMARY

GEL Solutions performed geophysical borehole logging services in 5 borings located at a Georgia Power's Plant Wansley in Carrollton, Georgia. The field investigation was performed on October 13, October 14, and October 19 over the course of two separate mobilizations. This investigation was conducted to aid Geosyntec in evaluating potential pathways for groundwater migration through fractured bedrock at the site. The geophysical logs consisted of acoustic televiewer, caliper, fluid conductivity, fluid temperature, single point resistance (SPR), spontaneous potential (SP). Fluid temperature and conductivity data was collected under ambient groundwater conditions in all wells and under pumping conditions in select wells.

The logging data was analyzed to determine the location and orientation of fractures; and other features. In addition to these data sets, synthetic caliper logs were calculated from the acoustic televiewer travel time data to aid in the interpretation. The logs were analyzed for fractures and other features. Dip and azimuth (dip direction), and aperture were calculated for each detected fracture based on the televiewer dataset.

1.0 INTRODUCTION

GEL Solutions performed geophysical borehole logging services in 5 borings located at Georgia Power's Plant Wansley located in Carrollton, Georgia. The geophysical logs consisted of acoustic televiewer, 3-arm caliper, fluid conductivity, fluid temperature, single point resistance (SPR), and spontaneous potential (SP). The fluid temperature and conductivity logs were collected under ambient groundwater conditions in all wells and under pumping conditions in 1 well. The field investigation was performed on October 13, October 14, and October 19 during two separate mobilizations. The logging data was analyzed to determine the location and orientation of fractures and other features. In addition to these data sets, synthetic caliper logs were calculated from the acoustic televiewer travel time data to aid in the interpretation.

2.0 EQUIPMENT AND METHODOLOGY

The information below is an overview of the geophysical methodologies used for this investigation. The intent of this overview is to give the reader a better understanding of each method, and background information as to what is actually measured, the resolution of the method, and the limitations imposed by site-specific subsurface conditions.

2.1 Acoustic Televiewer

Acoustic televiewer (ATV) logging produces a high resolution, magnetically oriented digital image of the borehole wall to map the location and orientation of intersecting fractures, foliations, and lithologic contacts. The Acoustic televiewer tool emits a rotating, narrow, acoustic beam that is reflected off the borehole wall. The travel time and amplitude of the reflected wave are recorded by the tool and used to create borehole images. Both datasets are useful for identifying the location and orientation of fractures. The amplitude of the reflected signal will decrease at the location of fractures and the travel time will increase. The travel time data can also be used for developing a high resolution caliper log for a more comprehensive analysis of fractures. Acoustic televiewers can only be used in fluid filled boreholes. However, the fluid does not have to be optically clear for the method to work.

When operating the ATV, a "time window" is set based on the borehole diameter. The time window is the time interval in which the ATV instrument searches for an echo from the borehole wall. For smaller increases in borehole diameter around fractures and sections of weaker rock, the ATV typically records an

accurate borehole diameter (correlates well with three-arm caliper data). However, if borehole openings are much larger than the borehole diameter, the echo from the borehole wall may fall outside the time window, or be too weak to be detected. In these situations, borehole diameters recorded with ATV may be inaccurate. Since ATV only records the reflection from the borehole wall, the data cannot be used to determine how far a fracture extends from the borehole. The acoustic televiewer has a vertical resolution of 2 millimeters.

2.2 3-Arm Caliper

Caliper logging is used to generate a profile of the borehole diameter with depth. The tool measures the borehole diameter using three spring-loaded arms. Narrow enlargements in the borehole diameter can, in most cases, be attributed to fractures. Caliper logging can be conducted above and below the water surface.

2.3 Fluid Temperature

Fluid temperature logging is used to identify where water enters or exits the borehole. In the absence of fluid flow, a gradual increase on water temperature of approximately 1°F per 100 feet of depth is expected. Rapid changes in the fluid temperature indicate water-producing or water-receiving zones. Little or no temperature gradient indicates intervals of vertical flow.

2.4 Fluid Conductivity

Fluid conductivity logging is used to measure the electrical conductivity of the fluid in the borehole.

Variations in fluid conductivity can be contributed to concentration variations of dissolved solids. These differences can occur when sources of water have contrasting chemistry and have come from different transmissive zones. Fluid temperature and conductivity are measured concurrently using the same logging tool.

2.5 Single Point Resistance (SPR)

Single point resistance logging involves passing an alternate current between a surface electrode and a probe electrode and measuring the voltage difference created by the current. SPR is then calculated using Ohm's law. SPR is the sum of cable resistance, and the resistance based on the composition of the medium, the cross sectional area and length of the path through the medium. Therefore, the single point resistance log does not provide quantitative data. In general, SPR increases with increasing grain size and decreases with increasing borehole diameter, fracture density, and the concentration of dissolved solids in the water. Single-point resistance logs are useful in the determination of lithology, water quality, and location of fracture zones

2.6 Spontaneous Potential (SP)

SP logging is conducted to measure naturally occurring voltage differences along a borehole. The method has been found useful for delineating sandstone/shale layering and other boundaries between permeable and impermeable beds. The measurements are made with reference to an electrode at ground level. Therefore, SP logging does not provide quantitative data.

3.0 FIELD PROCEDURES

All GEL Solutions activities on-site were supervised by a senior geophysicist. For this investigation, GEL Solutions used a Mount Sopris Matrix logging system. Pumping tests during HPF testing were conducted using a Grundfos Redi-Flow-2 water pump with variable speed control box and an in-situ Mini-Troll pressure transducer with logging capabilities. The pump is placed above the interval to be analyzed and preferably in the casing (unless the water level is too low). HPF logging under pumping conditions commenced after the borehole water level had stabilized. HPF logging was conducted at every 5 feet throughout the logging intervals under ambient and pumping conditions. More closely spaced readings were then conducted at sections with abrupt changes in flow. A summary of the configuration of the boreholes, pumping rates, and water levels is provided below. All depth measurements are referenced from the ground surface. All borings are surface cased and open hole below the casing.

Logging Configuration Summary

Well ID:	PZ - 22	PZ - 23D	PZ - 23S	PZ - 25	PZ - 26D
Casing Material:	Steel	Steel	Steel	Steel	Steel
Casing Diameter (in):	5.5	5.5	5.5	5.5	5.5
Open Hole (ft):	8.3-50.3	20.4-90.7	29.5-68.2	48.2-70.6	38.2-73.3
Open Hole Diameter (in):	6.2	6.2	6.2	6.2	6.2
Ambient Groundwater Level (ft):	12.4	47.5	35.5	23.6	12.3
Pump Depth (ft):	-	-	-	55	-
Pump Rate (Gallon per Minute):	-	-	-	0.2	-
Groundwater Level While Pumping (ft):	-	-	-	47.2	-

4.0 DATA PROCESSING AND RESULTS

The logs were analyzed for fractures and other features using WellCAD software, manufactured by Advanced Logic Technology. The travel time data from the acoustic televiewer log was used to develop a maximum caliper log. Fractures were interpreted through a complete data analysis of all logs. Dip and azimuth (dip direction) and aperture were calculated for each detected fracture. The fracture data was corrected from apparent to true dip and azimuth using deviation logs included with the televiewer dataset, and from magnetic north to true north by rotating the fracture azimuths 4.8° counterclockwise. Magnetic north is 4.8° west of true north at the site (according to National Oceanic and Atmospheric Administration). The reported azimuth is measured clockwise from true north (Figure 1). A fracture summary table including fracture attributes is provided in Appendix 1. Major fractures are shown in bold.

Schmidt stereonets (lower hemisphere) with fracture characteristics and fracture rose diagrams are presented on Appendix 2. Fluid Temperature and Conductivity logs and fracture characteristics are shown on Appendix 3. All logs are presented on Appendix 4. All depths are referenced from ground surface.

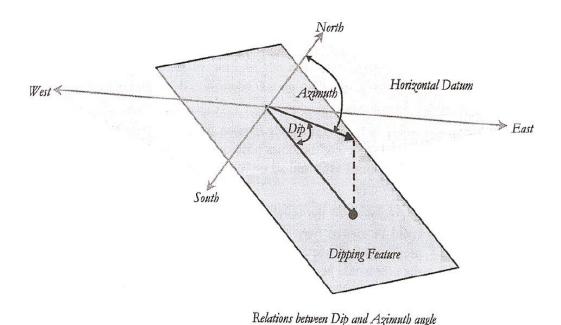
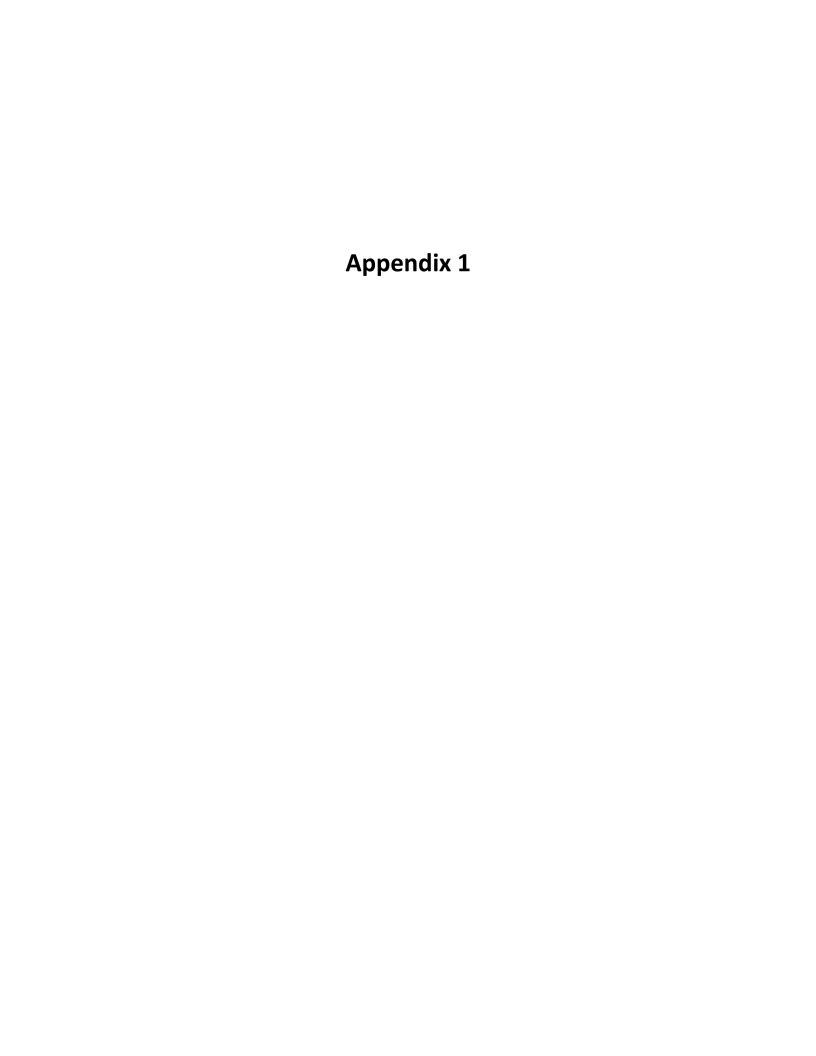


Figure 1: Explanation of azimuth and dip for fractures



PZ - 22: Fractures

PZ - 22: Fractures						
Depth	Azimuth	Dip	Aperture			
ft	deg	deg	mm			
12.1	260	34	1			
12.3	258	30	1			
12.9	129	33	10			
14.3	43	82	5			
14.8	291	74	1			
14.9	69	49	1			
16.6	125	28	1			
16.7	129	27	1			
18.8	136	23	1			
18.9	50	75	5			
19.6	129	19	11			
21.4	68	1	14			
21.6	152	12	23			
22.3	285	64	1			
23.5	132	34	8			
23.6	144	38	13			
24.5	126	29	12			
25.3	142	28	14			
26.9	152	34	1			
27.1	141	35	1			
29.2	320	61	38			
29.4	306	81	30			
30.4	21	49	1			
30.9	2	61	61			
33.5	314	75	17			
35.3	268	68	3			
37.0	278	77	1			
37.2	284	75	7			
39.9	54	1	1			
40.9	163	47	1			
41.0	315	79	1			
43.2	251	8	1			
43.7	150	27	1			
43.8	149	26	9			
45.0	308	83	1			
45.7	155	52	10			
46.0	142	44	1			
46.5	147	41	50			
48.7	325	74	46			

PZ - 23D: Fractures

PZ - 23D:	Fractures		
Depth	Azimuth	Dip	Aperture
ft	deg	deg	mm
48.5	230	66	1
50.4	211	80	1
53.2	271	19	1
53.7	112	26	1
54.3	295	64	1
55.8	305	73	1
56.1	149	15	12
56.3	147	12	12
57.1	313	71	1
58.3	132	73	1
58.4	128	81	10
58.4	141	46	1
60.8	136	15	1
61.2	117	28	1
61.9	158	36	1
64.0	287	69	3
65.9	235	27	14
66.1	305	79	7
66.9	174	31	24
67.6	322	36	10
68.7	147	14	1
69.1	141	24	21
69.4	148	34	23
71.0	164	73	1
73.7	313	61	6
73.9	300	75	26
75.0	309	63	1
75.1	310	59	1
75.9	9	65	1
77.0	143	85	6
77.2	98	67	3
81.3	341	73	1
81.5	16	81	1
81.8	176	75	1
81.8	179	71	1
82.1	345	68	1
83.6	142	7	6
83.8	141	21	7
84.6	307	69	1
·	·		·

PZ - 23D: Fractures

Depth	Azimuth	Dip	Aperture
ft	deg	deg	mm
84.7	193	67	1
85.0	311	70	1
86.7	327	65	1
86.8	294	66	1
86.8	298	76	1
87.0	305	79	4
88.1	299	71	1
89.0	137	29	1
89.1	137	29	1
89.9	43	2	1
		·	

PZ - 23S: Fractures

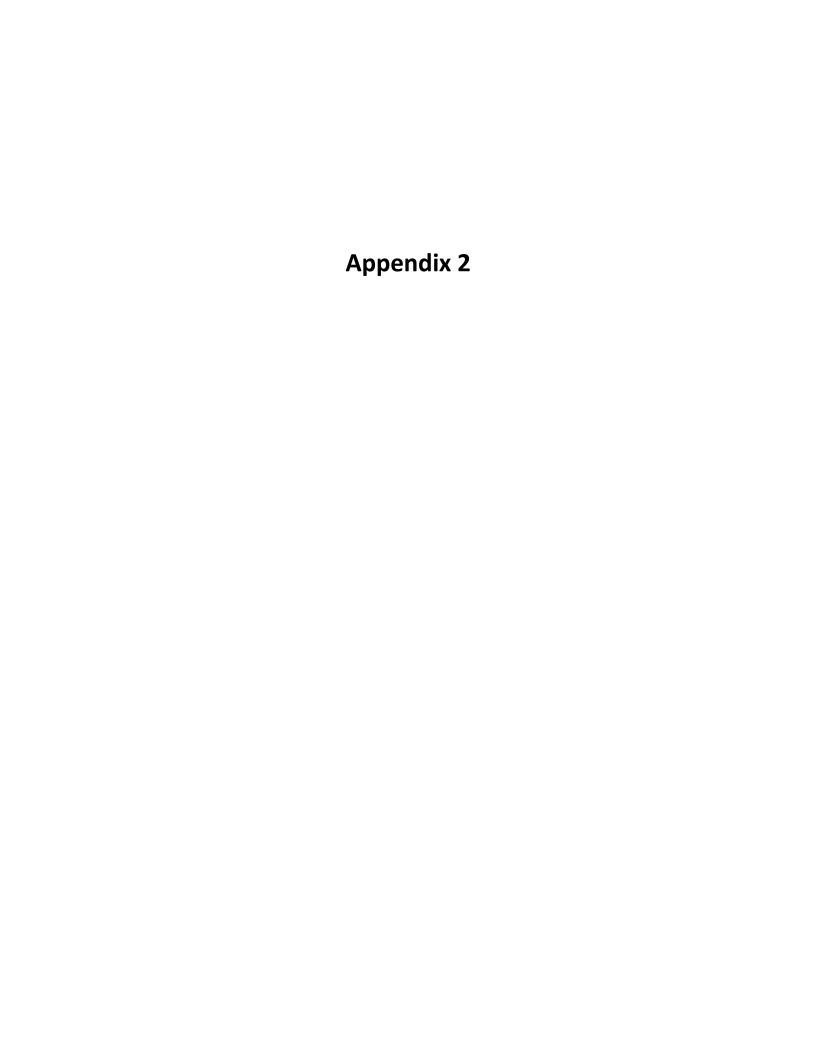
	ractures		
Depth	Azimuth	Dip	Aperture
ft	deg	deg	mm
35.7	163	9	14
36.0	323	27	1
36.1	126	45	4
36.8	282	13	27
37.2	203	55	1
38.0	169	32	5
38.2	195	9	1
38.9	180	25	18
39.7	58	2	1
40.1	246	9	48
40.2	208	84	1
41.6	29	78	2
41.6	314	69	6
43.1	134	33	17
43.7	151	22	1
44.2	129	33	1
44.6	130	46	1
46.8	311	56	1
47.7	310	62	6
48.7	311	57	8
48.9	319	57	1
50.7	212	83	3
51.0	313	60	8
51.9	317	73	3
52.2	319	77	3
53.2	319	58	4
56.2	162	21	6
56.3	33	84	1
59.0	36	86	1
59.1	53	2	1
59.1	141	45	1
59.5	128	28	1
62.7	162	28	74
65.4	151	26	52
65.8	25	81	1
66.4	25	80	2
66.8	30	76	1
68.1	26	79	1
i		i	

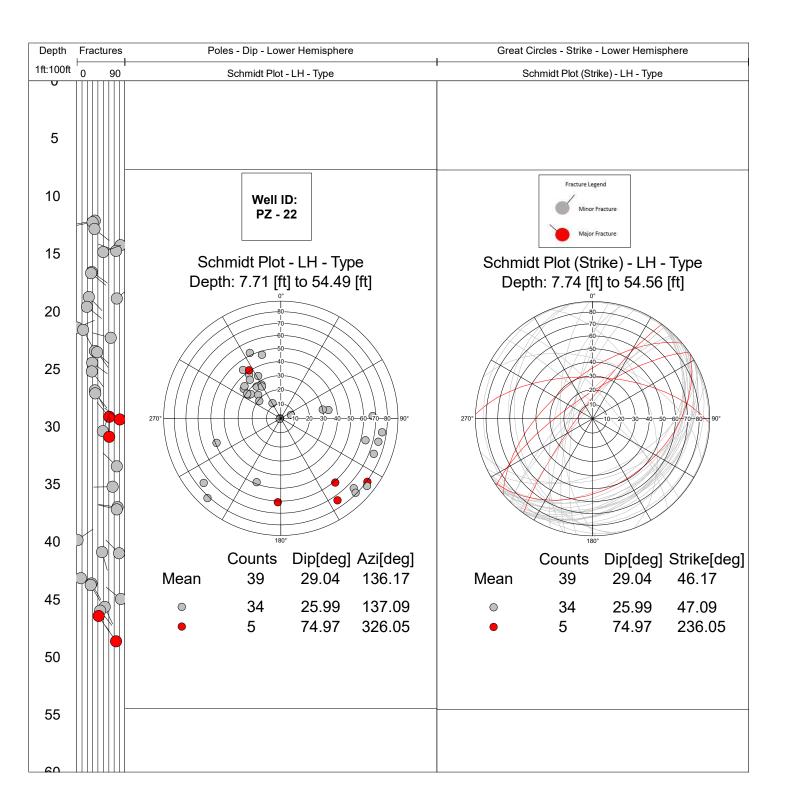
PZ - 25: Fractures

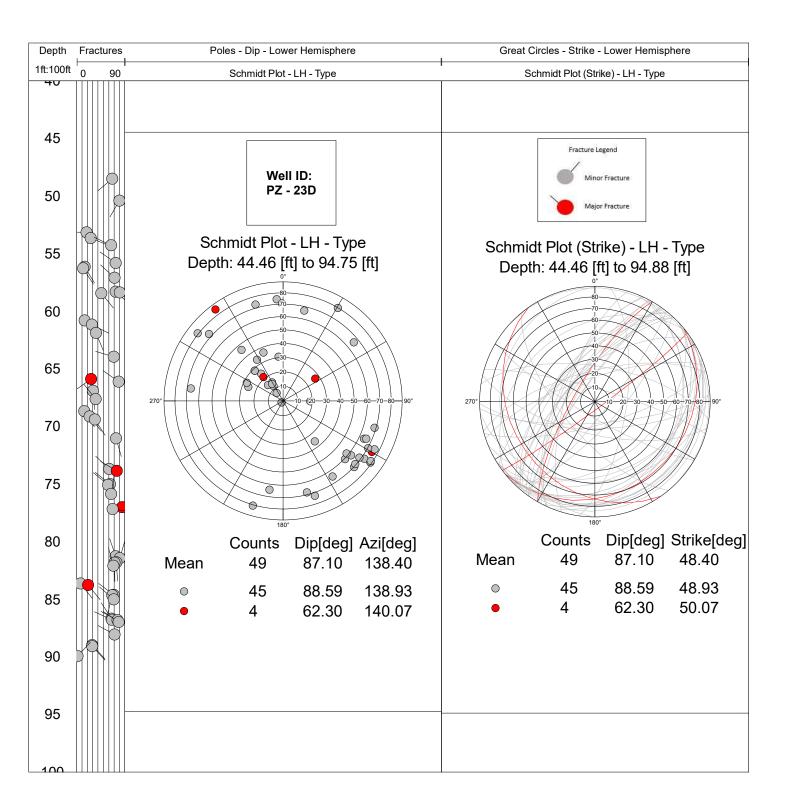
Depth	Azimuth	Dip	Aporturo
			Aperture
ft	deg	deg	mm
50.4	91	22	1
50.6	73	33	1
52.1	100	10	1
52.8	93	34	5
54.1	138	34	104
55.8	127	19	1
56.7	297	42	5
56.9	145	27	1
57.2	136	30	1
57.3	132	79	1
57.5	135	29	1
57.9	129	26	13
57.9	123	80	1
59.1	108	30	1
59.5	52	2	1
59.9	306	74	1
60.1	116	13	1
60.2	121	13	1
61.5	310	45	7
62.2	304	76	1
62.6	284	73	1
62.9	296	69	1
64.3	157	30	9
64.9	306	57	1
65.3	313	63	1
66.0	336	47	1
67.1	327	69	1
67.1	292	58	1
67.4	303	60	1
68.1	341	62	1
68.8	300	51	1
69.3	316	55	1
70.5	319	68	5
_ , 0.5	010		

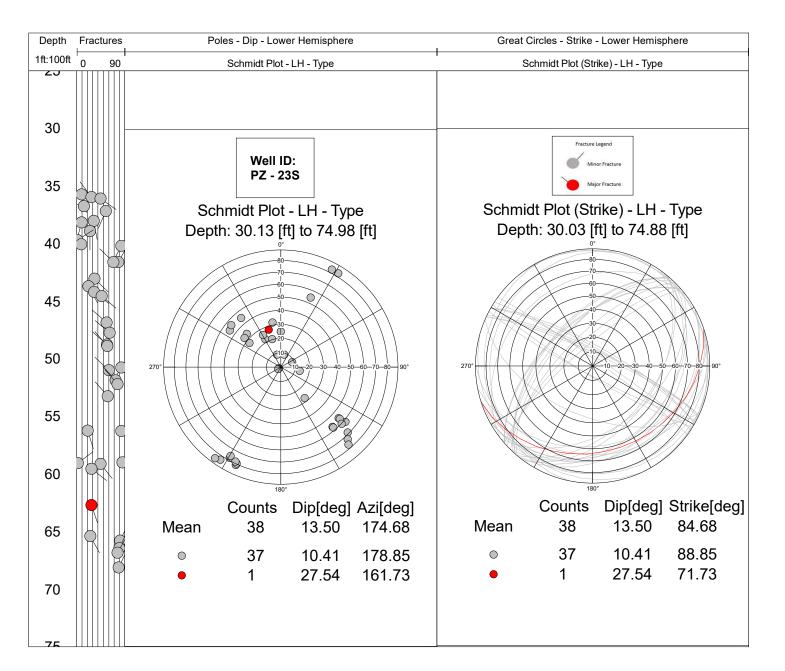
PZ - 26D: Fractures

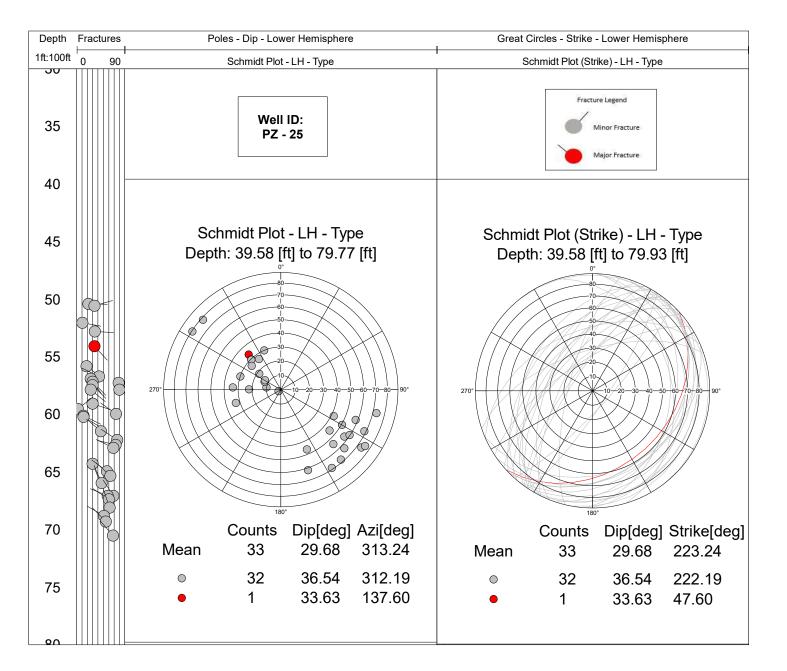
Depth	Azimuth	Dip	Aperture
ft	deg	deg	mm
40.9	74	63	1
41.1	356	69	1
42.4	312	56	9
42.8	271	61	1
43.0	260	63	1
43.7	261	65	1
44.5	257	50	1
45.3	257	64	1
45.5	254	66	1
46.0	267	60	1
47.3	261	62	1
48.4	141	49	3
48.6	141	52	1
48.6	239	55	1
49.0	140	48	1
49.6	108	30	1
50.1	83	52	1
50.6	109	44	1
51.5	329	84	4
53.9	138	78	5
55.5	222	13	1
55.8	123	80	5
57.6	260	18	1
58.4	137	47	27
59.4	137	57	8
60.6	156	42	1
61.4	248	72	1
63.4	327	78	1
63.6	252	33	1
64.2	323	24	1
65.2	145	24	1
66.0	160	47	1
66.5	163	35	1
67.6	253	54	1
68.0	240	21	1
68.2	149	37	8
69.0	41	53	6
69.6	24	42	11
70.4	123	40	1
70.5	121	40	1
70.8	126	38	1
71.6	304	80	1
72.5	148	54	63

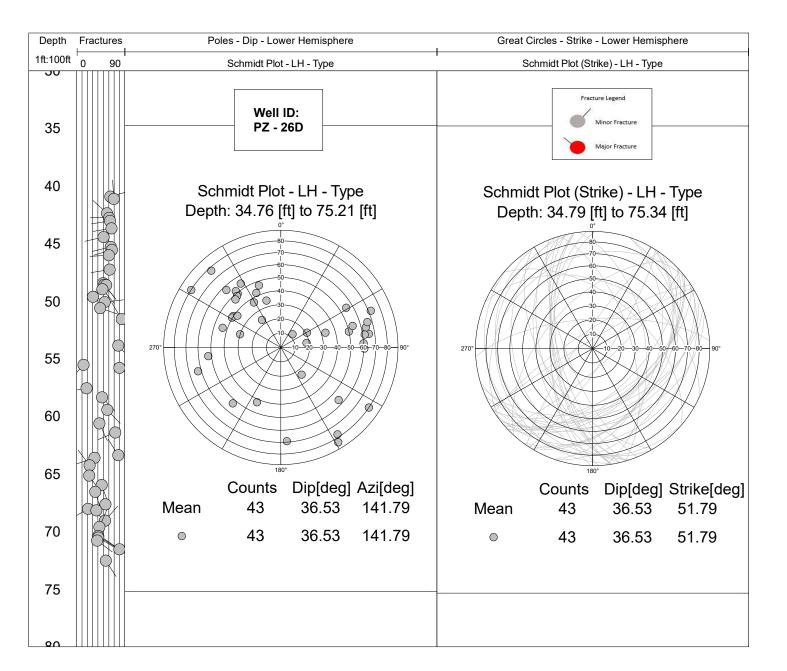


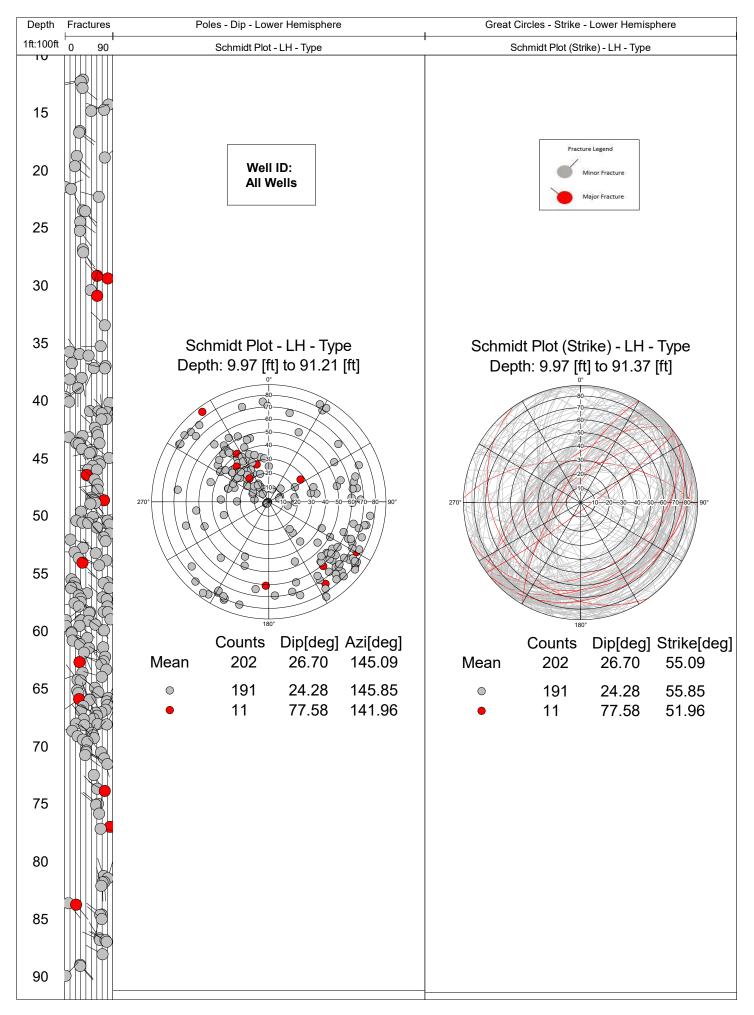


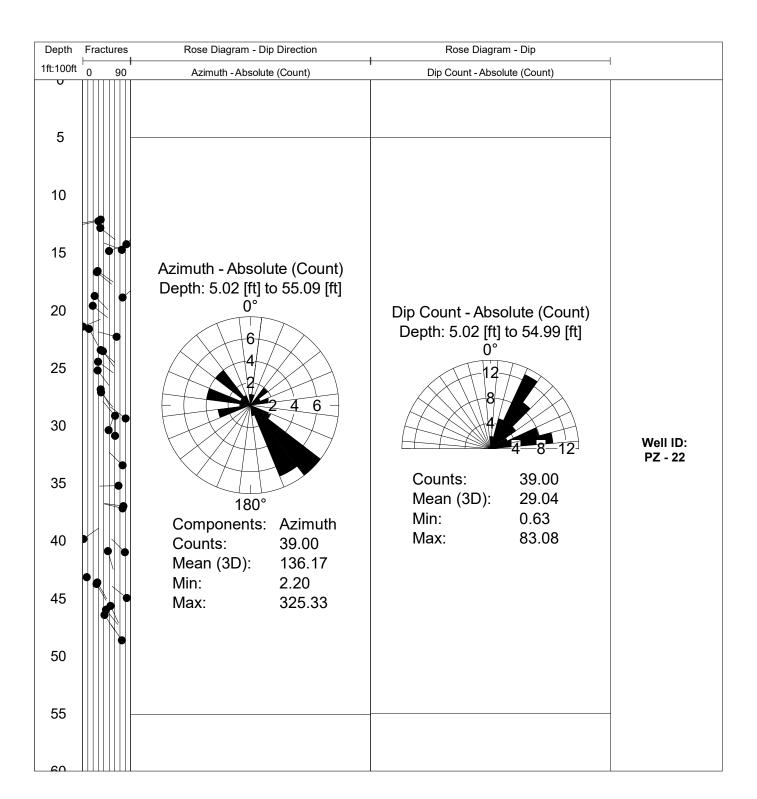


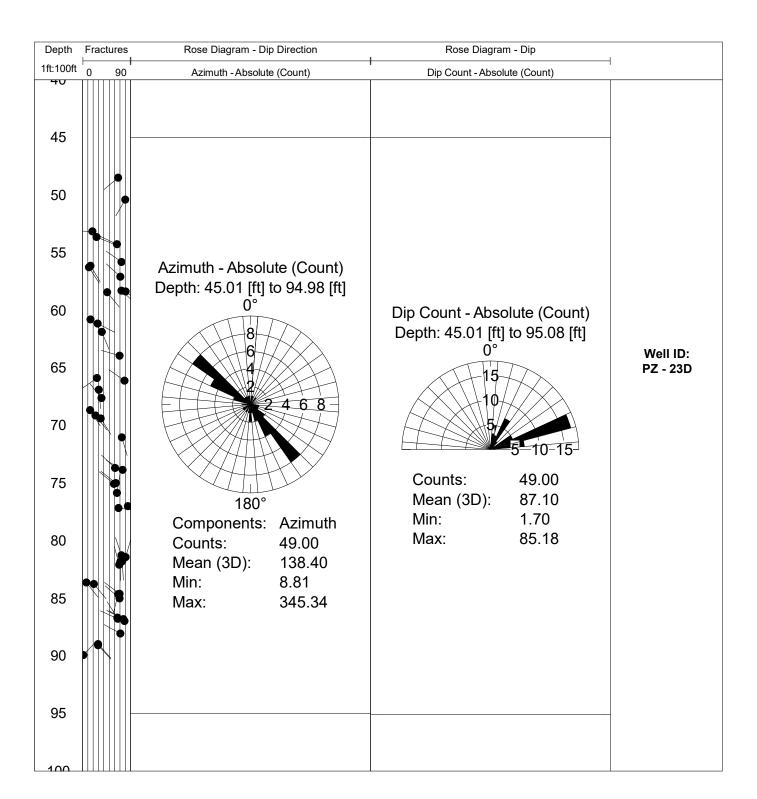




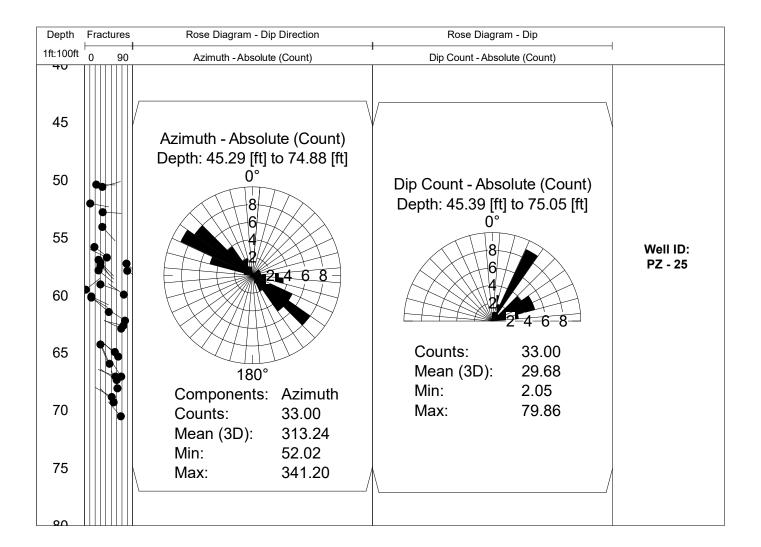


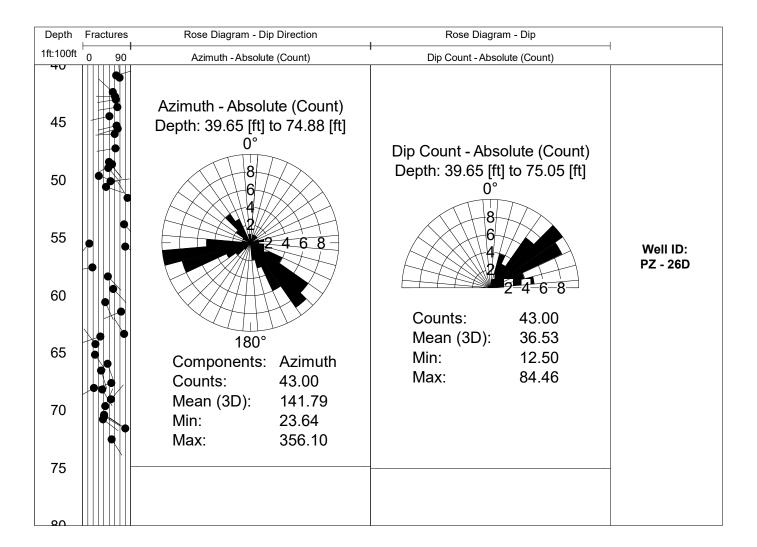


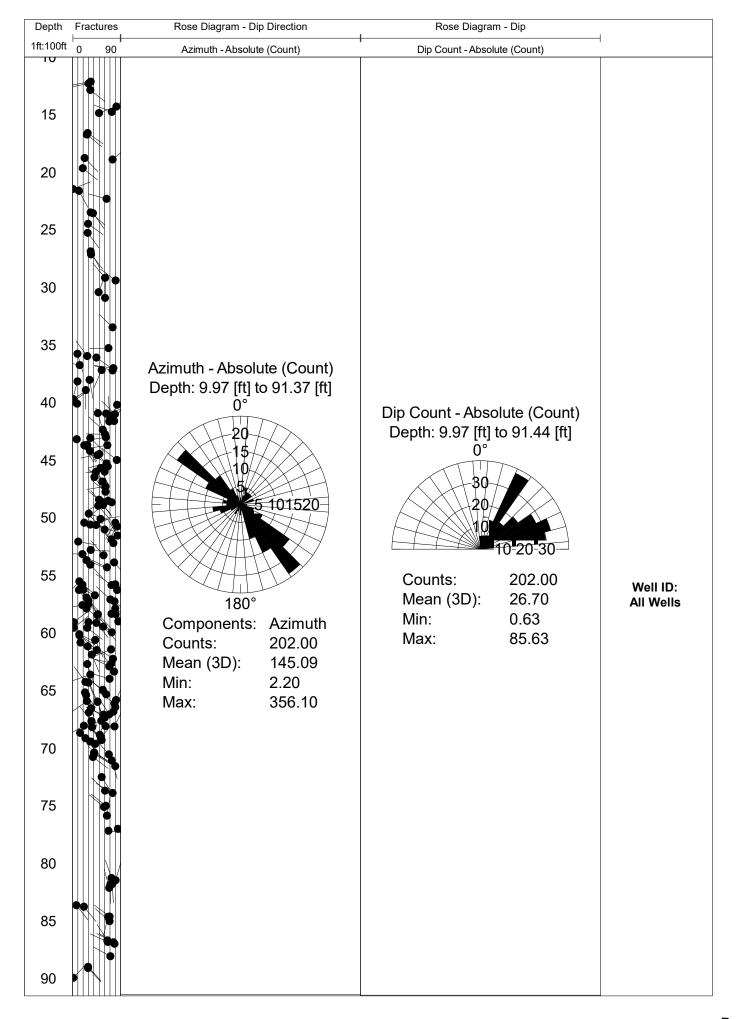


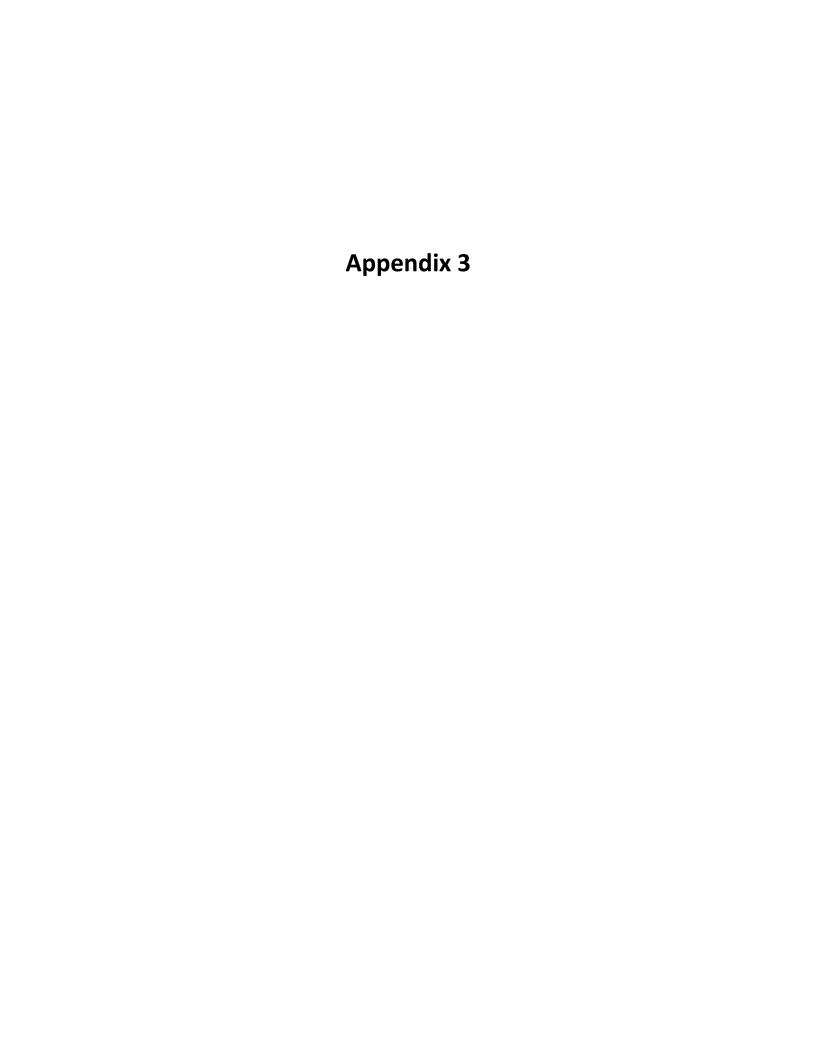


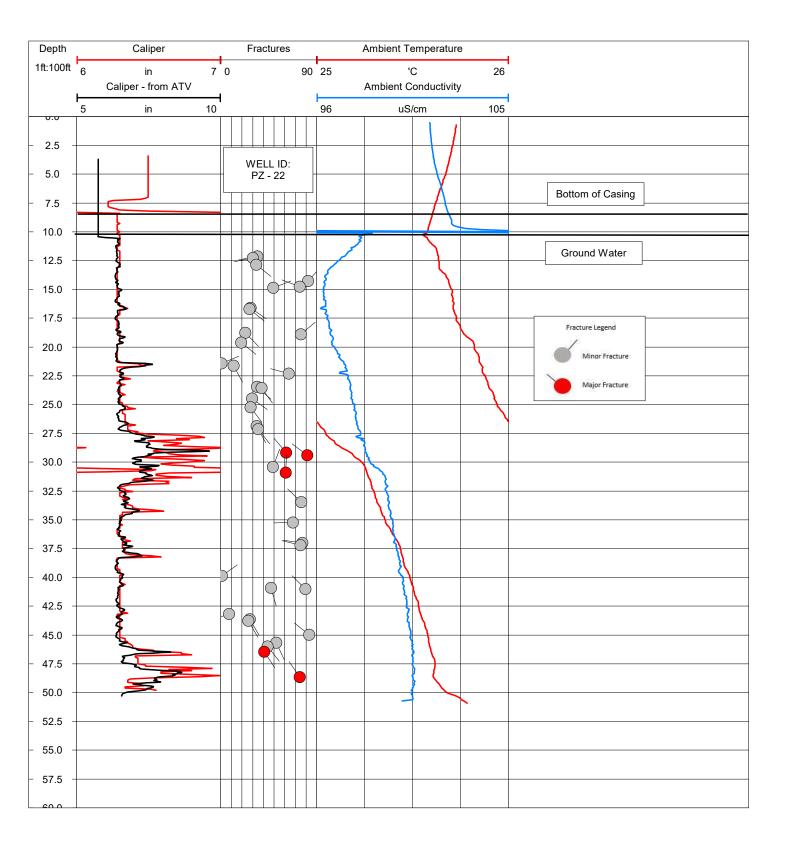
Depth	Fractures	Rose Diagram - Dip Direction	Rose Diagram - Dip	
1ft:100ft	0 90	Azimuth - Absolute (Count)	Dip Count - Absolute (Count)	
35		Azimuth Abaduta (Count)		
40		Azimuth - Absolute (Count) Depth: 32.92 [ft] to 70.26 [ft]	Dip Count - Absolute (Count) Depth: 32.92 [ft] to 70.32 [ft]	
45		6	0°	Well ID:
50 55		4 6 8	2 4 6 8	PZ - 23S
60		180° Components: Azimuth	Counts: 38.00 Mean (3D): 13.50 Min: 1.70	
65		Counts: 38.00 Mean (3D): 174.68	Max: 85.63	
70		Min: 24.76 Max: 322.53		
70				

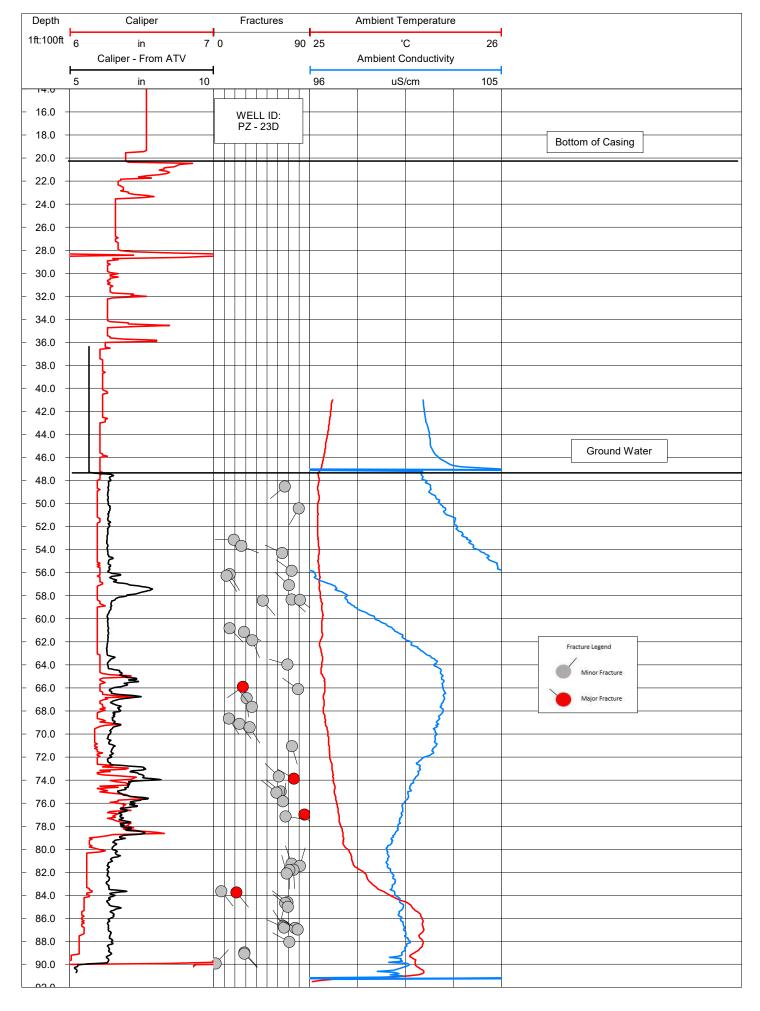


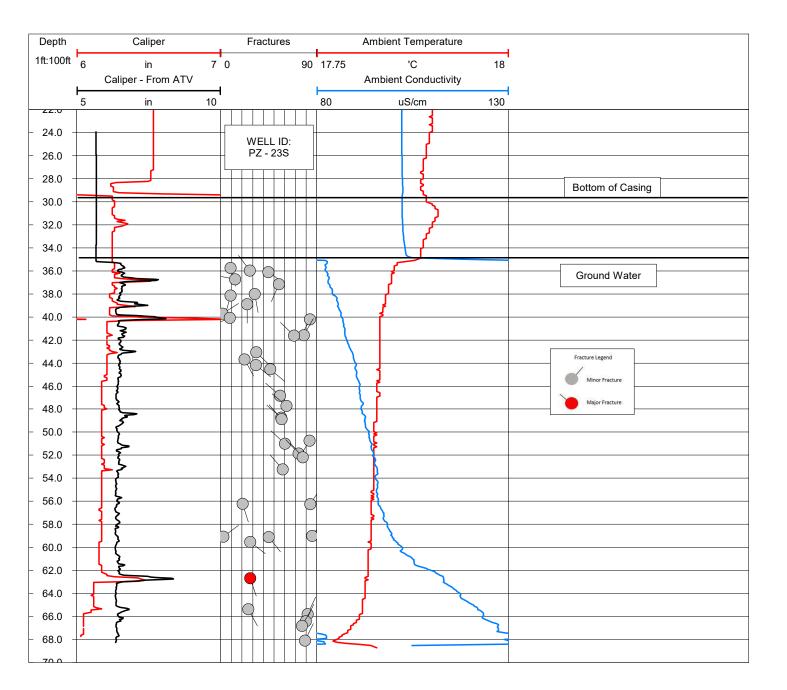


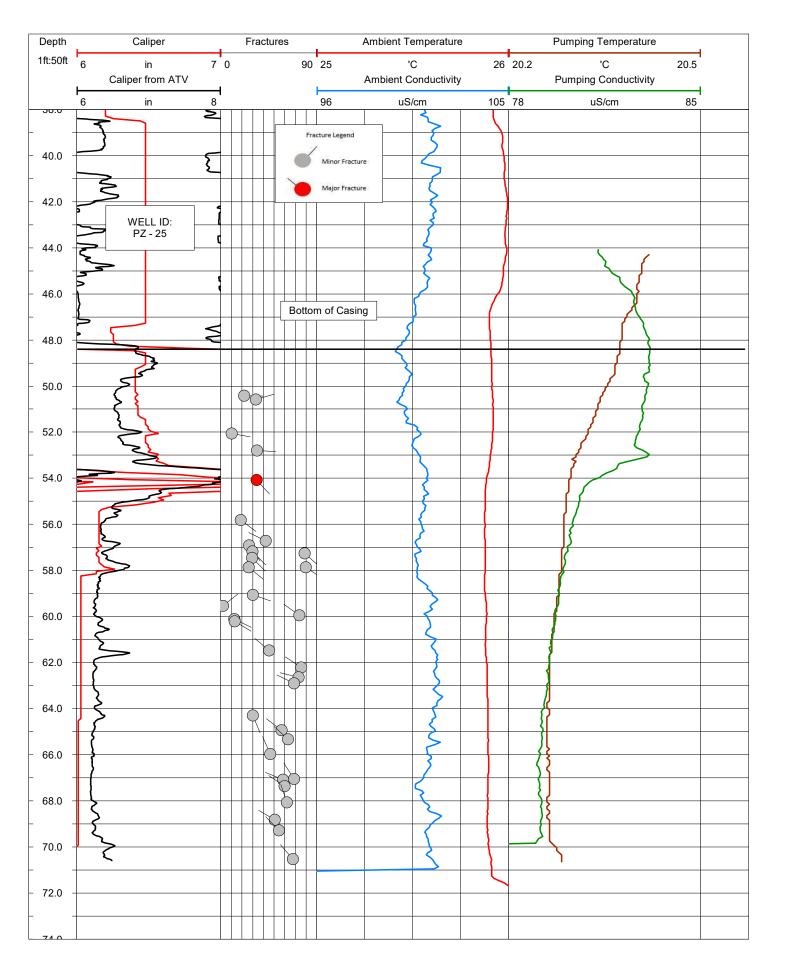


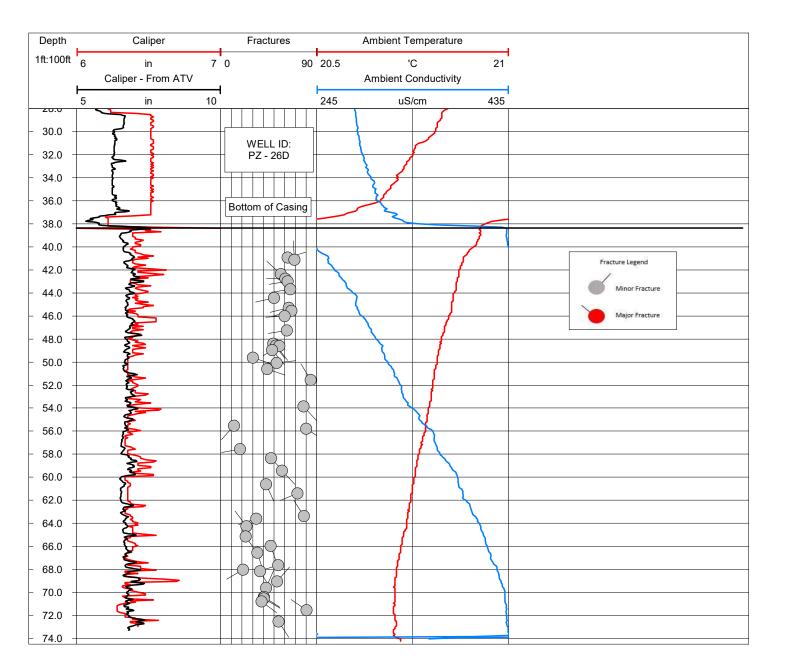


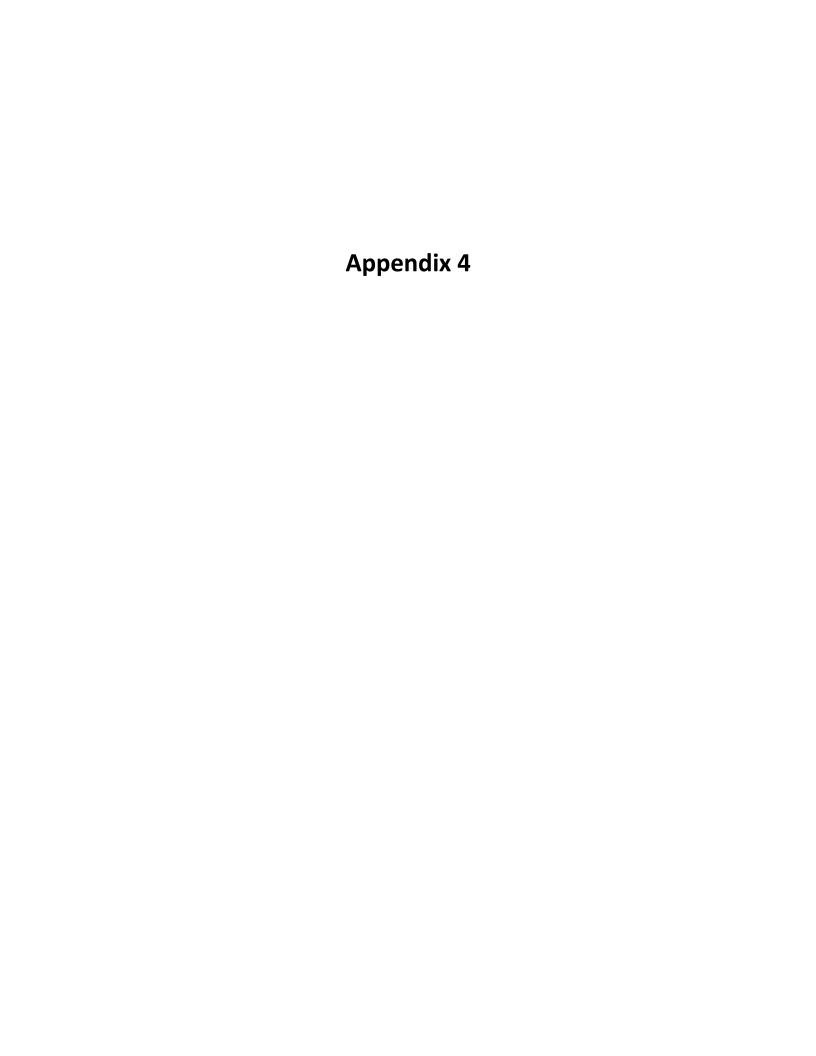


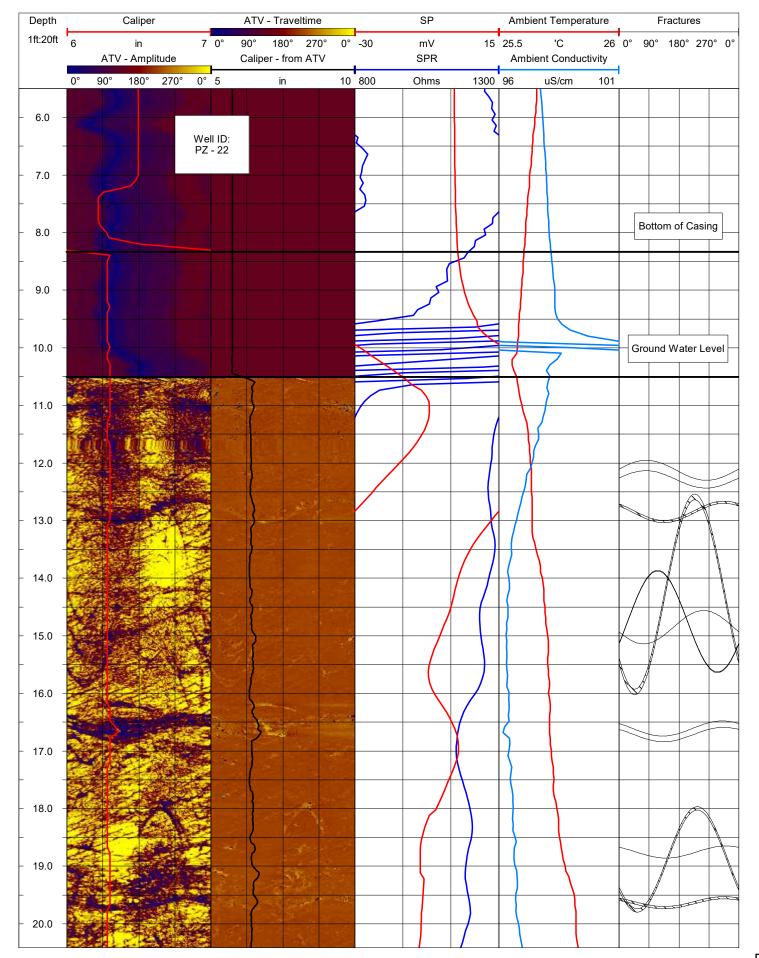


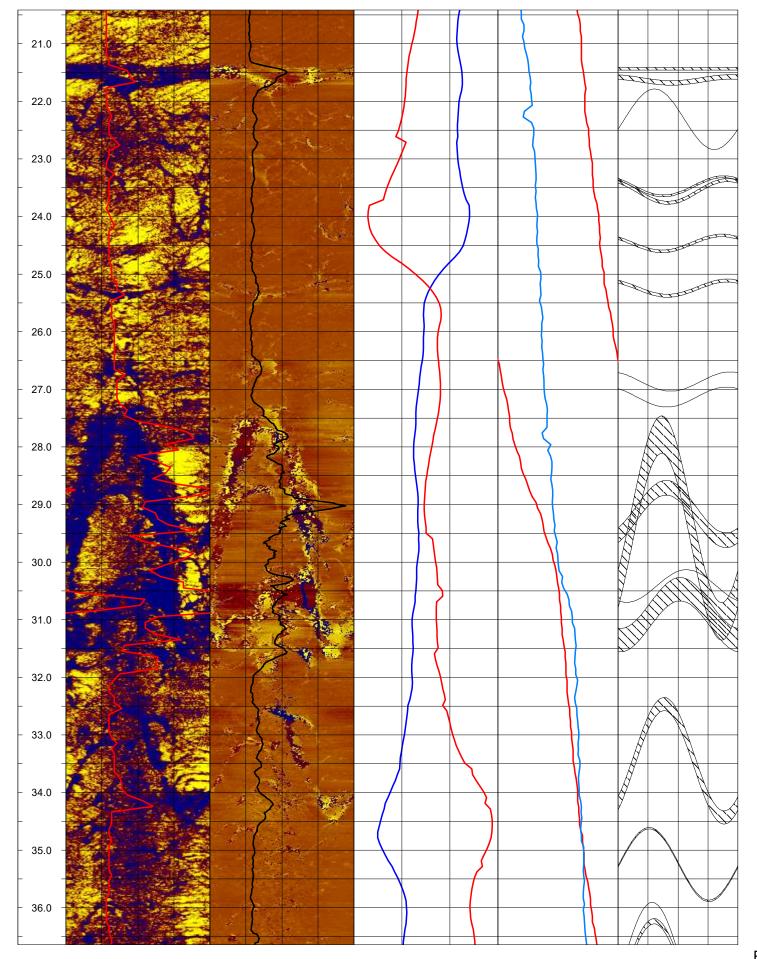


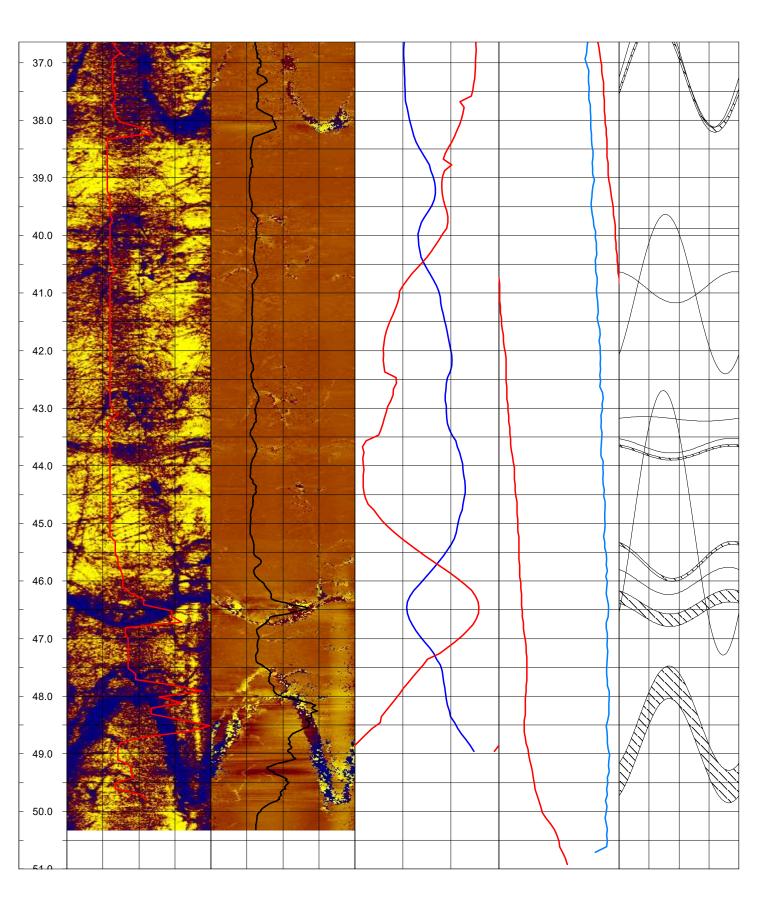


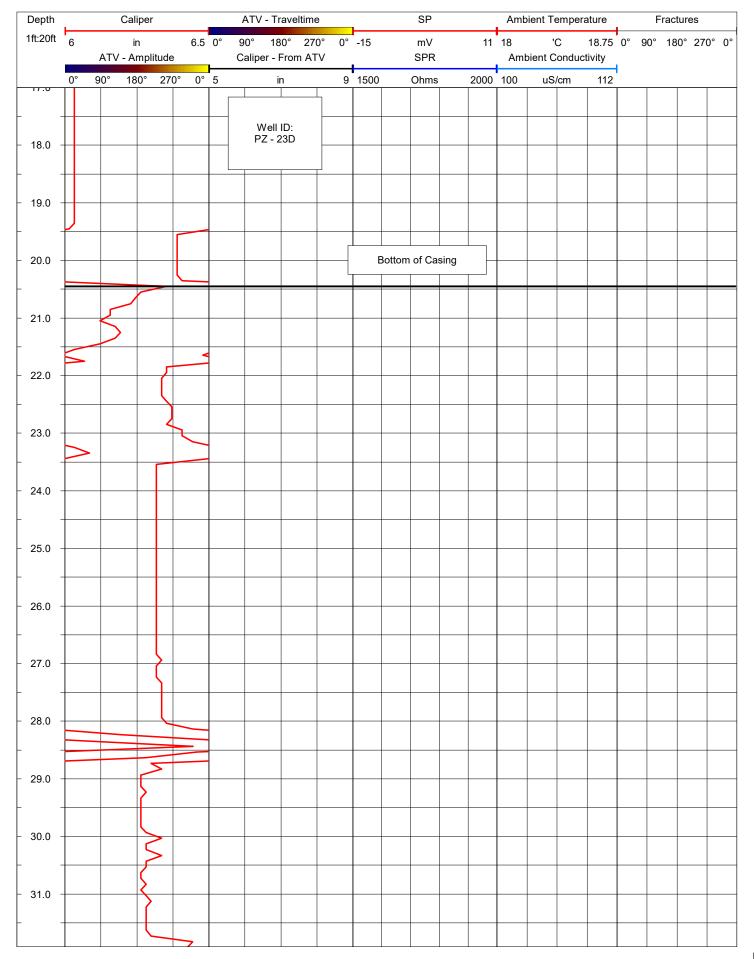


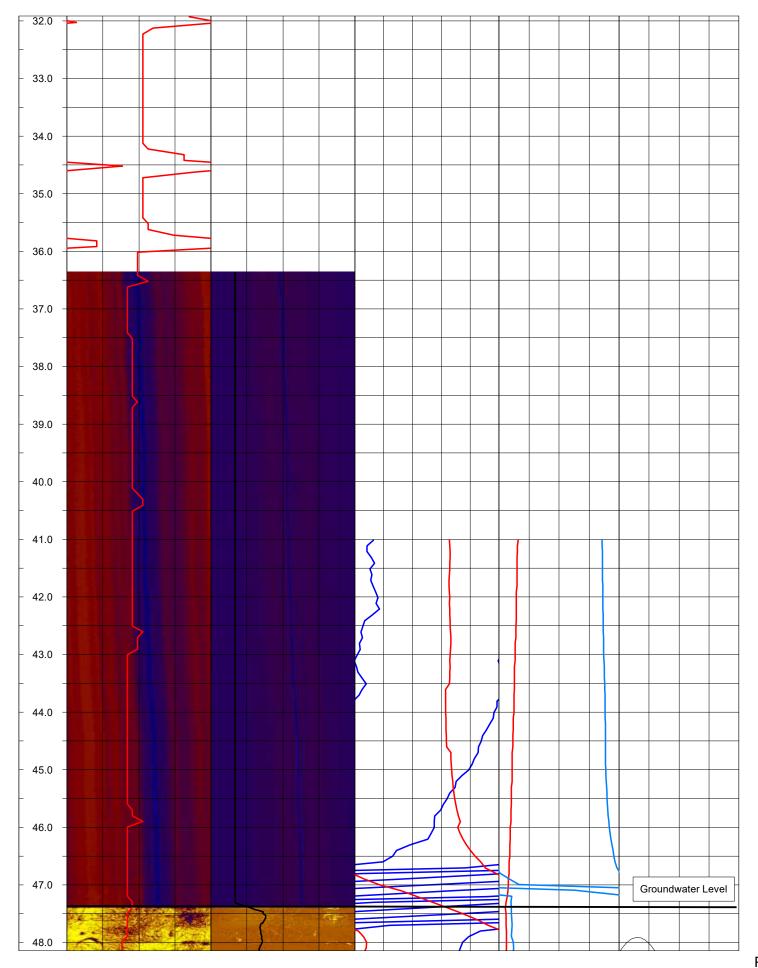


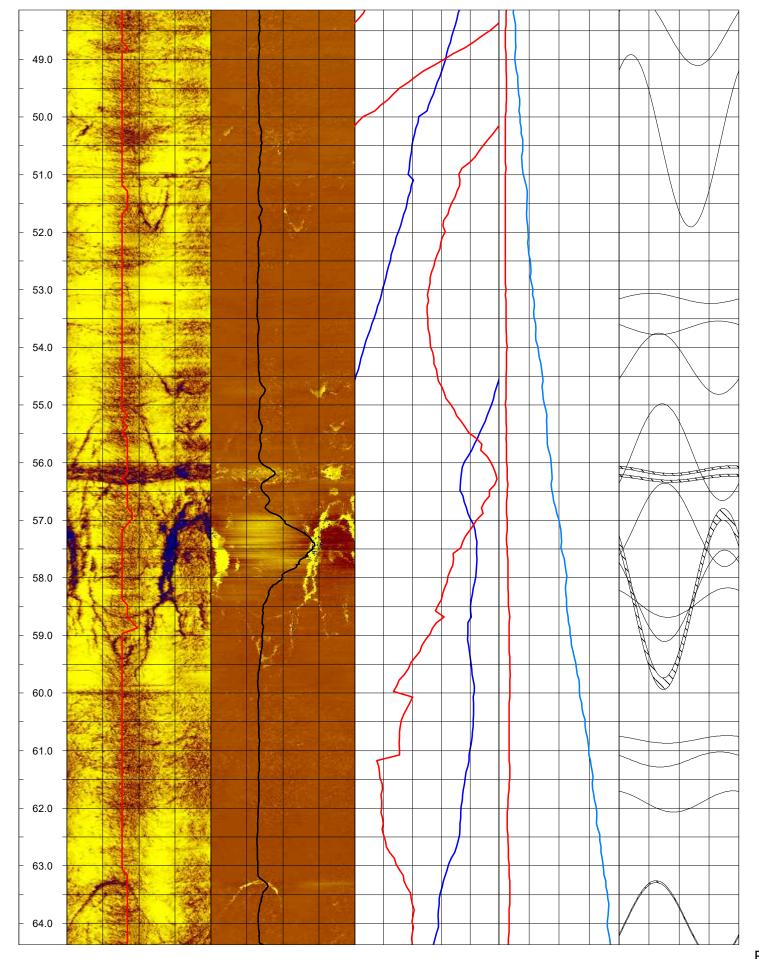


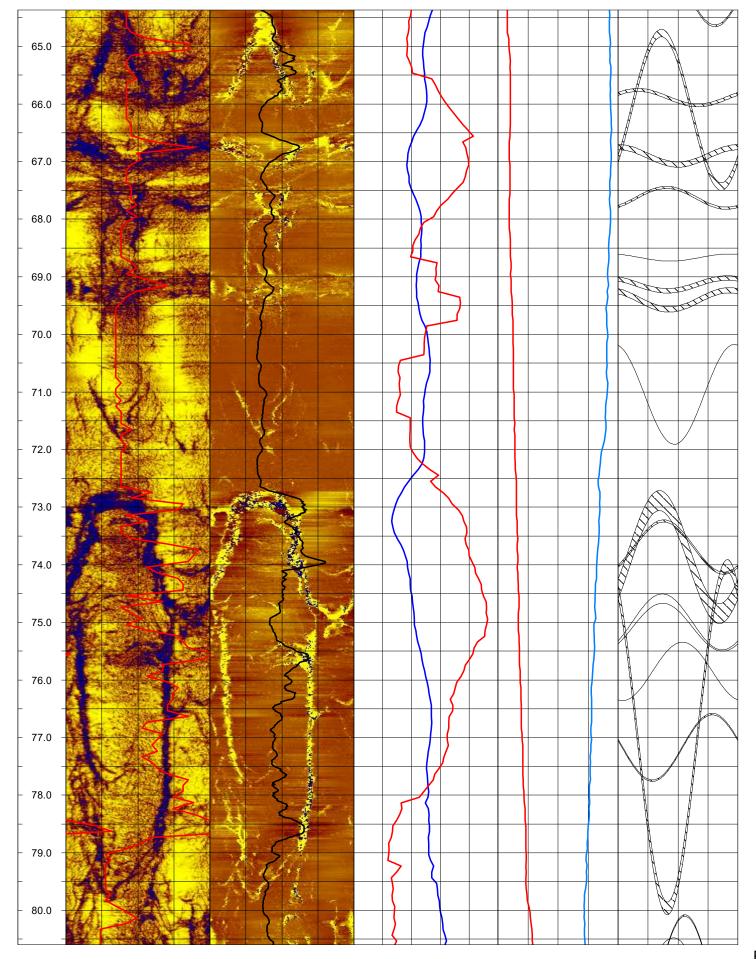


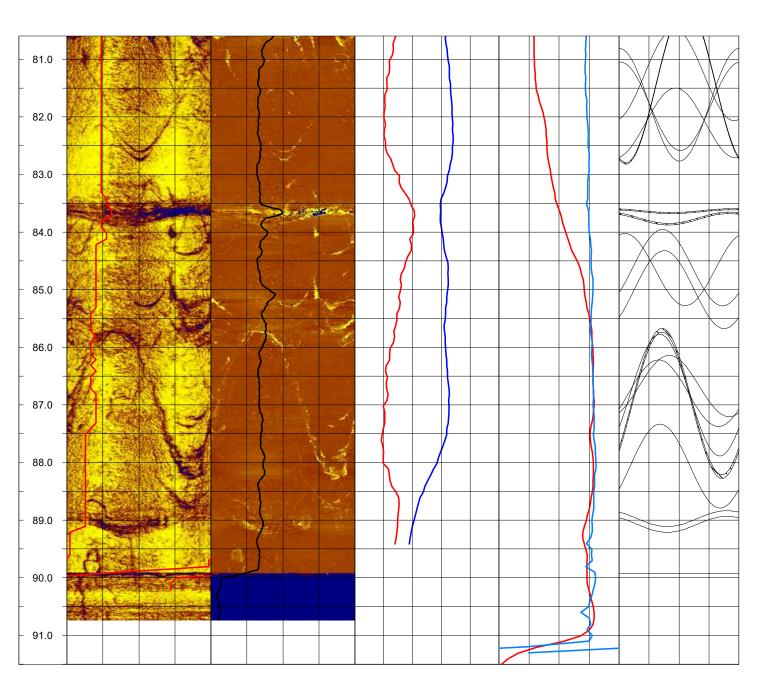


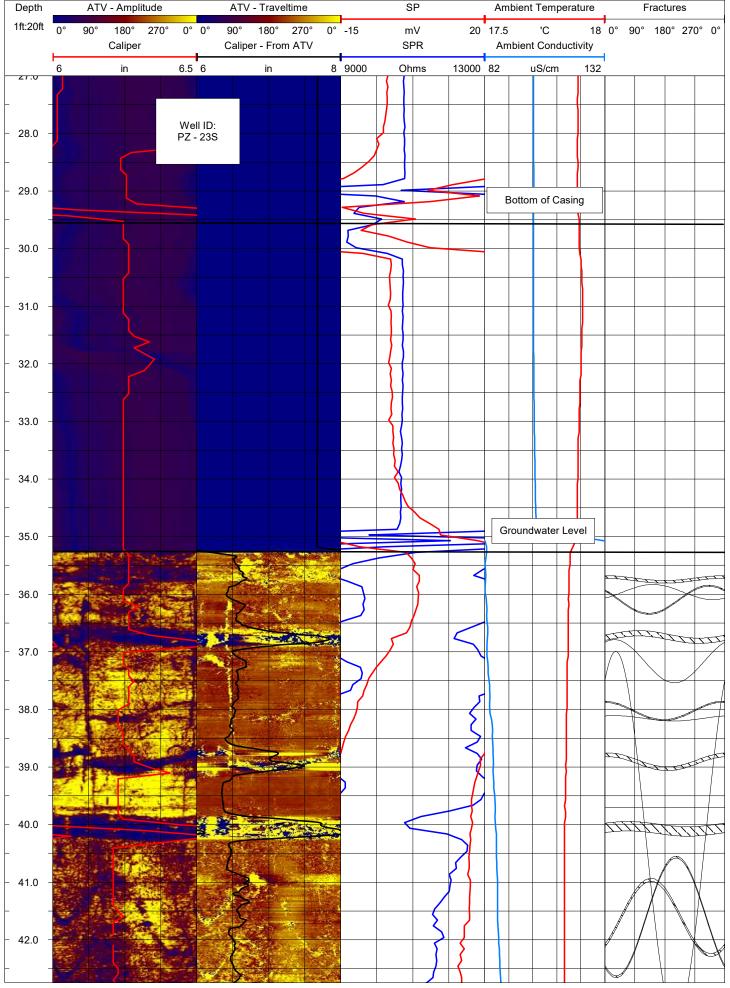


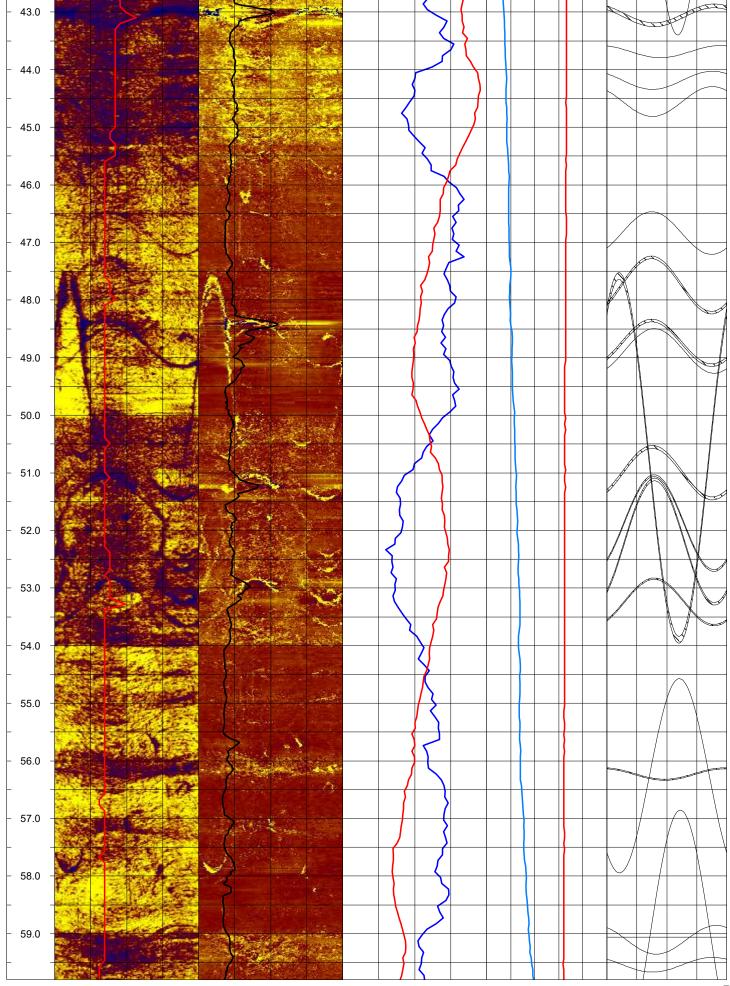


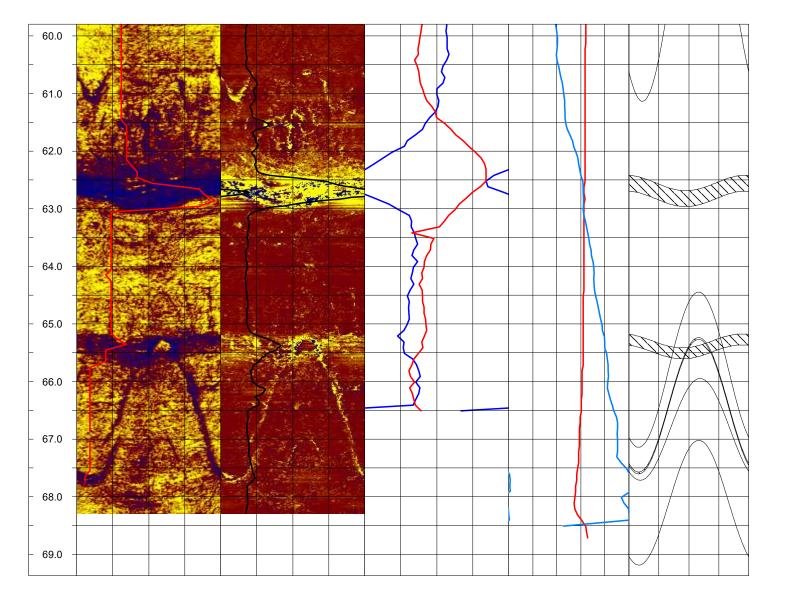


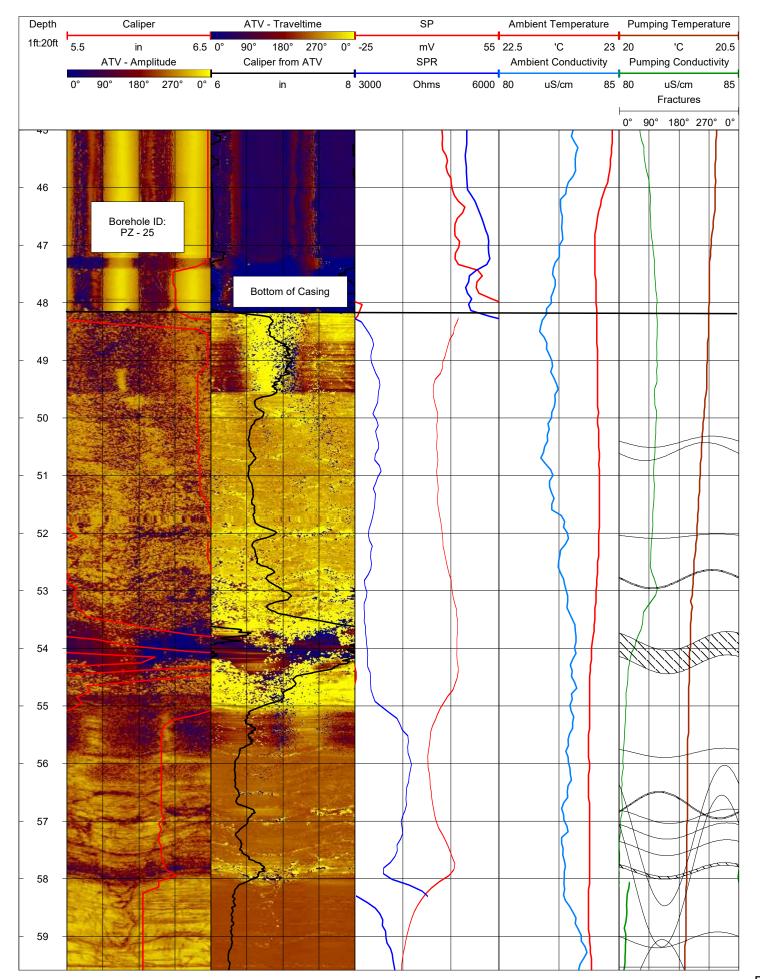


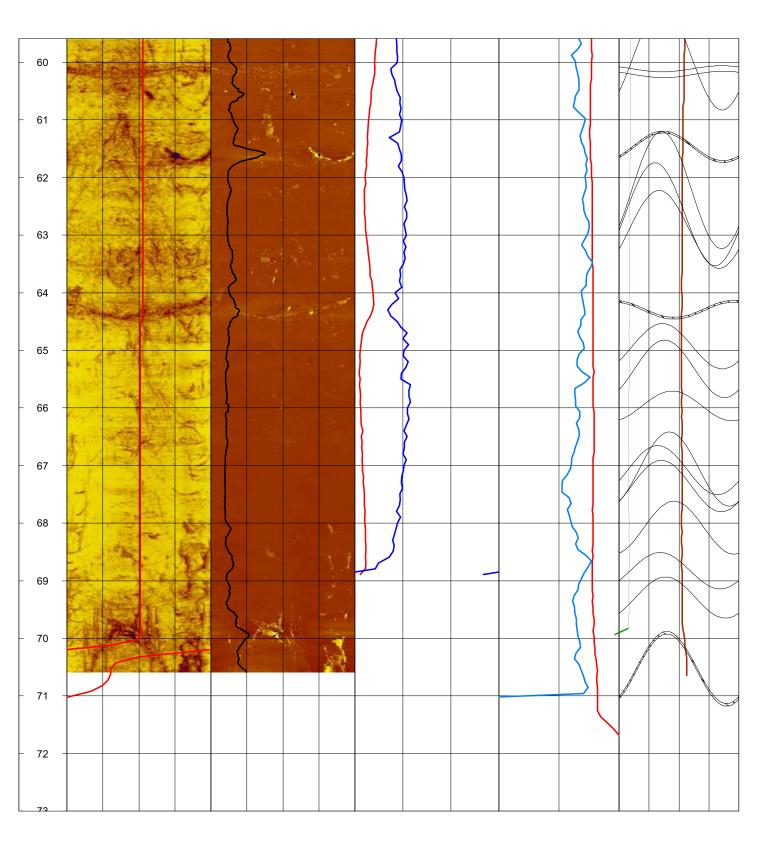


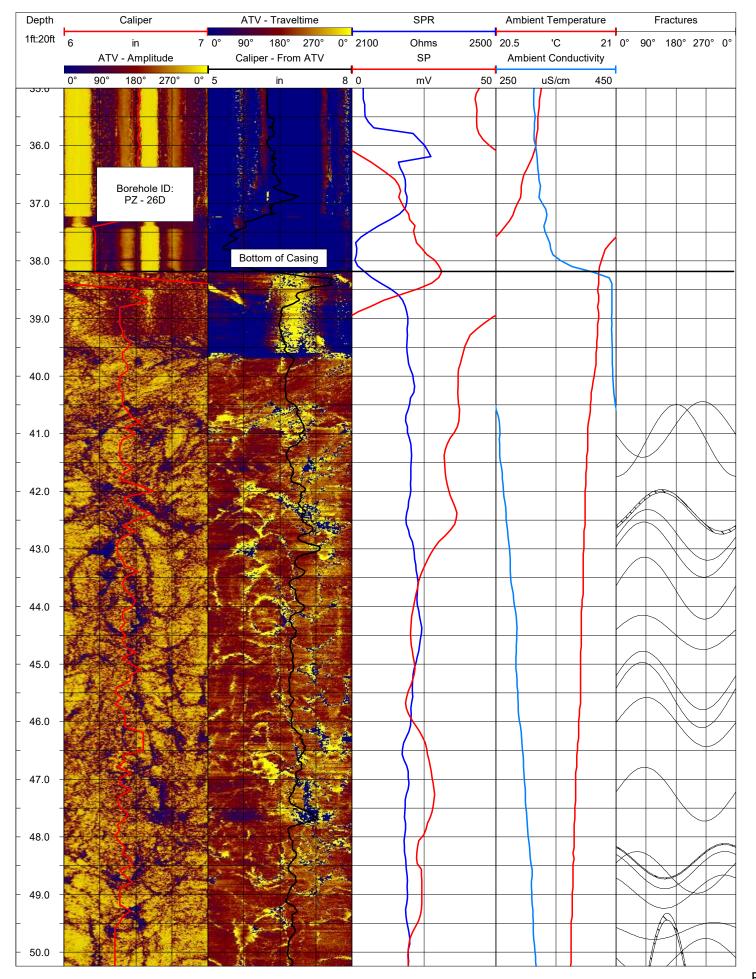


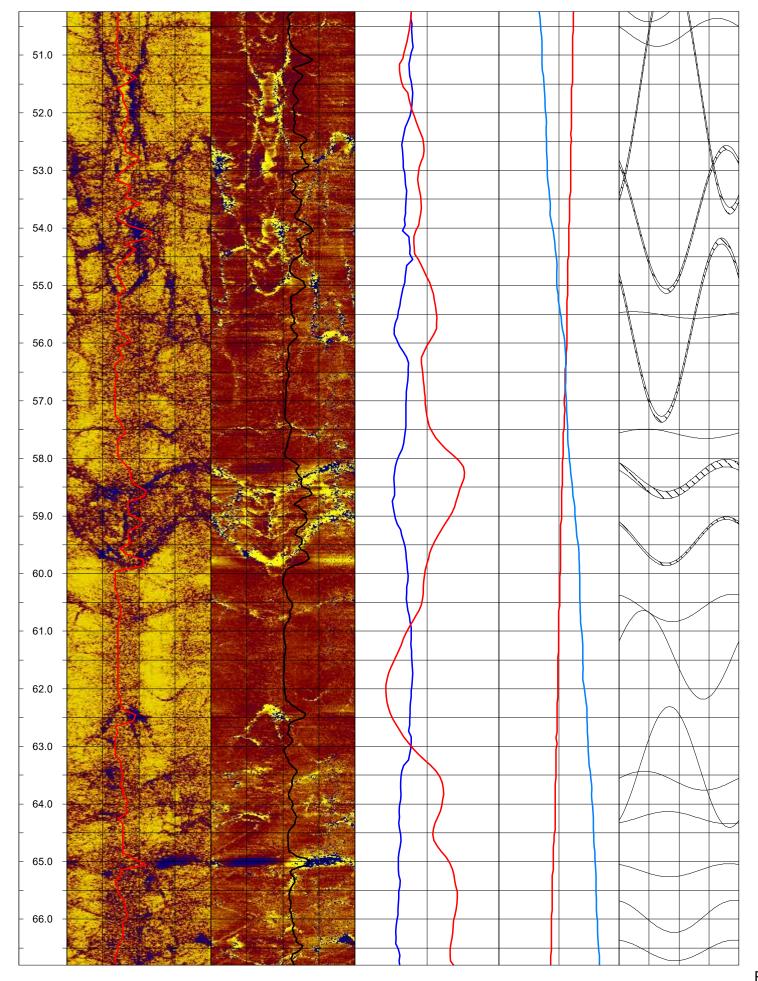


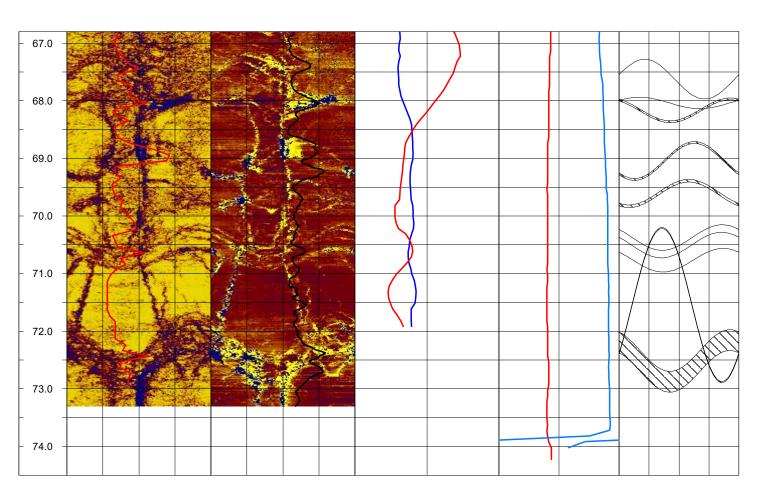












APPENDIX D

Piezometer Development Forms

Atlantic Coast Consulting, Inc. Well Development Field Record

Job Name:	WANSLEY A	P		Job No.	I054	-110	Well No	DZ -	-22
Developed By:	O.F	UQUEA		Date of I	nstallatio	n:		Sheet	of (
Started Dev.	10-23-20	1020		Complet	ed Dev	1135	10	26-20	-
		Date / Time			i vita		Dat	e / Time	
W.L. Before Dev.	26.14	10-23-20	1015	W.L. Afte	er Dev.	36	2/4	10/26/20	11412
	вто	C / Date / Tim	ie				BTOC /	Date / Time	•
Well Depth Before	Dev.:	42.85	ВТОС	Well Dep	oth After D	Dev.:	42.	. 85	BTOC
Water Column (H):	16.71 Ft.	Well Dia.:	2 In.	Well Volu	ıme:	2.7	G	al.	
Screen Length:	ID Ft.				. · · · · · · · · · · · · · · · · · · ·	362	1 8 7		

			Field Paramet	ers		
Date / Time	Volume Removed (Gal.)	Specific Cond. (umhos/cm)	Temperature (oC)	pH (S.U.)	Turbidity (NTU)	Remarks
1127	20	NA		->	664	Well purged dry.
1143	24	749.3	27.5	6.25	46	Will pugitar by
1218	33 27	760	13.6	6.37	25	
1254	34	692	24.2	6.51	17	
1328	40	717	22.8	6.40	6-3	
1340	45	740	21.8	6.33	4.8	
10-26-20	NA -				4	
11101105	46.5	671	20.6	6,33	7.6	
HISMO	48	672	70.8	6.05	7	
420 IIIS	49.5	680	71.1	5.98	6.6	
H251170	51	680	21.2	6.00	5.6	
H3 Dnzs		672	21.2	5.95	2	
435113	54	G72	21.1	5.88	2.7	
1135	55.5	672	21.1	5.86	1.5	
1137	NA -	THE CONTRACT OF THE SECTION OF THE S		1 2 2	\rightarrow	Well oursed dry
					en e	7 3
				and the second		
and the second second						

Development Method: Surge to purge

Surge w/ Surge blocker & foot value, pump w/ electric whole development

pump until stable & NTU < 5. Q = 1.2 4/min

Notes:

H = well depth (BTOC) - W.L. (BTOC)

Well volume in pipe:

2" diameter well: 0.16 X H = volume in gallons 4" diameter well: 0.66 X H = voume in gallons

Total of 111 gallons purged between 10/22/2020 and 10/26/2020

Test Date / Time: 10/26/2020 11:00:13 AM **Project:** Plant Wansley - Ash Pond Developments

Operator Name: Jordan Berisford

Location Name: PZ-22
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 32.85 ft

Total Depth: 42.85 ft

Initial Depth to Water: 25.81 ft

Pump Type: Whale Pump Tubing Type: Poly

Pump Intake From TOC: 42 ft Estimated Total Volume Pumped:

42 liter

Flow Cell Volume: 90 ml Final Flow Rate: 1200 ml/min Final Draw Down: 110.28 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
10/26/2020 11:00 AM	00:00	6.95 pH	24.05 °C	1.48 µS/cm	8.33 mg/L		92.8 mV	31.20 ft	1,200.0 ml/min
10/26/2020 11:05 AM	05:00	6.33 pH	20.65 °C	670.51 μS/cm	7.16 mg/L	7.55 NTU	96.0 mV	33.20 ft	1,200.0 ml/min
10/26/2020 11:10 AM	10:00	6.05 pH	20.82 °C	672.54 μS/cm	6.83 mg/L	7.02 NTU	98.8 mV	34.20 ft	1,200.0 ml/min
10/26/2020 11:15 AM	15:00	5.98 pH	21.12 °C	680.49 μS/cm	6.43 mg/L	6.57 NTU	99.6 mV	34.50 ft	1,200.0 ml/min
10/26/2020 11:20 AM	20:00	6.00 pH	21.29 °C	680.28 μS/cm	6.56 mg/L	5.55 NTU	99.9 mV	34.70 ft	1,200.0 ml/min
10/26/2020 11:25 AM	25:00	5.95 pH	21.15 °C	672.42 μS/cm	6.44 mg/L	4.98 NTU	100.4 mV	34.90 ft	1,200.0 ml/min
10/26/2020 11:30 AM	30:00	5.88 pH	21.12 °C	672.15 μS/cm	6.21 mg/L	2.74 NTU	101.3 mV	35.00 ft	1,200.0 ml/min
10/26/2020 11:35 AM	35:00	5.86 pH	21.12 °C	672.09 μS/cm	6.16 mg/L	1.52 NTU	101.6 mV	35.00 ft	1,200.0 ml/min

Samples

Sample ID:	Description:
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Total of 15 gallons purged between 10/28/2020 and 11/3/2020

Test Date / Time: 11/3/2020 2:14:02 PM **Project:** Plant Wansley Ash Pond **Operator Name:** O. Fuquea

Location Name: PZ-23S
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 61.73 ft
Total Depth: 71.73 ft

Initial Depth to Water: 56.4 ft

Pump Type: Ladder Pump Tubing Type: Poly

Pump Intake From TOC: 90 ft Estimated Total Volume Pumped:

0.5 gal

Flow Cell Volume: 90 ml Final Flow Rate: 0.02 gal/min Final Draw Down: 8.4 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
11/3/2020 2:14 PM	00:00	7.54 pH	22.20 °C	646.44 µS/cm	4.45 mg/L		32.5 mV	64.20 ft	0.02 gal/min
11/3/2020 2:19 PM	05:00	7.40 pH	20.22 °C	667.55 μS/cm	4.48 mg/L	5.30 NTU	20.5 mV	64.40 ft	0.02 gal/min
11/3/2020 2:24 PM	10:00	7.35 pH	19.91 °C	676.01 μS/cm	4.51 mg/L	6.20 NTU	17.3 mV	64.50 ft	0.02 gal/min
11/3/2020 2:29 PM	15:00	7.32 pH	19.61 °C	679.02 μS/cm	4.55 mg/L	4.10 NTU	16.7 mV	64.60 ft	0.02 gal/min
11/3/2020 2:34 PM	20:00	7.31 pH	19.39 °C	682.64 μS/cm	4.59 mg/L	4.98 NTU	15.5 mV	64.80 ft	0.02 gal/min
11/3/2020 2:39 PM	25:00	7.30 pH	19.16 °C	679.75 μS/cm	4.59 mg/L	4.84 NTU	16.3 mV	64.80 ft	0.02 gal/min

Samples

Sample ID:	Description:
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Atlantic Coast Consulting, Inc. Well Development Field Record

eveloped B				סמו מסר.		Well No. P (~~)		
		Berstel		Job No. Well No. $P2 \sim 23D$ Date of Installation: Sheet of				
arted Dev.		30-20/1630	Completed Dev.					
		Date / Time				Date / Time		
.L. Before [Dev. 50.0	9/10-30-20/	1010	W I Afte	r Dov			
		OC / Date / Ti		W.L. AILC		54.21 /10-30-20/ 1307 BTOC / Date / Time		
ell Depth B	efore Dev.:	94 30	RTOC	Well Don				
ater Colum	n (H): 44.71 Ft.	Well Dia ·	In.	Well Vel		:: 94,80 BTOO		
reen Lengi	th: <u>10</u> Ft.			well voic	ime:	7,15 Gal.		
			Field Paramet	ers	A deserted			
Ties.	Volume Removed	Specific Cond.	Temperature	Total Inches	Tueblalib			
ate / Time	(Gal.)	(umhos/cm)	(oC)	pH (S.U.)	Turbidity (NTU)	O. / 420 Pamarka		
W-10/1235	281.4	358				Do / 0,20 Remarks		
1240	294.6	363	13.78	6.55	1.71	0.24/79		
1245	307.8	362	13.7	6,54	1.61	0.76/17		
1250	321	361	13.8	6153	1,55	0.23/76		
1255	334,2	364	17.8	6,52	1,24	0.48/76		
)/ // ~	70-1	10.0	6, 5	1.03	0.50/76		
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velopment	Method:		-	62.76	M.M. 3,5	444-1010-1650 - 1401		
		1, 10				54m4-1050-1140 375		
			11 7 11			4/m/4 1140-1255 750		
						The contract of the contract o		
		(A)	* 31	-/				
		Market and a second	- A - A - A - A - A - A - A - A - A - A	A 18240	M. Walley Line			
tes: H=	well depth (BTOC) - \	W.L. (BTOC)						
E-E-(Case)	I volume in pipe:							
	liameter well: 0.16 X	H = volume in ga	allons					

Test Date / Time: 10/30/2020 12:30:04 PM **Project:** Plant Wansley - Ash Pond Developments

Operator Name: Jordan Berisford

Location Name: PZ-23D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 84.8 ft
Total Depth: 94.8 ft

Initial Depth to Water: 50.09 ft

Pump Type: Grunfos Tubing Type: Poly

> Pump Intake From TOC: 93 ft Estimated Total Volume Pumped:

1265 liter

Flow Cell Volume: 90 ml

Final Flow Rate: 10000 ml/min Final Draw Down: 464.52 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
10/30/2020 12:30 PM	00:00	7.12 pH	12.05 °C	44.91 μS/cm	10.67 mg/L	1.09 NTU	255.1 mV	88.80 ft	10,000.0 ml/min
10/30/2020 12:35 PM	05:00	6.55 pH	18.72 °C	358.81 μS/cm	0.29 mg/L	1.61 NTU	79.9 mV	88.80 ft	10,000.0 ml/min
10/30/2020 12:40 PM	10:00	6.54 pH	18.78 °C	363.13 μS/cm	0.26 mg/L	1.55 NTU	77.6 mV	88.80 ft	10,000.0 ml/min
10/30/2020 12:45 PM	15:00	6.53 pH	18.80 °C	362.33 μS/cm	0.28 mg/L	1.24 NTU	76.0 mV	88.80 ft	10,000.0 ml/min
10/30/2020 12:50 PM	20:00	6.52 pH	18.80 °C	361.47 μS/cm	0.48 mg/L	1.61 NTU	76.2 mV	88.80 ft	10,000.0 ml/min
10/30/2020 12:55 PM	25:00	6.50 pH	18.80 °C	364.23 μS/cm	0.50 mg/L	1.83 NTU	76.9 mV	88.80 ft	10,000.0 ml/min

Samples

Sample ID:	Description:
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Total of 40 gallons purged between 10/27/2020 and 11/2/2020

Test Date / Time: 11/2/2020 11:23:35 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

Location Name: PZ-24
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 30.51 ft
Total Depth: 40.51 ft

Initial Depth to Water: 16.43 m

Pump Type: Whale Development

Tubing Type: Poly

Pump Intake From TOC: 40 ft Estimated Total Volume Pumped:

5.177 gal

Flow Cell Volume: 90 ml Final Flow Rate: 0.2 gal/min Final Draw Down: 15.2 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Depth to Water 31.6 BTOC

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10	+/- 10	+/- 10	+/- 10	
11/2/2020 11:23 AM	00:00	5.86 pH	19.20 °C	244.50 μS/cm	1.19 mg/L		90.9 mV	61.60 cm	0.20 gal/min
11/2/2020 11:24 AM	00:53	5.87 pH	19.24 °C	242.18 μS/cm	1.20 mg/L		91.8 mV	31.60 cm	0.20 gal/min
11/2/2020 11:29 AM	05:53	5.87 pH	19.27 °C	241.66 μS/cm	1.25 mg/L	5.89 NTU	88.6 mV	31.60 cm	0.20 gal/min
11/2/2020 11:34 AM	10:53	5.87 pH	19.28 °C	243.03 μS/cm	1.28 mg/L	4.53 NTU	88.8 mV	31.60 cm	0.20 gal/min
11/2/2020 11:39 AM	15:53	5.86 pH	19.59 °C	245.44 μS/cm	1.28 mg/L	4.17 NTU	88.0 mV	31.60 cm	0.20 gal/min
11/2/2020 11:44 AM	20:53	5.86 pH	19.46 °C	248.02 μS/cm	1.30 mg/L	4.04 NTU	90.0 mV	31.60 cm	0.20 gal/min
11/2/2020 11:49 AM	25:53	5.85 pH	19.61 °C	250.37 μS/cm	1.29 mg/L	4.82 NTU	89.3 mV	31.60 cm	0.20 gal/min

Samples

Sample ID:	Description:
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Atlantic Coast Consulting, Inc. Well Development Field Record

	Job Name:					Well No. PZ-255			
Developed By: O. FUQUEA					Date of Installation: Sheet of				
Started Dev.	_10/30/20	1255 Date / Time		Completed Dev.					
		Date / Time		Date / Time					
W.L. Before D	Dev. 31.06	10/30/20	250	W.L. After					
		OC / Date / Ti		BTOC / Date / Time					
Well Depth Be				Well Dept	h After Dev	.: втос			
Well Depth Before Dev.: 53.86 BTOC Water Column (H): Ft. Well Dia.: In.					me:				
Screen Lengt	h:Ft.				4 4				
				1.91 1.5.889 to p. 255					
	Values Bassard	0.15.0	Field Paramet	of Mills of the Author					
Date / Time	Volume Removed (Gal.)	Specific Cond. (umhos/cm)	Temperature (oC)	pH (S.U.)	Turbidity (NTU)	Remarks			
1340	5		(00)	(3.0.)	>1000				
1450	200	NA -			39	Q = Zgal/MM			
1100	20				9 1				
		1/2			-				
					*				
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					2.0				
				100	1	***			
Development				450		1310-1450 - 29al/mi			

4" diameter well: 0.66 X H = voume in gallons

Scanned with CamScanner

Total of 510 gallons purged between 10/30/2020 and 11/2/2020

Low-Flow Test Report:

Test Date / Time: 11/2/2020 11:50:50 AM

Project: Plant Wansley - Ash Pond Developments

Operator Name: Jordan Berisford

Location Name: PZ-25S Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft

Top of Screen: 43.86 ft Total Depth: 53.86 ft

Initial Depth to Water: 31.06 ft

Pump Type: Whale Pump

Tubing Type: Poly

Pump Intake From TOC: 53 ft Estimated Total Volume Pumped:

187.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 7500 ml/min Final Draw Down: 158.8 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
11/2/2020 11:50 AM	00:00	5.96 pH	17.94 °C	108.03 μS/cm	4.46 mg/L		99.6 mV	31.06 ft	7,500.0 ml/min
11/2/2020 11:55 AM	05:00	5.63 pH	18.07 °C	111.74 μS/cm	4.20 mg/L	7.29 NTU	107.9 mV	44.30 ft	7,500.0 ml/min
11/2/2020 12:00 PM	10:00	5.51 pH	18.08 °C	121.42 μS/cm	4.48 mg/L	7.04 NTU	112.6 mV	44.30 ft	7,500.0 ml/min
11/2/2020 12:05 PM	15:00	5.47 pH	18.16 °C	116.26 μS/cm	4.55 mg/L	5.19 NTU	113.9 mV	44.30 ft	7,500.0 ml/min
11/2/2020 12:10 PM	20:00	5.48 pH	18.16 °C	112.97 μS/cm	4.52 mg/L	3.72 NTU	122.0 mV	44.30 ft	7,500.0 ml/min
11/2/2020 12:15 PM	25:00	5.50 pH	18.20 °C	111.25 μS/cm	4.47 mg/L	2.55 NTU	112.9 mV	44.30 ft	7,500.0 ml/min

Samples

Sample ID:	Description:
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Atlantic Coast Consulting, Inc. Well Development Field Record

Well Depth B Water Colum	v: <u>Sorden Br</u> 10 Dev. <u>151</u> BT	Date / Time は / ルー23・20/ OC / Date / Tir HO .80 Well Dia.:	ne BTOC	W.L. After	stallation: d Dev. <u>ro-</u> Dev. h After Dev	Well No. PZ-265 Sheet of 23-7-/1400 Date / Time 20.19 /12-73-72 / 1410 BTOC / Date / Time :: BTOC 4.1 Gal.
MELLEY.	A CONTRACT		Field Paramet	ers		
Date / Time	Volume Removed (Gal.)	Specific Cond. (umhos/cm)	Temperature (oC)	pH (S.U.)	Turbidity (NTU)	DO ORP Remarks
10-23/1110		723	18.9	4,44	42	0.28 / 180
1140	77.7	697	19.1	4.60		0,31/183 Surged Pup
1210	111	682	18.9	4,48	35	0.37/187
1240	144.3	670	19.0	4.59	422	0,39/183 Sugal Purp
1310	177	659	19.0	4.74	14	0.40/179 - Sugal pup 4 Ho Per
1335	205.3	653	19.7	4.92	89	0.40/187
1340	210-9	655	19.2	5.00	11	6.40/137
1345	216.5	655	19.2	4.96	9,42	0.40/136
1356	227	653	191	4,85	5.21	0.40/139
1355	227.5	652	19.2	4.31	2.71	041/040
12/00	239-2-16-15g.	6-118648	19,0	479	0185	640/179
					. 4	
	t Method: 50%ed		wige Blockers		9=	4.2 L/min => 1.11 gal/min
108	- value pror to	dout - sout	sound whole	0 40		

Notes: H = well depth (BTOC) - W.L. (BTOC)

Well volume in pipe:

2" diameter well: 0.16 X H = volume in gallons 4" diameter well: 0.66 X H = voume in gallons

Test Date / Time: 10/23/2020 1:30:17 PM

Project: Plant Wansley - Ash Pond Developments

Operator Name: Jordan Berisford

Location Name: PZ-26S
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 30.8 ft

Total Depth: 40.8 ft

Initial Depth to Water: 15.45 ft

Pump Type: Whale Pump Tubing Type: Poly

Pump Intake From TOC: 40 ft Estimated Total Volume Pumped:

216.5 gal

Flow Cell Volume: 90 ml Final Flow Rate: 4200 ml/min Final Draw Down: 174.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
10/23/2020 1:30 PM	00:00	4.74 pH	19.04 °C	660.66 μS/cm	0.40 mg/L		164.6 mV	15.45 ft	4,200.0 ml/min
10/23/2020 1:35 PM	05:00	4.92 pH	19.18 °C	653.99 μS/cm	0.40 mg/L	89.00 NTU	187.5 mV	30.00 ft	4,200.0 ml/min
10/23/2020 1:40 PM	10:00	5.00 pH	19.22 °C	655.93 μS/cm	0.40 mg/L	11.00 NTU	137.2 mV	30.00 ft	4,200.0 ml/min
10/23/2020 1:45 PM	15:00	4.96 pH	19.24 °C	655.16 µS/cm	0.40 mg/L	9.42 NTU	136.3 mV	30.00 ft	4,200.0 ml/min
10/23/2020 1:50 PM	20:00	4.85 pH	19.11 °C	653.97 μS/cm	0.40 mg/L	5.21 NTU	139.2 mV	30.00 ft	4,200.0 ml/min
10/23/2020 1:55 PM	25:00	4.81 pH	19.21 °C	652.34 μS/cm	0.40 mg/L	2.71 NTU	140.0 mV	30.00 ft	4,200.0 ml/min
10/23/2020 2:00 PM	30:00	4.79 pH	19.03 °C	648.65 μS/cm	0.40 mg/L	0.85 NTU	179.6 mV	30.00 ft	4,200.0 ml/min

Samples

Sample ID:	Description:
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Atlantic Coast Consulting, Inc. Well Development Field Record

		AAGII D	evelopiner	it Fleid	Necord	4			
Job Name:	Plant Wan	Yeur A? Du	elogoeste	Job No.		Well No. PZ-260			
Developed By	r: Jordan	Best	£ (0) PA(21) S	Date of Ir	stallation:	Sheet of			
Started Dev.		10		Complete	Completed Dev. 10-22-20/1425				
		Date / Time,		Complete		Date / Time			
W.L. Before D	Dev. 17.7	5/10-22-20/	1024	WI After	, Dev	29.42/10-22-20/ 1437			
		OC / Date / Til		W.L. Altei		BTOC / Date / Time			
Well Depth B		D. SELL DI RESULP & SU		Wall Dani	h After Day	:: 80.11 BTOC			
Water Colum	n (H): 63.86 Ft.	Well Dia:	BIOC	Well Velv		10.22 Gal.			
	th: 10 Ft.		<u> </u>	well volu	me	1B.ZZ dai.			
201.60									
			Field Paramet	ters					
	Volume Removed	Specific Cond.	Temperature	pН	Turbidity				
Date / Time	CREEK SWIDE BUT THE PROPERTY STATES	(umhos/cm)	(oC)	(S.U.)	(NTU)	Do Joi? P Remarks			
10/22-1145	100	484	20.7	6.72	107	0.94 / 64			
1215	107.8	403	25.8	7.00	49	1.58 / 53			
1240		329	21.6	6.46	18	0.81/41			
1300	119.5	292	21.8	6.10	41	0.77/52 - Suged Purp in well			
1330	127.3	270	27.6	5.98	12	0.78 53			
1400	1351	269	22.9	5.96	10	0.81/51			
1405	136.4	269 303	23.1	5.97	9.96	030/50			
1410	137.7	351	27.1	5.98	8.11	8-81 /51			
1415	139	393	22.4	5.98	7.83	0.81 /51			
1420	140.3	391	27.8	6.01	6.02	0.84/50			
1425	,41.6	402	22.9	6.03	4.81	0.82/49			
1430		,							
				1		P			
				. 5		×			
1,0	100								
				- 7					
A STATE OF THE STA									
1									
Development	Method:			0	11/1	4,6			
	sorged well w	ith Footralen	+	Q-	3,3 L/n	nh for 30 mis, should down to 11			
	Surse Blackary		relopment		0.8	379415 As 30			
	6" Boschole	dra - 2" wel	cesty			1gal= 3.785 1: fes			
	1.469	63.86) - 93.	81(5)=> 46	9.1975	=71,77	5.54 1:40;			
	(.16) 6	3.86 - 10.2	2 gels (5) => 5	51.1915	=>193.4	1,tus /3.3			
			1.0	J	C	19+			
Notes: H =	well depth (BTOC) -	W.L. (BTOC)	6.	76		7.			
/	ell volume in pipe:			and the	500	julit togit			
	diameter well: 0.16					1140-			
4" (diameter well: 0.66	X H = voume in g	allons						

Test Date / Time: 10/22/2020 2:00:46 PM

Project: Plant Wansley - Ash Pond Developments

Operator Name: O. Fuquea

Location Name: PZ-26D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 70.11 ft

Total Depth: 80.11 ft

Initial Depth to Water: 16.25 ft

Pump Type: Whale Pump Tubing Type: Poly

Pump Intake From TOC: 78 ft Estimated Total Volume Pumped:

25 liter

Flow Cell Volume: 90 ml Final Flow Rate: 1000 ml/min Final Draw Down: 367.8 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Well development, 70s

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
10/22/2020 2:00 PM	00:00	5.96 pH	23.01 °C	269.97 μS/cm	0.80 mg/L	10.00 NTU	51.3 mV	46.40 ft	1,000.00 ml/min
10/22/2020 2:05 PM	05:00	5.97 pH	23.10 °C	303.54 μS/cm	0.80 mg/L	9.96 NTU	50.9 mV	46.50 ft	1,000.00 ml/min
10/22/2020 2:10 PM	10:00	5.98 pH	22.16 °C	351.42 μS/cm	0.81 mg/L	8.11 NTU	51.7 mV	46.70 ft	1,000.00 ml/min
10/22/2020 2:15 PM	15:00	5.98 pH	22.40 °C	393.12 μS/cm	0.81 mg/L	7.83 NTU	51.8 mV	46.90 ft	1,000.00 ml/min
10/22/2020 2:20 PM	20:00	6.01 pH	22.88 °C	391.02 μS/cm	0.84 mg/L	6.02 NTU	50.6 mV	46.90 ft	1,000.00 ml/min
10/22/2020 2:25 PM	25:00	6.03 pH	22.93 °C	402.55 μS/cm	0.82 mg/L	4.81 NTU	49.2 mV	46.90 ft	1,000.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 11/2/2020 12:20:30 PM

Project: Plant Wansley **Operator Name:** Taylor Goble

Location Name: PZ-27-S Well Diameter: 2 in Casing Type: PVC Screen Length: 10 m

Top of Screen: 29.87 ft Total

Depth: 39.87 ft

Initial Depth to Water: 17.4 ft

Pump Type: Whale Pump Tubing Type: Poly

Pump Intake From TOC: 38 ft Estimated Total Volume Pumped:

100 gal

Flow Cell Volume: 90 ml Final Flow Rate: 1000 ml/min

Final Draw Down: 5 ft

Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Weather Conditions: Sunny 54 degrees

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 25	+/- 5	
11/2/2020 12:20 PM	00:00	5.77 pH	17.32 °C	255.52 μS/cm	1.09 mg/L	2.22 NTU	90.5 mV	23.95 ft	1000 ml/min
11/2/2020 12:25 PM	05:00	5.77 pH	17.31 °C	246.82 μS/cm	1.08 mg/L	1.74 NTU	89.8 mV	23.95 ft	1000 ml/min
11/2/2020 12:30 PM	10:00	5.75 pH	17.31 °C	251.79 μS/cm	1.06 mg/L	1.38 NTU	92.0 mV	23.95 ft	1000 ml/min
11/2/2020 12:35 PM	15:00	5.76 pH	17.32 °C	243.72 μS/cm	1.06 mg/L	1.25 NTU	91.1 mV	23.95 ft	1000 ml/min
11/2/2020 12:40 PM	20:00	5.76 pH	17.32 °C	242.27 μS/cm	1.04 mg/L	1.17 NTU	91.8 mV	23.95 ft	1000 ml/min
11/2/2020 12:45 PM	25:00	5.75 pH	17.32 °C	250.25 μS/cm	1.04 mg/L	1.09 NTU	92.5 mV	23.95 ft	1000 ml/min

Samples

Sample ID:	Description:
------------	--------------

Test Date / Time: 11/2/2020 1:15:54 PM

Project: Plant Wansley

Operator Name: Taylor Goble

Location Name: PZ-27-D Well Diameter: 2 in Casing Type: PVC Screen Length: 10 m

Top of Screen: 71.72 ft Total

Depth: 81.72 ft

Initial Depth to Water: 19.69 ft

Pump Type: Grundfos Tubing Type: Poly

Pump Intake From TOC: 77.5 ft Estimated Total Volume Pumped:

102 gal

Flow Cell Volume: 90 ml Final Flow Rate: 1000 ml/min

Final Draw Down: 5 ft

Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Weather Conditions: Sunny 57 degrees

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 5 %	+/- 10 %	+/- 10	+/- 25	+/- 5	
11/2/2020 1:15 PM	00:00	7.67 pH	17.69 °C	210.19 μS/cm	-0.01 mg/L	2.74 NTU	-12.4 mV	21.50 ft	1000 ml/min
11/2/2020 1:20 PM	05:00	7.72 pH	17.73 °C	209.42 μS/cm	-0.01 mg/L	2.27 NTU	-30.4 mV	21.50 ft	1000 ml/min
11/2/2020 1:25 PM	10:00	7.76 pH	17.73 °C	208.56 μS/cm	-0.01 mg/L	1.71 NTU	-48.0 mV	21.50 ft	1000 ml/min
11/2/2020 1:30 PM	15:00	7.78 pH	17.75 °C	208.35 μS/cm	-0.01 mg/L	1.69 NTU	-62.4 mV	21.50 ft	1000 ml/min
11/2/2020 1:35 PM	20:00	7.79 pH	17.77 °C	208.37 μS/cm	-0.01 mg/L	1.57 NTU	-73.3 mV	21.50 ft	1000 ml/min
11/2/2020 1:40 PM	25:00	7.79 pH	17.75 °C	207.96 μS/cm	-0.02 mg/L	1.74 NTU	-80.2 mV	21.50 ft	1000 ml/min
11/2/2020 1:45 PM	30:00	7.80 pH	17.78 °C	208.11 μS/cm	-0.02 mg/L	1.51 NTU	-85.6 mV	21.50 ft	1000 ml/min
11/2/2020 1:50 PM	35:00	7.80 pH	17.77 °C	208.24 μS/cm	-0.02 mg/L	1.35 NTU	-89.8 mV	21.50 ft	1000 ml/min
11/2/2020 1:55 PM	40:00	7.80 pH	17.86 °C	208.06 μS/cm	-0.02 mg/L	1.28 NTU	-93.0 mV	21.50 ft	1000 ml/min

Samples

Sample ID:	Description:
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Total of 147 gallons purged on 11/3/2020

Low-Flow Test Report:

Test Date / Time: 11/3/2020 12:10:59 PM

Project: Plant Wansley - Ash Pond Developments

Operator Name: Jordan Berisford

Location Name: PZ-28
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 62.96 ft

Total Depth: 72.96 ft

Initial Depth to Water: 29.06 ft

Pump Type: Whale Pump

Tubing Type: Poly

Pump Intake From TOC: 71 ft Estimated Total Volume Pumped:

72 liter

Flow Cell Volume: 90 ml Final Flow Rate: 3600 ml/min Final Draw Down: 136.08 m Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
			/	,					
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
11/3/2020	00:00	5.45 pH	17.82 °C	65.28 µS/cm	4.43 mg/L	3.51 NTU 109.3	109.3 mV	29.06 ft	3,600.0
12:10 PM	00.00	5.45 pri	17.82 °C	65.26 μ3/611	7.73 mg/L	3.31 1110	100.0111	25.00 11	ml/min
11/3/2020	05:00	5.26 pH	17.71 °C	63.05 µS/cm	4.70 mg/L	3.04 NTU	106.1 mV	29.06 ft	3,600.0
12:15 PM	05.00	5.26 PH	17.71 C	63.05 μ3/011	4.70 Hig/L	3.04 1010	100.11110	29.00 11	ml/min
11/3/2020	10:00	5.32 pH	17.72 °C	64.88 µS/cm	4.84 mg/L	2.89 NTU	99.7 mV	29.06 ft	3,600.0
12:20 PM	10.00	5.52 pm	17.72 C	04.00 μ3/011	4.04 IIIg/L	2.09 1110	99.7 MV	29.06 π	ml/min
11/3/2020	15:00	5.38 pH	17.71 °C	65.04 µS/cm	4.96 mg/L	2.09 NTU	102.5 mV	29.06 ft	3,600.0
12:25 PM	15.00	ა.აი p⊓	17.7130	05.04 μ5/cm	4.90 Hig/L	2.03 NTO	102.51110	29.06 11	ml/min
11/3/2020	20:00	5.38 pH	17.71 °C	64.63 µS/cm	5.00 mg/L	1.47 NTU	100.9 mV	29.06 ft	3,600.0
12:30 PM	20.00	3.30 pπ	17.71 C	04.03 μ3/011	3.00 Hig/L	1.47 NTO	100.91110	29.00 11	ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 11/5/2020 1:00:14 PM **Project:** Plant Wansley Ash Pond **Operator Name:** O. Fuquea

Location Name: PZ-29S
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 39.93 ft
Total Depth: 49.93 ft

Initial Depth to Water: 19.9 ft

Pump Type: Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 90 ft Estimated Total Volume Pumped:

22.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min Final Draw Down: 16 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
11/5/2020 1:00 PM	00:00	5.65 pH	20.23 °C	541.58 μS/cm	0.87 mg/L		71.2 mV	19.90 ft	225.00 ml/min
11/5/2020 1:05 PM	05:00	5.69 pH	20.09 °C	508.46 μS/cm	0.78 mg/L	5.20 NTU	66.6 mV	35.70 ft	225.00 ml/min
11/5/2020 1:10 PM	10:00	5.67 pH	20.08 °C	518.20 μS/cm	0.77 mg/L	5.09 NTU	62.6 mV	35.70 ft	225.00 ml/min
11/5/2020 1:15 PM	15:00	5.67 pH	20.17 °C	516.75 μS/cm	0.74 mg/L	3.08 NTU	60.0 mV	35.80 ft	225.00 ml/min
11/5/2020 1:20 PM	20:00	5.70 pH	20.17 °C	531.27 μS/cm	0.67 mg/L	5.00 NTU	57.9 mV	35.80 ft	225.00 ml/min
11/5/2020 1:25 PM	25:00	5.69 pH	20.18 °C	549.86 μS/cm	0.70 mg/L	4.51 NTU	56.3 mV	35.90 ft	225.00 ml/min

Samples

Sam	ple ID:	Description:
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Test Date / Time: 11/5/2020 2:30:45 PM Project: Plant Wansley Ash Pond Operator Name: J. Berisford

Location Name: PZ-29D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 119.5 ft
Total Depth: 129.5 ft

Initial Depth to Water: 21.34 ft

Pump Type: Grunfos Tubing Type: Poly

Pump Intake From TOC: 128.5 ft Estimated Total Volume Pumped:

661 liter

Flow Cell Volume: 90 ml Final Flow Rate: 2000 ml/min Final Draw Down: 106.16 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
11/5/2020	00:00	5.27 pH	23.74 °C	293.61 µS/cm	2.49 mg/L	6.34 NTU	45.9 mV	127.50 ft	2,000.0
2:30 PM	00.00	0.27 pm	20.74 0	200.01 μο/οιτι	2.43 mg/L	0.041410	40.0 mV	127.00 10	ml/min
11/5/2020	05:00	5.99 pH	23.61 °C	293.26 µS/cm	2.44 mg/L	4.62 NTU	42.3 mV	127.50 ft	2,000.0
2:35 PM	05.00	3.99 pm	23.01 0	293.20 μ3/cm	2.44 Hig/L	4.02 1110	42.5 1117	127.50 10	ml/min
11/5/2020	10:00	6.01 pH	23.70 °C	292.31 µS/cm	2.27 mg/L	4.44 NTU	40.3 mV	127.50 ft	2,000.0
2:40 PM	10.00	0.01 pi i	23.70 C	292.31 μ3/611	2.27 Hig/L	4.44 1110	40.5 1117	127.30 10	ml/min
11/5/2020	15:00	6.02 pH	23.74 °C	291.93 µS/cm	2.20 mg/L	3.79 NTU	38.9 mV	127.50 ft	2,000.0
2:45 PM	15.00	0.02 pm	23.74 0	291.93 μ3/611	2.20 Hig/L	3.79 1010	30.9 1110	127.50 10	ml/min
11/5/2020	20:00	6.03 pH	23.68 °C	290.96 µS/cm	2.16 mg/L	2.82 NTU	37.9 mV	127.50 ft	2,000.0
2:50 PM	20.00	0.03 μπ	23.00 C	290.90 μ3/611	2.10 Hig/L	2.02 NTU	37.3 1110	127.50 11	ml/min
11/5/2020	25:00	6.03 pH	23.70 °C	291.16 µS/cm	2.00 mg/l	3.04 NTU	36.9 mV	127.50 ft	2,000.0
2:55 PM	25:00	0.03 PH	23.70 °C	291.16 µ3/cm	2.09 mg/L	3.04 NTU	30.9 1110	127.50 IL	ml/min

Samples

Sample ID:	Description:
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APPENDIX E

Certified Piezometer 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-22	1243350.7570	2029769.4340	807.95	1243351.5210	2029768.3170	804.88
PZ-23D	1242139.5320	2028520.8680	834.32	1242138.6260	2028521.5100	831.89
PZ-23S	1242139.3280	2028512.6500	834.41	1242138.3710	2028513.3390	831.79
PZ-24	1241695.2460	2028116.0540	810.37	1241694.5570	2028117.2730	807.00
PZ-25S	1240769.7850	2027414.5750	823.80	1240770.8890	2027414.3720	820.50
PZ-26D	1239919.4530	2024146.3480	804.93	1239920.5460	2024145.9060	802.31
PZ-26S	1239916.6790	2024139.8210	804.80	1239917.8130	2024139.2740	802.22
PZ-27D	1240190.9250	2023620.3600	809.28	1240191.2500	2023619.0790	806.22
PZ-27S	1240184.1820	2023616.6900	808.98	1240184.5500	2023615.5290	805.98
PZ-28	1240066.0150	2022624.7330	816.18	1240066.0550	2022623.6960	813.57
PZ-29D	1244304.8990	2028853.2900	805.24	1244304.4270	2028852.7910	805.77
PZ-29S	1244317.1290	2028839.6800	805.30	1244316.6610	2028839.1970	805.80

Benchmark	Northing	Easting	Elevation	
BM-W1	1243475.416	2029633.083	804.08	

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: 11/04/2020-11/05/2020. 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 SET BY GEL SOLUTIONS USING A TRIMBLE DINI LEVEL

7 RIL



11/17/2020

APPENDIX C Well Inspection Forms

Facility Name: Plant Wansley AP

Well Inspection Form - Well Inspection Criteria

Date: 2/3/2020 Staff: H. Auld

1 - Location/Identification

2 - Protective Outer Casing

2	Is the well visible and accessible	\sim
а	is the well visible and accessible	-: r

- b Is the well properly identified with the correct well ID?
- c Does the well require protection from traffic?
- d ls the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)

- a Is the protective casing free from apparent damage?
- b Is the casing free of degradation or deterioration?
- c Does the casing have a functioning weep hole?
- d Is the annular space between casings filled with pea gravel or sand?
- e Is the well locked, and is the lock in good working condition?

3 - Surface Pad

- a Is the well pad in good condition? (Not cracked or broken)
- b Does the well pad provide adequate surface seal and stability to the well?
- c Is the well pad in complete contact with the protective casing?
- ls the well pad in complete contact with the ground surface? (Not undermined by erosion, animal
- burrows, and does not move when stepped on)
- e Is the pad surface clean? (Not covered by soil or debris)

4 - Internal Well Casing

- a Does the well cap prevent entry of foreign material into the well?
- b Is the casing free of kinks or bends, or any obstruction from foreign objects?
- Does the PVC casing move easily when touched or can it be taken apart by hand due to lack of
- grout or use of slip couplings in construction?

5 - Based on your professional judgment, is the well construction / location appropriate to:

- a Achieve the objectives of the facility Ground Water Monitoring Program?
- b Comply with the applicable regulatory requirements?

Facility Name: Plant Wansley AP

Well Inspection Form - Well Condition Log

Date:

Initials:

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
WGWA-1	/			
WGWA-2	/			
WGWA-3	/			
WGWA-4	✓	-		
WGWA-5	/			
WGWA-6	/			
WGWA-7	/			
WGWA-18				
WGWC-8				
WGWC-9	/			
WGWC-10				
WGWC-11	/			
WGWC-12	/			
WGWC-13	/			
WGWC-14A				
WGWC-15				
WGWC-16	/			
WGWC-17				
WGWC-19	/			

Check all appropriate boxes above. On the following page, provide details for any deficiencies and corrective actions taken. If any repairs could not be made, list them in the corrective actions still needed table.

Well Inspection Form - Well Condition Log

Date: 2/3/2020 Initials: #A

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
PZ-1	V			
PZ-4	/			
PZ-6	/			
PZ-8	/			
PZ-10				
PZ-11	/			
PZ-12	✓			
PZ-15	/			
PZ-16				
PZ-17	/			
PZ-18	<u> </u>			
PZ-20	/			
WAMW-1	/			
WAMW-2				

Check all appropriate boxes above. On the following page, provide details for any deficiencies and corrective actions taken. If any repairs could not be made, list them in the corrective actions still needed table.

Facility Name: Plant Wansley AP

Well Inspection Form - Corrective Actions & Summary

Well ID

	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
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	Action Taken:
	Deficiency Noted:
	Action Taken:

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Corrective Action Still Needed

Deficiency Noted:
Deficiency Noted:
Deficiency Noted:
Deficiency Noted:
Deficiency Noted:

Summary

Initials:	44	All monitoring wells are in good condition and any needed repairs have been made

Initials: Further corrective action is still needed - see list above

Staff: H. Auld

Signature: Date: $\frac{7}{3}/2020$

Site: Plant Wansley - Ash Ponds

Date(s): 3 - 16 - 20

Personell:

ATLANTIC COAST CONSULTING, INC.

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Notes Vent Hole Yes Yes | Yes Yes 🛚 Yes No <u>8</u> Yes 🗅 Weep Hole Yes No Yes No Yes **≥** Yes S S Yes No Zes No Yes Zes No **≥** Well Pad Damaged Damaged ☐ Damaged Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged S K Š ¥ Š Š Yo K W OK Š Lock Yes No Yes No Yes Yes 2 Yes Yes Yes Yes Bollards OK Deficient Label ☑ O★
☐ Deficient ☐ **ØK** ☐ Deficient ☐ **OK** ☐ Deficient ☐ **OK** ☐ Deficient Deficient □ OK
□ Deficient ☐ **ØK** ☐ Deficient ☐ Deficient ☐ Deficient ☐ Deficient 8 * T Š Well Casing ☐ Damaged Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged Damaged ☐ Damaged Damaged Damaged ∑ ĕ Š ₩ W ⊠ ok ∑ 8 N S Z S Š N OK OK Protective Casing Damaged Damaged Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged Damaged Damaged ☐ Damaged Š TOK TOK XO E ¥0 NOK T Š Š Š Š Š Well ID WGWC-10 WGWA-2 WGWA-3 WGWA-4 WGWA-5 WGWA-6 WGWA-1 WGWA-7 WGWC-8 WGWC-9

Site: Plant Wansley - Ash Ponds

Date(s): 3 - 16 - 20

Personell: T. Gable

ATLANTIC COAST CONSULTING, INC.

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Notes									,											
Vent	Yes	8 	☑ Yes	% □	Yes	_N	✓ Yes	% □	☑ Yes	% □	✓ Yes	№	☐ Yes	0N	Yes	% □	☐ Yes	% 	Yes	%
Weep	Yes	№	Yes	No	Yes	№	Yes	№	Yes	N 	Yes	№	Yes	N 	Yes	8 □	Yes	N		№
Well Pad) OK	☐ Damaged	¥ok	☐ Damaged	Ø OK	☐ Damaged	Ø OK	☐ Damaged	TOK TOK	☐ Damaged	OK OK	Damaged	□ ok	Damaged	OK	☐ Damaged	☑ ok	Damaged	⊠ ok	☐ Damaged
Lock	Yes	ON		No	□ Yes	No		N	Sə, √es	No	∑ Yes	№	Yes	□ No	Yes	2	✓ Yes	No	Səyta	№
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Protective Casing	NO K	☐ Damaged	□ ok	☐ Damaged	MO N	☐ Damaged	NO 🔼	Damaged	YO C	☐ Damaged	Z OK	Damaged	M OK	☐ Damaged	Š	Damaged	NO C	✓ Damaged	NO N	☐ Damaged
Well ID		WGWC-11		WGWC-12		WGWC-13	ř	WGWC-14		WGWC-14A		WGWC-15		WGWC-16		WGWC-17		WGWA-18		PZ-1

Site: Plant Wansley - Ash Ponds

Date(s): 3 - 16 - 20

Personell:

ATLANTIC COAST CONSULTING, INC.

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GI IOW	Protective	7 :: 0 :: 0/41		-	-		Weep	Vent	
well ID	Casing	well casing	Label	Bollards	Lock	Well Pad	Hole	Hole	Notes
) OK	МО	₩ 0□	NO N	Yes	OK	Yes	Yes	
PZ-4	☐ Damaged	☐ Damaged	☐ Deficient	Deficient	No	Damaged	No	2	
) OK	ЖО	₩) A	Yes	∑ ok	- Yes	Yes	
PZ-6	☐ Damaged	☐ Damaged	Deficient	Deficient	No	Damaged	No	№	
	NO K	XO.E	Xo 🔼	JOK □	Yes	Z OK	₽ Yes	Yes	
PZ-8	Damaged	☐ Damaged	☐ Deficient	Deficient	No	Damaged	% □	2	
	¥o □	жо 🗖	₩	MO Z	-Yes	OK	Yes	Yes	
PZ-10	Damaged	☐ Damaged	Deficient	Deficient	No	☐ Damaged	% □	% □	
	NO N	ЖОЕ	₩	NO E		Z OK	Yes	Yes	
PZ-11	Damaged	☐ Damaged	☐ Deficient	Deficient	No	Damaged	№	<u>ا</u>	
	Š	NO C	*6	МОМ	Yes	oK	☑ Yes	Yes	
PZ-12	Damaged	☐ Damaged	☐ Deficient	Deficient	% □	Damaged		& 	
	☐ Di maged	Ot €maged	O	Vel ficient	Sign.	Dk maged	Wes	X Kes	
PZ-15	Damaged	☐ Damaged	☐ Deficient	Deficient	% □	Damaged	% □	% 	
) OK	ж Д	₩	МО№		□ ok	Yes	Yes	
PZ-16	☐ Damaged	☐ Damaged	☐ Deficient	Deficient	□ (No	Damaged	No	No	
	Š	ž	× ×	☑ ok	1 Yes	D OK	Yes	Yes	
PZ-17	☐ Damaged	☐ Damaged	Deficient	Deficient	No	☐ Damaged	% □	% 	

Site: Plant Wansley - Ash Ponds

Date(s): 3 - 16 - 20

Personell:

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Notes Vent Hole Yes ☐ Yes 2 S √es ∏ Yes □Yes √es □ □ ☐ ∠es **≥** Weep Hole ☐ Yes Yes No Yes No ☐ Yes ☐ Yes □ Yes **№ ≥ № ≥ ≥** Well Pad ☐ Damaged ☐ Damaged Dkmaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged ☐ Damaged Š Š Š □ S □ S Š ĕ □ 8 Lock □ \ \ \ \ X es ☐ Yes No No 2 ☐ Yes☐ No √es No ☐ Yes ☐ Yes Bollards OK Deficient OK Deficient **Def**ficient Deficient OK Deficient OK Deficient OK Deficient OK Deficient OK Deficient OK Deficient ☐ Deficient ☐ **○K** ☐ Deficient Deficient **Okt**icient Deficient □ OK
□ Deficient □ **OK**□ Deficient Label □ **OK**□ Deficient ☐ **ØK** ☐ Deficient ☐ **※** ☐ Deficient Well Casing Damaged ☐ Damaged DKmaged Damaged Damaged Damaged Damaged Damaged ☐ Damaged ☐ Damaged Š \ \ \ Š Š Š Š Protective Casing ☐ OK ☐ Damaged ☐ Damaged Dkmaged ☐ Damaged ☐ Damaged ☐ Damaged Damaged ☐ Damaged ☐ Damaged ☐ Damaged Š Ď ¥ \ \ \ \ \ \ Š □ □ ok Well ID PZ-18 PZ-20

Well Inspection Form - Well Condition Log

Lad: 9-8-70

Initials: OF/HA

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
PZ-1	/			
PZ-4 HA				
PZ-6				
PZ-8 of	✓	NA		\rightarrow
PZ-10 0F	√	NA -		
PZ-11 WA	✓			
PZ-12 OF	✓	N/A		
PZ-15		No vis wep holo	Weep hole willed	
PZ-16 <u></u> ЦÂ	/		,	
PZ-17	•	iobal missing "7"		/
PZ-18 HA	1			
PZ-20 OF		No pea gravel	Pro grovel added	
WAMW-1 OF	V	Wis		
WAMW-2 OF	/	NA		
WGWA-1	✓	NA		>
WGWA-2	/	NA -		
ημ ε-AWDW				
WGWA-4	1			
WGWA-5 🏨				

Check all appropriate boxes above. On the following page, provide details for any deficiencies and corrective actions taken. If any repairs could not be made, list them in the corrective actions still needed table.

Well Inspection Form - Well Condition Log Initials: $OV \cap \mathcal{H}$

Մուe։

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
wgwa-6	√			
WGWA-7	√			
WGWA-18 HA	\checkmark			
WGWC-8		No Vis. weaphule	Weep hole added	
WGWC-9 OF		Pod burried by veg.	Uncovered pod	
WGWC-10	\checkmark	NA -	,	>
WGWC-11		Well overslown		/
WGWC-12		1		✓
WGWC-13	/			
WGWC-14A	/			
WGWC-15	√	NA —		7
WGWC-16	/	NA		—
WGWC-17	✓			
WGWC-19 0F	√	NA —		
LP2-3 OF		No well cap.	Hell Cop added.	NA
PB-45/DOF		Pad burned by veg.	Uncovered pad.	NA
LPZ-7 HA		Noels cop (Flush cop)	l , *	
AH 1-59J		Needs well cap	Cop of of	
	·			

Check all appropriate boxes above. On the following page, provide details for any deficiencies and corrective actions taken. If any repairs could not be made, list them in the corrective actions still needed table.

Facility Name: Plant Wansley AP

Well Inspection Form - Corrective Actions & Summary

Well ID

n-7	Deficiency Noted:
PZ-15	Action Taken: allow ween hole
DZ-20	Deficiency Noted:
	Action Taken: a los pea Grove
	Deficiency Noted:
WGWC-8	Action Taken: Ween hole added
	Deficiency Noted:
W5111-9	Action Taken: UNCONCIED pad
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Deficiency Noted:
LPZ-3	Action Taken: added (ap
0.0	Deficiency Noted:
48-4	Action Taken: ()MMNINED pod
	Deficiency Noted:
LPZ-7	Action Taken: Can added
1 5	Deficiency Noted:
LPZ-1	Action Taken: Can alled
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:

We	"	10	
IMD	,,	,,,	

Corrective Action Still Needed

Cops added	Deficiency Noted: LPZ-3-1PZ-7-, LPZ-1-	
-1PZ-70	Deficiency Noted: Pen ground Alile	
PZ-14	Deficiency Noted: Radd new "7" to lahel, no access to ken , unchk had	e 820
	Deficiency Noted:	
	Deficiency Noted:	

Summary

Initials: All monitoring wells are in good condition and any needed repairs have been made

Initials: $\mathcal{O}F$ Further corrective action is still needed - see list above

Staff:

Signature:

Date: 4/25/20

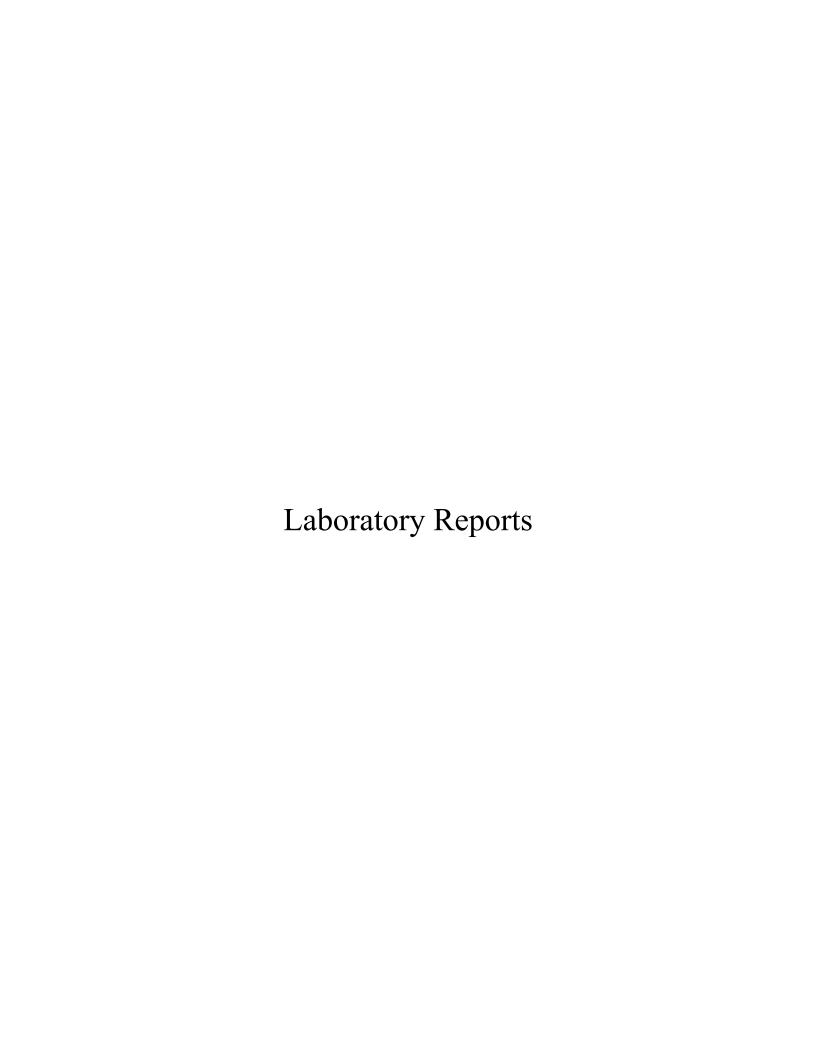
APPENDIX D Laboratory Analytical Reports and Field Sampling Forms

Appendix D1: Laboratory Analytical Data Packages and Data Validation Reports

Appendix D2: Field Data Forms

Appendix D3: Equipment Calibration Forms

APPENDIX D1 Laboratory Analytical Data Packages and Data Validation Reports



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

nonce bortet

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

·····LINKS ······

Review your project results through

Total Access

Have a Question?



Visit us at: 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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Client: Southern Company Project/Site: CCR - Plant Wansley Laboratory Job ID: 180-102004-1

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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.

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Definitions/Glossary

Client: Southern Company

Job ID: 180-102004-1

Project/Site: CCR - Plant Wansley

Qualifiers

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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

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)

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Accreditation/Certification Summary

Client: Southern Company

Job ID: 180-102004-1

Project/Site: CCR - Plant Wansley

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

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Eurofins TestAmerica, Pittsburgh

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

Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley

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 10:00 180-102004-2 WGWA-4 Water 02/04/20 10:45 02/06/20 10:00 180-102004-3 WGWA-3 Water 02/04/20 11:42 02/06/20 10:00 180-102004-4 WGWA-5 Water 02/04/20 15:17 02/06/20 10:00 180-102004-5 WGWA-6 Water 02/04/20 14:55 02/06/20 10:00 WGWA-1 Water 02/03/20 15:30 02/06/20 10:00 180-102004-6 180-102004-7 Dup-1 Water 02/04/20 00:00 02/06/20 10:00 180-102004-8 FB-1-2-4-20 Water 02/04/20 14:30 02/06/20 10:00 EB-1-2-4-20 02/04/20 14:00 02/06/20 10:00 180-102004-9 Water

Job ID: 180-102004-1

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley

Method **Method Description** Protocol Laboratory EPA 300.0 R2.1 Anions, Ion Chromatography **EPA** TAL PIT Metals (ICP/MS) SW846 **TAL PIT EPA 6020B** 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

Job ID: 180-102004-1

Client: Southern Company

Job ID: 180-102004-1 Project/Site: CCR - Plant Wansley

Client Sample ID: WGWA-2 Lab Sample ID: 180-102004-1

Date Collected: 02/03/20 15:18 **Matrix: Water** Date Received: 02/06/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307145	02/14/20 15:02	NAM	TAL PIT

Client Sample ID: WGWA-4 Lab Sample ID: 180-102004-2

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307145	02/14/20 15:04	NAM	TAL PIT

Client Sample ID: WGWA-3 Lab Sample ID: 180-102004-3

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			307222	02/17/20 06:51	MJH	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			307167	02/14/20 17:24	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	307378	02/18/20 09:20	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			307621	02/19/20 18:12	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	307012	02/13/20 16:03	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			307145	02/14/20 15:05	NAM	TAL PIT
	Instrumen	it ID: HGZ								

Eurofins TestAmerica, Pittsburgh

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Client: Southern Company

Job ID: 180-102004-1 Project/Site: CCR - Plant Wansley

Client Sample ID: WGWA-5 Lab Sample ID: 180-102004-4

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

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 t ID: CHIC2100A	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 307222	Prepared or Analyzed 02/17/20 07:06	Analyst MJH	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	306884 307167	02/12/20 15:51 02/14/20 17:27		TAL PIT TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	307378 307621	02/18/20 09:20 02/19/20 18:24		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	7470A EPA 7470A t ID: HGZ		1	50 mL	50 mL	307128 307328	02/14/20 13:55 02/17/20 14:12		TAL PIT TAL PIT

Lab Sample ID: 180-102004-5 **Client Sample ID: WGWA-6**

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 14:15	NAM	TAL PIT

Client Sample ID: WGWA-1 Lab Sample ID: 180-102004-6 Date Collected: 02/03/20 15:30 **Matrix: Water**

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 14:16	NAM	TAL PIT

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Client: Southern Company Job ID: 180-102004-1 Project/Site: CCR - Plant Wansley

Client Sample ID: Dup-1

Lab Sample ID: 180-102004-7 Date Collected: 02/04/20 00:00 **Matrix: Water**

Date Received: 02/06/20 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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		TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 14:17	NAM	TAL PIT

Client Sample ID: FB-1-2-4-20 Lab Sample ID: 180-102004-8 Date Collected: 02/04/20 14:30 **Matrix: Water**

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			307222	02/17/20 05:28	MJH	TAL PIT
	instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	306884	02/12/20 15:51	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 14:18	NAM	TAL PIT

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 14:21	NAM	TAL PIT

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Lab Chronicle

Client: Southern Company

Job ID: 180-102004-1

Project/Site: CCR - Plant Wansley

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

ID: 400 400004 4

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Job ID: 180-102004-1

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

Olient Commis ID: MOMA 0

Client Sample ID: WGWA-2 Lab Sample ID: 180-102004-1

Date Collected: 02/03/20 15:18 Matrix: Water
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

Fluoride -	0.061 J	0.10	0.026	mg/L			02/12/20 17:56	1
Method: EPA 6020B - Meta	ils (ICP/MS) - Total Reco	verable						
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 17:19	1
Barium	0.045	0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:07	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:19	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:19	1
Chromium	<0.0015	0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:19	1
Cobalt	0.00068	0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:19	1
Molybdenum	<0.00061	0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:19	1
Lead	0.00013 JB	0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:19	1
Antimony	<0.00038	0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:19	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:19	1
Thallium	0.00020 JB	0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:19	1
Lithium	0.0085	0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:07	1

Method: EPA 7470A - Mercury	(CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		02/13/20 16:03	02/14/20 15:02	1

Client Sample ID: WGWA-4

Date Collected: 02/04/20 10:45

Lab Sample ID: 180-102004-2

Matrix: Water

Date Received: 02/06/20 10:00

Method: EPA 300.0 R2.1 - Anions	, Ion Chromatograph	y					
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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00033	J	0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 17:22	1
Barium	0.0087	J	0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:09	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:22	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:22	1
Cobalt	< 0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:22	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:22	1
Lead	0.00019	JB	0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:22	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:22	1
Lithium	0.0055		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:09	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		02/13/20 16:03	02/14/20 15:04	1

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Job ID: 180-102004-1

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

Client Sample ID: WGWA-3

Lab Sample ID: 180-102004-3

Matrix: Water

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

Method: EPA 300.0 R2.1 - Anic	ons, Ion Chi	romatograp	hy						
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
_									

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
Barium	0.019		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
Lead	0.00013	JB	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
l	Mercury	0.00016	J	0.00020	0.00010	mg/L		02/13/20 16:03	02/14/20 15:05	1

Lab Sample ID: 180-102004-4 **Client Sample ID: WGWA-5 Matrix: Water**

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

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography Result Qualifier Analyte 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) - To	otal Recov	verable						
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
Barium	0.022		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
Cobalt	0.00082		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
Lead	0.00024	JB	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	ma/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

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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 - Anic	ons, Ion Chromatograpl	hy						
Analyte	Result Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13	0.10	0.026 m	ng/L			02/19/20 06:41	1

-	0110				3				
Method: EPA 6020B -	- Metals (ICP/MS) - Tot	tal Recove	erable						
Analyte	Result (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	1
Barium	0.013		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:22	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:29	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:29	1
Cobalt	< 0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:29	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:29	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:29	1
Lithium	0.0053		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:22	1

Method: EPA 7470A - Mercury	(CVAA)								
Analyte	Result C	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	1

Client Sample ID: WGWA-1

Date Collected: 02/03/20 15:30

Lab Sample ID: 180-102004-6

Matrix: Water

Date Received: 02/06/20 10:00

Selenium

Thallium

Lithium

Method: EPA 300.0 R Analyte	•	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) - T	otal Recov	erable						
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	1
Barium	0.053		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:14	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:31	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:31	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:31	1
Cobalt	0.00062		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:31	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:31	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:31	1
Antimony	<0.00038		0.0020	0.00038	ma/L		02/12/20 15:51	02/14/20 17:31	1

Method: EPA 7470A - Mercury	(CVAA)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010	0.00020	0.00010 mg/L		02/14/20 13:55	02/17/20 14:16	1

0.0050

0.0010

0.0050

0.0015 mg/L

0.00015 mg/L

0.0034 mg/L

< 0.0015

<0.00015

<0.0034

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02/12/20 15:51 02/14/20 17:31

02/12/20 15:51 02/14/20 17:31

02/18/20 09:20 02/19/20 18:14

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Job ID: 180-102004-1

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

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 - Anic	ons, Ion Chro	matograph	ıy						
Analyte	Result Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.036 J		0.10	0.026	mg/L			02/17/20 07:21	1

Analyte	Metals (ICP/MS) - Tota Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031	0.0010	0.00031	mg/L		02/12/20 15:51	02/14/20 17:34	1
Barium	0.017	0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:27	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:34	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:34	1
Chromium	<0.0015	0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:34	1
Cobalt	<0.00013	0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:34	1
Molybdenum	<0.00061	0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:34	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:34	1
Antimony	<0.00038	0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:34	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:34	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:34	1
Lithium	<0.0034	0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:27	1

Method: EPA 7470A - Mercury	(CVAA)									
Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	mg/L		(02/14/20 13:55	02/17/20 14:17	1

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

Date Collected: 02/04/20 14:30

Lab Sample ID: 180-102004-8

Matrix: Water

Date Received: 02/06/20 10:00

Method: EPA 7470A - Mercury (CVAA)

Analyte

Mercury

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) - To	otal Recov	erable						
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 17:41	1
Barium	<0.0016		0.010	0.0016	mg/L		02/18/20 09:20	02/19/20 18:29	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/12/20 15:51	02/14/20 17:41	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/12/20 15:51	02/14/20 17:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/20 15:51	02/14/20 17:41	1
Cobalt	<0.00013		0.00050	0.00013	mg/L		02/12/20 15:51	02/14/20 17:41	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/12/20 15:51	02/14/20 17:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/20 15:51	02/14/20 17:41	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/20 15:51	02/14/20 17:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/20 15:51	02/14/20 17:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/20 15:51	02/14/20 17:41	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/18/20 09:20	02/19/20 18:29	1

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Analyzed

02/14/20 13:55 02/17/20 14:18

Dil Fac

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Prepared

RL

0.00020

MDL Unit

0.00010 mg/L

Result Qualifier

<0.00010

Client Sample Results

Client: Southern Company Job ID: 180-102004-1

Project/Site: CCR - Plant Wansley

Date Received: 02/06/20 10:00

Lab Sample ID: 180-102004-9 Client Sample ID: EB-1-2-4-20 Date Collected: 02/04/20 14:00

Matrix: Water

Method: EPA 300.0 R	2.1 - Anions, Ion Ch	romatogra	phy						
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) - To	otal Recov	erable						
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
Barium	0.0017	J	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

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Client: Southern Company

Project/Site: CCR - Plant Wansley

Job ID: 180-102004-1

Prep Type: Total/NA

Client Sample ID: WGWA-2

Client Sample ID: WGWA-2

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

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

Lab Sample ID: MB 180-306773/48

Matrix: Water

Analysis Batch: 306773

MB MB

MB MB

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

Lab Sample ID: LCS 180-306773/47

Matrix: Water

Analysis Batch: 306773

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

Lab Sample ID: 180-102004-1 MS

Matrix: Water

Analysis Batch: 306773

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

Lab Sample ID: 180-102004-1 MSD

Matrix: Water

Analysis Batch: 306773

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

Lab Sample ID: MB 180-307222/6

Matrix: Water

Analysis Batch: 307222

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

Lab Sample ID: LCS 180-307222/5

Matrix: Water

Analysis Batch: 307222

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

Lab Sample ID: 180-102004-2 MS

Matrix: Water

Analysis Batch: 307222

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Fluoride 0.13 1 25 1.38 100 80 - 120 mg/L

Lab Sample ID: 180-102004-2 MSD

Matrix: Water

Analysis Batch: 307222 Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits RPD Analyte Unit %Rec Limit Fluoride 1.25 0.13 1.36 mg/L 98 80 - 120 20

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Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Client Sample ID: WGWA-4

Client: Southern Company

Job ID: 180-102004-1 Project/Site: CCR - Plant Wansley

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

Lab Sample ID: MB 180-307466/6

Matrix: Water

Analysis Batch: 307466

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared 0.10 Fluoride <0.026 0.026 mg/L 02/19/20 05:51

Lab Sample ID: LCS 180-307466/5

Matrix: Water

Analysis Batch: 307466

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

Lab Sample ID: 180-102004-5 MS

Matrix: Water

Analysis Batch: 307466

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

Lab Sample ID: 180-102004-5 MSD

Matrix: Water

Analysis Batch: 307466

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

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

	MB	MB							
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 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

Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Analysis Batch: 307167 Prep Batch: 306884 LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit %Rec Limits Arsenic 1.00 1.01 mg/L 101 80 - 120 Beryllium 0.500 0.542 mg/L 108 80 - 120Cadmium 0.500 0.532 mg/L 106 80 - 120 Chromium 0.500 104 80 - 120 0.521 mg/L

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Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: WGWA-6

Client Sample ID: WGWA-6

Client: Southern Company Job ID: 180-102004-1

Project/Site: CCR - Plant Wansley

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

Lab Sample ID: LCS 180-306668/2-C Matrix: Water

watrix: water

Analysis Batch: 307167

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

Spike LCS LCS		%Rec.
Analyte Added Result 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

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Analysis Batch. 307 107	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	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	Result	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

MB MB

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	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

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 Analyte
 Result
 Qualifier
 RL
 MDL
 Unit
 D
 Prepared
 Analyzed
 Dil Factory

 Mercury
 <0.00010</td>
 0.00020
 0.00010
 mg/L
 02/13/20 16:03
 02/14/20 14:41
 02/14/20 14:41

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Job ID: 180-102004-1

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Prep Batch: 307128

Prep Type: Total/NA

Client: Southern Company

Project/Site: CCR - Plant Wansley

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

Lab Sample ID: LCS 180-307012/2-A Client Sample ID: Lab Control Sample

Matrix: Water Prep Type: Total/NA Prep Batch: 307012 **Analysis Batch: 307145** Spike LCS LCS %Rec.

Analyte Added Result Qualifier %Rec Limits Unit 0.00250 0.00255 102 80 - 120 Mercury mg/L

Lab Sample ID: 180-102004-3 MS **Client Sample ID: WGWA-3** Prep Type: Total/NA

Matrix: Water

Prep Batch: 307012 Analysis Batch: 307145

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

Lab Sample ID: 180-102004-3 MSD Client Sample ID: WGWA-3

Matrix: Water

Prep Type: Total/NA **Analysis Batch: 307145 Prep Batch: 307012**

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

Lab Sample ID: MB 180-307128/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 307328

MB MB

Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed

Mercury <0.00010 0.00020 0.00010 mg/L 02/14/20 13:55 02/17/20 14:10

Lab Sample ID: LCS 180-307128/2-A **Client Sample ID: Lab Control Sample Matrix: Water**

Analysis Batch: 307328 Prep Batch: 307128 Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit %Rec Limits 0.00250 96 80 - 120 Mercury 0.00241 mg/L

Lab Sample ID: 180-102004-4 MS Client Sample ID: WGWA-5 **Matrix: Water** Prep Type: Total/NA Prep Batch: 307128 **Analysis Batch: 307328**

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

Lab Sample ID: 180-102004-4 MSD Client Sample ID: WGWA-5

Matrix: Water Prep Type: Total/NA **Analysis Batch: 307328** Prep Batch: 307128

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

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QC Association Summary

Client: Southern Company Job ID: 180-102004-1 Project/Site: CCR - Plant Wansley

HPLC/IC

Analysis Batch: 306773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bat	tch
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

Client Sample ID	Prep Type	Matrix	Method	Prep Batch
WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
Method Blank	Total/NA	Water	EPA 300.0 R2.1	
Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
	WGWA-6 Method Blank Lab Control Sample WGWA-6	WGWA-6 Total/NA Method Blank Total/NA Lab Control Sample Total/NA WGWA-6 Total/NA	WGWA-6 Total/NA Water Method Blank Total/NA Water Lab Control Sample Total/NA Water WGWA-6 Total/NA Water	WGWA-6 Total/NA Water EPA 300.0 R2.1 Method Blank Total/NA Water EPA 300.0 R2.1 Lab Control Sample Total/NA Water EPA 300.0 R2.1 WGWA-6 Total/NA Water EPA 300.0 R2.1 EPA 300.0 R2.1 EPA 300.0 R2.1 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	

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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	
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 180-307378/1-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

Chain of Custody Record

<u>TestAmerica</u>

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

Client Information	Sampler: O. FUQUEA	H. Huld	Lab PM: Veronica Bortot	a Bortot	Carrier Tracking No(s):	COC No: 400-72601-28757.	757.1
Client Contact: Join Abraham	Phone: (370)594.	8665-	E-Mail: (Veronic	E-Mail: (Veronica Bortot@testamericainc.com)		Page:	
Company:			-			Job #:	
Southern Company				Analysis	Requested		
Address: PO BOX 2641 GSC8	Due Date Requested:					Preservation Codes	odes: M - Hexane
City. Birmingham	TAT Requested (days):					B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: AL, 35291						D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone:	PO#: SCS10347656		(oN			G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate
Email: JAbraham@southernco.com	WO #:		10 88	(ON 1	5.70	Cadlesin Miles	
Project Name. CCR - Plant Wansley - Ash Pond	Project #: 40007709		Y) əlc	o sə)	uiestu	CONTRACTOR OF THE PARTY OF THE	W - pH 4-5 Z - other (specify)
Site: Georgia	SSOW#:			877		Other:	
sojjevojjevoj okamoj	Sample	Sample Type (C=comp,	Water (W=water, S=solid, O=waste/oil, HE BT=Tissue, ed.	VI. qqA sistel VI. qqA sistel abhuol 8 8 352 mulbsi 8 4156 848.W2	requirit less.	iedmuM listo	:
	Sample Date	1		N		Apade	
W6WA-2	8.3.0 1518	0	z	/		60	
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WGWA-6	2-4-20 1455	9	Z	\ \ \ z		3	n) jo
WGWA-1	2-5-20 (530	9	Z N	\ \ \ z		3	o nisi
		9	Z	z			CH
		g	N	Z			0020
62-4-2-1-87	2-4-20 1430	0 G	Z N	/ / Z			1-08
EB-1-2-4-20	2-4-20 1400	9	N N	\ \ \ z		3	L
00p-1	7-4.70	9	N	\ \ \ z		2	
ant	□ Poison B □	☐ Radiological		Sample Disposal (A fee ma	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Horive For More	tained longer th	an 1 month) Months
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:	irements:		
Empty Kit Relinquished by:	Date:		Ţ	Time:	Method of Shipment:		
Relinquished by:	Date/Time;	(35, us	Company	Received by:	2/S Date/Time:	13,48	Company
Relinquished by:	2 / Sate/Time:	6,6	Company Company	Received by:	L Wash date/Time:	0-30	Company
Custody Seals Infact: Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:	other Remarks:		
							Ver: 08/04/2016



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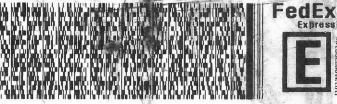


ORIGIN ID:LIYA (678 GEORGE TAYLOR EUROFINS TESTAMERICA 6500 MCDONOUGH DRIVE SUITE C-10 NORCROSS. GA 30093 UNITED STATES US

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

BILL RECIPIENT

EUROFINS TESTAMERICA PITTSBURGH PITTSBURGH PA 15238



TRK# 1516 9323 0072 ## MASTER ##

15238

Page 25 of 28

NA AGCA



Initials

Environment Testing TestAmerica

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ID:LIYA (678) 966-9991 TAYLOR TESTAMERICA YOUGH DRIVE SHIP DATE: 0 ACTWGT: 54.8 CAD: 859116/

9 30093

BILL RECIPIE

RECIEVING TESTAMERICA PITTSBUI

₽A 15238



THU - 06 FEB 3:00P STANDARD OVERNIGHT

acted temp Initials

Initials

Initials

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

eurofins Environment Testing TestAmerica

The content of the	Client Contact: Shipping/Receiving Company:	Phone:			E-Mail:							
Particular Par	Snipping/Receiving Company:										Page:	
Trail Marth, Control Dictable Control Marth, Control Dictable Control Marth, Control Dictable Control Marth, Control Dictable Co	Company:				veronic	a.bortot(@testar	nericainc.com			Page 1 of 1	
Trial Pointh Tria	nerica Laboratories, Inc.				Ao	creditation	s Require	ed (See note).			Job #: 180-102004-1	
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C - Chicago		TAT Requested (da	ys):					-			A - HCL	Σ 2
15 14 15 14 15 15 15 15						sə)/	sa				C - Zn Acetate D - Nitric Acid E - NaHSO4	2010
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Single February Single	Email:	WO#.			M 10	(0)		ocal M				
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Sample Identification - Client D (Lab ID) Sample Cut-comp Sample Samp	nsley CCR	SSOW#:			Sampl	A) asi		N) /2-4-1			_	
National Color	Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time			Perform MS/M		10_8225n0225n				nstructions/Note:
10,140 10,100 1		\bigvee	\setminus	CTS	Sode: X	X						
NGWA-6 (180-102004-2)	NGWA-2 (180-102004-1)	2/3/20	15:18 Fastern	S	ater	×	111111111111111111111111111111111111111	×			-	
11.42 Work-3 (180-102004-3) 24/20 11.42 Water X X X X X X X X X	WGWA-4 (180-102004-2)	2/4/20	10:45 Eastern	S	ater	×		×			-	
WGWAP (180-102004-4) 2/4/20 Eastern Lastern Water November (180-102004-5) X X X X X X X X X X X X X X X X X X X	WGWA-3 (180-102004-3)	2/4/20	11:42 Eastern	S	ater	×	10000	×			-	
1	WGWA-5 (180-102004-4)	2/4/20	15:17 Eastern	S	ater	×		×			-	
1972 Eastern Water X X X X X X X X X	NGWA-6 (180-102004-5)	2/4/20	14:55 Eastern	S	ater	×	1000	×			-	
14.30	WGWA-1 (180-102004-6)	2/3/20	15:30 Eastern	×	ater	×	2.50	×			-	
14:20	Dup-1 (180-102004-7)	2/4/20	Eastern	S	ater	×	1000	×			-	
EB-1-2-4-20 (180-102004-9) EB-1-2-4-20 (180-102004-9) Valets Since iaboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract iaboratories. This sample shipment is forwarded under chain-of-custody if the laboratory doces it samples analyzed, the samples must be shipped back to the Eurofins TestAmerica iaboratory or other instructions will be provided. Any changes to accreditation state or consistent to class, return the signed Chain of Custody stressing to sand compliance upon out subconfirmed. Possible Hazard Identification Possible Hazard Identification Possible Hazard Identification Primary Deliverable Rank: 2 Primary Deliverable Rank: 2 Special Instructions/OC Requirements: Company Received by: Compa	FB-1-2-4-20 (180-102004-8)	2/4/20	14:30 Eastern	×	ater	×		×			•	
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Sample Disposal (A fee may be assessed if samples are retained longer than 1 molecular than 1	Vote: Since laboratory accreditations are subject to change, Eurofins TestAmerica maintain accreditation in the State of Origin listed above for analysis/tests/matrix b festAmerica attention immediately. If all requested accreditations are current to di	a places the ownership being analyzed, the sa date, return the signed	of method, ar mples must be Chain of Cust	nalyte & accreditation shipped back to the ody attesting to said	compliance Eurofins Tes complicance	upon out s America la to Eurofins	subcontra laboratory s TestAmi	ct laboratories. Ti r or other instructic erica.	his sample shipment is fu ons will be provided. An	orwarded under chai y changes to accredi	n-of-custody. If the laboritation status should be	oratory does not currently brought to Eurofins
Special Instructions/QC Requirements: Company Second by: Configurations Company Second by: Configurations Confi	Possible Hazard Identification Unconfirmed					Sample	Dispo	sal (A fee ma	y be assessed if s	amples are reta	ained longer than	1 month) Months
inquished by: Date: Time: Company Registed by: Company Received by: Company Company	Deliverable Requested: I, III, III, IV, Other (specify)	Primary Delivera	Rank:			Special	Instruc	tions/QC Requ	uirements:			
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sals Intact: Custody Seal No.:		Date/Time:		Comp	, Aue	Rece	ived by:	11 14 14 17 17		Date/Time		Company
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A Yes A No						Cool	er Tempe	srature(s) °C and (Other Remarks:			

Client: Southern Company

Job Number: 180-102004-1

Login Number: 102004 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Creator. Watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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

which bortst

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

·····LINKS ······

Review your project results through

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Have a Question?



Visit us at: 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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Client: Southern Company Project/Site: CCR - Plant Wansley Laboratory Job ID: 180-102004-2

Table of Contents

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Case Narrative

Client: Southern Company

Job ID: 180-102004-2 Project/Site: CCR - Plant Wansley

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 Job ID: 180-102004-2

Project/Site: CCR - Plant Wansley

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)

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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

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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
lowa	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

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

Eurofins TestAmerica, Pittsburgh

Sample Summary

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

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

Job ID: 180-102004-2

Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley

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

Protocol References:

None = None

PrecSep-21

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.

Preparation, Precipitate Separation (21-Day In-Growth)

Laboratory References:

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

Job ID: 180-102004-2

TAL SL

None

Job ID: 180-102004-2

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

Lab Sample ID: 180-102004-1 **Client Sample ID: WGWA-2** Date Collected: 02/03/20 15:18

Matrix: Water

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumer	t 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
	Instrumer	t ID: GFPCPROTE	AN							
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
	Instrumer	t ID: NOEQUIP								

Client Sample ID: WGWA-4 Lab Sample ID: 180-102004-2

Date Collected: 02/04/20 10:45 **Matrix: Water**

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCRED		1			462630	03/03/20 09:25	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.38 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPROTEA	.N	1			461940	02/26/20 17:24	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463073	03/04/20 10:54	SMP	TAL SL

Client Sample ID: WGWA-3 Lab Sample ID: 180-102004-3 Date Collected: 02/04/20 11:42

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCRED		1			462630	03/03/20 09:25	AJD	TAL SL
Total/NA	Prep	PrecSep_0			999.95 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPROTEA	N	1			461940	02/26/20 17:24	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL

Client Sample ID: WGWA-5 Lab Sample ID: 180-102004-4 Date Collected: 02/04/20 15:17

Date Received: 02/06/20 10:00

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			1000.90 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
	Instrumer	t ID: GFPCRED								

Eurofins TestAmerica, Pittsburgh

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Matrix: Water

Matrix: Water

3/11/2020

Job ID: 180-102004-2

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

Client Sample ID: WGWA-5

Lab Sample ID: 180-102004-4

Matrix: Water

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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
	Instrumer	t ID: GFPCPROTE	EAN							
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
	Instrumer	t ID: NOEQUIP								

Lab Sample ID: 180-102004-5

Client Sample ID: WGWA-6 Date Collected: 02/04/20 14:55

Matrix: Water

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCRED		1			462630	03/03/20 09:26	AJD	TAL SL
Total/NA	Prep	PrecSep_0			999.98 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPROTEA	N	1			461940	02/26/20 17:24	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL

Lab Sample ID: 180-102004-6 **Client Sample ID: WGWA-1**

Date Collected: 02/03/20 15:30 **Matrix: Water**

Date Received: 02/06/20 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumer	t 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
	Instrumer	t ID: GFPCPROTEA	N							
Total/NA	Analysis	Ra226_Ra228		1			463073	03/04/20 10:54	SMP	TAL SL
	Instrumer	t ID: NOEQUIP								

Client Sample ID: Dup-1 Lab Sample ID: 180-102004-7

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCRED		1			462630	03/03/20 09:26	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			461921	02/26/20 17:28	AJD	TAL SL

Eurofins TestAmerica, Pittsburgh

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3/11/2020

Matrix: Water

Lab Chronicle

Client: Southern Company Job ID: 180-102004-2 Project/Site: CCR - Plant Wansley

Client Sample ID: Dup-1 Lab Sample ID: 180-102004-7

Date Collected: 02/04/20 00:00 **Matrix: Water** Date Received: 02/06/20 10:00

Batch Batch Dil Initial Final Batch Prepared Method Factor Amount Number or Analyzed **Prep Type** Type Run Amount Analyst Lab Total/NA 463073 03/04/20 10:54 SMP TAL SL Analysis Ra226_Ra228

Client Sample ID: FB-1-2-4-20 Lab Sample ID: 180-102004-8 Date Collected: 02/04/20 14:30 **Matrix: Water**

Date Received: 02/06/20 10:00

Prep Type Total/NA Total/NA	Batch Type Prep Analysis Instrumer	Batch Method PrecSep-21 9315 at ID: GFPCRED	Run	Dil Factor	Initial Amount 999.80 mL	Final Amount 1.0 g	Batch Number 459759 462630	Prepared or Analyzed 02/10/20 07:45 03/03/20 09:26		Lab TAL SL TAL SL
Total/NA Total/NA	Prep Analysis Instrumer	PrecSep_0 9320 nt ID: GFPCORANGE		1	999.80 mL	1.0 g	459763 461921	02/10/20 08:15 02/26/20 17:28		TAL SL TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463073	03/04/20 10:54	SMP	TAL SL

Lab Sample ID: 180-102004-9 Client Sample ID: EB-1-2-4-20 **Matrix: Water**

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCRED		1			462630	03/03/20 09:26	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.08 mL	1.0 g	459763	02/10/20 08:15	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCORANGE	Ī	1			461921	02/26/20 17:28	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463073	03/04/20 10:54	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

Batch Type: Analysis

AJD = Audra DeMariano

KLS = Kody Saulters

SMP = Siobhan Perry

3/11/2020

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Project/Site: CCR - Plant Wansley

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: 9315 - Ra	adium-226 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					02/10/20 07:45	03/03/20 09:25	1

Method: 9320 -	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - F	Radium-226 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					02/10/20 07:45	03/03/20 09:25	1

Method: 9320 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 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	l Radium-226	and Radium-228

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

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 - Padium-226 (GEDC)

		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0576	Ū	0.0669	0.0671	1.00	0.108	pCi/L	02/10/20 07:45	03/03/20 09:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		40 - 110					02/10/20 07:45	03/03/20 09:25	1

Method: 9320 - Radium-228 (GFPC)

		(011 0)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.2		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

Welliou. Nazzo_Na	220 - CUII	Inilien Ve	aululli-220 a	illu Naului	11-220					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.107	U	0.235	0.236	2.00	0.430	pCi/L		03/04/20 10:54	1
+ 228										

Client Sample ID: WGWA-5

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

Method: 9315 - Radium-226 (GFPC)

Lab Sample I	D: 180-102004-4
	Matrix: Water

Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 0.0982 U 0.0908 02/10/20 07:45 03/03/20 09:25 0.0912 1.00 0.142 pCi/L

١						
	Carrier	%Yield	Qualifier	Limits	Prepared Analyzed	Dil Fac
	Ba Carrier	94.8		40 - 110	02/10/20 07:45 03/03/20 09:25	1

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

Client Sample ID: WGWA-5 Lab Sample ID: 180-102004-4 Date Collected: 02/04/20 15:17

Matrix: Water

Date Received: 02/06/20 10:00

Method: 9320 - Ra	dium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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											
	_			Count	Total						
				Uncert.	Uncert.						
	Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Combined Radium 226	0.198	U	0.274	0.275	2.00	0.446	pCi/L		03/04/20 10:54	1
	+ 228										

Lab Sample ID: 180-102004-5 **Client Sample ID: WGWA-6** Date Collected: 02/04/20 14:55 **Matrix: Water** Date Received: 02/06/20 10:00

Method: 9315 - F	Radium-226 (GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					02/10/20 07:45	03/03/20 09:26	1

Method: 9320 - F	Radium-228 (GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra	a228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	8.30		0.632	0.842	2.00	0.429	pCi/L		03/04/20 10:54	1

Project/Site: CCR - Plant Wansley

Date Received: 02/06/20 10:00

Client Sample ID: WGWA-1

Lab Sample ID: 180-102004-6 Date Collected: 02/03/20 15:30

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

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

Method: 9320 - Radium-228 (GFPC)

Analyte Radium-228		Qualifier	Count Uncert. (2σ+/-) 0.279	Total Uncert. (2σ+/-) 0.280	RL 1.00		Unit pCi/L	Prepared	Analyzed 02/26/20 17:24	Dil Fac
Carrier		Qualifier	Limits	0.200	1.00	0.404	powe	Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					02/10/20 08:15	02/26/20 17:24	
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

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

Client Sample ID: Dup-1

Lab Sample ID: 180-102004-7 Date Collected: 02/04/20 00:00 **Matrix: Water** Date Received: 02/06/20 10:00

Count

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

Method: 9320	- Radium	-228	(GFPC)
MELITUA. 3320	- Naululli	-220	IGI F G

		Uncert.	uncert.					
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield Qualifier	Limits				Prepared	Analyzed	Dil Fac
Carrier Ba Carrier	%Yield Qualifier	Limits 40 - 110					Analyzed 02/26/20 17:28	Dil Fac

Total

Job ID: 180-102004-2

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

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: Ra226_	Ra228 - Combined	Radium-226	and Radium-228	
		0	T - 4 - 1	

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

Client Sample ID: FB-1-2-4-20 Lab Sample ID: 180-102004-8

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

Matrix: Water

Method: 9315 - F	Radium-226 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.5		40 - 110					02/10/20 07:45	03/03/20 09:26	1

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL**MDC** Unit Prepared Analyzed Dil Fac 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

Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 98.5 40 - 110 02/10/20 08:15 02/26/20 17:28 Y Carrier 87.1 40 - 110 02/10/20 08:15 02/26/20 17:28

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

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

Client Sample ID: EB-1-2-4-20 Lab Sample ID: 180-102004-9

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

Method: 9315 - Ra	dium-226 (GFPC)							
		Count Uncert.	Total Uncert.						
Analyte	Result Qualifi	er (2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield Qualifi	er Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8	40 - 110					02/10/20 07:45	03/03/20 09:26	1

Eurofins TestAmerica, Pittsburgh

Matrix: Water

Client Sample Results

Client: Southern Company Job ID: 180-102004-2

Project/Site: CCR - Plant Wansley

Client Sample ID: EB-1-2-4-20 Lab Sample ID: 180-102004-9

Date Collected: 02/04/20 14:00 Lab Gample 1B. 100-102004-3

Date Received: 02/06/20 10:00

Method: 9320 -	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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										
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.118	U	0.221	0.222	2.00	0.371	pCi/L		03/04/20 10:54	1

Comb + 228

Job ID: 180-102004-2

Client: Southern Company

Project/Site: CCR - Plant Wansley

Method: 9315 - Radium-226 (GFPC)

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

Count

Matrix: Water

Matrix: Water

Analysis Batch: 462630

Analysis Batch: 462630

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

Prep Batch: 459759

MB MB Uncert. Uncert. Analyte Result Qualifier RL MDC Unit $(2\sigma + / -)$ $(2\sigma + / -)$ Prepared Analyzed Dil Fac Radium-226 -0.02040 U 0.109 pCi/L 02/10/20 07:45 03/03/20 11:17 0.0425 0.0425 1.00

Total

MB MB

Carrier Qualifier Limits %Yield Prepared Analyzed Dil Fac Ba Carrier 40 - 110 02/10/20 07:45 03/03/20 11:17 84.3

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 459759

10

Total Spike LCS LCS Uncert. %Rec.

Added RLLimits **Analyte** Result Qual $(2\sigma + / -)$ MDC Unit %Rec Radium-226 11.3 10.33 1.09 1.00 0.0980 pCi/L 75 ₋ 125 91

LCS LCS

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

Carrier %Yield Qualifier I imits 40 - 110 Ba Carrier 96.6

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

RER

Total LCSD LCSD **Spike** Uncert. %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits RER

Limit Radium-226 11.3 10.29 1.09 1.00 0.0916 pCi/L 91 75 - 125 0.01

LCSD LCSD

Carrier %Yield Qualifier Limits Ba Carrier 99.1 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-459763/22-A Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA Analysis Batch: 461921 **Prep Batch: 459763** Count Total MB MB Uncert. Uncert.

Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.002449 0.224 0.224 1.00 0.405 pCi/L 02/10/20 08:15 02/26/20 17:30

MB MB Dil Fac Carrier %Yield Qualifier Limits Prepared Analyzed Ba Carrier 84.3 40 - 110 02/10/20 08:15 02/26/20 17:30 88.6 40 - 110 02/10/20 08:15 02/26/20 17:30 Y Carrier

3/11/2020

QC Sample Results

Client: Southern Company Job ID: 180-102004-2

Project/Site: CCR - Plant Wansley

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

Spike

Added

9.07

LCS LCS

Result Qual

7.880

Lab Sample ID: LCS 160-459763/1-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analyte

Radium-228

Analysis Batch: 461940

Prep Batch: 459763 Total Uncert. %Rec. RL **MDC** Unit Limits (2σ+/-) %Rec

0.421 pCi/L

LCS LCS Carrier %Yield Qualifier Ba Carrier 96.6

Limits 40 - 110 Y Carrier 89.0 40 - 110

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

0.963

1.00

Matrix: Water

Analysis Batch: 461940

Prep Type: Total/NA

87

Prep Batch: 459763

75 - 125

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

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

10

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	
180-102004-2	WGWA-4	Total/NA	Water	PrecSep-21	
180-102004-3	WGWA-3	Total/NA	Water	PrecSep-21	
180-102004-4	WGWA-5	Total/NA	Water	PrecSep-21	
180-102004-5	WGWA-6	Total/NA	Water	PrecSep-21	
180-102004-6	WGWA-1	Total/NA	Water	PrecSep-21	
180-102004-7	Dup-1	Total/NA	Water	PrecSep-21	
180-102004-8	FB-1-2-4-20	Total/NA	Water	PrecSep-21	
180-102004-9	EB-1-2-4-20	Total/NA	Water	PrecSep-21	
MB 160-459759/22-A	Method Blank	Total/NA	Water	PrecSep-21	
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	
180-102004-2	WGWA-4	Total/NA	Water	PrecSep_0	
180-102004-3	WGWA-3	Total/NA	Water	PrecSep_0	
180-102004-4	WGWA-5	Total/NA	Water	PrecSep_0	
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	

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Ver: 08/04/2016

Chain of Custody Record

TestAmerica Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

TestAmerica

S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify) : 180-102004 Chain of Custody Months N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 M - Hexane Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) COC No: 400-72601-28757.1 Preservation Codes Specie G - Amchlor H - Ascorbic Acid 3,40 0 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH I - Ice J - DI Water Archive For K - EDTA L-EDA Page Job#: 3 Total Number of containers Carrier Tracking No(s): Aethod of Shipment: Disposal By Lab **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements E-Mail: (Veronica.Bortot@testamericainc.com) Return To Client Radium 226 & 228 (SW-846 9315/9320) Received by: Received by: eceived by Flouride Lab PM: Veronica Bortot z z z z z z z Time: z z z Z Perform MS/MSD (Yes or No) z z Z Z z Z Z z Field Filtered Sample (Yes or No) (W=water, S=solid, O=waste/oil, BT=Tissue, Preservation Code ompany A=Air) 3 3 3 3 3 3 3 3 3 3 3 Halo Radiological (C=comp, Sample G=grab) Type 35.ax G G G G O 9 G 9 C G G 8665-465(026) O FUGUEA/H 1455 (530 1430 1400 Sample 6401 15/8 Time 142 4151 Date: Unknown (AT Requested (days) -4-20 Due Date Requested: PO#: SCS10347656 02-4-6 Sample Date 02-17-2 2-4-20 2-4-2 2-3-20 2-4-2 02-4-20 7-4.70 Date/Time: Project #: 40007709 ate/Time: Poison B N Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (412) 963-7058 Fax (412) 963-2468 EB-1-2-4-20 02-4-2-1-87 WGWA-3 WEWA-5 WGWA-4 WGWA-6 WBWA-2 Flammable Project Name: CCR - Plant Wansley - Ash Pond Possible Hazard Identification MOWA JAbraham@southernco.com Empty Kit Relinquished by Custody Seals Intact: Sample Identification Client Information oN △ PO BOX 2641 GSC8 Southern Company Non-Hazard △ Yes Joju Abraham elinquished by: Relinquished by: elinquished by: Birmingham State, Zip: AL, 35291 Georgia Page 21 of 25 3/11/2020



esting



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

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

BILL RECIPIENT

EUROFINS TESTAMERICA PITTSBURGH PITTSBURGH PA 15238



TRK# 1516 9323 0072 ## MASTER ##

NA AGCA

15238



Uncorrected temp Thermometer ID

Initials

Environment Testing TestAmerica

:00 A

ID:LIYA (678) 966-9991 TAYLOR TESTAMERICA NOUGH DRIVE SHIP DATE: 0 ACTWGT: 54.8 CAD: 859116/

9 30093

BILL RECIPIE

ECIEVING Testamerica Pitt**s**bu

R.

PA 15238



THU - 06 FEB 3:00P STANDARD OVERNIGHT

15238 PA-US PIT

ected temp
Initials
Initials

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.</td <td>N/A</td> <td></td>	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	

Client: Southern Company

Job Number: 180-102004-2

Login Number: 102004

List Number: 2

Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis

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

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

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

nonce bortet

Veronica Bortot, Senior Project Manager (412)963-2435

veronica.bortot@testamericainc.com

.....LINKS

Review your project results through

Total Access

Have a Question?



Visit us at: 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

Client: Southern Company Project/Site: CCR - Plant Wansley Laboratory Job ID: 180-102169-1

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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.

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Definitions/Glossary

Client: Southern Company Job ID: 180-102169-1

Project/Site: CCR - Plant Wansley

Qualifiers

	. ^	-
HP	1 1 2/	
	-	\cdot

Qualifier **Qualifier Description**

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**

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	v used abbreviations may	or may not be	present in this report.
ADDIEVIALIOII	THESE COMMISSION	/ useu abbievialions may	y OI IIIay IIOL De	present in tins repor

Listed under the "D" column to designate that the result is reported on a dry weight basis

Percent Recovery %R CFL Contains Free Liquid **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) LOD 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)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) **TEF** Toxicity Equivalent Quotient (Dioxin) **TEQ**

Eurofins TestAmerica, Pittsburgh

Page 4 of 35

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

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

Eurofins TestAmerica, Pittsburgh

Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley

WGWC-8

WGWC-17

180-102169-15 180-102169-16

Lab Sample ID **Client Sample ID** Matrix Collected Received Asset ID 02/05/20 12:33 02/11/20 09:00 180-102169-1 WGWA-7 Water 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 WGWC-11 Water 180-102169-8 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 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 WGWC-14A 180-102169-13 Water 02/05/20 14:40 02/11/20 09:00 WGWC-9 180-102169-14 Water 02/05/20 16:00 02/11/20 09:00

Water

Water

02/07/20 10:35 02/11/20 09:00

02/07/20 12:20 02/11/20 09:00

Job ID: 180-102169-1

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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

Client: Southern Company

Project/Site: CCR - Plant Wansley

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

Job ID: 180-102169-1

Batch Batch Dil Initial Final **Batch Prepared** Method **Prep Type** Type Run **Factor** Amount Amount Number or Analyzed Analyst Lab EPA 300.0 R2.1 307734 Total/NA Analysis 02/21/20 07:40 MJH TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 307560 02/19/20 14:08 JL TAL PIT Total Recoverable Analysis **EPA 6020B** 307853 02/21/20 14:06 RSK TAL PIT 1 Instrument ID: NEMO Total/NA 50 ml 50 ml 307130 02/14/20 14:00 NAM TAL PIT Prep 7470A Total/NA Analysis **EPA 7470A** 307328 02/17/20 15:07 NAM TAL PIT Instrument ID: HGZ

Client Sample ID: FB-2-2-7-20 Lab Sample ID: 180-102169-2

Date Collected: 02/07/20 10:20

Date Received: 02/11/20 09:00

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1		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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			307328	02/17/20 15:10	NAM	TAL PIT

Client Sample ID: Dup-2 Lab Sample ID: 180-102169-3 Date Collected: 02/07/20 00:00 **Matrix: Water**

Date Received: 02/11/20 09:00

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

Client Sample ID: WGWA-18 Lab Sample ID: 180-102169-4

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	- Kuii	1	Amount	Alliount	307733	02/21/20 10:16		TAL PIT
	Instrument	ID: CHICS2000								

Eurofins TestAmerica, Pittsburgh

Matrix: Water

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

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			307853	02/21/20 14:18	RSK	TAL PIT
	Instrumer	nt ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			307328	02/17/20 15:12	NAM	TAL PIT
	Instrumer	nt ID: HGZ								

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

Batch Batch Dil Initial Final Batch Prepared Amount **Prep Type** Method Amount Number or Analyzed Type Run **Factor** Analyst Lab Total/NA Analysis EPA 300.0 R2.1 307733 02/21/20 21:40 MJH TAL PIT Instrument ID: CHICS2000 Total Recoverable 3005A 50 mL 50 mL 307560 02/19/20 14:08 JL TAL PIT Total Recoverable EPA 6020B 307853 TAL PIT Analysis 1 02/21/20 14:20 RSK Instrument ID: NEMO Total/NA 7470A 50 mL 50 mL 307130 02/14/20 14:00 NAM TAL PIT Prep Total/NA Analysis **EPA 7470A** 307328 02/17/20 15:12 NAM TAL PIT 1 Instrument ID: HGZ

Client Sample ID: WGWC-10

Date Collected: 02/05/20 11:24

Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			307733	02/21/20 21:55	MJH	TAL PIT
	IIISH UITICI	it ib. Criic32000								
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			307853	02/21/20 14:23	RSK	TAL PIT
	Instrumer	t ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			307328	02/17/20 15:13	NAM	TAL PIT
	Instrumer	nt ID: HGZ								

Client Sample ID: WGWC-12

Date Collected: 02/05/20 14:16

Date Received: 02/11/20 09:00

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 t ID: CHICS2000	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 307733	Prepared or Analyzed 02/21/20 22:10	Analyst MJH	Lab TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	307560	02/19/20 14:08	JL	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			307853	02/21/20 14:25	RSK	TAL PIT

Lab Sample ID: 180-102169-7

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

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Matrix: Water

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

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			307328	02/17/20 15:16	NAM	TAL PIT
	Instrumen	t ID: HGZ								

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

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

Dil Batch Batch Initial Final Batch Prepared **Prep Type** Type Method Run **Factor Amount** Amount Number or Analyzed Analyst Lab 307633 Total/NA Analysis EPA 300.0 R2.1 1 02/20/20 12:04 MJH TAL PIT Instrument ID: CHICS2000 3005A Total Recoverable Prep 50 mL 50 mL 307560 02/19/20 14:08 JL TAL PIT Total Recoverable EPA 6020B 307853 TAL PIT Analysis 1 02/21/20 14:33 RSK Instrument ID: NEMO TAL PIT Total/NA 50 mL 50 mL 307130 Prep 7470A 02/14/20 14:00 NAM Total/NA Analysis **EPA 7470A** 1 307328 02/17/20 15:19 NAM TAL PIT Instrument ID: HGZ

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

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at 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 Instrumer	EPA 6020B nt 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 Instrumer	EPA 7470A nt 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**

Batch Batch Dil Initial Final Batch Prepared Method Number or Analyzed **Prep Type** Type **Factor Amount** Amount Run Analyst Lab Total/NA Analysis EPA 300.0 R2.1 307733 02/21/20 23:10 MJH TAL PIT Instrument ID: CHICS2000 Total Recoverable 3005A 50 mL 50 mL 307560 02/19/20 14:08 JL TAL PIT Total Recoverable 307853 02/21/20 14:38 RSK Analysis **EPA 6020B** 1 TAL PIT Instrument ID: NEMO Total/NA 7470A 307130 02/14/20 14:00 NAM TAL PIT Prep 50 mL 50 mL Total/NA **EPA 7470A** 307328 TAL PIT Analysis 02/17/20 15:21 NAM 1 Instrument ID: HGZ

Client Sample ID: WGWC-14A

Date Collected: 02/05/20 14:40

Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at 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 Instrumer	EPA 6020B at 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 Instrumer	EPA 7470A at 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

Bron Tuno	Batch	Batch Method	Run	Dil Factor	Initial	Final	Batch Number	Prepared or Analyzed	Analyst	Lob
Prep Type Total/NA	Type Analysis	EPA 300.0 R2.1	Kun	<u>1</u>	Amount	Amount	307733		. ,	TAL PIT
	Instrument	ID: CHICS2000								

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-102169-13

Lab Sample ID: 180-102169-14

Matrix: Water

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Matrix: Water

Lab Chronicle

Client: Southern Company Job ID: 180-102169-1 Project/Site: CCR - Plant Wansley

Client Sample ID: WGWC-9 Lab Sample ID: 180-102169-14

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			307853	02/21/20 14:48	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	307130	02/14/20 14:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			307328	02/17/20 15:23	NAM	TAL PIT
	Instrumen	t ID: HGZ								

Client Sample ID: WGWC-8 Lab Sample ID: 180-102169-15 Date Collected: 02/07/20 10:35 **Matrix: Water**

Dil Initial Batch Batch Batch Final Prepared Method **Prep Type** Type Run **Factor Amount** Amount Number or Analyzed **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 307633 02/20/20 12:19 MJH TAL PIT Instrument ID: CHICS2000 Total Recoverable Prep 3005A 50 mL 50 mL 307162 02/15/20 06:51 JL TAL PIT Total Recoverable **EPA 6020B** 307402 Analysis 1 02/17/20 17:20 WTR TAL PIT Instrument ID: M Total/NA 7470A 307130 Prep 50 mL 50 mL 02/14/20 14:00 NAM TAL PIT Total/NA Analysis **EPA 7470A** 307328 02/17/20 15:24 NAM 1 TAL PIT

Client Sample ID: WGWC-17 Lab Sample ID: 180-102169-16 Date Collected: 02/07/20 12:20 **Matrix: Water**

Dil Batch Batch Initial Final Batch Prepared **Prep Type** Type Method Run **Factor Amount Amount** Number or Analyzed **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 307733 02/22/20 00:25 MJH TAL PIT Instrument ID: CHICS2000 Total Recoverable Prep 3005A 50 mL 50 mL 307162 02/15/20 06:51 JL TAL PIT Total Recoverable Analysis **EPA 6020B** 307402 02/17/20 17:25 WTR TAL PIT 1 Instrument ID: M Total/NA Prep 7470A 50 mL 50 mL 307130 02/14/20 14:00 NAM TAL PIT Total/NA Analysis **EPA 7470A** 307328 02/17/20 15:25 NAM TAL PIT 1 Instrument ID: HGZ

Laboratory References:

Date Received: 02/11/20 09:00

Date Received: 02/11/20 09:00

Instrument ID: HGZ

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

Eurofins TestAmerica, Pittsburgh

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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

NAM = Nicole Marfisi

MJH = Matthew Hartman

RSK = Robert Kurtz

WTR = Bill Reinheimer

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

Client Sample ID: WGWA-7

Lab Sample ID: 180-102169-1

Matrix: Water

Date Collected: 02/05/20 12:33 Date Received: 02/11/20 09:00

Method: EPA 300.0 R2.1 - Anic	ons, Ion Chromatograph	ıy					
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

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

Lab Sample ID: 180-102169-2

Matrix: Water

Date Received: 02/11/20 09:00

Method: EPA 300.0 R	2.1 - Anions, Ion Ch	romatogra	phy						
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) - T	otal Recov	erable						
Analyte		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	• • • • • • • • • • • • • • • • • • • •	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

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

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

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	

Analyte	Result Qual	lifier 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	1
Barium	<0.0016	0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:16	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:16	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:16	1
Chromium	<0.0015	0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:16	1
Cobalt	0.00024 J	0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:16	1
Molybdenum	0.0013 J	0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:16	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:16	1
Antimony	<0.00038	0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:16	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:16	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:16	1
Lithium	0.044	0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:16	1

Method: EPA 7470A - Mercury (CVAA) Analyte **Result Qualifier** RL **MDL** Unit Prepared Analyzed 0.00010 mg/L Mercury <0.00010 0.00020 02/14/20 14:00 02/17/20 15:11

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: EPA 300.0 R2.1 - Anio	ohy								
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

-	0=				9. =				-
Method: EPA 6020B -	Metals (ICP/MS) - To	tal Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00058	J	0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:18	1
Barium	0.020		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:18	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:18	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:18	1
Cobalt	0.0027		0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:18	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:18	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:18	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:18	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		02/14/20 14:00	02/17/20 15:12	1

2/29/2020

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

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

	Method: EPA 300.0 R2.1 - Anio	romatogra	phy							
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Fluoride	0.031	J	0.10	0.026	mg/L			02/21/20 21:40	1

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	1
Barium	<0.0016	0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:20	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:20	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:20	1
Chromium	0.0016 J	0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:20	1
Cobalt	<0.00013	0.00050	0.00013	mg/L		02/19/20 14:08	02/21/20 14:20	1
Molybdenum	<0.00061	0.0050	0.00061	mg/L		02/19/20 14:08	02/21/20 14:20	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/19/20 14:08	02/21/20 14:20	1
Antimony	<0.00038	0.0020	0.00038	mg/L		02/19/20 14:08	02/21/20 14:20	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/19/20 14:08	02/21/20 14:20	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/19/20 14:08	02/21/20 14:20	1
Lithium	<0.0034	0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:20	1

Method: EPA 7470A - Mercury (CVAA)											
	Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
	Mercury	<0.00010		0.00020	0.00010	mg/L		_	02/14/20 14:00	02/17/20 15:12	1

Client Sample ID: WGWC-10 Lab Sample ID: 180-102169-6 Date Collected: 02/05/20 11:24 **Matrix: Water**

Date Received: 02/11/20 09:00

Molybdenum

Lead Antimony

Selenium

Thallium

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) - T	otal Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00035	J	0.0010	0.00031	mg/L		02/19/20 14:08	02/21/20 14:23	1
Barium	0.061		0.010	0.0016	mg/L		02/19/20 14:08	02/21/20 14:23	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/19/20 14:08	02/21/20 14:23	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/19/20 14:08	02/21/20 14:23	1
Chromium	0.0022		0.0020	0.0015	mg/L		02/19/20 14:08	02/21/20 14:23	1
Cobalt	0.0013		0.00050	0.00013	ma/l		02/19/20 14:08	02/21/20 14:23	1

0.0050

0.0010

0.0020

0.0050

0.0010

< 0.00061

<0.00038

< 0.0015

< 0.00015

0.00016 J

Lithium	0.0061		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:23	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		02/14/20 14:00	02/17/20 15:13	1

0.00061 mg/L

0.00013 mg/L

0.00038 mg/L

0.0015 mg/L

0.00015 mg/L

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02/19/20 14:08 02/21/20 14:23

02/19/20 14:08 02/21/20 14:23

02/19/20 14:08 02/21/20 14:23

02/19/20 14:08 02/21/20 14:23

02/19/20 14:08 02/21/20 14:23

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

Client Sample ID: WGWC-12

Lab Sample ID: 180-102169-7 Date Collected: 02/05/20 14:16 **Matrix: Water**

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

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
Barium	0.016		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
Cobalt	0.00058		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	0.0063		0.0050	0.0034	mg/L		02/19/20 14:08	02/21/20 14:25	1

Method: EPA 7470A - Mercury (CVAA)									
Analyte	e R	sult Quali	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercur	y <0.0	0010	0.00020	0.00010	mg/L		02/14/20 14:00	02/17/20 15:16	1

Lab Sample ID: 180-102169-8 **Client Sample ID: WGWC-11** Date Collected: 02/05/20 15:07 **Matrix: Water**

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

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
Barium	0.047		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
Cobalt	0.00026	J	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

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

Client Sample ID: WGWC-15

Lab Sample ID: 180-102169-9 Date Collected: 02/07/20 10:38

Matrix: Water

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 r	mg/L			02/21/20 22:40	1	

Fluoride	0.79		0.10	0.026	mg/L			02/21/20 22:40	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recoverab	le						
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 Prepared Analyzed Mercury <0.00010 0.00020 0.00010 mg/L 02/14/20 14:00 02/17/20 15:18

Client Sample ID: WGWC-16

Lab Sample ID: 180-102169-10 Date Collected: 02/07/20 11:28 **Matrix: Water** Date Received: 02/11/20 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
	Analyte	Result Qu	ualifier R	L MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Fluoride	0.072 J	0.1	0.026	mg/L			02/20/20 12:04	1

-	0.072	3	0.10	0.020	mg/L			02/20/20 12.04	
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recov	erable						
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

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

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: EPA 300.0 R2.1	- Anions, Ion Chromatography
A I 4 .	D 16 O 176

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

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 Prepared Analyzed <0.00010 0.00020 02/14/20 14:00 02/17/20 15:20 Mercury 0.00010 mg/L

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: EPA 300.0 R2.1 - Anions, Ion Chromatography

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

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

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Mercury <0.00010 0.00020 0.00010 mg/L 02/14/20 14:00 02/17/20 15:21

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

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: EPA 300.0 R2.1 - Anions,	Ion Ch	romatography							
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

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 Prepared Analyzed Mercury <0.00010 0.00020 0.00010 mg/L 02/14/20 14:00 02/17/20 15:22

Client Sample ID: WGWC-9 Lab Sample ID: 180-102169-14 Date Collected: 02/05/20 16:00 **Matrix: Water**

Date Received: 02/11/20 09:00

Method: EPA 300.0 R2.1 - Anio	ons, Ion Chroma	atography						
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.3	0.10	0.026	mg/L			02/22/20 00:10	1

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	0.0022	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

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Job ID: 180-102169-1

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

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

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

Analyte	Result Qualif	ier 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	1
Barium	<0.0016	0.010	0.0016	mg/L		02/15/20 06:51	02/17/20 17:20	1
Beryllium	0.0023	0.0010	0.00018	mg/L		02/15/20 06:51	02/17/20 17:20	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		02/15/20 06:51	02/17/20 17:20	1
Chromium	<0.0015	0.0020	0.0015	mg/L		02/15/20 06:51	02/17/20 17:20	1
Cobalt	0.0011	0.00050	0.00013	mg/L		02/15/20 06:51	02/17/20 17:20	1
Molybdenum	<0.00061	0.0050	0.00061	mg/L		02/15/20 06:51	02/17/20 17:20	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/15/20 06:51	02/17/20 17:20	1
Antimony	<0.00038	0.0020	0.00038	mg/L		02/15/20 06:51	02/17/20 17:20	1
Selenium	0.0048 J	0.0050	0.0015	mg/L		02/15/20 06:51	02/17/20 17:20	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/15/20 06:51	02/17/20 17:20	1
Lithium	0.014	0.0050	0.0034	mg/L		02/15/20 06:51	02/17/20 17:20	1

 Method: EPA 7470A - Mercury (CVAA)
 Result Mercury
 Qualifier Nector (CVAA)
 RL MDL (CVAA)
 Unit (CVAA)
 D (CVAA)
 Prepared (CVAA)
 Analyzed (CVAA)
 Dil Factor (CVAA)

Client Sample ID: WGWC-17

Date Collected: 02/07/20 12:20

Lab Sample ID: 180-102169-16

Matrix: Water

Date Received: 02/11/20 09:00

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) - T	otal Recov	erable						
Analyte		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	1
Barium	0.011		0.010	0.0016	mg/L		02/15/20 06:51	02/17/20 17:25	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		02/15/20 06:51	02/17/20 17:25	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		02/15/20 06:51	02/17/20 17:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/15/20 06:51	02/17/20 17:25	1
Cobalt	0.00077		0.00050	0.00013	mg/L		02/15/20 06:51	02/17/20 17:25	1
Molybdenum	0.0025	J	0.0050	0.00061	mg/L		02/15/20 06:51	02/17/20 17:25	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/15/20 06:51	02/17/20 17:25	1
Antimony	<0.00038		0.0020	0.00038	mg/L		02/15/20 06:51	02/17/20 17:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/15/20 06:51	02/17/20 17:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/15/20 06:51	02/17/20 17:25	1
Lithium	0.0045	J	0.0050	0.0034	mg/L		02/15/20 06:51	02/17/20 17:25	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	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	1

RL

0.10

Spike

Added

10

Client: Southern Company

Project/Site: CCR - Plant Wansley

Job ID: 180-102169-1

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec.

Limits

Analyzed

02/20/20 10:35

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

Lab Sample ID: MB 180-307633/6

Matrix: Water

Fluoride

Analysis Batch: 307633

MB MB

<0.026

Analyte Result Qualifier

Lab Sample ID: LCS 180-307633/5

Matrix: Water

Analysis Batch: 307633

Analyte

Fluoride

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

Analysis Batch: 307733

Analyte Result Qualifier

RL MDL Unit Fluoride 1.0 0.26 mg/L <0.26

Sample Sample

Sample Sample

0 12

Result Qualifier

Result Qualifier

Lab Sample ID: MB 180-307733/6

Matrix: Water

Analysis Batch: 307733

Analyte

Fluoride <0.026

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

Analysis Batch: 307733

Analyte

Fluoride

Lab Sample ID: 180-102169-4 MS

Matrix: Water

Analysis Batch: 307733

Analyte

Fluoride 0.12

Lab Sample ID: 180-102169-4 MSD

Matrix: Water

Fluoride

Analysis Batch: 307733

Analyte

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

Analysis Batch: 307734

MB MB Result Qualifier Analyte

Fluoride < 0.026 2.50 2.47 mg/L 99 90 - 110

ח

Unit

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyzed Dil Fac Prepared

02/21/20 12:26

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

LB1 LB1

Result Qualifier

Spike

Added

2.50

Spike

Added

1.25

Spike

Added

1 25

0.10

RL

LCS LCS

MS MS

MSD MSD

1.40

Result Qualifier

MDL Unit

0.026 mg/L

1.41

Result Qualifier

2.52

Result Qualifier

0.026 mg/L

MDL Unit

0.026 mg/L

LCS LCS

Result Qualifier

MDL Unit

mg/L

Unit

mg/L

Unit

mg/L

D

D

Prepared

Prepared

D %Rec

Analyzed 02/21/20 06:51

Dil Fac

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec Unit %Rec Limits

%Rec

Prepared

101 90 - 110

Client Sample ID: WGWA-18

Prep Type: Total/NA

%Rec.

%Rec Limits 103 80 - 120

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

%Rec. **RPD** Limits RPD Limit

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyzed Dil Fac 02/21/20 05:34

2/29/2020

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RL

0.10

Client: Southern Company Job ID: 180-102169-1

Project/Site: CCR - Plant Wansley

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

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

Analysis Batch: 307734

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

Lab Sample ID: 180-102169-1 MS

Matrix: Water

Analysis Batch: 307734

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

Lab Sample ID: 180-102169-1 MSD

Matrix: Water

Analysis Batch: 307734

7 maryolo Batom corro	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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								e: Total Recov Prep Batch:	
•	MB	MB						•	
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	ma/l		02/15/20 06:50	02/17/20 14:50	

Analyte	Result	Qualifier F	L MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031	0.00	0.00031	mg/L		02/15/20 06:50	02/17/20 14:50	1
Barium	<0.0016	0.0	0.0016	mg/L		02/15/20 06:50	02/17/20 14:50	1
Beryllium	<0.00018	0.00	0.00018	mg/L		02/15/20 06:50	02/17/20 14:50	1
Cadmium	<0.00022	0.00	0.00022	mg/L		02/15/20 06:50	02/17/20 14:50	1
Chromium	<0.0015	0.002	0.0015	mg/L		02/15/20 06:50	02/17/20 14:50	1
Cobalt	<0.00013	0.0005	0.00013	mg/L		02/15/20 06:50	02/17/20 14:50	1
Molybdenum	<0.00061	0.005	0.00061	mg/L		02/15/20 06:50	02/17/20 14:50	1
Lead	<0.00013	0.00	0.00013	mg/L		02/15/20 06:50	02/17/20 14:50	1
Antimony	0.000384	J 0.002	0.00038	mg/L		02/15/20 06:50	02/17/20 14:50	1
Selenium	<0.0015	0.005	0.0015	mg/L		02/15/20 06:50	02/17/20 14:50	1
Thallium	<0.00015	0.00	0.00015	mg/L		02/15/20 06:50	02/17/20 14:50	1
Lithium	< 0.0034	0.008	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
Prop Ratch: 307162

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: WGWA-7

Client Sample ID: WGWA-7

Client Sample ID: Method Blank

7, 6.6 20.0 60. 102	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%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

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

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 Spike LCS LCS %Rec.

							,		
Analyte	Added	Result	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

,												
	MB	MB										
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 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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	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	

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

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

Lab Sample ID: LCS 180-307560/2-A Matrix: Water				Clie	Client Sample ID: Lab Control S Prep Type: Total Reco					
Analysis Batch: 307853							Prep Batch: 3075	60		
	Spike	LCS	LCS				%Rec.			
Analyte	Added	Result	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: EP	A 7470A -	Mercury	(CVAA)
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<0.00010

Mercury

Lab Sample ID: MB 180-307130/1-A Matrix: Water					(ole ID: Method Prep Type: T	
Analysis Batch: 307328							Prep Batch:	307130
N	IB MB						•	
Analyte Res	ult Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: LCS 180-307130/2-A Matrix: Water				Clie	nt Saı	mple ID	: Lab Control Sample Prep Type: Total/NA
Analysis Batch: 307328	Cuika	LCS	1.00				Prep Batch: 307130 %Rec.
	Spike	_			_		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Mercury	0.00250	0.00246		mg/L		98	80 - 120

0.00020

0.00010 mg/L

Lab Sample ID: 180-102169	9-1 MS							Client	t Sample ID:	: WGWA-7
Matrix: Water									Prep Type	: Total/NA
Analysis Batch: 307328									Prep Bato	ch: 307130
-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Mercury	<0.00010		0.00100	0.00105		mg/L		105	75 - 125	

Lab Sample ID: 180-102169-1 MSD							Client Sample ID: WGWA-7				
Matrix: Water							Prep Ty	pe: Tot	al/NA		
Analysis Batch: 307328									Prep Ba	tch: 30	7130
_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.00010		0.00100	0.00101		mg/L		101	75 - 125	4	20

02/14/20 14:00 02/17/20 15:05

QC Association Summary

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

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	

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Job ID: 180-102169-1

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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	<u> </u>
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

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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	-
180-102169-2	FB-2-2-7-20	Total Recoverable	Water	3005A	
180-102169-3	Dup-2	Total Recoverable	Water	3005A	
180-102169-4	WGWA-18	Total Recoverable	Water	3005A	
180-102169-5	EB-2-2-7-20	Total Recoverable	Water	3005A	
180-102169-6	WGWC-10	Total Recoverable	Water	3005A	
180-102169-7	WGWC-12	Total Recoverable	Water	3005A	
180-102169-8	WGWC-11	Total Recoverable	Water	3005A	
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

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Ver: 08/04/2016

Chain of Custody Record

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

TestAmerica Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

TestAmerica

68 i-Atlanta N. None O. AsNaO2 P. Na2O4S Q. Na2SO3 R. Na2SSO3 S. H2SO4 T. TSP Dodecahydrate 681-Atlanta Sompany Company Special Instructions/Note: Z - other (specify) Months Company U - Acetone V - MCAA W - pH 4-5 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon COC No: 400-72601-28757.1 Preservation Codes H - Ascorbic Acid A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH 3:00 I - Ice J - DI Water G - Amchlor K - EDTA L - EDA Page: Page Job #: 3 7 M Total Number of contain Method of Shipment: 180-102169 Chain of Custody Analysis Requested Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Lab PM:
Veronica Bortot
E-Mail:
[Veronica.Bortot@testamericainc.com] Return To Client (0ZE6/91E6 978-MS Received by: Received by: z z z z z Z z Z Time: Z z Perform MS/MSD (Yes or No) Z z Z Z z Z Z Field Filtered Sample (Yes or No) Company (W=water, S=solid, O=waste/oil, BT=Tissue, Preservation Code A=Air) Company 3 3 3 3 3 > 3 3 3 3 3 Radiological (C=comp, Sample G=grab) Type 8565-465(ott G G G G G O 13cm O G O G O 6 1733 1038 10201 Sample 503 1719 1416 Date: O. FUQUEA Unknown 3 (days) Due Date Requested: PO#: SCS10347656 02-1-2 02-t-2 02-t-6 02-t-1 Sample Date 2-5-70 1-5-70 Date/Time. 7-5-70 2-5-20 Project #: 40007709 Date/Time: NO #: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) 02-Custody Seals Intact: UCustody Seal No.: W6WC-19 FB-2-2-Dup-2 MGMC-15 MGWC-16 MCWC-12 NGWC-11 JGWC-10 Flammable Project Name: CCR - Plant Wansley - Ash Pond Possible Hazard Identification JAbraham@southernco.com Empty Kit Relinquished by: Sample Identification Client Information PO BOX 2641 GSC8 Southern Company Non-Hazard elinquished by: Client Contact: Joju Abraham Relinquished by: Relinquished by: ∆ Yes Birmingham State, Zip: AL, 35291 Georgia 2/29/2020 Page 29 of 35

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Ver. 08/04/2016

Company

Months

Possible Hazard Identification		Selo
Non-Hazard Flammable Skin Irritant	t Poison B 🗡 Unknown Radiological	Return To Client A Disposal By Lab Archive For Months
Deliverable Requested: I, III, IV, Other (specify)		Special Instructions/QC Requirements:
Empty Kit Relinquished by:	Date: Time:	Nethod of Shipment:
Relinquished by:	Date/Time: Con 20 /3/22 /QC	Received by: 2 / 2/2/2/ (3 c.s. Company
Relinquished by:	2//offer 16 w Congress M	Received by Atulus Variant of Company
Selinquished by:	Company Company	Received by: O Company
Custody Seals Intabt: Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:
0		Ver: 08/04/

Chain of Custody Record

TestAmerica Pittsburgh

301 Alpha Drive RIDC Park

TestAmerica

Phone (412) 963-7058 Fax (412) 963-2468		The second secon		
Client Information	Sampler II Auld	Lab PM: Veronica Bortot	Carrier Tracking No(s):	COC No: 400-72601-28757.1
Client Contact: Joju Abraham	Phone: (770) 594-5998	E-Mail: (Veronica. Bortot@testamericainc.com)		Page: Page

Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	Clail Ol	idii oi custody necold		THE LEADER IN ENVIRONMENTAL TESTING
Client Information	Sampler: [] A. 1.0	Lab PM: Veronica Bortot	Carrier Tracking No(s):	COC No: 400-72601-28757.1

0 - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - NaHSO4
F - Machlor
G - Amchlor
H - Ascorbic Acid

Preservation Codes:

Analysis Requested

TAT Requested (days): Due Date Requested:

PO BOX 2641 GSC8 Southern Company

Birmingham

State, Zip: AL, 35291

Company:

PO#: SCS10347656

WO #:

Project #: 40007709 SSOW#:

Project Name: CCR - Plant Wansley - Ash Pond

JAbraham@southernco.com

Email:

U - Acetone V - MCAA W - pH 4-5 Z - other (specify)

I - Ice J - DI Water K - EDTA L - EDA

Total Number of containers

Special Instructions/Note:

Preservation Code

A=Air

Radium 226 & 228 Flouride

(W=water, S=solid, O=waste/oil, BT=Tissue,

Type (C=comp, G=grab)

Sample

Time

Sample Date

Sample

Perform MS/MSD (Yes or No)

Field Filtered Sample (Yes or No)

681-Atlanta

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0350

02-t-C

1220

02-t-6

JCWC-17

8-2M2M

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G U G U C

1400

010

01-6-6

02-t-2-1-83

JCUC-14A

UCWC

51-7MJM JCWA-8

Sample Identification

z z

3 3

1335

Ohni

-5-20 02-9-1

z

3

G G G

1705

7-5-20 02-9-2 z

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ww

180-102169-02 Chain of Custod,

Chain of Custody Record

StAmerico	400-72601-28757.1	Page: Page	;; qop	Š	B - NaOH N - None C - Zn Acetate O - AskaD2		D	I - Ice J - DI Water	and the same of	Other	radinuM late	Special Instructions/Note:	50		3	2	3 cos_Atlanta		3		安 特	震災,		es are retained longer than 1 month) Archive For Months		ent	DalerTime 20 (3 () Company	02-11-	Time: Q ' Q O Company	11-20 9:00 ETAR.H	Ver. 08/04/2016
180-102169-02 Chain of Custod,	Learner I racking No(s):	E-Mall: (Veronica.Bortot@testamericainc.com)	Analysis Requested							328	8 325 & 3. M-846 93169	- Times						1//						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Mon	Special Instructions/QC Requirements:	Method of Shipment:	Received by:	Saff when idahan	Received by Date-Time	Cooler Temberature(s) °C and Other Remarks:	
Chain of Custody Record	Lab PM: Veronica Bortot	E-Mall: (Veronica.Bortot@					(ON	School Street	ALC: NO PERSONS	wes	(Wawweller, Swelligh Conversibility	W C	N N N	G W N N	G W N N	N N N	G W N N	G W N N	G W N N	Z Z Z	N N N	N W	N N N	Sample Sample Radiological R		Time:	20	M	Company Rece	Coop	
Chain of C	Sampler: []. Auld	Phone: (770) 594-5998		Due Date Requested:	TAT Requested (days):		PO#. SCS10347656	WO #:	Project #: 40007709	SSOW#.	Sample	Sample Date Time G=	2-5-20 1705	2-5-20 1335	12-5-20 HAD		0101 01-6-2	3-7-20 1035	-					☐ Poison B ★ Unknown ☐ Rac		Date:	Date/Time: 20 /3	Determine (16 mm)	Date/Time:		
TestAmerica Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468			pany	Address: " PO BOX 2641 GSC8) City. Birmingham	State, Zip: AL, 35291	Phone:	Emall: JAbraham@southernco.com	Project Name: CCR - Plant Wansley - Ash Pond	Site: Georgia		Sample Identification	W6WA-18 COM	81-219	UGUC-14A	16WC-9	07-t-2-1-83	W6W6-8	1/16WC-17					Possible Hazard Identification 	Other (specify)	Empty Kit Relinquished by:	Reinquished by:	Reinquistred by:	M	Custody Seals Intater. Custody Seal No.: Δ Yes. Δ No.	



16:00 A

eurofins

Environment Testing TestAmerica

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: 55.80 LB CAD: 859116/CAFE3312

BILL RECIPIENT

SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH
301 ALPHA DR.
RIDC PARK
PITTSBURGH PA 15238

(412) 963 - 7058

REF: ACC - PLT WANSLEY



FedEx Express

TRK# 1516 9323 0164

TUE - 11 FEB 3:00P STANDARD OVERNIGHT

NA AGCA

15238 PA-US PIT



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2/29/2020

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3,0 CEO #10

Page 34 of 35 2/29/2020

Client: Southern Company

Job Number: 180-102169-1

Login Number: 102169 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Creator: watson, Depple		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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: 180-102169-2

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

ronce Bortot

Veronica Bortot, Senior Project Manager (412)963-2435

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

Client: Southern Company Project/Site: CCR - Plant Wansley Laboratory Job ID: 180-102169-2

Table of Contents

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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

Eurofins TestAmerica, Pittsburgh 3/11/2020

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.

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Definitions/Glossary

Client: Southern Company Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

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.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis

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)

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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

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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
lowa	State	373	09-17-20
Kansas	NELAP	E-10236	10-31-20
Kentucky (DW)	State	KY90125	12-31-20
₋ouisiana	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
√irginia	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	
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

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

Job ID: 180-102169-2

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

Flojeci/Site. CCR - Flant Wansley

Client Sample ID: WGWA-7

Lab Sample ID: 180-102169-1

Matrix: Water

Job ID: 180-102169-2

Date Collected: 02/05/20 12:33 Date Received: 02/11/20 09:00

Prep Type Total/NA	Batch Type Prep	Batch Method PrecSep-21	Run	Dil Factor	Amount 1000.41 mL	Final Amount 1.0 g	Batch Number 460626	Prepared or Analyzed 02/17/20 12:15	Analyst RBR	Lab TAL SL
Total/NA	Analysis Instrumen	9315 t ID: GFPCBLUE		1			463594	03/10/20 13:54	AJD	TAL SL
Total/NA Total/NA	Prep Analysis Instrumen	PrecSep_0 9320 t ID: GFPCPROTEA	۸N	1	1000.41 mL	1.0 g	460632 463178	02/17/20 13:01 03/04/20 18:15		TAL SL TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 t ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

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

Lab Sample ID: 180-102169-3

Matrix: Water

Matrix: Water

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9315 t ID: GFPCBLUE		1			463594	03/10/20 13:54	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.56 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 t ID: GFPCPROTEA	N	1			463178	03/04/20 18:15	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 t ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: Dup-2

Date Collected: 02/07/20 00:00

Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			463594	03/10/20 15:54	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.40 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPROTEA	.N	1			463178	03/04/20 18:15	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWA-18

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	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
	Instrumen	t ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-102169-4

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Job ID: 180-102169-2

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

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9320 at ID: GFPCORANC	}F	1			463111	03/04/20 18:18	KLS	TAL SL
Total/NA	Analysis	Ra226_Ra228	<u>-</u>	1			463806	03/11/20 08:03	SMP	TAL SL
	Instrumen	t ID: NOEQUIP								

Lab Sample ID: 180-102169-5 Client Sample ID: EB-2-2-7-20

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

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Factor Amount Amount Number or Analyzed Type Run Analyst Lab Total/NA PrecSep-21 460626 02/17/20 12:15 RBR TAL SL Prep 1000.76 mL 1.0 g Total/NA Analysis 9315 463594 03/10/20 15:54 AJD TAL SL 1 Instrument ID: GFPCBLUE Total/NA PrecSep_0 02/17/20 13:01 RBR TAL SL Prep 1000.76 mL 1.0 g 460632 Total/NA TAL SL Analysis 9320 463111 03/04/20 18:18 KLS Instrument ID: GFPCORANGE Total/NA Analysis Ra226_Ra228 463806 03/11/20 08:03 SMP TAL SL Instrument ID: NOEQUIP

Client Sample ID: WGWC-10 Lab Sample ID: 180-102169-6

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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
	Instrumer	nt 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
	Instrumer	nt ID: GFPCORANGE	•							
Total/NA	Analysis	Ra226_Ra228		1			463806	03/11/20 08:03	SMP	TAL SL
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: WGWC-12 Lab Sample ID: 180-102169-7

Date Collected: 02/05/20 14:16 **Matrix: Water** Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t 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
	Instrumen	t ID: GFPCORANG	E							

Eurofins TestAmerica, Pittsburgh

Job ID: 180-102169-2

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

Client Sample ID: WGWC-12

Lab Sample ID: 180-102169-7 Date Collected: 02/05/20 14:16

Matrix: Water

Date Received: 02/11/20 09:00 Dil Batch Batch Initial Final Batch Prepared

Method Factor Amount Number or Analyzed **Prep Type** Type Run Amount Analyst Lab 03/11/20 08:03 SMP Total/NA Analysis Ra226_Ra228 463806 TAL SL

Client Sample ID: WGWC-11 Lab Sample ID: 180-102169-8 Date Collected: 02/05/20 15:07 **Matrix: Water**

Date Received: 02/11/20 09:00

Prep Type Total/NA	Batch Type Prep	Batch Method PrecSep-21	Run	Dil Factor	Amount 1000.17 mL	Amount 1.0 g	Batch Number 460626	Prepared or Analyzed 02/17/20 12:15		Lab TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.17 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ī	1			463111	03/04/20 18:19	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWC-15 Lab Sample ID: 180-102169-9

Date Collected: 02/07/20 10:38 Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9315 at ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.50 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANGE	Ē	1			463111	03/04/20 18:19	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWC-16 Lab Sample ID: 180-102169-10

Date Collected: 02/07/20 11:28 Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.80 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE		1			463111	03/04/20 18:19	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

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Matrix: Water

Matrix: Water

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

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCORANG	SE.	1			463111	03/04/20 18:19	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWC-13 Lab Sample ID: 180-102169-12

Date Collected: 02/05/20 13:35 Date Received: 02/11/20 09:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.77 mL	1.0 g	460626	02/17/20 12:15		TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1		-	463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.77 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			463111	03/04/20 18:19	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Lab Sample ID: 180-102169-13 Client Sample ID: WGWC-14A Date Collected: 02/05/20 14:40 **Matrix: Water**

Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.16 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCORANGE	Ē	1			463111	03/04/20 18:20	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWC-9 Lab Sample ID: 180-102169-14

Date Collected: 02/05/20 16:00 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	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
	Instrumen	t ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

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3/11/2020

Matrix: Water

Client: Southern Company Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9320 nt ID: GFPCORANG	3E	1			463111	03/04/20 18:20	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Lab Sample ID: 180-102169-15 **Client Sample ID: WGWC-8**

Date Collected: 02/07/20 10:35 **Matrix: Water**

Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9315 at ID: GFPCBLUE		1			463594	03/10/20 15:55	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.31 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANGE	Ē	1			463111	03/04/20 18:20	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	SMP	TAL SL

Client Sample ID: WGWC-17 Lab Sample ID: 180-102169-16

Date Collected: 02/07/20 12:20 Date Received: 02/11/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9315 at ID: GFPCBLUE		1			463594	03/10/20 15:56	AJD	TAL SL
Total/NA	Prep	PrecSep_0			1000.48 mL	1.0 g	460632	02/17/20 13:01	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANGE	Ē	1			463111	03/04/20 18:20	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			463806	03/11/20 08:03	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

KLS = Kody Saulters

SMP = Siobhan Perry

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Matrix: Water

Eurofins TestAmerica, Pittsburgh

2

Client: Southern Company

Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

Client Sample ID: WGWA-7

Lab Sample ID: 180-102169-1

Matrix: Water

Date Collected: 02/05/20 12:33 Date Received: 02/11/20 09:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0239	Ū	0.0649	0.0649	1.00	0.143	pCi/L	02/17/20 12:15	03/10/20 13:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.2		40 - 110					02/17/20 12:15	03/10/20 13:54	1

Method: 9320 -	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0263	Ū	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

	Radium-226 ((GFPC)								
	·		Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					02/17/20 12:15	03/10/20 13:54	1

Method: 9320 -	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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

Project/Site: CCR - Plant Wansley

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: Ra226_	Ra228 - Combined Radium-226 and Radium-228
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			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.266	Ū	0.258	0.258	2.00	0.403	pCi/L		03/11/20 08:03	1

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

Method: 9315 - Radium-226 (GFPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					02/17/20 12:15	03/10/20 15:54	

Method: 9320 - Radium-228 (GFPC)

		,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.8		40 - 110					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

_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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

Date Collected: 02/05/20 12:05 Date Received: 02/11/20 09:00 Lab Sample ID: 180-102169-4

Matrix: Water

Method: 9315 - Radium-226 (GFPC)

		·	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					02/17/20 12:15	03/10/20 15:54	1

Eurofins TestAmerica, Pittsburgh

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

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: 9320 - Ra	adium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Ra	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.327	Ū	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)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fa
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	
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fa
5 0 .			10 110					02/17/20 12:15	03/10/20 15:54	
Ba Carrier Method: 9320 -	93.8 Radium-228 ((GFPC)	40 - 110 Count	Total				02/1//2012.15	03/10/20 13.54	
- -		(GFPC)		Total				02/11/20 12.15	03/10/20 13:54	
- -	Radium-228 ((GFPC) Qualifier		Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Method: 9320 -	Radium-228 (Qualifier	Count Uncert.	Uncert.	RL 1.00	MDC 0.395				Dil Fac
Method: 9320 -	Radium-228 (Result 0.298	Qualifier	Count Uncert. (2σ+/-)	Uncert. (2σ+/-)				Prepared	Analyzed	Dil Fac
Method: 9320 - Analyte Radium-228	Radium-228 (Result 0.298	Qualifier	Count Uncert. (2σ+/-) 0.248	Uncert. (2σ+/-)				Prepared 02/17/20 13:01	Analyzed 03/04/20 18:18	

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.291	U	0.255	0.257	2.00	0.395	pCi/L		03/11/20 08:03	1

+ 228

2

Job ID: 180-102169-2

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

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: 9315 - Rac	dium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					02/17/20 12:15	03/10/20 15:54	1
_										

Method: 9320 -	Radium-228 ((GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0961	Ū	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

	Radium-226 (GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					02/17/20 12:15	03/10/20 15:54	1

Method: 9320 -	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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

Job ID: 180-102169-2

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

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: Ra226_	_Ra228 - Combined	l Radium-226	and Radium-228

Mictilou. Itazzo_ita	220 - 0011	ibilied ixe	1010111- 22 0 0	ilia itaalal	11-220					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.225	U	0.318	0.319	2.00	0.524	pCi/L		03/11/20 08:03	1
+ 228										

Client Sample ID: WGWC-11 Lab Sample ID: 180-102169-8

Date Collected: 02/05/20 15:07 Date Received: 02/11/20 09:00

Matrix: Water

Method: 9315 - Radium-226 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL**MDC** Unit Prepared Analyzed Dil Fac 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 Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 92.6 40 - 110 02/17/20 12:15 03/10/20 15:55

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.136 U 0.264 0.264 02/17/20 13:01 03/04/20 18:19 1.00 0.448 pCi/L Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 92.6 40 - 110 02/17/20 13:01 03/04/20 18:19 Y Carrier 87.1 40 - 110 02/17/20 13:01 03/04/20 18:19

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.163	Ū	0.271	0.271	2.00	0.448	pCi/L		03/11/20 08:03	1

Client Sample ID: WGWC-15 Lab Sample ID: 180-102169-9

Date Collected: 02/07/20 10:38 Date Received: 02/11/20 09:00

Method: 9315 - Ra	adium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Matrix: Water

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

Client Sample ID: WGWC-15

Lab Sample ID: 180-102169-9 Date Collected: 02/07/20 10:38

Matrix: Water

Date Received: 02/11/20 09:00

Method: 9320 - Ra	adium-228 (GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ **MDC** Unit Prepared RL Analyzed Dil Fac 0.125 U 0.295 0.296 2.00 0.498 pCi/L 03/11/20 08:03 Combined Radium 226 + 228

Client Sample ID: WGWC-16 Lab Sample ID: 180-102169-10 Date Collected: 02/07/20 11:28 **Matrix: Water**

Date Received: 02/11/20 09:00

Method: 9315 - F	Radium-226 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Method: 9320 - F	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.797		0.313	0.319	2.00	0.424	pCi/L		03/11/20 08:03	1

Job ID: 180-102169-2

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

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 - Ra	adium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Method: 9320 - R	adium-228 ((GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radiun	n- 228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.200	Ū	0.272	0.273	2.00	0.444	pCi/L		03/11/20 08:03	1

Lab Sample ID: 180-102169-12 **Client Sample ID: WGWC-13** Date Collected: 02/05/20 13:35 **Matrix: Water** Date Received: 02/11/20 09:00

Method: 9315 - I	Radium-226 (GFPC)								
		, ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Method: 9320 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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

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

Client Sample ID: WGWC-13 Lab Sample ID: 180-102169-12

Date Collected: 02/05/20 13:35 **Matrix: Water** Date Received: 02/11/20 09:00

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

			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Combined Radium	0.609		0.284	0.288	2.00	0.397 pCi/L		03/11/20 08:03	1
226 + 228									

Lab Sample ID: 180-102169-13 Client Sample ID: WGWC-14A

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

Method: 9315 - F	Radium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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	

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 Lab Sample ID: 180-102169-14 Date Collected: 02/05/20 16:00 **Matrix: Water**

Date Received: 02/11/20 09:00

Method: 9315 - I	Radium-226 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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	

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

Lab Sample ID: 180-102169-14

Matrix: Water

Client Sample ID: WGWC-9 Date Collected: 02/05/20 16:00

Date Received: 02/11/20 09:00

Method: 9320 - Rad	dium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ **MDC** Unit Prepared RL Analyzed Dil Fac -0.137 U 0.206 0.207 2.00 0.389 pCi/L 03/11/20 08:03 Combined Radium 226 + 228

Client Sample ID: WGWC-8 Lab Sample ID: 180-102169-15 Date Collected: 02/07/20 10:35 **Matrix: Water**

Date Received: 02/11/20 09:00

Method: 9315 - Ra	dium-226 (GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.8		40 - 110					02/17/20 12:15	03/10/20 15:55	1

Method: 9320 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

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 - Rad	lium-226 ((GFPC)	Count Uncert.	Total Uncert.					
Analyte Radium-226	0.0807	Qualifier U	(2σ+/-) 0.0833	(2σ+/-) 0.0836	1.00	Unit pCi/L	Prepared 02/17/20 12:15	Analyzed 03/10/20 15:56	Dil Fac
Carrier Ba Carrier	%Yield 90.2	Qualifier	Limits 40 - 110				Prepared 02/17/20 12:15	Analyzed 03/10/20 15:56	Dil Fac

Method: 9320 - I	Radium-228 ((GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.163	Ū	0.236	0.237	1.00	0.396	pCi/L	02/17/20 13:01	03/04/20 18:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Ra2	28 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.244	Ū	0.250	0.251	2.00	0.396	pCi/L		03/11/20 08:03	1

Job ID: 180-102169-2

Client: Southern Company

Project/Site: CCR - Plant Wansley

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-460626/24-A

Total

Matrix: Water

Matrix: Water

Analysis Batch: 463594

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 460626

MB MB Uncert. Uncert. Analyte Result Qualifier MDC Unit $(2\sigma + / -)$ $(2\sigma + / -)$ RI Prepared Analyzed Dil Fac Radium-226 -0.02286 U 02/17/20 12:15 03/10/20 15:56 0.0621 0.0622 1.00 0.137 pCi/L

MB MB

Carrier Qualifier Limits %Yield Prepared Analyzed Dil Fac Ba Carrier 40 - 110 02/17/20 12:15 03/10/20 15:56 94.5

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 460626

10

Analysis Batch: 463594 Total

Spike LCS LCS Uncert. %Rec. Added RL Limits **Analyte** Result Qual $(2\sigma + / -)$ MDC Unit %Rec Radium-226 11.3 9.861 1.08 1.00 0.163 pCi/L 75 ₋ 125 87

Count

LCS LCS

Lab Sample ID: LCS 160-460626/1-A

Carrier %Yield Qualifier I imits 40 - 110 Ba Carrier 87.7

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

Prep Batch: 460632

Total LCSD LCSD RER **Spike** Uncert. %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits RER Limit Radium-226 11.3 9.303 0.992 1.00 0.107 pCi/L 82 75 - 125 0.27

LCSD LCSD

Carrier %Yield Qualifier Limits Ba Carrier 99.1 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-460632/24-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water Analysis Batch: 463111

Count Total MB MB Uncert. Uncert.

Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.01360 Ū 0.209 0.209 1.00 0.375 pCi/L 02/17/20 13:01 03/04/20 18:20

MB MB Dil Fac Carrier %Yield Qualifier Limits Prepared Analyzed Ba Carrier 94.5 40 - 110 02/17/20 13:01 03/04/20 18:20 86.7 40 - 110 02/17/20 13:01 03/04/20 18:20 Y Carrier

QC Sample Results

Client: Southern Company Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

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

Lab Sample ID: LCS 160-460632/1-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 463178

Prep Batch: 460632 Total Spike LCS LCS Uncert. %Rec. Analyte Added RL **MDC** Unit Limits Result Qual (2σ+/-) %Rec Radium-228 1.00 0.477 pCi/L 75 - 125 9.05 8.766 1.07 97

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 87.7 40 - 110 Y Carrier 88.2 40 - 110

Lab Sample ID: LCSD 160-460632/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 463178

Total **Spike** LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit Radium-228 9.05 1.00 0.405 pCi/L 8.231 0.987 91 75 - 125 0.26

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrier 99.1 40 - 110 40 - 110 Y Carrier 88.6

Prep Type: Total/NA

Prep Batch: 460632

10

QC Association Summary

Client: Southern Company

Job ID: 180-102169-2

Project/Site: CCR - Plant Wansley

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	
180-102169-2	FB-2-2-7-20	Total/NA	Water	PrecSep-21	
180-102169-3	Dup-2	Total/NA	Water	PrecSep-21	
180-102169-4	WGWA-18	Total/NA	Water	PrecSep-21	
180-102169-5	EB-2-2-7-20	Total/NA	Water	PrecSep-21	
180-102169-6	WGWC-10	Total/NA	Water	PrecSep-21	
180-102169-7	WGWC-12	Total/NA	Water	PrecSep-21	
180-102169-8	WGWC-11	Total/NA	Water	PrecSep-21	
180-102169-9	WGWC-15	Total/NA	Water	PrecSep-21	
180-102169-10	WGWC-16	Total/NA	Water	PrecSep-21	
180-102169-11	WGWC-19	Total/NA	Water	PrecSep-21	
180-102169-12	WGWC-13	Total/NA	Water	PrecSep-21	
180-102169-13	WGWC-14A	Total/NA	Water	PrecSep-21	
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	
180-102169-2	FB-2-2-7-20	Total/NA	Water	PrecSep_0	
180-102169-3	Dup-2	Total/NA	Water	PrecSep_0	
180-102169-4	WGWA-18	Total/NA	Water	PrecSep_0	
180-102169-5	EB-2-2-7-20	Total/NA	Water	PrecSep_0	
180-102169-6	WGWC-10	Total/NA	Water	PrecSep_0	
180-102169-7	WGWC-12	Total/NA	Water	PrecSep_0	
180-102169-8	WGWC-11	Total/NA	Water	PrecSep_0	
180-102169-9	WGWC-15	Total/NA	Water	PrecSep_0	
180-102169-10	WGWC-16	Total/NA	Water	PrecSep_0	
180-102169-11	WGWC-19	Total/NA	Water	PrecSep_0	
180-102169-12	WGWC-13	Total/NA	Water	PrecSep_0	
180-102169-13	WGWC-14A	Total/NA	Water	PrecSep_0	
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	

Eurofins TestAmerica, Pittsburgh

Page 27 of 37

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1.

Chain of Custody Record

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

TestAmerica Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

TestAmerica

68 i-Atlanta N. None O. AsNaO2 P. Na2O4S Q. Na2SO3 R. Na2SSO3 S. H2SO4 T. TSP Dodecahydrate 681-Atlanta Special Instructions/Note: Z - other (specify) Months U - Acetone V - MCAA W - pH 4-5 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon COC No: 400-72601-28757.1 Preservation Codes H - Ascorbic Acid A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH I - Ice J - DI Water G - Amchlor K - EDTA L - EDA Page: Page Job #: 3 7 M Total Number of contain Method of Shipment: 180-102169 Chain of Custody Analysis Requested Special Instructions/QC Requirements: Lab PM:
Veronica Bortot
E-Mail:
[Veronica.Bortot@testamericainc.com] Return To Client (0ZE6/91E6 978-MS z z z z z Z z Z Time: Z z Perform MS/MSD (Yes or No) Z z Z Z z Z Z Field Filtered Sample (Yes or No) (W=water, S=solid, O=waste/oil, BT=Tissue, Preservation Code A=Air) 3 3 3 3 3 > 3 3 3 3 3 Radiological (C=comp, Sample G=grab) Type 8565-465(ott G G G G G O O G O G O 1733 1038 10201 Sample 503 1719 1416 Date: O. FUQUEA Unknown (days) Due Date Requested: PO#: SCS10347656 02-1-2 02-t-2 02-t-6 1-7-20 Sample Date 2-5-70 1-5-70 Date/Time. 7-5-70 2-5-20 Project #: 40007709 NO #: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) 02-W6WC-19 FB-2-2-Dup-2 MGMC-15 MGWC-16 MCWC-12 NGWC-11 JGWC-10 Flammable Project Name: CCR - Plant Wansley - Ash Pond Possible Hazard Identification JAbraham@southernco.com Empty Kit Relinquished by: Sample Identification Client Information PO BOX 2641 GSC8 Southern Company Non-Hazard Client Contact: Joju Abraham Relinquished by: Birmingham State, Zip: AL, 35291 Georgia

Page 28 of 37

Ver: 08/04/2016

Sompany Company

Company

3:00

0

Cooler Temperature(s) °C and Other Remarks:

Received by: Received by:

Company

6

13cm

3

Company

Date/Time:

Custody Seals Intact: UCustody Seal No.:

3/11/2020

∆ Yes

elinquished by:

Relinquished by:

Client Information	Sampler: 11 A. 1.0		Lab PM: Veronica Bortot	Carrier Tracking No(s):	COC No: 400-72601-28757.1
Client Contact: Iolii Abraham	Phone: (770) 594 - 599	8	E-Mail: (Veronica Bortot@testamericainc.com)		Page:
Company	1				Job #:
Southern Company			Analysis Requested	uested	
Address: PO BOX 2641 GSC8	Due Date Requested:				
City: Birmingham	TAT Requested (days):		I		B - NaOH N - None C - Zn Acetate O - AsNaO2
State, zip. AL, 35291					
Phone:	PO#: SCS10347656		(on		
Email: JAbraham@southernco.com	WO#			Iers	1 - Ice J - DI Water
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709		CONTRACTOR OF THE PERSON NAMED IN	nieżno	All Sales and Charles
Site: Georgia	:#MOSS		Sam (Sam	r of c	Other:
Samula Idontification	Sample Date Time	Sample (vi=water, Type 0=wasteloil, (C=comp, BT=Tissue, G=crah)	ging ging ging ging ging ging ging ging	edmu N IstoT	Special Instructions/Note:
	1	ation	Q Z Q X		
O WCWA-8	2-5-20 1205	M 9	> z z	8	2
51-7M3M	2-5-20 1335	M 9	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
13 USUC-14A	Ohhl 02-5-2	G W	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3.	2
6-JMPU	0001 02-5-2	M 9	N N N	3	3
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8-7M9M	GEO1 02-2-2	M 9	N N V		3 000
F1-2MO[N	02-7-20 1230	M B	N N	(*)	3
	>	G	Z		
		M 9	z		
		G W	Z		
		M B	Z		
Possible Hazard Identification	O accised D		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month	assessed if samples are reta	tained longer than 1 month)
ested: I, II, III, IV, Other		Nadiological	Requirem	losal by Lab	
Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by:	Date/Time:	13cm Company	Received by:	2 Date/Time:	13cm Company
Relinquished by:	Molecularing: [[6]	Company St.	19 Received by: Martin	Valen Dajetime - 1	1-20 Company
1	Date/Time:	Company	y Received by:	Date/Time:	O O Company
Custody Seals Intate: Custody Seal No.: △ Yes △ No			Cooler Temperature(s) °C and Other Remarks	(emarks:	
0					Ver. 08/04/2016

TestAmerica

Chain of Custody Record

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

TestAmerica Pittsburgh

Lab PM:

THE LEADER IN ENVIRONMENTAL TESTING

COC No:

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

180-102169-02 Chain of Custod, Chain of Custody Record

stAmerica ADER IN EHVIRONMENTAL TESTING

Analysis Requested Analysis Rescented Analysis Requested Analysis Rescented Analysis Requested Analysis Requested Analysis Analysis Requested Analysis Analysis Analysis Analysis Analysis	TIONE (4 12) 303-1030 TBX (4 12) 303-2400	Sampler: ()	1		Lab PM:		1		Loame	Camer Faceurg Nots:	(8):	SOC No.	-	
Processor Proc	Client Information	I. Auld			Veron	ca Bortot				1		400-72	501-28757.	1
Column C	llent Comact: oju Abraham	Phone: (770) 50	-	8	E-Mall: (Veror	ica.Borto	@testam	ericainc.con				Page: Page		
No. 1982-93 The frequence flays The fr	ompany: Southern Company							Analysis	Rednes	ted		Job #:		
Compared fourth Compared f	ddress: 00 BOX 2641 GSC8	Due Date Requested:										Preserv	ĕ	s: V - Hexane
Sample Date Control	ily. Sirningham	TAT Requested (days	<u></u>			. 723						B - NaO C - Zn A D - Nitr		N - None O - AsNaO2 P - Na2O4S
Control Cont	iate, zp: \L ₁ , 35291											E - NaH		Q - Na2SO3
Continue	hone:	PO#: SCS10347656										G-Amc	D	S - H2SO4 T - TSP Dodecahydrate
Sample Control Control Sample Control Con	mall: Abraham@southemco.com	,wo#:										ers		U - Acetone V - MCAA
Sample Creeking Sample Creeking Sample Creeking Cree	roject Name: SCR - Plant Wansley - Ash Pond	Project #: 40007709	٠									x 7		w - pH 4-5 Z - olher (specify)
UCMA- 8 Captill Sample Date Sample Captill Sample Captil	ilte: Seorgia	SSOW#:					228							
				Sample Type C=comp,		nsk mons	adium 226 &							
	sample identification	Sample Date	1	Preservati	-10.00	X	A O					高 西波	opecial ins	crucuons/Note:
	11	-	3001	ဗ	W		3					3		
	WGWC-13	-	1335	တ	Α		3					jar.		
	UGUC-14A	-	ahh l	Ø	W		3					W		
10 10 10 10 10 10 10 10	UBWC-9	-	1600	Ð	W		?					3		
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A SWC- 7	WGWC-8	-	3501	O	W	Z	>					8	a 70 CB	
G W N N N N N N N N N N N N N N N N N N	1016WC-17	2-7-20	1220	9	Α		3					3		
Company Comp				g	^							PEAK SINS		
Contest Cont				ŋ	W									
Contest Cont				Ø	M							W 5.		
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Zard — Flammable — Skin Irritant — Poison B — Unknown — Radiological Special Instructions/QC Requirements: Ilinquished by, Date: Time: Method of Shipment Months Date: Date: Company Received by: Company Company Company Company Company Company Company Company Cooler femerics: Cooler femeric				g	W									
Inquished by: Industrial Date: Inquished by: Industrial Date: Inquished by: Industrial Date: Industrial Date	ole Skin Irritant	Poison B Wurken		Radiologica	,	Samp	le Dispos	al (A fee n	nay be ass	essed if s	amples ar	a retained for	onger than	1 month)
Inquished by: Date: Date: Time: Date: Time: Date: Date:						Speci	al Instruct	ions/QC Re	quirement					Simonal
2) Date Time: Company Received by: 3 Date Time: 3 Date Time: Company Received by: 3 Date Time: 3 Date	Empty Kit Relinquished by:		Date:			8 1				Method of	Shipment:		The state of the s	
Sals Intake. Custody Seal No.:	Relinquished by:	~		1	Company	, N	ceived by:	4		12	Date/Time:	0	312	Company
Company Received W. W. Wash Time: 9:00 Cooler Temberature(s) *C and Other Remarks: 3-1/-269' (c)	Tak Id	1/10	161		Company	ž	sceived by:	date	lue bo	mon	Dajerime	-11-	20	压
Cushboy Seal No.:	0	/ bate/Time:			Company	ě.	sceived by:	Palle	3	nor		0	00	Company
						ō	ooler Tempe	rature(s) °C an	d Other Rem	arks:		1-26	8v. 6	ErAPH



3/11/2020

eurofins

Environment Testing TestAmerica

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: 55.80 LB CAD: 859116/CAFE3312

BILL RECIPIENT

SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

(412) 963 - 7058

REF: ACC - PLT WANSLEY

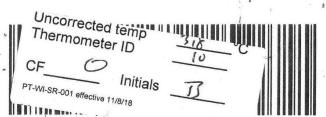


TUE - 11 FEB 3:00P STANDARD OVERNIGHT

FedEx

1 of 3 TRK# 1516 9323 0164

15238 PIT



3,0 CEO #10

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Cooler Temperature(s) °C and Other Remarks:

12 13

eurofins Environment Testing TestAmerica

Phone: 412-963-7058 Fax: 412-963-2468											estamenca
Client Information (Sub Contract Lab)	Sampler:			Lab PM Bortot	Lab PM: Bortot, Veronica	92		Carrier Tracking No(s):	:(s	COC No: 180-385221.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail: veroni	ca.borto	t@test	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia		Page: Page 1 of 2	
Company: TestAmerica Laboratories, Inc.				Q.	ccreditatio	ins Requ	Accreditations Required (See note):			Job #: 180-102169-2	
Address: 13715 Rider Trail North,	Due Date Requested 3/13/2020	:pa					Analysis	Requested		Preservation Codes	odes:
City: Earth City State, Zis: MO 63745	TAT Requested (days):	ays):			291	_				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4	M - Hexane N - None O - AsNaO2 P - Na2O4S O - Na2SO3
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO#.				100		роц			F - MeOH G - Amchlor	R - Na2S203 S - H2S04 T - TSD Podeonbudgeto
Email:	WO#:				(0)	17600	eal Me			_	
Project Name: CCR - Plant Wansley	Project #: 18019922				N 10 8	Designation of	op) ro				W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#.				sp (Y		:bC\ (w			Offier:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample N Type (v S(C=comp, om G=grab) BT=TI	Matrix (w=water, S=solid, O=waste/oll, BT=Titsue, A=Air)	Field Filtered : Perform MSM P315_Ra226/Pre	9320_Ra228/Pre	Ra226Ra228_GF			Total Number	Special Instructions (Note:
		X	CD	Code:	X						
WGWA-7 (180-102169-1)	2/5/20	12:33 Eastern	_	Water	^	×	×			-	
FB-2-2-7-20 (180-102169-2)	2/7/20	10:20 Eastern	>	Water	×	×	×			-	
Dup-2 (180-102169-3)	2/7/20	Eastern	>	Water	×	×	×			-	
WGWA-18 (180-102169-4)	2/5/20	12:05 Eastern	>	Water	×	×	×			-	
EB-2-2-7-20 (180-102169-5)	2/7/20	10:10 Eastern	>	Water	×	×	×			-	
WGWC-10 (180-102169-6)	2/5/20	11:24 Eastern	3	Water	×	×	×			1	
WGWC-12 (180-102169-7)	2/5/20	14:16 Eastern	>	Water	×	×	×			-	
WGWC-11 (180-102169-8)	2/5/20	15:07 Eastern	>	Water	×	×	×			1	
WGWC-15 (180-102169-9)	2/7/20	10:38 Eastern	2	Water	×	×	×			-	
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory or other 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/lests/martx 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 attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.	Mmerica places the ownershi /matrix being analyzed, the sa rent to date, return the signer	p of method, ar amples must be I Chain of Cust	inalyte & accreditation shipped back to the tody attesting to said	on compliand le Eurofins To d'complicand	e upon oul sstAmerica e to Eurofi	t subcont a laborate ns TestA	tract laboratories. This ory or other instruction (merica.	s sample shipment is forward s will be provided. Any chan	led under chain- ges to accredita	of-custody. If the lab	oratory does not currently brought to Eurofins
Possible Hazard Identification					Samp	le Disp	nosal (A fee may	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	les are retai	ned longer than	1 month)
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Total Local Control III III III III III III III III III I	The state of the s	- Flanting	-		-	The second second					

Method of Shipment Special Instructions/QC Requirements: Received by: Primary Deliverable Rank: 2 Date/Time: 2020 Deliverable Requested: I, II, III, IV, Other (specify) Empty Kit Relinquished by: nquished by:

Custody Seal No.:

Custody Seals Intact:

Environment Testing TestAmerica

🔆 eurofins

Carrier Tracking No(s)

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

N · None
O · AshaO2
P · Na2O4S
O · Na2SO3
R · NaSS2O3
S · H2SO4
T · TSP Dodecahydrate STS STS Special Instructions/Note: Ver: 01/16/2019 Z - other (specify) U - Acetone V - MCAA W - pH 4-5 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - MaSO4
F - MacOh
G - Amchlor
H - Ascorbic Acid lote: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the labo COC No: 180-385221.2 180-102169-2 Page 2 of 2 I - Ice J - DI Water K - EDTA Archive For Total Number of containers 2 2 -Date/Time Aethod of Shipment Disposal By Lab State of Origin: Georgia Analysis Requested Cooler Temperature(s) C and Other Remarks Special Instructions/QC Requirements: Lab PM:
Bortot, Veronica
E-Mail:
veronica.bortot@testamericainc.com Return To Client ewed by: × × × × × × × SazzeRazza_GFPC/ (MOD) Local Method Received by: 320 Ra228/PrecSep_0 (MOD) Copy Analytes × × × × × × × 9315_Ra226/PrecSep_21 (MOD) Copy Analytes × × × × × × × Matrix Preservation Code: Water Water Water Water Water Water Water FTA Company Type (C=comp, G=grab) Sample 120 Primary Deliverable Rank: 2 Eastern 13:35 Eastern 12:19 Eastern 14:40 Eastern 16:00 Eastern 10:35 Sample Eastern 12:20 astern Time Date: TAT Requested (days): 13/2020 Due Date Requested: 3/13/2020 Sample Date 2/5/20 2/5/20 Project #: 18019922 SSOW#. 2/7/20 2/7/20 2/5/20 2/7/20 2/7/20 Jate/Time: Client Information (Sub Contract Lab) beliverable Requested: I, II, III, IV, Other (specify) Custody Seal No.: SOC S Sample Identification - Client ID (Lab ID) 314-298-8566(Tel) 314-298-8757(Fax) Possible Hazard Identification restAmerica Laboratories, Inc NGWC-14A (180-102169-13) WGWC-13 (180-102169-12) NGWC-16 (180-102169-10) NGWC-19 (180-102169-11) WGWC-17 (180-102169-16) WGWC-9 (180-102169-14) WGWC-8 (180-102169-15) Empty Kit Relinquished by: Custody Seals Intact: 13715 Rider Trail North, Project Name: CCR - Plant Wansley A Yes A No Shipping/Receiving Wansley CCR nquished by: yd paysinbu State, Zip: MO, 63045 Earth City

Page 35 of 37

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.</td <td>N/A</td> <td></td>	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	

Client: Southern Company

Job Number: 180-102169-2

Login Number: 102169

List Number: 2

Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis

List Creation: 02/14/20 03:52 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $<$ /= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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

Helpson

Authorized for release by: 6/1/2020 11:30:38 AM

Shali Brown, Project Manager II (615)301-5031 shali.brown@testamericainc.com

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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: 180-103742-1

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.

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Job ID: 180-103742-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-103742-1

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

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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.

Eisted 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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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

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 Illinios 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 Newada State PA00164 07-31-20 New Jorsey NELAP PA005 06-30-20 New York NELAP 11182 04-01-21 North Dakota State 434 01-01-21 North Dakota State R-227 04-30-20 Oregon NELAP PA-2151 02-06-21	Authority	Program	Identification Number	Expiration Date
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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	New York	NELAP	11182	04-01-21
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	North Carolina (WW/SW)	State	434	01-01-21
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	North Dakota	State	R-227	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	Oregon	NELAP	PA-2151	02-06-21
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	Pennsylvania	NELAP	02-00416	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	Rhode Island	State	LAO00362	12-31-20
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	South Carolina	State	89014	04-30-20
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	Texas	NELAP	T104704528	03-31-21
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	US Fish & Wildlife	US Federal Programs	058448	07-31-20
Utah NELAP PA001462019-8 05-31-20 Virginia NELAP 10043 09-15-20 West Virginia DEP State 142 02-01-21	USDA	Federal	P-Soil-01	06-26-22
Virginia NELAP 10043 09-15-20 West Virginia DEP State 142 02-01-21	USDA	US Federal Programs	P330-16-00211	06-26-22
West Virginia DEP State 142 02-01-21	Utah	NELAP	PA001462019-8	05-31-20
	Virginia	NELAP	10043	09-15-20
Wisconsin State 998027800 08-31-20	West Virginia DEP	State	142	02-01-21
	Wisconsin	State	998027800	08-31-20

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Job ID: 180-103742-1

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
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

Job ID: 180-103742-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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	Prenaration Mercury	SW846	TAI 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

Job ID: 180-103742-1

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Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-1 Lab Sample ID: 180-103742-1

Date Collected: 03/16/20 14:15 **Matrix: Water** 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	EPA 300.0 R2.1 at ID: CHICS2100B	- Kuii	1	Amount	Amount	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 Instrumer	EPA 6020B at 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 Instrumer	EPA 7470A at ID: HGZ		1			311000	03/24/20 16:33	NAM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			310781	03/16/20 14:15	FDS	TAL PIT

Lab Sample ID: 180-103742-2 **Client Sample ID: WGWA-2 Matrix: Water**

Date Collected: 03/16/20 12:25 Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311000	03/24/20 16:34	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			310781	03/16/20 12:25	FDS	TAL PIT

Client Sample ID: WGWA-3 Lab Sample ID: 180-103742-3 Date Collected: 03/17/20 11:35 **Matrix: Water**

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311000	03/24/20 17:13	NAM	TAL PIT

Eurofins TestAmerica, Pittsburgh

Job ID: 180-103742-1

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-3 Lab Sample ID: 180-103742-3

Date Collected: 03/17/20 11:35 Date Received: 03/19/20 08:30

Matrix: Water

Job ID: 180-103742-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrument	Field Sampling ID: NOEQUIP		1			310781	03/17/20 11:35	FDS	TAL PIT

Client Sample ID: WGWA-4 Lab Sample ID: 180-103742-4

Date Collected: 03/17/20 10:40 **Matrix: Water**

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	EPA 300.0 R2.1 ID: CHICS2100B	- Kuii	1	Amount	Amount	311491	03/30/20 16:46		TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311070	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B 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 Instrument	EPA 7470A ID: HGZ		1			311000	03/24/20 17:14	NAM	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			310781	03/17/20 10:40	FDS	TAL PIT

Lab Sample ID: 180-103742-5 **Client Sample ID: WGWA-5**

Date Collected: 03/17/20 12:50 Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 7470A at ID: HGZ		1			311000	03/24/20 17:15	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310587	03/20/20 11:51	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			310781	03/17/20 12:50	FDS	TAL PIT

Matrix: Water

Job ID: 180-103742-1 Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-6

Date Received: 03/19/20 08:30

Lab Sample ID: 180-103742-6 Date Collected: 03/17/20 11:15

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 Instrumer	EPA 300.0 R2.1 at 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 Instrumer	EPA 6020B at 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 Instrumer	EPA 7470A at ID: HGZ		1			311000	03/24/20 17:16	NAM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310562	03/20/20 09:05	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			310781	03/17/20 11:15	FDS	TAL PIT

Lab Sample ID: 180-103742-7 **Client Sample ID: WGWA-7** Date Collected: 03/17/20 14:05

Matrix: Water

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 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 Instrument	EPA 6020B 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 Instrument	EPA 7470A ID: HGZ		1			311000	03/24/20 17:17	NAM	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	310562	03/20/20 09:05	AVS	TAL PIT
Total/NA	Analysis Instrument	Field Sampling		1			310781	03/17/20 14:05	FDS	TAL PIT

Client Sample ID: WGWA-18 Lab Sample ID: 180-103742-8 Date Collected: 03/17/20 14:35 **Matrix: Water**

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at 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 Instrumer	EPA 6020B nt 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 Instrumer	EPA 7470A nt ID: HGZ		1			311000	03/24/20 17:18	NAM	TAL PIT

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Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-103742-8 **Client Sample ID: WGWA-18**

Date Collected: 03/17/20 14:35 Date Received: 03/19/20 08:30

Matrix: Water

Job ID: 180-103742-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			310781	03/17/20 14:35	FDS	TAL PIT
	Instrument	ID: NOEQUIP								

Lab Sample ID: 180-103742-9 Client Sample ID: EB-1 3-17-20

Matrix: Water Date Collected: 03/17/20 14:00

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 7470A at ID: HGZ		1			311000	03/24/20 17:19	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310565	03/20/20 09:14	AVS	TAL PIT

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 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 Instrument	EPA 6020B 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 Instrument	EPA 7470A ID: HGZ		1			311000	03/24/20 17:20	NAM	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	310664	03/21/20 07:58	AVS	TAL PIT

Lab Sample ID: 180-103742-11 **Client Sample ID: WGWC-11** Date Collected: 03/18/20 13:05 **Matrix: Water**

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at 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		1			312551	04/09/20 15:20	RJR	TAL PIT
	Instrumer	t ID: NEMO								

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Lab Chronicle

Client: Southern Company

Job ID: 180-103742-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11 Lab Sample ID: 180-103742-11

Date Collected: 03/18/20 13:05

Date Received: 03/19/20 08:30

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	310888	03/23/20 17:54	NAM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A at ID: HGZ		1			311000	03/24/20 17:43	NAM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310666	03/21/20 08:52	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at 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

Eurofins TestAmerica, Pittsburgh

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Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103742-1

Method: EPA 3	800.0 R2.1 - Anions, Ion Ch	romatogra	ohy						
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

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	1
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	

Analyte		Qualifier	RL .	MDL		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 - F	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
Date Collected: 03/16/20 12:25	Matrix: Water
Date Received: 03/19/20 08:30	

Method: EPA 300.0 R2.1 - A	nions, Ion Ch	romatograp	hy						
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

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	1
Barium	0.026		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 14:53	1
Beryllium	0.00076	J	0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 14:53	1
Boron	0.048	J	0.080	0.039	mg/L		03/25/20 11:00	04/09/20 14:53	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 14:53	1
Calcium	10		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 14:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 14:53	1

Eurofins TestAmerica, Pittsburgh

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-103742-2 **Client Sample ID: WGWA-2**

Date Collected: 03/16/20 12:25 Date Received: 03/19/20 08:30

עג	Jampie	ID.	100-	103	1 72-2
			Ma	trix:	Water

Job ID: 180-103742-1

Method: EPA 6020B - Met	als (ICP/MS) - T	otal Recov	erable (Cor	itinued)					
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 - Mer	curv (CVAA)								
Analyte	• • •	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

Lab Sample ID: 180-103742-3 **Client Sample ID: WGWA-3** Date Collected: 03/17/20 11:35 **Matrix: Water**

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Ar	nions, Ion Ch	romatograp	hy						
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

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

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	

RL **MDL** Unit Result Qualifier D Prepared Analyzed Dil Fac 10 03/20/20 09:14 **Total Dissolved Solids** 20 10 mg/L

Method: Field Sampling - Field Sampling Analyte

Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac SU 03/17/20 11:35 pН 5.61

Lab Sample ID: 180-103742-4

Client Sample ID: WGWA-4 Date Collected: 03/17/20 10:40

Date Received: 03/19/20 08:30

Matrix: Water

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

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride 1.0 0.32 mg/L 03/30/20 16:46 1.4 **Fluoride** 0.11 0.10 0.026 mg/L 03/30/20 16:46 **Sulfate** 1.0 0.38 mg/L 03/30/20 16:46 12

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	1
Barium	0.0059	J	0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:03	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:03	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:03	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:03	1
Calcium	15		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:03	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:03	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:03	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:03	1
Lead	0.00016	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:03	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:03	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:03	1
Lithium	0.0059		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:03	1

Method: EPA 7470A - Mercury (CVAA)

Result Qualifier RL D Analyte MDL Unit 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** 10 10 mg/L 03/20/20 09:14 100

Method: Field Sampling - Field Sampling

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac SU 03/17/20 10:40 рН 6.83

Client Sample ID: WGWA-5

Date Collected: 03/17/20 12:50 Date Received: 03/19/20 08:30

Matrix: Water

Method: EPA 300 0 R2 1 - Anions, Ion Chromatography

Michiga, El A 300.0 Itz. I - Allioi	13, ion omomatograp	Jily .				
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

Lab Sample ID: 180-103742-5

2

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 180-103742-5

Matrix: Water

Job ID: 180-103742-1

Date Collected: 03/17/20 12:50 Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 - Anic	ons, Ion Chromatograph	y (Continu	ed)				
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

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 15:05	1
Barium	0.017		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:05	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:05	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:05	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:05	1
Calcium	1.4		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:05	1
Cobalt	0.00066	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:05	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:05	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:05	1

Method: EPA 7470A - N	lercury (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 17:15	1
General Chemistry							

Analyte	Result Qualifier	RL	MDL Un	it D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18	10	10 mg	/L		03/20/20 11:51	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result (Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
pH	5.34				SU			03/17/20 12:50	1

Client Sample ID: WGWA-6

Date Collected: 03/17/20 11:15

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1	1 - Anions, Ion Ch	romatograp	hy						
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

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 15:08	1
Barium	0.0081	J	0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:08	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:08	1
Calcium	26		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:08	1
Cobalt	0.00014	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:08	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:08	1

Eurofins TestAmerica, Pittsburgh

Job ID: 180-103742-1

03/17/20 11:15

Client Sample ID: WGWA-6 Lab Sample ID: 180-103742-6

Date Collected: 03/17/20 11:15 **Matrix: Water**

Date Received: 03/19/20 08:30

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 - Merc	cury (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 - I	Field Sampling								
Analyte		Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: WGWA-7 Lab Sample ID: 180-103742-7 **Matrix: Water**

7.96

SU

Date Collected: 03/17/20 14:05

Date Received: 03/19/20 08:30

pН

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

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 Q	ualifier	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 ID: WGWA-7

Lab Sample ID: 180-103742-7

Matrix: Water

Job ID: 180-103742-1

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
	рН	5.32				SU			03/17/20 14:05	1

Client Sample ID: WGWA-18

Lab Sample ID: 180-103742-8

Date Collected: 03/17/20 14:35

Matrix: Water

Date Received: 03/19/20 08:30

Method: EPA 300.0 R2	2.1 - Anions, Ion Chromatograp	hy						
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

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	1
Barium	0.013		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:13	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:13	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:13	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:13	1
Calcium	10		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:13	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:13	1
Cobalt	0.0017	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:13	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:13	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:13	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:13	1

Method: EPA 7470A - Merc	ury (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	1
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 - Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
рН	6.36				SU			03/17/20 14:35	1	

Lab Sample ID: 180-103742-9 Client Sample ID: EB-1 3-17-20 **Matrix: Water**

Date Collected: 03/17/20 14:00 Date Received: 03/19/20 08:30

Method: EPA 300.0 R2.1 -	Anions, Ion Chromatogra	aphy						
Analyte	Result Qualifier	RL	MDL U	Jnit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32	1.0	0.32 m	ng/L			04/01/20 01:15	1
Fluoride	0.036 J	0.10	0.026 m	ng/L			04/01/20 01:15	1
Sulfate	<0.38	1.0	0.38 m	ng/L			04/01/20 01:15	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

Job ID: 180-103742-1

Analyte	Result Qualif	ier 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 Qualif	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.00020

RL

10

0.00010 mg/L

MDL Unit

10 mg/L

D

Prepared

Client Sample ID: DUPLICATE 1 3-17-20

< 0.00010

Result Qualifier

<10

Date Collected: 03/17/20 00:00 Date Received: 03/19/20 08:30

Mercury

Analyte

General Chemistry

Total Dissolved Solids

Lab Sample ID: 180-103742-10 Matrix: Water

Analyzed

03/20/20 09:14

Dil Fac

03/23/20 17:48 03/24/20 17:19

Method: EPA 300.0 R2.1 - Anio	ons, Ion Ch	romatograp	hy						
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	12		1.0	0.38	ma/l			04/01/20 01:30	1

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

Lab Sample ID: 180-103742-10 Client Sample ID: DUPLICATE 1 3-17-20

Date Collected: 03/17/20 00:00

Matrix: Water

Job ID: 180-103742-1

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

Date Collected: 03/18/20 13:05 Date Received: 03/19/20 08:30

рН

Matrix: Water

Method: EPA 300.0 R2	‼.1 - Anions, Ion Chromatogra∣	phy						
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

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	1
Barium	0.038		0.010	0.0016	mg/L		03/25/20 11:00	04/09/20 15:20	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/09/20 15:20	1
Boron	<0.039		0.080	0.039	mg/L		03/25/20 11:00	04/09/20 15:20	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/09/20 15:20	1
Calcium	1.6		0.50	0.13	mg/L		03/25/20 11:00	04/09/20 15:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/09/20 15:20	1
Cobalt	0.00069	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/09/20 15:20	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/09/20 15:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/09/20 15:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/09/20 15:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/09/20 15:20	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/09/20 15:20	1

_ Method: EPA 7470A - Mercเ	urv (CVAA)			Ü				
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	1
General Chemistry	Rosult Qualifior	RI	MDI	Unit	n	Prepared	Analyzad	Dil Fac

Method: Field Sampling - Analyte		Qualifier	RL	MDL Un	nit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	26		10	10 mg	g/L			03/21/20 08:52	1	

5.89

SU

03/18/20 13:05

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Analysis Batch: 311491

Lab Sample ID: MB 180-311491/37 **Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA**

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 0.32 mg/L 03/30/20 14:40 <0.32 Fluoride 0.10 0.026 mg/L 03/30/20 14:40 < 0.026 Sulfate 03/30/20 14:40 < 0.38 1.0 0.38 mg/L

Lab Sample ID: MB 180-311491/6 Client Sample ID: Method Blank **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 311491

	MB	MB							
Analyte	Result	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 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA**

Analysis Batch: 311491

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 311491

	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%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 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 311618

	MB	MB							
Analyte	Result	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 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 311618

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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

Job ID: 180-103742-1

Job ID: 180-103742-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-311839/45 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 311839

Prep Type: Total/NA MR MR

Analyte	Result	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 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 311839

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Chloride 50.0 49.7 99 90 - 110 mg/L 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 **Client Sample ID: Method Blank Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 312551

Prep Batch: 311070 MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Arsenic <0.00031 0.0010 0.00031 mg/L 03/25/20 11:00 04/09/20 14:31 Barium < 0.0016 0.010 0.0016 mg/L 03/25/20 11:00 04/09/20 14:31 Beryllium <0.00018 0.0025 0.00018 mg/L 03/25/20 11:00 04/09/20 14:31 Boron < 0.039 0.080 0.039 mg/L 03/25/20 11:00 04/09/20 14:31 Cadmium < 0.00022 0.0025 0.00022 mg/L 03/25/20 11:00 04/09/20 14:31 Calcium < 0.13 0.50 0.13 mg/L 03/25/20 11:00 04/09/20 14:31 Chromium < 0.0015 0.0020 0.0015 mg/L 03/25/20 11:00 04/09/20 14:31 Cobalt 0.0025 0.00013 mg/L 03/25/20 11:00 04/09/20 14:31 < 0.00013 0.00061 mg/L Molybdenum < 0.00061 0.015 03/25/20 11:00 04/09/20 14:31 Lead < 0.00013 0.0010 0.00013 mg/L 03/25/20 11:00 04/09/20 14:31 Selenium < 0.0015 0.0050 0.0015 mg/L 03/25/20 11:00 04/09/20 14:31 Thallium 0.0010 0.00015 mg/L 03/25/20 11:00 04/09/20 14:31 < 0.00015 Lithium < 0.0034 0.0050 0.0034 mg/L 03/25/20 11:00 04/09/20 14:31

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

7 maryolo Batom 012001	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
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

Job ID: 180-103742-1

Client: Southern Company

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

Spike LCS LCS %Rec. Added Result Qualifier **Analyte** Unit %Rec Limits Selenium 1.00 1.05 105 80 - 120 mg/L Thallium 1.00 1.02 mg/L 102 80 - 120Lithium 0.500 0.485 mg/L 97 80 - 120

Lab Sample ID: 180-103742-1 MS **Client Sample ID: WGWA-1 Matrix: Water Prep Type: Total Recoverable**

Prep Batch: 311070

Analysis Batch: 312551 Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Arsenic 0.00038 1.00 0.930 mg/L 93 75 - 125 Barium 0.046 1.00 1.06 mg/L 101 75 - 1250.500 0.483 Beryllium 0.00071 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 25.0 26.9 mg/L 103 75 - 125 1.1 Chromium < 0.0015 0.500 0.509 102 75 - 125 mg/L Cobalt 0.500 0.451 75 - 125 0.00092 J mg/L 90 Molybdenum 0.500 0.501 100 75 - 125 < 0.00061 mg/L Lead 0.500 0.491 mg/L 98 75 - 125 0.00021 Selenium < 0.0015 1.00 1.08 mg/L 108 75 - 125 Thallium 0.00036 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 Client Sample ID: WGWA-1 **Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 312551 Prep Batch: 311070

Tillary Cic Datolli C 12001											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 311000

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed <0.00010 03/23/20 17:44 03/24/20 16:29 Mercury 0.00020 0.00010 mg/L

Eurofins TestAmerica, Pittsburgh

Prep Batch: 310885

Spike

Added

0.00250

MB MB

MB MB

Result Qualifier

LCS LCS

0.00236

RL

RL

0.00020

0.00020

Spike

Added

0.00450

Spike

Added

0.00450

Spike

Added

0.00100

Result Qualifier

MDL Unit

0.00010 mg/L

LCS LCS

0.00446

Result Qualifier

MDL Unit

0.00010 mg/L

LCS LCS

MS MS

Result Qualifier

0.00440

Result Qualifier

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

10

Job ID: 180-103742-1

Prep Type: Total/NA

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: LCS 180-310885/2-A

Matrix: Water

Analysis Batch: 311000

Analyte

Lab Sample ID: MB 180-310886/1-A

Mercury

Analyte

Matrix: Water Analysis Batch: 311000

Mercury < 0.00010

Lab Sample ID: LCS 180-310886/2-A **Matrix: Water**

Analysis Batch: 311000

Analyte Mercury

Lab Sample ID: MB 180-310888/1-A

Matrix: Water

Analysis Batch: 311000

Analyte

Result Qualifier

Mercury <0.00010

Lab Sample ID: LCS 180-310888/2-A

Matrix: Water Analysis Batch: 311000

Analyte

Mercury

Lab Sample ID: 180-103742-11 MS

Matrix: Water

Analysis Batch: 311000

Analyte Mercury

Lab Sample ID: 180-103742-11 MSD

Matrix: Water

Analysis Batch: 311000

Sample Sample Analyte

Mercury <0.00010

Result Qualifier

<0.00010

Sample Sample

Result Qualifier

Added 0.00100

Spike

MSD MSD 0.000985

0.00100

Result Qualifier

Unit mg/L

%Rec 99

%Rec

%Rec

100

98

Limits

75 - 125 2

Prep Batch: 310885

%Rec. Limits 80 - 120

Client Sample ID: Lab Control Sample

%Rec

Prepared

94

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 310886

Analyzed Dil Fac

03/23/20 17:48 03/24/20 16:58

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 310886

%Rec.

Limits D %Rec 99 80 - 120

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 310888

Dil Fac Prepared Analyzed

03/23/20 17:54 03/24/20 17:26

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 310888

%Rec.

Limits 80 - 120

Client Sample ID: WGWC-11 Prep Type: Total/NA

Prep Batch: 310888

%Rec.

Limits

Client Sample ID: WGWC-11 Prep Type: Total/NA

75 - 125

Prep Batch: 310888 %Rec.

RPD RPD Limit

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103742-1

Prep Type: Total/NA

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

Lab Sample ID: MB 180-310562/2 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 310562

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared Total Dissolved Solids 10 10 mg/L 03/20/20 09:05 <10

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 180-310562/1 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 310562

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits 242 **Total Dissolved Solids** 236 mg/L 98 80 - 120

Lab Sample ID: MB 180-310565/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310565

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Total Dissolved Solids 10 03/20/20 09:14 <10 10 mg/L

Lab Sample ID: LCS 180-310565/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310565

Spike LCS LCS %Rec. Added Analyte Result Qualifier Limits Unit D %Rec **Total Dissolved Solids** 242 242 100 80 - 120 mg/L

Lab Sample ID: MB 180-310587/2

Matrix: Water

Analysis Batch: 310587

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 10 mg/L 03/20/20 11:51 <10

Lab Sample ID: LCS 180-310587/1

Matrix: Water

Analysis Batch: 310587

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits mg/L Total Dissolved Solids 242 248 102 80 - 120

Lab Sample ID: MB 180-310664/2

Matrix: Water

Analysis Batch: 310664

MB MB

Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids <10 10 10 mg/L 03/21/20 07:58

Lab Sample ID: LCS 180-310664/1

Matrix: Water

Analysis Batch: 310664

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit %Rec Limits **Total Dissolved Solids** 242 236 mg/L 98 80 - 120

Eurofins TestAmerica, Pittsburgh

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

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 180-310666/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310666 MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	<10		10 mg/L			03/21/20 08:52	1	

Lab Sample ID: LCS 180-310666/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310666

LCS LCS Spike %Rec. Result Qualifier Unit Added D %Rec Limits

Total Dissolved Solids 242 248 102 mg/L 80 - 120

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

HPLC/IC

Analysis Batch: 311491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bat
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	

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Job ID: 180-103742-1

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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 Batcl
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

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Job ID: 180-103742-1

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QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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	
180-103742-7	WGWA-7	Total/NA	Water	SM 2540C	
MB 180-310562/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-310562/1	Lab Control Sample	Total/NA	Water	SM 2540C	

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	

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-103742-1

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	

Chain of Custody, ecord

681-Atlanta

TestAme Pittsburgh

JC Park

301 Alpha Dr

Pittsburgh, PA 15238

S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify) Special Instructions/Note: N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month Preservation Codes 8 0 30 G - Amchlor H - Ascorbic Acid 5.29 5 0.5 9 A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH V I - Ice J - DI Water K-EDTA L-EDA SOC No: =Hd =Hd =Hd =Hd Hd =Hd =Hd TA-AIL Total Number of containers Carrier Tracking No(s): P ACC Analysis Requested 180-103742 Chain of Custody E-Mail: (Veronica.Bortot@testamericainc.com) Radium 226 & 228 (SW-846 9315/9320) Detected App IV Metals (See list below) CI, F, 50₄ & TDS (EPA 300.0 & SM 2540C) Z Z GODIE/A. Shriffle / Veronica Bortot Z Z z z z z z z z Perform MS/MSD (Yes or No) z Z Field Filtered Sample (Yes or No) BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, Preservation Code: Matrix 3 3 3 3 3 3 3 3 3 3 3 -54.98 Type (C=comp, G=grab) Sample G G G 9 O G O G U G G Sample 1040 1250 1460 770-544 1435 1305 アゴ 3-16-20 1225 1405 1115 -17-20 1135 (days) Due Date Requested: 3-18-20 3-17-20 3-16-20 17.20 -17.20 -17.20 -17.20 PO#: SCS10347656 Sample Date 3-17.20 17.20 Project #: 40007709 SSOW#: WO #: 3-17-20 3-17-20 GWA-18 Phone (412) 963-7058 Fax (412) 963-2468 WGWA- 6 MGWA-L MCMA - 5 NGWC-1 一くろうろ MGWA Possible Hazard Identification とろうろ N GENT Project Name: CCR - Plant Wansley - Ash Pond JAbraham@southernco.com Duplizate Client Information Sample Identification PO BOX 2641 GSC8 Southern Company 50 Client Contact: Joju Abraham Birmingham State, Zip: AL, 35291 Page 31 of 34

Deliverable Requested: I, II, III, IV, Other (specify)			Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by: W Park ACC	Date/Time: 1/18/20	1620 Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	16.21 Company	Received by:	Date/Time: 2 935	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		
Detected APP IV: Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride	yllium Cadmium Chromium C	Sobalt Lead Lithium Molybden	um Selenium Thallium; Radium Fluoride		Ver: 08/04/2016

Months

_____Archive For

Return To Client

Radiological

Unknown

Poison B

Skin Irritant

9469-434 RIT EXP 07/20

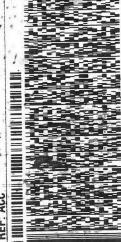
Environment Testing TestAmerica

PEORGE TAYLOR (678) 966-9991 BEORGE TAYLOR FURDING TESTAMERICA SCOOL MEDDINGHE DRIVE

BILL RECIPIENT

EUROFINS TESTAMERICA PIFTSBURGH 301 ALPHA OR PITTSBURGH PA 15238 (412) 963-7056 SAMPLE RECIEVING RIDC PARK

REF: ACC



THU - 19 MAR 3:00P STANDARD OVERNIGHT

516 9323 1962

| of 4

O Initials PT-WI-SR-001 effective 11/8/18 Thermometer ID

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Environment Test TestAmerica

ID:LIYA (678) 966-9991 FAYLOR 3 TESTAMERICA JONOUGH DRIVE STATES US

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180-103742 Waybill ROFINS TESTAMERICA PITTS LISBURGH PA 15238

LALPHA DR.

DC PARK

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4 of 4

Uncorrected tem Thermometer ID

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

Page 32 of 34

6/1/2020 (Rev

Environment Testing TestAmerica

(678) 966-9991

378 966-9991

SHIP DATE: 18MAR20 ACTWGT: 59.35 LB CAD: 859116/CAFE3312 BILL RECIPIENT

CIEVING

TESTAMERICA PITTSBURGH

GH PA 15238

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- 19 MAR 3:00P STANDARD OVERNIGH

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

484 RIT EXP 07/20

Environment Testing

TestAmerica

EUROFINS TESTAMERICA PITTSBURGH BILL RECIP SAMPLE RECIEVING 301 ALPHA DR. EUROFINS TESTAMERICA 6500 MCDONDUGH DRIVE SUITE C-10 NORCROSS, 6A 30093 UNITED STATES US

PITTSBURGH PA 15238 (412) 963-7058

RIDC PARK

- 19 MAR 3:00P

NPS# 1516 9323

Thermometer ID Uncorrected tem

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

eurofins

Client: Southern Company

Job Number: 180-103742-1

Login Number: 103742 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

Creator. Say, monias C		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

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:

Veronica Bortot

4/28/2020 4:16:03 PM

Veronica Bortot, Senior Project Manager

(412)963-2435

veronica.bortot@testamericainc.com

Designee for

Shali Brown, Project Manager II (615)301-5031

shali.brown@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

Client: Southern Company Project/Site: CCR - Plant Wansley Ash Pond Laboratory Job ID: 180-103742-2

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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.

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Job ID: 180-103742-2

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Definitions/Glossary

Client: Southern Company Job ID: 180-103742-2

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

Rad

Qualifier Qualifier Description

U Result is less than the sample detection limit.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

PQL Practical Quantitation Limit

QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

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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 Dat
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

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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
lowa	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

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Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
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

Job ID: 180-103742-2

Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

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

Job ID: 180-103742-2

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-103742-1 **Client Sample ID: WGWA-1**

Date Collected: 03/16/20 14:15 Date Received: 03/19/20 08:30

Matrix: Water

Job ID: 180-103742-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 t ID: GFPCBLUE		1			467823	04/15/20 05:18	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.96 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 t ID: GFPCPURPLE		1			468602	04/22/20 16:29	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

Lab Sample ID: 180-103742-2

Client Sample ID: WGWA-2 Date Collected: 03/16/20 12:25 **Matrix: Water**

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			467823	04/15/20 05:18	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.86 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			468602	04/22/20 16:29	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

Client Sample ID: WGWA-3 Lab Sample ID: 180-103742-3 Date Collected: 03/17/20 11:35

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467823	04/15/20 05:18	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.50 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			468602	04/22/20 16:29	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

Client Sample ID: WGWA-4 Lab Sample ID: 180-103742-4 Date Collected: 03/17/20 10:40

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			1000.81 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
	Instrumen	t ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

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Matrix: Water

Matrix: Water

4/28/2020

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-4 Lab Sample ID: 180-103742-4

Date Collected: 03/17/20 10:40 Date Received: 03/19/20 08:30

Matrix: Water

Matrix: Water

Matrix: Water

Job ID: 180-103742-2

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrument	9320 ID: GFPCPURPLE		1			468602	04/22/20 16:29	AJD	TAL SL
	Total/NA	Analysis Instrument	Ra226_Ra228 ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

Lab Sample ID: 180-103742-5 Client Sample ID: WGWA-5

Date Collected: 03/17/20 12:50 Date Received: 03/19/20 08:30

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Factor Amount Amount Number or Analyzed Type Run Analyst Lab Total/NA PrecSep-21 465458 03/24/20 13:03 RBR TAL SL Prep 1000.17 mL 1.0 g Total/NA Analysis 9315 467823 04/15/20 05:18 CJQ TAL SL 1 Instrument ID: GFPCBLUE PrecSep_0 Total/NA 04/19/20 12:26 MNH TAL SL Prep 749.27 mL 1.0 g 468060 Total/NA TAL SL Analysis 9320 1 468602 04/22/20 16:30 AJD Instrument ID: GFPCPURPLE Total/NA Analysis Ra226_Ra228 04/23/20 08:09 SMP TAL SL 468673 Instrument ID: NOEQUIP

Client Sample ID: WGWA-6 Lab Sample ID: 180-103742-6

Date Collected: 03/17/20 11:15 Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467823	04/15/20 05:19	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.73 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			468602	04/22/20 16:30	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL

Client Sample ID: WGWA-7 Lab Sample ID: 180-103742-7

Date Collected: 03/17/20 14:05 Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t 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
	Instrumen	t ID: GFPCPURPLE								

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Matrix: Water

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-7

Date Collected: 03/17/20 14:05

Lab Sample ID: 180-103742-7 **Matrix: Water** Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Date Collected: 03/17/20 14:35 **Matrix: Water** Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467823	04/15/20 05:19	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			749.72 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPROTEAI	N	1			468601	04/22/20 16:35	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL

Client Sample ID: EB-1 3-17-20

Lab Sample ID: 180-103742-9 Date Collected: 03/17/20 14:00 **Matrix: Water** Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			467823	04/15/20 07:24	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			750.78 mL	1.0 g	468060	04/19/20 12:26	MNH	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPROTEA	N	1			468601	04/22/20 16:35	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			468673	04/23/20 08:09	SMP	TAL SL

Client Sample ID: DUPLICATE 1 3-17-20

Date Collected: 03/17/20 00:00

Date Received: 03/19/20 08:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t 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 Instrumen	9320 t ID: GFPCPROTEA	.N	1			468601	04/22/20 16:35	AJD	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 t ID: NOEQUIP		1			468673	04/23/20 08:09	SMP	TAL SL

Lab Sample ID: 180-103742-10

Matrix: Water

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Job ID: 180-103742-2

4/28/2020

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11 Lab Sample ID: 180-103742-11

Date Collected: 03/18/20 13:05 Date Received: 03/19/20 08:30

Matrix: Water

Job ID: 180-103742-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at 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 Instrumer	9320 at ID: GFPCPROTE	AN	1			468601	04/22/20 16:36	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at 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

Eurofins TestAmerica, Pittsburgh

4/28/2020

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

Job ID: 180-103742-2

Method: 9315	- Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/24/20 13:03	04/15/20 05:18	1

Method: 9320 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	228 - Combined Rad	dium-226 a	nd Radium	1-228				
_		Count	Total					
		Uncert.	Uncert.					
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
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)								
		, , ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					03/24/20 13:03	04/15/20 05:18	1

Method: 9320 - I	Radium-228 ((GFPC)	Count	Total						
Analyte	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103742-2

Method: Razzo_Raz			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.289	Ū	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)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		40 - 110					03/24/20 13:03	04/15/20 05:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte Radium-228	Result -0.0840	Qualifier	Count Uncert. (2σ+/-) 0.314	Total Uncert. (2σ+/-) 0.314	RL 1.00	MDC 0.579	 Prepared 04/19/20 12:26	Analyzed 04/22/20 16:29	Dil Fac
Carrier	%Yield	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Ba Carrier	85.1		40 - 110				04/19/20 12:26	04/22/20 16:29	1
Y Carrier	89.3		40 - 110				04/19/20 12:26	04/22/20 16:29	1

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

_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.139	Ū	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) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ **MDC** Unit Prepared Analyzed Dil Fac RL 03/24/20 13:03 04/15/20 05:18 Radium-226 0.462 0.158 0.163 1.00 0.154 pCi/L

Carrier	%Yield Qualifier	Limits	Prepared Analyzed	Dil Fac
Ba Carrier	83.6	40 - 110	03/24/20 13:03 04/15/20 05:18	1

Job ID: 180-103742-2

Client Sample ID: WGWA-4 Lab Sample ID: 180-103742-4

Date Collected: 03/17/20 10:40 **Matrix: Water** Date Received: 03/19/20 08:30

Method: 9320 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra	228 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.964		0.419	0.424	2.00	0.615	pCi/L		04/23/20 08:09	1

Lab Sample ID: 180-103742-5 **Client Sample ID: WGWA-5** Date Collected: 03/17/20 12:50 **Matrix: Water** Date Received: 03/19/20 08:30

Method: 9315 -	Radium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.4		40 - 110					03/24/20 13:03	04/15/20 05:18	1

Method: 9320 - Rad	dium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.207	Ū	0.351	0.351	2.00	0.585	pCi/L		04/23/20 08:09	1

Client Sample ID: WGWA-6

Lab Sample ID: 180-103742-6

Matrix: Water

Job ID: 180-103742-2

Date Collected: 03/17/20 11:15 Date Received: 03/19/20 08:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - I	Radium-226 (GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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

Date Collected: 03/17/20 14:05 Date Received: 03/19/20 08:30

Matrix: Water

Job ID: 180-103742-2

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.258	Ū	0.378	0.378	2.00	0.626	pCi/L		04/23/20 08:09	1

Lab Sample ID: 180-103742-8 **Client Sample ID: WGWA-18**

Date Collected: 03/17/20 14:35 **Matrix: Water** Date Received: 03/19/20 08:30

Method: 9315 - F	Radium-226 (GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
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 - R	Radium-228 ((GFPC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.8		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_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 Lab Sample ID: 180-103742-9 Date Collected: 03/17/20 14:00 **Matrix: Water**

Date Received: 03/19/20 08:30

Method: 9315 - F	Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.9		40 - 110					03/24/20 13:03	04/15/20 07:24	

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

Lab Sample ID: 180-103742-10

Matrix: Water

Matrix: Water

Job ID: 180-103742-2

Method: 9320 - R	adium-228 ((GFPC)								
		•	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Total Count Uncert. Uncert. Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ **MDC** Unit Analyte RL Prepared Analyzed Dil Fac 0.165 U 0.375 0.375 2.00 0.631 pCi/L 04/23/20 08:09 Combined Radium 226 + 228

Client Sample ID: DUPLICATE 1 3-17-20

Date Collected: 03/17/20 00:00

Date Received: 03/19/20 08:30

Method: 9315 - Ra	dium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					03/24/20 13:03	04/15/20 07:24	1

Method: 9320 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0100	U	0.366	0.366	2.00	0.639	pCi/L		04/23/20 08:09	1

Client Sample Results

Client: Southern Company Job ID: 180-103742-2

Project/Site: CCR - Plant Wansley Ash Pond

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

Method: 9315 - Ra	dium-226 (GFPC)	Count Uncert.	Total Uncert.						
Analyte Radium-226	Result 0.0347	Qualifier	(2σ+/-) 0.0781	(2σ+/-) 0.0782	RL 1.00	MDC 0.142		Prepared 03/24/20 13:03	Analyzed 04/15/20 07:24	Dil Fac
Carrier Ba Carrier		Qualifier	Limits 40 - 110	******			,	Prepared 03/24/20 13:03	Analyzed 04/15/20 07:24	Dil Fac

Method: 9320 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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 Ra	228 - Combined Rad	dium-226 a	nd Radiun	n-228					
_		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.866	0.442	0.449	2.00	0.660	pCi/L		04/23/20 08:09	1

12

Job ID: 180-103742-2

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-465458/22-A Client Sample ID: Method Blank

Matrix: Water

Matrix: Water

Analysis Batch: 467823

Analysis Batch: 467823

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

Prep Batch: 465458

MB MB Uncert. Uncert. Analyte Result Qualifier RL MDC Unit $(2\sigma + / -)$ $(2\sigma + / -)$ Prepared Analyzed Dil Fac Radium-226 -0.02844 U 0.112 pCi/L 03/24/20 13:03 04/15/20 07:24 0.0416 0.0417 1.00

Total

Count

Count

MB MB

 Carrier
 %Yield Ba Carrier
 Qualifier 40 - 110
 Limits 40 - 110
 Prepared Prepared 503/24/20 13:03 04/15/20 07:24
 Dil Fac 03/24/20 13:03 04/15/20 07:24

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 465458

Prep Bato

Total

Spike LCS LCS Uncert. %Rec. Added $(2\sigma + / -)$ RLLimits **Analyte** Result Qual MDC Unit %Rec Radium-226 9.112 1.02 1.00 0.147 pCi/L 80 75 ₋ 125 11.3

LCS LCS

 Carrier
 %Yield
 Qualifier
 Limits

 Ba Carrier
 86.5
 40 - 110

Lab Sample ID: LCS 160-465458/1-A

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

MB MB Uncert. Uncert.

Analyte Result Qualifier (2σ+/-) (2σ+/-) RL MDC Unit Prepared Analyzed Dil Fac

Total

 Analyte
 Result Result
 Qualifier Qualifier
 (2σ+/-)
 (2σ+/-)
 RL MDC Unit
 Prepared Prepared
 Analyzed Analyzed O4/22/20 16:36
 Dil Fac Dil F

 Carrier
 %Yield Ba Carrier
 Qualifier 94.2
 Limits 40-110
 Prepared 04/19/20 12:26
 Analyzed 04/22/20 16:36
 Dil Fac 04/19/20 12:26

 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

Total **Spike** LCS LCS Uncert. %Rec. Added RL Analyte Result Qual $(2\sigma + / -)$ MDC Unit %Rec Limits Radium-228 1.00 0.792 pCi/L 75 - 125 11.9 11.88 1.56 100

 LCS
 LCS

 Carrier
 %Yield
 Qualifier
 Limits

 Ba Carrier
 79.9
 40 - 110

 Y Carrier
 69.2
 40 - 110

3

4

6

7

10

11

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 Client Sample ID: Lab Control Sample Dup

Matrix: Water

Analysis Batch: 468602

Prep Type: Total/NA

Prep Batch: 468060

_				Total						
	Spike	LCSD	LCSD	Uncert.				%Rec.		RER
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits	RER	Limit
Radium-228	11.9	11.96		1.45	1.00	0.590 pCi/L	101	75 - 125	0.03	1

 Carrier
 %Yield Plant
 Qualifier Plant
 Limits Plant

 Ba Carrier
 81.7
 40 - 110

 Y Carrier
 91.2
 40 - 110

8

10

11

QC Association Summary

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

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	

Job ID: 180-103742-2

Ver: 08/04/2016

Sooler Temperature(s) °C and Other Remarks

Custody Seal No.:

Chain of Custody, ecord

TestAm ica

681-Atlanta

TestAme Pittsburgh

JC Park

301 Alpha Dr

Pittsburgh, PA 15238

S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Company Special Instructions/Note: Company N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon reservation Codes: 5.79 8 0 2.6 30 G - Amchlor H - Ascorbic Acid 0.5 9 A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 V I - Ice J - DI Water F - MeOH K-EDTA L-EDA Date/Time: SOC No: Archive For =Hd =Hd Hd =Hd 2 Hd Hd =Hd TA-AIL Total Number of containers Jate Time: lethod of Shipment: Carrier Tracking No(s): 2 Analysis Requested ACC 180-103742 Chain of Custody Special Instructions/QC Requirements E-Mail: (Veronica.Bortot@testamericainc.com) Radium 226 & 228 (SW-846 9315/9320) Detected App IV Metals (See list below) Received by: Received by: Received by CI, F, SO₄ & TDS EPA 300.0 & SM 2540C) Z Z Z GODIE/A. Shin Hiller Veronica Bortot 0 Z z z z z z z Z Perform MS/MSD (Yes or No) z Z z Field Filtered Sample (Yes or No) BT=Tissue, A=Air S=solid, O=waste/oil, Preservation Code: Matrix 3 3 3 3 Company 3 3 3 3 3 3 3 -54.88 Radiological Type (C=comp, G=grab) Sample 1620 N G G G G G G O G G U G 0 1040 1250 1460 770-544 1435 Sample アゴ 3-16-20 1225 1405 1115 3-18-20 1305 -17-20 1135 Date: Date/Time: / Date/Time: 7/18/20 Unknown (days) Due Date Requested: 3-17-20 3-16-20 17.70 -17.20 -17.20 -17.20 PO#: SCS10347656 Sample Date 3-17.20 17.20 Project #: 40007709 SSOW#: NO #: Phone: Poison B AC 3-17-20 Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) 3-17-20 GWA-18 Phone (412) 963-7058 Fax (412) 963-2468 MGWA- G MGWA-L NGWC-11 MCMA - 5 一くろうろ MGWA とろうろ Non-Hazard Flammable N GENT Project Name: CCR - Plant Wansley - Ash Pond Possible Hazard Identification JAbraham@southernco.com Duplizate Empty Kit Relinquished by: Client Information Sample Identification PO BOX 2641 GSC8 Southern Company 50 Joju Abraham elinquished by: elinquished by Birmingham State, Zip: AL, 35291

4/28/2020

Custody Seals Intact: △ Yes △ No

TestAmerica

469-434 RIT EXP 07/20 **Environment Testing**

RRIGIN ID: LIYA (678) 966-9991 SEORGE TAYLOR EURCHISS HARRICA SEOO MCDONUGH-DRIVE STOO MCDONUGH-DRIVE

EUROFINS TESTAMERICA PIFTSBURGH 301 ALPHA OR BILL RECIPIENT SAMPLE RECIEVING RIDC PARK

PITTSBURGH PA 15238 (412) 963-7066

REF: ACC

THU - 19 MAR 3:00P STANDARD OVERNIGHT

516 9323 1962

| of 4

O Initials

Thermometer ID

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

45

Environment Test TestAmerica

ID:LIYA (678) 966-9991 FAYLOR 3 TESTAMERICA JONOUGH DRIVE STATES US

BILL RECIPIENIS

ROFINS TESTAMERICA PITTS

MPLE RECIEVING

LALPHA DR.

DC PARK

180-103742 Waybill

LISBURGH PA 15238

THU - 19 MAR 3:00P

1516 9323 1995

4 of 4

Uncorrected tem Thermometer ID

Initials CF O

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

Page 24 of 29

Environment Testing TestAmerica

(678) 966-9991 EUROFINS TESTAMERICA 6500 MCDONDUGH DRIVE SUITE C-10 NORCROSS, 6A 30093 UNITED STATES US

378 966-9991

SHIP DATE: 18MAR20 ACTWGT: 59.35 LB CAD: 859116/CAFE3312 BILL RECIPIENT

TESTAMERICA PITTSBURGH CIEVING

GH PA 15238

edEx

STANDARD OVERNIGH

- 19 MAR 3:00P

ected timp

sitials itials mometer D

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

484 RIT EXP 07/20

Environment Testing

TestAmerica

BILL RECIP

EUROFINS TESTAMERICA PITTSBURGH TO SAMPLE RECIEVING

PITTSBURGH PA 15238 (412) 963-7058 RIDC PARK

301 ALPHA DR.

- 19 MAR 3:00P

NPS# 1516 9323

Thermometer ID Uncorrected tem

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

Initials

eurofins

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive RIDC Park

eurofins Environment Testing TestAmerica

Client Contact:				Bortot,	Bortot, Veronica	200				180-388211.1	-
Shipping/Receiving	Phone:			E-Mail: veronic	a.bortot@	Diestame	ricainc.com	State of Origin: Georgia		Page:	
Company: TestAmerica Laboratories, Inc.				Ac	creditations	s Required	Accreditations Required (See note):			Job #: 180-103742-2	2
Address: 13715 Rider Trail North, ,	Due Date Requested 4/17/2020	ij					Analysis Requested	quested		Preservation Codes:	D
City. Earth City State, Zp.: MO, 63045	TAT Requested (days):	ys):			Se:	sət/				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #;				Bar.					F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
Email;	, MO#:			ON 10	(0)						
Project Name: CCR - Plant Wansley	Project #: 18019922			SeY) e	1 10 28			-		K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#:			gms2	Y) ası	-12				of con	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample (Time	Sample Type (C=comp, G=grab)	Matrix of (w=water, S=solid, O=wastefoll, G=Tissue, A=Air)	M/SM mnohaq anq\8sssA_osee	9315_Ra226/Pre 93256Ra228/GI				Total Number	Special Instructions/Note:
	X	1	Preservation Code:	n Code:	X					\times	
WGWA-1 (180-103742-1)	3/16/20	14:15 Eastern		Water	×	×				+	
WGWA-2 (180-103742-2)	3/16/20	12:25 Fastern		Water	×	×				+	
WGWA-3 (180-103742-3)	3/17/20	11:35 Eastern		Water	×	×				+	
WGWA-4 (180-103742-4)	3/17/20	10:40 Eastern		Water	×	×				1	
WGWA-5 (180-103742-5)	3/17/20	12:50 Eastern		Water	×	×				-	
WGWA-6 (180-103742-6)	3/17/20	11:15 Eastern		Water	×	×					
WGWA-7 (180-103742-7)	3/17/20	14:05 Eastern		Water	×	×				1	
WGWA-18 (180-103742-8)	3/17/20	14:35 Eastern		Water	×	×				.	
EB-1 3-17-20 (180-103742-9)	3/17/20	14:00 Eastern		Water	×	×				-	
Note: Since aboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/lests/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 attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.	stAmerica places the ownership s/matrix being analyzed, the sa irrent to date, return the signed	of method, anal mples must be s Chain of Custod	lyte & accredita hipped back to ly attesting to sa	ion compliance the Eurofins Ter iid complicance	upon out st stAmerica le to Eurofins	ubcontract aboratory o TestAmen	aboratories. This sam other instructions will	ple shipment is for be provided. Any	warded under ch changes to accre	ain-of-custody. If the le ditation status should b	boratory does not curre e brought to Eurofins
Possible Hazard Identification					Sample	Disposa	I (A fee may be	assessed if sa	imples are re	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	n 1 month)
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	ble Rank: 2			Special I	Return To Client al Instructions/QC	Requirem	^J Disposal By Lab ents:		Archive For	Months
Empty Kit Relinquished by:	,	Date:		Ī	Time:			Method of Shipment	Shipment:		
Relinquished by:	202	170	0	1	Rece	Received by:		-	Date/Time:		Company
Relinquished by:	Date/Time:		8	Company	Regived To a serious de la constant	MICHA	Konuh	ngi	Selle soo	n 08:37	Company ST
				, had in	9	ved by.		5	Date/Time:		Сотралу
Custody Seals Intact: Custody Seal No.:					Coole	ır Tempera	Cooler Temperature(s) °C and Other Remarks.	emarks:			

🔆 eurofins

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

P - Na204S Q - Na2S03 R - Na2S203 S - H2S04 T - TSP Dodecahydrate K V - MCAA W - pH 4-5 Z - other (specify) Special Instructions/Note: Ver: 01/16/2019 U - Acetone Months 本北 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month Preservation Codes A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NanSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid tote Ishoralory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under channel-custody. If the laboratory 180-103742-2 180-388211.2 Page: Page 2 of 2 JAMES CO.37 I - Ice J - DI Water K - EDTA L - EDA Total Number of containers ethod of Shipment. arrier Tracking No(s) State of Origin Georgia Analysis Requested Mary Comment Cooler Temperature(s) ^oC and Other Remarks. Special Instructions/QC Requirements veronica.bortot@testamericainc.com Sa226Ra228_GFPC/ (MOD) Local Method × eceived by: 3315_Ra226/PrecSep_21 (MOD) Copy Analytes × Lab PM: Bortot, Veronica 3320_Ra228/PrecSep_0 (MOD) Copy Analytes × × Perform MS/MSD (Yes or No) me Field Filtered Sample (Yes or No) E-Mail: BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, Preservation Code: Water Matrix Water Company (C=comp, G=grab) Sample Type Primary Deliverable Rank: 2 Sample 13:05 Eastern Eastern Time 22 TAT Requested (days) Due Date Requested: 4/17/2020 Sample Date 3/17/20 3/18/20 Project #: 18019922 Client Information (Sub Contract Lab) Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Custody Seals Infact: Custody Seal No. Sample Identification - Client ID (Lab ID) DUPLICATE 1 3-17-20 (180-103742-10) 314-298-8566(Tel) 314-298-8757(Fax) Possible Hazard Identification Company: TestAmerica Laboratories, Inc. NGWC-11 (180-103742-11) Empty Kit Relinquished by: 13715 Rider Trail North, CCR - Plant Wansley Shipping/Receiving Wansley CCR d paysing inquished by: inquished by: State, Zip: MO, 63045 Earth City

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.</td <td>True</td> <td></td>	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	

Client: Southern Company Job Number: 180-103742-2

Login Number: 103742 List Number: 2

03742 List Source: Eurofins TestAmerica, St. Louis

List Creation: 03/23/20 01:14 PM

Creator: Korrinhizer, Micha L

Creator. Romanizer, wiicha L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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.</td <td>True</td> <td></td>	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 America

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

----- LINKS -----

Review your project results through Total Access

Have a Question?



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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 Job ID: 180-103809-1

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

	-		_		_
н	μ	1 (/1	1:
		_	•		•

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.

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)

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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

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Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
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
80-103809-7	WGWC-15	Water	03/18/20 10:35	03/20/20 09:00
80-103809-8	WGWC-16	Water	03/18/20 11:45	03/20/20 09:00
80-103809-9	WGWC-17	Water	03/18/20 15:11	03/20/20 09:00
180-103809-12	DUPLICATE 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

Job ID: 180-103809-1

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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	TAI 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

Job ID: 180-103809-1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-8 Lab Sample ID: 180-103809-1 Date Collected: 03/19/20 12:49

Matrix: Water

Job ID: 180-103809-1

Date Received: 03/20/20 09:00

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 t ID: CHIC2100A	Run	Factor 1	Initial Amount	Final Amount	Batch Number 312087	Prepared or Analyzed 04/05/20 15:24	Analyst MJH	Lab TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHICS2100B		1			312254	04/08/20 05:11	SAC	TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	311071 312686	03/25/20 11:00 04/10/20 15:12		TAL PIT TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	311071 312904	03/25/20 11:00 04/14/20 11:23		TAL PIT TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	311071 313029	03/25/20 11:00 04/15/20 13:43		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	7470A EPA 7470A t ID: HGZ		1	50 mL	50 mL	311010 311297	03/24/20 19:39 03/26/20 19:37		TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			310781	03/19/20 12:49	FDS	TAL PIT

Client Sample ID: WGWC-9 Lab Sample ID: 180-103809-2 Date Collected: 03/19/20 11:22 **Matrix: Water**

Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			312087	04/05/20 15:55	MJH	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311297	03/26/20 19:40	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-9 Lab Sample ID: 180-103809-2

Date Collected: 03/19/20 11:22 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-1

Batch Batch Dil Initial Final Batch Prepared Factor Method **Prep Type** Type Run Amount Amount Number or Analyzed Analyst Lab 310781 03/19/20 11:22 FDS Total/NA Analysis Field Sampling TAL PIT

Client Sample ID: WGWC-10 Lab Sample ID: 180-103809-3 Date Collected: 03/18/20 14:55

Matrix: Water

Date Received: 03/20/20 09:00

Dil Initial Batch Ratch Final Batch Prepared **Prep Type** Type Method Run **Factor** Amount Amount Number or Analyzed **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 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 **EPA 6020B** 312686 04/10/20 15:32 RJR TAL PIT Total Recoverable Analysis 1 Instrument ID: NEMO Total Recoverable Prep 3005A 50 mL 50 mL 311071 03/25/20 11:00 RJR TAL PIT Total Recoverable 312904 TAL PIT Analysis **EPA 6020B** 04/14/20 11:38 RJR 1 Instrument ID: NEMO Total Recoverable 3005A 50 mL 50 mL 311071 03/25/20 11:00 RJR TAL PIT Prep Total Recoverable Analysis **EPA 6020B** 313029 04/15/20 13:58 RJR TAL PIT 1 Instrument ID: NEMO Total/NA Prep 7470A 50 mL 50 mL 311010 03/24/20 19:39 NAM TAL PIT Total/NA **EPA 7470A** 311297 03/26/20 19:41 NAM TAL PIT Analysis 1 Instrument ID: HGZ Total/NA Analysis SM 2540C 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 Lab Sample ID: 180-103809-4 Date Collected: 03/18/20 11:45 **Matrix: Water**

Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHICS2100B		1			312144	04/07/20 03:36	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			312686	04/10/20 15:34	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			312904	04/14/20 11:40	RJR	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	311071	03/25/20 11:00	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			313029	04/15/20 14:00	RJR	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	311010	03/24/20 19:39	NAM	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			311297	03/26/20 19:42	NAM	TAL PIT

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-12 Lab Sample ID: 180-103809-4

Date Collected: 03/18/20 11:45 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			310781	03/18/20 11:45	FDS	TAL PIT
	Instrument	ID: NOEQUIP								

Lab Sample ID: 180-103809-5 **Client Sample ID: WGWC-13**

Date Collected: 03/19/20 11:15 **Matrix: Water**

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	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311297	03/26/20 19:43	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t 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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312254	04/07/20 21:38	SAC	TAL PIT
	Instrumen	t 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 15:39	RJR	TAL PIT
	Instrumen	t 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 11:50	RJR	TAL PIT
	Instrumen	t 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 14:10	RJR	TAL PIT
	Instrumen	t ID: NEMO								

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Lab Sample ID: 180-103809-6

Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-14A Lab Sample ID: 180-103809-6

Date Collected: 03/19/20 13:35

Date Received: 03/20/20 09:00

Prep Type Total/NA Total/NA	Batch Type Prep Analysis Instrumer	Batch Method 7470A EPA 7470A at ID: HGZ	Run	Dil Factor	Initial Amount 50 mL	Final Amount 50 mL	Batch Number 311010 311297	Prepared or Analyzed 03/24/20 19:39 03/26/20 19:44		Lab TAL PIT TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 7470A at ID: HGZ		1			311297	03/26/20 19:45	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t ID: NEMO		1			313029	04/15/20 14:13	RJR	TAL PIT

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Job ID: 180-103809-1

Lab Sample ID: 180-103809-7

Matrix: Water

Matrix: Water

Lab Sample ID: 180-103809-8 **Matrix: Water**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-16 Lab Sample ID: 180-103809-8

Date Collected: 03/18/20 11:45

Matrix: Water Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGZ		1			311297	03/26/20 19:52	NAM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling of ID: NOEQUIP		1			310781	03/18/20 11:45	FDS	TAL PIT

Lab Sample ID: 180-103809-9 **Client Sample ID: WGWC-17**

Date Collected: 03/18/20 15:11 **Matrix: Water** Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311297	03/26/20 19:53	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	310934	03/24/20 08:03	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			310781	03/18/20 15:11	FDS	TAL PIT

Client Sample ID: DUPLICATE 2 Lab Sample ID: 180-103809-12

Date Collected: 03/18/20 00:00 **Matrix: Water** Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			312143	04/07/20 01:17	MJH	TAL PIT
	Instrumen	t ID: CHIC2100A								
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 15:59	RJR	TAL PIT
	Instrumen	t 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 12:05	RJR	TAL PIT
	Instrumen	t ID: NEMO								

Eurofins TestAmerica, Pittsburgh

Job ID: 180-103809-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: DUPLICATE 2 Lab Sample ID: 180-103809-12

Date Collected: 03/18/20 00:00 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			50 mL	50 mL	311012	03/24/20 19:42	NAM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGZ		1			311297	03/26/20 19:56	NAM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT

Lab Sample ID: 180-103809-13 Client Sample ID: FB-1 3-18-20

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 6020B at 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 Instrumen	EPA 7470A at ID: HGZ		1			311297	03/26/20 19:57	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	310933	03/24/20 08:00	AVS	TAL PIT

Client Sample ID: FB-2 3-19-20 Lab Sample ID: 180-103809-14

Date Collected: 03/19/20 12:30 Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			311297	03/26/20 19:58	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t 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

Matrix: Water

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

3

0

Client Sample ID: WGWC-8 Lab Sample ID: 180-103809-1

Date Collected: 03/19/20 12:49 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-1

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	

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

Lithium	0.015		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:23	1
Method: EPA 7470A - Mer	cury (CVAA)								
Analyte	• •	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
Hα	6.43				SU			03/19/20 12:49	1

Client Sample ID: WGWC-9 Lab Sample ID: 180-103809-2 Date Collected: 03/19/20 11:22 **Matrix: Water** Date Received: 03/20/20 09:00

Method: EPA 300.0 R2.1 -	Anions, Ion Chromatograp	hy						
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

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

Lab Sample ID: 180-103809-2

Job ID: 180-103809-1

Matrix: Water

Client Sample ID: WGWC-9	
Date Collected: 03/19/20 11:22	

Date Received: 03/20/20 09:00

(ICP/MS) - T	otal Recov	erable (Cor	itinued)					
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:29	1
0.0042	J	0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:29	1
<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:29	1
0.0033	J	0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:29	1
<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:29	1
0.039		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:35	1
• •	<u> </u>	RL 0.00020			<u>D</u>	Prepared 03/24/20 19:39	Analyzed 03/26/20 19:40	Dil Fac
					D	Prepared		Dil Fac
160		10	10	mg/L			03/24/20 08:03	1
d Sampling								
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
				SU			03/19/20 11:22	
	Result <0.00013 0.0042 <0.00013 0.0033 <0.00015 0.039 (CVAA) Result <0.00010 Result 160	Result Qualifier	Result Qualifier RL	Colored Colo	Result Qualifier RL MDL Unit	Result Qualifier RL MDL Unit D	Result Qualifier RL MDL Unit D Prepared	Result Qualifier RL MDL Unit D Prepared Analyzed

Lab Sample ID: 180-103809-3 **Client Sample ID: WGWC-10** Date Collected: 03/18/20 14:55 **Matrix: Water**

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	1.5		1.0	0.32	mg/L			04/07/20 01:30	1
	Fluoride	0.052	J	0.10	0.026	mg/L			04/07/20 01:30	1
	Sulfate	2.1		1.0	0.38	mg/L			04/07/20 01:30	1

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
Barium	0.035		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
Boron	0.049	J	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
Calcium	7.5		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
Cobalt	0.0012	J	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
Lead	0.00021	J	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	0.0071		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

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-1

General	Chemistry
Analyto	

RL **MDL** Unit Result Qualifier D Prepared Analyzed Dil Fac Analyte 10 03/24/20 08:03 **Total Dissolved Solids** 10 mg/L

Method: Field Sampling - Field Sampling

Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac рН SU 03/18/20 14:55 6.40

Client Sample ID: WGWC-12 Lab Sample ID: 180-103809-4 Date Collected: 03/18/20 11:45

Date Received: 03/20/20 09:00

Matrix: Water

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

Analyte	Result	Qualifier	KL	MDL	Unit	ט	Prepared	Anaiyzea	DII 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

Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010		0.00020	0.00010	ma/L		03/24/20 19:39	03/26/20 19:42	

General Chemistry

Analyte Result Qualifier RL **MDL** Unit D Prepared Analyzed Dil Fac 10 10 mg/L 03/24/20 08:00 **Total Dissolved Solids** 73

Method: Field Sampling - Field Sampling

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac SU 6.94 03/18/20 11:45 рН

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 Qua	alifier 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	ma/l			04/07/20 21:22	1

Eurofins TestAmerica, Pittsburgh

Client Sample ID: WGWC-13 Lab Sample ID: 180-103809-5

Date Collected: 03/19/20 11:15 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-1

Method: EPA 300.0 R2.1 - Anions,	lon	Chi	ron	natography	(Continue	d)

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00039	J	0.0010	0.00031	mg/L		03/25/20 11:00	04/10/20 15:37	1
Barium	0.072		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:48	•
Boron	0.053	J	0.080	0.039	mg/L		03/25/20 11:00	04/15/20 14:08	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:37	1
Calcium	5.0		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:37	
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:37	
Molybdenum	0.0018	J	0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:37	1
Lead	0.00060	J	0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:37	
Selenium	<0.0015		0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:37	1
Thallium	< 0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:37	
Lithium	<0.0034		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:48	

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result Quali	lifier RL	MDL Unit	: D	Prepared	Analyzed	Dil Fac
Mercury	<0.00010	0.00020	0.00010 mg/		03/24/20 19:39	03/26/20 19:43	1

General	Chemistry
Amaluda	_

Analyte	Result Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	95	10	10 r	mg/L			03/24/20 08:03	1

Method: Field Sampling - Field	Sampling									
Analyte	Result	Qualifier	RL	MDL	Unit	D		Prepared	Analyzed	Dil Fac
рН	6.56				SU				03/19/20 11:15	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

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		

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 15:39	1
Barium	0.031		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:39	1
Beryllium	0.00025	J	0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:50	1
Boron	0.039	J	0.080	0.039	mg/L		03/25/20 11:00	04/15/20 14:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:39	1
Calcium	0.89		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:39	1
Cobalt	0.0039		0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:39	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:39	1

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-103809-6

Matrix: Water

Job ID: 180-103809-1

Client Sample ID: WGWC-14A	
Date Collected: 03/19/20 13:35	

Date Received: 03/20/20 09:00

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 - Merc	cury (CVAA)								
Analyte	• •	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 - I	Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.49				SU			03/19/20 13:35	

Lab Sample ID: 180-103809-7 **Client Sample ID: WGWC-15** Date Collected: 03/18/20 10:35 **Matrix: Water**

Date Received: 03/20/20 09:00

Method: EPA 300.0 R2.1 - Ani	ons, Ion Ch	romatograpl	hy						
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

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	JB^	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								

General Chemistry Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	160	10	10	mg/L		<u> </u>	03/24/20 08:03	1

Job ID: 180-103809-1

Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 180-103809-7 Date Collected: 03/18/20 10:35

Matrix: Water

Date Received: 03/20/20 09:00

Method: Field Sampling - Field Sampling Analyzed Analyte Result Qualifier RL **MDL** Unit Dil Fac D Prepared SU 03/18/20 10:35 pН 7.73

Client Sample ID: WGWC-16 Lab Sample ID: 180-103809-8

Date Collected: 03/18/20 11:45 Date Received: 03/20/20 09:00

Method: EPA 300.0 R2.1 -	Anions, Ion Chi	romatograp	hy						
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

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	1
Barium	0.034		0.010	0.0016	mg/L		03/25/20 11:00	04/10/20 15:44	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/25/20 11:00	04/14/20 11:55	1
Boron	2.0		0.080	0.039	mg/L		03/25/20 11:00	04/15/20 14:13	1
Cadmium	0.00022	J	0.0025	0.00022	mg/L		03/25/20 11:00	04/10/20 15:44	1
Calcium	66		0.50	0.13	mg/L		03/25/20 11:00	04/10/20 15:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/25/20 11:00	04/10/20 15:44	1
Cobalt	0.00016	J	0.0025	0.00013	mg/L		03/25/20 11:00	04/10/20 15:44	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/25/20 11:00	04/10/20 15:44	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/25/20 11:00	04/10/20 15:44	1
Selenium	0.0046	J	0.0050	0.0015	mg/L		03/25/20 11:00	04/10/20 15:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/25/20 11:00	04/10/20 15:44	1
Lithium	0.0057		0.0050	0.0034	mg/L		03/25/20 11:00	04/14/20 11:55	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 19:52	1

General Chemistry							
Analyte	Result Qua	lifier RL	MDL U	Jnit D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	370	10	10 n	ng/L		03/24/20 08:00	1

Method: Field Sampling - Field	d 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 Lab Sample ID: 180-103809-9 Date Collected: 03/18/20 15:11 **Matrix: Water**

Date Received: 03/20/20 09:00

Method: EPA	300.0 R2.1 - Anions, Ion Chi	romatography						
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

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-1

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 - Mer	cury (CVAA)								
Analyte	• •	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

Client Sample ID: DUPLICATE 2

6.28

Date Collected: 03/18/20 00:00 Date Received: 03/20/20 09:00

рН

Lab Sample ID: 180-103809-12

03/18/20 15:11

Matrix: Water

Method: EPA 300.0 R2.1	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				

SU

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	JB^	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: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-1

I	/lethod:	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

Date Collected: 03/18/20 14:55 Date Received: 03/20/20 09:00

Lab Sample ID: 180-103809-13

Matrix: Water

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: FPA 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	JB^	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	ma/L		03/25/20 11:00	04/14/20 12:07	1

Method: EPA 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Pre	pared	Analyzed	Dil Fac	
Mercury	0.00011	J	0.00020	0.00010	ma/L		03/24	/20 19:42	03/26/20 19:57		

General Chemistry

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	<10	10	10 ma/L			03/24/20 08:00	1	

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

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
	Analyte	Result	Qualifier R	L MDI	. Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<0.32		0.32	mg/L			04/07/20 22:10	1
	Fluoride	<0.026	0.1	0.026	mg/L			04/07/20 22:10	1
	Sulfate	<0.38	1.	0.38	3 mg/L			04/07/20 22:10	1

Client Sample Results

Client: Southern Company Job ID: 180-103809-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2 3-19-20 Lab Sample ID: 180-103809-14

Date Collected: 03/19/20 12:30 Matrix: Water Date Received: 03/20/20 09:00

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
Boron	0.066	JB^	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 - Me	rcury (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	

5

7

8

4 6

4 4

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

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride 1.0 0.32 mg/L 04/05/20 14:20 <0.32 0.10 Fluoride < 0.026 0.026 mg/L 04/05/20 14:20 Sulfate < 0.38 1.0 0.38 mg/L 04/05/20 14:20

LCS LCS

50.3

2.71

49.2

Result Qualifier

mg/L

Spike

Added

50.0

2.50

50.0

Lab Sample ID: LCS 180-312087/36

Matrix: Water

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 312087

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

%Rec. Limits Unit D %Rec 101 90 - 110 mg/L mg/L 108 90 - 110

98

Lab Sample ID: MB 180-312143/6

Matrix: Water

Analysis Batch: 312143

Client Sample ID: Method Blank

90 - 110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

MB MB

MR MR

Analyte	Result C	Qualifier R	. MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32	1.	0.32	mg/L			04/06/20 15:26	1
Fluoride	<0.026	0.1	0.026	mg/L			04/06/20 15:26	1
Sulfate	<0.38	1.	0.38	mg/L			04/06/20 15:26	1

Lab Sample ID: LCS 180-312143/5

Matrix: Water

Analysis Batch: 312143

7	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%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

Client Sample ID: Lab Control Sample

102

Prep Type: Total/NA

Prep Type: Total/NA

	IVID	IVID						
Analyte	Result (Qualifier R	L 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	0.1	0 0.026	mg/L			04/06/20 15:35	1
Sulfate	<0.38	1	0 0.38	3 mg/L			04/06/20 15:35	1

Lab Sample ID: LCS 180-312144/5

M

Sulfate

Matrix: Water							Prep Type: Total/NA
Analysis Batch: 312144							
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	50.0	51.3		mg/L		103	90 - 110
Fluoride	2.50	2.44		mg/L		98	90 - 110

50.8

mg/L

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90 - 110

50.0

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 1.5 25.0 25.5 80 - 120 mg/L 96 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

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

MB MB Analyte Result Qualifier RL MDL Unit D Prepared Dil Fac Analyzed Chloride 1.0 0.32 mg/L < 0.32 04/07/20 17:25 Fluoride < 0.026 0.10 0.026 mg/L 04/07/20 17:25 Sulfate <0.38 1.0 0.38 mg/L 04/07/20 17:25

Lab Sample ID: LCS 180-312254/5

Matrix: Water

Analysis Batch: 312254

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

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Chloride 50.0 47.6 mg/L 95 90 - 110 Fluoride 2.50 2.30 92 mg/L 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**

	MB	MB							
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 15:08	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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6/1/2020 (Rev. 3)

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

Lab Sample ID: MB 180-311071/1-A

Matrix: Water

Analysis Batch: 312904

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 311071**

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

Prep Batch: 311071

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Beryllium 0.0025 0.00018 mg/L 03/25/20 11:00 04/14/20 11:18 < 0.00018 03/25/20 11:00 04/14/20 11:18 Lithium < 0.0034 0.0050 0.0034 mg/L

Lab Sample ID: MB 180-311071/1-A

Matrix: Water

Analysis Batch: 313029

MB MB

RL **MDL** Unit Dil Fac Analyte Result Qualifier D Prepared Analyzed Boron <0.039 0.080 0.039 mg/L 03/25/20 11:00 04/15/20 13:39

Lab Sample ID: LCS 180-311071/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Analysis Batch: 312686 Prep Batch: 311071** Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit %Rec Limits 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 - 120 100 80 - 120 Molybdenum 0.500 0.502 mg/L 0.500 0.492 98 80 - 120 Lead mg/L Antimony 0.250 0.234 mg/L 94 80 - 120 1.00 101 80 - 120 Selenium 1.01 mg/L Thallium 1.00 0.995 mg/L 99 80 - 120

Lab Sample ID: LCS 180-311071/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Prep Batch: 311071** Analysis Batch: 312904 Spike LCS LCS %Rec. Analyte Added Result 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 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Analysis Batch: 313029 Prep Batch: 311071** Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec 1.25 Boron 1.23 mg/L 98 80 - 120

Lab Sample ID: 180-103809-1 MS

Matrix: Water

Analysis Batch: 312686	Sample	Sample	Spike	MS	MS				Prep Ba	atch: 311071
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
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	

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Client Sample ID: WGWC-8

Prep Type: Total Recoverable

Job ID: 180-103809-1

Client Sample ID: WGWC-8

Client Sample ID: WGWC-8

Client Sample ID: WGWC-8

Client Sample ID: WGWC-8

Prep Type: Total Recoverable

Prep Batch: 311071

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-103809-1 MS

Matrix: Water

Analysis Batch: 312686	Sample	Sample	Spike	MS	MS				Prep Batch: 311071 %Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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									Prep Batch: 31107
-	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Beryllium	0.0028		0.500	0.527		mg/L		105	75 - 125
Lithium	0.015		0.500	0.532		ma/L		103	75 ₋ 125

Lab Sample ID: 180-103809-1 MS

Matrix: Water

Analysis Batch: 313029

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 1.25 mg/L Boron 2.2 3.64 111 75 - 125

Lab Sample ID: 180-103809-1 MSD

Matrix: Water

Analysis Batch: 312686									Prep Ba	atch: 31	11071
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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							- 1	rep ıy	pe: Total I	Recove	rabie
Analysis Batch: 312904									Prep Ba	atch: 3	11071
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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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Client Sample ID: WGWC-8

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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 Client Sample ID: WGWC-8 **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 313029 Prep Batch: 311071** MSD MSD Sample Sample Spike **RPD** %Rec. Analyte Result Qualifier Added Result Qualifier Limits RPD Limit Unit %Rec Boron 2.2 1.25 109 75 - 125 20 3.61 mg/L

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-311010/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA Analysis Batch: 311297 Prep Batch: 311010 MR MR

Result Qualifier RL **MDL** Unit **Prepared** Analyzed Analyte 0.00020 03/24/20 19:39 03/26/20 19:20 Mercury <0.00010 0.00010 mg/L

Lab Sample ID: LCS 180-311010/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 311010 Analysis Batch: 311297** Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Mercury 0.00250 0.00241 mg/L 97 80 - 120

Lab Sample ID: 180-103809-7 MS Client Sample ID: WGWC-15 **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 311297 Prep Batch: 311010** Sample Sample Spike MS MS %Rec. **Analyte** Result Qualifier Added Result Qualifier Unit D %Rec Limits

75 - 125 Mercury <0.00010 0.00100 0.000884 mg/L 88

Lab Sample ID: 180-103809-7 MSD **Client Sample ID: WGWC-15 Matrix: Water** Prep Type: Total/NA **Analysis Batch: 311297 Prep Batch: 311010** Sample Sample Spike MSD MSD %Rec. **RPD**

Result Qualifier Added Limits Analyte Result Qualifier Unit %Rec RPD Limit Mercury <0.00010 0.00100 0.000847 mg/L 85 75 - 125

Lab Sample ID: MB 180-311012/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 311297 Prep Batch: 311012**

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00020 0.00010 mg/L 03/24/20 19:42 03/26/20 19:48 Mercury <0.00010

Lab Sample ID: LCS 180-311012/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 311012 Analysis Batch: 311297**

LCS LCS Spike %Rec. Analyte Added Result Qualifier Limits Unit Mercury 0.00250 0.00238 mg/L 95 80 - 120

Prep Type: Total/NA

Prep Type: Total/NA

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 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 310933

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Total Dissolved Solids 10 10 mg/L 03/24/20 08:00 <10

Lab Sample ID: LCS 180-310933/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310933

LCS LCS Spike %Rec. Added Result Qualifier Unit D %Rec Limits 242 Total Dissolved Solids 236 mg/L 98 80 - 120

Lab Sample ID: 180-103809-8 DU Client Sample ID: WGWC-16

Matrix: Water

Analysis Batch: 310933

Sample Sample DU DU **RPD** Analyte Result Qualifier Result Qualifier Unit RPD Limit Total Dissolved Solids 370 410 mg/L

Lab Sample ID: MB 180-310934/2 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 310934

MB MB

RL Analyte Result Qualifier **MDL** Unit Dil Fac Prepared Analyzed **Total Dissolved Solids** <10 10 10 mg/L 03/24/20 08:03

Lab Sample ID: LCS 180-310934/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310934

Spike LCS LCS %Rec Added Limits Analyte Result Qualifier Unit %Rec Total Dissolved Solids 242 258 107 80 - 120 mg/L

Lab Sample ID: 180-103809-1 DU Client Sample ID: WGWC-8 Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310934

DU DU **RPD** Sample Sample Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 540 576 mg/L

Lab Sample ID: 180-103809-7 DU **Client Sample ID: WGWC-15** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310934

Sample Sample DII DII RPD Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 160 164 mg/L 0.6

Lab Sample ID: MB 180-310936/2 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 310936

MB MB Result Qualifier RL **MDL** Unit Analyte Analyzed Dil Fac Prepared Total Dissolved Solids 10 03/24/20 08:08 <10 10 mg/L

Eurofins TestAmerica, Pittsburgh

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 **Matrix: Water**

Analysis Batch: 310936

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Total Dissolved Solids 242 80 - 120 276 mg/L 114

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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	
l	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	

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-

Job ID: 180-103809-1

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QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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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Job ID: 180-103809-1

QC Association Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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	

Eurofins TestAmerica, Pittsburgh

2

Job ID: 180-103809-1

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Cooler Temperature(s) C and Other Remarks

Custody Seal No.:

TestAme - Pittsburgh							Toct A mo
301 Alpha Dr DC Park Pittsburgh PA 13238	Chain	Chain of Custodyecord	lyecc	rd	681-Atlanta	anta	
Phone (412) 963-7058 Fax (412) 963-2468							THE LEADER IN ENVIRONMENTAL TESTING
Client Information	Sampler. T. Golole / A.	Schnittler.	Lab PM: Veronica Bortot	ortot		Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone:		E-Mail: (Veronica.E	3ortot@testar	E-Mail: (Veronica. Bortot@testamericainc.com)		Page:
Company: Southern Company					Analysis Requested	uested	Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:						Preservation Codes:
City: Birmingham	TAT Requested (days):						
State, Zip: AL, 35291							D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3
Phone:	PO #: SCS10347656		(0)	180-10	80-103809 Chain of Custody	atody	
Email: JAbraham@southernco.com			-	_			1 - Ice J - DI Water
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709		-		sı		The K-EDIA W-PH4-5
Site: Georgia	SSOW#:		_		82		of co Other:
	Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=waste/oit MS/N	p. III Metals F, SO ₄ & TD: A 300.0 & SI	// qqA bətəət (wolad tzil əs S. 8 3SS muib 8\2 \2 6\2 \2 6 3\8 -\8		tal Mumber
Sample Identification	Sample Date Time	G=grab)]]	D AF	S)		Special Instructions/Note:
Manc. 4	3-19-20 1249	1	Z	×	×		3 pH= (0.43
MOMC 'A	-	0	z	/ ×	×		3 pH= 6,64
NOWCIO	3-18-20 1455	9	z	X	X		
MGWC-12	3-14-20 1145	ŋ	z	X X	X		76 9 =Hd 7
WGWC-13	3-19-20 1115	O C	Z Z	XX	X		3 ph= 6.56
WGWC-14K	3-19-20 133	S G	N W	XX	XX		3 PH= 5.49
MG-US	3.18-20 1035	O O	N N	X	XX		3 pH= 7.73
MGW C-16	3-18-20 1145	9 0	N	X	XX		3 PH= 5.04
WGWC-17	3-18-20 1511	Ŋ	N W	X	XX		3 pH= 6.29
WGW C-19	3-19-20 1320	9 0	N N	XX	XX		3pH= 7,11
EB-2 3-19-20	3-19-20 1310	9	N W	X	×		-Hd C
L			Š	ample Dispo	sal (A fee may be a	ssessed if samples are	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Non-Hazard Flammable Skin Irritant P	Poison B Unknown	Radiological		Return To Client	o Client D	Disposal By Lab	Archive For Months
Deliverable Requested: I, III, IV, Other (specify)			S	oecial Instruct	Special Instructions/QC Requirements:	ıts:	
Empty Kit Relinquished by;	Date:		Time:			Method of Shipment:	
Delinentished hou	Doto Climo:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Doodlood hy		Contraction of the contraction o	

Ver: 08/04/2016

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Custody Seals Intact: △ Yes △ No

300

Cooler Temperature(s) °C and Other Remarks:

Chain of Custody .. ecord

TestAmera Pittsburgh

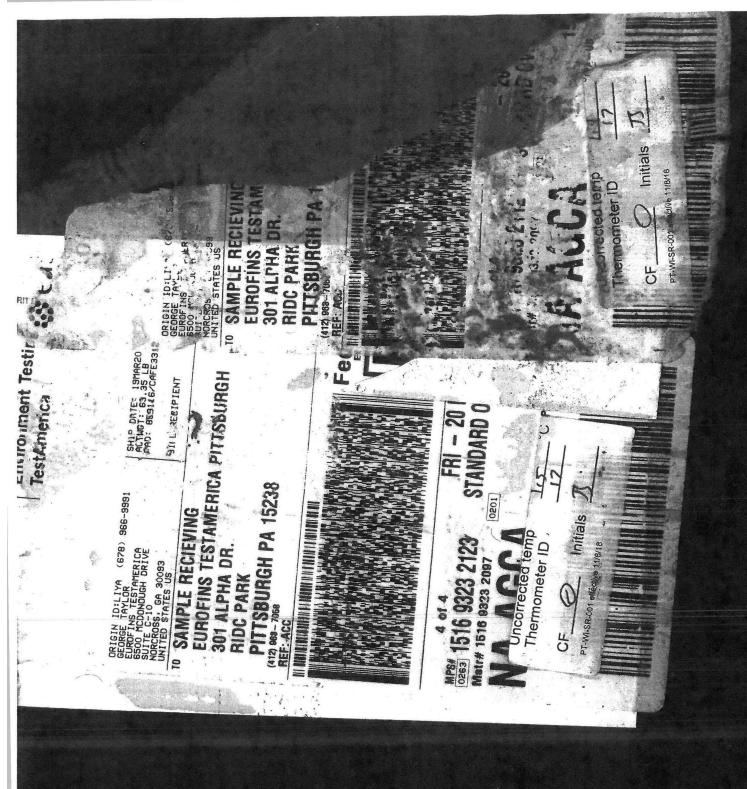
681-Atlanta TestAm ica

301 Alpha Dr	טֿ	nain of	Chain of Custodyecord	dye	cord		681-Atlanta	THE LEADER IN ENVIRONMENTAL TESTING	7 9
Client Information	Sampler: T. Goble		A. Schnitter		Lab PM: Veronica Bortot		Carrier Tracking No(s):	COC No:	
Client Contact:	Phone:			$\overline{}$		E-Mail:		Page:	T
Juju Abraham Company:		l		(veron	ca. boi ioi@le			Job #:	T
Southern Company					The second second second	Analysis F	Requested		
Address: PO BOX 2641 GSC8	Due Date Requested:							vation Code	
City: Birmingham	TAT Requested (days):	s):							
State, Zip: AL, 35291	T							D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3	
Phone:	PO#: SCS10347656							G - Amchlor S - H2SO4	
Email: JAbraham@southernco.com	.#OM			N 30 S	SHAPP PROPERTY.			1 - Ice J - DI Water	<u> </u>
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			9X) 9	es or			Charles Control Control	
Site: Georgia	SSOW#:			dmes	s ISD (k	/ Metal		of cor	
				Matrix (w=water,	MSM mm slatalls OQT & QO SQT & 0.008	// qqA bə: (woləd tə S & 3SS m :e\31£6 34		TedmuM	
Sample Identification	Sample Date	Sample ((C=comp, c	S=solid, O=waste/oil, BT=Tissue, A=Air	Perfor App. II CI, F, S	Detect il se2) ruibsЯ		Special Instructions/Note:	
		X		Code:	Z O				
Duplikate 2	3-18-20		9	Z M	7 7 2	メイ		-Ha	
FB-1 3-18-20	3-18-20	1455	9	Z M	×	メ		S pH= /	
FB-2 3-19-20	3-19-20	1230	ŋ	Z A	X	メス		3 pH= 1	
			g	×	z			=Hd	
			g	Z M	z			=Hd	
			ŋ	N	z			=Hd	
			g	N	z			=Hd	
			g	N	z			=Hd	
			g	×	z			=Hd	
			g	×	z			=Hd	
			9	W	z			=Hd	
Possible Hazard Identification	Doison B Inknown	_	Padiological		Sample Dis	le Disposal (A fee may t	be assessed if samples are	ger than 1 mc	
ested: I, II, III, IV, Other (specify)		1			Special Inst	Requir	nents:	Alcilive ror	
Empty Kit Relinquished by;	О	Date:			Time:		Method of Shipment:		
Relinquished by:	Date/Time:	11/10	00	Company	Received by:	by:	Date/Time:	16:11 Company	I

Detected APP IV: Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride Custody Seals Intact: △ Yes △ No

Custody Seal No.:

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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

----- 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

Client: Southern Company Project/Site: CCR - Plant Wansley Ash Pond Laboratory Job ID: 180-103809-2

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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.

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Job ID: 180-103809-2

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Definitions/Glossary

Client: Southern Company Job ID: 180-103809-2

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

Rad

Qualifier Qualifier Description

U Result is less than the sample detection limit.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
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)

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	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

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Job ID: 180-103809-2

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Laboratory: Eurofins TestAmerica, St. Louis

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

Authority	Program	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
lowa	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

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Job ID: 180-103809-2

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Sample Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset I
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	
80-103809-4	WGWC-12	Water	03/18/20 11:45	03/20/20 09:00	
80-103809-5	WGWC-13	Water	03/19/20 11:15	03/20/20 09:00	
80-103809-6	WGWC-14A	Water	03/19/20 13:35	03/20/20 09:00	
30-103809-7	WGWC-15	Water	03/18/20 10:35	03/20/20 09:00	
0-103809-8	WGWC-16	Water	03/18/20 11:45	03/20/20 09:00	
80-103809-9	WGWC-17	Water	03/18/20 15:11	03/20/20 09:00	
80-103809-12	DUPLICATE 2	Water	03/18/20 00:00	03/20/20 09:00	
80-103809-13	FB-1 3-18-20	Water	03/18/20 14:55	03/20/20 09:00	
80-103809-14	FB-2 3-19-20	Water	03/19/20 12:30	03/20/20 09:00	

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Job ID: 180-103809-2

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Protocol References:

None = None

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

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

Laboratory References:

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

Job ID: 180-103809-2

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1:

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-8

Date Collected: 03/19/20 12:49

Lab Sample ID: 180-103809-1

Matrix: Water

Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumer	t 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
	Instrumer	t ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
	Instrumer	t 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

Lab Sample ID: 180-103809-3

Matrix: Water

Matrix: Water

Prep Type Total/NA	Batch Type Prep	Batch Method PrecSep-21	Run	Dil Factor	Amount 1000.38 mL	Final Amount 1.0 g	Batch Number 465545	Prepared or Analyzed 03/25/20 12:24	Analyst RBR	Lab TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA Total/NA	Prep Analysis Instrumer	PrecSep_0 9320 at ID: GFPCPURPLE		1	1000.38 mL	1.0 g	465549 467676	03/25/20 12:53 04/14/20 13:43		TAL SL TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

Client Sample ID: WGWC-10

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			1000.49 mL	1.0 g	465545	03/25/20 12:24	RBR	TAL SL
Total/NA	Analysis Instrumen	9315 it ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.49 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCPURPLE		1			467676	04/14/20 13:43	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

Instrument ID: NOEQUIP	
Client Sample ID: WGWC-12	Lab Sample ID: 180-103809-4
Date Collected: 03/18/20 11:45	Matrix: Water
Date Received: 03/20/20 09:00	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-103809-4 **Client Sample ID: WGWC-12**

Date Collected: 03/18/20 11:45 **Matrix: Water** Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9320 at ID: GFPCPURPL	Ē	1			467676	04/14/20 13:43	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 t ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

Lab Sample ID: 180-103809-5 Client Sample ID: WGWC-13 **Matrix: Water**

Date Collected: 03/19/20 11:15 Date Received: 03/20/20 09:00

Batch		Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumen	9315 nt ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.88 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis Instrumen	9320 nt ID: GFPCPURPLE		1			467676	04/14/20 13:43	KLS	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

Lab Sample ID: 180-103809-6 Client Sample ID: WGWC-14A

Date Collected: 03/19/20 13:35 Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.89 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			467676	04/14/20 13:43	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

Client Sample ID: WGWC-15 Lab Sample ID: 180-103809-7

Date Collected: 03/18/20 10:35 Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t 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
	Instrumen	t ID: GFPCPURPLE	<u> </u>							

Eurofins TestAmerica, Pittsburgh

Job ID: 180-103809-2

Matrix: Water

Matrix: Water

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

Batch Batch Dil Initial Final Batch Prepared Method Factor or Analyzed **Prep Type** Type Run Amount Amount Number Analyst Lab Total/NA Ra226_Ra228 467932 04/16/20 10:11 SMP TAL SL Analysis

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.63 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			467676	04/14/20 13:44	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			467927	04/16/20 04:54	CJQ	TAL SL
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	465549	03/25/20 12:53	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			467676	04/14/20 13:44	KLS	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			467932	04/16/20 10:11	SMP	TAL SL

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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
	Instrumen	t 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
	Instrumen	t ID: GFPCPROTEAL	N							
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
	Instrumen	t ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

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Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-1 3-18-20 Lab Sample ID: 180-103809-13

Date Collected: 03/18/20 14:55 Date Received: 03/20/20 09:00

Matrix: Water

Job ID: 180-103809-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			467927	04/16/20 06:44	CJQ	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.47 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
	Instrumer	nt ID: GFPCPROTE	AN							
Total/NA	Analysis	Ra226_Ra228		1			467932	04/16/20 10:11	SMP	TAL SL
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: FB-2 3-19-20

Lab Sample ID: 180-103809-14 Date Collected: 03/19/20 12:30

Matrix: Water

Date Received: 03/20/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt 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 Instrumer	9320 nt ID: GFPCPROTE	AN	1			467710	04/14/20 13:39	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt 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

Eurofins TestAmerica, Pittsburgh

Client Sample ID: WGWC-8

Lab Sample ID: 180-103809-1

Matrix: Water

Job ID: 180-103809-2

Date Collected: 03/19/20 12:49 Date Received: 03/20/20 09:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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

Date Collected: 03/19/20 11:22

Date Received: 03/20/20 09:00

Lab Sample ID: 180-103809-2

Matrix: Water

- Method: 9315 - I	Radium-226 (GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - I	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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

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

Job ID: 180-103809-2

Method: Ra226_	_Ra228 -	Combined	Radium-22	6 and	Radium-228

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.230	Ū	0.301	0.302	2.00	0.446	pCi/L		04/16/20 10:11	1

Lab Sample ID: 180-103809-3 **Client Sample ID: WGWC-10**

Date Collected: 03/18/20 14:55 Date Received: 03/20/20 09:00

Matrix: Water

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.165	Ū	0.137	0.138	1.00	0.200	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/25/20 12:24	04/16/20 04:54	1

Method: 9320 - Radium-228 (GFPC)

		(011 0)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/25/20 12:53	04/14/20 13:43	
Y Carrier	78.1		40 - 110					03/25/20 12:53	04/14/20 13:43	1

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228

Welliou. Nazzo_Na	220 - CUII	Inilien Ve	aululli-220 a	illu Naului	11-220					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.461	U	0.336	0.338	2.00	0.500	pCi/L		04/16/20 10:11	1
+ 228										

Client Sample ID: WGWC-12 Lab Sample ID: 180-103809-4 Date Collected: 03/18/20 11:45 **Matrix: Water** Date Received: 03/20/20 09:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					03/25/20 12:24	04/16/20 04:54	1

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-2

Method: 9320	- Radium-228	(GFPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0492	Ū	0.260	0.260	1.00	0.474	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					03/25/20 12:53	04/14/20 13:43	1
Y Carrier	71.8		40 - 110					03/25/20 12:53	04/14/20 13:43	1

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

_		Count	Total					
		Uncert.	Uncert.					
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Un	nit Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.0262 U	0.290	0.290	2.00	0.474 pC	Di/L	04/16/20 10:11	1
+ 228								

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 - F	Radium-226 (GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.107	Ū	0.132	0.132	1.00	0.217	pCi/L	03/25/20 12:24	04/16/20 04:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					03/25/20 12:24	04/16/20 04:54	1

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

Method: 9320 - R	≺adium-228 (0	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.362	Ū	0.271	0.273	1.00	0.424	pCi/L	03/25/20 12:53	04/14/20 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					03/25/20 12:53	04/14/20 13:43	1
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

			Count	ıotai					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Combined Radium	0.470		0.301	0.303	2.00	0.424 pCi/L		04/16/20 10:11	1

226 + 228

Client Sample ID: WGWC-14A

Lab Sample ID: 180-103809-6 Date Collected: 03/19/20 13:35

Matrix: Water

Job ID: 180-103809-2

Method:	9315 -	Radium-226	(GFPC)

Date Received: 03/20/20 09:00

Method: 9315 - Rad	dium-226 ((GFPC)	0	T.4.1						
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - I	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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_Ra2	228 - Combined Rad	dium-226 a	nd Radium	1-228				
_		Count	Total					
		Uncert.	Uncert.					
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
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 Date Collected: 03/18/20 10:35 **Matrix: Water** Date Received: 03/20/20 09:00

Method: 9315 - F	Radium-226 ((GFPC)								
		, , ,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - F	Radium-228 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0678	U	0.269	0.269	1.00	0.469	pCı/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

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-2

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

momountari razzo_ra			a.a 							
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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)

Wethou. 9319 - Ra		,00,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier Ba Carrier	%Yield 88.4	Qualifier	Limits 40 - 110					Prepared 03/25/20 12:24	Analyzed 04/16/20 04:54	Dil Fac

Method: 9320 - Radium-228 (GFPC)

		,	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	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

Wethou. Nazzo_Na	1220 - 0011	ibilieu ita	ululli-220 a	illa itaululi	1-220					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 - Ra	Method: 9315 - Radium-226 (GFPC)											
		, ,	Count Uncert.	Total Uncert.								
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac		
Radium-226	0.0223	Ū	0.124	0.124	1.00	0.240	pCi/L	03/25/20 12:24	04/16/20 04:54	1		
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac		
Ba Carrier	89.9		40 - 110					03/25/20 12:24	04/16/20 04:54	1		

Client Sample ID: WGWC-17 Lab Sample ID: 180-103809-9 Date Collected: 03/18/20 15:11

Matrix: Water

Job ID: 180-103809-2

Date Received: 03/20/20 09:00

Radium-228 ((GFPC)								
	, , ,	Count	Total						
		Uncert.	Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.0432	U	0.248	0.248	1.00	0.439	pCi/L	03/25/20 12:53	04/14/20 13:44	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
89.9		40 - 110					03/25/20 12:53	04/14/20 13:44	1
79.6		40 - 110					03/25/20 12:53	04/14/20 13:44	1
	Result 0.0432 %Yield 89.9		Count Uncert. (2σ+/-)	Count Uncert. Uncert. Uncert. (2σ+/-) (2σ+/-)	Count Uncert. Uncert. Uncert.	Count Uncert. Uncert. Vincert. Vincer	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Uncert. Count Uncert. Cou	Count Uncert. Prepared Analyzed O3/25/20 12:53 O4/14/20 13:44

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 Total Count Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ **MDC** Unit RL Prepared Analyzed 0.0655 U 0.277 0.277 2.00 0.439 pCi/L 04/16/20 10:11 Combined Radium 226 + 228

Lab Sample ID: 180-103809-12 Client Sample ID: DUPLICATE 2

Date Collected: 03/18/20 00:00 **Matrix: Water**

Date Received: 03/20/20 09:00

Method: 9315 - I	Radium-226 (GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					03/25/20 12:24	04/16/20 06:43	

Method: 9320 - Ra	dium-228 ((GFPC)	0	T . 4 . 1						
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.223		0.258	0.259	1.00	0.424		03/25/20 12:53		1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	228 - Con	nbined Ra	dium-226 a	nd Radiur	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.260	U	0.276	0.277	2.00	0.424	pCi/L		04/16/20 10:11	1

Client Sample ID: FB-1 3-18-20

Lab Sample ID: 180-103809-13

Matrix: Water

Job ID: 180-103809-2

Date Collected: 03/18/20 14:55

Date Received: 03/20/20 09:00

Method: 9315 - Radium-226 (GFPC) Count Total Uncert. Uncert. RL MDC Unit Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ Prepared Analyzed Dil Fac 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 %Yield Qualifier Carrier Limits Prepared Analyzed Dil Fac Ba Carrier 91.4 40 - 110

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 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 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 91.4 40 - 110 Y Carrier 77.8 40 - 110 03/25/20 12:53 04/14/20 13:39

Method: Ra226 Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Result Qualifier **MDC** Unit Dil Fac **Analyte** $(2\sigma + / -)$ $(2\sigma + / -)$ RL Prepared Analyzed -0.0408 U 0.321 0.321 2.00 0.542 pCi/L 04/16/20 10:11 Combined Radium 226 + 228

Client Sample ID: FB-2 3-19-20

Lab Sample ID: 180-103809-14

Date Collected: 03/19/20 12:30

Matrix: Water

Date Received: 03/20/20 09:00

Method: 9320 - Radium-228 (GFPC)

84.5

Y Carrier

Method: 9315 - Radium-226 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 03/25/20 12:24 04/16/20 06:44 Radium-226 0.00689 U 0.119 0.119 1.00 0.234 pCi/L Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 91.4 40 - 110 03/25/20 12:24 04/16/20 06:44

Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 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 Carrier Prepared **%Yield Qualifier** Limits Analyzed Dil Fac Ba Carrier 91.4 40 - 110 03/25/20 12:53 04/14/20 13:39

40 - 110

03/25/20 12:53 04/14/20 13:39

Client Sample Results

Client: Southern Company Job ID: 180-103809-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2 3-19-20 Lab Sample ID: 180-103809-14

Date Collected: 03/19/20 12:30 Matrix: Water Date Received: 03/20/20 09:00

Method: Ra226_F	Ra228 - Combined	Radium-226 and	Radium-228
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			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.425	U	0.346	0.348	2.00	0.517	pCi/L	-	04/16/20 10:11	1
+ 228										

9

10

4.6

1:

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-103809-2

Prep Batch: 465545

MB MB Uncert. Uncert. Result Qualifier MDC Unit Analyte $(2\sigma + / -)$ $(2\sigma + / -)$ RI Prepared Analyzed Dil Fac Radium-226 0.01663 U 03/25/20 12:24 04/16/20 06:44 0.0885 0.0885 1.00 0.176 pCi/L

Total

MB MB

Carrier Qualifier Limits %Yield Prepared Analyzed Ba Carrier 40 - 110 03/25/20 12:24 04/16/20 06:44 95.7

Count

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Dil Fac

10

Prep Batch: 465545

Total

Spike LCS LCS Uncert. %Rec. Added RL **Analyte** Result Qual $(2\sigma + / -)$ MDC Unit %Rec Limits Radium-226 9.183 1.09 1.00 0.205 pCi/L 75 ₋ 125

LCS LCS

Lab Sample ID: LCS 160-465545/1-A

Carrier %Yield Qualifier I imits Ba Carrier 95.7 40 - 110

Lab Sample ID: LCSD 160-465545/2-A

Matrix: Water

Matrix: Water

Analysis Batch: 467927

Analysis Batch: 467927

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 465545

Total Spike LCSD LCSD Uncert.

11.3

RER %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL**MDC** Unit Limits %Rec RER Limit Radium-226 11.3 9.005 1.07 1.00 0.197 pCi/L 79 75 - 125 0.08

LCSD LCSD

%Yield Qualifier Carrier Limits 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

MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.2261 Ū 0.288 0.288 1.00 0.477 pCi/L 03/25/20 12:53 04/14/20 13:40

Total

Count

MB MB

Dil Fac Carrier **%Yield Qualifier** Limits Prepared Analyzed Ba Carrier 95.7 40 - 110 03/25/20 12:53 04/14/20 13:40 82.2 40 - 110 03/25/20 12:53 04/14/20 13:40 Y Carrier

QC Sample Results

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-103809-2

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

Total Spike LCS LCS Uncert. %Rec. Analyte Added RL **MDC** Unit Limits Result Qual (2σ+/-) %Rec Radium-228 0.475 pCi/L 75 - 125 8.93 8.213 1.02 1.00 92

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 40 - 110 95.7 Y Carrier 77.0 40 - 110

Lab Sample ID: LCSD 160-465549/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 467676

Prep Type: Total/NA

Prep Batch: 465549

Total

LCSD LCSD %Rec. **RER** Spike Uncert. Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit Radium-228 0.435 pCi/L 8.93 8.041 0.996 1.00 90 75 - 125 0.09

LCSD LCSD %Yield Qualifier Carrier Limits Ba Carrier 94.5 40 - 110 Y Carrier 79.3 40 - 110

Eurofins TestAmerica, Pittsburgh

QC Association Summary

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

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	
180-103809-2	WGWC-9	Total/NA	Water	PrecSep-21	
180-103809-3	WGWC-10	Total/NA	Water	PrecSep-21	
180-103809-4	WGWC-12	Total/NA	Water	PrecSep-21	
180-103809-5	WGWC-13	Total/NA	Water	PrecSep-21	
180-103809-6	WGWC-14A	Total/NA	Water	PrecSep-21	
180-103809-7	WGWC-15	Total/NA	Water	PrecSep-21	
180-103809-8	WGWC-16	Total/NA	Water	PrecSep-21	
180-103809-9	WGWC-17	Total/NA	Water	PrecSep-21	
180-103809-12	DUPLICATE 2	Total/NA	Water	PrecSep-21	
180-103809-13	FB-1 3-18-20	Total/NA	Water	PrecSep-21	
180-103809-14	FB-2 3-19-20	Total/NA	Water	PrecSep-21	

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	
180-103809-2	WGWC-9	Total/NA	Water	PrecSep_0	
180-103809-3	WGWC-10	Total/NA	Water	PrecSep_0	
180-103809-4	WGWC-12	Total/NA	Water	PrecSep_0	
180-103809-5	WGWC-13	Total/NA	Water	PrecSep_0	
180-103809-6	WGWC-14A	Total/NA	Water	PrecSep_0	
180-103809-7	WGWC-15	Total/NA	Water	PrecSep_0	
180-103809-8	WGWC-16	Total/NA	Water	PrecSep_0	
180-103809-9	WGWC-17	Total/NA	Water	PrecSep_0	
180-103809-12	DUPLICATE 2	Total/NA	Water	PrecSep_0	
180-103809-13	FB-1 3-18-20	Total/NA	Water	PrecSep_0	
180-103809-14	FB-2 3-19-20	Total/NA	Water	PrecSep 0	

Job ID: 180-103809-2

cooler Temperature(s) °C and Other Remarks

Chain of Custody ..ecord

TestAmerina Pittsburgh 301 Alpha Dr 3C Park Pittsburgh, PA 15238

681-Atlanta

TestAm ica

11011e (412) 303-7 030 FdX (412) 303-2400									
lient Information	Sampler: T. Gabile	/A.	Schnittler		Lab PM: Veronica Bortot	ب		Carrier Tracking No(s):	COC No:
ient Contact. oju Abraham	Phone:				nica.Bort	ot@testa	E-Mail: (Veronica.Bortot@testamericainc.com)		Page:
ompany: outhern Company							Analysis Reguested	quested	Job #:
ddress:	Due Date Requested:	:pa							Preservation Codes:
ty: imingham	TAT Requested (days)	1ys):							A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2
late, Zip: L, 35291									
hone:	PO#: SCS10347656				(0	180-1	80-103809 Chain of Custody	700	F - MeOH R - Na2S203 G - Amchlor S - H2SO4 H - Ascribic Acid T - TSP Doderahydrate
mail: Abraham@southernco.com	WO #:				N. Salarana	3		doolog	I - Ice J - DI Water
roject Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709				THE PERSON NAMED IN	()	s		K - EDTA W - pH 4-5
ite: Seorgia	SSOW#:						82		of col
		Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=wastefoil,	ield Filtered erform MS/N pp. III Metals	I, F, SO ₄ & TD:	// qqA bətəətə (wolad təil əəč S. 8 3SZ muibs. 9/3156 348-W2		1edmuV listo
valiple luellulication	Sample Date		Preserva	Preservation Code:	X		3)		A Special Instructions/Note:
WGWC. &	3-19-20	1249	9	3	Z	X	X		3 PH= 6.43
WCWC-9	3-19-20	1122	9	M	Z	*	×		3 pH= 6,64
NGWC-10	3-18-20	1455	9	8	Z	X	X		3 pt= 6.40
WGWC-12	3-18-20	1145	ß	W	Z	X	XX		7 b. 9 =Hd 7
Wewc-13	3-19-20	1115	G	W	Z	X	×		3 pH= 6.5.6
MGWC-14K	3-19-20	1335	9	W	Z	X	X		3 pt= 5.49
WGWC-15	3.18.20	1035	g	W	Z	X	X		3 pt= 7.73
MGWC-16	3-18-20	1145	O	Ν	z	X	×		20 PH= 50.04
WGWC-17	3-18-20	1511	9	W	Z	X	×		3pH= 6.29
WGW C-19	3-19-20	1320	Ö	W	z	X	.×		3 pH= 7.11
EB-2 3-19-20	3-19-20	1310	9	M	Z	X	×		J PH=
1		1			Sam	le Disp	osal (A fee may be	assessed if samples are re	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
ant	Poison B Unknown		Radiological			Return	Return To Client	osal By Lab	Archive For Months
					Spec	al Instru	Special Instructions/QC Requirements:	ents:	

Lead APP IV: Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride

Custody Seal No.:

Date/Time: 3-19-26

Empty Kit Relinquished by

linquished by:

Ver: 08/04/2016

Company

lethod of Shipment

6/10/2020 (Rev. 1)

Custody Seals Intact: △ Yes △ No

300

cooler Temperature(s) °C and Other Remarks:

Detected APP IV: Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium; Radium Fluoride

Custody Seal No.:

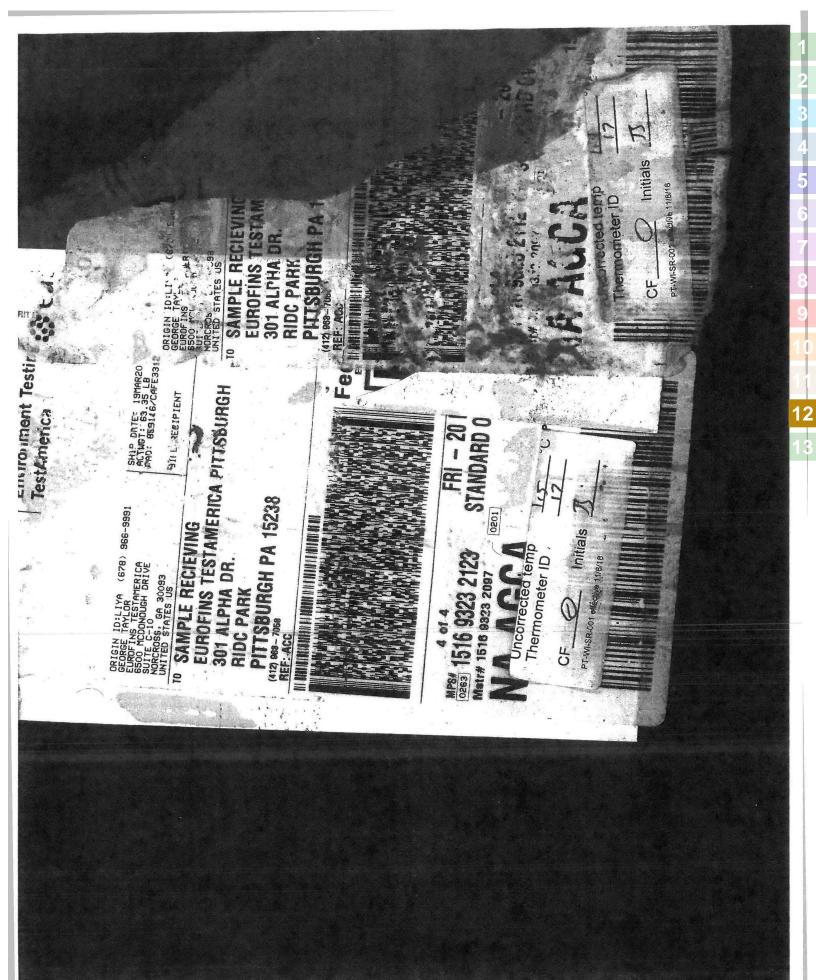
Chain of Custody .. ecord

TestAmera Pittsburgh

681-Atlanta TestAm ica

301 Alpha Dr	Chain	Chain of Custodyecord	yecord		681-Atlanta	THE LEADER IN ENVIRONMENTAL TESTING
Client Information	Sampler: T. GODIE	A. Schnittler	Lab PM: Veronica Bortot		Carrier Tracking No(s):	COC No:
Client Contact: Joju Abraham	Phone:		E-Mail: (Veronica.Bortot@	E-Mail: (Veronica.Bortot@testamericainc.com)		Page:
Company: Southern Company				Analysis Requested	uested	Job #:
Address: PO BOX 2641 GSC8	Due Date Requested:					B
City: Birmingham	TAT Requested (days):					A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip. AL, 35291						
Phone:	PO#: SCS10347656		(0			G - Amchlor S - H2SO4
Емаі: JAbraham@southernco.com	:MO#:				SJ	J - DI Water
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709				ənistr	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
Site: Georgia	SSOW#:		A) ası	A 2540	00 to	Other:
		Sample	Matrix (Wawater, Sasolid, Saso	8 0.005 8 0.005 Wight poly Wight	I Number	and the state of t
Sample Identification	Sample Date Time	(C=comp, G=grab)	Perfe Perfe App.	(EPA Detec (See	stoT	Special Instructions/Note:
		Preservation Code	ode: N D N			
Duplikate 2	3-18-20	9	ZZ	メメ		PH=
FB-1 3-18-20	3-18-20 1455	ŋ	× z z	メメ	[2]	PH=
FB-2 3-19-20	3-19-20 1230	9	N N W	イメイン		3 pH=
		5	zz			=Hd
		9	zz			=Hd
		9	ZZ			=Hd
		0	ZZ			=Hd
		9	z z			=Hd
		9	z z			=Hd
		0	Z			=Hd
		5	z			=Hd
ant	☐ Poison B ☐ Unknown	Radiological	Sample D	ole Disposal (A fee may be a Return To Client	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	etained longer than 1 month) Archive For Months
			Special In	Special Instructions/QC Requirements:		
Empty Kit Relinquished by	Date:		Time:		Method of Shipment:	
Relinquished by: Tolker Manual	Date/Time:	Company	Received by:	7 Sed by:	Q Date/Time:	16,00 Company

Custody Seals Intact: △ Yes △ No



Chain of Custody Record

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive RIDC Park

eurofins Environment Testing TestAmerica

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company: Tompany: 13715 Rider Trail North, Coty: Earth City State, Zip: And				Lab PM:				Carrier Tracking No(s)	(S)O	COCO	
ract. WReceiving srica Laboratories, Inc. ider Trail North,				Bortot	Bortot, Veronica	æ		Silver in the second	.(0).	180-388549.1	
orica Laboratories, Inc. ider Trail North, , iy	Phone:			E-Mail: veroni	ca.bortot	@testan	E-Mail: veronica.bortot@testamericainc.com	State of Origin: Georgia		Page: Page 1 of 2	
ider Trail North, ,				d	ccreditation	ns Require	Accreditations Required (See note):			Job #: 180-103809-2	
λ,	Due Date Requested: 4/20/2020	÷					Analysis Reguested	nested		Preservation Codes	des:
ate, Zip:	TAT Requested (days)	(8):								A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
3043					tes					D - Nitric Acid E - NaHSO4	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	,# Od				W.S.	snA y	poute			G - Amchlor H - Ascorbic Acid	K - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate
Email:	WO#				(0)	D) Cob	ocsi We				
Project Name: CCR - Plant Wanslev Ash Pond	Project #: 18019922				8 ot N	IOM) I	og (ac			Name and Address of the Owner, where	W - pH 4-5 Z - other (specify)
	:#MOSS				SD (Ye	c2eb_2	N) /2d-			of cont	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (w=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered S Perform MS/M 9320_Ra228/Pre	9315_Ra226/Pre	8228 [™] GF			Total Number of	Special Instructions/Note:
	\\	X	a la		X						mad definitions.
WGWC-8 (180-103809-1)	3/19/20	12:49 Fastern		Water	×	×	×			-	
WGWC-9 (180-103809-2)	3/19/20	11:22 Eastern		Water	×	×	×			1	
WGWC-10 (180-103809-3)	3/18/20	14:55 Eastern		Water	×	×	×			-	
WGWC-12 (180-103809-4)	3/18/20	11:45 Eastern		Water	×	×	×			2	
WGWC-13 (180-103809-5)	3/19/20	11:15 Eastern		Water	×	×	×			+	
WGWC-14A (180-103809-6)	3/19/20	13:35 Eastern		Water	×	×	×			-	
WGWC-15 (180-103809-7)	3/18/20	10:35 Eastern		Water	×	×	×			•	
WGWC-16 (180-103809-8)	3/18/20	11:45 Eastern		Water	×	×	×			+	
WGWC-17 (180-103809-9)	3/18/20	15:11 Eastern		Water	×	×	×			1	
Note. Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract lab maintain accreditation in the State of Origin listed above for analysis/lests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or or TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica	places the ownership sing analyzed, the sar ite, return the signed	of method, an nples must be Chain of Custo	alyte & accredita shipped back to dy attesting to s	tion complianc the Eurofins Te aid complicanc	e upon out estAmerica e to Eurofin	subcontract laboratory is TestAme	method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently les 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 ain of Custody attesting to said complicance to Eurofins TestAmerica.	le shipment is forw e provided. Any ch	arded under changes to accre	ain-of-custody. If the lab ditation status should be	oratory does not currently brought to Eurofins
Possible Hazard Identification					Sample	e Dispo:	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	ssessed if san	nples are re	tained longer than	1 month)
]	Return To Client	o Client	Disposal By Lab		Archive For	Months
I, III, IV, Other (specify)	Primary Deliverable Rank:	ole Rank: 2			Specia	l Instruct	Special Instructions/QC Requirements:	ıts:			
linguished by:		Date:			Time:			Method of Shipment:	hipment.		
	2731	710	00	Compan	Rec	Received by:	#		Date/Time;		Company
Relinquished by:	Bafe/firme: Date/Time:	,	8 8	Company	Rece	Received by:	natorinh	My	Date/Time:	:30 9606	S THA ST
г	***)			
Custody Seals Infact: Custody Seal No.: △ Yes △ No					Coo	er Tempe	Cooler Temperature(s) °C and Other Remarks	narks:			

Environment Testing 🔆 eurofins

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

S - H2SO4 T - TSP Dodecahydrate U - Acetone Special Instructions/Note: Ver: 01/16/2019 W - pH 4-5 Z - other (specify) O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 Months Сотрапу SO: IS CITY Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Preservation Codes: G - Amchlor H - Ascorbic Acid Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the labo COC No: 180-388549.2 180-103809-2 Page: Page 2 of 2 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH I - Ice J - DI Water K - EDTA L-EDA Micha Koninhina 334 200 Total Number of containers Date/Time ethod of Shipment Carrier Tracking No(s) State of Origin: Georgia **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: veronica.bortot@testamericainc.com Accreditations Required (See note) SazzeRazza_GFPC/ (MOD) Local Method × eceived by: × × 315_Ra226/PrecSep_21 (MOD) Copy Analytes × × × Lab PM: Bortot, Veronica 9320_Ra228/PrecSep_0 (MOD) Copy Analytes × × × × × Perform MS/MSD (Yes or No) ime: Field Filtered Sample (Yes or No) (W=water, S=solid, O=waste/oil, Preservation Code: Water Matrix Water Water Water Water Company Type (C=comp, G=grab) Sample Primary Deliverable Rank: 2 Eastern 13:10 Eastern Eastern 12:30 Sample Eastern Eastern 14:55 Date: TAT Requested (days): Due Date Requested: 4/20/2020 Sample Date 3/19/20 3/18/20 3/18/20 3/19/20 3/18/20 Project #. 18019922 Client Information (Sub Contract Lab) Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Sample Identification - Client ID (Lab ID) 314-298-8566(Tel) 314-298-8757(Fax) 加 CCR - Plant Wansley Ash Pond DUPLICATE 2 (180-103809-12) Possible Hazard Identification TestAmerica Laboratories, Inc. EB-2 3-19-20 (180-103809-11) FB-1 3-18-20 (180-103809-13) FB-2 3-19-20 (180-103809-14) WGWC-19 (180-103809-10) Empty Kit Relinquished by: Custody Seals Intact: 13715 Rider Trail North Shipping/Receiving Wansley CCR quished by: inquished by nquished by: State, Zip: MO, 63045 Unconfirmed Earth City

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.</td <td>True</td> <td></td>	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	

Client: Southern Company

Job Number: 180-103809-2

Login Number: 103809

List Number: 2

Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis

List Creation: 03/24/20 06:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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 ampered 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	
s 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

·····LINKS ······

Review your project results through Total Access

Have a Question?



Visit us at: 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

Table of Contents

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12

1:

Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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.

2

Job ID: 180-105386-1

3

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Definitions/Glossary

Client: Southern Company Job ID: 180-105386-1

Project/Site: CCR - Plant Wansley Ash Pond

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)

3

4

0

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Accreditation/Certification Summary

Client: Southern Company

Job ID: 180-105386-1 Project/Site: CCR - Plant Wansley Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
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

Job ID: 180-105386-1

Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Job ID: 180-105386-1

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1:

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-19

Date Collected: 05/04/20 11:15

Lab Sample ID: 180-105386-1 **Matrix: Water**

Date Received: 05/06/20 09:20

Prep Type Total/NA	Batch Type Analysis	Batch Method EPA 300.0 R2.1 ID: CHICS2100B	Run	Factor 1	Initial Amount	Final Amount	Batch Number 315658	Prepared or Analyzed 05/16/20 18:07	Analyst MJH	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrument	3005A EPA 6020B		1	50 mL	50 mL	314849 315496	05/07/20 16:07 05/13/20 22:13		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrument	3005A EPA 6020B ID: A		1	50 mL	50 mL	314849 315543	05/07/20 16:07 05/14/20 18:39		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrument	7470A EPA 7470A ID: HGZ		1	50 mL	50 mL	314833 314888	05/07/20 16:00 05/07/20 20:00		TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			315129	05/04/20 11:15	FDS	TAL PIT

Client Sample ID: EB-1-5-4-2020

Date Collected: 05/04/20 11:00 Date Received: 05/06/20 09:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 6020B t 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 Instrumen	EPA 7470A t ID: HGZ		1			314888	05/07/20 20:01	NAM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT

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

Lab Sample ID: 180-105386-2

Matrix: Water

Matrix: Water

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 at ID: CHICS2100B	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 315658	Prepared or Analyzed 05/16/20 18:39	Analyst MJH	Lab TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	314849	05/07/20 16:07	JL	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			315496	05/13/20 22:20	RSK	TAL PIT

Lab Chronicle

Client: Southern Company Job ID: 180-105386-1

Project/Site: CCR - Plant Wansley Ash Pond

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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		1			315543	05/14/20 18:53	RSK	TAL PIT
	Instrumer	nt ID: A								
Total/NA	Prep	7470A			50 mL	50 mL	314833	05/07/20 16:00	NAM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			314888	05/07/20 20:02	NAM	TAL PIT
	Instrumer	it ID: HGZ								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	314792	05/07/20 09:15	AVS	TAL PIT
	Instrumer	t ID: NOEQUIP								

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

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Client Sample ID: WGWC-19 Lab Sample ID: 180-105386-1

Date Collected: 05/04/20 11:15 Date Received: 05/06/20 09:20

Matrix: Water

Job ID: 180-105386-1

Method: EPA 300.0 R2.1 - Anio	ns, Ion Chi	omatogra	phy						
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

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 22:13	1
Barium	<0.0016	0.010	0.0016	mg/L		05/07/20 16:07	05/13/20 22:13	1
Beryllium	<0.00018	0.0010	0.00018	mg/L		05/07/20 16:07	05/13/20 22:13	1
Boron	<0.039	0.080	0.039	mg/L		05/07/20 16:07	05/13/20 22:13	1
Cadmium	<0.00022	0.0010	0.00022	mg/L		05/07/20 16:07	05/13/20 22:13	1
Calcium	15	0.50	0.13	mg/L		05/07/20 16:07	05/13/20 22:13	•
Chromium	<0.0015	0.0020	0.0015	mg/L		05/07/20 16:07	05/13/20 22:13	1
Cobalt	0.00018	J 0.00050	0.00013	mg/L		05/07/20 16:07	05/13/20 22:13	1
Lead	<0.00013	0.0010	0.00013	mg/L		05/07/20 16:07	05/13/20 22:13	•
Lithium	0.049	0.0050	0.0034	mg/L		05/07/20 16:07	05/14/20 18:39	1
Molybdenum	0.0013	J 0.0050	0.00061	mg/L		05/07/20 16:07	05/13/20 22:13	1
Selenium	< 0.0015	0.0050	0.0015	mg/L		05/07/20 16:07	05/13/20 22:13	1
Thallium	<0.00015	0.0010	0.00015	mg/L		05/07/20 16:07	05/13/20 22:13	,

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 20:00	1
General Chemistry Analyte	Rosult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110	Qualifier	10		mg/L		Trepared	05/07/20 09:15	1

Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	6.90			SU			05/04/20 11:15	1
Client Sample ID: EB-1-5-4	-2020				Lak	Sample	ID: 180-105	386-2

Client Sample ID: EB-1-5-4-2020 Date Collected: 05/04/20 11:00

Date Received: 05/06/20 09:20

Method: EPA 300.0 R2.1 -	Anions, Ion Chr	omatograpl	hy						
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

Analyte	- Metals (ICP/MS) - To 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 22:17	1
Barium	<0.0016		0.010	0.0016	mg/L		05/07/20 16:07	05/13/20 22:17	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		05/07/20 16:07	05/13/20 22:17	1
Boron	<0.039		0.080	0.039	mg/L		05/07/20 16:07	05/13/20 22:17	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		05/07/20 16:07	05/13/20 22:17	1
Calcium	<0.13		0.50	0.13	mg/L		05/07/20 16:07	05/13/20 22:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		05/07/20 16:07	05/13/20 22:17	1

Eurofins TestAmerica, Pittsburgh

Matrix: Water

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

Job ID: 180-105386-1

Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recov	erable (Cor	itinued)					
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 - Mer	cury (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

Client Sample ID: Dup-1

Total Dissolved Solids

Date Collected: 05/04/20 00:00 Date Received: 05/06/20 09:20

Lab Sample ID: 180-105386-3

05/07/20 09:15

Matrix: Water

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result Qual	lifier 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		

10 mg/L

<10

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

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

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

_ Lab Sample ID: MB 180-315658/6

Matrix: Water

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 315658

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

Job ID: 180-105386-1

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 1.0 0.32 mg/L 05/16/20 10:28 <0.32 0.10 0.026 mg/L 05/16/20 10:28 < 0.026 05/16/20 10:28 < 0.38 1.0 0.38 mg/L

Lab Sample ID: LCS 180-315658/5

Matrix: Water

Analysis Batch: 315658

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
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

,									
	MB	MB							
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 21:42	1
Barium	<0.0016		0.010	0.0016	mg/L		05/07/20 16:07	05/13/20 21:42	1
Beryllium	<0.00018		0.0010	0.00018	mg/L		05/07/20 16:07	05/13/20 21:42	1
Boron	<0.039		0.080	0.039	mg/L		05/07/20 16:07	05/13/20 21:42	1
Cadmium	<0.00022		0.0010	0.00022	mg/L		05/07/20 16:07	05/13/20 21:42	1
Calcium	<0.13		0.50	0.13	mg/L		05/07/20 16:07	05/13/20 21:42	1
Chromium	<0.0015		0.0020	0.0015	mg/L		05/07/20 16:07	05/13/20 21:42	1
Cobalt	< 0.00013		0.00050	0.00013	mg/L		05/07/20 16:07	05/13/20 21:42	1
Lead	< 0.00013		0.0010	0.00013	mg/L		05/07/20 16:07	05/13/20 21:42	1
Molybdenum	<0.00061		0.0050	0.00061	mg/L		05/07/20 16:07	05/13/20 21:42	1
Selenium	<0.0015		0.0050	0.0015	mg/L		05/07/20 16:07	05/13/20 21:42	1
Thallium	<0.00015		0.0010	0.00015	mg/L		05/07/20 16:07	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

	11.5 11.5						
Analyte	Result Qua	alifier RL	MDL Ur	nit D	Prepared	Analyzed	Dil Fac
Lithium	<0.0034	0.0050	0.0034 mg	g/L	05/07/20 16:07	05/14/20 18:29	1

MR MR

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

Analysis Batch: 315496	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
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

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Job ID: 180-105386-1

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 314833

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Project/Site: CCR - Plant Wansley Ash Pond

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

, , , , , , , , , , , , , , , , , , , ,	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	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					F	rep Ty	pe: Total Recoverable
Analysis Batch: 315543							Prep Batch: 314849
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	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

MR MR

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 19:53	1

Lab Sample ID: LCS 180-314833/2-A

Matrix: Water

Analysis Batch: 314888							Prep Ba	atch: 314833
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	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

	IND IND						
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

Lab Sample ID: LCS 180-314792/1

Matrix: Water

Analysis Batch: 314792

	Sp	ike	LUS	LUS					%Rec.	
Analyte	Add	ded	Result	Qualifier	Unit	D	9	%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

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	314833
180-105386-2	EB-1-5-4-2020	Total/NA	Water	EPA 7470A	314833
180-105386-3	Dup-1	Total/NA	Water	EPA 7470A	314833
MB 180-314833/1-A	Method Blank	Total/NA	Water	EPA 7470A	314833
LCS 180-314833/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	314833

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	314849
180-105386-2	EB-1-5-4-2020	Total Recoverable	Water	EPA 6020B	314849
180-105386-3	Dup-1	Total Recoverable	Water	EPA 6020B	314849
MB 180-314849/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	314849
LCS 180-314849/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	314849

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	314849
180-105386-2	EB-1-5-4-2020	Total Recoverable	Water	EPA 6020B	314849
180-105386-3	Dup-1	Total Recoverable	Water	EPA 6020B	314849
MB 180-314849/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	314849
LCS 180-314849/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	314849

Eurofins TestAmerica, Pittsburgh

Job ID: 180-105386-1

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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	

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Chain of Custody Record

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

681-Atlanta TestAmerico

Slient Information	Owens Fuquea			Veroni	Lab PM: Veronica Bortot	tot				a a a a	Carrier Tracking No(s)		COC		
ilient Contact:	Phone: 770 549 5009			E-Mail:	o coid	10,00	- Caroto	100	l moo	Γ			Page:		
oju Abranam	7 7 0-548-5888			(vero	nica.bo	101(@1	(Veronica. Bortot@testamericainc.com)	ricainc.	com)	-					
ompany: Southern Company								Anal	ysis R	Analysis Requested	7		.# #:		
ddress:	Due Date Requested	d:				_							Preservation Codes	odes:	
ity: iminoham	TAT Requested (days):	ıys):											B - NaOH	N - None	
state, Zip:	2-De	14	11										D - Nitric Acid	P - Na204S	
AL, 35291	1	1											E - NaHSO4 F - MeOH		
hone:	PO#: SCS10347656				(0)								G - Amchlor H - Ascorbic Acid		vdrate
email: JAbraham@southernco.com	:# OM				-							LS	I - Ice J - DI Water		
Project Name: SCR - Plant Wansley - Ash Pond	Project #: 40007709				-							ənistr	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
itie. 3eorgia	SSOW#:				-			87	(02:			100 100	Other:		
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=crab)	Matrix (w=water, S=solid, O=waste/oli, BT=Triscile A=alr)	Field Filtered S Perform MS/M	4pp. III Metals 71, F, 50 ₄ & TDS	MS & 0.005 A99	VI qqA bətəəbəC See list below) Sadium SSS & SSS	26/9186 948-WS			TedmuM lsto	izang	Special Instructions (Note:	
	$\langle \rangle$	X	Preserva	55,000	X	Z)			X			
WGWC-19	5/4/20	1115	g	8	z	×		×					pH= 6.90		
EB-1-5-4-2020	5/4/20	1100	O	3	z	×		×	_				pH= NA		
DUP-1	1	ı	O	3	z	×	×	×	_				pH= NA		
			9	8	z								=Hd		
			9	8	z								=Hd		
8			9	×	z	-							=Hd		
			ŋ	8	z	1							=Hd		
			9	W	z	1 4							=Hd		
			g	W	z								=Hd		
			ŋ	W	z		180-1	05386	Chain	180-105386 Chain of Custody	λ		=Hd		
			ŋ	W	z	_	_		_	_	_		=Hd		
ant	Design B Hunknown	Ц	Radiological		San	Diple D	le Disposal (A	(A fe	e may b	e assessed if san	d if sampl	es are retain	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	1 month)	
1					Spe	cial Ins	struction	1S/QC	Special Instructions/QC Requirements:	nents:	and for			SIBION	
Empty Kit Relinquished by:		Date:			Time:		(1	N	Method of Shipment:	nent:			
Relinquished by:	Date/Time: 5/5	02/8	Ohol	Company		Received by	id by:	11	N	1	Date	Date/Time; 4/20	0401	Company	
Relinquished by M	0	16	S	Company	7	Received by	y pa	1/2 of	13	1	Dat	Date/Time/	920	Company (1)	1
Relinguiened by:	/ Date/Time:	2		Company		Received by	ed by:	7	1		Dat	Date/Time:		Company	
Custody Seals Intact:	Custody Seal No	lo.:				Cooler	Temperat	ture(s) °(3 and Oth	Cooler Temperature(s) °C and Other Remarks:					
Detected APP IV: Metals: Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Lead Lithium Molybdenum Selenium Thallium Mercury; Radium Fluoride	eryllium Cadmium Chro	mium Cob.	alt Lead Li	thium Molyb	denum	Selen	ium Th	allium	Mercur	y; Radiur	1 Fluoride			Ver. 08/04/2016	, y

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

10 SAMPLE RECIEVING

301 ALPHA DR.

SHIP DATE: 05MAY20 ACTWGT: 54.85 LB CAD: 859116/CAFE3313 EUROFINS TESTAMERICA PITTSBURGH BILL RECIPIENT

PITTSBURGH PA 15238 REF: SOUTHERN CO RIDC PARK (412) 963-7058

FedEx

WED - 06 MAY 3:00P STANDARD OVERNIGHT TRK# 1516 9323 4891

VA AGCA

Uncorrected temp Thermometer ID O Initials

SF

PT-WI-SR-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.

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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

----- LINKS -----

Review your project results through Total Access

Have a Question?



Visit us at:

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

Table of Contents

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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.

Job ID: 180-105386-2

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Definitions/Glossary

Client: Southern Company Job ID: 180-105386-2

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

Rad

Qualifier Qualifier Description

U Result is less than the sample detection limit.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
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)

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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

6/5/2020

Eurofins TestAmerica, Pittsburgh

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

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

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6/5/2020

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
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	

Job ID: 180-105386-2

Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Protocol References:

None = None

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

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

Laboratory References:

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

Job ID: 180-105386-2

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-19 Lab Sample ID: 180-105386-1

Date Collected: 05/04/20 11:15 Date Received: 05/06/20 09:20

Matrix: Water

Job ID: 180-105386-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			471867	06/03/20 04:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			1000.32 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			471096	05/21/20 16:41	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			471874	06/03/20 09:41	SMP	TAL SL

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

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 at ID: GFPCBLUE		1			471867	06/03/20 04:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			1000.06 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			471096	05/21/20 16:41	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			471874	06/03/20 09:41	SMP	TAL SL

Client Sample ID: Dup-1 Lab Sample ID: 180-105386-3 Date Collected: 05/04/20 00:00

Date Received: 05/06/20 09:20

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	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 Instrumer	9315 nt ID: GFPCBLUE		1			471867	06/03/20 04:14	KLS	TAL SL
Total/NA	Prep	PrecSep_0			1000.07 mL	1.0 g	470205	05/12/20 10:02	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			471096	05/21/20 16:41	AJD	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			471874	06/03/20 09:41	SMP	TAL SL

Laboratory References:

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

Eurofins TestAmerica, Pittsburgh

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Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Analyst References:

Lab: TAL SL

Batch Type: Prep

RBR = Rachael Ratcliff

Batch Type: Analysis

AJD = Audra DeMariano

KLS = Kody Saulters

SMP = Siobhan Perry

Job ID: 180-105386-2

Client Sample ID: WGWC-19 Lab Sample ID: 180-105386-1

Date Collected: 05/04/20 11:15 Date Received: 05/06/20 09:20

Matrix: Water

Job ID: 180-105386-2

Method: 9315 - Rad	dium-226 ((GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		40 - 110					05/12/20 09:20	06/03/20 04:14	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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_Ra2	28 - Con	nbined Ra	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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 Lab Sample ID: 180-105386-2 Date Collected: 05/04/20 11:00 **Matrix: Water** Date Received: 05/06/20 09:20

Method: 9315 -	Radium-226 (GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.2		40 - 110					05/12/20 09:20	06/03/20 04:14	1

Method: 9320 -	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
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

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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: Ra226_	S_Ra228 - Combined Radium-226 and Radium	-228
----------------	--	------

Mictiloa. Mazzo_Ma		ibilica ita	alam LLO a	iid itaaiai						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.101	Ū	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

Date Collected: 05/04/20 00:00 Date Received: 05/06/20 09:20

Matrix: Water

Method: 9315 - Radium-226 (GEPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.7		40 - 110					05/12/20 09:20	06/03/20 04:14	1

Method: 9320 - Radium-228 (GFPC)

		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
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
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	71.7		40 - 110					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

_			Count Uncert.	Total Uncert.						
Analyte	Result (Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC U	Jnit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0357	U	0.295	0.295	2.00	0.511 p	Ci/L		06/03/20 09:41	1

Eurofins TestAmerica, Pittsburgh

Project/Site: CCR - Plant Wansley Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-470201/23-A

Matrix: Water

Matrix: Water

Analysis Batch: 471867

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 470201

MB MB Uncert. Uncert. Result Qualifier **MDC** Unit Analyte $(2\sigma + / -)$ $(2\sigma + / -)$ RI Prepared Analyzed Dil Fac Radium-226 0.01889 U 05/12/20 09:20 06/03/20 06:01 0.0404 0.0404 1.00 0.0751 pCi/L

Total

MB MB

Carrier Qualifier Limits %Yield Prepared Analyzed Dil Fac Ba Carrier 40 - 110 05/12/20 09:20 06/03/20 06:01 95.5

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 470201

Analysis Batch: 471867

Total

Spike LCS LCS Uncert. %Rec. Added RLLimits Analyte Result Qual $(2\sigma + / -)$ MDC Unit %Rec Radium-226 11.3 11.19 1.00 0.124 pCi/L 99 75 - 125 1.17

Count

LCS LCS

Carrier %Yield Qualifier Limits 75.3 40 - 110 Ba Carrier

Lab Sample ID: LCS 160-470201/1-A

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

			Count	IUlai					
	MB	MB	Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
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	1

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 40 - 110 05/12/20 10:02 05/21/20 16:39 95.5 Y Carrier 86.0 40 - 110 05/12/20 10:02 05/21/20 16:39

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

Total **Spike** LCS LCS Uncert.

MB MB

%Rec. Added RL Limits Analyte Result Qual $(2\sigma + / -)$ MDC Unit %Rec 1.00 75 - 125 Radium-228 8.82 9.366 1.17 0.544 pCi/L 106

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 75.3 40 - 110 Y Carrier 81.5 40 - 110

QC Association Summary

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

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	- <u> </u>
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	

Job ID: 180-105386-2

Chain of Custody Record

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

TestAmerica Pittsburgh

THE LEADER IN ENVIRONMENTAL TESTING

681-Atlanta TestAmerica

Client Information	Owens Fuquea			Veronica Bortot	ca Bo	tot				Callel Hacking No(s)	(e) oki Billy		5				_
Client Contact: Joiu Abraham	Phone: 770-548-5998			E-Mail: (Veron	ica.Bc	ortota	testam	ericai	E-Mail: (Veronica.Bortot@testamericainc.com)				Page:	ë			
Company: Southern Company								Ā		Requested			Job #:	#			-
Address:	Due Date Requested:	Ġ:					-				F	L	Pre	Preservation Codes	odes:		_
PO BOX 2641 GSC8 City:	TAT Requested (days):	vs):									_		Υď	HCL	M - Hexane	э	
Birmingham	C	f	1										000	Zn Acetate	O - AsNa	02	_
State, Zip: AL, 35291	5-Day	1	/				_							D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3	45 03	_
Phone:	PO #: SCS10347656				10								<u> </u>	G - Amchlor		203 14	
Email: JAbraham@southernco.com	.#OM			N 20 3									Obligation of the	I - Ice J - DI Water		U - Acetone V - MCAA	
Project Name: CCR - Plant Wansley - Ash Pond	Project #: 40007709			N/ 01			(၁	s					NO SPONSO	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	.5 (specify)	
Site: Georgia	SSOW#:				No. of Concession,			Metal				_	and the same	Other:			-
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Watrix (Wewater, Sesolid, Oewaste/oll, BT=Tissue, A=AIr)	Field Filtered Perform MS/M	App. III Metals CI, F, SO4 & TDS	MS & 0.006 A93)	VI qqA bətəətəD (wolad tail əa2)	Radium 226 & 2 (SW-846 9315/93				Total Number	Special	Special Instructions/Note:	s/Note:	_
	\bigvee	X	B	ion Code:	X		7						X				_
WGWC-19	5/4/20	1115	O	Α	z	×	×	×	×				표	pH= 6.90			_
EB-1-5-4-2020	5/4/20	1100	O	A	z	×	×	×	×				핍	pH= NA			_
DUP-1	-	1	O	M	z	×	×	×	×				됩	pH= NA			_
			ŋ	M	z								=Hd	11			_
			9	M	z								Hd				_
×			9	Μ	z		_						=Hd	11			_
			9	M	z								=Hd	15			_
			9	M	z								=Hd	11			7
			g	M	z								=Hd	11			
			9	×	z	Ш	180	-1053	80-105386 Chain of Custody	Custody			Hd	11			
			9	N	z			_	_		_	_	Ha	н			
Possible Hazard Identification Non-Hazard Elammable Skin Irriant Poison B	Son B Kilnknown	Ш	Radiological		Sar	nple	le Disposal (A t	al (A	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if san	if sampl	es are re	stained Ion	onger than	1 month)		_
1					Spe	scial II	nstructi	Ons/O	Special Instructions/QC Requirements:	ents:	ran A			5	DION.	2	
Empty Kit Relinquished by:		Date:			Time:		(1	Meth	Method of Shipment:	ment:					
Relinquished by:	Date/Time: 5/8	02/8	Ohol	Company		Regeli	Regeived by:		1		Dat	Date/Time;	120	1040	Company	1/4	1
Relinquished by/	Date/Time:	160	S	Company	1	Recei	Received by:	K	3		Dat	Date/Time/	7	920	Compan	Company (A)	1
0		2		Company		Recei	Received by:		2		Dat	Date/Time:			Company	λí	
Custody Seals Intact:	Custody Seal N	lo.:				Coole	г Тетре	rature(s	Cooler Temperature(s) °C and Other Remarks	Remarks:							
Desected APP IV: Metals: Antimony Arsenic Baryllium Cadmium Chromium Cobalt Lead Lithium Wolybdenum Selenium Thallium Wercury: Radium Fluoride	m Cadmium Chro	mium Cob	alt Lead Lit	hium Molybo	lenum	Sele	nium 7	halliu	ım Mercury,	Radium F	-luoride				77	7700104/2016	1



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

SHIP DATE: 05MAY20 ACTWGT: 54.85 LB CAD: 859116/CAFE3313 BILL RECIPIENT

EUROFINS TESTAMERICA PITTSBURGH 10 SAMPLE RECIEVING

PITTSBURGH PA 15238 301 ALPHA DR. RIDC PARK (412) 963-7058

REF: SOUTHERN CO

FedEx

WED - 06 MAY 3:00P STANDARD OVERNIGHT

VA AGCA

O Initials Uncorrected temp Thermometer ID

PT-WI-SR-001 effective 7/26/13 SF

180-105386 Waybill

eurofins Environment Testing America

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Client Information (Sub Contract Lab)

Sompany: TestAmerica Laboratories, Inc.

Client Contact: Shipping/Receiving

13715 Rider Trail North,

Phone: 412-963-7058 Fax: 412-963-2468

D - Nitre Acid		Analysis Requested	Accreditations Required (See note): Job #: 180-105386-2	Lab PM: Carrier Tracking No(s): COC No: Brown, Shali 180-393008.1	M Hexane N None O AsNaO2 P Na2O4S Q Na2SO3 R Na2SSO3 S H2SO4 T T SP Dodecahydrate U Accordor V MCAA W pH 4+5 Z - other (specify)	A - HCL B - NaOH C - Zn Acetate D - Ninro Acid E - NaHSO4 F - MeOH G - Ameother G - Ameother H - Ascorbic Acid I - Cea J - Di Water K - EDTA L - EDA
228_GFPC/ (MOD) Local Method	iced Sample (Yes or No) MS/MSD (Yes or No) MS/MSD (Yes or No) MS/MSD (Yes or No)	Seed Sample (Yes or No) MS/MSD (Yes or No)	RESIDENCE OF THE STATE OF THE S	Matrix Matrix		inn le:
#SD (Yes or No) ecSep_21 (MOD) Copy Analy PPC/ (MOD) Local Method	#SD (Yes or No) ecSep_0 (MOD) Copy Analytes ecSep_21 (MOD) Local Method PPC/ (MOD) Local Method	#SD (Yes or No) ecSep_0 (MOD) Copy Analytes PPC/ (MOD) Local Method	Analytes ecSep_0 (MOD) Copy Analytes pcSep_21 (MOD) Local Method PPC/ (MOD) Local Method of containers	State of Origin: State of Origin Georgia Analysis Requested PPC/ (MOD) Local Method Analysis Requested Of containers		ипшрег
Yes or No) 24 (MOD) Copy Analys (MOD) Local Method (MOD) Local Method 1- I - Ios 1- I	Yes or No) (MOD) Copy Analytes (MOD) Local Method (MOD) Local Method (MOD) Local Method (MOD) Local Method	Yes or No) 2.1 (MOD) Copy Analytes 2.2 (MOD) Copy Analytes 2.3 (MOD) Local Method (MOD) Local Method 1. Local Method 2. J. Di Waler 3. Di Waler 4. Local Method 6. Amchlor 7. Local Method 8. Amchlor 8. Amchlor 9. Local Method 1. Lo	Analysis Requested A - HCL A - HCL A - HCL A - HCL B - NaOH C - Zn Acetale C - Zn Acetale D - Nitric Acetale C - Zn A	brown@lestamericainc.com State of Origin: Page: Accreditations Required (See note): Analysis Requested Analysis Requester Analysis Analysis Requester Analysis Analys		
Mo) Copy Analys Cocal Method Cocal Method Local Method Copy Analys Cocal Method	OD) Copy Analytes OD) OD) Copy Analytes OD) OD) Copy Analytes	Mo) Copy Analytes Cocal Method	Analysis Requested A - HCL A - HCL C - Zn Acetale C - Zn Acetale C - Zn Acetale C - Zn Acetale C - Namlro Acid E - NaHSOH F - MeOH F - M	brown@lestamericainc.com State of Origin: Page: Accreditations Required (See note): Job Analysis Requested Analysis Analysis Requested Analysis Requested Analysis Analysis Requested Analysis An	7	L - EDA
opy Analysi Copy Analysi Method I Method I Ascorbic Acid	opy Analytes Copy Analytes I Method G - Anchlor H - Asonto Acid	opy Analytes Copy Analytes I Method F - Nach Agonhod	Analysis Requested A - HCL. B - NaOH Copy Analytes Copy Analytes I Method E - NaHSO4 F - MeOH F - MeO	brown@lestamericainc.com State of Origin: Page: Accreditations Required (See note): Analysis Requested Analysis Analysis Requested Analysis Requested Analysis Requested Analysis Requested Analysis Requested Analysis Requested Analysis Analysis Requested Analysis		J-DI Water K-EDTA
hod F. MeOH G. Amchlor	Annalytes C. Markod C. Annalytes C. Annalytes G. Annalytes	Analytes Analytes F. MacOH G. AmcHor	Analysis Requested A - HCL A - HCL C - Zh Acetalee D - Ninch Acid E - NaHSO4 F - MeOH G - Annchlor	State of Origin: Page: Page: Page of 1 of 1		H - Ascorbic Acid I - Ice
	C - Minic Acid	A - HCL B - NaOH C - Zn Acetate D - Ninto Acid	Analysis Requested A - HCL B - NaCH C - Zn Acetale	State of Origin: Page: Page of 1		F - MeOH G - Amchlor
10b #: 10b #: 180-105386-2 1	ysis Requested					Job #: 180-105386-2 Preservation Co

Phone: 314-298-8566(Tel) 314-298-8757(Fax)

State, Zip: MO, 63045 City: Earth City

CCR - Plant Wansley Ash Pond

Wansley CCR

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/lests/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 attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica. Possible Hazard Identification

Unconfirmed Unconfirmed Unconfirmed Unconfirmed Unconfirmed Unconfirmed Deliverable Rank: 2 Special Instructions/QC Requirements: Empty Kit Relinquished by: Relinqui	rossible riazard identification		2	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	ed if samples are retained	longer than	1 month)
. III. IV, Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements: Date:	Unconfirmed			Return To Client Dispos	al By Lab	For	Months
Date/Time: Date/Time: Company Received by: FED EX Date/Time: Date/Time: SAP/PAY O'QZO	Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	S	pecial Instructions/QC Requirements:	1	5	Months
FED EX Date/Time: Company Received by: FED EX Date/Time: Date/Time: Company Received by: September of 200 Date/Time: Date/Time: A No Cooler Temperature(s) "C and Other Remarks:	Empty Kit Relinquished by:	Date:	Time		lethod of Shipment:		
PED EX Date/Time: Company Received by: Company Received by: Cooler Temperature(s) °C and Other Remarks: Date/Time: Date/Time: Styrou. 0420 Styrou. 0420	Relinquished by:	120		Received by:	Date/Time:		Company
als Infact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks:				Received by:	Date/Time:	97.0	Company
Cooler Temperature(s) °C and Other Remarks:	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	00	Company
Ver: 01/16/2019	Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:			
							Ver: 01/16/2019

EB-1-5-4-2020 (180-105386-2)

Dup-1 (180-105386-3)

NGWC-19 (180-105386-1)

Sample Identification - Client ID (Lab ID)

N -

× × ×

× ×

Water Water

Eastern Eastern 11:00

> 5/4/20 5/4/20

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh							-				
301 Alpha Drive RIDC Park Pittsburgh, PA 15238	•	Shain	Chain of Custody Record	tody F	ecor	Q				euroiins	S Environment Testing America
Phone: 412-963-7058 Fax: 412-963-2468											
Client Information (Sub Contract Lab)	Sampler			Lab PM: Brown	Lab PM: Brown, Shali			Carrier Tracking No(s)	ng No(s):	COC No: 180-393008.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail: shali.b	il: i.brown@	testame	E-Mail: shall.brown@testamericainc.com	State of Origin: Georgia	11	Page: Page 1 of 1	
Сопрану: TestAmerica Laboratories, Inc.					Accreditati	ions Requ	Accreditations Required (See note):			Job #:	
Address; 13715 Rider Trail North,	Due Date Requested: 6/5/2020	:pe				ŀ	Analys	Analysis Requested		Preservation Codes:	odes:
Gly:	TAT Requested (days):	ays):				F				A - HCL B - NaOH	M - Hexane N - None
Earth City State, Zip: MO, 63045	T							-		C - Zn Acetate D - Nitric Acid E - NaHSO4	0 - AsNaO2 P - Na2O4S Q - Na2SO3
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #.				200	-	poq			F - MeOH G - Amchlor	
1	#OM				(0)		cal Me				
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				N 10 S		op) ro			K-EDTA L-EDA	W - pH:4-5 Z - other (specify)
Site: Wansley CCR	:#MOSS				en (ve		.ьс\ (м			of conf	
	8	Sample	Sample Type (C=comp,	Matrix (w=water, S=solid, O=waste/oil,	eld Filtered MS/M	20_Ra228/Pre	226Ra228_GF		-,-	TedmuM ls	
Sample Identification - Client ID (Lab ID)	Sample Date	Lime	G=grab) Preserva	S=grab) BT=Tissue, A=Air) Preservation Code:	d	-	eA .				Special Instructions/Note:
WGWC-19 (180-105386-1)	5/4/20	11:15		Water		×	>			-	
FB-1-5-4-2020 (180-105388-2)	6/4/20	Eastern 11:00		10/040		+	< >			- 1	
(7-0000-00-) 0707-1-0	07/4/50	Eastern		water		< <	×			2	
Dup-1 (180-105386-3)	5/4/20	Eastern		Water		×	×			-	
						4					
Note: Since laboratory accreditations are subject to change, Eurofins TestAmeri	rica places the ownershi	o of method, ar	nalyte & accred	itation complia	no uodn əpu	nt subcont	act laboratories.	his sample shipment is t	orwarded under chair	-of-custody. If the lab	oratory does not currently
maintain accreditation in the State of Origin listed above for analysis/tests/mainx being analyzed, the samples must be shipped back to the Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.	ix being analyzed, the sa to date, return the signed	imples must be Chain of Cust	s shipped back lody attesting to	to the Eurofins said complica	TestAmeric nce to Eurol	a laborato fins TestA	ry or other instruct nerica.	ions will be provided. An	ly changes to accredit	ation status should be	brought to Eurofins
Possible Hazard Identification			į.		Samp	ole Disp	osal (A fee m	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	samples are reta	ined longer than	1 month)
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	ble Rank: 2			Speci	al Instru	Special Instructions/QC Requirements:	uirements:		Archive For	Months
Empty Kit Relinquished by:		Date:			Time:			Method	Method of Shipment:		
Retinquished by:	Date/Time:	17	CU7	Company	St. Jak	Received by:	FF	<u>.</u>	Date/Time:		Company
Relinquished by: FED EX	Date/Time:			Company		Received by	0 4/1	2.	Date/Time:	0.47.0	Company F70 SF1
Relinquished by:	Date/Time:			Company	(E)	Received by			Date/Time:	3	
Custody Seals Intact: Custody Seal No.:				ŧ	Ö	ooler Temp	Cooler Temperature(s) °C and Other Remarks:	Other Remarks:			

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.

7

9

4 4

12

Client: Southern Company

Job Number: 180-105386-2

Login Number: 105386

List Number: 2

Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis List Creation: 05/07/20 12:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

Eurofins TestAmerica, Pittsburgh

Page 20 of 20

6/5/2020



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-111399-1

Client Project/Site: CCR - Plant Wansley Ash Pond

For:

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

Attn: Kristen N Jurinko

(Helfman)

Authorized for release by: 10/27/2020 11:00:08 AM

Shali Brown, Project Manager II (615)301-5031

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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: 180-111399-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-111399-1

Comments

No additional comments.

Receipt

The samples were received on 9/24/2020 9:15 AM and 9/26/2020 9:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.9° C, 1.9° C, 2.1° C, 2.4° C, 2.7° C and 3.4° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC wasn't relinquished.

GC Semi VOA

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

Metals

Method 6020B: The post digestion spike % recovery for phosphorus associated with batch 180-332751 was outside of control limits. The associated sample is: Dup-1 (180-111399-1).

Methods 6020A, 6020B: The low level continuing calibration verification (CCVL) associated with batch 180-333527 recovered above the upper control limit for iron. The samples associated with the CCVL were non-detects for the affected analytes and 10X the RL for the affected analytes; therefore, the data have been reported.

Methods 245.1, 7470A: The laboratory control sample (LCS) for preparation batch 180-332971 and analytical batch 180-333510 recovered outside control limits for the following analytes: Mercury These analytes were biased high in the LCS and were not detected in the associated samples; 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.

Field Service / Mobile Lab

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.

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Job ID: 180-111399-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

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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

* LCS or LCSD is outside acceptance limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
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)

TNTC Too Numerous To Count

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Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Laboratory: Eurofins TestAmerica, Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-20 *
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-21
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-20
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
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	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	02-01-21
Wisconsin	State	998027800	08-31-21

Job ID: 180-111399-1

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins TestAmerica, Pittsburgh

Sample Summary

Client: Southern Company

180-111526-13

WGWC-12

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-111399-1	Dup-1	Water	09/21/20 00:00	09/24/20 09:15	
180-111399-2	EB-1-9-22-20	Water	09/22/20 11:20	09/24/20 09:15	
180-111399-3	FB-1-9-22-20	Water	09/22/20 14:10	09/24/20 09:15	
180-111399-4	WGWA-2	Water	09/21/20 12:10	09/24/20 09:15	
180-111399-5	WGWA-4	Water	09/21/20 14:00	09/24/20 09:15	
180-111399-6	WGWA-3	Water	09/21/20 15:01	09/24/20 09:15	
180-111399-7	WGWA-1	Water	09/22/20 10:57	09/24/20 09:15	
180-111399-8	WGWA-5	Water	09/22/20 12:20	09/24/20 09:15	
180-111399-9	WGWA-6	Water	09/22/20 10:30	09/24/20 09:15	
180-111399-10	WGWA-7	Water	09/22/20 14:20	09/24/20 09:15	
180-111399-11	WGWA-18	Water	09/22/20 13:15	09/24/20 09:15	
180-111399-12	WGWC-8	Water	09/22/20 14:30	09/24/20 09:15	
180-111526-1	Dup-2	Water	09/23/20 00:00	09/26/20 09:00	
180-111526-2	EB-2-9-24-20	Water	09/24/20 11:50	09/26/20 09:00	
180-111526-3	FB-2-9-24-20	Water	09/24/20 10:00	09/26/20 09:00	
180-111526-4	WGWC-17	Water	09/23/20 11:11	09/26/20 09:00	
180-111526-5	WGWC-10	Water	09/23/20 12:25	09/26/20 09:00	
180-111526-6	WGWC-15	Water	09/23/20 14:35	09/26/20 09:00	
180-111526-7	WGWC-16	Water	09/23/20 13:30	09/26/20 09:00	
180-111526-8	WGWC-9	Water	09/23/20 15:50	09/26/20 09:00	
180-111526-9	WGWC-13	Water	09/24/20 11:05	09/26/20 09:00	
180-111526-10	WGWC-14A	Water	09/24/20 09:55	09/26/20 09:00	
180-111526-11	WGWC-19	Water	09/23/20 15:00	09/26/20 09:00	
180-111526-12	WGWC-11	Water	09/24/20 10:20	09/26/20 09:00	

Water

09/23/20 13:55 09/26/20 09:00

Job ID: 180-111399-1

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Batch

Type

Prep

Prep

Analysis

Analysis

Analysis

Analysis

Prep Type

Total Recoverable

Total Recoverable

Total/NA

Total/NA

Total/NA

Total/NA

Client Sample ID: Dup-1

Date Collected: 09/21/20 00:00 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-1

Matrix: Water

Matrix: Water

TAL PIT

TAL PIT

TAL PIT

Job ID: 180-111399-1

Batch Dil Initial Batch Batch Final Prepared Method Factor or Analyzed **Prep Type** Type Run **Amount** Amount Number **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 332056 10/02/20 18:10 EPS TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 332470 10/06/20 13:44 TJO TAL PIT Total Recoverable Analysis EPA 6020B 1 332836 10/08/20 15:55 RSK **TAL PIT** Instrument ID: NEMO Total/NA Prep 7470A 50 mL 50 mL 332349 10/05/20 18:35 MM1 TAL PIT Total/NA Analysis **EPA 7470A** 332694 10/07/20 16:50 KEM TAL PIT 1 Instrument ID: HGZ Analysis Total/NA SM 2540C 100 mL 100 mL 331211 09/25/20 06:48 AVS **TAL PIT** Instrument ID: NOEQUIP

Client Sample ID: EB-1-9-22-20 Lab Sample ID: 180-111399-2

Run

Dil

1

Factor

Initial

Amount

50 mL

50 mL

100 mL

Final

Amount

50 mL

50 mL

100 mL

332506

332827

331211

Date Collected: 09/22/20 11:20 Date Received: 09/24/20 09:15

Batch

Instrument ID: CHIC2100A

Instrument ID: NEMO

Instrument ID: HGZ

Instrument ID: NOEQUIP

3005A

7470A

EPA 6020B

EPA 7470A

SM 2540C

Method

EPA 300.0 R2.1

Batch Prepared Number or Analyzed Analyst Lab 332056 10/02/20 22:39 EPS TAL PIT 332470 TAL PIT 10/06/20 13:44 TJO 332836 10/08/20 16:12 RSK TAL PIT

10/07/20 18:42 MM1

10/08/20 18:45 KEM

09/25/20 06:48 AVS

Client Sample ID: FB-1-9-22-20

Date Collected: 09/22/20 14:10

Lab Sample ID: 180-111399-3

Matrix: Water

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			332056	10/02/20 23:43	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			332836	10/08/20 16:15	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332506	10/07/20 18:42	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			332827	10/08/20 18:46	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Instrument ID: NOEQUIP

Instrument ID: NOEQUIP

Field Sampling

Analysis

Date Received: 09/24/20 09:15

Client Sample ID: WGWA-2 Lab Sample ID: 180-111399-4

Date Collected: 09/21/20 12:10 Date Received: 09/24/20 09:15

Total/NA

Matrix: Water

Job ID: 180-111399-1

TAL PIT

Batch Dil Initial Batch Batch Final Prepared Method Factor or Analyzed **Prep Type** Type Run **Amount** Amount Number **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 332056 10/02/20 21:36 EPS TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 332470 10/06/20 13:44 TJO TAL PIT Total Recoverable Analysis EPA 6020B 1 332836 10/08/20 16:18 RSK **TAL PIT** Instrument ID: NEMO Total/NA Prep 7470A 50 mL 50 mL 332349 10/05/20 18:35 MM1 TAL PIT Total/NA Analysis **EPA 7470A** 332694 10/07/20 16:51 KEM TAL PIT 1 Instrument ID: HGZ Total/NA Analysis SM 2540C 100 mL 100 mL 331211 09/25/20 06:48 AVS TAL PIT

Client Sample ID: WGWA-4

Date Collected: 09/21/20 14:00

Lab Sample ID: 180-111399-5

Matrix: Water

333009

09/21/20 12:10 AGJ

Date Collected: 09/21/20 14:00
Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			332056	10/02/20 21:52	EPS	TAL PIT
	Instrument	ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			332836	10/08/20 16:20	RSK	TAL PIT
	Instrument	ID: NEMO								
Total/NA	Prep	7470A			50 mL	50 mL	332349	10/05/20 18:35	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			332694	10/07/20 16:52	KEM	TAL PIT
	Instrument	ID: HGZ								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
	Instrument	ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			333009	09/21/20 14:00	AGJ	TAL PIT
	Instrument	ID: NOEQUIP								

Client Sample ID: WGWA-3

Date Collected: 09/21/20 15:01

Lab Sample ID: 180-111399-6

Matrix: Water

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run **Factor** Amount Amount Number or Analyzed **Analyst** Lab 10/02/20 22:55 Total/NA Analysis EPA 300.0 R2.1 332056 EPS TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 332470 10/06/20 13:44 TJO TAL PIT Total Recoverable 10/08/20 16:23 RSK Analysis **EPA 6020B** 1 332836 **TAL PIT** Instrument ID: NEMO Total/NA Prep 7470A 50 mL 50 mL 332349 10/05/20 18:35 MM1 TAL PIT Total/NA Analysis **EPA 7470A** 332694 10/07/20 16:53 KEM TAL PIT Instrument ID: HGZ

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-3 Lab Sample ID: 180-111399-6

Date Collected: 09/21/20 15:01 Date Received: 09/24/20 09:15

Matrix: Water

Job ID: 180-111399-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis	Field Sampling		1			333009	09/21/20 15:01	AGJ	TAL PIT
	Instrument	ID: NOEQUIP								

Client Sample ID: WGWA-1 Lab Sample ID: 180-111399-7

Date Collected: 09/22/20 10:57 **Matrix: Water**

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHIC2100A		1			332056	10/02/20 23:59	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			332836	10/08/20 16:25	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332506	10/07/20 18:42	MM1	TAL PIT
Total/NA	Analysis Instrument	EPA 7470A ID: HGZ		1			332827	10/08/20 18:47	KEM	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			333009	09/22/20 10:57	AGJ	TAL PIT

Client Sample ID: WGWA-5 Lab Sample ID: 180-111399-8

Date Collected: 09/22/20 12:20

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			332056	10/03/20 00:14	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			332836	10/08/20 16:28	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332506	10/07/20 18:42	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			332827	10/08/20 18:48	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			333009	09/22/20 12:20	AGJ	TAL PIT

Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-6

Date Collected: 09/22/20 10:30 Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-9

Matrix: Water

Job ID: 180-111399-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			332056	10/03/20 00:30	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			332836	10/08/20 16:36	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332506	10/07/20 18:42	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			332827	10/08/20 18:49	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			333009	09/22/20 10:30	AGJ	TAL PIT

Client Sample ID: WGWA-7

Date Collected: 09/22/20 14:20

Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-10

Lab Sample ID: 180-111399-11

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		1	Amount	Amount	332056	10/03/20 00:46		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B It ID: NEMO		1	50 mL	50 mL	332470 332836	10/06/20 13:44 10/08/20 16:38		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	7470A EPA 7470A it ID: HGZ		1	50 mL	50 mL	332506 332827	10/07/20 18:42 10/08/20 18:50		TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			333009	09/22/20 14:20	AGJ	TAL PIT

Client Sample ID: WGWA-18

Date Collected: 09/22/20 13:15

Date Received: 09/24/20 09:15

Prep Type Total/NA	Batch Type Analysis Instrumer	Batch Method EPA 300.0 R2.1 at ID: CHIC2100A	Run	Pactor 1	Initial Amount	Final Amount	Batch Number 332056	Prepared or Analyzed 10/03/20 01:02	Analyst EPS	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	3005A EPA 6020B nt ID: NEMO		1	50 mL	50 mL	332470 332836	10/06/20 13:44 10/08/20 16:41		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	7470A EPA 7470A nt ID: HGZ		1	50 mL	50 mL	332506 332827	10/07/20 18:42 10/08/20 18:51	MM1 KEM	TAL PIT

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Matrix: Water

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-18

Lab Sample ID: 180-111399-11

Date Collected: 09/22/20 13:15 **Matrix: Water** Date Received: 09/24/20 09:15

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method Factor **Amount** Number or Analyzed Analyst Run **Amount** Lab Total/NA Analysis SM 2540C 100 mL 100 mL 331211 09/25/20 06:48 AVS TAL PIT Total/NA 09/22/20 13:15 AGJ Analysis Field Sampling 1 333009 TAL PIT Instrument ID: NOEQUIP

Lab Sample ID: 180-111399-12 Client Sample ID: WGWC-8

Date Collected: 09/22/20 14:30 **Matrix: Water**

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			332056	10/03/20 01:49	EPS	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			332194	10/03/20 19:14	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332470	10/06/20 13:44	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			332836	10/08/20 16:44	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332507	10/07/20 18:43	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			332827	10/08/20 18:59	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331211	09/25/20 06:48	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			333009	09/22/20 14:30	AGJ	TAL PIT

Client Sample ID: Dup-2 Lab Sample ID: 180-111526-1

Date Collected: 09/23/20 00:00 Date Received: 09/26/20 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 at ID: CHIC2100A		1			332252	10/05/20 10:53		TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332954	10/10/20 10:18	KHM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			333527	10/14/20 11:19	RSK	TAL PIT
Total/NA	Prep	7470A			50 mL	50 mL	332507	10/07/20 18:43	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			332827	10/08/20 19:18	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT

Eurofins TestAmerica, Pittsburgh

Job ID: 180-111399-1

Matrix: Water

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2-9-24-20

Date Collected: 09/24/20 11:50

Lab Sample ID: 180-111526-2 **Matrix: Water** Date Received: 09/26/20 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 Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			332252	10/05/20 10:21	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332954	10/10/20 10:18	KHM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: NEMO		1			333527	10/14/20 11:21	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	332971	10/12/20 10:01	RSR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGY		1			333510	10/14/20 16:23	KEM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT

Client Sample ID: FB-2-9-24-20 Lab Sample ID: 180-111526-3 **Matrix: Water**

Date Collected: 09/24/20 10:00 Date Received: 09/26/20 09:00

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			332252	10/05/20 10:37	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			334010	10/17/20 14:54	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			334271	10/21/20 10:34	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	332971	10/12/20 10:01	RSR	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGY		1			333510	10/14/20 16:24	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT

Client Sample ID: WGWC-17 Lab Sample ID: 180-111526-4 Date Collected: 09/23/20 11:11 **Matrix: Water**

Dil Batch Batch Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Type Run **Factor Analyst** Lab Total/NA 332252 10/05/20 11:09 MJH Analysis EPA 300.0 R2.1 TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 332956 10/10/20 10:22 KHM TAL PIT Total Recoverable Analysis EPA 6020B 334010 10/17/20 14:58 RSK TAL PIT 1 Instrument ID: A Total Recoverable 3005A 50 mL Prep 50 mL 332956 10/10/20 10:22 KHM TAL PIT Total Recoverable EPA 6020B Analysis 334271 10/21/20 10:37 RSK TAL PIT 1 Instrument ID: A Total/NA 25 mL 10/09/20 12:31 RSR TAL PIT Prep 7470A 25 mL 332871 Total/NA Analysis **EPA 7470A** 333677 10/15/20 19:56 KEM **TAL PIT** Instrument ID: HGY

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Job ID: 180-111399-1

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Instrument ID: NOEQUIP

Client Sample ID: WGWC-17

Date Collected: 09/23/20 11:11 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-4

Matrix: Water

Job ID: 180-111399-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			333008	09/23/20 11:11	AGJ	TAL PIT

Lab Sample ID: 180-111526-5 **Client Sample ID: WGWC-10**

Date Collected: 09/23/20 12:25 **Matrix: Water**

Date Received: 09/26/20 09:00 Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type **Factor Amount** Amount Number or Analyzed Run **Analyst** Lab 332252 10/05/20 11:25 TAL PIT Total/NA Analysis EPA 300.0 R2.1 MJH Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 332956 10/10/20 10:22 KHM **TAL PIT** Total Recoverable Analysis **EPA 6020B** 334010 10/17/20 15:01 RSK TAL PIT 1 Instrument ID: A Total Recoverable Prep 3005A 50 mL 50 mL 332956 10/10/20 10:22 KHM TAL PIT Total Recoverable Analysis EPA 6020B 1 334271 10/21/20 10:41 RSK **TAL PIT** Instrument ID: A Total/NA Prep 7470A 25 mL 25 mL 332871 10/09/20 12:31 RSR TAL PIT Total/NA EPA 7470A 333677 10/15/20 19:57 KEM TAL PIT Analysis 1 Instrument ID: HGY Total/NA Analysis SM 2540C 100 mL 100 mL 331565 09/29/20 06:43 AVS **TAL PIT** Instrument ID: NOEQUIP 333008 TAL PIT Total/NA Analysis Field Sampling 09/23/20 12:25 AGJ

Client Sample ID: WGWC-15 Lab Sample ID: 180-111526-6

Date Collected: 09/23/20 14:35 **Matrix: Water** Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			332252	10/05/20 11:41	MJH	TAL PI
	Instrument	ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PI
Total Recoverable	Analysis	EPA 6020B		1			334010	10/17/20 15:05	RSK	TAL PI
	Instrument	tID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PI
Total Recoverable	Analysis	EPA 6020B		1			334271	10/21/20 10:44	RSK	TAL PI
	Instrument	tID: A								
Total/NA	Prep	7470A			25 mL	25 mL	332871	10/09/20 12:31	RSR	TAL PI
Total/NA	Analysis	EPA 7470A		1			333677	10/15/20 19:58	KEM	TAL PI
	Instrument	ID: HGY								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PI
	Instrument	ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			333008	09/23/20 14:35	AGJ	TAL PI
	Instrument	ID: NOEQUIP								

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Client Sample ID: WGWC-16

Lab Sample ID: 180-111526-7 Date Collected: 09/23/20 13:30

Matrix: Water

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			332252	10/05/20 11:56	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: A		1			334010	10/17/20 15:08	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: A		1			334271	10/21/20 10:48	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	332871	10/09/20 12:31	RSR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGY		1			333677	10/15/20 19:59	KEM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			333008	09/23/20 13:30	AGJ	TAL PIT

Client Sample ID: WGWC-9 Lab Sample ID: 180-111526-8

Date Collected: 09/23/20 15:50 **Matrix: Water** Date Received: 09/26/20 09:00

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Type Method Run Factor Amount **Amount** Number or Analyzed Analyst Lab Total/NA EPA 300.0 R2.1 Analysis 332252 10/05/20 12:12 MJH TAL PIT Instrument ID: CHIC2100A Total Recoverable 3005A 50 mL 10/10/20 10:22 KHM TAL PIT Prep 50 mL 332956 **EPA 6020B** TAL PIT Total Recoverable Analysis 1 334010 10/17/20 15:12 RSK Instrument ID: A Total Recoverable Prep 3005A 50 mL 50 mL 332956 10/10/20 10:22 KHM TAL PIT Total Recoverable Analysis **EPA 6020B** 334271 10/21/20 10:51 RSK TAL PIT Instrument ID: A Total/NA 7470A 25 mL 332871 10/09/20 12:31 RSR TAL PIT Prep 25 mL Total/NA Analysis EPA 7470A 333677 10/15/20 20:00 KEM TAL PIT 1 Instrument ID: HGY TAL PIT Total/NA Analysis SM 2540C 100 mL 100 mL 331565 09/29/20 06:43 AVS 1 Instrument ID: NOEQUIP 333008 Total/NA Analysis Field Sampling 09/23/20 15:50 AGJ TAL PIT Instrument ID: NOEQUIP

Client Sample ID: WGWC-13 Lab Sample ID: 180-111526-9

Date Collected: 09/24/20 11:05 **Matrix: Water** Date Received: 09/26/20 09:00

Batch Dil Initial Final Batch **Batch Prepared** Method Number or Analyzed **Prep Type** Type Run Factor **Amount** Amount Analyst Lab EPA 300.0 R2.1 332252 10/05/20 13:00 MJH TAL PIT Total/NA Analysis Instrument ID: CHIC2100A

Eurofins TestAmerica, Pittsburgh

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-13

Date Collected: 09/24/20 11:05 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable Total Recoverable	Prep Analysis Instrument	3005A EPA 6020B ID: A		1	50 mL	50 mL	332956 334010	10/10/20 10:22 10/17/20 15:16		TAL PIT TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrument	3005A EPA 6020B ID: A		1	50 mL	50 mL	332956 334271	10/10/20 10:22 10/21/20 10:55		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrument	7470A EPA 7470A ID: HGY		1	25 mL	25 mL	332971 333510	10/12/20 10:01 10/14/20 16:25		TAL PIT TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			333008	09/24/20 11:05	AGJ	TAL PIT

Client Sample ID: WGWC-14A

Date Collected: 09/24/20 09:55

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-10

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHIC2100A		1			332252	10/05/20 14:35	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B t ID: A		1			334010	10/17/20 15:19	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B t ID: A		1			334271	10/21/20 11:06	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	332971	10/12/20 10:01	RSR	TAL PIT
Total/NA	Analysis Instrument	EPA 7470A t ID: HGY		1			333510	10/14/20 16:26	KEM	TAL PIT
Total/NA	Analysis Instrument	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PI
Total/NA	Analysis Instrument	Field Sampling		1			333008	09/24/20 09:55	AGJ	TAL PI

Client Sample ID: WGWC-19

Date Collected: 09/23/20 15:00

Date Received: 09/26/20 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 Instrumer	EPA 300.0 R2.1 at ID: CHIC2100A		1			332252	10/05/20 14:51	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			334010	10/17/20 15:30	RSK	TAL PIT
	Instrumer	nt ID: A								

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1:

Lab Sample ID: 180-111526-11

Matrix: Water

Job ID: 180-111399-1

Matrix: Water

Date Collected: 09/23/20 15:00 Date Received: 09/26/20 09:00

Client Sample ID: WGWC-19

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	332956	10/10/20 10:22		TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			334271	10/21/20 11:09	RSK	TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	7470A EPA 7470A t ID: HGY		1	25 mL	25 mL	332871 333677	10/09/20 12:31 10/15/20 20:01	RSR KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			333008	09/23/20 15:00	AGJ	TAL PIT

Client Sample ID: WGWC-11 Lab Sample ID: 180-111526-12

Date Collected: 09/24/20 10:20 **Matrix: Water** Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			332252	10/05/20 15:06	MJH	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			334010	10/17/20 15:33	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			334271	10/21/20 11:13	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	332971	10/12/20 10:01	RSR	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGY		1			333510	10/14/20 16:27	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			333008	09/24/20 10:20	AGJ	TAL PIT

Client Sample ID: WGWC-12 Lab Sample ID: 180-111526-13 Date Collected: 09/23/20 13:55 **Matrix: Water**

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			332252	10/05/20 15:22	MJH	TAL PIT
	Instrumer	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			334010	10/17/20 15:37	RSK	TAL PIT
	Instrumer	nt ID: A								
Total Recoverable	Prep	3005A			50 mL	50 mL	332956	10/10/20 10:22	KHM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			334271	10/21/20 11:16	RSK	TAL PIT
	Instrumer	nt ID: A								

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Lab Chronicle

Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-12 Lab Sample ID: 180-111526-13

Date Collected: 09/23/20 13:55

Date Received: 09/26/20 09:00

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			25 mL	25 mL	332871	10/09/20 12:31	RSR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGY		1			333677	10/15/20 20:02	KEM	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	331565	09/29/20 06:43	AVS	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling of ID: NOEQUIP		1			333008	09/23/20 13:55	AGJ	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

KHM = Kyle Mucroski

MM1 = Mary Beth Miller

RSR = Roseann Ruyechan

TJO = Tyler Oliver

Batch Type: Analysis

AGJ = Andy Johnson

AVS = Abbey Smith

EPS = Evan Scheuer

KEM = Kimberly Mahoney

MJH = Matthew Hartman

RSK = Robert Kurtz

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4.0

11

12

Client: Southern Company

Result Qualifier

22

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-111399-1

Date Collected: 09/21/20 00:00 Matrix: Water

Date Received: 09/24/20 09:15

Analyte

Total Dissolved Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.32	mg/L			10/02/20 18:10	1
Fluoride	<0.026		0.10	0.026	mg/L			10/02/20 18:10	1
Sulfate	0.90	J	1.0	0.38	mg/L			10/02/20 18:10	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 15:55	1
Barium	0.015		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 15:55	1
Beryllium	0.00022	J	0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 15:55	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 15:55	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 15:55	1
Calcium	1.8		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 15:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 15:55	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 15:55	1
Lead	0.00013	J	0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 15:55	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 15:55	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 15:55	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 15:55	1
Thallium	0.00026	J	0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 15:55	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/05/20 18:35	10/07/20 16:50	1

RL

10

MDL Unit

10 mg/L

10/27/2020

Job ID: 180-111399-1

Dil Fac

Analyzed

09/25/20 06:48

Prepared

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-1-9-22-20

Date Collected: 09/22/20 11:20 Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-2

Matrix: Water

Job ID: 180-111399-1

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			10/02/20 22:39	1
Fluoride	<0.026		0.10	0.026	mg/L			10/02/20 22:39	1
Sulfate	<0.38		1.0	0.38	mg/L			10/02/20 22:39	1

Method: EPA 6020B - Me	etals (ICP/MS)) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:12	1
Barium	<0.0016		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:12	1
Beryllium	0.00029	J	0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:12	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:12	1
Calcium	<0.13		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:12	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:12	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:12	1
Thallium	0.00037	J	0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:12	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:45	1

General	Chemistry
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Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			09/25/20 06:48	1

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1:

Client: Southern Company

Thallium

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-1-9-22-20

Date Collected: 09/22/20 14:10 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-3

10/06/20 13:44 10/08/20 16:15

Matrix: Water

Job ID: 180-111399-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL						
0.1									

0.00016 J

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32		1.0	0.32	mg/L			10/02/20 23:43	1
Fluoride	<0.026		0.10	0.026	mg/L			10/02/20 23:43	1
Sulfate	<0.38		1.0	0.38	mg/L			10/02/20 23:43	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:15	
Barium	<0.0016		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:15	
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:15	
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:15	
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:15	
Calcium	<0.13		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:15	
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:15	
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:15	
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:15	
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:15	
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:15	
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:15	

Me	ethod: EPA 7470A - Mercury	(CVAA)								
Ana	alyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Me	rcurv	<0.00013		0.00020	0.00013	ma/L		10/07/20 18:42	10/08/20 18:46	1

0.0010

0.00015 mg/L

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			09/25/20 06:48	1

Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-2 Lab Sample ID: 180-111399-4 Date Collected: 09/21/20 12:10

Matrix: Water

Date Received: 09/24/20 09:15

pН

Method: EPA 300.0 R2.1 - Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.5		1.0		mg/L	=		10/02/20 21:36	1
Fluoride	0.037	J	0.10	0.026	-			10/02/20 21:36	1
Sulfate	1.1		1.0		mg/L			10/02/20 21:36	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:18	1
Barium	0.024		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:18	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:18	1
Calcium	13		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:18	1
Cobalt	0.00054	J	0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:18	1
Lithium	0.0075		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:18	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:18	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:18	1
Method: EPA 7470A - Mer	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/05/20 18:35	10/07/20 16:51	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	100		10	10	mg/L			09/25/20 06:48	1
Method: Field Sampling -	Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

6.05

SU

09/21/20 12:10

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Method: EPA 7470A - Mercury (CVAA)

Analyte

Client Sample ID: WGWA-4

Date Collected: 09/21/20 14:00 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-5

Matrix: Water

Job ID: 180-111399-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.32	mg/L			10/02/20 21:52	1
Fluoride	0.091	J	0.10	0.026	mg/L			10/02/20 21:52	1
Sulfate	7.7		1.0	0.38	mg/L			10/02/20 21:52	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:20	1
Barium	0.0060	J	0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:20	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:20	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:20	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:20	1
Calcium	16		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:20	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:20	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:20	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:20	1
Lithium	0.0050		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:20	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:20	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:20	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:20	1

Mercury	<0.00013		0.00020	0.00013	mg/L		10/05/20 18:35	10/07/20 16:52	1
General Chemistry		0 115				_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	92		10	10	mg/L			09/25/20 06:48	1
Method: Field Sampling - Fiel	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.81				SU			09/21/20 14:00	1

RL

MDL Unit

Prepared

Analyzed

Result Qualifier

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Dil Fac

Client: Southern Company

Analyte

pН

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-3

Result Qualifier

5.35

Date Collected: 09/21/20 15:01 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-6

Matrix: Water

Job ID: 180-111399-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.32	mg/L			10/02/20 22:55	1
Fluoride	<0.026		0.10	0.026	mg/L			10/02/20 22:55	1
Sulfate	0.77	J	1.0	0.38	mg/L			10/02/20 22:55	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:23	1
Barium	0.015		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:23	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:23	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:23	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:23	1
Calcium	1.8		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:23	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:23	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:23	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:23	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:23	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/05/20 18:35	10/07/20 16:53	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		10	10	mg/L			09/25/20 06:48	1

RL

MDL Unit

SU

Prepared

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Dil Fac

Analyzed

09/21/20 15:01

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-1

Date Collected: 09/22/20 10:57 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-7

Matrix: Water

Job ID: 180-111399-1

Method: EPA 300.0 R	2.1 - Anions, Ion Chromatogra	ıphy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0	1.0	0.32	mg/L			10/02/20 23:59	1
Fluoride	<0.026	0.10	0.026	mg/L			10/02/20 23:59	1
Sulfate	<0.38	1.0	0.38	mg/L			10/02/20 23:59	1
_								

Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:25	1
Barium	0.048		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:25	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:25	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:25	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:25	1
Calcium	1.2		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:25	1
Cobalt	0.00072	J	0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:25	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:25	1
Lithium	0.0036	J	0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:25	1

Method: EPA 7470A - Mero Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:47	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		10	10	mg/L			09/25/20 06:48	1
_ Method: Field Sampling -	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.09				SU			09/22/20 10:57	1

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Client: Southern Company

Result Qualifier

6.78

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-5 Lab Sample ID: 180-111399-8 Date Collected: 09/22/20 12:20

Matrix: Water

Job ID: 180-111399-1

Date Received: 09/24/20 09:15

Analyte

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.32	mg/L			10/03/20 00:14	1
Fluoride	<0.026		0.10	0.026	mg/L			10/03/20 00:14	1
Sulfate	1.5		1.0	0.38	mg/L			10/03/20 00:14	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:28	1
Barium	0.032		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:28	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:28	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:28	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:28	1
Calcium	58		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:28	1
Cobalt	0.0065		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:28	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:28	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:28	1
Molybdenum	0.0025	J	0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:28	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:28	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10	10	mg/L			09/25/20 06:48	1

RL

MDL Unit

SU

D

Prepared

Analyzed

09/22/20 12:20

Dil Fac

Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-6 Lab Sample ID: 180-111399-9 Date Collected: 09/22/20 10:30

Matrix: Water

Date Received: 09/24/20 09:15

Analyte

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.32	mg/L			10/03/20 00:30	1
Fluoride	0.068	J	0.10	0.026	mg/L			10/03/20 00:30	1
Sulfate	8.0		1.0	0.38	mg/L			10/03/20 00:30	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:36	1
Barium	0.0079	J	0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:36	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:36	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:36	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:36	1
Calcium	25		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:36	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:36	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:36	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:36	1
Lithium	0.0049	J	0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:36	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:36	1
Method: EPA 7470A - Mer	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:49	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	130		10	10	mg/L			09/25/20 06:48	1

RL

MDL Unit

SU

D

Prepared

Analyzed

09/22/20 10:30

Dil Fac

Result Qualifier

7.4

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-7

Lab Sample ID: 180-111399-10 Date Collected: 09/22/20 14:20

Matrix: Water

Job ID: 180-111399-1

Date Received: 09/24/20 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.32	mg/L			10/03/20 00:46	1
Fluoride	<0.026		0.10	0.026	mg/L			10/03/20 00:46	1
Sulfate	0.38	J	1.0	0.38	mg/L			10/03/20 00:46	1
Method: EPA 6020B - Meta	nls (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:38	1
Barium	0.013		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:38	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:38	1
Calcium	0.89		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:38	1
Cobalt	0.00015	J	0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:38	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:38	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:38	1
Selenium	< 0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:38	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:50	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	15		10	10	mg/L			09/25/20 06:48	1

RL

MDL Unit

SU

Prepared

D

Result Qualifier

5.36

Dil Fac

Analyzed

09/22/20 14:20

Client: Southern Company

pН

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-18

Date Collected: 09/22/20 13:15 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-11

Matrix: Water

Job ID: 180-111399-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
An	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ch	nloride	2.1		1.0	0.32	mg/L			10/03/20 01:02	1
Flo	uoride	0.10		0.10	0.026	mg/L			10/03/20 01:02	1
Su	ulfate	9.0		1.0	0.38	mg/L			10/03/20 01:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:41	1
Barium	0.015		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:41	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:41	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:41	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:41	1
Calcium	19		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:41	1
Cobalt	0.00033	J	0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:41	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:41	1
Molybdenum	0.00097	J	0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:41	1

Method: EPA 7470A - Merc	ury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:42	10/08/20 18:51	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	96		10	10	mg/L			09/25/20 06:48	1
Method: Field Sampling - F	ield Sampling								
Analyto	Posult	Qualifier	DI	MDI	Unit	n	Droparod	Analyzod	Dil Eac

7.18

SU

10/27/2020

09/22/20 13:15

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 180-111399-12

Matrix: Water

Job ID: 180-111399-1

Date Collected: 09/22/20 14:30 Date Received: 09/24/20 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		1.0	0.32	mg/L			10/03/20 01:49	1
Fluoride	0.14		0.10	0.026	mg/L			10/03/20 01:49	1
Sulfate	200		1.0	0.38	mg/L			10/03/20 19:14	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0011		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 16:44	1
Barium	<0.0016		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 16:44	1
Beryllium	0.0025		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 16:44	1
Boron	2.5		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 16:44	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 16:44	1
Calcium	81		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 16:44	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 16:44	1
Cobalt	0.00065	J	0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 16:44	1
Lead	0.00013	J	0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 16:44	1
Lithium	0.013		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 16:44	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 16:44	1
Selenium	0.0039	J	0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 16:44	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 16:44	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:43	10/08/20 18:59	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	600		10	10	mg/L			09/25/20 06:48	1

RL

MDL Unit

SU

D

Prepared

Analyzed

09/22/20 14:30

Dil Fac

Result Qualifier

5.17

Client: Southern Company

Method: EPA 7470A - Mercury (CVAA)

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-2 Lab Sample ID: 180-111526-1

Date Collected: 09/23/20 00:00 Date Received: 09/26/20 09:00

Matrix: Water

Job ID: 180-111399-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.7		1.0	0.32	mg/L			10/05/20 10:53	1
Fluoride	0.27		0.10	0.026	mg/L			10/05/20 10:53	1
Sulfate	3.2		1.0	0.38	mg/L			10/05/20 10:53	1
Method: EPA 6020B - I	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:18	10/14/20 11:19	1
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:18	10/14/20 11:19	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:18	10/14/20 11:19	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:18	10/14/20 11:19	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:18	10/14/20 11:19	1
Calcium	12		0.50	0.13	mg/L		10/10/20 10:18	10/14/20 11:19	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:18	10/14/20 11:19	1
Cobalt	0.00023	J	0.0025	0.00013	mg/L		10/10/20 10:18	10/14/20 11:19	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:18	10/14/20 11:19	1
Lithium	0.050		0.0050	0.0034	mg/L		10/10/20 10:18	10/14/20 11:19	1
Molybdenum	0.0012	J	0.015	0.00061	mg/L		10/10/20 10:18	10/14/20 11:19	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:18	10/14/20 11:19	1
Thallium	<0.00015		0.0010	0.00015	ma/L		10/10/20 10:18	10/14/20 11:19	1

) ()								
Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/07/20 18:43	10/08/20 19:18	1
General Chemistry									
Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	92		10	10	ma/l			09/29/20 06:43	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2-9-24-20

Date Collected: 09/24/20 11:50 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-2

Matrix: Water

Job ID: 180-111399-1

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			10/05/20 10:21	1	
Fluoride	<0.026	0.10	0.026	mg/L			10/05/20 10:21	1	
Sulfate	<0.38	1.0	0.38	mg/L			10/05/20 10:21	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:18	10/14/20 11:21	
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:18	10/14/20 11:21	
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:18	10/14/20 11:21	
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:18	10/14/20 11:21	
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:18	10/14/20 11:21	
Calcium	<0.13		0.50	0.13	mg/L		10/10/20 10:18	10/14/20 11:21	
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:18	10/14/20 11:21	
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:18	10/14/20 11:21	
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:18	10/14/20 11:21	
Lithium	<0.0034		0.0050	0.0034	mg/L		10/10/20 10:18	10/14/20 11:21	
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/10/20 10:18	10/14/20 11:21	
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:18	10/14/20 11:21	
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:18	10/14/20 11:21	

Method: EPA 7470A - Mer	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	*	0.00020	0.00013	mg/L		10/12/20 10:01	10/14/20 16:23	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/29/20 06:43	1

8

9

11

12

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2-9-24-20

Date Collected: 09/24/20 10:00 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-3

Matrix: Water

Job ID: 180-111399-1

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			10/05/20 10:37	1	
Fluoride	<0.026	0.10	0.026	mg/L			10/05/20 10:37	1	
Sulfate	<0.38	1.0	0.38	mg/L			10/05/20 10:37	1	

Analyte	Result Q	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031	0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 14:54	1
Barium	<0.0016	0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 14:54	•
Beryllium	<0.00018	0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 14:54	•
Boron	<0.039	0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:34	
Cadmium	<0.00022	0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 14:54	•
Calcium	<0.13	0.50	0.13	mg/L		10/10/20 10:22	10/17/20 14:54	•
Chromium	<0.0015	0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 14:54	
Cobalt	<0.00013	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 14:54	•
Lead	<0.00013	0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 14:54	•
Lithium	<0.0034	0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 14:54	
Molybdenum	<0.00061	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 14:54	•
Selenium	<0.0015	0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 14:54	•
Thallium	0.00020 J	0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 14:54	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		10/12/20 10:01	10/14/20 16:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/29/20 06:43	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 180-111526-4 Date Collected: 09/23/20 11:11

Matrix: Water

Job ID: 180-111399-1

Date Received: 09/26/20 09:00

Analyte

рН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.32	mg/L			10/05/20 11:09	1
Fluoride	0.050	J	0.10	0.026	mg/L			10/05/20 11:09	1
Sulfate	4.4		1.0	0.38	mg/L			10/05/20 11:09	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00067	J	0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 14:58	1
Barium	0.012		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 14:58	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 14:58	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:37	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 14:58	1
Calcium	5.9		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 14:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 14:58	1
Cobalt	0.00090	J	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 14:58	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 14:58	1
Lithium	0.0056		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 14:58	1
Molybdenum	0.0027	J	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 14:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 14:58	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 14:58	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 19:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		10	10	mg/L			09/29/20 06:43	1

RL

MDL Unit

SU

Prepared

D

Analyzed

09/23/20 11:11

Dil Fac

Result Qualifier

5.89

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-10

Date Collected: 09/23/20 12:25 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-5

Matrix: Water

Job ID: 180-111399-1

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			10/05/20 11:25	1	
Fluoride	0.090	J	0.10	0.026	mg/L			10/05/20 11:25	1	
Sulfate	1.8		1.0	0.38	mg/L			10/05/20 11:25	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:01	1
Barium	0.035		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:01	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:41	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:01	1
Calcium	7.7		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:01	1
Chromium	0.0018	J	0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:01	1
Cobalt	0.00062	J	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:01	1
Lead	0.00013	J	0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:01	1
Lithium	0.0054		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:01	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:01	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 19:57	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	50		10	10	mg/L			09/29/20 06:43	1

10/27/2020

9

4

6

9

11

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-15

Date Collected: 09/23/20 14:35 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-6

Matrix: Water

Job ID: 180-111399-1

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Method: EPA 300.0 R	21 - Anions Io	n Chromatography

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5	1.0	0.32 mg/L			10/05/20 11:41	1
Fluoride	0.63	0.10	0.026 mg/L			10/05/20 11:41	1
Sulfate	21	1.0	0.38 mg/L			10/05/20 11:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00061	J	0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:05	1
Barium	0.027		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:05	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:05	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:44	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:05	1
Calcium	32		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:05	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:05	1
Lithium	0.0071		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:05	1
Molybdenum	0.0031	J	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:05	1
Thallium	< 0.00015		0.0010	0.00015	ma/L		10/10/20 10:22	10/17/20 15:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 19:58	1

General	Chemistry
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Analyte	Result Qual	lifier RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150	10	10 r	mg/L			09/29/20 06:43	1

Method:	Field S	Sampling	- Field	Sampling
Analyta				Docult

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.35				SU			09/23/20 14:35	1

Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Method: Field Sampling - Field Sampling

Result Qualifier

5.05

Analyte

рН

Client Sample ID: WGWC-16

Date Collected: 09/23/20 13:30

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		1.0	0.32	mg/L			10/05/20 11:56	1
Fluoride	0.049	J	0.10	0.026	mg/L			10/05/20 11:56	1
Sulfate	85		1.0	0.38	mg/L			10/05/20 11:56	1
Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:08	1
Barium	0.037		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:08	1
Boron	1.5		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:48	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:08	1
Calcium	43		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:08	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:08	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:08	1
Lithium	0.0059		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:08	1
Selenium	0.0028	J	0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:08	1
Method: EPA 7470A - Mer	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 19:59	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	250		10	10	mg/L			09/29/20 06:43	1

RL

MDL Unit

SU

Prepared

D

Analyzed

09/23/20 13:30

Dil Fac

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-9

Lab Sample ID: 180-111526-8

Matrix: Water

Job ID: 180-111399-1

Date Collected: 09/23/20 15:50 Date Received: 09/26/20 09:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		1.0	0.32	mg/L			10/05/20 12:12	1
Fluoride	0.82		0.10	0.026	mg/L			10/05/20 12:12	1
Sulfate	54		1.0	0.38	mg/L			10/05/20 12:12	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:12	1
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:12	1
Beryllium	0.00034	J	0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:12	1
Boron	0.68		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:51	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:12	1
Calcium	10		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:12	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:12	1
Lithium	0.033		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:12	1
Molybdenum	0.0027	J	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:12	1
Selenium	0.0029	J	0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:12	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 20:00	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10	10	mg/L			09/29/20 06:43	1

RL

MDL Unit

SU

D

Prepared

Analyzed

09/23/20 15:50

Dil Fac

Result Qualifier

5.80

Client: Southern Company

Lithium

Molybdenum

Selenium

Thallium

pН

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-13

Date Collected: 09/24/20 11:05 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-9

10/10/20 10:22 10/17/20 15:16

10/10/20 10:22 10/17/20 15:16

10/10/20 10:22 10/17/20 15:16

10/10/20 10:22 10/17/20 15:16

Matrix: Water

Job ID: 180-111399-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.32	mg/L			10/05/20 13:00	1
Fluoride	<0.026		0.10	0.026	mg/L			10/05/20 13:00	1
Sulfate	0.63	J	1.0	0.38	mg/L			10/05/20 13:00	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:16	1
Barium	0.038		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:16	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:16	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:55	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:16	1
Calcium	1.4		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:16	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:16	1
Cobalt	0.00032	J	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:16	1
Lead	<0.00013		0.0010	0.00013	ma/l		10/10/20 10:22	10/17/20 15:16	1

0.0050

0.015

0.0050

0.0010

0.0034 mg/L

0.00061 mg/L

0.0015 mg/L

0.00015 mg/L

SU

< 0.0034

< 0.00061

<0.0015

<0.00015

6.29

Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	*	0.00020	0.00013	mg/L		10/12/20 10:01	10/14/20 16:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	21		10	10	mg/L			09/29/20 06:43	1
Method: Field Sampling - I	Field Sampling								
Analyte	. •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

10/27/2020

09/24/20 11:05

Client: Southern Company

Lead

Lithium

Molybdenum

Selenium

Thallium

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-14A

Date Collected: 09/24/20 09:55 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-10

10/10/20 10:22 10/17/20 15:19

10/10/20 10:22 10/17/20 15:19

10/10/20 10:22 10/17/20 15:19

10/10/20 10:22 10/17/20 15:19

10/10/20 10:22 10/17/20 15:19

Matrix: Water

1

Job ID: 180-111399-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.32	mg/L			10/05/20 14:35	1
Fluoride	0.028	J	0.10	0.026	mg/L			10/05/20 14:35	1
Sulfate	1.2		1.0	0.38	mg/L			10/05/20 14:35	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:19	1
Barium	0.034		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:19	1
Beryllium	0.00024	J	0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:19	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 11:06	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:19	1
Calcium	0.99		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:19	1
	-0.0045		0.0020	0.0015	ma/l		10/10/20 10:22	10/17/20 15:19	1
Chromium	<0.0015		0.0020	0.0013	IIIg/L		10/10/20 10.22	10/11/20 13.19	

0.0010

0.0050

0.015

0.0050

0.0010

0.00018 J

< 0.0034

<0.00061

<0.0015

< 0.00015

0.00013 mg/L

0.0034 mg/L

0.00061 mg/L

0.0015 mg/L

0.00015 mg/L

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	*	0.00020	0.00013	mg/L		10/12/20 10:01	10/14/20 16:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		10	10	mg/L			09/29/20 06:43	1

Method: Field Sampling - Field Sampling											
	Analyte	Result	Qualifier	RL	MDL	Unit	D		Prepared	Analyzed	Dil Fac
l	рН	5.16				SU				09/24/20 09:55	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 180-111526-11

Matrix: Water

Job ID: 180-111399-1

Date Collected: 09/23/20 15:00 Date Received: 09/26/20 09:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.32	mg/L			10/05/20 14:51	1
Fluoride	0.25		0.10	0.026	mg/L			10/05/20 14:51	1
Sulfate	3.0		1.0	0.38	mg/L			10/05/20 14:51	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:30	1
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:30	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:30	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 11:09	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:30	1
Calcium	13		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:30	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:30	1
Cobalt	0.00024	J	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:30	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:30	1
Lithium	0.056		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:30	1
Molybdenum	0.0013	J	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:30	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:30	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:30	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 20:01	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	94		10	10	mg/L			09/29/20 06:43	1

RL

MDL Unit

SU

Prepared

D

Result Qualifier

6.59

2

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6

8

10

11

13

Dil Fac

Analyzed

09/23/20 15:00

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11

Date Collected: 09/24/20 10:20 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-12

Matrix: Water

Job ID: 180-111399-1

Method: EPA 300.0 R2.	1 - Anions, Ion Chrom	natography						
Analyte	Result Qu	ıalifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	1.0	0.32	mg/L			10/05/20 15:06	1
Fluoride	0.18	0.10	0.026	mg/L			10/05/20 15:06	1
Sulfate	2.7	1.0	0.38	mg/L			10/05/20 15:06	1
_								

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00051	J	0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:33	1
Barium	0.061		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:33	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 11:13	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:33	1
Calcium	5.2		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:33	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:33	1
Lead	0.00037	J	0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:33	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:33	1
Molybdenum	0.0017	J	0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:33	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013	*	0.00020	0.00013	mg/L		10/12/20 10:01	10/14/20 16:27	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		10	10	mg/L			09/29/20 06:43	1
Nethod: Field Sampling -			.0		1119/2			00/20/20 00.10	
Method: I leid Sampling -	i leiu Sailipillig								

Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.50				SU			09/24/20 10:20	1

2

3

5

7

9

10

12

Ш

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-12

Date Collected: 09/23/20 13:55

Date Received: 09/26/20 09:00

pН

Lab Sample ID: 180-111526-13

Matrix: Water

Job ID: 180-111399-1

Method: EPA 300.0 R2.1 - Ar	ions, Ion Chromatog	raphy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8	1.0	0.32	mg/L			10/05/20 15:22	1
Fluoride	0.064 J	0.10	0.026	mg/L			10/05/20 15:22	1
Sulfate	12	1.0	0.38	mg/L			10/05/20 15:22	1

Method: EPA 6020B - Analyte	•	tal Recover Qualifier	able RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 15:37	1
Barium	0.016		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 15:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 15:37	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 11:16	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 15:37	1
Calcium	13		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 15:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 15:37	1
Cobalt	0.00039	J	0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 15:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 15:37	1
Lithium	0.0070		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 15:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 15:37	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 15:37	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 15:37	1

Method: EPA 7470A - Mero	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00013		0.00020	0.00013	mg/L		10/09/20 12:31	10/15/20 20:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	90		10	10	mg/L			09/29/20 06:43	1
Method: Field Sampling - I	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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09/23/20 13:55

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-1

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

Lab Sample ID: MB 180-332056/41

Matrix: Water

Analysis Batch: 332056

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac D Chloride 0.32 mg/L < 0.32 1.0 10/02/20 16:51 Fluoride <0.026 0.10 0.026 mg/L 10/02/20 16:51 Sulfate < 0.38 1.0 0.38 mg/L 10/02/20 16:51

Lab Sample ID: LCS 180-332056/40

Matrix: Water

Analysis Batch: 332056

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

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Chloride 50.0 50.7 mg/L 101 90 - 110 Fluoride 2.50 2.47 mg/L 99 90 - 110 Sulfate 50.0 90 - 110 50.4 mg/L 101

Lab Sample ID: 180-111399-1 MS

Matrix: Water

Analysis Batch: 332056

Client Sample ID: Dup-1 Prep Type: Total/NA

Client Sample ID: Dup-1

Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Result Qualifier Result Qualifier Added Analyte Unit D %Rec Limits Chloride 1.6 50.0 52.6 mg/L 102 90 - 110 Fluoride < 0.026 2.50 2.54 mg/L 102 90 - 110 Sulfate 50.0 52.0 102 90 - 110 0.90 J mg/L

Lab Sample ID: 180-111399-1 MSD

Matrix: Water

Analysis Batch: 332056

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-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	1.6		50.0	50.8		mg/L		98	90 - 110	4	20	
Fluoride	<0.026		2.50	2.47		mg/L		99	90 - 110	3	20	
Sulfate	0.90	J	50.0	50.7		mg/L		100	90 - 110	3	20	

Analysis Batch: 332056

Lab Sample ID: 180-111399-6 MS **Client Sample ID: WGWA-3 Matrix: Water** Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1.5		50.0	47.5		mg/L		92	90 - 110	
Fluoride	<0.026		2.50	2.27		mg/L		91	90 - 110	
Sulfate	0.77	J	50.0	47.2		mg/L		93	90 - 110	

Lab Sample ID: 180-111399-6 MSD

Matrix: Water

Analysis Batch: 332056

Analysis Daton. 002000											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1.5		50.0	48.2		mg/L		93	90 - 110	1	20
Fluoride	<0.026		2.50	2.30		mg/L		92	90 - 110	1	20
Sulfate	0.77	J	50.0	47.9		mg/L		94	90 - 110	2	20

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Client Sample ID: WGWA-3

Prep Type: Total/NA

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Job ID: 180-111399-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: WGWC-8

Client Sample ID: WGWC-8

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

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

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-332194/50

Matrix: Water

Analysis Batch: 332194

MB MB

Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared Sulfate 1.0 0.38 mg/L 10/03/20 18:11 < 0.38

Lab Sample ID: LCS 180-332194/49

Matrix: Water

Analysis Batch: 332194

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit D %Rec Limits Sulfate 50.0 90 - 110 48.9 mg/L 98

Lab Sample ID: 180-111399-12 MS

Matrix: Water

Analysis Batch: 332194

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec Sulfate 200 250 438 95 90 - 110 mg/L

Lab Sample ID: 180-111399-12 MSD

Matrix: Water

Analysis Batch: 332194

Spike MSD MSD %Rec. **RPD** Sample Sample Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits **RPD** Limit Sulfate 250 90 - 110 200 446 mg/L

Lab Sample ID: MB 180-332252/6

Matrix: Water

Analysis Batch: 332252

MR MR

		·· ·						
Analyte	Result Q	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.32	1.0	0.32	mg/L			10/05/20 07:05	1
Fluoride	<0.026	0.10	0.026	mg/L			10/05/20 07:05	1
Sulfate	<0.38	1.0	0.38	mg/L			10/05/20 07:05	1

Lab Sample ID: LCS 180-332252/5

Matrix: Water

Analysis Batch: 332252

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 50.0	48.9		mg/L		98	90 - 110	
Fluoride	2.50	2.47		mg/L		99	90 - 110	
Sulfate	50.0	50.2		mg/L		100	90 - 110	

Lab Sample ID: 180-111526-9 MS

Matrix: Water

Analysis Batch: 332252

Analysis Batch: 002202	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1.6		50.0	47.8		mg/L		93	90 - 110	
Fluoride	<0.026		2.50	2.30		mg/L		92	90 - 110	
Sulfate	0.63	J	50.0	48.0		mg/L		95	90 - 110	

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-111526-9 MSD

Matrix: Water

Analysis Batch: 332252

Client Sample ID: WGWC-13 Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1.6		50.0	49.1		mg/L		95	90 - 110	3	20
Fluoride	< 0.026		2.50	2.37		mg/L		95	90 - 110	3	20
Sulfate	0.63	J	50.0	49.4		mg/L		97	90 - 110	3	20

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

Lab Sample ID: MB 180-332470/1-A

Matrix: Water

Analysis Batch: 332836

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

Prep Batch: 332470

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/06/20 13:44	10/08/20 15:50	1
Barium	< 0.0016		0.010	0.0016	mg/L		10/06/20 13:44	10/08/20 15:50	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/06/20 13:44	10/08/20 15:50	1
Boron	<0.039		0.080	0.039	mg/L		10/06/20 13:44	10/08/20 15:50	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/06/20 13:44	10/08/20 15:50	1
Calcium	<0.13		0.50	0.13	mg/L		10/06/20 13:44	10/08/20 15:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/06/20 13:44	10/08/20 15:50	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/06/20 13:44	10/08/20 15:50	1
Lead	< 0.00013		0.0010	0.00013	mg/L		10/06/20 13:44	10/08/20 15:50	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/06/20 13:44	10/08/20 15:50	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		10/06/20 13:44	10/08/20 15:50	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/06/20 13:44	10/08/20 15:50	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/06/20 13:44	10/08/20 15:50	1

Lab Sample ID: LCS 180-332470/2-A

Matrix: Water

Analysis Batch: 332836

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 332470

Analysis Datcii. 332030	Spike	LCS	LCS				%Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Arsenic	1.00	0.943		mg/L		94	80 - 120
Barium	1.00	1.07		mg/L		107	80 - 120
Beryllium	0.500	0.522		mg/L		104	80 - 120
Boron	1.25	1.26		mg/L		100	80 - 120
Cadmium	0.500	0.495		mg/L		99	80 - 120
Calcium	25.0	26.8		mg/L		107	80 - 120
Chromium	0.500	0.490		mg/L		98	80 - 120
Cobalt	0.500	0.470		mg/L		94	80 - 120
Lead	0.500	0.487		mg/L		97	80 - 120
Lithium	0.500	0.458		mg/L		92	80 - 120
Molybdenum	0.500	0.500		mg/L		100	80 - 120
Selenium	1.00	0.976		mg/L		98	80 - 120
Thallium	1.00	0.951		mg/L		95	80 - 120

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Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-111399-1 MS

Matrix: Water

Analysis Batch: 332836

Client Sample ID: Dup-1 Prep Type: Total Recoverable

Prep Batch: 332470

Job ID: 180-111399-1

_	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	<0.00031		1.00	0.924		mg/L		92	75 - 125	
Barium	0.015		1.00	1.06		mg/L		105	75 - 125	
Beryllium	0.00022	J	0.500	0.536		mg/L		107	75 - 125	
Boron	<0.039		1.25	1.32		mg/L		106	75 - 125	
Cadmium	<0.00022		0.500	0.494		mg/L		99	75 - 125	
Calcium	1.8		25.0	27.9		mg/L		104	75 - 125	
Chromium	<0.0015		0.500	0.481		mg/L		96	75 - 125	
Cobalt	<0.00013		0.500	0.466		mg/L		93	75 - 125	
Lead	0.00013	J	0.500	0.479		mg/L		96	75 - 125	
Lithium	<0.0034		0.500	0.484		mg/L		97	75 - 125	
Molybdenum	<0.00061		0.500	0.495		mg/L		99	75 - 125	
Selenium	<0.0015		1.00	1.01		mg/L		101	75 - 125	
_Thallium	0.00026	J	1.00	0.933		mg/L		93	75 - 125	

Lab Sample ID: 180-111399-1 MSD

Matrix: Water

Client Sample ID: Dup-1 Prep Type: Total Recoverable

Analysis Batch: 332836									Prep Ba	itch: 33	32470
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00031		1.00	0.912		mg/L		91	75 - 125	1	20
Barium	0.015		1.00	1.08		mg/L		107	75 - 125	2	20
Beryllium	0.00022	J	0.500	0.525		mg/L		105	75 - 125	2	20
Boron	<0.039		1.25	1.29		mg/L		103	75 - 125	3	20
Cadmium	<0.00022		0.500	0.502		mg/L		100	75 - 125	2	20
Calcium	1.8		25.0	28.2		mg/L		106	75 - 125	1	20
Chromium	<0.0015		0.500	0.489		mg/L		98	75 - 125	1	20
Cobalt	< 0.00013		0.500	0.468		mg/L		94	75 - 125	0	20
Lead	0.00013	J	0.500	0.484		mg/L		97	75 - 125	1	20
Lithium	<0.0034		0.500	0.467		mg/L		93	75 - 125	3	20
Molybdenum	<0.00061		0.500	0.493		mg/L		99	75 - 125	0	20
Selenium	<0.0015		1.00	0.977		mg/L		98	75 - 125	3	20
Thallium	0.00026	J	1.00	0.956		mg/L		96	75 - 125	3	20

Lab Sample ID: MB 180-332954/1-A

Matrix: Water

Analysis Batch: 333527

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

Prep Batch: 332954

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:18	10/14/20 09:47	1
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:18	10/14/20 09:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:18	10/14/20 09:47	1
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:18	10/14/20 09:47	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:18	10/14/20 09:47	1
Calcium	<0.13		0.50	0.13	mg/L		10/10/20 10:18	10/14/20 09:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:18	10/14/20 09:47	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:18	10/14/20 09:47	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:18	10/14/20 09:47	1
Lithium	<0.0034		0.0050	0.0034	mg/L		10/10/20 10:18	10/14/20 09:47	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/10/20 10:18	10/14/20 09:47	1

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Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-332954/1-A

Lab Sample ID: LCS 180-332954/2-A

Matrix: Water

Analysis Batch: 333527

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 332954

Job ID: 180-111399-1

MB MB

MD MD

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:18	10/14/20 09:47	1
Thallium	< 0.00015		0.0010	0.00015	mg/L		10/10/20 10:18	10/14/20 09:47	1

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

Prep Batch: 332954

Matrix: Water Analysis Batch: 333527 Chika 100 100

	Spike	LUS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	1.00		mg/L		100	80 - 120	
Barium	1.00	1.07		mg/L		107	80 - 120	
Beryllium	0.500	0.520		mg/L		104	80 - 120	
Boron	1.25	1.23		mg/L		98	80 - 120	
Cadmium	0.500	0.482		mg/L		96	80 - 120	
Calcium	25.0	28.1		mg/L		112	80 - 120	
Chromium	0.500	0.483		mg/L		97	80 - 120	
Cobalt	0.500	0.504		mg/L		101	80 - 120	
Lead	0.500	0.483		mg/L		97	80 - 120	
Lithium	0.500	0.480		mg/L		96	80 - 120	
Molybdenum	0.500	0.542		mg/L		108	80 - 120	
Selenium	1.00	1.01		mg/L		101	80 - 120	
Thallium	1.00	0.954		mg/L		95	80 - 120	

Lab Sample ID: MB 180-332956/1-A

Matrix: Water

Analysis Batch: 334010

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 332956

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00031		0.0010	0.00031	mg/L		10/10/20 10:22	10/17/20 14:33	1
Barium	<0.0016		0.010	0.0016	mg/L		10/10/20 10:22	10/17/20 14:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		10/10/20 10:22	10/17/20 14:33	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		10/10/20 10:22	10/17/20 14:33	1
Calcium	<0.13		0.50	0.13	mg/L		10/10/20 10:22	10/17/20 14:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		10/10/20 10:22	10/17/20 14:33	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		10/10/20 10:22	10/17/20 14:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		10/10/20 10:22	10/17/20 14:33	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		10/10/20 10:22	10/17/20 14:33	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		10/10/20 10:22	10/17/20 14:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		10/10/20 10:22	10/17/20 14:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		10/10/20 10:22	10/17/20 14:33	1

Lab Sample ID: MB 180-332956/1-A

Matrix: Water

Analysis Batch: 334271

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 332956 MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		10/10/20 10:22	10/21/20 10:23	1

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Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCS 180-332956/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable** Analysis Batch: 334010 Prep Batch: 332956

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	0.961		mg/L		96	80 - 120	
Barium	1.00	0.992		mg/L		99	80 - 120	
Beryllium	0.500	0.465		mg/L		93	80 - 120	
Cadmium	0.500	0.467		mg/L		93	80 - 120	
Calcium	25.0	27.1		mg/L		108	80 - 120	
Chromium	0.500	0.469		mg/L		94	80 - 120	
Cobalt	0.500	0.476		mg/L		95	80 - 120	
Lead	0.500	0.479		mg/L		96	80 - 120	
Lithium	0.500	0.468		mg/L		94	80 - 120	
Molybdenum	0.500	0.487		mg/L		97	80 - 120	
Selenium	1.00	0.965		mg/L		97	80 - 120	
Thallium	1.00	0.970		mg/L		97	80 - 120	
				-				

Lab Sample ID: LCS 180-332956/2-A **Client Sample ID: Lab Control Sample Prep Type: Total Recoverable**

Matrix: Water

Analysis Batch: 334271

Spike LCS LCS %Rec. Added Result Qualifier Limits **Analyte** Unit %Rec Boron 1.25 1.31 mg/L 105 80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-332349/1-A **Client Sample ID: Method Blank** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 332694

MB MB

Result Qualifier RL **MDL** Unit Analyte **Prepared** Analyzed Dil Fac 0.00020 10/05/20 18:35 10/07/20 16:40 Mercury < 0.00013 0.00013 mg/L

Lab Sample ID: LCS 180-332349/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 332694 **Prep Batch: 332349** Spike LCS LCS %Rec.

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

Lab Sample ID: MB 180-332506/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Prep Batch: 332506 **Analysis Batch: 332827**

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00020 10/07/20 18:42 10/08/20 18:25 Mercury < 0.00013 0.00013 mg/L

Lab Sample ID: LCS 180-332506/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 332827** Prep Batch: 332506

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits 0.00250 0.00240 mg/L 96 80 - 120 Mercury

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10/27/2020

Prep Batch: 332956

Prep Batch: 332349

Job ID: 180-111399-1

Prep Type: Total/NA

Prep Batch: 332507

Prep Type: Total/NA

Prep Batch: 332507

Prep Type: Total/NA

Prep Batch: 332871

Prep Type: Total/NA

Prep Batch: 332871

Prep Type: Total/NA

Prep Batch: 332971

Prep Type: Total/NA

Prep Batch: 332971

Prep Type: Total/NA

Analyzed

Analyzed

Client Sample ID: Lab Control Sample

D %Rec

Prepared

%Rec

Prepared

D %Rec

122

104

90

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

10/09/20 12:31 10/15/20 19:54

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

10/12/20 10:01 10/14/20 15:57

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

Client Sample ID: Method Blank

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-332507/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 332827

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared 0.00020 10/07/20 18:43 10/08/20 18:54 Mercury < 0.00013 0.00013 mg/L

LCS LCS

0.00225

RL

RL

0.00020

0.00020

Spike

Added

0.00250

Spike

Added

0.00250

Result Qualifier

MDL Unit

0.00013 mg/L

LCS LCS

0.00261

Result Qualifier

MDL Unit

0.00013 mg/L

LCS LCS

0.00306

Result Qualifier

Unit

mg/L

Unit

mg/L

Unit

mg/L

Spike

Added

0.00250

Lab Sample ID: LCS 180-332507/2-A

Matrix: Water

Analysis Batch: 332827

Analyte

Lab Sample ID: MB 180-332871/1-A

Matrix: Water

Mercury

Analysis Batch: 333677

MB MB

Analyte

Result Qualifier Mercury <0.00013

Lab Sample ID: LCS 180-332871/2-A

Matrix: Water

Analysis Batch: 333677

Analyte

Mercury

Mercury

Lab Sample ID: MB 180-332971/1-A

Matrix: Water

Analysis Batch: 333510

Analyte

Lab Sample ID: LCS 180-332971/2-A **Matrix: Water**

Analysis Batch: 333510

Analyte

Mercury

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

Lab Sample ID: MB 180-331211/2

Matrix: Water

Analysis Batch: 331211

MR MR

Result Qualifier

Total Dissolved Solids

<10

MR MR

< 0.00013

Result Qualifier

RL 10 MDL Unit 10 mg/L Prepared

Analyzed 09/25/20 06:48

Dil Fac

Dil Fac

Dil Fac

Eurofins TestAmerica, Pittsburgh

Job ID: 180-111399-1

10

Client: Southern Company

Lab Sample ID: LCS 180-331211/1

Project/Site: CCR - Plant Wansley Ash Pond

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

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

Matrix: Water Analysis Batch: 331211

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Analyte Total Dissolved Solids 632 632 mg/L 100 80 - 120

Lab Sample ID: 180-111399-8 DU Client Sample ID: WGWA-5

Matrix: Water Prep Type: Total/NA

Analysis Batch: 331211 Sample Sample DU DU **RPD**

Result Qualifier Result Qualifier Unit D RPD Limit Total Dissolved Solids 190 179 mg/L

Lab Sample ID: MB 180-331565/2 **Client Sample ID: Method Blank**

Matrix: Water Prep Type: Total/NA **Analysis Batch: 331565**

MB MB

Result Qualifier RL **MDL** Unit Analyte Prepared Analyzed Dil Fac Total Dissolved Solids <10 10 10 mg/L 09/29/20 06:43

Lab Sample ID: LCS 180-331565/1 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA**

Analysis Batch: 331565

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits

Total Dissolved Solids 632 612 80 - 120 mg/L

Lab Sample ID: 180-111526-6 DU Client Sample ID: WGWC-15 **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 331565

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 150 141 mg/L

Lab Sample ID: 180-111526-7 DU Client Sample ID: WGWC-16 **Matrix: Water Prep Type: Total/NA**

Analysis Batch: 331565 DU DU RPD Sample Sample

Result Qualifier Result Qualifier **RPD** Limit Analyte Unit D 250 250 **Total Dissolved Solids** mg/L

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

HPLC/IC

Analysis Batch: 332056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-111399-2	EB-1-9-22-20	Total/NA	Water	EPA 300.0 R2.1	
180-111399-3	FB-1-9-22-20	Total/NA	Water	EPA 300.0 R2.1	
180-111399-4	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-111399-5	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-111399-6	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-111399-7	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-111399-8	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-111399-9	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
180-111399-10	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-111399-11	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-111399-12	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
MB 180-332056/41	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-332056/40	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-111399-1 MS	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-111399-1 MSD	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-111399-6 MS	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-111399-6 MSD	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 332194

Lab Sample ID 180-111399-12	Client Sample ID WGWC-8	Prep Type Total/NA	Matrix Water	Method Prep	Batch
MB 180-332194/50	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-332194/49	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-111399-12 MS	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-111399-12 MSD	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 332252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-111526-1	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-111526-2	EB-2-9-24-20	Total/NA	Water	EPA 300.0 R2.1	
180-111526-3	FB-2-9-24-20	Total/NA	Water	EPA 300.0 R2.1	
180-111526-4	WGWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-111526-5	WGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-111526-6	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-111526-7	WGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-111526-8	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-111526-9	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-111526-10	WGWC-14A	Total/NA	Water	EPA 300.0 R2.1	
180-111526-11	WGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-111526-12	WGWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-111526-13	WGWC-12	Total/NA	Water	EPA 300.0 R2.1	
MB 180-332252/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-332252/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-111526-9 MS	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-111526-9 MSD	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Metals

Prep Batch: 332349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total/NA	Water	7470A	
180-111399-4	WGWA-2	Total/NA	Water	7470A	
180-111399-5	WGWA-4	Total/NA	Water	7470A	
180-111399-6	WGWA-3	Total/NA	Water	7470A	
MB 180-332349/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-332349/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 332470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total Recoverable	Water	3005A	
180-111399-2	EB-1-9-22-20	Total Recoverable	Water	3005A	
180-111399-3	FB-1-9-22-20	Total Recoverable	Water	3005A	
180-111399-4	WGWA-2	Total Recoverable	Water	3005A	
180-111399-5	WGWA-4	Total Recoverable	Water	3005A	
180-111399-6	WGWA-3	Total Recoverable	Water	3005A	
180-111399-7	WGWA-1	Total Recoverable	Water	3005A	
180-111399-8	WGWA-5	Total Recoverable	Water	3005A	
180-111399-9	WGWA-6	Total Recoverable	Water	3005A	
180-111399-10	WGWA-7	Total Recoverable	Water	3005A	
180-111399-11	WGWA-18	Total Recoverable	Water	3005A	
180-111399-12	WGWC-8	Total Recoverable	Water	3005A	
MB 180-332470/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-332470/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-111399-1 MS	Dup-1	Total Recoverable	Water	3005A	
180-111399-1 MSD	Dup-1	Total Recoverable	Water	3005A	

Prep Batch: 332506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-2	EB-1-9-22-20	Total/NA	Water	7470A	_
180-111399-3	FB-1-9-22-20	Total/NA	Water	7470A	
180-111399-7	WGWA-1	Total/NA	Water	7470A	
180-111399-8	WGWA-5	Total/NA	Water	7470A	
180-111399-9	WGWA-6	Total/NA	Water	7470A	
180-111399-10	WGWA-7	Total/NA	Water	7470A	
180-111399-11	WGWA-18	Total/NA	Water	7470A	
MB 180-332506/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-332506/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 332507

Lab Sample ID 180-111399-12	Client Sample ID WGWC-8	Prep Type Total/NA	Matrix Water	Method 7470A	Prep Batch
180-111526-1	Dup-2	Total/NA	Water	7470A	
MB 180-332507/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-332507/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 332694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total/NA	Water	EPA 7470A	332349
180-111399-4	WGWA-2	Total/NA	Water	EPA 7470A	332349
180-111399-5	WGWA-4	Total/NA	Water	EPA 7470A	332349
180-111399-6	WGWA-3	Total/NA	Water	EPA 7470A	332349

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Job ID: 180-111399-1

3

6

8

4.6

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

Metals (Continued)

Analysis Batch: 332694 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-332349/1-A	Method Blank	Total/NA	Water	EPA 7470A	332349
LCS 180-332349/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	332349

Analysis Batch: 332827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-2	EB-1-9-22-20	Total/NA	Water	EPA 7470A	332506
180-111399-3	FB-1-9-22-20	Total/NA	Water	EPA 7470A	332506
180-111399-7	WGWA-1	Total/NA	Water	EPA 7470A	332506
180-111399-8	WGWA-5	Total/NA	Water	EPA 7470A	332506
180-111399-9	WGWA-6	Total/NA	Water	EPA 7470A	332506
180-111399-10	WGWA-7	Total/NA	Water	EPA 7470A	332506
180-111399-11	WGWA-18	Total/NA	Water	EPA 7470A	332506
180-111399-12	WGWC-8	Total/NA	Water	EPA 7470A	332507
180-111526-1	Dup-2	Total/NA	Water	EPA 7470A	332507
MB 180-332506/1-A	Method Blank	Total/NA	Water	EPA 7470A	332506
MB 180-332507/1-A	Method Blank	Total/NA	Water	EPA 7470A	332507
LCS 180-332506/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	332506
LCS 180-332507/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	332507

Analysis Batch: 332836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total Recoverable	Water	EPA 6020B	332470
180-111399-2	EB-1-9-22-20	Total Recoverable	Water	EPA 6020B	332470
180-111399-3	FB-1-9-22-20	Total Recoverable	Water	EPA 6020B	332470
180-111399-4	WGWA-2	Total Recoverable	Water	EPA 6020B	332470
180-111399-5	WGWA-4	Total Recoverable	Water	EPA 6020B	332470
180-111399-6	WGWA-3	Total Recoverable	Water	EPA 6020B	332470
180-111399-7	WGWA-1	Total Recoverable	Water	EPA 6020B	332470
180-111399-8	WGWA-5	Total Recoverable	Water	EPA 6020B	332470
180-111399-9	WGWA-6	Total Recoverable	Water	EPA 6020B	332470
180-111399-10	WGWA-7	Total Recoverable	Water	EPA 6020B	332470
180-111399-11	WGWA-18	Total Recoverable	Water	EPA 6020B	332470
180-111399-12	WGWC-8	Total Recoverable	Water	EPA 6020B	332470
MB 180-332470/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	332470
LCS 180-332470/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	332470
180-111399-1 MS	Dup-1	Total Recoverable	Water	EPA 6020B	332470
180-111399-1 MSD	Dup-1	Total Recoverable	Water	EPA 6020B	332470

Prep Batch: 332871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-4	WGWC-17	Total/NA	Water	7470A	<u> </u>
180-111526-5	WGWC-10	Total/NA	Water	7470A	
180-111526-6	WGWC-15	Total/NA	Water	7470A	
180-111526-7	WGWC-16	Total/NA	Water	7470A	
180-111526-8	WGWC-9	Total/NA	Water	7470A	
180-111526-11	WGWC-19	Total/NA	Water	7470A	
180-111526-13	WGWC-12	Total/NA	Water	7470A	
MB 180-332871/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-332871/2-A	Lab Control Sample	Total/NA	Water	7470A	

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

Metals

Prep Batch: 332954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-1	Dup-2	Total Recoverable	Water	3005A	
180-111526-2	EB-2-9-24-20	Total Recoverable	Water	3005A	
MB 180-332954/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-332954/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 332956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-3	FB-2-9-24-20	Total Recoverable	Water	3005A	
180-111526-4	WGWC-17	Total Recoverable	Water	3005A	
180-111526-5	WGWC-10	Total Recoverable	Water	3005A	
180-111526-6	WGWC-15	Total Recoverable	Water	3005A	
180-111526-7	WGWC-16	Total Recoverable	Water	3005A	
180-111526-8	WGWC-9	Total Recoverable	Water	3005A	
180-111526-9	WGWC-13	Total Recoverable	Water	3005A	
180-111526-10	WGWC-14A	Total Recoverable	Water	3005A	
180-111526-11	WGWC-19	Total Recoverable	Water	3005A	
180-111526-12	WGWC-11	Total Recoverable	Water	3005A	
180-111526-13	WGWC-12	Total Recoverable	Water	3005A	
MB 180-332956/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-332956/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 332971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-2	EB-2-9-24-20	Total/NA	Water	7470A	
180-111526-3	FB-2-9-24-20	Total/NA	Water	7470A	
180-111526-9	WGWC-13	Total/NA	Water	7470A	
180-111526-10	WGWC-14A	Total/NA	Water	7470A	
180-111526-12	WGWC-11	Total/NA	Water	7470A	
MB 180-332971/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-332971/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 333510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-2	EB-2-9-24-20	Total/NA	Water	EPA 7470A	332971
180-111526-3	FB-2-9-24-20	Total/NA	Water	EPA 7470A	332971
180-111526-9	WGWC-13	Total/NA	Water	EPA 7470A	332971
180-111526-10	WGWC-14A	Total/NA	Water	EPA 7470A	332971
180-111526-12	WGWC-11	Total/NA	Water	EPA 7470A	332971
MB 180-332971/1-A	Method Blank	Total/NA	Water	EPA 7470A	332971
LCS 180-332971/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	332971

Analysis Batch: 333527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-1	Dup-2	Total Recoverable	Water	EPA 6020B	332954
180-111526-2	EB-2-9-24-20	Total Recoverable	Water	EPA 6020B	332954
MB 180-332954/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	332954
LCS 180-332954/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	332954

Analysis Batch: 333677

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-4	WGWC-17	Total/NA	Water	EPA 7470A	332871

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Project/Site: CCR - Plant Wansley Ash Pond

Metals (Continued)

Analysis Batch: 333677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-5	WGWC-10	Total/NA	Water	EPA 7470A	332871
180-111526-6	WGWC-15	Total/NA	Water	EPA 7470A	332871
180-111526-7	WGWC-16	Total/NA	Water	EPA 7470A	332871
180-111526-8	WGWC-9	Total/NA	Water	EPA 7470A	332871
180-111526-11	WGWC-19	Total/NA	Water	EPA 7470A	332871
180-111526-13	WGWC-12	Total/NA	Water	EPA 7470A	332871
MB 180-332871/1-A	Method Blank	Total/NA	Water	EPA 7470A	332871
LCS 180-332871/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	332871

Analysis Batch: 334010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-3	FB-2-9-24-20	Total Recoverable	Water	EPA 6020B	332956
180-111526-4	WGWC-17	Total Recoverable	Water	EPA 6020B	332956
180-111526-5	WGWC-10	Total Recoverable	Water	EPA 6020B	332956
180-111526-6	WGWC-15	Total Recoverable	Water	EPA 6020B	332956
180-111526-7	WGWC-16	Total Recoverable	Water	EPA 6020B	332956
180-111526-8	WGWC-9	Total Recoverable	Water	EPA 6020B	332956
180-111526-9	WGWC-13	Total Recoverable	Water	EPA 6020B	332956
180-111526-10	WGWC-14A	Total Recoverable	Water	EPA 6020B	332956
180-111526-11	WGWC-19	Total Recoverable	Water	EPA 6020B	332956
180-111526-12	WGWC-11	Total Recoverable	Water	EPA 6020B	332956
180-111526-13	WGWC-12	Total Recoverable	Water	EPA 6020B	332956
MB 180-332956/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	332956
LCS 180-332956/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	332956

Analysis Batch: 334271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-3	FB-2-9-24-20	Total Recoverable	Water	EPA 6020B	332956
180-111526-4	WGWC-17	Total Recoverable	Water	EPA 6020B	332956
180-111526-5	WGWC-10	Total Recoverable	Water	EPA 6020B	332956
180-111526-6	WGWC-15	Total Recoverable	Water	EPA 6020B	332956
180-111526-7	WGWC-16	Total Recoverable	Water	EPA 6020B	332956
180-111526-8	WGWC-9	Total Recoverable	Water	EPA 6020B	332956
180-111526-9	WGWC-13	Total Recoverable	Water	EPA 6020B	332956
180-111526-10	WGWC-14A	Total Recoverable	Water	EPA 6020B	332956
180-111526-11	WGWC-19	Total Recoverable	Water	EPA 6020B	332956
180-111526-12	WGWC-11	Total Recoverable	Water	EPA 6020B	332956
180-111526-13	WGWC-12	Total Recoverable	Water	EPA 6020B	332956
MB 180-332956/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	332956
LCS 180-332956/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	332956

General Chemistry

Analysis Batch: 331211

Lab Sample ID 180-111399-1	Client Sample ID Dup-1	Prep Type Total/NA	Matrix Water	Method SM 2540C	Prep Batch
180-111399-2	EB-1-9-22-20	Total/NA	Water	SM 2540C	
180-111399-3	FB-1-9-22-20	Total/NA	Water	SM 2540C	
180-111399-4	WGWA-2	Total/NA	Water	SM 2540C	
180-111399-5	WGWA-4	Total/NA	Water	SM 2540C	
180-111399-6	WGWA-3	Total/NA	Water	SM 2540C	

Page 56 of 67

Project/Site: CCR - Plant Wansley Ash Pond

General Chemistry (Continued)

Analysis Batch: 331211 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-7	WGWA-1	Total/NA	Water	SM 2540C	
180-111399-8	WGWA-5	Total/NA	Water	SM 2540C	
180-111399-9	WGWA-6	Total/NA	Water	SM 2540C	
180-111399-10	WGWA-7	Total/NA	Water	SM 2540C	
180-111399-11	WGWA-18	Total/NA	Water	SM 2540C	
180-111399-12	WGWC-8	Total/NA	Water	SM 2540C	
MB 180-331211/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-331211/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-111399-8 DU	WGWA-5	Total/NA	Water	SM 2540C	

Analysis Batch: 331565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-1	Dup-2	Total/NA	Water	SM 2540C	
180-111526-2	EB-2-9-24-20	Total/NA	Water	SM 2540C	
180-111526-3	FB-2-9-24-20	Total/NA	Water	SM 2540C	
180-111526-4	WGWC-17	Total/NA	Water	SM 2540C	
180-111526-5	WGWC-10	Total/NA	Water	SM 2540C	
180-111526-6	WGWC-15	Total/NA	Water	SM 2540C	
180-111526-7	WGWC-16	Total/NA	Water	SM 2540C	
180-111526-8	WGWC-9	Total/NA	Water	SM 2540C	
180-111526-9	WGWC-13	Total/NA	Water	SM 2540C	
180-111526-10	WGWC-14A	Total/NA	Water	SM 2540C	
180-111526-11	WGWC-19	Total/NA	Water	SM 2540C	
180-111526-12	WGWC-11	Total/NA	Water	SM 2540C	
180-111526-13	WGWC-12	Total/NA	Water	SM 2540C	
MB 180-331565/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-331565/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-111526-6 DU	WGWC-15	Total/NA	Water	SM 2540C	
180-111526-7 DU	WGWC-16	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 333008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-4	WGWC-17	Total/NA	Water	Field Sampling	
180-111526-5	WGWC-10	Total/NA	Water	Field Sampling	
180-111526-6	WGWC-15	Total/NA	Water	Field Sampling	
180-111526-7	WGWC-16	Total/NA	Water	Field Sampling	
180-111526-8	WGWC-9	Total/NA	Water	Field Sampling	
180-111526-9	WGWC-13	Total/NA	Water	Field Sampling	
180-111526-10	WGWC-14A	Total/NA	Water	Field Sampling	
180-111526-11	WGWC-19	Total/NA	Water	Field Sampling	
180-111526-12	WGWC-11	Total/NA	Water	Field Sampling	
180-111526-13	WGWC-12	Total/NA	Water	Field Sampling	

Analysis Batch: 333009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batcl	n
180-111399-4	WGWA-2	Total/NA	Water	Field Sampling	_
180-111399-5	WGWA-4	Total/NA	Water	Field Sampling	
180-111399-6	WGWA-3	Total/NA	Water	Field Sampling	
180-111399-7	WGWA-1	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh

Job ID: 180-111399-1

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Client: Southern Company Job ID: 180-111399-1

Project/Site: CCR - Plant Wansley Ash Pond

Field Service / Mobile Lab (Continued)

Analysis Batch: 333009 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-8	WGWA-5	Total/NA	Water	Field Sampling	
180-111399-9	WGWA-6	Total/NA	Water	Field Sampling	
180-111399-10	WGWA-7	Total/NA	Water	Field Sampling	
180-111399-11	WGWA-18	Total/NA	Water	Field Sampling	
180-111399-12	WGWC-8	Total/NA	Water	Field Sampling	

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Eurofins T *America, Pittsburgh 301 Alpha Driv. S Park Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	S	Chain of Custodyecord	f Cust	. dpo:	ecord	g.		D	244-	Envient Testing America
Client Information	Sampler: O. F. UQU	DUEA J.	BELTSFARD	Fall Brow	Lab PM: Brown, Shali		O	Carrier Tracking No(s):	COC No:	
Client Contact: SCS Contacts	Phone (370) 5	5-46	866	E-Mail.	E-Mail: shali.brown@eurofinset.com	inset.com			Page:	
Company: GA Power							Analysis Requested	ested	Job #:	
Address: 241 Raiph McGill Blvd SE	Due Date Requested	÷							ion Cod	isi
City: Atlanta	TAT Requested (days):	ys):							A - HCL B - NaOH	M - Hexane
State, Zip. GA, 30308										ί Ο ω
Phone: 404-506-7116(Tel)	PO#: SCS10382606				(0	:(0747)3
Email: SCS Contacts					DANCE MEMORY	/0Z09\	ac'ow.			acanydiate
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				10 es	A93) e	'6uún'	MINIMINIMINIMINIMINIMINIMINIMINIMINIMIN	of Custody	other (specify)
Site:	SSOW#:				(B,Ca)	N 2540	028 (028		of co	
		0			ield Filtered erform MS/M pp. III Metals I, F, SO ₄ & TD3	18 & 0.00£ Aq	17,67,68,88,8 84,68,68,15/9 18,68,68,15/9		otal Number	
Sample Identification	Sample Date		G=grab) BT=Tissue, A=A Preservation Code	<u>.</u>	A X	a)	8)			Special Instructions/Note:
DUP-1	9-11-50	\	O	Water	NN	1	>		3 pH= NA	
EB-1-9-22-20	9-12-20	0211	O	Water	/ / / /		>		=Hd	
FB-1-9-22-20	4-11-10	01/11	ŋ	Water	NUV		>		=Hd	
WCWA-2	02-12-6	0121	O	Water	NNV	1	>		3 pH=6 05	
WGWA-4	02-12-6	oohl	O	Water	NNV	\ \	/		3 pH= 6.8	
WCWA-3	02-17-6	1501	O	Water	NNV	>			3 pH= 5.35	
WEWA-1	92-22-6	1007	ŋ	Water	NN	>	/		3 PH= 5,69	
WGWA-S	02-22-6	0221	Ŋ	Water	NN	>				
WGWA-6	02-22-6	1030	O	Water	500	7			3 PH= 7.40	
WEWA-7	9-11-20	1450	O	Water	UNV.				3 PH 5.36	
WGWA-18	4.22-20	1315	ŋ	Water	NUS				3 pH= 7.18	
ant	Poison B Unknown	Ш	Radiological		Sample D	le Disposal (At Return To Client	4 fee may be as:	o assessed if samples are in Disposal By Lab	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	month)
i					Special Ins	structions/	Require	3:		2500
Empty Kit Relinquished by:		Date:			Time:			Method of Shipment:		
Relinquished by: Mc	Date/Time:	1 12:0	/1	Company Ac	Received by:	d by:	N	Date/Time:	13:15	Company
Relinquished by 2	Date/Time:	16ia		Company	Received by	Soy	0	Date/Time:		Company
г	Date/Time:			ompany	Received by:	d by:	Muella	bate Fings.	14-20	Company AR A
Custody Seals Intact: Custody Seal No.: △ Yes △ No					Cooler	remperature remperature	Cooler Température(s) °C and Other Remarks:	larks: (21.6	

N - None
O - AsNaO2
P - Na2O45
Q - Na2SO3
R - Na2S203
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - PH 4-5
Z - other (specify) ent Testing Ver: 01/16/2019 Special Instructions/Note: Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month
Special Instructions/QC Requirements: reservation Codes: 💸 eurofins A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid N.C lce DI Water 5 K-EDTA L-EDA ----=Hd =Hd =Hd =Hd Total Number of containers 9/23/20 **Jethod of Shipment**: Who Analysis Requested Sooler Temperature(s) °C and Other Remarks: Received by: MMMLe SW-846 9315/9320) Detected App IV Metals (EPA 6020/7470): Radla Ba, Ba, Cd, Cr, Co, Pb, Li, Hg, Mo, Se, TI Radla S 28 228 Lab PM:
Brown, Shali
E-Mail:
Shali.brown@eurofinset.com (EPA 300.0 & SM 2540C) Chain of Custody ... cord erform MS/MSD (Yes or No) ACC BT=Tissue, A=Air Preservation Code: Water Matrix Water Company Company Radiological Type (C=comp, G=grab) Sample Phone: (770) 594-5948 G 1318 G G Ö G G G G G G G 1430 Sampler: O, FUQUEA Sample Time Date: Anknown 9.23-20 TAT Requested (days) Due Date Requested: PO#: SCS10382606 0-22-10 Sample Date Project #: 18019922 Date/Time: Poison B Skin Irritant Eurofins To-America, Pittsburgh Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Phone (412) 963-7058 Fax (412) 963-2468 Flammable Possible Hazard Identification Project Name: CCR - Plant Wansley Ash Pond Empty Kit Relinquished by: Address: 241 Ralph McGill Blvd SE Custody Seals Intact: Client Information Sample Identification Pittsburgh, PA 15238 △ Yes △ No Non-Hazard 404-506-7116(Tel) 301 Alpha Drive Client Contact: SCS Contacts inquished by: linquished by: SCS Contacts State, Zip: GA, 30308 **GA** Power Company: City: Atlanta

Ver: 01/16/2019

Company Company

3

cooler Temperature(s) °C and Other Remarks:

Received by: Received by:

Company Company

1600

0

Chain of Custody Second

Eurofins T America, Pittsburgh

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

Pittsburgh, PA 15238

301 Alpha Drive

ent Testing

N None
O - Ashadoz
P - NazOds
Q - NazSO3
R - NazSO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
W - MCAA
W - PH 4-5
Z - other (specify) Special Instructions/Note: Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month
Special Instructions/QC Requirements: 58-30 Preservation Codes 5.16 67.9 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
F - NaNSO4
F - MOH
G - Amchlor
H - Ascorbic Acid 3 PH= 7,35 5.80 6.29 PH= 5.89 3 pH= 5,05 PH= 6,14 PH= NA I - Ice J - DI Water K - EDTA NA NA EDTA COC No: 3 pH= age: M W 3 3 7 Total Number of containers Date/Filme: **Method of Shipment** Carrier Tracking No(s): 180-111526 Chain of Custody Defected App IV Metals (EPA 6020/1470): Radium 226 & 228 Radium 226 & 228 (SW-846 9315/9320) CI, F, SO₄ & TDS (EPA 300.0 & SM 2540C) shali.brown@eur Lab PM: Brown, Shali Field Filtered Sample (Yes or No) E-Mail: BT=Tissue, A=Air Water Water S=solid, O=waste/oil, Preservation Code: Water Water Water Water Water Water Water Water Water Matrix J. BLOBFORDS Radiological 0830 Sample Type (C=comp, G=grab) O O G G C C O G 9 9 G hone: (770) 544-5498 1550 1435 1150 9-13-20 1500 1330 Sample 1000 125 9-74-70 0955 1105 Date: Unknown O. FUQUEA TAT Requested (days) Due Date Requested: Date/Time: 72/20 02-11-6 9-23-20 PO#: SCS10382606 Sample Date 9-13-20 02-52-6 9-23-70 02-82-6 02-11-6 Project #: 18019922 SSOW#: Poison B WO #: Skin Irritant Possible Hazard Identification

Non-Hazard Flammable Skin Irriti
Deliverable Requested: I, III, IV, Other (specify) 02-12-6-42-WGWC-14A WGWC-16 WGWC-13 Project Name: CCR - Plant Wansley Ash Pond 2 WGWC-NG WC-**Empty Kit Relinquished by** 241 Ralph McGill Blvd SE WGWC JM SM Client Information Sample Identification ER-2 Phone: 404-506-7116(Tel) linquished by: SCS Contacts SCS Contacts FB State, Zip: GA, 30308 Client Contact: **GA Power** City: Atlanta

Custody Seal No.

Custody Seals Intact:

Δ Yes Δ No

ent Testing

Eurofins Taramerica, Pittsburgh 301 Alpha Drive Pittsburgh, Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

		-								-		The state of the s	The state of the s	r
Client Information	Sampler. O. FUOLEA	PUCA		Brown	Lab PM: Brown, Shali				Carrier Tracking No(s):	ng No(s):	0	COC No:		
Client Contact: SCS Contacts	Phone: (770)	1) 594	- 599	E-Mail:	E-Mail: shali.brown@eurofinset.com	urofinset.	com				III.	Page:		
Company: GA Power							Anal	Analysis Requested	uested		7	Job #:		_
Address: 241 Raiph McGill Blvd SE	Due Date Requested:	ed:										Preservation Codes:		_
City: Atlanta	TAT Requested (days):	ays):										A - HCL B - NaOH C - 7n Aretate		
State, Zip: GA, 30308												D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3	
Phone: 404-506-7116(Tel)	PO#: SCS10382606				(0		:(0747 IT,					F - MeOH G - Amchlor H - Ascorbic Acid		
Email: SCS Contacts	.#OM				-		\0209 <i>t</i> 98,0M,					I - Ice J - DI Water		
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				10 sa	(၁	s (EP/					K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
Site:	SSOW#:				SD (Y		,Co,Pb	(075			4. 6 mm/mg0/2050a	Other:		
O constant of the setting of the set		Sample		Matrix (W=water, S=solid, O=wastefoll,	ield Filtered erform MS/M pp. III Metals	I, F, SO₄ & TD9 IS & 0.00£ Aq	otected App IV rO,bO,e8,s8,e salium 226 & 2	6/9126 978-M			nedmuM leto			
Sample identification	Sample Date		Preservation Code:	BT=Tissue, A=Air) fion Code:			A A	3)			1	Special	Special Instructions/Note:	100
11 - JMSM	02-12-5	1020	0	Water	N	>	/				W	PH= 5.50	0	_
WGWC-12	9.13-70	1355	O	Water	NN	>	/) W	PH= MSCA7320	24.6) 05	_
			O	Water								pH=)	_
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Possible Hazard Identification	A Green	Ш	locizoloibo		Samp	le Dispos	sal (A fe	e may be a	ssessed in	samples are	retaine	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	n 1 month)	_
ested: I, II, III, IV, Other (specify)	1		Nadiological		Specia	al Instruct	ions/QC	Special Instructions/QC Requirements:	nts:	Lab	Archiv	/e ror	Wontns	_
Empty Kit Relinguished by:		Date:			Time.	l			Method	Method of Shipmen:				Т
Relinatished by	Date/Time:	-		voecomo	-	Booking		1						_
Non-manufacture 25:	2/22/20		08.30	5/25	200	V		1	2	129/2	9		08.30	
Kelinduished go	123 (20	650	7	く	- R	Received by:	The state of the s	Ja		Date/Time:	2	900	Company Con Brown	
IN	(Øate/Time:			Company	Re	Received by:	N			Date/Time:			Company	
Custody Seals Intact: Custody Seal No.: △ Yes △ No					ဝိ	oler Tempe	rature(s) °C	Cooler Temperature(s) °C and Other Remarks	emarks:			1		
													Ver 01/16/2010	1



180-111526 Waybill

IYA* (678) 966-9991 TAYLOR NS TESTAMERICA DONOUGH DRIVE

SHIP DATE: 25SEP20 ACTWGT: 59.05 LB CAD: 859116/CAFE3408

BILL RECIPIENT

TO SAMPLE RECIEVING
ENROFINS TESTAMERICA PITTSBURGH
SUT ALPHA DR. SUITE C 10 NORCRUSS, 36 30093 UNITED STATES -US

PITTSBURGH PA 15238 * RIDC PARK

REF: GA POWER (412) 963-7058

SATURDAY 12:00P

1 01.3

PA-US



Sunsannich Lesting **TestAmerica**

S TESTAMERICA PITTSBURGH

SAMPLE RECIEVING

OH 30093

SHIP DATE: 25SEP2(ACTWGT: 59.05 LB CAD: 859116/CAFE3

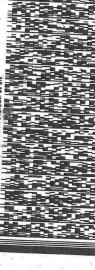
BILL RECIPIENT

ORIGIN ID-LIYA (G78) 966-9991 GEORGE TAYLOR EUROFINS TESTAMERICA ESOO MEDONOUGH DRIVE SUITE C-10 NORCROSS, GA 30093 UNITED STATES US

EUROFINS TESTAMERICA PITTSBURGH BILL RECIPIENT TO SAMPLE RECIEVING 301 ALPHA DR.

PITTSBURGH PA 15238 (412) 863-7056 RIDC PARK

REF: GA POWER



SATURDAY PRIORITY OVE

Uncorrected temp Thermometer ID

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

O Initials CF

THE PRINCE OF THE PRINCE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN

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

Uncorrected temp Thermometer ID

Job Number: 180-111399-1

Login Number: 111399

List Number: 1

Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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.	False	
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	

Client: Southern Company

Job Number: 180-111399-1

Login Number: 111526 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.</td <td>True</td> <td></td>	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 America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive **RIDC Park** Pittsburgh, PA 15238

Tel: (412)963-7058

Laboratory Job ID: 180-111399-2

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: 12/9/2020 3:33:00 PM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

Review your project results through Total Access

Have a Question?



Visit us at:

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

Client: Southern Company Project/Site: CCR - Plant Wansley Ash Pond Laboratory Job ID: 180-111399-2

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Method Summary	9
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QC Sample Results	43
QC Association Summary	48
Chain of Custody	50
Receipt Chacklists	50

Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-111399-2

Comments

No additional comments.

Receipt

The samples were received on 9/24/2020 9:15 AM and 9/26/2020 9:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.9° C, 1.9° C, 2.1° C, 2.4° C, 2.7° C and 3.4° C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. The COC wasn't relinquished.

RAD

Methods 903.0, 9315: Radium-226 prep batch 160-484391:

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.

Dup-2 (180-111526-1), EB-2-9-24-20 (180-111526-2), FB-2-9-24-20 (180-111526-3), WGWC-17 (180-111526-4), WGWC-10 (180-111526-5), WGWC-15 (180-111526-6), WGWC-16 (180-111526-7), WGWC-9 (180-111526-8), WGWC-13 (180-111526-9), WGWC-14A (180-111526-10), WGWC-19 (180-111526-11), WGWC-11 (180-111526-12), WGWC-12 (180-111526-13), (LCS 160-484391/1-A), (LCSD 160-484391/2-A) and (MB 160-484391/23-A)

Method 9315: Radium-226 prep batch 160-484404:

The following samples need to be re-analyzed due to MB contamination and activity in the samples above the MDC and RL. EB-1-9-22-20 (180-111399-2) and WGWA-2 (180-111399-4)

Methods 903.0, 9315: Radium-226 prep batch 160-484404:

The method blank (MB) has Ra-226 activity above the MDC and RL. The following associated samples are non-detect for the contaminant observed in the MB, therefore, re-analysis is not required. The data have been reported. Dup-1 (180-111399-1), FB-1-9-22-20 (180-111399-3) and (MB 160-484404/24-A)

Methods 903.0, 9315: Radium-226 prep batch 160-484404;

The method blank (MB) has Ra-226 activity above the MDC and RL. The following associated samples have results below the RL. All other QC is within limits (LCS, LCSD, and RER/RPD). The data have been reported with this narrative. Dup-1 (180-111399-1), FB-1-9-22-20 (180-111399-3) and (MB 160-484404/24-A)

Methods 903.0, 9315: Radium-226 prep batch 160-484404:

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. Dup-1 (180-111399-1), FB-1-9-22-20 (180-111399-3), (LCS 160-484404/1-A), (LCSD 160-484404/2-A) and (MB 160-484404/24-A)

Methods 903.0, 9315: 903/9315 Prep Batch: 160-487775

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. EB-1-9-22-20 (180-111399-2), WGWA-2 (180-111399-4), WGWA-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12)

Methods 904.0, 9320: 904 / 9320 prep batch: 160-484392

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. Dup-2 (180-111526-1), EB-2-9-24-20 (180-111526-2), FB-2-9-24-20 (180-111526-3), WGWC-17 (180-111526-4), WGWC-10 (180-111526-5), WGWC-15 (180-111526-6), WGWC-16 (180-111526-7), WGWC-9 (180-111526-8), WGWC-13

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

(180-111526-9), WGWC-14A (180-111526-10), WGWC-19 (180-111526-11), WGWC-11 (180-111526-12) and WGWC-12 (180-111526-13)

Methods 904.0, 9320: Ra 228 prep batch: 160-484437

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-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12)

Methods 904.0, 9320: Ra-228 prep batch 160-484405:

The Ra-228 laboratory control sample(LCS) recovery (166%) associated with the following samples is outside the upper QC limit of (125%) indicating a potential positive bias for that analyte. This analyte was not observed above the MDC/RL in the associated samples; therefore the sample data is not adversely affected by this excursion. The data have been reported with this narrative. Dup-1 (180-111399-1), EB-1-9-22-20 (180-111399-2), FB-1-9-22-20 (180-111399-3), WGWA-2 (180-111399-4) and (LCS 160-484405/1-A)

Methods 904.0, 9320: Ra-228 prep batch 160-484405:

The Ra-228 laboratory control sample(LCS) recovery (166%) associated with the following samples is outside the upper QC limit of (125%) indicating a potential positive bias for that analyte. This analyte was observed above the MDC/RL in the associated samples. Per client request, the data have been reported with this narrative. (LCS 160-484405/1-A)

Methods 904.0, 9320: Ra-228 prep batch 160-484405:

The following samples have an RER (replicate error ratio) result outside of the acceptance criteria of 1 (1.51) for Ra-228. Duplicate precision is demonstrated by acceptable relative percent difference (RPD), within the limit of 40% (40%). The samples have been evaluated in the LIMS against the QSM limit of 25 %. The flag have been removed and the data have been reported with this narrative. (LCSD 160-484405/2-A)

Methods 904.0, 9320: Ra-228 prep batch 160-484405:

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.

Dup-1 (180-111399-1), EB-1-9-22-20 (180-111399-2), FB-1-9-22-20 (180-111399-3), WGWA-2 (180-111399-4), (LCS 160-484405/1-A), (LCSD 160-484405/2-A) and (MB 160-484405/24-A)

Method PrecSep 0: Radium 228 Prep Batch 160-484392:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-2 (180-111526-1), EB-2-9-24-20 (180-111526-2), FB-2-9-24-20 (180-111526-3), WGWC-17 (180-111526-4), WGWC-10 (180-111526-5), WGWC-15 (180-111526-6), WGWC-16 (180-111526-7), WGWC-9 (180-111526-8), WGWC-13 (180-111526-9), WGWC-14A (180-111526-10), WGWC-19 (180-111526-11), WGWC-11 (180-111526-12) and WGWC-12 (180-111526-13). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep 0: Radium 228 Prep Batch 160-484405:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-1 (180-111399-1), EB-1-9-22-20 (180-111399-2), FB-1-9-22-20 (180-111399-3) and WGWA-2 (180-111399-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep 0: Radium 228 Prep Batch 160-484437:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWA-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484391:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-2 (180-111526-1), EB-2-9-24-20 (180-111526-2), FB-2-9-24-20 (180-111526-3), WGWC-17 (180-111526-4), WGWC-10 (180-111526-5), WGWC-15 (180-111526-6), WGWC-16 (180-111526-7), WGWC-9 (180-111526-8), WGWC-13 (180-111526-9), WGWC-14A (180-111526-10), WGWC-19 (180-111526-11), WGWC-11 (180-111526-12) and WGWC-12 (180-111526-13). A laboratory control sample/ laboratory control sample

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Case Narrative

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-2 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484404:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-1 (180-111399-1), EB-1-9-22-20 (180-111399-2), FB-1-9-22-20 (180-111399-3) and WGWA-2 (180-111399-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-484436:

Insufficient sample volume was available to perform a sample duplicate for the following samples: WGWA-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-487775:

Insufficient sample volume was available to perform a sample duplicate for the following samples: EB-1-9-22-20 (180-111399-2), WGWA-2 (180-111399-4), WGWA-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-487775:

The following samples were prepared at a reduced aliquot due to re extract of the samples: EB-1-9-22-20 (180-111399-2), WGWA-2 (180-111399-4), WGWA-4 (180-111399-5), WGWA-3 (180-111399-6), WGWA-1 (180-111399-7), WGWA-5 (180-111399-8), WGWA-6 (180-111399-9), WGWA-7 (180-111399-10), WGWA-18 (180-111399-11) and WGWC-8 (180-111399-12).

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

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Definitions/Glossary

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Qualifiers

R	a	d

LOD

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
U	Result is less than the sample detection limit.

Glossary

Giossaiy				
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			
CFU	Colony Forming Unit			
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)			

LOQ Limit of Quantitation (DoD/DOE) EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Limit of Detection (DoD/DOE)

MDL Method Detection Limit Minimum Level (Dioxin) MLMPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive 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)

TNTC Too Numerous To Count

Accreditation/Certification Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-2

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	06-30-21
California	State	2886	06-30-21
Connecticut	State	PH-0241	03-31-21
Florida	NELAP	E87689	06-30-21
HI - RadChem Recognition	State	n/a	06-30-21
lowa	State	373	12-01-22
Kentucky (DW)	State	KY90125	12-31-20
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-20
Maryland	State	310	09-30-21
MI - RadChem Recognition	State	9005	06-30-21
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-21
New Jersey	NELAP	MO002	06-30-21
New York	NELAP	11616	04-01-21
North Dakota	State	R-207	06-30-21
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-21
Oregon	NELAP	4157	09-01-21
Pennsylvania	NELAP	68-00540	02-28-21
South Carolina	State	85002001	06-30-21
Texas	NELAP	T104704193-19-13	07-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542019-11	07-31-21
Virginia	NELAP	10310	06-14-21
Washington	State	C592	08-30-21
West Virginia DEP	State	381	10-31-21

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12/9/2020

Sample Summary

Client: Southern Company

180-111526-13

WGWC-12

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-111399-1	Dup-1	Water	09/21/20 00:00	09/24/20 09:15	
180-111399-2	EB-1-9-22-20	Water	09/22/20 11:20	09/24/20 09:15	
180-111399-3	FB-1-9-22-20	Water	09/22/20 14:10	09/24/20 09:15	
180-111399-4	WGWA-2	Water	09/21/20 12:10	09/24/20 09:15	
180-111399-5	WGWA-4	Water	09/21/20 14:00	09/24/20 09:15	
180-111399-6	WGWA-3	Water	09/21/20 15:01	09/24/20 09:15	
180-111399-7	WGWA-1	Water	09/22/20 10:57	09/24/20 09:15	
180-111399-8	WGWA-5	Water	09/22/20 12:20	09/24/20 09:15	
180-111399-9	WGWA-6	Water	09/22/20 10:30	09/24/20 09:15	
180-111399-10	WGWA-7	Water	09/22/20 14:20	09/24/20 09:15	
180-111399-11	WGWA-18	Water	09/22/20 13:15	09/24/20 09:15	
180-111399-12	WGWC-8	Water	09/22/20 14:30	09/24/20 09:15	
180-111526-1	Dup-2	Water	09/23/20 00:00	09/26/20 09:00	
180-111526-2	EB-2-9-24-20	Water	09/24/20 11:50	09/26/20 09:00	
180-111526-3	FB-2-9-24-20	Water	09/24/20 10:00	09/26/20 09:00	
180-111526-4	WGWC-17	Water	09/23/20 11:11	09/26/20 09:00	
180-111526-5	WGWC-10	Water	09/23/20 12:25	09/26/20 09:00	
180-111526-6	WGWC-15	Water	09/23/20 14:35	09/26/20 09:00	
180-111526-7	WGWC-16	Water	09/23/20 13:30	09/26/20 09:00	
180-111526-8	WGWC-9	Water	09/23/20 15:50	09/26/20 09:00	
180-111526-9	WGWC-13	Water	09/24/20 11:05	09/26/20 09:00	
180-111526-10	WGWC-14A	Water	09/24/20 09:55	09/26/20 09:00	
180-111526-11	WGWC-19	Water	09/23/20 15:00	09/26/20 09:00	
180-111526-12	WGWC-11	Water	09/24/20 10:20	09/26/20 09:00	

Water

09/23/20 13:55 09/26/20 09:00

Job ID: 180-111399-2

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Method Summary

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Protocol References:

None = None

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

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

Laboratory References:

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

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Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-111399-1 **Client Sample ID: Dup-1**

Date Collected: 09/21/20 00:00 **Matrix: Water**

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.23 mL	1.0 g	484404	10/01/20 11:19	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			486960	10/27/20 14:02	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.23 mL	1.0 g	484405	10/01/20 11:51	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCORANGE	≣	1			486847	10/26/20 13:10	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			487773	11/02/20 23:25	SCB	TAL SL

Client Sample ID: EB-1-9-22-20 Lab Sample ID: 180-111399-2

Date Collected: 09/22/20 11:20 **Matrix: Water**

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.09 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			490978	12/07/20 06:20	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.35 mL	1.0 g	484405	10/01/20 11:51	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCORANGE		1			486847	10/26/20 13:10	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			491202	12/08/20 22:04	GRW	TAL SL

Client Sample ID: FB-1-9-22-20 Lab Sample ID: 180-111399-3 Date Collected: 09/22/20 14:10

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.68 mL	1.0 g	484404	10/01/20 11:19	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486960	10/27/20 14:02	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.68 mL	1.0 g	484405	10/01/20 11:51	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			486847	10/26/20 13:10	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			487773	11/02/20 23:25	SCB	TAL SL

Client Sample ID: WGWA-2 Lab Sample ID: 180-111399-4 Date Collected: 09/21/20 12:10

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.46 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis	9315		1			490978	12/07/20 06:21	SCB	TAL SL
	Instrumen	t ID: GFPCRED								

Eurofins TestAmerica, Pittsburgh

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Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-111399-4 Client Sample ID: WGWA-2

Date Collected: 09/21/20 12:10 Date Received: 09/24/20 09:15

Matrix: Water

Job ID: 180-111399-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.36 mL	1.0 g	484405	10/01/20 11:51	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANG	βE	1			486847	10/26/20 13:10	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			491202	12/08/20 22:04	GRW	TAL SL

Lab Sample ID: 180-111399-5 Client Sample ID: WGWA-4 **Matrix: Water**

Date Collected: 09/21/20 14:00 Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.16 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			490978	12/07/20 06:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.93 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			486425	10/20/20 12:48	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			491202	12/08/20 22:04	GRW	TAL SL

Lab Sample ID: 180-111399-6 **Client Sample ID: WGWA-3** Date Collected: 09/21/20 15:01 **Matrix: Water**

Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.09 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			490978	12/07/20 06:21	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.82 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCBLUE		1			486425	10/20/20 12:48	SCB	TAL SL
Total/NA	Analysis	Ra226_Ra228		1			491202	12/08/20 22:04	GRW	TAL SL

Client Sample ID: WGWA-1 Lab Sample ID: 180-111399-7

Date Collected: 09/22/20 10:57 Date Received: 09/24/20 09:15

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.72 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis	9315		1			490978	12/07/20 06:21	SCB	TAL SL
	Instrumer	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.26 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis	9320		1			486425	10/20/20 12:48	SCB	TAL SL
	Instrumer	t ID: GFPCBLUE								

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Matrix: Water

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-1

Date Collected: 09/22/20 10:57 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-7

Matrix: Water

Job ID: 180-111399-2

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method **Factor** Number or Analyzed Type Run Amount **Amount** Analyst Lab Total/NA Analysis Ra226_Ra228 491202 12/08/20 22:04 GRW TAL SL

Client Sample ID: WGWA-5

Date Collected: 09/22/20 12:20 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-8

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.94 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis	9315		1			490978	12/07/20 06:22	SCB	TAL SL
	Instrumer	nt ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.84 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis	9320		1			486425	10/20/20 12:48	SCB	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Analysis	Ra226_Ra228		1			491202	12/08/20 22:04	GRW	TAL SL
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: WGWA-6

Date Collected: 09/22/20 10:30

Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-9

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.12 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			490978	12/07/20 06:22	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.89 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			486425	10/20/20 12:48	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			491202	12/08/20 22:04	GRW	TAL SL

Client Sample ID: WGWA-7

Date Collected: 09/22/20 14:20

Date Received: 09/24/20 09:15

Lab Sample ID:	180-111399-10
	Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.84 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			490978	12/07/20 06:23	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.58 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			486425	10/20/20 12:48	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			491202	12/08/20 22:04	GRW	TAL SL

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Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-18

Date Collected: 09/22/20 13:15 Date Received: 09/24/20 09:15

Client: Southern Company

Lab Sample ID: 180-111399-11

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			749.01 mL	1.0 g	487775	11/03/20 06:55	AVB	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCRED		1			490978	12/07/20 06:23	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.62 mL	1.0 g	484437	10/02/20 07:05	AVB	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCBLUE		1			486425	10/20/20 12:49	SCB	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			491202	12/08/20 22:04	GRW	TAL SL

Lab Sample ID: 180-111399-12

Client Sample ID: WGWC-8 Date Collected: 09/22/20 14:30 **Matrix: Water**

Date Received: 09/24/20 09:15

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method Run Factor **Amount Amount** Number or Analyzed **Analyst** Lab 749.36 mL Total/NA Prep PrecSep-21 487775 11/03/20 06:55 AVB TAL SL 1.0 g Total/NA Analysis 9315 490978 12/07/20 06:23 SCB TAL SL Instrument ID: GFPCRED Total/NA Prep PrecSep 0 999.39 mL 484437 10/02/20 07:05 AVB TAL SL 1.0 g Total/NA 486425 Analysis 9320 10/20/20 12:49 SCB TAL SL 1 Instrument ID: GFPCBLUE Total/NA Analysis Ra226 Ra228 TAL SL 1 491202 12/08/20 22:04 GRW Instrument ID: NOEQUIP

Client Sample ID: Dup-2 Lab Sample ID: 180-111526-1 Date Collected: 09/23/20 00:00

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.72 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486669	10/24/20 10:22	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.72 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			485929	10/16/20 12:03	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: EB-2-9-24-20 Lab Sample ID: 180-111526-2

Date Collected: 09/24/20 11:50 Date Received: 09/26/20 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			999.83 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis	9315		1			486669	10/24/20 10:22	SCB	TAL SL
	Instrumer	t ID: GFPCRED								

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Matrix: Water

Matrix: Water

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2-9-24-20

Date Collected: 09/24/20 11:50

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-2 **Matrix: Water**

Job ID: 180-111399-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			999.83 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE	Ē	1			485929	10/16/20 12:03	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: FB-2-9-24-20

Date Collected: 09/24/20 10:00 Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-3

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.93 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486669	10/24/20 10:22	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.93 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			485929	10/16/20 12:03	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-17

Date Collected: 09/23/20 11:11

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-4 **Matrix: Water**

Lab Sample ID: 180-111526-5

Matrix: Water

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	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.74 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis	9315		1			486669	10/24/20 10:22	SCB	TAL SL
	Instrumer	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.74 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis	9320		1			485929	10/16/20 12:03	FLC	TAL SL
	Instrumer	t ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			487771	11/02/20 23:24	SCB	TAL SL
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: WGWC-10

Date Collected: 09/23/20 12:25

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.73 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis	9315		1			486669	10/24/20 10:22	SCB	TAL SL
	Instrumer	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.73 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis	9320		1			485929	10/16/20 12:03	FLC	TAL SL
	Instrumer	it ID: GFPCPURPLE								

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-10

Date Collected: 09/23/20 12:25

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-5

Matrix: Water

Job ID: 180-111399-2

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method **Factor** Number or Analyzed Type Run **Amount Amount** Analyst Lab Total/NA Analysis Ra226 Ra228 487771 11/02/20 23:24 SCB TAL SL

Client Sample ID: WGWC-15

Date Collected: 09/23/20 14:35 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-6

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.49 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis	9315		1			486669	10/24/20 12:11	SCB	TAL SL
	Instrumen	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			999.49 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis	9320		1			485929	10/16/20 12:03	FLC	TAL SL
	Instrumen	t ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			487771	11/02/20 23:24	SCB	TAL SL
	Instrumen	t ID: NOEQUIP								

Client Sample ID: WGWC-16

Date Collected: 09/23/20 13:30

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-7

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.65 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			486669	10/24/20 12:11	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.65 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			485929	10/16/20 12:04	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-9

Date Collected: 09/23/20 15:50

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-8
Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.17 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486669	10/24/20 12:11	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.17 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			485929	10/16/20 12:04	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

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Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-13

Date Collected: 09/24/20 11:05 Date Received: 09/26/20 09:00 **Lab Sample ID: 180-111526-9**

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.01 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486669	10/24/20 12:11	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.01 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE	<u> </u>	1			485929	10/16/20 12:04	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-14A

Date Collected: 09/24/20 09:55

Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-10 Matrix: Water

Lab Sample ID: 180-111526-11

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.23 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			486669	10/24/20 12:11	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.23 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			485929	10/16/20 12:04	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-19

Date Collected: 09/23/20 15:00

Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.44 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			486669	10/24/20 12:12	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.44 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			485929	10/16/20 12:04	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-11

Date Collected: 09/24/20 10:20

Date Received: 09/26/20 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	=		1000.34 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis	9315		1			486669	10/24/20 12:12	SCB	TAL SL
	Instrumen	t ID: GFPCRED								

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Lab Sample ID: 180-111526-12 Matrix: Water

Matrix: Water

Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11 Lab Sample ID: 180-111526-12

Date Collected: 09/24/20 10:20 Date Received: 09/26/20 09:00

Matrix: Water

Matrix: Water

Job ID: 180-111399-2

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.34 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCBLUE		1			485931	10/16/20 12:05	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	TAL SL

Client Sample ID: WGWC-12 Lab Sample ID: 180-111526-13

Date Collected: 09/23/20 13:55 Date Received: 09/26/20 09:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			999.29 mL	1.0 g	484391	10/01/20 06:59	AVB	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCRED		1			486669	10/24/20 12:12	SCB	TAL SL
Total/NA	Prep	PrecSep_0			999.29 mL	1.0 g	484392	10/01/20 08:24	AVB	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCBLUE		1			485931	10/16/20 12:05	FLC	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			487771	11/02/20 23:24	SCB	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

AVB = Amber Bleem

Batch Type: Analysis

FLC = Fernando Cruz

GRW = George Witt

SCB = Sarah Bernsen

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-111399-1

Date Collected: 09/21/20 00:00 Matrix: Water
Date Received: 09/24/20 09:15

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0194	U	0.110	0.110	1.00	0.224	pCi/L	10/01/20 11:19	10/27/20 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110					10/01/20 11:19	10/27/20 14:02	1

Method: 9320 - I	Radium-228 ((GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.385	U *	0.318	0.320	1.00	0.506	pCi/L	10/01/20 11:51	10/26/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110					10/01/20 11:51	10/26/20 13:10	1
Y Carrier	83.4		40 - 110					10/01/20 11:51	10/26/20 13:10	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.405	U	0.336	0.338	2.00	0.506	pCi/L		11/02/20 23:25	1

Job ID: 180-111399-2

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-1-9-22-20

Date Collected: 09/22/20 11:20 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-2

Matrix: Water

Mictiod: 3010 - N		(3.1.3)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.63		0.324	0.356	1.00	0.215	pCi/L	11/03/20 06:55	12/07/20 06:20	1
Carrier		Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					11/03/20 06:55	12/07/20 06:20	1

Method: 9320 - Radium-228 (GFPC)

		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.144	U *	0.276	0.276	1.00	0.471	pCi/L	10/01/20 11:51	10/26/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		40 - 110					10/01/20 11:51	10/26/20 13:10	1
Y Carrier	83.7		40 - 110					10/01/20 11:51	10/26/20 13:10	1

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

Mictiloa. Razzo_Ra		ibilica ita	alam LL O d	ila itaalali						
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.78		0.426	0.450	2.00	0.471	pCi/L		12/08/20 22:04	1

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12/9/2020

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-1-9-22-20

Date Collected: 09/22/20 14:10 Date Received: 09/24/20 09:15 Lab Sample ID: 180-111399-3

Matrix: Water

Job ID: 180-111399-2

Method: 9315 - F	Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.124	U	0.135	0.135	1.00	0.215	pCi/L	10/01/20 11:19	10/27/20 14:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					10/01/20 11:19	10/27/20 14:02	1
=										

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0751	U *	0.236	0.236	1.00	0.411	pCi/L	10/01/20 11:51	10/26/20 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					10/01/20 11:51	10/26/20 13:10	1
Y Carrier	82.2		40 - 110					10/01/20 11:51	10/26/20 13:10	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.199	U	0.272	0.272	2.00	0.411	pCi/L		11/02/20 23:25	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-2

Date Collected: 09/21/20 12:10 Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-4

Matrix: Water

Job ID: 180-111399-2

Method: 9315 - I	Radium-226 ((GFPC)							
			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed
Radium-226	0.136	U	0.151	0.151	1.00	0.244	pCi/L	11/03/20 06:55	12/07/20 06:21

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 40 - 110 11/03/20 06:55 12/07/20 06:21 80.9

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL**MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.282 U * 0.262 0.263 0.422 pCi/L 10/01/20 11:51 10/26/20 13:10 1.00 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 86.7 40 - 110 10/01/20 11:51 10/26/20 13:10 82.6 40 - 110 10/01/20 11:51 10/26/20 13:10 Y Carrier

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL MDC Unit Prepared Analyzed Dil Fac 0.418 U 0.302 0.303 2.00 0.422 pCi/L 12/08/20 22:04 Combined Radium 226

+ 228

12/9/2020

Dil Fac

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-4

Date Collected: 09/21/20 14:00 Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-5

Matrix: Water

Method: 9315 -	Radium-226 (GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0960	U	0.167	0.167	1.00	0.294	pCi/L	11/03/20 06:55	12/07/20 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	56.9		40 - 110					11/03/20 06:55	12/07/20 06:21	

Method: 9320 - F	Radium-228 ((GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-228	0.976		0.396	0.406	1.00	0.558	pCi/L	10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.1		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	72.9		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radiun	n-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.07		0.430	0.439	2.00	0.558	pCi/L		12/08/20 22:04	1

12/9/2020

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-3

Lab Sample ID: 180-111399-6

Matrix: Water

Job ID: 180-111399-2

Date Collected: 09/21/20 15:01 Date Received: 09/24/20 09:15

Method: 9315 - R	adium-226 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0440	U	0.138	0.138	1.00	0.261	pCi/L	11/03/20 06:55	12/07/20 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	62.2		40 - 110					11/03/20 06:55	12/07/20 06:21	1

Method: 9320 - I	Radium-228 ((GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0248	U	0.303	0.303	1.00	0.541	pCi/L	10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.2		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	75.9		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0688	U	0.333	0.333	2.00	0.541	pCi/L		12/08/20 22:04	1

12/9/2020

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Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-1

Lab Sample ID: 180-111399-7 Date Collected: 09/22/20 10:57

Matrix: Water

Date Received: 09/24/20 09:15

Method: 9315 - F	Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.189	U	0.166	0.166	1.00	0.255	pCi/L	11/03/20 06:55	12/07/20 06:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					11/03/20 06:55	12/07/20 06:21	1

Method: 9320 - F	Radium-228 ((GFPC)								
Analyte	Rosult	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Allalyte		Qualifier	` _							Dil Fac
Radium-228	0.539		0.312	0.316	1.00	0.468	pCi/L	10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	75.1		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.729		0.353	0.357	2.00	0.468	pCi/L	_	12/08/20 22:04	1

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-5

Lab Sample ID: 180-111399-8

Matrix: Water

Date Collected: 09/22/20 12:20 Date Received: 09/24/20 09:15

Method: 9315 - I	Radium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.187	U	0.200	0.201	1.00	0.315	pCi/L	11/03/20 06:55	12/07/20 06:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	52.8		40 - 110					11/03/20 06:55	12/07/20 06:22	1
<u>_</u>										

Method: 9320 - F	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.767		0.417	0.423	1.00	0.624	pCi/L	10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.1		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	71.8		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226 Ra	228 - Com	bined Rad	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.954		0.462	0.468	2.00	0.624	pCi/L		12/08/20 22:04	1

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Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-6

Lab Sample ID: 180-111399-9

Matrix: Water

Date Collected: 09/22/20 10:30 Date Received: 09/24/20 09:15

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.716		0.260	0.268	1.00	0.267	pCi/L	11/03/20 06:55	12/07/20 06:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	63.9		40 - 110					11/03/20 06:55	12/07/20 06:22	1

Method: 9320 - F	Radium-228 ((GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-228	6.93		0.740	0.977	1.00	0.566		10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	69.2		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	7.65		0.784	1.01	2.00	0.566	pCi/L		12/08/20 22:04	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-7 Lab Sample ID: 180-111399-10

Date Collected: 09/22/20 14:20
Date Received: 09/24/20 09:15

Method: 9315 - Rad	lium- <mark>226</mark> ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0314	U	0.0770	0.0770	1.00	0.185	pCi/L	11/03/20 06:55	12/07/20 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		40 - 110					11/03/20 06:55	12/07/20 06:23	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0837	U	0.412	0.412	1.00	0.718	pCi/L	10/02/20 07:05	10/20/20 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		40 - 110					10/02/20 07:05	10/20/20 12:48	1
Y Carrier	70.3		40 - 110					10/02/20 07:05	10/20/20 12:48	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0523	U	0.419	0.419	2.00	0.718	pCi/L		12/08/20 22:04	1

Job ID: 180-111399-2

Matrix: Water

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-18

Date Collected: 09/22/20 13:15 Date Received: 09/24/20 09:15

Lab Sample ID: 180-111399-11

Matrix: Water

Job ID: 180-111399-2

Method:	9315	- Radium-226	(GFPC)
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Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0361	U	0.0700	0.0701	1.00	0.176	pCi/L	11/03/20 06:55	12/07/20 06:23	1
Carrier Ba Carrier	%Yield 87.4	Qualifier	Limits 40 - 110					Prepared 11/03/20 06:55	Analyzed 12/07/20 06:23	Dil Fac

Method: 9320 - Radium-228 (GFPC)

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.593	U	0.416	0.419	1.00	0.647	pCi/L	10/02/20 07:05	10/20/20 12:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.3		40 - 110					10/02/20 07:05	10/20/20 12:49	1
Y Carrier	66.9		40 - 110					10/02/20 07:05	10/20/20 12:49	1

Method: Ra226_Ra2	228 - Con	ibined Ra	aium-226 a	na Radium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.557	U	0.422	0.425	2.00	0.647	pCi/L		12/08/20 22:04	1

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12/9/2020

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-8

Lab Sample ID: 180-111399-12 Date Collected: 09/22/20 14:30

Matrix: Water

Date Received: 09/24/20 09:15

Method: 9315 - R	adium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.293		0.160	0.162	1.00	0.195	pCi/L	11/03/20 06:55	12/07/20 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		40 - 110					11/03/20 06:55	12/07/20 06:23	1

Method: 9320 - F	Radium-228 ((GFPC)								
			Count	Total						
Analyte	Posult	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Allalyte	Result	Qualifier	(20+/-)	(20+/-)	KL .	IVIDC	Ullit	Frepareu	Allalyzeu	DII Fac
Radium-228	1.46		0.445	0.465	1.00	0.594	pCi/L	10/02/20 07:05	10/20/20 12:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					10/02/20 07:05	10/20/20 12:49	1
Y Carrier	73.6		40 - 110					10/02/20 07:05	10/20/20 12:49	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.75		0.473	0.492	2.00	0.594	pCi/L		12/08/20 22:04	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-2 Lab Sample ID: 180-111526-1

Date Collected: 09/23/20 00:00 Matrix: Water Date Received: 09/26/20 09:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0630	U	0.0634	0.0636	1.00	0.0983	pCi/L	10/01/20 06:59	10/24/20 10:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					10/01/20 06:59	10/24/20 10:22	1

Method: 9320 - I	Radium-228 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.291	0.292	1.00	0.474	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	74.4		40 - 110					10/01/20 08:24	10/16/20 12:03	1

Method: Ra226_Ra2	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.341	U	0.298	0.299	2.00	0.474	pCi/L		11/02/20 23:24	1

Job ID: 180-111399-2

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2-9-24-20

Date Collected: 09/24/20 11:50 Date Received: 09/26/20 09:00 **Lab Sample ID: 180-111526-2**

Matrix: Water

Job ID: 180-111399-2

Method:	9315 - I	Radium∙	-226 (0	GFPC)

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.000	U	0.0472	0.0472	1.00	0.102	pCi/L	10/01/20 06:59	10/24/20 10:22	1
Carrior	%Viold	Qualifier	l imite					Propared	Analyzed	Dil Fac

Total

Count

 Carrier
 %Yield Ba Carrier
 Qualifier Limits
 Prepared 10/01/20 06:59
 Analyzed Analyze

Method: 9320 - Radium-228 (GFPC)

Mictiod: 3020 - IX		,00,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.241	U	0.269	0.270	1.00	0.442	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	77.4		40 - 110					10/01/20 08:24	10/16/20 12:03	1

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

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.241	U	0.273	0.274	2.00	0.442	pCi/L		11/02/20 23:24	1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2-9-24-20

Date Collected: 09/24/20 10:00 Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-3

Matrix: Water

Job ID: 180-111399-2

Method:	9315 -	Radium-2	226 (GFPC)

			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0916	U	0.0772	0.0776	1.00	0.114	pCi/L	10/01/20 06:59	10/24/20 10:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					10/01/20 06:59	10/24/20 10:22	1

	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.119	U	0.293	0.294	1.00	0.505	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	72.9		40 - 110					10/01/20 08:24	10/16/20 12:03	1

Method: Ra226_Ra2	228 - Com	ibined Ra	aium-226 a	na Kadium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.211	U	0.303	0.304	2.00	0.505	pCi/L		11/02/20 23:24	1

+ 228

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-17

Lab Sample ID: 180-111526-4

Matrix: Water

Date Collected: 09/23/20 11:11 Date Received: 09/26/20 09:00

um-226 (GFPC)								
	•	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.126		0.0896	0.0903	1.00	0.126	pCi/L	10/01/20 06:59	10/24/20 10:22	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
78.7		40 - 110					10/01/20 06:59	10/24/20 10:22	1
_	Result 0.126 %Yield	%Yield Qualifier	Count Uncert.	Count Total Uncert. Uncert. Uncert. (2σ+/-) (2σ+/-)	Count Total Uncert. Uncert. Uncert. Uncert.	Count Total Uncert. Uncert. Uncert. Uncert. Uncert. O.126 Uncert. O.0896 O.0903 O.0903 O.0126 O.0896 O.0903 O.0903	Count Total Uncert. Uncert. Uncert. Count Uncert. Uncert.	Count Uncert. Uncert. Uncert.	Count Uncert. Uncert. Uncert. Variety V

Method: 9320 - I	Radium-228 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.517	U	0.347	0.351	1.00	0.538	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	72.5		40 - 110					10/01/20 08:24	10/16/20 12:03	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.643		0.358	0.362	2.00	0.538	pCi/L		11/02/20 23:24	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-10

Date Collected: 09/23/20 12:25 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-5

Matrix: Water

Job ID: 180-111399-2

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0853	U	0.0763	0.0767	1.00	0.115	pCi/L	10/01/20 06:59	10/24/20 10:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					10/01/20 06:59	10/24/20 10:22	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.356	U	0.324	0.325	1.00	0.522	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	74.0		40 - 110					10/01/20 08:24	10/16/20 12:03	1

Method: Ra226_Ra2	228 - Con	bined Rad	dium-226 a	nd Radium	n- 22 8					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.442	U	0.333	0.334	2.00	0.522	pCi/L		11/02/20 23:24	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-15

Lab Sample ID: 180-111526-6 Date Collected: 09/23/20 14:35

Matrix: Water

Job ID: 180-111399-2

Date Received: 09/26/20 09:00

Method: 9315 - Rad	dium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0875	U	0.0714	0.0719	1.00	0.101	pCi/L	10/01/20 06:59	10/24/20 12:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					10/01/20 06:59	10/24/20 12:11	1

Method: 9320 - I	Naululli-220 ((GFFC)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.360	U	0.303	0.304	1.00	0.481	pCi/L	10/01/20 08:24	10/16/20 12:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					10/01/20 08:24	10/16/20 12:03	1
Y Carrier	75.1		40 - 110					10/01/20 08:24	10/16/20 12:03	1

_ Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.448	U	0.311	0.312	2.00	0.481	pCi/L		11/02/20 23:24	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-16

Date Collected: 09/23/20 13:30 Date Received: 09/26/20 09:00

Lab Sample ID: 180-111526-7

Matrix: Water

Job ID: 180-111399-2

Method: 9315 - R	adium-226 (GFPC)						
		Count	Total				
		Uncert.	Uncert.				
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed
Dodium 226	0.470	0.0957	0.0972	1.00	0.0047 pCi/l	10/01/20 06:50	10/24/20 12:1

10/24/20 12:11 10/01/20 06:59 Radium-226 0.179 0.0857 0.0872 1.00 0.0947 pCi/L Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac 10/01/20 06:59 10/24/20 12:11 Ba Carrier 88.8 40 - 110

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL**MDC** Unit Prepared Analyzed Dil Fac 0.0977 U 0.280 0.280 10/01/20 08:24 10/16/20 12:04 Radium-228 1.00 0.484 pCi/L

Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 88.8 40 - 110 10/01/20 08:24 10/16/20 12:04 75.1 40 - 110 10/01/20 08:24 10/16/20 12:04 Y Carrier

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

			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	0.276	U	0.293	0.293	2.00	0.484	pCi/L	<u> </u>	11/02/20 23:24	1

+ 228

Dil Fac

12/9/2020

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-9

Date Collected: 09/23/20 15:50 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-8

Matrix: Water

Job ID: 180-111399-2

	GFPC)								
·	•	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.0153	U	0.0479	0.0479	1.00	0.0926	pCi/L	10/01/20 06:59	10/24/20 12:11	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
94.4		40 - 110					10/01/20 06:59	10/24/20 12:11	1
	0.0153 %Yield	Result Qualifier 0.0153 U WYield Qualifier 94.4	Result 0.0153 Qualifier Uncert. (2σ+/-) Uncert. (2σ+/	Uncert. Uncert. Uncert. (2σ+/-) (2σ	Note	Uncert. Unc	Uncert. Unc	Note	Variable Variable

Method: 9320 - I	Radium-228 (GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0434	U	0.266	0.266	1.00	0.467	pCi/L	10/01/20 08:24	10/16/20 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					10/01/20 08:24	10/16/20 12:04	1
Y Carrier	74.8		40 - 110					10/01/20 08:24	10/16/20 12:04	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0587	U	0.270	0.270	2.00	0.467	pCi/L		11/02/20 23:24	1

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-13

Lab Sample ID: 180-111526-9 Date Collected: 09/24/20 11:05

Matrix: Water

Date Received: 09/26/20 09:00

Method: 9315 - Ra	adium-226 ((GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.259		0.114	0.117	1.00	0.138	pCi/L	10/01/20 06:59	10/24/20 12:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		40 - 110					10/01/20 06:59	10/24/20 12:11	1

Method: 9320 - F	Radium-228 ((GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.761		0.319	0.327	1.00	0.439	pCi/L	10/01/20 08:24	10/16/20 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.7		40 - 110					10/01/20 08:24	10/16/20 12:04	1
Y Carrier	74.0		40 - 110					10/01/20 08:24	10/16/20 12:04	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.339	0.347	2.00	0.439	pCi/L		11/02/20 23:24	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-14A

Date Collected: 09/24/20 09:55 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-10

Matrix: Water

Job ID: 180-111399-2

Method: 9315 - F	Radium-226 (GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.308		0.112	0.115	1.00	0.107	pCi/L	10/01/20 06:59	10/24/20 12:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		40 - 110					10/01/20 06:59	10/24/20 12:11	1

Method: 9320 - I	Radium-228 ((GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-228	0.487		0.337	0.340	1.00	0.525		10/01/20 08:24	10/16/20 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.0		40 - 110					10/01/20 08:24	10/16/20 12:04	1
Y Carrier	75.5		40 - 110					10/01/20 08:24	10/16/20 12:04	1

Method: Ra226_Ra	228 - Con	bined Rad	dium-226 a	nd Radium	1-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.796		0.355	0.359	2.00	0.525	pCi/L		11/02/20 23:24	1

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-19

Lab Sample ID: 180-111526-11 Date Collected: 09/23/20 15:00

Matrix: Water

Date Received: 09/26/20 09:00

Method: 9315 - Ra	adium-226 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.03		0.189	0.211	1.00	0.107	pCi/L	10/01/20 06:59	10/24/20 12:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		40 - 110					10/01/20 06:59	10/24/20 12:12	1

Method: 9320 - I	Radium-228 ((GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.152	U	0.314	0.314	1.00	0.535	pCi/L	10/01/20 08:24	10/16/20 12:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.7		40 - 110					10/01/20 08:24	10/16/20 12:04	1
Y Carrier	77.0		40 - 110					10/01/20 08:24	10/16/20 12:04	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	1-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.18		0.366	0.378	2.00	0.535	pCi/L		11/02/20 23:24	1

Client: Southern Company

226 + 228

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11

Date Collected: 09/24/20 10:20 Date Received: 09/26/20 09:00 Lab Sample ID: 180-111526-12

Matrix: Water

Job ID: 180-111399-2

Method:	9315	- Radium-226	(GFPC)

			Count Uncert.	Total Uncert.				_		
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0634	U	0.0612	0.0615	1.00	0.0927	pCi/L	10/01/20 06:59	10/24/20 12:12	1
Carrier Ba Carrier	% Yield 84.6	Qualifier	Limits 40 - 110					Prepared 10/01/20 06:59	Analyzed 10/24/20 12:12	Dil Fac

Method: 9320 - F	Radium-228 ((GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.14		0.356	0.371	1.00	0.468	pCi/L	10/01/20 08:24	10/16/20 12:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					10/01/20 08:24	10/16/20 12:05	1
Y Carrier	78.5		40 - 110					10/01/20 08:24	10/16/20 12:05	1

Method: Ra226_	_Ra228 - Combined	Radium-226	and Radium-228

			Count	Total							
			Uncert.	Uncert.							
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Pre	pared	Analyzed	Dil Fac
Combined Radium	1.20		0.361	0.376	2.00	0.468	pCi/L			11/02/20 23:24	1

Client: Southern Company

Y Carrier

226 + 228

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-12 Lab Sample ID: 180-111526-13

Date Collected: 09/23/20 13:55 **Matrix: Water** Date Received: 09/26/20 09:00

	dium-226 (GFPC)								
		Count Uncert.	Total Uncert.						
Analyte	Result Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0993 U	0.0747	0.0753	1.00	0.103	pCi/L	10/01/20 06:59	10/24/20 12:12	1

Carrier %Yield Qualifier Limits Prepared Analyzed 40 - 110 10/01/20 06:59 10/24/20 12:12 Ba Carrier 76.9

Method: 9320 - Radium-228 (GFPC) Count Total Uncert. Uncert. Result Qualifier Analyte $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 0.333 0.339 0.484 pCi/L 10/01/20 08:24 10/16/20 12:05 Radium-228 0.685 1.00 Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 76.9 40 - 110 10/01/20 08:24 10/16/20 12:05 80.0

Method: Ra226_Ra228 - Combined Radium-226 and Radium-228 Count Total Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL MDC Unit Prepared Analyzed Dil Fac **Combined Radium** 0.341 0.347 2.00 0.484 pCi/L 11/02/20 23:24 0.785

40 - 110

Job ID: 180-111399-2

10/01/20 08:24 10/16/20 12:05

10

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: MB 160-484391/23-A

Lab Sample ID: LCS 160-484391/1-A

Method: 9315 - Radium-226 (GFPC)

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-111399-2

Matrix: Water Analysis Batch: 486669 **Prep Batch: 484391** Count Total

	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC (Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07219	U	0.0708	0.0711	1.00	0.110 p	pCi/L	10/01/20 06:59	10/24/20 12:12	1

MB MB

Carrier **%Yield Qualifier** Limits Prepared Analyzed Dil Fac Ba Carrier 92.0 40 - 110 10/01/20 06:59 10/24/20 12:12

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 484391

Total Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 113 94.57 10.2 1.00 0.974 pCi/L 83 75 - 125

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 80.2 40 - 110

Lab Sample ID: LCSD 160-484391/2-A

Matrix: Water

Matrix: Water

Analysis Batch: 486669

Analysis Batch: 486669

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA **Prep Batch: 484391**

Total **Spike** LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit Radium-226 113 103.2 10.8 1.00 0.909 pCi/L 91 75 - 125 0.41

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrier 89.6 40 - 110

Lab Sample ID: MB 160-484404/24-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 487030

Prep Type: Total/NA

Prep Batch: 484404

Total Count MB MB Uncert. Uncert. Analyte Result Qualifier $(2\sigma + / -)$ $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 10/01/20 11:19 10/28/20 12:49 Radium-226 4.451 0.499 0.640 1.00 0.163 pCi/L

MΒ MB Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 83.4 40 - 110 10/01/20 11:19 10/28/20 12:49

Lab Sample ID: LCS 160-484404/1-A

Matrix: Water

Analysis Batch: 486960

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

Prep Batch: 484404

Total **Spike** LCS LCS Uncert. %Rec. Analyte Added Result Qual $(2\sigma + / -)$ RL MDC Unit %Rec Limits Radium-226 11.3 10.47 1.33 1.00 0.245 pCi/L 75 - 125

Eurofins TestAmerica, Pittsburgh

10

Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

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

Limits

40 - 110

Lab Sample ID: LCS 160-484404/1-A

Matrix: Water

Matrix: Water

Analysis Batch: 486960

Analysis Batch: 486960

Client: Southern Company

LCS LCS

Lab Sample ID: LCSD 160-484404/2-A

Carrier **%Yield Qualifier** Ba Carrier 68.0

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 484404

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 484404

Total

LCSD LCSD %Rec. **RER Spike** Uncert. Analyte Added Result Qual $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit Radium-226 11.3 10.28 1.27 1.00 0.224 pCi/L 91 75 - 125 0.07

LCSD LCSD

Carrier %Yield Qualifier Limits Ba Carrier 77.5 40 - 110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 487775

Lab Sample ID: MB 160-487775/14-A

Matrix: Water

Analysis Batch: 490978

	МВ	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.1557	U	0.0856	0.0868	1.00	0.300	pCi/L	11/03/20 06:55	12/07/20 06:23	1

Total

Count

MR MR

Carrier **%Yield Qualifier** Limits Prepared Analyzed 40 - 110 11/03/20 06:55 Ba Carrier 84.8 12/07/20 06:23

Lab Sample ID: LCS 160-487775/1-A

Matrix: Water

Analysis Batch: 490978

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

Prep Batch: 487775

Total

Spike LCS LCS Uncert. %Rec. Added RL **MDC** Unit Limits Analyte Result Qual $(2\sigma + / -)$ %Rec Radium-226 75 - 125 15.1 13.81 1.53 1.00 0.221 pCi/L 91

LCS LCS

Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 83.3

Lab Sample ID: LCSD 160-487775/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 490978

Prep Type: Total/NA **Prep Batch: 487775**

Total Spike LCSD LCSD Uncert. %Rec. **RER** Analyte Added $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Limit Result Qual RER Radium-226 15.1 13.23 1.00 0.202 pCi/L 75 - 125 0.19 1.50

LCSD LCSD

%Yield Qualifier Limits Carrier 76.2 40 - 110 Ba Carrier

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Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-111399-2

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-484392/23-A

Matrix: Water

Analysis Batch: 485931

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 484392

	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.8933		0.294	0.305	1.00	0.387	pCi/L	10/01/20 08:24	10/16/20 12:05	1

Total

Count

	IVID	IVID				
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110	10/01/20 08:24	10/16/20 12:05	1
Y Carrier	82.6		40 - 110	10/01/20 08:24	10/16/20 12:05	1

Lab Sample ID: LCS 160-484392/1-A

Matrix: Water

Analysis Batch: 485929

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 484392

				Total				
	Spike	LCS	LCS	Uncert.				%Rec.
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits
Radium-228	7.73	7.855		1.01	1.00	0.524 pCi/L	102	75 - 125

LCS LCS

Carrier	%Yield	Qualifier	Limits
Ba Carrier	80.2		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: LCSD 160-484392/2-A

Matrix: Water

Analysis Batch: 485929

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 484392

Total

		Spike	LCSD	LCSD	Uncert.				%Rec.		RER
Analyt)	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits	RER	Limit
Radiun	-228	7.73	8.658		1.05	1.00	0.447 pCi/L	112	75 - 125	0.39	1

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	89.6		40 - 110
Y Carrier	80.0		40 - 110

Lab Sample ID: MB 160-484405/24-A

Matrix: Water

Analysis Batch: 486847

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 484405

			Count	Total					
	MB	MB	Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2400	U	0.293	0.294	1.00	0.485 pCi/L	10/01/20 11:51	10/26/20 13:11	1

Carrier	%Yield	Qualifier Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	83.4	40 - 110	10/01/20 11:51	10/26/20 13:11	1
Y Carrier	79.6	40 - 110	10/01/20 11:51	10/26/20 13:11	1

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Client: Southern Company

Analysis Batch: 486872

Matrix: Water

Carrier

Y Carrier

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: LCS 160-484405/1-A

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

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Job ID: 180-111399-2

Prep Batch: 484405

Prep Batch: 484405

Prep Batch: 484437

				Total					
	Spike	LCS	LCS	Uncert.				%Rec.	
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits	
Radium-228	7.70	12.76	*	1.67	1.00	0.808 pCi/L	166	75 - 125	

LCS LCS %Yield Qualifier Limits Ba Carrier 68.0 40 - 110 56.1 40 - 110

Lab Sample ID: LCSD 160-484405/2-A **Client Sample ID: Lab Control Sample Dup Matrix: Water Prep Type: Total/NA**

Analysis Batch: 486872

				Total						
	Spike	LCSD	LCSD	Uncert.				%Rec.		RER
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits	RER	Limit
Radium-228	7.70	8.539		1.12	1.00	0.540 pCi/L	111	75 - 125	1.51	1

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrier 40 - 110 77.5 40 - 110 Y Carrier 71.8

Lab Sample ID: MB 160-484437/23-A Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 486271

			Count	Total						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2421	U	0.285	0.286	1.00	0.470	pCi/L	10/02/20 07:05	10/20/20 12:57	1

	MB	MB				
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110	10/02/20 07:05	10/20/20 12:57	1
Y Carrier	79.6		40 - 110	10/02/20 07:05	10/20/20 12:57	1

Ma

ab Sample ID: LCS 160-484437/1-A	Client Sample ID: Lab Control Sample
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 486425	Prep Batch: 484437

			Total				
	Spike	LCS LCS	Uncert.				%Rec.
Analyte	Added	Result Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits
Radium-228	7.72	8.355	1.08	1.00	0.498 pCi/L	108	75 - 125

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	74.0		40 - 110
Y Carrier	82.2		40 - 110

12/9/2020

QC Sample Results

Client: Southern Company Job ID: 180-111399-2

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCSD 160-484437/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 486425

Prep Type: Total/NA

Prep Batch: 484437

				iotai							
	Spike	LCSD	LCSD	Uncert.					%Rec.		RER
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC	Unit	%Rec	Limits	RER	Limit
Radium-228	7.72	7.414		0.983	1.00	0.465	pCi/L	96	75 - 125	0.46	1

LCSD LCSD Limits Carrier %Yield Qualifier Ba Carrier 79.0 40 - 110 Y Carrier 77.8 40 - 110

QC Association Summary

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

Prep Batch: 484391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-1	Dup-2	Total/NA	Water	PrecSep-21	
180-111526-2	EB-2-9-24-20	Total/NA	Water	PrecSep-21	
180-111526-3	FB-2-9-24-20	Total/NA	Water	PrecSep-21	
180-111526-4	WGWC-17	Total/NA	Water	PrecSep-21	
180-111526-5	WGWC-10	Total/NA	Water	PrecSep-21	
180-111526-6	WGWC-15	Total/NA	Water	PrecSep-21	
180-111526-7	WGWC-16	Total/NA	Water	PrecSep-21	
180-111526-8	WGWC-9	Total/NA	Water	PrecSep-21	
180-111526-9	WGWC-13	Total/NA	Water	PrecSep-21	
180-111526-10	WGWC-14A	Total/NA	Water	PrecSep-21	
180-111526-11	WGWC-19	Total/NA	Water	PrecSep-21	
180-111526-12	WGWC-11	Total/NA	Water	PrecSep-21	
180-111526-13	WGWC-12	Total/NA	Water	PrecSep-21	
MB 160-484391/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484391/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-484391/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 484392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111526-1	Dup-2	Total/NA	Water	PrecSep_0	
180-111526-2	EB-2-9-24-20	Total/NA	Water	PrecSep_0	
180-111526-3	FB-2-9-24-20	Total/NA	Water	PrecSep_0	
180-111526-4	WGWC-17	Total/NA	Water	PrecSep_0	
180-111526-5	WGWC-10	Total/NA	Water	PrecSep_0	
180-111526-6	WGWC-15	Total/NA	Water	PrecSep_0	
180-111526-7	WGWC-16	Total/NA	Water	PrecSep_0	
180-111526-8	WGWC-9	Total/NA	Water	PrecSep_0	
180-111526-9	WGWC-13	Total/NA	Water	PrecSep_0	
180-111526-10	WGWC-14A	Total/NA	Water	PrecSep_0	
180-111526-11	WGWC-19	Total/NA	Water	PrecSep_0	
180-111526-12	WGWC-11	Total/NA	Water	PrecSep_0	
180-111526-13	WGWC-12	Total/NA	Water	PrecSep_0	
MB 160-484392/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484392/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-484392/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 484404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total/NA	Water	PrecSep-21	
180-111399-3	FB-1-9-22-20	Total/NA	Water	PrecSep-21	
MB 160-484404/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-484404/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-484404/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 484405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-1	Dup-1	Total/NA	Water	PrecSep_0	
180-111399-2	EB-1-9-22-20	Total/NA	Water	PrecSep_0	
180-111399-3	FB-1-9-22-20	Total/NA	Water	PrecSep_0	
180-111399-4	WGWA-2	Total/NA	Water	PrecSep_0	
MB 160-484405/24-	-A Method Blank	Total/NA	Water	PrecSep 0	

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Job ID: 180-111399-2

QC Association Summary

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

Rad (Continued)

Prep Batch: 484405 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
LCS 160-484405/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0
LCSD 160-484405/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0

Prep Batch: 484437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-5	WGWA-4	Total/NA	Water	PrecSep_0	
180-111399-6	WGWA-3	Total/NA	Water	PrecSep_0	
180-111399-7	WGWA-1	Total/NA	Water	PrecSep_0	
180-111399-8	WGWA-5	Total/NA	Water	PrecSep_0	
180-111399-9	WGWA-6	Total/NA	Water	PrecSep_0	
180-111399-10	WGWA-7	Total/NA	Water	PrecSep_0	
180-111399-11	WGWA-18	Total/NA	Water	PrecSep_0	
180-111399-12	WGWC-8	Total/NA	Water	PrecSep_0	
MB 160-484437/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-484437/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-484437/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 487775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-111399-2	EB-1-9-22-20	Total/NA	Water	PrecSep-21	
180-111399-4	WGWA-2	Total/NA	Water	PrecSep-21	
180-111399-5	WGWA-4	Total/NA	Water	PrecSep-21	
180-111399-6	WGWA-3	Total/NA	Water	PrecSep-21	
180-111399-7	WGWA-1	Total/NA	Water	PrecSep-21	
180-111399-8	WGWA-5	Total/NA	Water	PrecSep-21	
180-111399-9	WGWA-6	Total/NA	Water	PrecSep-21	
180-111399-10	WGWA-7	Total/NA	Water	PrecSep-21	
180-111399-11	WGWA-18	Total/NA	Water	PrecSep-21	
180-111399-12	WGWC-8	Total/NA	Water	PrecSep-21	
MB 160-487775/14-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-487775/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-487775/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Job ID: 180-111399-2

Chain of Custody ..ecord

*America, Pittsburgh

Eurofins T 301 Alpha Driv Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

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Env. America

A LA LA - Seurofins

ecahydrate Special Instructions/Note: Ver: 01/16/2019 - - orner (specify) Company Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client A Disposal By Lab Monti Preservation Codes: 5.36 5.35 7.40 6.78 9 5,69 PH= 6 05 NA NA SA A - HCL B - NaOH C - 7" ^ 180-111399 Chain of Custody Page: 3 N 3 Total Number of co 3 3 W m Date/Time: Aethod of Shipment tathin Analysis Requested cooler Temperature(s) °C and Other Remarks Return To Client Special Instructions/QC Requirements: SW-846 9315/9320) Detected App IV Metals (EPA 6020/7470): T,68,Ba,Be,Cd,Cr,Co,Pb,Li,Hg,Mo,Se,TI Radium 22.8 & 228 E-Mail: shali.brown@eurofinset.com Received by: Received by: EPA 300.0 & SM 2540C) App. III Metals (B,Ca) J. BELLISTARD Brown, Shali Perform MS/MSD (Yes or No) Time: Filtered Sample (Yes or No) Water S=solid, O=waste/oil, Preservation Code Water Water Water Water Water Water Water Company Water Water Water Matrix Radiological 770) 594-5998 (C=comb, G=grab) Sample Type O O O O O O G O O O O 1030 1450 0121 1400 Sample 0221 0/1/ £ 601 5151 02-22-6 1170 1501 ampler. O. Fuqued Date: Unknown TAT Requested (days) Due Date Requested: 02.22.6 9-23-20 02-22-6 02-22-6 02-12-6 02-17-6 02-22-6 PO#: SCS10382606 Sample Date 02-22-6 02-22-6 02-12-6 9-71-20 Project #: 18019922 ,hone; WO #: Poison B 912312 Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) -20 0 Custody Seal No. N - 77 2 Possible Hazard Identification ナー WCWA-3 WGWA-18 WGWA-5 Project Name: CCR - Plant Wansley Ash Pond 5 WGWA- G WEWA-WCWA WGWA Empty Kit Relinquished by: 1-8 NEW/A 241 Ralph McGill Blvd SE Custody Seals Intact: Client Information Sample Identification 0 104-506-7116(Tel) Client Contact: SCS Contacts SCS Contacts equished by: elinquished by: State, Zip: GA, 30308 GA Power Atlanta

Eurofins Tratamerica, Pittsburgh	Chain	of Cust	Chain of Custodyscord	<u>p</u>			eurofins	Env. ent Testing America
Pritsburgh, PA 19238 Phone (412) 963-7058 Fax (412) 963-2468							700	
Client Information	Sampler: O. FUQUEA		Lab PM: Brown, Shali	=	Carrier	er Tracking No(s):	COC No:	
Client Contact: SCS Contacts	394	8665	E-Mail: Shali.brown	E-Mail: shali.brown@eurofinset.com	t.com		Page: 2	
Company: GA Power	·				Analysis Requested	sted	Job #:	
Address: 241 Ralph McGill Blvd SE	Due Date Requested:							es:
City: Atlanta State, Zip:	TAT Requested (days):						B - NaOH C - Zn Acetate D - Nitric Acid	M - None N - None O - AsNaO2 P - Na2O4S
GA, 30308					:(Q - Na2SO3 R - Na2S2O3
Phone: 404-506-7116(Tel)	PO#: SCS10382606		(0		(07 <i>4</i> 7/			S - H2SO4 T - TSP Dodecahydrate
Email: SCS Contacts	WO#:				y 6020		1 - Ice J - DI Water	U - Acetone V - MCAA
Project Name: ICCR - Plant Wansley Ash Pond	Project #: 18019922		THE REAL PROPERTY.		дН;іл;		K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:		-	(£0,8	Co,Pb		of con	
	Sample	Sample Type (C=comp,	Matrix (W=water, S=solid Eilitered S=solid Eilitered S=solid Eilitered S=wastelol, o=wastelol, o=waste	0. III Metals (I F, SO ₄ & TDS A 300.0 & SM	VI qqd bətəs: Ba,Be,Cd,Ct, Mill 226 & 23 W-846 9315/93		TedmuN lst	
Sample Identification	Sample Date Time	G=grab)	Eie	ldΑ	,eA Rad			Special Instructions/Note:
W.C.W.C8	9-77-10 1430		Water N/ I/	1	>		3 PH= 5.17	
	_	O	_				=Hd	
		O	Water				=Hd	
		O	Water				=Hd	
		9	Water				=Hd	
		9	Water				=Hd	
		O	Water				=Hd	
		O	Water				=Hd	
		O	Water				=Hd	
		O	Water				=Hd	
		O	Water				=Hd	
ant	Poison B Huknown] Radiological	S	mple Dispo	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Abisposal By Lab Archive For Mont	essed if samples are re	etained longer than Archive For_	1 month) Months
Deliverable Requested: I, II, III, IV, Other (specify)			S	oecial Instruc	ctions/QC Requirements:			
Empty Kit Relinquished by:	Date:		Time:			Method of Shipment:		
Relinquished by: (V)	Date/Time: 9. 23 – 20 /	(3.18	Company A CC	Received by:	2	9/23/20	13:15	Company
Relinquished by:	9/23/20 /6	il.	Company	Received by:	0			Company
	Date/Time:		Company	Received by:	Melle 14	(Ultro Date/Time: 4)	- 34-30 m	Company XX K
Custody Seals Intact: Custody Seal No.: A Yes A No				Cooler Temp	Cooler Temperature(s) °C and Other Remarks:	ırks:	112	
								Ver: 01/16/2019

Chain of Custody Second

Eurofins T 'America, Pittsburgh
301 Alpha Drive Pittsburgh, PA 15238
Phone (412) 963-7058 Fax (412) 963-2468

10 10 10 10 10 10 10 10	Control Cont	Client Information	Sampler J. BLAKFORS		Carrier Tracking No(s):		COC No:	
The control of the	Total SE	act: rtacts	4	E-Mail: Shali.brown@e		ш	Page:	
Victorial Bind SE	16(7 c) 10 C) 17	10					Job #:	
10 10 10 10 10 10 10 10	SC Control	nh McGill Blvd SE	Due Date Requested:				e	
Signature Sign	SCORTOGRAPH		TAT Requested (days):		180-111526 Chain of Custody			
Total March Marc	The control of the	80				-		
Continue	Contract	-7116(Tel)	PO#: SCS10382606	(0	(07 <u>4</u> 7/			ate
Sample Ash Pond Sample Date Sample S	Sample Nath Pond Sample Date Sample Sample Corporation C	ntacts	WO #:		98,0M,1			
SSOWNE Sample Matrix Sample C-cong Sample C-cong Sample C-cong Sample C-cong Sample C-cong Sample C-cong Sample Sample Sample C-cong Sample S	Sample Date Sample Matrix ed (80.5) Sample Matrix ed (80.5)	me: lant Wansley Ash Pond	Project #: 18019922	MANAGEMENT OF THE PARTY OF THE	(EP)	and the same of the same of		
Sample Date Sample Water Fig. Sample Water Fig. Sample Sample Water Sample Sam	Sample Date Sample Water Wilder Sample Water Sample Water Sample Water Sample Water Sample Capability Capabi		SSOW#;	A) ası	M 2540		Other:	
7-2 9.73-70 9.73-70 9.73-70 9.74-70 9.74-70 9.74-70 9.74-70 9.74-70 9.74-70 9.74-70 9.74-70 9.73-70 1111 9. Water M.M. V. V. V. P. Sphall M. V. V. V. P. Sphall M. V. V. V. V. V. P. Sphall M. V. V. V. V. V. V. Sphall M. V. V. V. V. V. V. Sphall M. V.	7-2 7-2 7-2 7-2 7-2 7-2 7-2 7-2 7-2 7-2	الم مرواني مرواني المراورة الم	Sample	Matrix (W=water, S=solid, O=wasteloil, Idl III III III III III III III III III	EPA 300.0 & SI Jefecfed App IV A,Ba,Be,Cd,Cr Sadium 226 & 2	otal Number	Gnorial Inetwindiane Mode	
9-13-70	9-23-20 G water N G-23-20 G water N G-23-20 (1150 G water N G-23-70 (1111 G water N G-23-70 (1111 G water N G-23-70 (125 G water N G-23-70 (125 G water N G-23-70 (105 G water N G-23-	Identification	X	ation Code:	7		apedal manacinal successions	
9.74-70 1150 G Water MM	9-24-70 1150 G Water N 9-24-70 1000 G Water N 9-73-70 1111 G Water N 9-73-70 1115 G Water N 9-13-70 1335 G Water N 9-13-70 1550 G Water N 9-13-70 1550 G Water N 9-13-70 1500 G	2-0110			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	The state of the state of	Hd	
9-73-70 111 G Water MM	9-74-70 1000 G Water M 9-73-70 1111 G Water M 9-73-70 1125 G Water M 9-73-70 1338 G Water M 9-73-70 1550 G Water M 9-71-70 1105 G Water M 9-73-70 1500 G Water M 9-71-70 1105 G WATER	-2-9	1150			W	=Hd	
9-73-70 111 G Water	9-73-70 11 G Water M 9-73-70 125 G Water M 9-73-70 1435 G Water M 9-73-70 1550 G Water M 9-73-70 1650 G Water M 9-71/-70 1055 G Water M 9-71/-70 1055 G Water M 9-73-70 1500 G Water M 9-73-70 1500 G Water M 170 17	42-6-2-8	000/			3	=Hd	
9-13-20 1125 G Water N N V V V V N V V V	9-13-70 1125 G Water N 9-13-70 1435 G Water N 9-13-70 1336 G Water N 9-13-70 1550 G Water N 9-21-70 105 G Water N 9-71-70 105 G Water N 9-73-70 1500 G Water N 9-73-70 1050		1111		// //			
9-73-70 1435 G Water MM / / / / / / / S PH= 5.05 9-73-70 1550 G Water MM / / / / / / / / / S PH= 5.05 9-73-70 105 G Water MM / / / / / / / / / / S PH= 5.05 9-71/-70 105 G Water MM / / / / / / / / / / / S PH= 5.05 9-71/-70 105 G Water MM / / / / / / / / / / / / S PH= 5.16 9-73-70 1500 G Water MM / / / / / / / / / / S PH= 5.16 9-73-70 1500 G Water MM / / / / / / / / / / / / / / / / / /	9-23-70 1435 G Water N 9-23-70 1336 G Water N 9-23-70 1056 G Water N 9-71-70 1105 G Water N 9-71-70 1705 G Water N 9-71-70 1705 G Water N 9-71-70 1705 G Water N 1-10 1055 G Water N 1-10	1-7	1225	2	/////		PH= 6.14	
9-13-70 1336 G Water M V V V V S DH= 5,05 9-13-70 1550 G Water M V V V V S DH= 5,16 9-11-10 105 G Water M V V V V S DH= 5,16 9-11-10 1055 G Water M V V V V S DH= 6,29 9-11-10 1055 G Water M V V V V S DH= 6,29 9-11-10 1055 G Water M V V V V V S DH= 6,29 9-11-10 1055 G Water M V V V V V V V V V	9-13-10 1336 G Water M 9-13-10 1105 G Water M 9-11-10 1105 G Water M 9-211-20 1500 G Water M 9-23-20 1500 G Water M 9-13-70 1500 G Water M Date/Time: Date: Tim	1	1435	Water NN	/////		PH= +	
9-13-70 1550 G Water M	9-23-70 1550 G Water M 9-24-70 105 G Water M 9-24-70 0955 G Water M 9-23-70 1500 G Water M 9-23-70 1500 G Water M Tin Date/Time: Date:	1	1330	2			1	
9-74-70 1105 G Water M V V V V S PH= C. 29	9-74-70 1105	3	1550		// //		15	
9-71/-70 0955 G Water	ant □ Poison B ★ Unknown □ Radiological Q-71/70 0755 G Water M Q-73-70 1500 G Water M Date/Time: □ Date: □ Time Date/Time: □ O B:3 ∪ O C O C O C O C O C O C O C O C O C O	1	1105		111		6.2	
ant Poison B Y Unknown Radiological Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Special Instructions/QC Requirements: Image:	ant Poison B Y Unknown Radiological Paterfilme: Date: Tine	1	0955	N		3	PH= 5.1	
ant Doison B Y Unknown Rediciological Special Instructions/OC Requirements: Date:	ant Poison B Y Unknown Radiological Date: DaterTime: O 33 C Company Company DaterTime: O 20 Company Company	1	1,500			3	PH= C	
Special Instructions/QC Requirements: Date: Time: Time	Special Instructions/QC Requirements: Special Instructions/QC Requirements: Method of Shipment:	ant	Unknown [ole Disposal (A fee may be assessed in Return To Client	if samples are retaine Lab	ed longer than 1 month) ve For Months	
inquished by: Company Received by: Company Received by: Company Received by: Company Confirme: Company Confirme: Co	inquished by: Pate: Pate: Time: Pate: Time:				ial Instructions/QC Requirements:			
Date/Time: Custody Seal No.: A A A B B B B B B B	Company Received by: Canpert Cooler Temperature(s) **C and Other Remarks: Date/Time: Cooler Temperature(s) **C and Other Remarks: Cooler Temperature(s) **C and Other Remarks: Date/Time: Cooler Temperature(s) **C and Other Remarks: Cooler Te	Kit Relinquished by:	Dat			od of Shipment:		
Company Received by Date/Time: Company Received by Date/Time: Company Received by Cooler Temperature(s) °C and Other Remarks: Cooler Temperature(s) °C and	Sals Intact: Custody Seal No.:	hed by:	02/		eceivedby:	Date/Time:	& OSEL COMPANY	
Sals Intact: Custody Seal No.: Company Received by: Cooler Temperature(s) °C and Other Remarks: Cooler Temperature(s) °C and Other Remarks:	Company Received by: A No Cooler Temperature(s) °C and Other Remarks:	2 3	16:002	24	eceived by:	132	Pw Con	
Custody Seal No.:	Custody Seal No.:	0 2 / C . Kg pau	Date/Time.		eceived by:	Date/Time:	Company	
				Ö	ooler Temperature(s) °C and Other Remarks:			

Eurofins Tar-America, Pittsburgh 301 Alpha Drive Brank Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

Client Information	Sampler: O. FUQUEA	PUEA		Lab PM Brown	Lab PM: Brown, Shali			Carrier Tracking No(s):	Vo(s):	COC No:	
Dient Contact: SCS Contacts	Phone: (720)) 594	- 599	E-Mail	E-Mail: shali.brown@eurofinset.com	rofinset.c	Wo			Page:	
Sompany: GA Power			1	1			Analysis Requested	Requested		Job #:	
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	ij								Preservation Codes	des:
Oity: Atlanta	TAT Requested (days):	ys):								A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
State, Zip: GA, 30308										D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 404-506-7116(Tel)	PO#: SCS10382606				(0					G - Amchlor	R - Na2S203 S - H2S04 T - TSP Dodecehydrate
Email: SCS Contacts	:# OM				HISTORIAN PROPERTY.				8.		U - Acetone
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				THE RESIDENCE OF	(၁				K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site:	:#MOSS				SD (Y		,Co,Pb			Other:	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered : Perform MS/M App. III Metals	CI, F, SO₄ & TD3 (EPA 300.0 & SI	Detected App IV Radium 226 & 2 Radium 226 & 2 (SW-846 9315/9		Total Number		Special Instructions/Note:
	X	X	700	on Code:	\boxtimes						
W6WC-11	02-12-5	0201	9	Water	NN	>	1			3 PH= 5.50	
WGWC-12	9.13-70	1355	O	Water	NN	>	>		2	PH= Hd	24.6) 0
			O	Water						=Hd	
			O	Water					80.00	=Hd	
			O	Water						=Hd	
			O	Water						=Hd	
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Possible Hazard Identification Non-Hazard Plammable Skin Irritant	Poison B Unknown	Ш	Radiological		Sample	e Disposa Return To	I (A fee may)	oe assessed if sa Disposal By Lat	mples are retai	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client A Disposal By Lab Mont	1 month) Months
Deliverable Requested: I, III, IV, Other (specify)					Special	Instruction	Special Instructions/QC Requirements:	ments:			
Empty Kit Relinquished by:	П	Date:			Time:	7		Method of Shipmer	Shipment		
Relinquished by:	1/25/20		08.30	Sompany 9 DK	12. Re	Readived by:	1	9/2	9/20		Company 23
Relinquished by Communication of the Communication	9/2/20	650	7	大阪	Rec	Received by:	y sh	/	Date/Time: /	900	Company of
/N	(Company	Rec	Receivedoy	9		Date/Time:		Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No					C00	ler Tempera	Cooler Temperature(s) °C and Other Remarks:	er Remarks:		í.	
											Ver. 01/16/2010



TestAmerica

180-111526 Waybill

IYA* (678) 966-9991 TAYLOR NS TESTAMERICA CDONOLGH DRIVE

SHIP DATE: 25SEP20 ACTWGT: 59.05 LB CAD: 859116/CAFE3408

BILL RECIPIENT

SUITE C 10 NORCRUSS, 36 30093 UNITED STATES -US

TO SAMPLE RECIEVING
ENROFINS TESTAMERICA PITTSBURGH
SUT ALPHA DR.

PITTSBURGH PA 15238 * RIDC PARK

REF: GA POWER

(412) 963-7058

SATURDAY 12:00P

1 01.3

PA-US



Sunsannich Lesting TestAmerica

ORIGIN ID-LIYA (G78) 966-9991 GEORGE TAYLOR EUROFINS TESTAMERICA ESOO MEDONOUGH DRIVE SUITE C-10 NORCROSS, GA 30093 UNITED STATES US

S TESTAMERICA PITTSBURGH

SAMPLE RECIEVING

OH 30093

SHIP DATE: 25SEP2(ACTWGT: 59.05 LB CAD: 859116/CAFE3

BILL RECIPIENT

BILL RECIPIENT

EUROFINS TESTAMERICA PITTSBURGH TO SAMPLE RECIEVING 301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238 (412) 863-7056

REF: GA POWER

Thermometer ID

Uncorrected temp

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

O Initials CF

SATURDAY PRIORITY OVE MPS# 1516 9325 2066

Uncorrected temp

Thermometer ID

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

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Client Information (Sub Contract Lab)	Sampler			Lab PM: Brown	Brown, Shali	=				Carrier	Carrier Tracking No(s):		COC No: 180-412750.1	
Client Contact:	Phone			E.Mail	- 17					Charles of	antine.			
Shipping/Receiving	500			Sha	III. Brow	J@Eu	Shali.Brown@Eurofinset.com	moo:		Georgia	gin;		Page: Page 1 of 2	
Company:					Accred	tations	Required	Accreditations Required (See note):				Ī	Job #:	
TestAmerica Laboratories, Inc.													180-111399-2	
Address: 13715 Birler Trail North	Due Date Requested:	#						1	6				Preservation Codes:	35:
COLOUNDE HERITAGIN,	IOIZIIZUZU							Anaiy	SIS KE	Analysis Requested			A - HC	M. Hoose
City: Earth City	TAT Requested (days):	::(s			2:33							To the	H Cetate	N - None O - AsNaO2
State, Zip: MO, 63045							pue 9							P - Na204S Q - Na2SO3
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	# Od				(0		7000					171	F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSD Dedecabudeates
Email:	WO#:					822 m			-			•		U - Acetone V - MCAA
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				100000	uibsA (nənist	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#:				ASSESSMENT OF THE PARTY OF THE	czeb_(- 11-		noo to	Other:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A*Air	Field Filtered Perform MS/M	9320_Ra228/Pre	9315_Ra226/Pre Radium-228_GR	077-11151/051			100	Total Number	Specialins	Special Instructions/Note:
		X	Preserva	Preservation Code:	X							X	\int_{I}	V
Dup-1 (180-111399-1)	9/21/20	Eastern		Water		×	×					-		
EB-1-9-22-20 (180-111399-2)	9/22/20	11:20 Fastern		Water		×	×					-		
FB-1-9-22-20 (180-111399-3)	9/22/20	14:10 Eastern		Water		×	×					-		
WGWA-2 (180-111399-4)	9/21/20	12:10 Eastern		Water		×	×					-		
WGWA-4 (180-111399-5)	9/21/20	14:00 Eastern		Water		×	×					-		
WGWA-3 (180-111399-6)	9/21/20	15:01 Eastern		Water		×	×					-		
WGWA-1 (180-111399-7)	9/22/20	10:57 Eastern		Water		×	×					-		
WGWA-5 (180-111399-8)	9/22/20	12:20 Eastern		Water		×	×					-		
WGWA-6 (180-111399-9)	9/22/20	10:30		Water		×	×					-		

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont attesting to said complicance to Eurofins TestAmerica. Possible Hazard Identification

Unconfirmed			Return To Client Dispo	Disposal By Lab	Archive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2		Requi			
Empty Kit Relinquished by:	Date:	Time:	·ė:	Method of Shipment:		
Relinquished by:	Date/Time: (500)	Company Company	Received by: Fedex	Date/Time;		Company
Relinquished by: D	Date/Time:	Company	Received by:	Date/Time:	ı	OS:26 ETASTL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	1	Сотрапу
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) ^o C and Other Remarks:	33		
						Ver: 01/16/2019

Ver: 01/16/2019

Environment Testing

: eurofins

Carrier Tracking No(s)

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

N. None O - AsnaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate Vote: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently an analysis/lests/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 attention immediately, if all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica. Special Instructions/Note: ET45TL Z - other (specify) V - MCAA W - pH 4-5 Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mon Preservation Codes: 2:30 A - HCL
B - NaOH
C - Zn Acetate
C - Zn Acetate
D - Nitric Acid
F - MeOH
G - Amchlor
H - Ascorbic Acid COC No: 180-412750.2 180-111399-2 Page: Page 2 of 2 I - Ice J - DI Water K - EDTA L - EDA Date/Time: 9/26/20 Total Number of containers Date/Time: lethod of Shipment: State of Origin Georgia Analysis Requested ooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements: Fedex Accreditations Required (See note) E-Mail: Shali.Brown@Eurofinset.com Radium-228 × × × sceived by: Received by: Received by: 9315_Ra226/PrecSep_21 Radium 226 × × × × × × 320_Ra228/PrecSep_0 Radium 228 Brown, Shali Perform MS/MSD (Yes or No) Time: Company F. Dool 7 BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, Preservation Code: Water Matrix Water Water Company Company G=grab) Sample (C=comb, Type 3 Primary Deliverable Rank: 2 Eastern 14:30 Sample Time Eastern 14:20 Date: TAT Requested (days): Due Date Requested: 10/27/2020 Sample Date ント 9/22/20 9/22/20 9/22/20 Project #; 18019922 Date/Time: Date/Time: Client Information (Sub Contract Lab) Deliverable Requested: I, III, III, IV, Other (specify) Feder Custody Seal No. Sample Identification - Client ID (Lab ID) 314-298-8566(Tel) 314-298-8757(Fax) CCR - Plant Wansley Ash Pond Possible Hazard Identification restAmerica Laboratories, Inc. WGWA-18 (180-111399-11) WGWC-8 (180-111399-12) NGWA-7 (180-111399-10) Empty Kit Relinquished by: Custody Seals Intact: 13715 Rider Trail North, Shipping/Receiving Wansley CCR inquished by: inquished by: nquished by: Unconfirmed State, Zip: MO, 63045 Earth City

Client: Southern Company Job Number: 180-111399-2

List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Login Number: 111399

Greator. Watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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.	False	
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	

12/9/2020

Client: Southern Company Job Number: 180-111399-2

Login Number: 111399

List Source: Eurofins TestAmerica, St. Louis List Number: 2 List Creation: 09/26/20 11:52 AM

Creator: Boyd, Jacob C

Creator: Boyd, Jacob C		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

Client: Southern Company Job Number: 180-111399-2

Login Number: 111526 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

oronton day, momao d		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	
s 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	

Client: Southern Company Job Number: 180-111399-2

Login Number: 111526

List Number: 2

Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis

List Creation: 09/29/20 02:11 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	



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)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². 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

¹USEPA, 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

²USEPA, 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

							Analys	ses	
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (60208, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
102004	WGWA-2	2/3/2020	180-102004-1	GW		Х	Χ		Х
102004	WGWA-4	2/4/2020	180-102004-2	GW		Х	Х		Х
102004	WGWA-3	2/4/2020	180-102004-3	GW		Х	Х		Х
102004	WGWA-5	2/4/2020	180-102004-4	GW		Х	Х		Х
102004	WGWA-6	2/4/2020	180-102004-5	GW		Х	Χ		Х
102004	WGWA-1	2/3/2020	180-102004-6	GW		Х	Χ		Х
102004	DUP-1	2/4/2020	180-102004-7	GW	FD (WGWA-3)	Х	Χ		Х
102004	FB-1-2-4-20	2/4/2020	180-102004-8	WQ	FB	Х	Χ		Х
102004	EB-1-2-4-20	2/4/2020	180-102004-9	WQ	EB	Х	Χ		Х
102169	WGWA-7	2/5/2020	180-102169-1	GW		Х	Χ		Х
102169	FB-2-2-7-20	2/7/2020	180-102169-2	WQ	FB	Х	Χ		Х
102169	DUP-2	2/7/2020	180-102169-3	GW	FD (WGWC-19)	Х	Χ		Х
102169	WGWA-18	2/5/2020	180-102169-4	GW		X	Χ		Χ
102169	EB-2-2-7-20	2/7/2020	180-102169-5	WQ	EB	Х	Χ		Χ
102169	WGWC-10	2/5/2020	180-102169-6	GW		Х	Χ		Χ
102169	WGWC-12	2/5/2020	180-102169-7	GW		X	Χ		Χ
102169	WGWC-11	2/5/2020	180-102169-8	GW		Х	Χ		Χ
102169	WGWC-15	2/7/2020	180-102169-9	GW		Х	Χ		Χ
102169	WGWC-16	2/7/2020	180-102169-10	GW		X	Χ		Χ
102169	WGWC-19	2/7/2020	180-102169-11	GW		Х	Х		Х
102169	WGWC-13	2/5/2020	180-102169-12	GW		Х	Χ		Χ
102169	WGWC-14A	2/5/2020	180-102169-13	GW		Х	Х		Χ
102169	WGWC-9	2/5/2020	180-102169-14	GW		Х	Х		Χ
102169	WGWC-8	2/7/2020	180-102169-15	GW		X	Χ		Χ
102169	WGWC-17	2/7/2020	180-102169-16	GW		X	Χ		Χ

Abbreviations:

EB – Equipment Blank FB – Field Blank

FD – Field Duplicate

 $\mathsf{GW}-\mathsf{Groundwater}$

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	Constituent	New RL	New MDL	Qualifier	Reason
	Identification			or MDC		
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)¹ and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017)². 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

¹USEPA, 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

²USEPA, 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

						,	Analys	es	
SDG	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Metals (60208, 7470A)	Anions (300.0)	TDS (SM 2540C)	Radium-226/-228 (9315, 9320)
103742	WGWA-1	3/16/2020	180-103742-1	GW		Х	Х	Х	Х
103742	WGWA-2	3/16/2020	180-103742-2	GW		Х	Х	Х	Χ
103742	WGWA-3	3/17/2020	180-103742-3	GW		Х	Х	Χ	Х
103742	WGWA-4	3/17/2020	180-103742-4	GW		Х	Х	Χ	Х
103742	WGWA-5	3/17/2020	180-103742-5	GW		Х	Χ	Χ	Х
103742	WGWA-6	3/17/2020	180-103742-6	GW		Х	Χ	Χ	Х
103742	WGWA-7	3/17/2020	180-103742-7	GW		Х	Χ	Χ	Х
103742	WGWA-18	3/17/2020	180-103742-8	GW		Х	Χ	Χ	Х
103742	EB-1 3-17-20	3/17/2020	180-103742-9	WQ	EB	Х	Χ	Χ	Х
103742	DUPLICATE 1 3-17-20	3/17/2020	180-103742-10	GW	FD (WGWA-3)	Х	Χ	Χ	Х
103742	WGWC-11	3/18/2020	180-103742-11	GW		Х	Χ	Χ	Х
103809	WGWC-8	3/19/2020	180-103809-1	GW		Х	Χ	Χ	Х
103809	WGWC-9	3/19/2020	180-103809-2	GW		Х	Χ	Χ	Х
103809	WGWC-10	3/18/2020	180-103809-3	GW		Х	Х	Χ	Χ
103809	WGWC-12	3/18/2020	180-103809-4	GW		Х	Х	Χ	Χ
103809	WGWC-13	3/19/2020	180-103809-5	GW		Х	Χ	Χ	Χ
103809	WGWC-14A	3/19/2020	180-103809-6	GW		Х	Χ	Χ	Χ
103809	WGWC-15	3/18/2020	180-103809-7	GW		Х	Х	Χ	Χ
103809	WGWC-16	3/18/2020	180-103809-8	GW		Х	Χ	Χ	Χ
103809	WGWC-17	3/18/2020	180-103809-9	GW		Х	Х	Χ	Χ
103809	DUPLICATE 2	3/18/2020	180-103809-12	GW	FD (WGWC-19)	Х	Х	Χ	Χ
103809	FB-1 3-18-20	3/18/2020	180-103809-13	WQ	FB	Х	Χ	Χ	Х
103809	FB-2 3-19-20	3/19/2020	180-103809-14	WQ	FB	Х	Χ	Χ	Χ
105386	WGWC-19	5/4/2020	180-105386-1	GW		Х	Χ	Χ	Χ
105386	EB-1-5-4-2020	5/4/2020	180-105386-2	WQ	EB	Х	Χ	Χ	Χ
105386	DUP-1	5/4/2020	180-105386-3	GW	FD (WGWC-19)	Х	Х	Χ	Χ

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 – March 2020

SDG	Field	Constituent	New RL	New MDL	Qualifier	Reason
	Identification			or MDC		
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



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Memorandum

Date: December 15, 2020

To: Adria Reimer

From: Kristoffer Henderson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables - Eurofins

TestAmerica Laboratory Job IDs 180-111399-1 and 180-111399-2

SITE: Plant Wansley Ash Pond

INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of nineteen aqueous samples, two field duplicates, two equipment blanks and two field blanks, collected 21-24 September 2020, as part of the Plant Wansley AP on-site sampling event.

The samples were analyzed at Eurofins TestAmerica Pittsburgh, Pennsylvania, for the following analytical tests:

- Metals by United States (US) Environmental Protection Agency (EPA) Methods 3005A/6020B
- Mercury by USEPA Method 7470A
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0
- Total Dissolved Solids (TDS) by Standard Method 2540C

The samples were analyzed at Eurofins TestAmerica St. Louis, Missouri, for the following analytical tests:

- Radium-226 by USEPA Method 9315
- Radium-228 by USEPA Method 9320
- Total Radium by Calculation

EXECUTIVE SUMMARY

Based on the Stage 2A data validation covering the quality control (QC) parameters listed below and the information provided, the data as qualified are usable for meeting project objectives. Qualified data should be used within the limitation of the qualification.

DVR Wansley 111399 Final Review: JK Caprio 12/16/2020

Plant Wansley AP Site Data Validation 15 December 2020 Page 2

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011);
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017 (EPA 540-R-2017-001); and
- American National Standard, Verification and Validation of Radiological Data for use in Waste Management and Environmental Remediation, February 15, 2012 (ANSI/ANS-41.5-2012).

The following samples were analyzed and reported in the laboratory reports:

Laboratory ID	Client ID
180-111399-1	Dup-1
180-111399-2	EB-1-9-22-20
180-111399-3	FB-1-9-22-20
180-111399-4	WGWA-2
180-111399-5	WGWA-4
180-111399-6	WGWA-3
180-111399-7	WGWA-1
180-111399-8	WGWA-5
180-111399-9	WGWA-6
180-111399-10	WGWA-7
180-111399-11	WGWA-18
180-111399-12	WGWC-8
180-111526-1	Dup-2

Laboratory ID	Client ID
180-111526-2	EB-2-9-24-20
180-111526-3	FB-2-9-24-20
180-111526-4	WGWC-17
180-111526-5	WGWC-10
180-111526-6	WGWC-15
180-111526-7	WGWC-16
180-111526-8	WGWC-9
180-111526-9	WGWC-13
180-111526-10	WGWC-14A
180-111526-11	WGWC-19
180-111526-12	WGWC-11
180-111526-13	WGWC-12

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

Collection times were not documented on the chain of custody (COC) for field duplicates, Dup-1 and Dup-2. Dup-1 and Dup-2 were logged in with the collection time of 00:00.

The field pH data included in the laboratory report were not validated.

1.0 METALS

The samples were analyzed for metals by USEPA methods 3005A/6020B.

The areas of data review are listed below. A leading check mark (\checkmark) indicates an area of review in which the data were acceptable. A preceding crossed circle (\otimes) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

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Plant Wansley AP Site Data Validation 15 December 2020 Page 3

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ⊗ Equipment Blank
- ⊗ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

1.1 Overall Assessment

The metals data reported in this data package are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

1.2 **Holding Time**

The holding time for the metals analysis of a water sample is 180 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported (batches 332470, 332954 and 332956). Metals were not detected in the method blanks above the method detection limits (MDLs).

1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

One sample set specific MS/MSD pair was reported using sample Dup-1. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

1.5 <u>Laboratory Control Sample (LCS)</u>

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

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1.6 **Equipment Blank**

Two equipment blanks were collected with the sample set, EB-1-9-22-20 and EB-2-9-24-20. Metals were not detected in the equipment blanks above the MDLs, with the following exceptions.

Beryllium and thallium were detected in EB-1-9-22-20 at estimated concentrations greater than the MDLs and less than the reporting limits (RLs). Since the thallium concentration in EB-1-9-22-20 was U qualified due to field blank contamination, no additional qualifications were applied to the thallium data. However, the estimated beryllium concentrations in the associated samples were U qualified as not detected at the RL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
Dup-1	Beryllium	0.00022	J	0.0025	U	3
WGWC-14A	Beryllium	0.00024	J	0.0025	U	3
WGWC-9	Beryllium	0.00034	J	0.0025	U	3

mg/L-milligrams per liter

1.7 Field Blank

Two field blanks were collected with the sample set, FB-1-9-22-20 and FB-2-9-24-20. Metals were not detected in the field blanks above the MDLs with the following exception.

Thallium was detected in FB-1-9-22-20 and FB-2-9-24-20 at estimated concentrations greater than the MDL and less than the RL. Therefore, the estimated thallium concentrations in the associated samples were U qualified as not detected at the RL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
Dup-1	Thallium	0.00026	J	0.0010	U	3
EB-1-9-22-20	Thallium	0.00037	J	0.0010	U	3

mg/L-milligrams per liter

J-estimated concentration greater than the MDL and less than the RL

1.8 <u>Field Duplicate</u>

Two field duplicate samples were collected with the sample set, Dup-1 and Dup-2. Acceptable precision (RPD \leq 20% or the difference between the concentrations \leq RL) was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-19, respectively.

J-estimated concentration greater than the MDL and less than the RL

^{*} Validation qualifiers are defined in Attachment 1 at the end of this report

^{**}Reason codes are defined in Attachment 2 at the end of this report

Plant Wansley AP Site Data Validation 15 December 2020 Page 5

1.9 **Sensitivity**

The samples were reported to the MDLs. Elevated nondetect results were not reported.

1.10 Electronic Data Deliverable (EDD) Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

2.0 MERCURY

The samples were analyzed for mercury by USEPA method 7470A.

The areas of data review are listed below. A leading check mark (\checkmark) indicates an area of review in which the data were acceptable. A preceding crossed circle (\otimes) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

2.1 Overall Assessment

The mercury data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

2.2 **Holding Time**

The holding time for mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five method blanks were reported (batches 332349, 332506, 332507, 332871 and 332971). Mercury was not detected in the method blanks above the MDL.

2.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

MS/MSD pairs were not reported.

2.5 <u>Laboratory Control Sample</u>

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five LCSs were reported. The recovery results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of mercury in the LCS in batch 332971 was high and outside the laboratory specified acceptance criteria. Since mercury was not detected in the associated samples, no qualifications were applied to the data.

Equipment Blank

Two equipment blanks were collected with the sample set, EB-1-9-22-20 and EB-2-9-24-20. Mercury was not detected in the equipment blanks above the MDL.

2.7 Field Blank

Two field blanks were collected with the sample set, FB-1-9-22-20 and FB-2-9-24-20. Mercury was not detected in the field blanks above the MDL.

2.8 Field Duplicate

Two field duplicate samples were collected with the sample set, Dup-1 and Dup-2. Acceptable precision (RPD \leq 20% or the difference between the concentrations \leq RL) was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-19, respectively.

2.9 Sensitivity

The samples were reported to the MDL. No elevated nondetect results were reported.

2.10 Electronic Data Deliverable Review

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

3.0 WET CHEMISTRY

The samples were analyzed for anions by USEPA method 300.0 and TDS by Standard method 2540C.

The areas of data review are listed below. A leading check mark (\checkmark) indicates an area of review in which the data were acceptable. A preceding crossed circle (\otimes) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Equipment Blank
- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

3.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

3.2 Holding Times

The holding time for the anions (fluoride, chloride, sulfate) analysis of a water sample is 28 days from sample collection to analysis. The holding time for the TDS analysis of a water sample is 7 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported for anions (batches 332056, 332194 and 332252) and two method blanks were reported for TDS (batches 331211 and 331565). The wet chemistry parameters were not detected in the method blanks above the MDLs.

3.4 Matrix Spike/Matrix Spike Duplicate

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four sample set specific MS/MSD pairs were reported for the anions using samples Dup-1, WGWA-3, WGWC-8 and WGWC-13. The recovery and RPD results were within the laboratory specified acceptance criteria.

3.5 <u>Laboratory Control Sample</u>

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCSs were reported for the anions and two LCSs were reported for TDS. The recovery results were within the laboratory specified acceptance criteria.

3.6 <u>Laboratory Duplicate</u>

Three sample set specific laboratory duplicates were reported using samples WGWA-5, WGWC-15 and WGWC-16. The RPD results were within the laboratory specified acceptance criteria.

3.7 Equipment Blank

Two equipment blanks were collected with the sample set, EB-1-9-22-20 and EB-2-9-24-20. The wet chemistry parameters were not detected in the equipment blanks above the MDLs.

3.8 Field Blank

Two field blanks were collected with the sample set, FB-1-9-22-20 and FB-2-9-24-20. The wet chemistry parameters were not detected in the field blanks above the MDLs.

3.9 Field Duplicate

Two field duplicate samples were collected with the sample set, Dup-1 and Dup-2. Acceptable precision (RPD \leq 20% or the difference between the concentrations \leq RL) was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-19, respectively.

3.10 Sensitivity

The samples were reported to the MDLs. No elevated nondetect results were reported.

3.11 <u>Electronic Data Deliverable Review</u>

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

4.0 RADIOCHEMISTRY

The samples were analyzed for radium-226 by USEPA method 9315, radium-228 by USEPA method 9320 and total radium by calculation.

The areas of data review are listed below. A leading check mark (\checkmark) indicates an area of review in which the data were acceptable. A preceding crossed circle (\otimes) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ⊗ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Laboratory Duplicate
- ✓ Tracers and Carriers
- ⊗ Equipment Blank
- ✓ Field Blank
- ⊗ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

4.1 Overall Assessment

The radium-226 and radium-228 data reported in this data set are considered usable for meeting project objectives. The results are considered valid; the analytical completeness defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for this data set is 100%.

4.2 **Holding Times**

The holding times for the radium-226 and radium-228 analyses of a water sample are 180 days from sample collection to analysis. The holding times were met for the sample analyses.

4.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three method blanks were reported for the radium-226 data (batches 484391, 484404 and 487775). Three method blanks were reported for the radium-228 data (batches 484392, 484405 and 484437). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs), with the following exceptions.

Radium-226 was detected above the MDC in the method blank in batch 484404 (4.451 pCi/L). Since radium-226 was not detected in the associated samples, no qualifications were applied to the data.

Radium-228 was detected above the MDC in the method blank in batch 484392 (0.8933 pCi/L). Therefore, the radium-228 concentrations in the associated samples greater than the MDC and less than the method blank concentration were U qualified as not detected at the reported concentration and the radium-228 concentration in the associated sample greater than the method blank concentration and less than ten times the method blank concentration was J+ qualified as estimated with high biases. In addition, the combined radium concentrations in WGWC-11 and WGWC-13 were J+ qualified as estimated with high biases and the combined radium concentration in WGWC-12 was U qualified as not detected at the reported concentration.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result	Validation Qualifier	Reason Code
WGWC-11	Radium-228	1.14	NA	1.14	J+	3
WGWC-11	Combined Radium	1.20	NA	1.20	J+	3
WGWC-12	Radium-228	0.685	NA	0.685	U	3
WGWC-12	Combined Radium	0.785	NA	0.785	U	3
WGWC-13	Radium-228	0.761	NA	0.761	U	3
WGWC-13	Combined Radium	1.02	NA	1.02	J+	3

pCi/L- picocuries per liter NA-not applicable

4.4 Matrix Spike/Matrix Spike Duplicate

MS/MSD pairs were not reported with the data.

4.5 <u>Laboratory Control Sample</u>

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three LCS/LCS duplicate (LCSD) pairs were reported for radium-226. Three LCS/LCSD pairs were reported for radium-228. The recovery and replicate error ratio (RER) [2 sigma (2σ)] results were within the laboratory specified acceptance criteria, with the following exception.

The recovery of radium-228 in the LCS in batch 484405 was low and outside the laboratory specified acceptance criteria. Since radium-228 was not detected in the associated samples, no qualifications were applied to the data.

4.6 <u>Laboratory Duplicate</u>

Laboratory duplicates were not reported.

4.7 <u>Tracers and Carriers</u>

Carriers were reported for the radium-226 and radium-228 analyses and a tracer was reported for the radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

4.8 Equipment Blank

Two equipment blanks were collected with the sample set, EB-1-9-22-20 and EB-2-9-24-20. Radium-226 and Radium-228 were not detected in the equipment blanks above the MDCs, with the following exceptions.

Radium-226 (1.63 pCi/L) and combined radium (1.78 pCi/L) were detected at concentrations greater than the MDCs in EB-1-9-22-20. Therefore, the radium-228 and combined radium concentrations in the associated samples greater than the MDCs and less than the method blank concentrations were U qualified as not detected at the reported concentrations and the combined radium concentration in the associated sample greater than the method blank concentration and less than ten times the method blank concentration was J+ qualified as estimated with high bias.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
WGWC-8	Radium-226	0.293	NA	0.293	U	3
WGWC-8	Combined Radium	1.75	NA	1.75	U	3
WGWA-4	Combined Radium	1.07	NA	1.07	U	3
WGWA-1	Combined Radium	0.729	NA	0.729	U	3
WGWA-5	Combined Radium	0.954	NA	0.954	U	3

Sample	Analyte	Laboratory	Laboratory	Validation	Validation	Reason
		Result	Flag	Result	Qualifier	Code
		(pCi/L)		(pCi/L)		
WGWA-6	Radium-226	0.716	NA	0.716	U	3
WGWA-6	Combined Radium	7.65	NA	7.65	J+	3
WGWC-14A	Radium-226	0.308	NA	0.308	U	3
WGWC-14A	Combined Radium	0.796	NA	0.796	U	3
WGWC-19	Radium-226	1.03	NA	1.03	U	3
WGWC-19	Combined Radium	1.18	NA	1.18	U	3
WGWC-11	Combined Radium	1.20	NA	1.20	U	3
WGWC-12	Combined Radium	0.785	NA	0.785	U	3
WGWC-17	Radium-226	0.126	NA	0.126	U	3
WGWC-17	Combined Radium	0.643	NA	0.643	U	3
WGWC-16	Radium-226	0.179	NA	0.179	U	3
WGWC-13	Radium-226	0.259	NA	0.259	U	3
WGWC-13	Combined Radium	1.02	NA	1.02	U	3

pCi/L- picocuries per liter NA-not applicable

4.9 Field Blank

Two field blanks were collected with the sample set, FB-1-9-22-20 and FB-2-9-24-20. Radium-226 and Radium-228 were not detected in the field blanks above the MDCs.

4.10 Field Duplicate

Two field duplicate samples were collected with the sample set, Dup-1 and Dup-2. Acceptable precision (RER $(2\sigma) < 3$) was demonstrated between the field duplicate and the original sample, WGWA-3 and WGWC-19, respectively.

4.11 **Sensitivity**

The samples were reported to the MDCs. No elevated nondetect results were reported.

4.12 <u>Electronic Data Deliverable Review</u>

The results and sample IDs in the EDD were reviewed against the information provided by the associated level II report at a minimum of 20% as part of the data validation process. No discrepancies were identified between the level II report and the EDD.

* * * * *

ATTACHMENT 1 DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
- J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

DVR Wansley 111399 Final Review: JK Caprio 12/16/2020

ATTACHMENT 2 DATA VALIDATION REASON CODES Assigned by Geosyntec's Data Validation Team

Valid Value	Description					
1	Preservation requirement not met					
2	Analysis holding time exceeded					
3	Blank contamination (i.e., method, trip, equipment, etc.)					
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits					
5	LCS or RPD recovery outside limits (LCS/LCSD)					
6	Surrogate recovery outside limits					
7	Field Duplicate RPD exceeded					
8	Serial dilution percent difference exceeded					
9	Calibration criteria not met					
10	Linear range exceeded					
11	Internal standard criteria not met					
12	Lab duplicates RPD exceeded					
13	Other					
14	Lab flag removed or modified: no validation qualification required					

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample duplicate

RPD - Relative percent difference

DVR Wansley 111399 Final Review: JK Caprio 12/16/2020

APPENDIX D2 Field Data Forms

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

Test Notes:

Sampled at 1530 on 2-3-20.

Weather Conditions:

Sunny, 70s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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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

Test Notes:

Sampled at 1318. Clear 72F.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:

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

Test Notes:

Collected at 1142. 63F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
2/4/2020	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
11:16 AM	00.00	0.00 p. i	10.10	σο. το μοτοιτί	0.11 mg/L		01.1111	2.0110	000.00 1111/111111
2/4/2020	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
11:21 AM	03.00	3.07 pm	10.40 C	33.13 μ3/6111	7.77 mg/L	0.551416	70.0111	0.40 11	300.00 1111/111111
2/4/2020	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
11:26 AM	10.00	3.03 pm	10.55 C	33.04 μ3/6/11	7.33 Hig/L	0.49 1110	70.4 1110	3.00 10	300.00 1111/111111
2/4/2020	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
11:31 AM	13.00	3.03 pri	10.73 C	33.13 μ3/611	7.32 Hig/L	0.57 1010	02.7 1110	3.00 11	300.00 1111/111111
2/4/2020	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
11:36 AM	20.00	3.03 PH	10.07 C	33.30 μ3/011	7.05 Hig/L	0.40 N 10	00.81110	3.00 11	300.00 1111/111111
2/4/2020	25:00	E 66 nU	16.96 °C	22 22 uS/om	6.02 mg/l	0.64 NTU	83.8 mV	3.60 ft	300.00 ml/min
11:41 AM	25.00	5.66 pH	10.96 C	33.33 µS/cm	6.93 mg/L	0.04 NTO	03.0 1110	3.00 11	300.00 111/11111

Samples

Sample ID:	Description:
WGWA-3	@ 1142

Test Date / Time: 2/4/2020 10:18:16 AM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWA-4 Well Diameter: 2 in Casing Type: PVC

Screen Length: 10 ft Top of Screen: 63.9 ft Total Depth: 73.9 ft Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 68.9 ft Estimated Total Volume Pumped:

4.01 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 7 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1045. 60F overcast.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Test Date / Time: 2/4/2020 12:15:19 PM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWA-5

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 13.6 ft Total Depth: 23.6 ft **Pump Type: QED Bladder Pump**

Tubing Type: Poly

Pump Intake From TOC: 21.5 ft Estimated Total Volume Pumped:

54.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min

Final Draw Down: 4 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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							
	01.11.00	5.30 μπ	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	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	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	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	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	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	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	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	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
PM 2/4/2020 2:26 PM 2/4/2020 2:31 PM 2/4/2020 2:36 PM 2/4/2020 2:41 PM 2/4/2020 2:46 PM 2/4/2020 2:56 PM 2/4/2020 3:01 PM 2/4/2020 3:01 PM 2/4/2020 3:11 PM 2/4/2020 3:11 PM	02:06:39 02:11:39 02:16:39 02:21:39 02:26:39 02:36:39 02:41:39 02:46:39 02:56:39	5.29 pH 5.30 pH 5.30 pH 5.31 pH	16.91 °C 16.87 °C 16.83 °C 16.85 °C 16.82 °C 16.79 °C 16.90 °C 16.91 °C 16.83 °C	20.17 μS/cm 19.83 μS/cm 19.63 μS/cm 19.45 μS/cm 19.13 μS/cm 19.10 μS/cm 18.88 μS/cm 18.71 μS/cm 18.96 μS/cm 19.75 μS/cm	6.40 mg/L 6.38 mg/L 6.36 mg/L 6.44 mg/L 6.44 mg/L 6.41 mg/L 6.36 mg/L 6.30 mg/L 6.48 mg/L 6.49 mg/L	9.49 NTU 10.30 NTU 10.10 NTU 10.10 NTU 9.92 NTU 9.82 NTU 10.00 NTU 10.00 NTU 10.00 NTU 9.83 NTU	82.4 mV 82.0 mV 81.8 mV 129.1 mV 83.2 mV 82.3 mV 81.4 mV 81.2 mV 82.5 mV	11.60 ft 11.60 ft	300.00 ml

Sample ID:	Description:
WGWA-5	Collect at 1517. 69F cloudy.

Test Date / Time: 2/4/2020 2:26:41 PM

Project: Plant Wansley AP **Operator Name:** Hunter Auld

Location Name: WGWA-6

Well Diameter: 2 in Casing Type: PVC Screen Length: 50 ft Top of Screen: 54.5 ft Total Depth: 104.5 ft

Initial Depth to Water: 12.9 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 79.5 ft Estimated Total Volume Pumped:

5.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.9 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sampled at 1455 on 2-4-20.

Weather Conditions:

Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID):	Description:	
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Test Date / Time: 2/5/2020 12:01:37 PM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWA-7
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 29.6 ft

Total Depth: 39.6 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 34.6 ft Estimated Total Volume Pumped:

3.86 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min

Final Draw Down: 0 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
WGWA-7	Collected at 1233. 65F overcast.

Test Date / Time: 2/5/2020 11:05:44 AM

Project: Plant Wansley AP **Operator Name:** Hunter Auld

Location Name: WGWA-18

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30 ft Total Depth: 40 ft

Initial Depth to Water: 18.04 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 35 ft Estimated Total Volume Pumped:

7 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 21.1 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sampled at 1205 on 2-5-20.

Weather Conditions:

Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:

Test Date / Time: 2/7/2020 10:02:43 AM

Project: Plant Wansley AP **Operator Name:** Hunter Auld

Location Name: WGWC-8

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 49.4 ft Total Depth: 59.4 ft

Initial Depth to Water: 1.13 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 54 ft
Estimated Total Volume Pumped:

4.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 11.64 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sampled at 1035 on 2-7-20.

Weather Conditions:

Cloudy, 30s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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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

Test Notes:

Sampled at 1600 on 2-5-20.

Weather Conditions:

Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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Test Date / Time: 2/5/2020 10:52:08 AM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWC-10

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 138.95 ft Total Depth: 148.95 ft **Pump Type: QED Bladder Pump**

Tubing Type: Poly

Pump Intake From TOC: 143.95 ft Estimated Total Volume Pumped:

3.62 liter

Flow Cell Volume: 90 ml Final Flow Rate: 115 ml/min Final Draw Down: 29 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
WGWC-10	Collected at 1124. 63F overcast.

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

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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.

Test Date / Time: 2/5/2020 1:10:22 PM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWC-12

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 66.57 ft Total Depth: 76.57 ft

Initial Depth to Water: 17.29 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 71.57 ft Estimated Total Volume Pumped:

9.93 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 5 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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.

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

Test Notes:

Sampled at 1335 on 2-5-20.

Weather Conditions:

Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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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

Test Notes:

Sampled at 1440 on 2-5-20.

Weather Conditions:

Cloudy, 60s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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Test Date / Time: 2/7/2020 10:03:01 AM

Project: Plant Wansley AP **Operator Name**: Owens Fuquea

Location Name: WGWC-15

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.36 ft Total Depth: 53.36 ft

Initial Depth to Water: 17.5 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 48.36 ft Estimated Total Volume Pumped:

2.80 liter

Flow Cell Volume: 90 ml Final Flow Rate: 80 ml/min Final Draw Down: 60 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:			
WGWC-15	Called at 1038. 38F cloudy.			

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

Test Notes:

Starting WL 16.41

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:				
WGWC-16	Collected at 1128. 38F cloudy.				

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

Test Notes:

Sampled at 1220 on 2-7-20.

Weather Conditions:

Cloudy, 30s.

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

Sample ID:	Description:
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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

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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.

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

Test Notes:

Sample time: 14:15 Weather: cloudy 50s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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

S	ample ID:	Description:
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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

Test Notes:

Sample time: 12:25 Weather: Cloudy 50s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
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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

Test Notes:

Sample time: 11:35. Dup 1 here

Weather: Cloudy 60s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
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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

Test Notes:

Sample time: 10:40

Weather: Cloudy, light precipitation

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
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Date: 2020-03-17 12:43:19

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

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

445707
HACH Pump placement from TOC

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

QED Bladder Pump

poly

.17 in

23 ft

18 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS/cmTurb 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

Date: 2020-03-17 11:17:32

Pump Information:

Pump Model/Type

Tubing Diameter

Pumping Information:

Tubing Length

Tubing Type

QED Bladder

poly

.17 in

104.5 ft

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 placement from TOC 99 ft

Well Information:

Final Pumping Rate Well ID WGWA6 100 mL/min Well diameter 2 in Total System Volume 0.5564277 L Calculated Sample Rate Well Total Depth 104.5 ft 300 sec Screen Length 10 ft Stabilization Drawdown 6 in Depth to Water 5 L 8.00 ft Total Volume Pumped

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS/cmTurb 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

Date: 2020-03-1714:07:00

Pump Information:

Pump Model/Type

Tubing Diameter

Tubing Length

Tubing Type

Project Information:

Operator Name **Taylor Goble** ACC

Company Name Project Name Plant Wansley Ash Pond

Site Name Plant Wansley 00 0' 0" Latitude

00 0' 0" Longitude Sonde SN 445707

Turbidity Make/Model HACH Pump placement from TOC

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

QED Bladder Pump

poly

.17 in

18 ft

35 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	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

Test Date / Time: 3/17/2020 12:51:34 PM

Project: Plant Wansley AP **Operator Name:** Anna Schnittker

Location Name: WGWA-18

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 30 ft Total Depth: 40 ft

Initial Depth to Water: 10.22 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 35 ft Estimated Total Volume Pumped:

9.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 22.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sample time: 14:35 Weather: Cloudy 60s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
Campie ib.	везаприон.

Date: 2020-03-19 13:52:06

Tubing Type

Pump Information: Pump Model/Type

Tubing Diameter

Pumping Information:

Tubing Length

QED Bladder

poly

.17 in

60 ft

55 ft

Project Information:

Operator Name Taylor Goble

Company Name ACC
Project Name Plant Wansley Ash Pond
Site Name Plant Wansley

Site Name
Latitude
Longitude
Sonde SN
Plant Wa
0° 0' 0"
407447

Turbidity Make/Model Hach Pump placement from TOC

Well Information:

Final Pumping Rate Well ID WGWC-8 100 mL/min Well diameter Total System Volume 0.3578054 L 2 in Calculated Sample Rate Well Total Depth 59.40 ft 300 sec Screen Length 10 ft Stabilization Drawdown 12 in Depth to Water 2.28 ft Total Volume Pumped 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	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

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

Site Name Plant Wa Latitude 0° 0' 0" Longitude 0° 0' 0" Sonde SN 445707

Turbidity Make/Model Hach

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

Pump Information:

Pump Model/Type QED Bladder

56 ft

Tubing TypepolyTubing Diameter.17 inTubing Length61 ft

Pump placement from TOC

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	рН	SpCond µS	S/cmTurb 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

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

Test Notes:

Sample time: 14:55 Weather: Cloudy 70s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
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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

Site Name Plant Wa Latitude 0° 0' 0" Longitude 0° 0' 0" Sonde SN 445707

Turbidity Make/Model Hach

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

Pump Information:

Pump Model/Type QED Bladder

45 ft

Tubing TypepolyTubing Diameter.17 inTubing Length50 ft

Pump placement from TOC

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	рН	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

Date: 2020-03-18 11:45:50

Pump Information:

Pump Model/Type

Tubing Diameter

Pumping Information:

Tubing Length

Tubing Type

QED Bladder

poly

.17 in

77 ft

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 placement from TOC 71 ft

Well Information:

Final Pumping Rate Well ID WGWC-12 150 mL/min Well diameter Total System Volume 0.4336836 L 2 in Calculated Sample Rate Well Total Depth 76.57 ft 300 sec Screen Length 10 ft Stabilization Drawdown 3 in Depth to Water 17 L 12.45 ft Total Volume Pumped

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cmTurb 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

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

Test Notes:

Sample time: 11:15 Weather: Cloudy 70s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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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Test Date / Time: 3/19/2020 12:26:37 PM

Project: Plant Wansley AP **Operator Name:** Anna Schnittker

Location Name: WGWC-14A

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33 ft Total Depth: 43.08 ft

Initial Depth to Water: 12.93 ft

Pump Type: Peri

Tubing Type: Poly

Pump Intake From TOC: 38 ft Estimated Total Volume Pumped:

6 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 18 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sample time: 13:35 Weather: Cloudy 70s EB-2 here. 13:10

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:

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	рН	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:
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Test Date / Time: 3/18/2020 11:09:54 AM

Project: Plant Wansley AP **Operator Name:** Anna Schnittker

Location Name: WGWC-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

Test Notes:

Sample time: 11:45 Weather: Cloudy 60s

Low-Flow Readings:

Date Time	Elapsed Time	рН	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:
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Date: 2020-03-18 15:12:41

Tubing Type

Pump Information: Pump Model/Type

Tubing Diameter

Tubing Length

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 placement from TOC

Well Information:

Well IDWGWC-17Well diameter2 inWell Total Depth95.94 ftScreen Length10 ftDepth to Water25.05 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

QED Bladder

poly

.17 in

96 ft

91 ft

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	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

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

Test Notes:

Low-Flow Readings:

Date Time	Elapsed Time	рН	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.

Test Date / Time: 9/22/2020 10:02:08 AM **Project:** Plant Wansley - Ash Pond

Operator Name: O. Fuquea

Location Name: WGWA-1
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 119.6 ft

Total Depth: 129.6 ft

Initial Depth to Water: 27.73 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 124.6 ft Estimated Total Volume Pumped:

4125 ml

Flow Cell Volume: 90 ml Final Flow Rate: 75 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1057. 59F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/22/2020 10:02 AM	00:00	9.24 pH	14.49 °C	14,335 μS/cm	10.43 mg/L		242.7 mV	27.73 ft	75.00 ml/min
9/22/2020 10:07 AM	05:00	6.94 pH	17.45 °C	56.54 μS/cm	1.04 mg/L	1.89 NTU	137.5 mV	27.73 ft	75.00 ml/min
9/22/2020 10:12 AM	10:00	5.63 pH	17.98 °C	35.77 μS/cm	1.10 mg/L	1.30 NTU	128.2 mV	27.73 ft	75.00 ml/min
9/22/2020 10:17 AM	15:00	5.29 pH	18.18 °C	34.57 μS/cm	2.06 mg/L	1.15 NTU	128.6 mV	27.73 ft	75.00 ml/min
9/22/2020 10:22 AM	20:00	5.20 pH	18.30 °C	34.86 μS/cm	2.82 mg/L	0.87 NTU	131.0 mV	27.73 ft	75.00 ml/min
9/22/2020 10:27 AM	25:00	5.15 pH	18.35 °C	34.78 μS/cm	2.95 mg/L	0.50 NTU	132.5 mV	27.73 ft	75.00 ml/min
9/22/2020 10:32 AM	30:00	5.14 pH	18.29 °C	34.97 μS/cm	2.65 mg/L	0.51 NTU	131.7 mV	27.73 ft	75.00 ml/min
9/22/2020 10:37 AM	35:00	5.12 pH	18.43 °C	35.09 μS/cm	2.31 mg/L	0.49 NTU	132.3 mV	27.73 ft	75.00 ml/min
9/22/2020 10:42 AM	40:00	5.09 pH	18.55 °C	35.17 μS/cm	2.06 mg/L	0.47 NTU	132.9 mV	27.73 ft	75.00 ml/min
9/22/2020 10:47 AM	45:00	5.12 pH	18.65 °C	35.18 μS/cm	1.91 mg/L	0.64 NTU	131.0 mV	27.73 ft	75.00 ml/min
9/22/2020 10:52 AM	50:00	5.10 pH	18.65 °C	35.24 μS/cm	1.83 mg/L	0.60 NTU	131.2 mV	27.73 ft	75.00 ml/min
9/22/2020 10:57 AM	55:00	5.09 pH	18.74 °C	35.22 μS/cm	1.77 mg/L	0.42 NTU	131.0 mV	27.73 ft	75.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/21/2020 11:40:19 AM **Project:** Plant Wansley - Ash Pond

Operator Name: O. 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

Initial Depth to Water: 10.41 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 97.65 ft Estimated Total Volume Pumped:

3750 ml

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 0.69 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1210. Clear 60F.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/21/2020 11:40 AM	00:00	6.18 pH	18.14 °C	121.38 μS/cm	0.17 mg/L		124.1 mV	10.41 ft	125.00 ml/min
9/21/2020 11:45 AM	05:00	6.04 pH	17.98 °C	119.81 μS/cm	0.13 mg/L	1.55 NTU	102.8 mV	11.10 ft	125.00 ml/min
9/21/2020 11:50 AM	10:00	6.02 pH	18.35 °C	120.29 μS/cm	0.12 mg/L	1.53 NTU	98.8 mV	11.10 ft	125.00 ml/min
9/21/2020 11:55 AM	15:00	6.04 pH	17.98 °C	121.45 μS/cm	0.12 mg/L	1.48 NTU	95.8 mV	11.10 ft	125.00 ml/min
9/21/2020 12:00 PM	20:00	6.04 pH	17.88 °C	122.01 μS/cm	0.13 mg/L	0.65 NTU	94.1 mV	11.10 ft	125.00 ml/min
9/21/2020 12:05 PM	25:00	6.05 pH	17.82 °C	122.68 μS/cm	0.14 mg/L	0.63 NTU	92.8 mV	11.10 ft	125.00 ml/min
9/21/2020 12:10 PM	30:00	6.05 pH	17.76 °C	123.36 μS/cm	0.15 mg/L	0.54 NTU	93.2 mV	11.10 ft	125.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/21/2020 2:31:29 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

Location Name: WGWA-3
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 9 ft

Initial Depth to Water: 4.03 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 14 ft
Estimated Total Volume Pumped:

9000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1501. 71F cloudy.

Total Depth: 19 ft

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/21/2020 2:31 PM	00:00	6.14 pH	18.25 °C	33.18 µS/cm	5.58 mg/L		77.3 mV	4.03 ft	300.00 ml/min
9/21/2020 2:36 PM	05:00	5.62 pH	17.87 °C	31.73 µS/cm	5.69 mg/L	1.03 NTU	101.5 mV	4.03 ft	300.00 ml/min
9/21/2020 2:41 PM	10:00	5.51 pH	17.77 °C	31.39 µS/cm	5.74 mg/L	0.94 NTU	111.8 mV	4.03 ft	300.00 ml/min
9/21/2020 2:46 PM	15:00	5.48 pH	17.75 °C	31.42 µS/cm	5.74 mg/L	0.66 NTU	117.1 mV	4.03 ft	300.00 ml/min
9/21/2020 2:51 PM	20:00	5.38 pH	17.72 °C	31.48 µS/cm	5.75 mg/L	0.61 NTU	153.2 mV	4.03 ft	300.00 ml/min
9/21/2020 2:56 PM	25:00	5.38 pH	17.68 °C	31.48 µS/cm	5.75 mg/L	1.00 NTU	156.7 mV	4.03 ft	300.00 ml/min
9/21/2020 3:01 PM	30:00	5.35 pH	17.68 °C	31.50 μS/cm	5.76 mg/L	0.70 NTU	160.7 mV	4.03 ft	300.00 ml/min

Samples

Sample II	ID:	Description:	
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Test Date / Time: 9/21/2020 1:31:08 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

Location Name: WGWA-4
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 63.9 ft
Total Depth: 73.9 ft

Initial Depth to Water: 6.66 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 68.9 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.94 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1400. Cloudy 68F.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/21/2020 1:31 PM	00:00	6.84 pH	25.89 °C	109.51 μS/cm	7.59 mg/L		93.2 mV	6.66 ft	150.00 ml/min
9/21/2020 1:36 PM	05:00	6.83 pH	23.34 °C	114.24 μS/cm	2.55 mg/L	2.30 NTU	35.9 mV	6.80 ft	150.00 ml/min
9/21/2020 1:41 PM	10:00	6.74 pH	19.52 °C	126.31 µS/cm	0.27 mg/L	4.32 NTU	13.5 mV	7.00 ft	150.00 ml/min
9/21/2020 1:46 PM	15:00	6.77 pH	19.04 °C	128.62 μS/cm	0.15 mg/L	5.57 NTU	-4.7 mV	7.30 ft	150.00 ml/min
9/21/2020 1:51 PM	20:00	6.80 pH	18.87 °C	128.38 μS/cm	0.10 mg/L	3.77 NTU	-12.6 mV	7.60 ft	150.00 ml/min
9/21/2020 1:56 PM	25:00	6.81 pH	19.08 °C	127.96 μS/cm	0.10 mg/L	3.85 NTU	-17.3 mV	7.60 ft	150.00 ml/min
9/21/2020 2:01 PM	30:00	6.81 pH	19.17 °C	126.44 μS/cm	0.11 mg/L	2.38 NTU	-21.2 mV	7.60 ft	150.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/22/2020 11:10:27 AM

Project: Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

Location Name: WGWA-5
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 13.19 ft
Total Depth: 23.19 ft

Initial Depth to Water: 17.94 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 200 ft Estimated Total Volume Pumped:

14000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 12.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sunny, 70s, sample time-1220

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/22/2020 11:10 AM	00:00	6.96 pH	19.73 °C	283.20 μS/cm	1.77 mg/L		62.6 mV	18.40 ft	200.00 ml/min
9/22/2020 11:15 AM	05:00	6.68 pH	18.39 °C	283.87 μS/cm	0.41 mg/L	5.04 NTU	45.1 mV	17.94 ft	200.00 ml/min
9/22/2020 11:20 AM	10:00	6.68 pH	18.46 °C	268.65 μS/cm	0.22 mg/L	5.32 NTU	32.2 mV	18.70 ft	200.00 ml/min
9/22/2020 11:25 AM	15:00	6.68 pH	18.45 °C	75.34 µS/cm	1.40 mg/L	4.91 NTU	19.2 mV	19.00 ft	200.00 ml/min
9/22/2020 11:30 AM	20:00	6.16 pH	18.48 °C	52.28 μS/cm	2.02 mg/L	3.33 NTU	34.3 mV	19.00 ft	200.00 ml/min
9/22/2020 11:35 AM	25:00	6.06 pH	18.26 °C	68.77 μS/cm	0.87 mg/L	4.72 NTU	36.5 mV	19.00 ft	200.00 ml/min
9/22/2020 11:40 AM	30:00	6.16 pH	18.12 °C	133.21 μS/cm	0.52 mg/L	5.77 NTU	39.1 mV	19.00 ft	200.00 ml/min
9/22/2020 11:45 AM	35:00	6.35 pH	18.39 °C	191.83 μS/cm	0.38 mg/L	3.78 NTU	39.1 mV	19.00 ft	200.00 ml/min
9/22/2020 11:50 AM	40:00	6.51 pH	18.91 °C	224.89 μS/cm	0.32 mg/L	2.95 NTU	38.8 mV	19.00 ft	200.00 ml/min
9/22/2020 11:55 AM	45:00	6.60 pH	19.02 °C	246.42 μS/cm	0.29 mg/L	1.90 NTU	38.6 mV	19.00 ft	200.00 ml/min
9/22/2020 12:00 PM	50:00	6.65 pH	19.50 °C	258.79 μS/cm	0.26 mg/L	2.21 NTU	37.6 mV	19.00 ft	200.00 ml/min
9/22/2020 12:05 PM	55:00	6.69 pH	19.29 °C	268.48 μS/cm	0.24 mg/L	2.04 NTU	36.2 mV	19.00 ft	200.00 ml/min
9/22/2020 12:10 PM	01:00:00	6.70 pH	18.98 °C	278.23 μS/cm	0.21 mg/L	1.72 NTU	34.1 mV	19.00 ft	200.00 ml/min
9/22/2020 12:15 PM	01:05:00	6.71 pH	19.33 °C	284.80 μS/cm	0.18 mg/L	1.55 NTU	30.3 mV	19.00 ft	200.00 ml/min
9/22/2020 12:20 PM	01:10:00	6.78 pH	19.57 °C	290.17 μS/cm	0.17 mg/L	1.09 NTU	29.8 mV	19.00 ft	200.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/22/2020 9:55:39 AM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

Location Name: WGWA-6
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft

Top of Screen: 94.5 ft Total Depth: 104.5 ft

Initial Depth to Water: 17.96 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 100 ft Estimated Total Volume Pumped:

3500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 8.8 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Cloudy, 60s, sample time-1030

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/22/2020 9:55 AM	00:00	8.43 pH	17.46 °C	223.53 μS/cm	9.70 mg/L		149.4 mV	17.96 ft	100.00 ml/min
9/22/2020 10:00 AM	05:00	7.01 pH	17.32 °C	160.14 μS/cm	0.71 mg/L	2.06 NTU	101.2 mV	18.20 ft	100.00 ml/min
9/22/2020 10:05 AM	10:00	7.11 pH	17.19 °C	159.85 μS/cm	0.54 mg/L	2.21 NTU	84.3 mV	18.50 ft	100.00 ml/min
9/22/2020 10:10 AM	15:00	7.18 pH	17.32 °C	159.23 μS/cm	0.33 mg/L	2.22 NTU	81.9 mV	18.70 ft	100.00 ml/min
9/22/2020 10:15 AM	20:00	7.25 pH	17.06 °C	159.43 μS/cm	0.30 mg/L	1.94 NTU	79.8 mV	18.70 ft	100.00 ml/min
9/22/2020 10:20 AM	25:00	7.31 pH	17.28 °C	159.29 μS/cm	0.30 mg/L	1.26 NTU	77.1 mV	18.70 ft	100.00 ml/min
9/22/2020 10:25 AM	30:00	7.36 pH	17.28 °C	158.77 μS/cm	0.29 mg/L	1.28 NTU	74.8 mV	18.70 ft	100.00 ml/min
9/22/2020 10:30 AM	35:00	7.40 pH	17.41 °C	159.10 μS/cm	0.29 mg/L	1.46 NTU	72.4 mV	18.70 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/22/2020 1:40:17 PM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

Location Name: WGWA-7
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 29.6 ft
Total Depth: 39.6 ft

Initial Depth to Water: 28.53 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 34 ft Estimated Total Volume Pumped:

6000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 2 in

Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sunny, 70s, sample time-1420

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/22/2020 1:40 PM	00:00	6.95 pH	23.43 °C	25.55 μS/cm	7.08 mg/L		32.4 mV	28.53 ft	150.00 ml/min
9/22/2020 1:45 PM	05:00	6.23 pH	18.99 °C	22.11 µS/cm	7.46 mg/L	1.26 NTU	49.3 mV	28.70 ft	150.00 ml/min
9/22/2020 1:50 PM	10:00	5.89 pH	18.29 °C	22.15 μS/cm	7.49 mg/L	1.22 NTU	64.7 mV	28.70 ft	150.00 ml/min
9/22/2020 1:55 PM	15:00	5.69 pH	18.17 °C	22.10 µS/cm	7.45 mg/L	2.01 NTU	79.6 mV	28.70 ft	150.00 ml/min
9/22/2020 2:00 PM	20:00	5.55 pH	18.19 °C	22.05 µS/cm	7.44 mg/L	1.53 NTU	92.5 mV	28.70 ft	150.00 ml/min
9/22/2020 2:05 PM	25:00	5.48 pH	18.03 °C	22.19 µS/cm	7.51 mg/L	1.14 NTU	103.8 mV	28.70 ft	150.00 ml/min
9/22/2020 2:10 PM	30:00	5.42 pH	17.90 °C	22.22 µS/cm	7.67 mg/L	1.31 NTU	115.3 mV	28.70 ft	150.00 ml/min
9/22/2020 2:15 PM	35:00	5.38 pH	18.01 °C	22.11 µS/cm	7.44 mg/L	1.25 NTU	126.5 mV	28.70 ft	150.00 ml/min
9/22/2020 2:20 PM	40:00	5.36 pH	17.90 °C	22.13 μS/cm	7.51 mg/L	1.11 NTU	136.7 mV	28.70 ft	150.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/22/2020 12:32:13 PM **Project:** Plant Wansley - Ash Pond

Operator Name: O. Fuquea

Location Name: WGWA-18

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 29.59 ft Total Depth: 39.59 ft

Initial Depth to Water: 21.67 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 34.59 ft Estimated Total Volume Pumped:

4131.667 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.63 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1315. 66F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/22/2020 12:32 PM	00:00	5.75 pH	21.10 °C	0.00 μS/cm	8.55 mg/L		87.6 mV	21.67 ft	100.00 ml/min
9/22/2020 12:33 PM	01:19	5.75 pH	21.55 °C	0.00 μS/cm	8.46 mg/L		89.7 mV	21.67 ft	100.00 ml/min
9/22/2020 12:38 PM	06:19	6.26 pH	21.55 °C	90.63 µS/cm	8.42 mg/L	3.97 NTU	99.9 mV	21.80 ft	100.00 ml/min
9/22/2020 12:43 PM	11:19	6.66 pH	18.27 °C	123.01 μS/cm	2.86 mg/L	2.76 NTU	60.8 mV	22.30 ft	100.00 ml/min
9/22/2020 12:48 PM	16:19	6.99 pH	17.45 °C	133.95 μS/cm	1.88 mg/L	1.86 NTU	58.9 mV	22.90 ft	100.00 ml/min
9/22/2020 12:53 PM	21:19	7.18 pH	17.37 °C	140.59 μS/cm	1.17 mg/L	2.13 NTU	59.0 mV	23.40 ft	100.00 ml/min
9/22/2020 12:58 PM	26:19	7.29 pH	17.38 °C	143.39 μS/cm	0.90 mg/L	2.06 NTU	61.3 mV	24.10 ft	100.00 ml/min
9/22/2020 1:03 PM	31:19	7.28 pH	17.36 °C	144.62 μS/cm	0.75 mg/L	1.67 NTU	62.9 mV	24.20 ft	100.00 ml/min
9/22/2020 1:08 PM	36:19	7.25 pH	17.36 °C	144.78 μS/cm	0.61 mg/L	0.98 NTU	63.9 mV	24.20 ft	100.00 ml/min
9/22/2020 1:13 PM	41:19	7.18 pH	17.39 °C	144.07 μS/cm	0.49 mg/L	0.73 NTU	64.5 mV	24.30 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/22/2020 1:55:22 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

Location Name: WGWC-8
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 49.4 ft
Total Depth: 59.4 ft

Initial Depth to Water: 5.63 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 54.9 ft Estimated Total Volume Pumped:

3500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 2.17 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Collected at 1430. 69F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/22/2020 1:55 PM	00:00	7.41 pH	24.36 °C	0.10 μS/cm	8.06 mg/L		88.1 mV	5.63 ft	100.00 ml/min
9/22/2020 2:00 PM	05:00	6.30 pH	23.54 °C	763.54 μS/cm	2.55 mg/L	1.30 NTU	95.4 mV	5.80 ft	100.00 ml/min
9/22/2020 2:05 PM	10:00	5.32 pH	20.77 °C	772.93 μS/cm	1.08 mg/L	1.76 NTU	105.9 mV	6.50 ft	100.00 ml/min
9/22/2020 2:10 PM	15:00	5.21 pH	20.57 °C	772.41 μS/cm	1.04 mg/L	2.09 NTU	111.6 mV	7.00 ft	100.00 ml/min
9/22/2020 2:15 PM	20:00	5.19 pH	20.54 °C	772.90 μS/cm	1.00 mg/L	1.54 NTU	111.2 mV	7.00 ft	100.00 ml/min
9/22/2020 2:20 PM	25:00	5.18 pH	20.25 °C	774.88 μS/cm	0.97 mg/L	2.01 NTU	110.8 mV	7.60 ft	100.00 ml/min
9/22/2020 2:25 PM	30:00	5.18 pH	20.03 °C	776.41 μS/cm	0.97 mg/L	1.19 NTU	110.1 mV	7.70 ft	100.00 ml/min
9/22/2020 2:30 PM	35:00	5.17 pH	20.05 °C	775.64 μS/cm	0.99 mg/L	2.71 NTU	141.1 mV	7.80 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/23/2020 3:20:53 PM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

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

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 56 ft Estimated Total Volume Pumped:

3 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 14.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sunny,70s, sample time-1550

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/23/2020 3:20 PM	00:00	6.55 pH	23.88 °C	175.89 μS/cm	1.82 mg/L		68.5 mV	20.41 ft	100.00 ml/min
9/23/2020 3:25 PM	05:00	6.16 pH	22.85 °C	178.60 μS/cm	1.55 mg/L	4.21 NTU	73.6 mV	20.70 ft	100.00 ml/min
9/23/2020 3:30 PM	10:00	5.99 pH	22.80 °C	176.50 μS/cm	1.46 mg/L	0.78 NTU	77.4 mV	20.90 ft	100.00 ml/min
9/23/2020 3:35 PM	15:00	5.91 pH	23.03 °C	177.30 μS/cm	1.36 mg/L	1.11 NTU	80.5 mV	21.30 ft	100.00 ml/min
9/23/2020 3:40 PM	20:00	5.89 pH	24.34 °C	174.89 μS/cm	1.38 mg/L	1.27 NTU	81.9 mV	21.50 ft	100.00 ml/min
9/23/2020 3:45 PM	25:00	5.82 pH	23.61 °C	175.74 μS/cm	1.33 mg/L	0.92 NTU	85.2 mV	21.60 ft	100.00 ml/min
9/23/2020 3:50 PM	30:00	5.80 pH	22.77 °C	175.24 μS/cm	1.31 mg/L	0.86 NTU	88.9 mV	21.60 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/23/2020 11:50:56 AM **Project:** Plant Wansley - Ash Pond

Operator Name: O. Fuquea

Location Name: WGWC-10

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 137.16 ft Total Depth: 147.16 ft

Initial Depth to Water: 18.66 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 142.16 ft Estimated Total Volume Pumped:

3500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.84 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sampled at 1225. 72F clear.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/23/2020 11:50 AM	00:00	6.27 pH	21.45 °C	65.64 μS/cm	6.17 mg/L		74.0 mV	18.66 ft	100.00 ml/min
9/23/2020 11:55 AM	05:00	6.13 pH	19.18 °C	65.19 µS/cm	0.60 mg/L	5.83 NTU	80.1 mV	18.66 ft	100.00 ml/min
9/23/2020 12:00 PM	10:00	6.11 pH	18.98 °C	65.10 µS/cm	1.43 mg/L	4.22 NTU	81.1 mV	18.80 ft	100.00 ml/min
9/23/2020 12:05 PM	15:00	6.08 pH	19.03 °C	65.20 µS/cm	2.35 mg/L	4.19 NTU	83.3 mV	19.00 ft	100.00 ml/min
9/23/2020 12:10 PM	20:00	6.12 pH	18.16 °C	69.76 µS/cm	4.06 mg/L	3.65 NTU	84.2 mV	19.20 ft	100.00 ml/min
9/23/2020 12:15 PM	25:00	6.16 pH	17.98 °C	69.44 µS/cm	4.35 mg/L	3.35 NTU	83.5 mV	19.40 ft	100.00 ml/min
9/23/2020 12:20 PM	30:00	6.15 pH	17.85 °C	69.22 µS/cm	4.41 mg/L	3.09 NTU	84.3 mV	19.50 ft	100.00 ml/min
9/23/2020 12:25 PM	35:00	6.14 pH	17.85 °C	68.95 µS/cm	4.45 mg/L	2.58 NTU	85.1 mV	19.50 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/24/2020 9:50:18 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. 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: 24.85 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 44.5 ft Estimated Total Volume Pumped:

3750 ml

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 2.65 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sampled at 1020. 66 F rain.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/24/2020 9:50 AM	00:00	8.01 pH	17.98 °C	55.47 µS/cm	7.72 mg/L		159.5 mV	24.85 ft	125.00 ml/min
9/24/2020 9:55 AM	05:00	6.13 pH	17.49 °C	35.12 µS/cm	7.65 mg/L	3.70 NTU	138.1 mV	27.50 ft	125.00 ml/min
9/24/2020 10:00 AM	10:00	5.64 pH	17.45 °C	35.31 µS/cm	7.78 mg/L	3.42 NTU	138.9 mV	27.50 ft	125.00 ml/min
9/24/2020 10:05 AM	15:00	5.57 pH	17.45 °C	35.39 µS/cm	7.88 mg/L	3.28 NTU	136.8 mV	27.50 ft	125.00 ml/min
9/24/2020 10:10 AM	20:00	5.50 pH	17.45 °C	35.61 µS/cm	7.95 mg/L	2.11 NTU	179.7 mV	27.50 ft	125.00 ml/min
9/24/2020 10:15 AM	25:00	5.53 pH	17.48 °C	35.77 µS/cm	8.01 mg/L	1.73 NTU	179.4 mV	27.50 ft	125.00 ml/min
9/24/2020 10:20 AM	30:00	5.50 pH	17.54 °C	35.70 μS/cm	8.03 mg/L	1.53 NTU	138.9 mV	27.50 ft	125.00 ml/min

Samples

	Sample ID:	Description:
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Test Date / Time: 9/23/2020 12:56:19 PM **Project:** Plant Wansley - Ash Pond

Operator Name: O. Fuquea

Location Name: WGWC-12

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 66.57 ft Total Depth: 76.57 ft

Initial Depth to Water: 24.34 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 71.57 ft Estimated Total Volume Pumped:

7500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 0.36 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sampled at 1355. 73F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/23/2020 12:56 PM	00:00	6.34 pH	20.71 °C	118.41 μS/cm	3.85 mg/L		84.6 mV	24.50 ft	125.00 ml/min
9/23/2020 1:01 PM	05:00	6.21 pH	18.52 °C	111.04 μS/cm	1.62 mg/L	354.00 NTU	47.7 mV	24.34 ft	125.00 ml/min
9/23/2020 1:06 PM	10:00	6.21 pH	18.49 °C	109.97 μS/cm	1.12 mg/L	271.00 NTU	43.3 mV	24.70 ft	125.00 ml/min
9/23/2020 1:11 PM	15:00	6.21 pH	18.91 °C	110.62 μS/cm	0.96 mg/L	163.00 NTU	38.2 mV	24.70 ft	125.00 ml/min
9/23/2020 1:16 PM	20:00	6.25 pH	18.61 °C	113.04 μS/cm	0.83 mg/L	76.50 NTU	34.1 mV	24.70 ft	125.00 ml/min
9/23/2020 1:21 PM	25:00	6.27 pH	18.78 °C	115.15 μS/cm	0.74 mg/L	51.10 NTU	30.6 mV	24.70 ft	125.00 ml/min
9/23/2020 1:26 PM	30:00	6.30 pH	18.61 °C	117.01 μS/cm	0.59 mg/L	28.30 NTU	27.9 mV	24.70 ft	125.00 ml/min
9/23/2020 1:31 PM	35:00	6.32 pH	18.83 °C	118.83 μS/cm	0.49 mg/L	21.80 NTU	25.4 mV	24.70 ft	125.00 ml/min
9/23/2020 1:36 PM	40:00	6.35 pH	18.65 °C	119.42 μS/cm	0.44 mg/L	17.00 NTU	23.2 mV	24.70 ft	125.00 ml/min
9/23/2020 1:41 PM	45:00	6.37 pH	18.65 °C	120.77 μS/cm	0.40 mg/L	14.20 NTU	21.6 mV	24.70 ft	125.00 ml/min
9/23/2020 1:46 PM	50:00	6.39 pH	19.00 °C	121.31 μS/cm	0.38 mg/L	11.90 NTU	19.3 mV	24.70 ft	125.00 ml/min
9/23/2020 1:51 PM	55:00	6.41 pH	19.18 °C	121.78 μS/cm	0.34 mg/L	9.30 NTU	17.5 mV	24.70 ft	125.00 ml/min
9/23/2020 1:56 PM	01:00:00	6.42 pH	19.46 °C	122.34 μS/cm	0.30 mg/L	4.33 NTU	15.8 mV	24.70 ft	125.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/24/2020 10:30:17 AM

Project: Plant Wansley Ash Pond **Operator Name**: Jordan Berisford

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: 22.38 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 90 ft Estimated Total Volume Pumped:

3.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 9.8 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Rain, 70s, sample time-1105

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/24/2020 10:30 AM	00:00	5.34 pH	18.18 °C	37.52 μS/cm	3.16 mg/L		188.3 mV	22.38 ft	100.00 ml/min
9/24/2020 10:35 AM	05:00	6.18 pH	18.31 °C	84.32 µS/cm	7.83 mg/L	7.03 NTU	161.9 mV	22.60 ft	100.00 ml/min
9/24/2020 10:40 AM	10:00	6.26 pH	18.44 °C	89.13 µS/cm	3.91 mg/L	9.10 NTU	156.9 mV	22.80 ft	100.00 ml/min
9/24/2020 10:45 AM	15:00	6.28 pH	18.48 °C	88.27 μS/cm	2.29 mg/L	15.00 NTU	150.2 mV	23.00 ft	100.00 ml/min
9/24/2020 10:50 AM	20:00	6.24 pH	18.42 °C	88.06 µS/cm	1.91 mg/L	7.41 NTU	141.8 mV	23.10 ft	100.00 ml/min
9/24/2020 10:55 AM	25:00	6.24 pH	18.31 °C	88.01 µS/cm	2.08 mg/L	5.68 NTU	133.7 mV	23.20 ft	100.00 ml/min
9/24/2020 11:00 AM	30:00	6.26 pH	18.25 °C	87.17 μS/cm	2.22 mg/L	3.83 NTU	128.2 mV	23.20 ft	100.00 ml/min
9/24/2020 11:05 AM	35:00	6.29 pH	18.09 °C	86.38 µS/cm	2.27 mg/L	2.68 NTU	124.6 mV	23.20 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/24/2020 9:20:18 AM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

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: 23.51 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 38 ft Estimated Total Volume Pumped:

4.375 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 10.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Rain, 70s, sample time-0955

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/24/2020 9:20 AM	00:00	8.78 pH	19.49 °C	2.11 μS/cm	8.96 mg/L	2.21 NTU	196.2 mV	23.80 ft	125.00 ml/min
9/24/2020 9:25 AM	05:00	6.59 pH	18.53 °C	30.29 µS/cm	1.55 mg/L	2.09 NTU	125.7 mV	24.00 ft	125.00 ml/min
9/24/2020 9:30 AM	10:00	5.35 pH	18.37 °C	28.63 µS/cm	0.94 mg/L	1.27 NTU	128.5 mV	24.30 ft	125.00 ml/min
9/24/2020 9:35 AM	15:00	5.23 pH	17.99 °C	28.10 µS/cm	0.64 mg/L	1.35 NTU	133.2 mV	24.40 ft	125.00 ml/min
9/24/2020 9:40 AM	20:00	5.18 pH	17.99 °C	27.73 µS/cm	0.63 mg/L	0.97 NTU	140.5 mV	24.40 ft	125.00 ml/min
9/24/2020 9:45 AM	25:00	5.17 pH	17.91 °C	27.67 μS/cm	0.58 mg/L	1.11 NTU	145.7 mV	24.40 ft	125.00 ml/min
9/24/2020 9:50 AM	30:00	5.18 pH	17.92 °C	27.89 μS/cm	0.56 mg/L	1.22 NTU	150.6 mV	24.40 ft	125.00 ml/min
9/24/2020 9:55 AM	35:00	5.16 pH	17.99 °C	27.82 µS/cm	0.56 mg/L	1.06 NTU	156.3 mV	24.40 ft	125.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/23/2020 1:55:20 PM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

Location Name: WGWC-15

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.36 ft Total Depth: 53.36 ft

Initial Depth to Water: 19.25 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 48 ft Estimated Total Volume Pumped:

4 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 21 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Sunny, 70s, sample time-1430

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/23/2020 1:55 PM	00:00	6.55 pH	21.18 °C	209.23 μS/cm	4.94 mg/L		68.8 mV	19.25 ft	100.00 ml/min
9/23/2020 2:00 PM	05:00	6.82 pH	20.80 °C	224.86 μS/cm	2.92 mg/L	1.62 NTU	68.0 mV	20.00 ft	100.00 ml/min
9/23/2020 2:05 PM	10:00	7.02 pH	20.57 °C	238.68 μS/cm	1.45 mg/L	1.25 NTU	66.6 mV	20.50 ft	100.00 ml/min
9/23/2020 2:10 PM	15:00	7.16 pH	20.70 °C	237.66 μS/cm	1.45 mg/L	1.77 NTU	64.5 mV	20.90 ft	100.00 ml/min
9/23/2020 2:15 PM	20:00	7.25 pH	20.75 °C	231.94 μS/cm	1.93 mg/L	1.05 NTU	63.2 mV	21.00 ft	100.00 ml/min
9/23/2020 2:20 PM	25:00	7.30 pH	20.57 °C	228.68 μS/cm	2.41 mg/L	0.71 NTU	62.6 mV	21.00 ft	100.00 ml/min
9/23/2020 2:25 PM	30:00	7.32 pH	20.83 °C	227.23 μS/cm	2.70 mg/L	0.59 NTU	62.2 mV	21.00 ft	100.00 ml/min
9/23/2020 2:30 PM	35:00	7.34 pH	20.85 °C	225.57 μS/cm	2.90 mg/L	0.83 NTU	62.0 mV	21.00 ft	100.00 ml/min
9/23/2020 2:35 PM	40:00	7.35 pH	21.37 °C	224.93 μS/cm	2.94 mg/L	0.78 NTU	61.3 mV	21.00 ft	100.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/23/2020 1:00:21 PM **Project:** Plant Wansley Ash Pond **Operator Name:** Jordan Berisford

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: 18.67 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 30 ft Estimated Total Volume Pumped:

3.75 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 2.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

Test Notes:

Cloudy, 70s, sample time-1330

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 10	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 0.3	
9/23/2020 1:00 PM	00:00	6.69 pH	22.04 °C	1.89 µS/cm	8.58 mg/L		116.2 mV	18.67 ft	125.00 ml/min
9/23/2020 1:05 PM	05:00	5.39 pH	18.41 °C	425.87 μS/cm	4.51 mg/L	0.48 NTU	55.8 mV	18.90 ft	125.00 ml/min
9/23/2020 1:10 PM	10:00	5.15 pH	17.99 °C	391.90 μS/cm	3.76 mg/L	0.55 NTU	60.7 mV	18.90 ft	125.00 ml/min
9/23/2020 1:15 PM	15:00	5.09 pH	17.92 °C	392.02 μS/cm	3.65 mg/L	0.72 NTU	65.0 mV	18.90 ft	125.00 ml/min
9/23/2020 1:20 PM	20:00	5.07 pH	18.03 °C	391.86 μS/cm	3.62 mg/L	0.66 NTU	68.5 mV	18.90 ft	125.00 ml/min
9/23/2020 1:25 PM	25:00	5.06 pH	17.99 °C	393.71 μS/cm	3.53 mg/L	0.49 NTU	71.7 mV	18.90 ft	125.00 ml/min
9/23/2020 1:30 PM	30:00	5.05 pH	17.95 °C	394.55 μS/cm	3.55 mg/L	0.50 NTU	74.7 mV	18.90 ft	125.00 ml/min

Samples

Sample ID:	Description:
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Test Date / Time: 9/23/2020 10:41:04 AM **Project:** Plant Wansley - Ash Pond

Operator Name: O. Fuquea

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: 29.19 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 90.94 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 1.91 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sampled at 1111. 67F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/23/2020 10:41 AM	00:00	6.97 pH	18.56 °C	104.22 μS/cm	1.41 mg/L		78.0 mV	29.19 ft	150.00 ml/min
9/23/2020 10:46 AM	05:00	5.94 pH	17.72 °C	93.96 µS/cm	0.17 mg/L	3.79 NTU	51.6 mV	31.10 ft	150.00 ml/min
9/23/2020 10:51 AM	10:00	5.87 pH	17.64 °C	93.80 µS/cm	0.18 mg/L	2.64 NTU	52.4 mV	31.10 ft	150.00 ml/min
9/23/2020 10:56 AM	15:00	5.87 pH	17.66 °C	93.00 μS/cm	0.19 mg/L	2.40 NTU	54.2 mV	31.10 ft	150.00 ml/min
9/23/2020 11:01 AM	20:00	5.88 pH	17.63 °C	92.29 µS/cm	0.22 mg/L	2.42 NTU	54.8 mV	31.10 ft	150.00 ml/min
9/23/2020 11:06 AM	25:00	5.88 pH	17.63 °C	91.57 μS/cm	0.26 mg/L	2.02 NTU	56.2 mV	31.10 ft	150.00 ml/min
9/23/2020 11:11 AM	30:00	5.89 pH	17.67 °C	91.16 μS/cm	0.31 mg/L	2.09 NTU	56.4 mV	31.10 ft	150.00 ml/min

Samples

	Sample ID:	Description:
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Test Date / Time: 9/23/2020 2:30:06 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. 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: 19.97 ft

Pump Type: QED Bladder Pump

Tubing Type: Poly

Pump Intake From TOC: 89.84 ft Estimated Total Volume Pumped:

6000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.33 ft Instrument Used: Aqua TROLL 400

Serial Number: 714344

Test Notes:

Sampled at 1500. 77F cloudy.

Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
9/23/2020 2:30 PM	00:00	6.86 pH	21.42 °C	160.37 μS/cm	0.45 mg/L		36.3 mV	19.97 ft	200.00 ml/min
9/23/2020 2:35 PM	05:00	6.68 pH	18.90 °C	137.56 μS/cm	0.15 mg/L	3.54 NTU	47.4 mV	21.50 ft	200.00 ml/min
9/23/2020 2:40 PM	10:00	6.60 pH	18.73 °C	135.77 μS/cm	0.08 mg/L	1.36 NTU	50.4 mV	22.00 ft	200.00 ml/min
9/23/2020 2:45 PM	15:00	6.57 pH	19.04 °C	135.81 µS/cm	0.08 mg/L	1.42 NTU	52.2 mV	21.10 ft	200.00 ml/min
9/23/2020 2:50 PM	20:00	6.57 pH	18.87 °C	137.52 μS/cm	0.10 mg/L	1.38 NTU	53.4 mV	22.20 ft	200.00 ml/min
9/23/2020 2:55 PM	25:00	6.58 pH	18.61 °C	139.93 μS/cm	0.12 mg/L	1.29 NTU	55.0 mV	22.30 ft	200.00 ml/min
9/23/2020 3:00 PM	30:00	6.59 pH	18.87 °C	142.60 μS/cm	0.13 mg/L	1.26 NTU	56.1 mV	22.30 ft	200.00 ml/min

Samples

	Sample ID:	Description:
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APPENDIX D3 Equipment Calibration Forms



SITE:	Plant Wansley	7.00				
TECHNICIAN:	G. FUQUEA					
	0 10000					
	0 , 1 , ,					
WATER LEVEL:	Solnist MIOI					
WATER LEVEL S/N:	32210\					
	SN 714344					
INSTRUMENT S/N:	<u> </u>					
INSTRUMENT TYPE:	SmarTROLL	•				
CAL. SOLUTION/S:	ID: CON. LOT #: 90 LIFF EXP. DATE: 12	1/20				
	ID: 114 LOT #: G(1/1/2) EXP. DATE:	1121				
	ID: ON I LOT#: Q CHINGO EXP. DATE:	1 31 - 1				
	Will to Million					
	ID: 10 HO LOT #: 2904650 EXP. DATE:	3/20				
	ID: ORP LOT#: 961592 EXP. DATE:	9120				
	ID: LOT #: EXP. DATE:					
,	ID: LOT #: EXP. DATE:					
	1					
Calibration Date: 6	2/3/20					
	100% sat. = 101,59%					
		0 00				
	4.00 = 3,98 7.00 = 6,94	10.00 = 9,92				
CONDUCTIVITY:	1303,7 8.0					
ORP (mV)	8.0					
0-111	2/4/20					
	60 0 PC					
RDO:	100% sat. = 93.95°/0					
PH:	4.00 = 4.10 7.00 = 7.05	10.00 = 10-10				
CONDUCTIVITY:	1362.7					
	- 2.	_				
ORP (mV)	6-1-1-1	_				
	7/5/20					
Calibration Date:						
RDO:	100% sat. = 99.95 %					
	4.00 = 4.35 7.00 = 7.01	10.00 = 10.03				
		10.00 - 10.0-				
CONDUCTIVITY:		_				
ORP (mV)	231.2	_				
	1 1					
Calibration Date:	7/7/20					
	100% sat. = 99.45%					
		- 1121				
PH:	4.00 = 4.12 7.00 = 7.11	10.00 = [0.2]				
CONDUCTIVITY:	1394.2	_				
ORP (mV)	759.6°/c	=				
()		_				
Calibration Date:						
	400%					
RDO:	100% sat. =					
PH:	4.00 = 7.00 =	10.00 =				
CONDUCTIVITY:	•					
ORP (mV)		=				



SITE:		Plant Wansley	
TECHNICIAN:		Flatit Walisiey	
TECHNICIAN.	PF		
			,
INSTRUMENT S/N:	160090005	2230 (PIN	IE)
INSTRUMENT TYPE:	Hach 2100Q NAI	(1)	
CAL. SOLUTION:	O NTU - LOT#	EXP. DATE:	
	10 NTU - LOT #	EXP. DATE:	
	20 NTU - LOT #	EXP. DATE:	
	,		
Calibration Date:	2-3-20		
Cambration Date.	Calibation Solution	Instrument Reading	
	0.0	A A	== NTU
	10.0	0.0	— NTU
		10.11	
	20.0	19.3	NTU
Calibration Date:	2-4-20		
Cambration Date:	Calibation Solution	Instrument Deading	
		Instrument Reading	
	0.0	0.0	NTU
	10.0	10.1	NTU
	20.0	19. 9	NTU
0 111 - 11 - 12 - 12	205-20		
Calibration Date:	•	l	
	Calibation Solution	Instrument Reading	
	0.0	0.0	NTU
	10.0	10.1	NTU
	20.0	19.8	NTU
	2-7-20		
Calibration Date:		1	
	Calibation Solution	Instrument Reading	_
	0.0	0.0	NTU
	10.0	10.2	NTU
	20.0	/9. 9	NTU
Calibration Date:			
Campianon Date:	Calibation Solution	Instrument Booding	
	Calibation Solution	Instrument Reading	
	0.0		NTU
	10.0		NTU
	20.0		NTU
Calibration Date:			
- and anon batte	0-11	Lucture Described	

Calibation Solution

0.0

10.0

20.0

Instrument Reading

NTU

NTU

NTU



SITE:		Plant Wansley	
TECHNICIAN:		H GUID	-
WATER LEVEL: WATER LEVEL S/N:	A 50 714293	11151 M101 42832	
INSTRUMENT S/N:	<u> </u>		
INSTRUMENT TYPE:	SmarTROLL Hat	<u>uatroll</u>	
CAL. SOLUTION/S:	ID: pif 4 LOT#	: 96L003 EXP. DATE:	7/21
	ID: OH 7 LOT#	: 96H11WO EXP. DATE: E	18/21
•	ID: OH IO LOT#		3/10
	ID: (and 1413 LOT#	4	120
	ID: BRP LOT#	7.00	1,500
			120 9/20
	ID: LOT #		
	ID: LOT #	EXP. DATE:	
	100% sat. = 95.5 4.00 = 4.24	7.00 = 7.25	10.00 = 10.39
CONDUCTIVITY:	1628.2		
	737.3		
PH: CONDUCTIVITY: ORP (mV)	100% sat. = 102, 3 4.00 = 41.02 1395 (1316 238 (240)	7.00 = 7.01	10.00 = 10.04
Calibration Date: 7	a .		
PH: CONDUCTIVITY:	$\frac{100\% \text{ sat.} = 98.8}{4.00 = 4.03}$ $\frac{1314 = 1434}{240 = 239}$	7.00 = (0, 94	10.00 = /0,06
Calibration Date: (7.00 = 7.03	10.00 = 10 1 4
CONDUCTIVITY:	1 2	,,,,,,	10.00
ORP (mV)	- 6		<u> </u>
Calibration Date:			
RDO:	100% sat. =		
	4.00 =	7.00 =	10.00 =
		1.00	10.00 -
CONDUCTIVITY:			
ORP (mV)	Marie Control of the	1/18/17/14/17/17 17 17 17	



SITE: TECHNICIAN:	H. Anld		Plant Wansley		
INSTRUMENT S/N:	17120606	,3767			
INSTRUMENT TYPE:	Hach 2100Q				
CAL. SOLUTION:	O NTU - LOT#	NA	EXP. DATE: -	Tinty 2020	
	10 NTU - LOT #	A8194	EXP. DATE:	July 2020	
	20 NTU - LOT #	A8215	EXP. DATE:	Ang 2020	

Calibration Date: 2-3-20

Calibation Solution	Instrument Reading	
0.0	0.5	— NTU
10.0	9.5	— NTU
20.0	20.2	NTU

Calibration Date: 2-4-20

Calibation Solution	Instrument Reading	
0.0	0.4	MTU
10.0	9.3	— NTU
20.0	20.1	NTU

Calibration Date: 7-5-70

Calibation Solution	Instrument Reading	
0.0	0.5	— NTU
10.0	9.1.	— NTU
20.0	20.4	 NTU

Calibration Date: 2-7-20

Instrument Reading	_
0.5	— NTU
9.24	— NTU
20,5	 NTU
	Instrument Reading 0.5 9.27 20.5

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		 NTU
10.0		— NTU
20.0		 NTU

Calibration Date:

_	Calibation Solution	Instrument Reading	_
	0.0		- NTU
	10.0		- NTU
	20.0		- NTU



SITE: Plant Wansley TECHNICIAN: 171200063767 INSTRUMENT S/N: INSTRUMENT TYPE: Hach 2100Q O NTU - LOT # EXP. DATE: CAL. SOLUTION: 10 NTU - LOT # 48199 EXP. DATE: 20 NTU - LOT # A 8 215 EXP. DATE:

Calibration Date: 3-17-20

Calibation Solution	Instrument Reading	
0.0	0.35	NTU
10.0	9.98	NTU
20.0	21.2	NTU

Calibration Date:

3-18-20

Calibation Solution	Instrument Reading	
0.0	0.42	NTU
10.0	9.77	NTU
20.0	21.0	NTU

Calibration Date:

3-19-20

Calibation Solution	Instrument Reading	
0.0	0.48	NTU
10.0	9.82	NTU
20.0	21.2	NTU

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		_ _NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		 NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		NTU
10.0		NTU
20.0		NTU

(cyll 00:101.2 ORP: 245.1 Con: 1391 0.0.09 Tur: 10: 9.6 20:195 Trol1 DO 160.6 PH 4 4.00

Con 1424.6 7 7.04

ORP 245.7 10 10.17 Troll DO 100.5 PH 4 4.04 0 0.12 Con 1405 7 7.05 10 9.52 ORP 242.5 10 10.11 20 19.3 PH7 196K721 11/21 A9126 8/20 PH 104 86B1055 2/21 A9275 961282 9/21 867875

Troll SN: 714293

PH 4

Hach: 1809000697299



SITE:	Plant Wansley	
TECHNICIAN:	O. FUQUEA	,
WATER LEVEL:		
WATER LEVEL S/N:	327 814	
	714302	
INSTRUMENT S/N:	·	
INSTRUMENT TYPE:	SmarTROLL	
CAL. SOLUTION/S:	ID: Coad LOT #: 961177 EXP. DATE:	12/20
	ID: DI ID LOT #: 9 CA 1078 EXP. DATE:	17 21
	ID: 0P LOT#: 0685/0 EXP. DATE:	11/20
	ID: pH 4 LOT #: 961804 EXP. DATE:	12/2/
	ID: pH 7 LOT#: GGH IIGO EXP. DATE:	8/21
	ID: LOT # : EXP. DATE: ID: LOT # : EXP. DATE:	
	ID: LOT #: EXP. DATE:	
Calibration Date:	5/4/20	
	100% sat. = /04.9%	
	4.00 = 4.10 7.00 = 6.99	10.00 = 9.94
CONDUCTIVITY:		1.1.
ORP (mV)	<u> </u>	
,		
Calibration Date:		
RDO:	100% sat. =	
PH:	4.00 = 7.00 =	10.00 =
CONDUCTIVITY:		T
ORP (mV)		
, ,		
Calibration Date:		
RDO:	100% sat. =	
	4.00 = 7.00 =	10.00 =
CONDUCTIVITY:		
,		
Calibration Date:		
RDO:	100% sat. =	
	4.00 = 7.00 =	10.00 =
CONDUCTIVITY:		
ORP (mV)		
Calibration Date:		
RDO:	100% sat. =	
	4.00 = 7.00 =	10.00 =
CONDUCTIVITY:		
ORP (mV)		

17 120 CO 6 376 7 HACH 2100 Q O = O.I 10 = 9.9 20 = 19.4

10 = A 8199 7/20 20 = A 8215 8/20



SITE:		Plan	t wansiey		
TECHNICIAN:		Jordon Beni	fort		
WATER LEVEL		solut			
WATER LEVEL:		267304			
WATER LEVEL S/N:		26 7307			
INSTRUMENT S/N:	71429	3			
INSTRUMENT TYPE:	SmarTROLL				
CAL. SOLUTION/S:	ID: 1744	LOT #: OGPOYLE	EXP. DATE:	4/22	
	ID: pH 7	LOT#:060808	EXP. DATE:	422	
	ID: p# 10	LOT #: 96648	EXP. DATE:	12/21	
	ID: 62P	LOT # : 6125 46	EXP. DATE:	1/21	
	ID: Cord	LOT #: 06F438	EXP. DATE:	5/2/	
	ID:	LOT #:	EXP. DATE:		
	ID:	LOT #:	EXP. DATE:		
Calibration Date: 4	1/28/20				
	100% sat. =	n.7			
	4.00 = 3.96	7.00 = 6	71	10.00 = 10.01	
CONDUCTIVITY:		7.00		10.00	
	249.2				
J ()	-160	*			
Calibration Date:	1/23/20				
	100% sat. =	» I			
	4.00 = -1.11	7.00 = 7	12	10.00 = 10.25	
CONDUCTIVITY:		,,,,,	7	70.	
	236.5	× ,			
Calibration Date: 🖣	1/24/20				
	100% sat. = 16 0	1			
	4.00 = 3.97		02	10.00 = 10.04	
CONDUCTIVITY:				1007	
ORP (mV)	235.7				
J ()			9		
Calibration Date:					
	100% sat. =				
	4.00 =	7.00 =		10.00 =	
CONDUCTIVITY:					
ORP (mV)					
()	•	9		,	
Calibration Date:					
RDO:	100% sat. =				
PH:	4.00 =	7.00 =		10.00 =	
CONDUCTIVITY:					
ORP (mV)				_	



Calibration Date: 9/22(1)

Calibation Solution	Instrument Reading	
0.0	0.41	NTU
10.0	9.57	NTU
20.0	20.9	NTU

Calibration Date: 9/13/20

_	Calibation Solution	Instrument Reading	_
	0.0	0.47	NTU
	10.0	10.5	NTU
	20.0	20.7	NTU

Calibration Date: 4/20

_	Calibation Solution	Instrument Reading	_
	0.0	6.18	NTU
	10.0	9.67	NTU
	20.0	20.8	NTU
_			

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	_
0.0		NTU
10.0		NTU
20.0		NTU



SITE:	Plant Wansley		
TECHNICIAN:	OF		
WATER LEVEL:	Solnist MIOI		
WATER LEVEL S/N:	322814		
	77		
	211171111		
INSTRUMENT S/N:	714344		
INSTRUMENT TYPE:	SmarTROLL		
CAL. SOLUTION/S:	ID: COND. LOT #: 961177 EXP. DATE:	12/20	
	ID: OHY LOT#: OGDO46 EXP. DATE:	4/22	
	ID: DH 7 LOT #: OGDXXX EXP. DATE:	4122	
	ID: DAID LOT #: 966 648 EXP. DATE:	12/21	
	ID: ORP LOT #: OCD 520 EXP. DATE:	1/21	
	ID: LOT #: EXP. DATE:		
	ID: LOT #: EXP. DATE:		
	A 21.00		
Calibration Date:	9-21-20		
	100% sat. = 107 07		
	4.00 = 4.02 7.00 = 7.2	10.00 =	10:07
CONDUCTIVITY:			
ORP (mV)	738.7		
. ,	11-20		
Calibration Date:	1-11-00		
	100% sat. = 96, 390/6		44
PH:	4.00 = 4.00 7.00 = 7.05	10.00 =	10.04
CONDUCTIVITY:	1368		
ORP (mV)	746 Ce		
Calibration Date:	9-23-20		
RDO:	100% sat. = 98.95%		
PH:	4.00 = 4.11 7.00 = 7.17	10.00 =	10.01
CONDUCTIVITY:	1423.8		
ORP (mV)			
Calibration Date:	9-24-20		
	100% sat. = 99.97 %		
	4.00 = 4.00 7.00 7.00 7.02	10.00 =	10.0\$
CONDUCTIVITY:			
ORP (mV)			
O' (v)			
Calibration Date:			
	100% sat. =		
	4.00 = 7.00 =	10.00 =	
CONDUCTIVITY:			
ORP (mV)			
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SITE:	Plant Wansley								
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APPENDIX E Statistical Analysis Packages

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 1st 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 onehalf 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: WGWC-19

For the state confidence intervals, the following exceedances were noted:

•Lithium: WGWC-8, WGWC-9, WGWC-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

Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM Constituent <u>Well</u> Upper Lim. Lower Lim. <u>Date</u> Observ. Sig. Bg N %NDs Transform <u>Alpha</u> Method WGWC-16 3/18/2020 NP Inter (NDs) 1 of 2 Boron (mg/L) 2 Yes 111 99.1 0.000... 0.08 n/a n/a Boron (mg/L) WGWC-8 3/19/2020 2.2 Yes 111 99.1 0.000... NP Inter (NDs) 1 of 2 0.08 n/a 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 3/18/2020 66 111 Calcium (mg/L) WGWC-16 52 n/a Yes 0 0.000... NP Inter (normality) ... n/a Calcium (mg/L) WGWC-8 52 n/a 3/19/2020 Yes 0.000... NP Inter (normality) ... n/a Chloride (mg/L) WGWC-16 6.05 n/a 3/18/2020 93 Yes 111 0.000... NP Inter (normality) ... WGWC-8 3/19/2020 98 Yes 111 0 0.000... NP Inter (normality) ... Chloride (mg/L) 6.05 n/a n/a WGWC-15 3/18/2020 135 NP Inter (normality) ... Fluoride (mg/L) 0.284 n/a Yes 0.000... Fluoride (mg/L) WGWC-19 0.284 n/a 5/4/2020 0.36 Yes 135 49.63 0.000... NP Inter (normality) ... Fluoride (mg/L) WGWC-9 0.284 3/19/2020 Yes 135 49.63 0.000... NP Inter (normality) ... n/a n/a 3/18/2020 pH (S.U.) WGWC-16 7.96 5.13 5.08 Yes 134 n/a 0.000... NP Inter (normality) ... Sulfate (mg/L) WGWC-16 21 3/18/2020 120 Yes 111 23.42 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 3/19/2020 111 23.42 0.000... NP Inter (normality) ... 45 Yes n/a n/a Total Dissolved Solids (mg/L) WGWC-15 150 n/a 3/18/2020 160 Yes 111 9.009 0.000... NP Inter (normality) ... 3/18/2020 Yes 111 Total Dissolved Solids (mg/L) WGWC-16 150 n/a 370 9.009 0.000... NP Inter (normality) ... n/a Total Dissolved Solids (mg/L) WGWC-8 150 n/a 3/19/2020 540 Yes 111 9.009 NP Inter (normality) ... n/a Total Dissolved Solids (mg/L) WGWC-9 150 3/19/2020 160 Yes 111 9.009 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

Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
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
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-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
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-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)
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-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)
Calcium (mg/L)	WGWC-8	52	n/a	3/19/2020	79	Yes	111	0	n/a	0.000	NP Inter (normality)
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)
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-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)
Chloride (mg/L)	WGWC-8	6.05	n/a	3/19/2020	98	Yes	111	0	n/a	0.000	NP Inter (normality)
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)
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-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)
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-8	0.284	n/a	3/19/2020	0.057J	No	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-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 WGWC-14A	7.96	5.13	3/19/2020	6.56	No	134	0	n/a	0.000	NP Inter (normality)
pH (S.U.)	WGWC-14A WGWC-15	7.96 7.96	5.13 5.13	3/19/2020	5.49 7.73	No No	134	0	n/a n/a	0.000	NP Inter (normality) NP Inter (normality)
pH (S.U.)	WGWC-15		5.13 5.13	3/18/2020 3/18/2020	7.73 5.08	No Yes	134 134		n/a n/a	0.000	NP Inter (normality)
pH (S.U.) pH (S.U.)	WGWC-16 WGWC-17	7.96 7.96	5.13 5.13	3/18/2020	5.08 6.28	No	134 134	0 0	n/a n/a	0.000	NP Inter (normality) NP Inter (normality)
pH (S.U.)	WGWC-17	7.96	5.13	5/4/2020	6.9	No	134	0	n/a	0.000	NP Inter (normality)
pH (S.U.)	WGWC-18	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)
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-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)
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-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

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM Constituent <u>Well</u> Upper Lim. Lower Lim. <u>Date</u> Observ. Sig. Bg N %NDs Transform <u>Alpha</u> Method WGWC-12 Total Dissolved Solids (mg/L) 3/18/2020 73 No 111 9.009 NP Inter (normality) ... 0.000... 150 n/a n/a Total Dissolved Solids (mg/L) WGWC-13 150 3/19/2020 95 No 111 9.009 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) ... Total Dissolved Solids (mg/L) 3/18/2020 Yes 111 0.000... NP Inter (normality) ... WGWC-15 160 150 n/a 9.009 n/a Total Dissolved Solids (mg/L) WGWC-16 150 n/a 3/18/2020 Yes 111 9.009 n/a 0.000... NP Inter (normality) ... Total Dissolved Solids (mg/L) WGWC-17 150 n/a 3/18/2020 98 No 111 9.009 0.000... NP Inter (normality) ... Total Dissolved Solids (mg/L) WGWC-19 No 111 NP Inter (normality) ... 150 n/a 5/4/2020 110 9.009 n/a 0.000... Total Dissolved Solids (mg/L) WGWC-8 150 3/19/2020 540 Yes 111 9.009 0.000... NP Inter (normality) ... n/a n/a 3/19/2020 160 Total Dissolved Solids (mg/L) WGWC-9 150 Yes 111 9.009 n/a 0.000... NP Inter (normality) ...

Trend Test - Significant Results

	Plant Wansley	Client: So	uthern Comp	any Data: W	ansley A	AP Print	ted 6/18/20	020, 7:49 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
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 Wansle	y Client: S	Southern Cor	mpany Da	ita: Wansley	AP	Printed 6/18/2	2020, 7:49 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
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
Calcium (mg/L)	WGWC-8	12.62	69	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16	-16.32	-13	-48	No	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-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
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-16	0	0	48	No	14	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
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
Total Dissolved Solids (mg/L)	WGWC-8	63.11	74	48	Yes	14	0	n/a	n/a	0.01	NP
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: Southe	ern Company	Data: Wans	ley AP	Printed 7/	22/2020, 1	2:08 PM		
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Bg N	Std. Dev.	%NDs	Transform	<u>Alpha</u>	Method
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										
		CCR-Rule		Federal	State					
Constituent Name	MCL	Specified	Background	GWPS	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

 ${\it Highlighted cells indicate background is higher than established limit.}$

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
 104
 Yes
 16
 0
 No
 0.01
 NP (normality)

Confidence Interval Summary Table - All Results

	Commo	Jence	interval	Juilli	па	ı y ı	abic	- 711 110	Suits	•
	Р	lant Wansley	Client: Southern 0	Company Dat	ta: War	nsley AF	Printed	7/22/2020, 1:42 PM	l	
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	<u>Alpha</u>	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-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.002	0.0005	0.00	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-11	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-13	0.001	0.00045	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A WGWC-15	0.0019	0.00093	0.01	No	16	0	No	0.01	Param.
, , ,	WGWC-15 WGWC-16	0.002399	0.00133	0.01	No	16	37.5		0.01	
Arsenic (mg/L)								No		Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No 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-13 WGWC-14A	0.3081	0.2371	4	No	17	82.35	No	0.01	NP (NDs)
	WGWC-14A WGWC-15			4		17				
Fluoride (mg/L)		0.8825	0.7903	4	No		0	No No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084		No	17 17	11.76	No 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 No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No 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 Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

	P	lant Wansley	Client: Southern C	Company Da	ta: War	nsley AP	Printed 7	7/22/2020, 1:42 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	Transform	<u>Alpha</u>	Method
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	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-19	0.056	0.045	0.04	Yes	16	0	No	0.01	NP (normality)
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

				-				-		
	Pla	ant Wansley C	lient: Southern Co	ompany Dat	a: Wan	sley AP	Printed 7	/22/2020, 1:49 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	Transform	<u>Alpha</u>	Method
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

	Cornic	Jence	interval	Juilli	па	ı y ı	abic	- /11 110	Suits	•
	P	lant Wansley	Client: Southern 0	Company Dat	ta: War	nsley AF	Printed	7/22/2020, 1:49 PM	l	
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	<u>Alpha</u>	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-12 WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.002	0.0005	0.00	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-11	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-13	0.001	0.00045	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A WGWC-15	0.0019	0.00093	0.01	No	16	0	No	0.01	Param.
, , ,	WGWC-15 WGWC-16	0.002399	0.00133	0.01	No	16	37.5		0.01	
Arsenic (mg/L)								No		Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No 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-13 WGWC-14A	0.3061	0.2371	4	No	17	82.35	No	0.01	NP (NDs)
	WGWC-14A WGWC-15	0.1	0.7903	4	No	17	02.33	No	0.01	Param.
Fluoride (mg/L)				4						
Fluoride (mg/L)	WGWC-16	0.18	0.084		No	17 17	11.76	No 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 No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No 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 Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

	Pla	ant Wansley (Client: Southern Co	ompany Da	ta: Wan	sley AP	Printed 7	/22/2020, 1:49 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
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	In(x)	0.01	Param.
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.
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-6 Combined Radium 226 + 228 (pCi/L)
WGWA-6 Combined Radium 226 + 228 (pCi/L)
WGWA-1 Lithium (mg/L)
WGWA-1 Lithium (mg/L)
WGWA-2 Lithium (mg/L)
WGWA-3 Lithium (mg/L)
WGWA-4 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

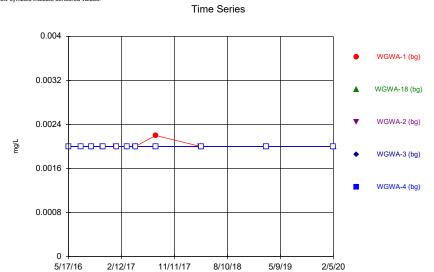
9/14/2016 0.016 (o)

1/19/2017

3/14/2017 4/26/2017

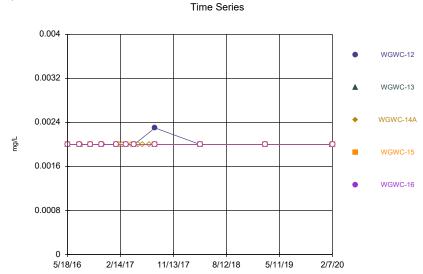
FIGURE A.





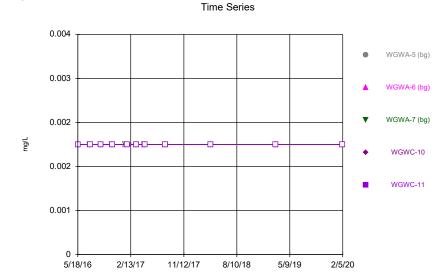
Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





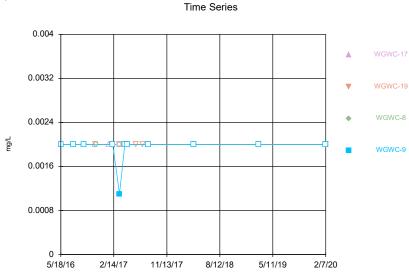
Constituent: Antimony Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG



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.



Constituent: Antimony Analysis Run 7/22/2020 12:02 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			

	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				
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			
2/5/2020			<0.002	<0.002	<0.002

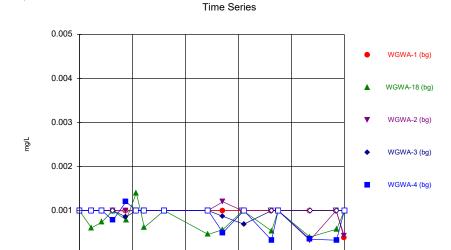
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.002	<0.002
5/19/2016	<0.002	<0.002			
7/19/2016				<0.002	<0.002
7/20/2016	<0.002	<0.002			
9/14/2016	<0.002	<0.002		<0.002	<0.002
11/10/2016		<0.002		<0.002	<0.002
11/11/2016	<0.002				
1/24/2017				<0.002	<0.002
1/27/2017	<0.002	<0.002			
2/8/2017			<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

	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	

5/17/16

2/21/17

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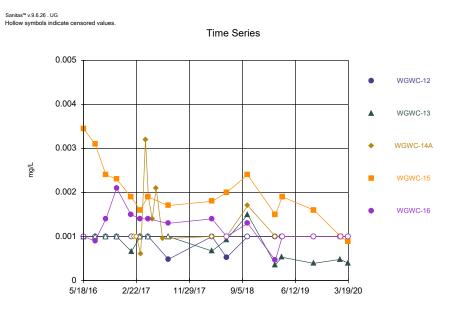
Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

9/4/18

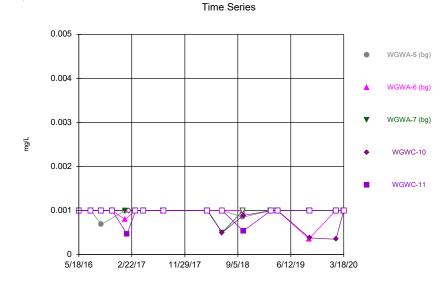
6/11/19

3/17/20

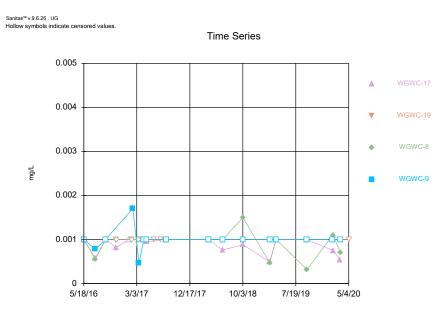
11/28/17



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Arsenic Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

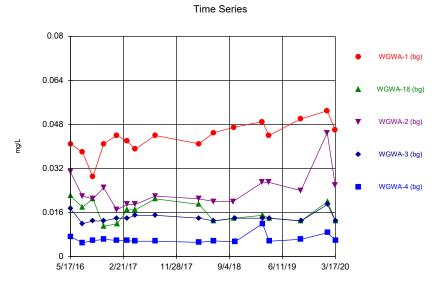
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	0.00061 (J)	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	0.00074 (J)	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	0.00078 (J)
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

	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

·	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			

	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		
			<0.001	<0.001
	<0.001	<0.001		
			0.00032 (J)	<0.001
				<0.001
2/7/2020	0.00075 (J)	<0.001	0.0011	
	0.00054 (J)			
			0.00071 (J)	<0.001
5/4/2020		<0.001		
	5/19/2016 7/20/2016 9/14/2016 9/14/2016 9/15/2016 11/10/2016 11/11/2016 11/14/2016 11/20/2017 2/9/2017 2/9/2017 3/14/2017 3/15/2017 4/11/2017 4/25/2017 4/26/2017 6/7/2017 7/11/2017 8/9/2018 3/30/2018 6/14/2018 10/4/2018 2/26/2019 2/27/2019 2/28/2019 4/3/2019 4/3/2019 4/4/2019 9/18/2019 9/18/2019 9/19/2019	5/18/2016	5/18/2016 <0.001	5/18/2016 <0.001

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Constituent: Barium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series 0.08 0.048 0.048 0.032 WGWC-13 WGWC-15 WGWC-16

Constituent: Barium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

9/5/18

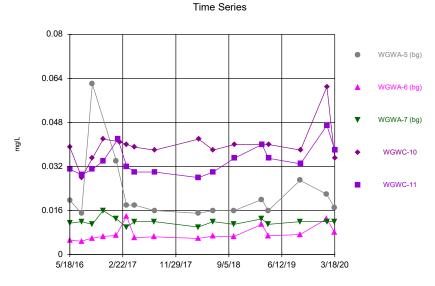
6/12/19

3/19/20

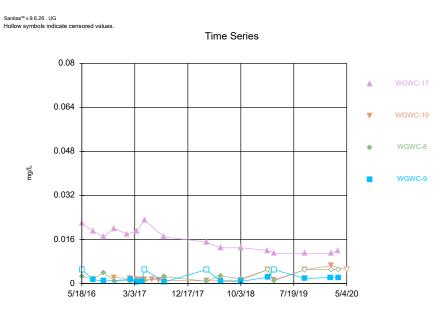
11/29/17

5/18/16

2/22/17



Constituent: Barium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Barium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

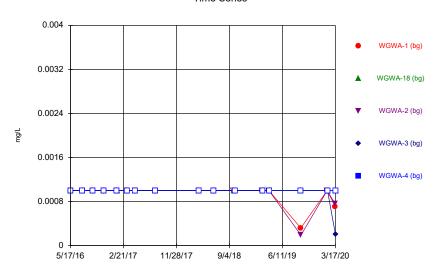
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.041	0.0221	0.0308		
5/18/2016				0.0174	0.00723
7/19/2016	0.038	0.018	0.022		
7/20/2016				0.012	0.0051
9/13/2016	0.029	0.021	0.021	0.013	0.0058
11/9/2016	0.041	0.011	0.025		
11/10/2016				0.013	0.0063
1/17/2017	0.044		0.017		
1/18/2017				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)

			Fidill V	varisley Client. 30	differin Company	Data. Wallsley AF		
	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							
1/27/2017					0.042			
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			

				,	
	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		

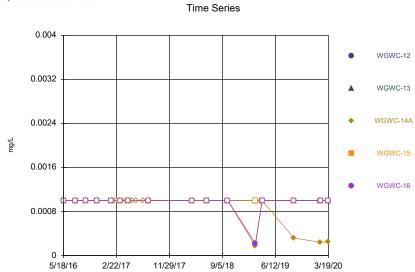
				, , . ,
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0219			
5/19/2016			0.0026	<0.01
7/20/2016	0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.017			0.00092 (J)
9/15/2016			0.0039	
11/10/2016	0.02			
11/11/2016		0.0022 (J)		
11/14/2016			0.00085 (J)	
1/20/2017	0.018			
2/6/2017		0.0018 (J)	0.0011 (J)	
2/9/2017				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		





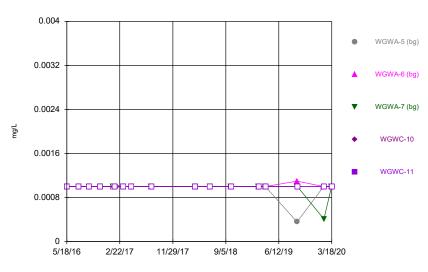
Constituent: Beryllium Analysis Run 7/22/2020 12:02 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values



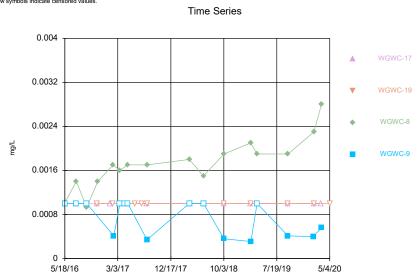
Constituent: Beryllium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series



Constituent: Beryllium 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



Constituent: Beryllium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

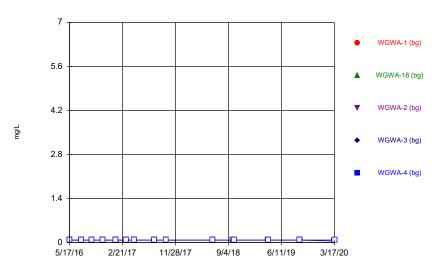
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<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

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-1
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				
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

				,	
	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)		

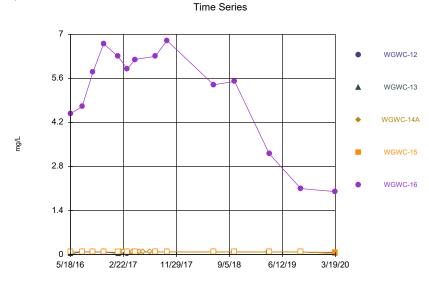
				,
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.001			
5/19/2016			0.00102 (J)	<0.001
7/20/2016	<0.001		0.0014 (J)	<0.001
9/14/2016	<0.001			<0.001
9/15/2016			0.00093 (J)	
11/10/2016	<0.001			
11/11/2016		<0.001		
11/14/2016			0.0014 (J)	
1/20/2017	<0.001			
2/6/2017		<0.001	0.0017 (J)	
2/9/2017				0.00041 (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		





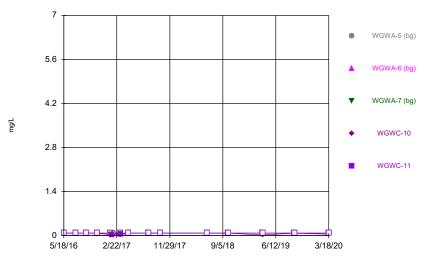
Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



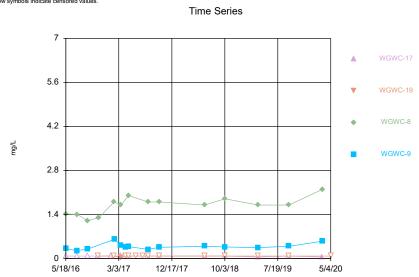
Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series



Constituent: Boron 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.



Constituent: Boron Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

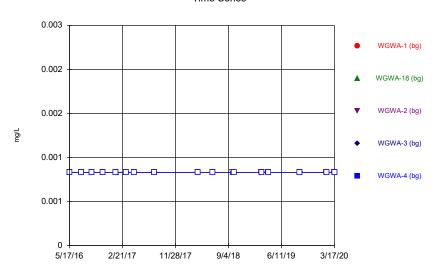
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.08	<0.08	<0.08		
5/18/2016				<0.08	<0.08
7/19/2016	<0.08	<0.08	<0.08		
7/20/2016				<0.08	<0.08
9/13/2016	<0.08	<0.08	<0.08	<0.08	<0.08
11/9/2016	<0.08	<0.08	<0.08		
11/10/2016				<0.08	<0.08
1/17/2017	<0.08		<0.08		
1/18/2017				<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

	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

				•	
	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)			
7/19/2016				<0.08	4.7
7/20/2016	<0.08	<0.08			
9/14/2016	<0.08	<0.08		<0.08	5.8
11/10/2016		<0.08		<0.08	6.7
11/11/2016	<0.08				
1/24/2017				<0.08	6.3
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)		

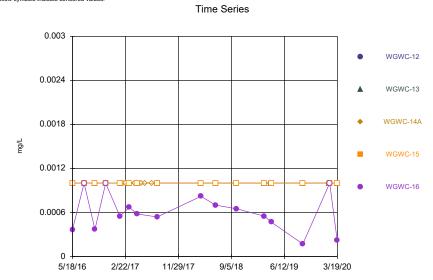
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.08			
5/19/2016			1.42	0.314
7/20/2016	<0.08		1.4	0.25
9/14/2016	<0.08			0.3
9/15/2016			1.2	
11/10/2016	<0.08			
11/11/2016		<0.08		
11/14/2016			1.3	
1/20/2017	<0.08			
2/6/2017		<0.08	1.8	
2/9/2017				0.61
3/14/2017	<0.08			
3/15/2017		0.034 (J)	1.7	0.42
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		





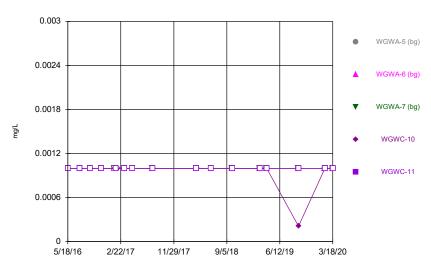
Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



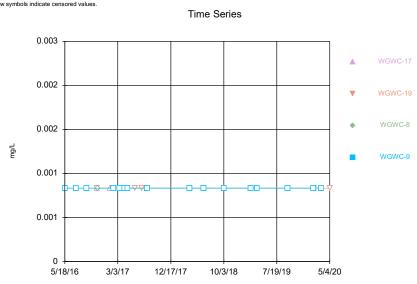
Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





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



Constituent: Cadmium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

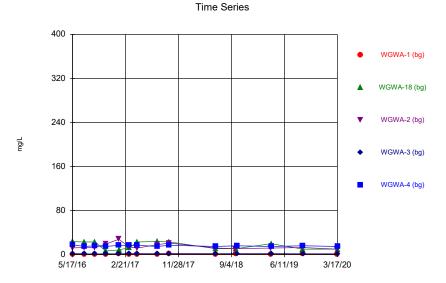
				,	,
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<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	<0.001				
9/17/2019		<0.001	<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	<0.001

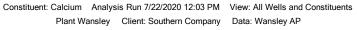
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	<0.001			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				
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

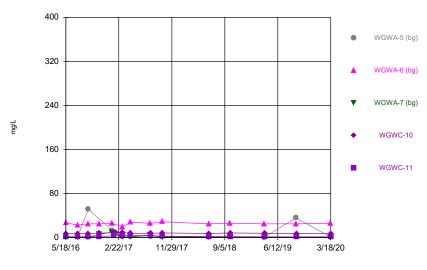
			i idiit vv	disiey Chert. Ooi	autern Company
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.001	0.000362 (J)
5/19/2016	<0.001	<0.001			
7/19/2016				<0.001	<0.001
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		<0.001	0.00037 (J)
11/10/2016		<0.001		<0.001	<0.001
11/11/2016	<0.001				
1/24/2017				<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		

	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

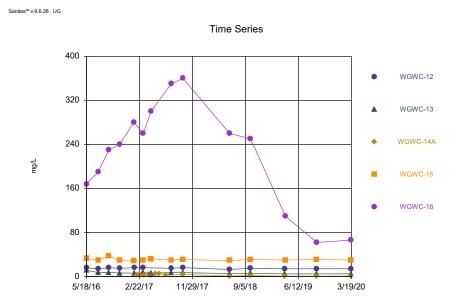




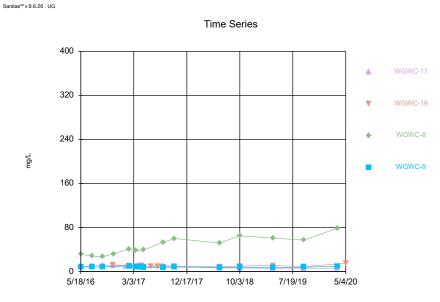


Time Series

Constituent: Calcium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Calcium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Calcium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

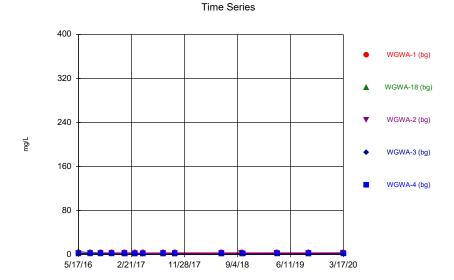
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.927	23.7	12.2		
5/18/2016				2.1	17.9
7/19/2016	1	23	13		
7/20/2016				1.7	15
9/13/2016	0.44	23	13	1.3	16
11/9/2016	1.1	6.7	19		
11/10/2016				1.6	15
1/17/2017	1.4		28		
1/18/2017				1.7	17
1/19/2017		8.5			
3/13/2017	1.1		14		
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				
9/17/2019		10	13		16
9/18/2019				1.6	
3/16/2020	1.1		10		
3/17/2020		10		1.7	15

			i idiit vv	ransley Chem. 00	union company Data. Warsiey Ar
	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

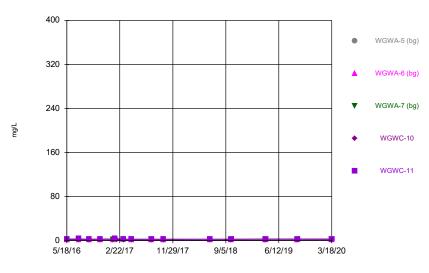
			i idiit v	ransicy onem. co	duling company Sala. Wallocy / II
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				32.5	168
5/19/2016	15.8	11.4			
7/19/2016				30	190
7/20/2016	14	7.1			
9/14/2016	16	7.4		37	230
11/10/2016		6.4		29	240
11/11/2016	15				
1/24/2017				28	280
1/27/2017	16	6.2			
2/8/2017			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 (0)	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	360
10/12/2017	16	7			
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		

				,
	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		

Sanitas™ v.9.6.26 . UG Sanitas™ v.9.6.26 . UG



Constituent: Chloride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Time Series

Constituent: Chloride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series

400

320

WGWC-12

WGWC-13

WGWC-15

WGWC-16

Sanitas™ v.9.6.26 . UG

5/18/16

2/22/17

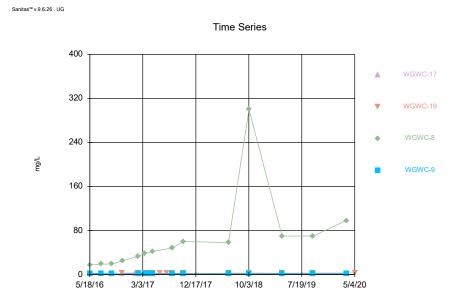
Constituent: Chloride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

9/5/18

6/12/19

3/19/20

11/29/17



Constituent: Chloride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

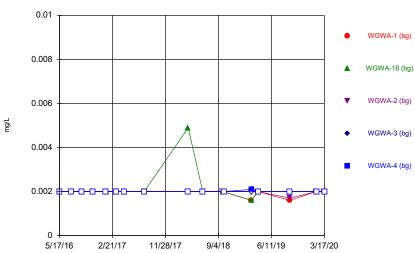
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	3.8	6.05	2.5		
5/18/2016				1.92	1.45
7/19/2016	3.9	4	2.6		
7/20/2016				1.8	1.4
9/13/2016	3.6	3.1	2.4	1.7	1.4
11/9/2016	3.9	2.3	2.3		
11/10/2016				1.6	1.3
1/17/2017	3.8		2.3		
1/18/2017				1.7	1.3
1/19/2017		2			
3/13/2017	3.4		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

	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

	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		290
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		

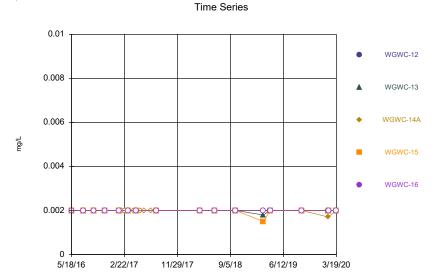
				and of the country
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	2.72			
5/19/2016			17.5	1.46
7/20/2016	1.9		19	1.5
9/14/2016	1.6			1.4
9/15/2016			19	
11/10/2016	1.6			
11/11/2016		2.6		
11/14/2016			25	
1/20/2017	1.5			
2/6/2017		2.6	33	
2/9/2017				1.5
3/14/2017	1.5			
3/15/2017		2.4	38	1.3
4/11/2017		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		





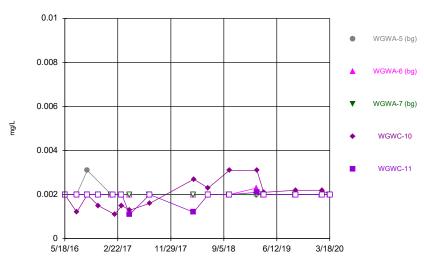
Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



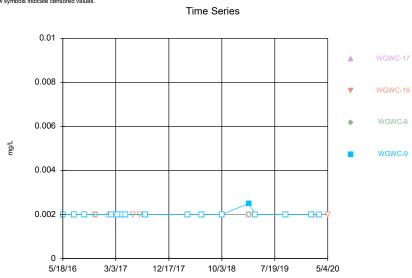
Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





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



Constituent: Chromium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

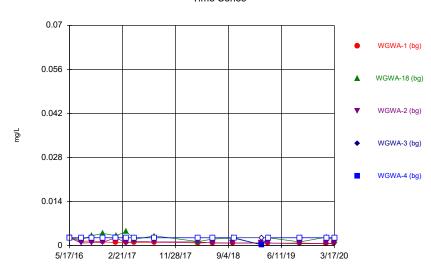
				,	
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.002	<0.002	<0.002		
5/18/2016				<0.002	<0.002
7/19/2016	<0.002	<0.002	<0.002		
7/20/2016				<0.002	<0.002
9/13/2016	<0.002	<0.002	<0.002	<0.002	<0.002
11/9/2016	<0.002	<0.002	<0.002		
11/10/2016				<0.002	<0.002
1/17/2017	<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	<0.002	<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	<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

					,
	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				
1/27/2017					<0.002
2/6/2017				0.0011 (J)	
3/14/2017	<0.002	<0.002	<0.002		
3/15/2017				0.0015 (J)	<0.002
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

				,	, , ,
	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		

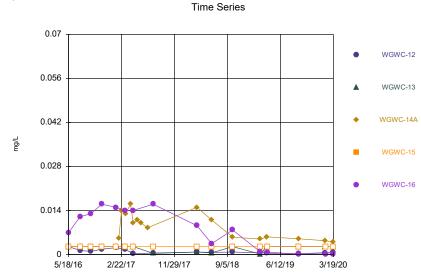
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.002			
5/19/2016			<0.002	<0.002
7/20/2016	<0.002		<0.002	<0.002
9/14/2016	<0.002			<0.002
9/15/2016			<0.002	
11/10/2016	<0.002			
11/11/2016		<0.002		
11/14/2016			<0.002	
1/20/2017	<0.002			
2/6/2017		<0.002	<0.002	
2/9/2017				<0.002
3/14/2017	<0.002			
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		





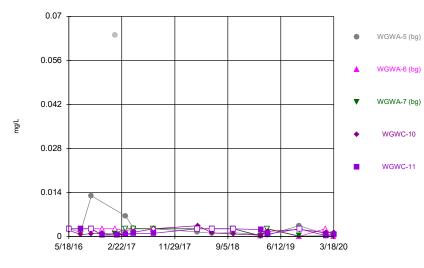
Constituent: Cobalt Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



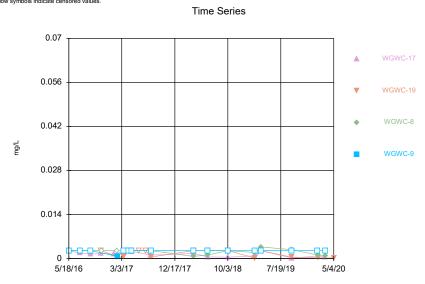
Constituent: Cobalt Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series



Constituent: Cobalt 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



Constituent: Cobalt Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

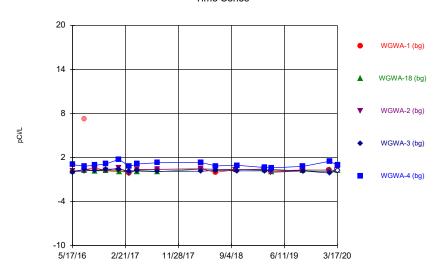
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025		
5/18/2016				<0.0025	<0.0025
7/19/2016	0.0014 (J)	0.0019 (J)	0.00086 (J)		
7/20/2016				<0.0025	<0.0025
9/13/2016	0.0015 (J)	0.0032	0.00095 (J)	<0.0025	<0.0025
11/9/2016	0.0012 (J)	0.0039	0.0011 (J)		
11/10/2016				<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

			Fiant W	ansiey	Ciletti. 300	itileiti Company
	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)

			i idiit vv	difficy Offerit.	differin Company	Data: Wallsley Al
	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			

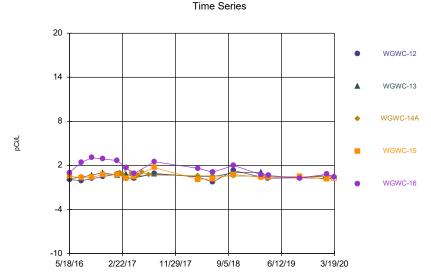
				and the second s
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.00245 (J)			
5/19/2016			<0.0025	<0.0025
7/20/2016	0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.0014 (J)			<0.0025
9/15/2016			<0.0025	
11/10/2016	0.0016 (J)			
11/11/2016		<0.0025		
11/14/2016			<0.0025	
1/20/2017	0.0014 (J)			
2/6/2017		0.00058 (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			
	0.00018 (J)	0.00045 (J)		
			0.0028	<0.0025
				<0.0025
2/7/2020	0.00077	0.00024 (J)	0.0011	
	0.00052 (J)			
			0.00092 (J)	<0.0025
5/4/2020		0.00018 (J)		
	5/19/2016 7/20/2016 9/14/2016 9/15/2016 11/10/2016 11/11/2016 11/14/2016 11/20/2017 2/6/2017 2/9/2017 3/15/2017 4/11/2017 4/25/2017 4/26/2017 6/7/2017 7/11/2017 8/9/2017 8/10/2017 3/129/2018 3/30/2018 6/14/2018 10/4/2018 2/26/2019 2/27/2019 2/28/2019 4/3/2019 4/3/2019 4/3/2019 9/18/2019 9/18/2019 9/19/2019 2/5/2020	5/18/2016	5/18/2016 0.00245 (J) 5/19/2016 0.0018 (J) 9/14/2016 0.0014 (J) 9/15/2016 0.0014 (J) 11/10/2016 0.0016 (J) 11/11/2016 <0.0025	5/18/2016 0.00245 (J) 5/19/2016 <0.0018 (J)





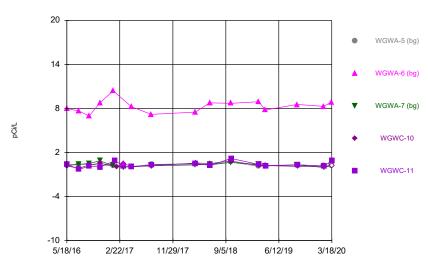
Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:03 PM View: All Wells and Constitu
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



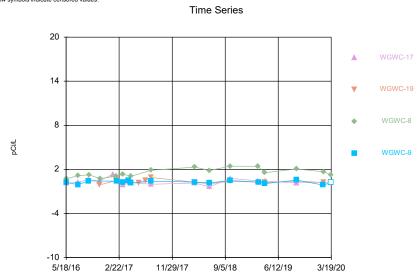
Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:03 PM View: All Wells and Constitu
Plant Wansley Client: Southern Company Data: Wansley AP





Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:03 PM View: All Wells and Constitu Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:03 PM View: All Wells and Constitu
Plant Wansley Client: Southern Company Data: Wansley AP

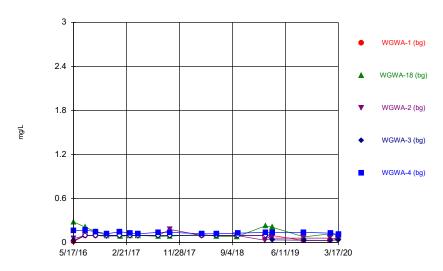
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	0.0525 (U)	0.184 (U)	0.13 (U)		
5/18/2016				0.025 (U)	1.04
7/19/2016	7.25 (o)	0.27 (U)	0.121 (U)		
7/20/2016				0.398 (U)	0.812
9/13/2016	0.592 (U)	0.194 (U)	0.372 (U)	0.215 (U)	0.958
11/9/2016	0.221 (U)	0.219 (U)	0.217 (U)		
11/10/2016				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

			riaiit v	varisley Client. 30	utiletti Company Date	•
	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)					
1/27/2017					0.898	
2/6/2017				0.104 (U)		
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	

	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
		0.47			

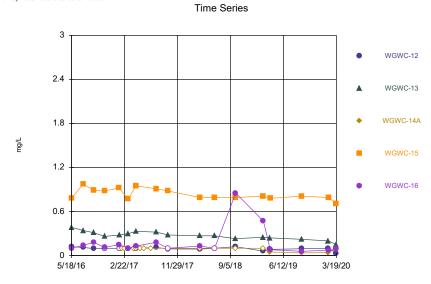
			i idiit v	varisity Cheft. Countries Company Data. Wansiey Ai
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.116 (U)			
5/19/2016			0.711 (U)	0.209 (U)
7/20/2016	0.247 (U)		1.14	-0.084 (U)
9/14/2016	0.594			0.42 (U)
9/15/2016			1.26	
11/10/2016	0.431			
11/11/2016		-0.11 (U)		
11/14/2016			0.749	
1/20/2017	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





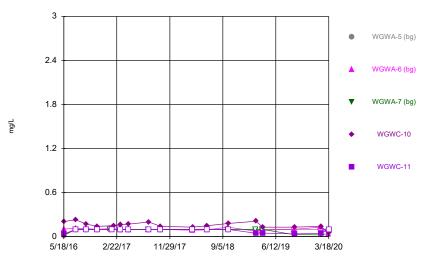
Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



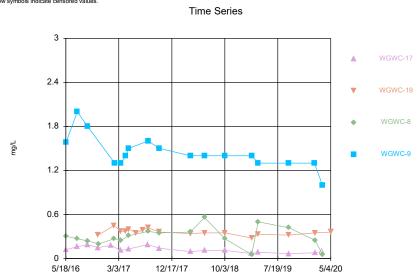
Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series



Constituent: Fluoride 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



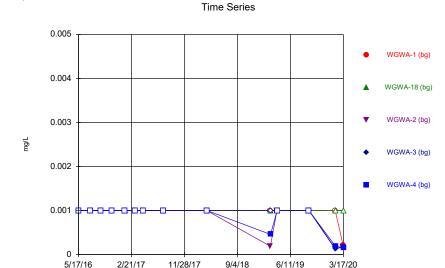
Constituent: Fluoride Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

				,	
	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

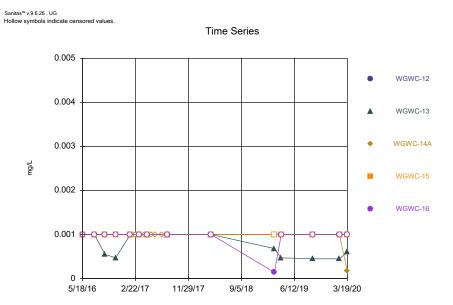
					and in Company Date: Mandoy / in
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	0.014 (J)	0.106 (J)	0.018 (J)	0.206	
5/19/2016					0.039 (J)
7/19/2016	<0.1	0.11 (J)	<0.1		
7/20/2016				0.23	<0.1
9/13/2016		0.11 (J)	<0.1		
9/14/2016	0.095 (J)			0.17 (J)	<0.1
11/9/2016		0.1 (J)			
11/10/2016			<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

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	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			
7/19/2016				0.97	0.14 (J)
7/20/2016	0.11 (J)	0.34			
9/14/2016	0.095 (J)	0.31		0.89	0.18 (J)
11/10/2016		0.26		0.88	0.11 (J)
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		

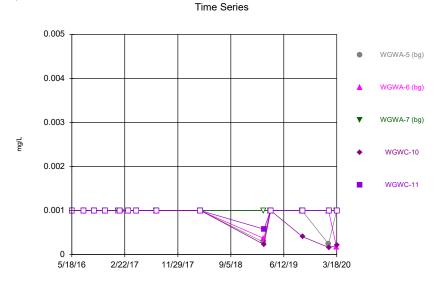
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.121 (J)			
5/19/2016			0.304	1.58
7/20/2016	0.16 (J)		0.27	2
9/14/2016	0.19 (J)			1.8
9/15/2016			0.24	
11/10/2016	0.15 (J)			
11/11/2016		0.32		
11/14/2016			0.2	
1/20/2017	0.18 (J)			
2/6/2017		0.45	0.27	
2/9/2017				1.3
3/14/2017	0.11 (J)			
3/15/2017		0.37	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		



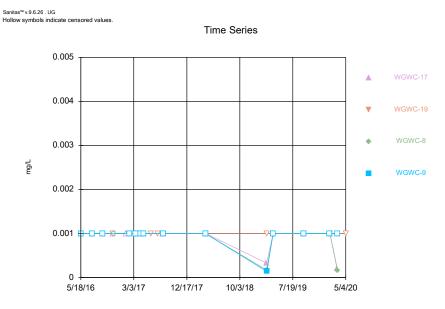
Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Lead Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

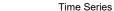
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.001	<0.001	<0.001		
5/18/2016				<0.001	<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016	<0.001	<0.001	<0.001	<0.001	<0.001
11/9/2016	<0.001	<0.001	<0.001		
11/10/2016				<0.001	<0.001
1/17/2017	<0.001		<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				
9/17/2019		<0.001	<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)

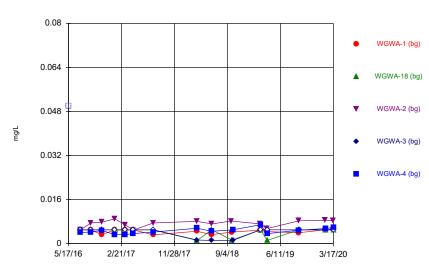
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.001	<0.001	<0.001	<0.001	
5/19/2016					<0.001
7/19/2016	<0.001	<0.001	<0.001		
7/20/2016				<0.001	<0.001
9/13/2016		<0.001	<0.001		
9/14/2016	<0.001			<0.001	<0.001
11/9/2016		<0.001			
11/10/2016			<0.001		
11/11/2016				<0.001	<0.001
1/18/2017		<0.001	<0.001		
1/19/2017	<0.001				
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

			Plant \	Wansley Client: So	outhern 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)						

				,	. ,	•
	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				

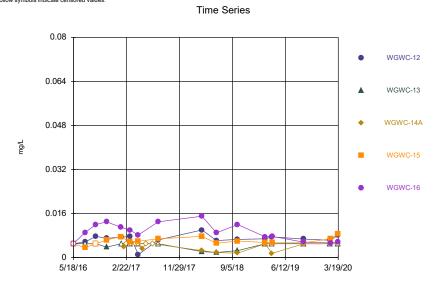
Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values





Constituent: Lithium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

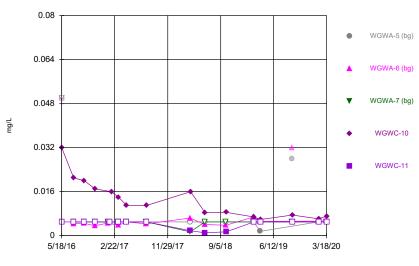
Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values



Constituent: Lithium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents

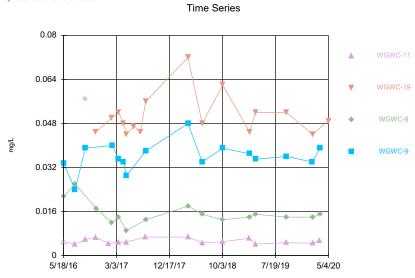
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series



Constituent: Lithium 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



Constituent: Lithium Analysis Run 7/22/2020 12:03 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
	5/18/2016 7/19/2016 7/19/2016 7/20/2016 9/13/2016 11/9/2016 11/9/2016 11/10/2016 11/10/2017 1/18/2017 1/19/2017 3/13/2017 3/13/2017 4/24/2017 4/25/2017 8/8/2017 8/9/2017 3/27/2018 3/28/2018 6/13/2018 6/13/2018 6/13/2018 9/24/2018 9/24/2018 9/27/2018 9/27/2018 9/26/2019 4/1/2019 9/16/2019 9/17/2019 9/18/2019 9/18/2019 9/18/2020 2/4/2020 2/5/2020 3/16/2020	5/17/2016	5/17/2016 <0.05 (o)	5/17/2016 <0.05 (o)	5/17/2016 <0.05 (o)

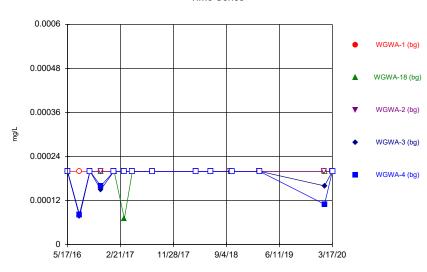
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.05 (o)	<0.05 (o)	<0.05 (o)	0.032	
5/19/2016					<0.005
7/19/2016	<0.005	0.0043 (J)	<0.005		
7/20/2016				0.021	<0.005
9/13/2016		0.0045 (J)	<0.005		
9/14/2016	<0.005			0.02	<0.005
11/9/2016		0.0036 (J)			
11/10/2016			<0.005		
11/11/2016				0.017	<0.005
1/18/2017		0.0046 (J)	<0.005		
1/19/2017	<0.005				
1/27/2017					<0.005
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

				,	,	
	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			

	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		

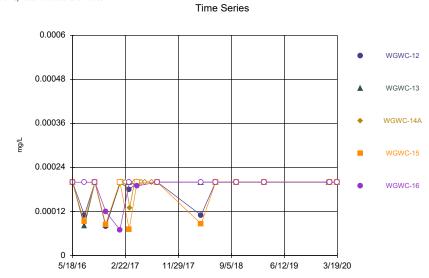
Sanitas™ v.9.6.26 . UG





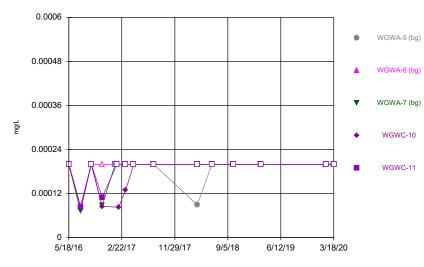
Constituent: Mercury Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values



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 Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series

Sanitas™ v.9.6.26 . UG

0.00012

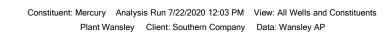
5/18/16

3/3/17

0.0006 0.00048 0.00036 ↓ WGWC-19 ↓ WGWC-8 ■ WGWC-9

-010

5/4/20



10/3/18

7/19/19

12/17/17

	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

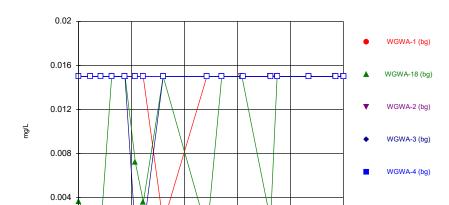
				•	. ,
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.0002	<0.0002	<0.0002	<0.0002	
5/19/2016					<0.0002
7/19/2016	8.5E-05 (J)	8.4E-05 (J)	7.2E-05 (J)		
7/20/2016				8.2E-05 (J)	8.2E-05 (J)
9/13/2016		<0.0002	<0.0002		
9/14/2016	<0.0002			<0.0002	<0.0002
11/9/2016		<0.0002			
11/10/2016			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				
1/27/2017					<0.0002
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

	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		

			Fidit W	alisiey	Client. Southern Company	Data. Wai
	WGWC-17	WGWC-19	WGWC-8	WGWC	-9	
5/18/2016	<0.0002					
5/19/2016			<0.0002	<0.0002	2	
7/20/2016	7.4E-05 (J)		<0.0002	<0.0002	2	
9/14/2016	<0.0002			<0.0002	2	
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	2	
3/14/2017	<0.0002					
3/15/2017		<0.0002	0.00013 (J)	0.00013	3 (J)	
4/11/2017		<0.0002		<0.0002	2	
4/25/2017	<0.0002					
4/26/2017		<0.0002	<0.0002	<0.0002	2	
6/7/2017		<0.0002				
7/11/2017		<0.0002				
8/9/2017	<0.0002					
8/10/2017		<0.0002	<0.0002	<0.0002	2	
3/29/2018		<0.0002	<0.0002	<0.0002	2	
3/30/2018	<0.0002					
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	2	
10/4/2018	<0.0002	<0.0002	<0.0002	<0.0002	2	
2/26/2019	<0.0002					
2/27/2019			<0.0002			
2/28/2019		<0.0002		<0.0002	2	
2/5/2020				<0.0002	2	
2/7/2020	<0.0002	<0.0002	<0.0002			
3/18/2020	<0.0002					
3/19/2020			<0.0002	<0.0002	2	
5/4/2020		<0.0002				

5/17/16

2/21/17



Time Series

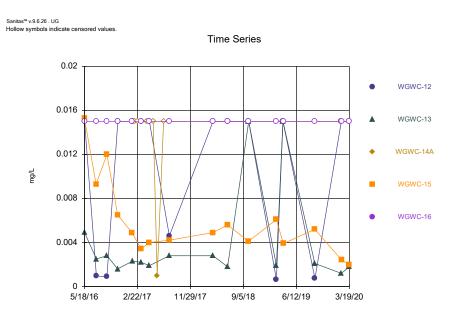
Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

9/4/18

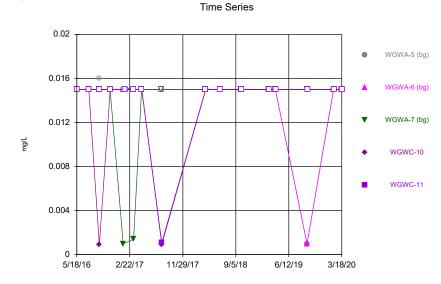
6/11/19

3/17/20

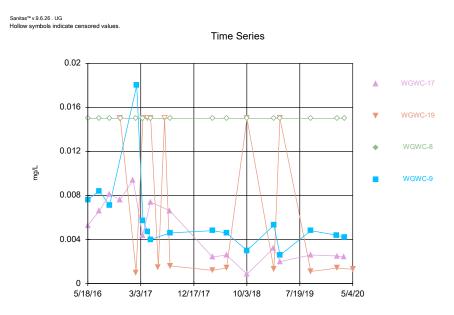
11/28/17



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Molybdenum Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

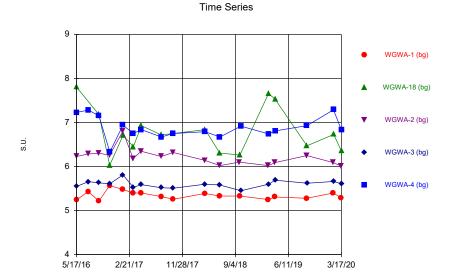
				,	
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<0.015	0.00367 (J)	<0.015		
5/18/2016				<0.015	<0.015
7/19/2016	<0.015	0.002 (J)	<0.015		
7/20/2016				<0.015	<0.015
9/13/2016	<0.015	0.0014 (J)	<0.015	<0.015	<0.015
11/9/2016	<0.015	<0.015	<0.015		
11/10/2016				<0.015	<0.015
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

	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				
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

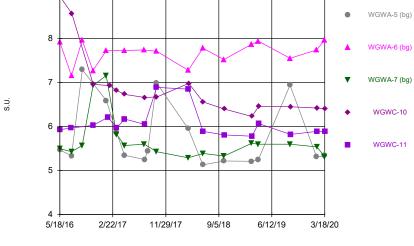
			i idiit vv	difficy Offerit.	attletti Company I
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				0.0153	<0.015
5/19/2016	<0.015	0.00491 (J)			
7/19/2016				0.0093 (J)	<0.015
7/20/2016	0.00095 (J)	0.0025 (J)			
9/14/2016	0.0009 (J)	0.0028 (J)		0.012 (J)	<0.015
11/10/2016		0.0016 (J)		0.0065 (J)	<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		

				,
	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)		

Sanitas™ v.9.6.26 . UG



Constituent: pH Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Time Series

Constituent: pH Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Time Series

WGWC-12

WGWC-13

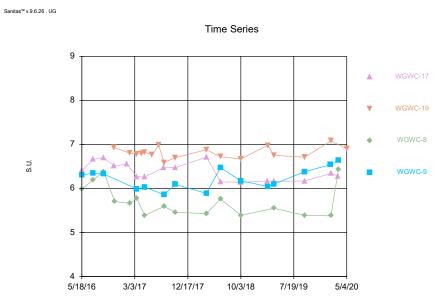
WGWC-14A

WGWC-15

WGWC-16

Sanitas™ v.9.6.26 . UG

Constituent: pH Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: pH Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

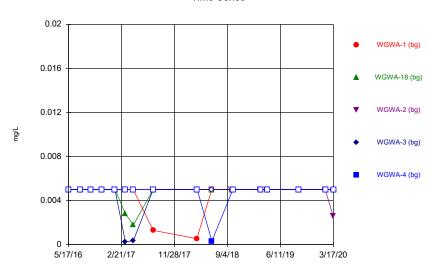
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	5.24	7.81	6.23		
5/18/2016				5.55	7.23
7/18/2016	5.434038				
7/19/2016			6.285413		
7/20/2016				5.656628	7.281557
9/13/2016	5.22	7.18	6.3	5.63	7.15
11/9/2016	5.57	6.03	6.26		
11/10/2016				5.61	6.33
1/17/2017	5.48		6.8		
1/18/2017				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

			Plant W	lansley Client: So	uthern 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	

			riaiit v	varisley Client. 30	dulerii Company i	Dala
	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			

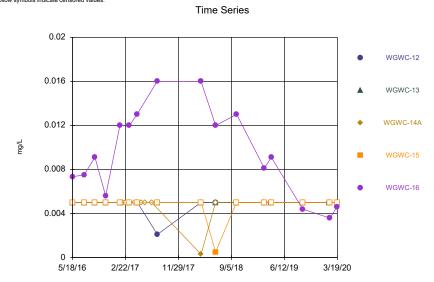
	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	6.41			
5/19/2016			5.99	6.31
7/20/2016	6.662463		6.194334	6.345061
9/14/2016	6.7			6.33
9/15/2016			6.38	
11/10/2016	6.51			
11/11/2016		6.93		
11/14/2016			5.7	
1/20/2017	6.55			
2/6/2017		6.8	5.66	
3/14/2017	6.27			
3/15/2017		6.78	5.77	5.99
4/11/2017		6.79		
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		





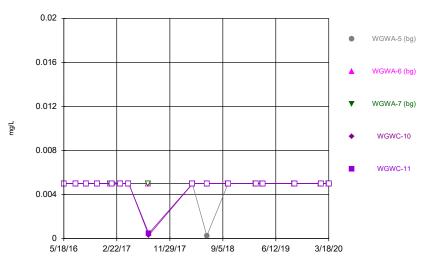
Constituent: Selenium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values



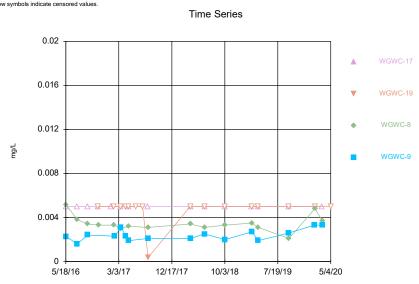
Constituent: Selenium Analysis Run 7/22/2020 12:03 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





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



Constituent: Selenium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

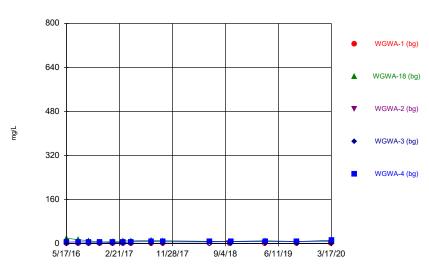
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-	3 (bg)	WGWA-4 (bg)		
5/17/2016	<0.005	<0.005	<0.005					
5/18/2016				<0.005		<0.005		
7/19/2016	<0.005	<0.005	<0.005					
7/20/2016				<0.005		<0.005		
9/13/2016	<0.005	<0.005	<0.005	<0.005		<0.005		
11/9/2016	<0.005	<0.005	<0.005					
11/10/2016				<0.005		<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		
	5/18/2016 7/19/2016 7/19/2016 7/20/2016 9/13/2016 11/9/2016 11/19/2016 11/19/2017 1/18/2017 1/19/2017 3/13/2017 3/14/2017 4/24/2017 4/25/2017 8/8/2017 3/27/2018 3/28/2018 6/13/2018 6/14/2018 9/24/2018 9/24/2018 9/24/2018 9/25/2019 2/26/2019 4/1/2019 9/16/2019 9/17/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2019 9/18/2020 2/4/2020 2/5/2020 3/16/2020	5/17/2016	5/17/2016	5/17/2016 <0.005	5/17/2016 <0.005	5/17/2016 <0.005	5/17/2016 < 0.005	5/17/2016 <0.005

	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				
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

5/18/2016 5/19/2016 7/19/2016	WGWC-12 <0.005	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/19/2016 7/19/2016	<0.005				
7/19/2016	<0.005			<0.005	0.00735
		<0.005			
				<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		
	7/20/2016 9/14/2016 11/10/2016 11/11/2016 11/11/2017 1/27/2017 2/8/2017 2/23/2017 3/14/2017 3/15/2017 3/15/2017 3/17/2017 4/25/2017 4/25/2017 5/17/2017 6/7/2017 7/11/2017 8/9/2017 8/10/2017 3/10/2018 10/4/2018 10/4/2018 10/4/2018 10/4/2018 10/4/2019 4/4/2019 9/18/2019 9/19/2019 2/5/2020 2/7/2020 3/18/2020	7/20/2016	7/20/2016	7/20/2016	7/20/2016

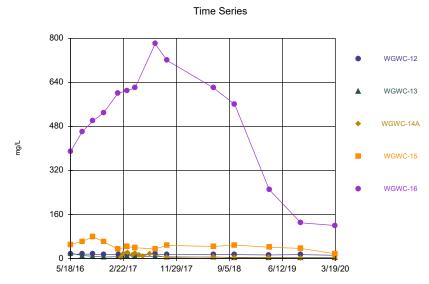
			1 10	The Wansiey Chert. Counter Company	Data. Wansiey
	WGWC-17	WGWC-19	WGWC-8	WGWC-9	
5/18/2016	<0.005				
5/19/2016			0.00518	0.00228	
7/20/2016	<0.005		0.0038	0.0016	
9/14/2016	<0.005			0.0024	
9/15/2016			0.0034		
11/10/2016	<0.005				
11/11/2016		<0.005			
11/14/2016			0.0033		
1/20/2017	<0.005				
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			





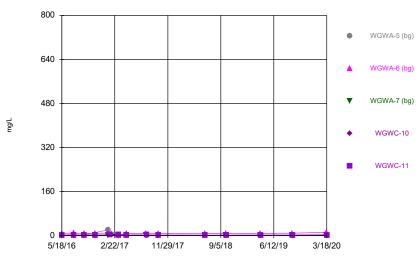
Constituent: Sulfate Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG



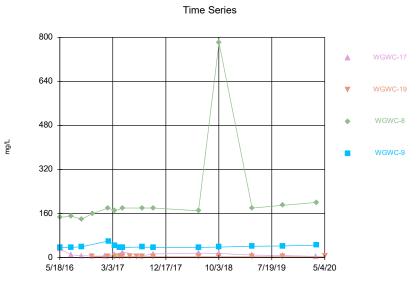
Constituent: Sulfate Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





Constituent: Sulfate 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



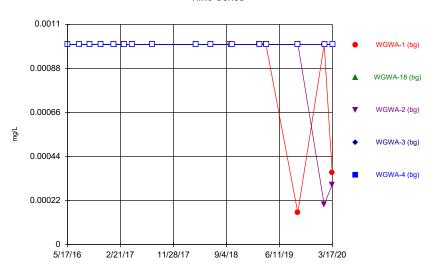
Constituent: Sulfate Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

				,	,
	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

	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

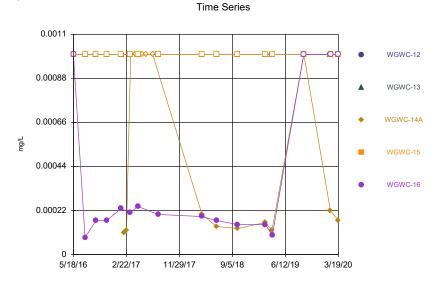
			r idire v	ransiey olient. oo	autom Company Buta. Mansiey / I
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				50.7	388
5/19/2016	15.8	19.2			
7/19/2016				62	460
7/20/2016	16	11			
9/14/2016	16	8.6		79	500
11/10/2016		5.7		61	530
11/11/2016	14				
1/24/2017				34	600
1/27/2017	15	6.8			
2/8/2017			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	720
10/12/2017	14	6.1			
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		

	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		



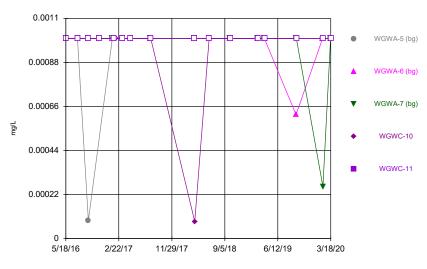
Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG Hollow symbols indicate censored values.



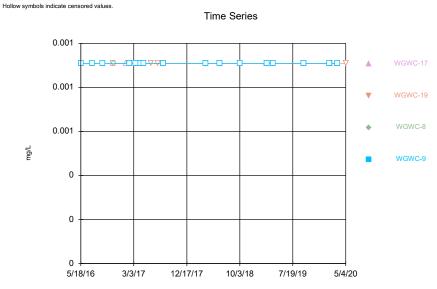
Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





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



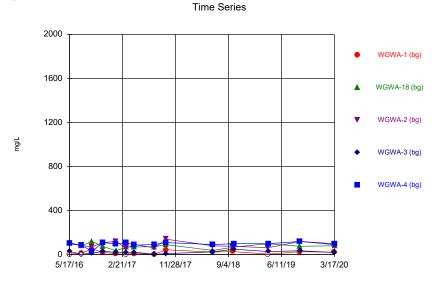
Constituent: Thallium Analysis Run 7/22/2020 12:04 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

	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

	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-1
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				
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

			Plant W	ansiey	Client: Soi	utnern Company	Data: wansiey 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)				

	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		



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 2000 WGWC-12 1600 WGWC-13 WGWC-14A 1200 mg/L WGWC-15 800 WGWC-16 400

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

9/5/18

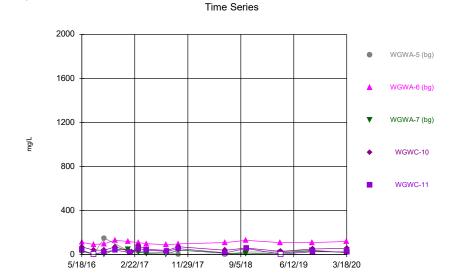
6/12/19

3/19/20

11/29/17

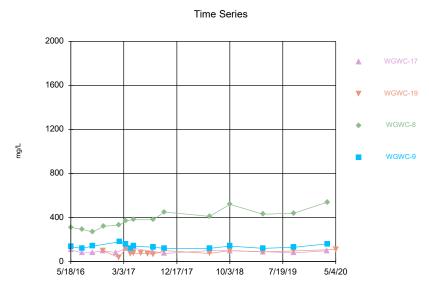
5/18/16

2/22/17



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





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

					,
	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

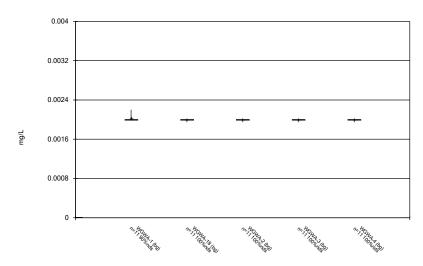
			r idiit vi	ransicy chem. co	dution company Buta. Wandley / ti
	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	33	113	31	70	
5/19/2016					39
7/19/2016	<10	92	<10		
7/20/2016				42	<10
9/13/2016		100	<10		
9/14/2016	150			40	24
11/9/2016		130			
11/10/2016			44		
11/11/2016				72	42
1/18/2017		120	50		
1/19/2017	34				
1/27/2017					18
2/6/2017				24	
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

			i idiit i	varioley Chert. Co	dulom company Data. Wandley / ii
	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				190	1080
5/19/2016	101	127			
7/19/2016				180	1200
7/20/2016	76	88			
9/14/2016	96	92		230	1300
11/10/2016		100		210	1400
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		

			riant W	raiisiey	Client. Southern Company	Data.
	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				

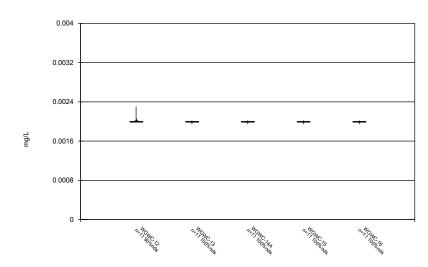
FIGURE B.





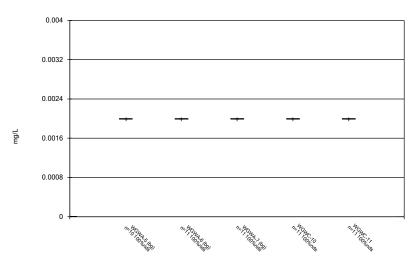
Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

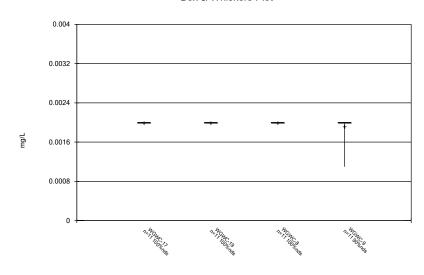
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

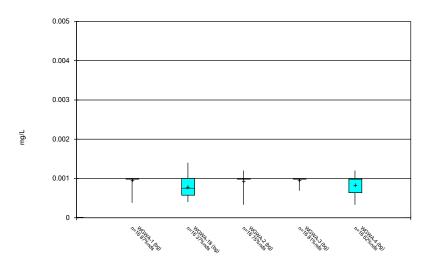
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



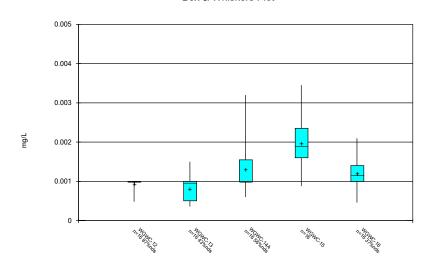
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Plant Wansley Client: Southern Company Data: Wansley AP





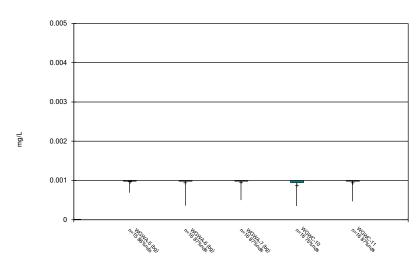
Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

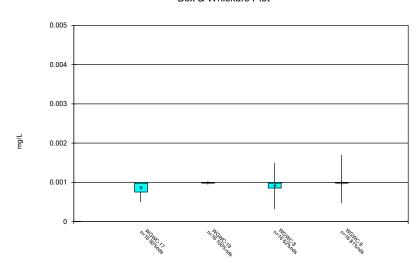
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

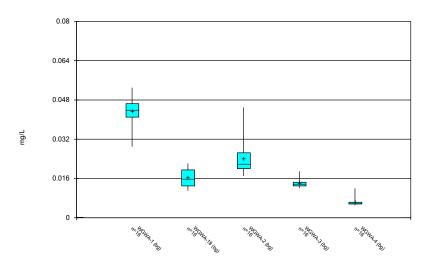
Sanitas™ v.9.6.26 . UG

Box & 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

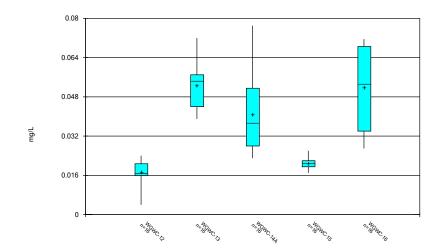
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

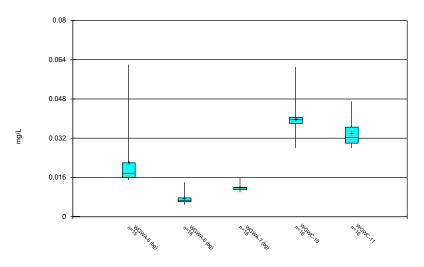
Sanitas™ v.9.6.26 . UG

Box & 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

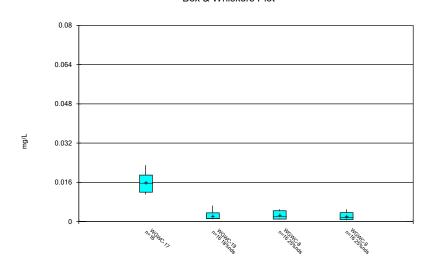
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

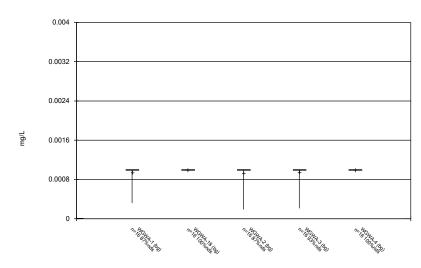
Sanitas™ v.9.6.26 . UG

Box & 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

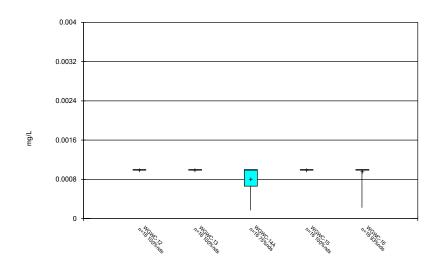
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

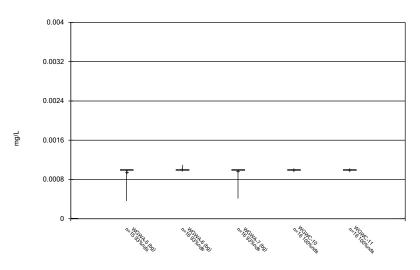
Sanitas™ v.9.6.26 . UG

Box & 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

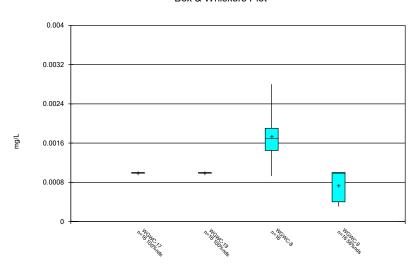
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

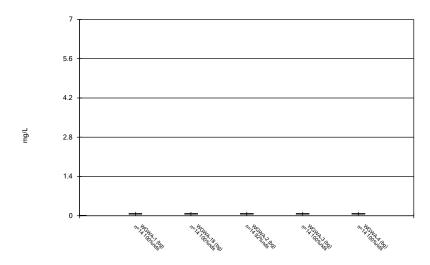
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



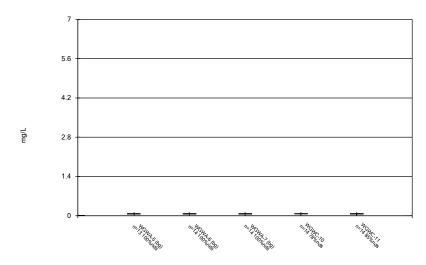
Constituent: Beryllium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

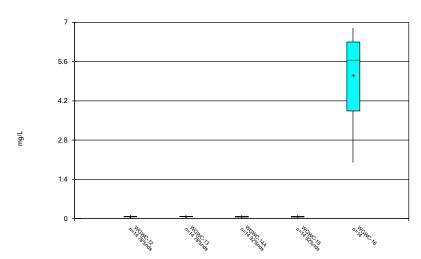
Box & Whiskers Plot



Constituent: Boron Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

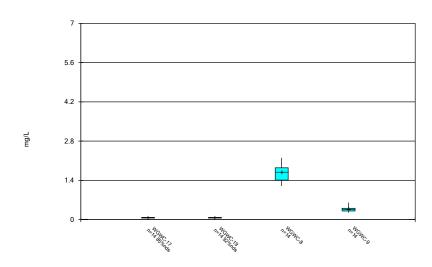
Box & Whiskers Plot



Constituent: Boron Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

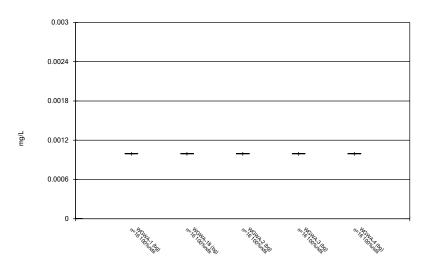
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



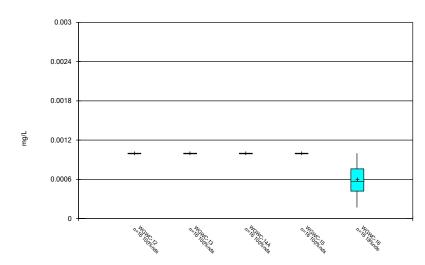
Constituent: Boron Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP





Constituent: Cadmium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

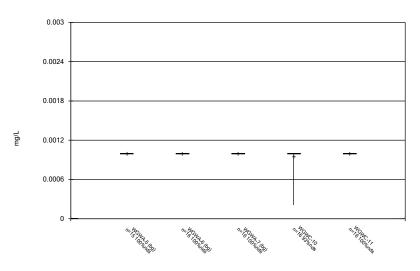
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents

Plant Wansley Client: Southern Company Data: Wansley AP

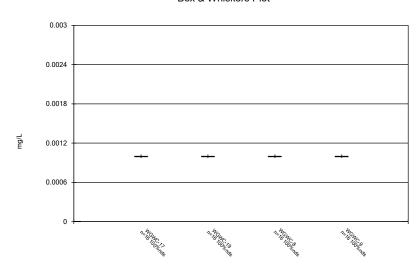
Box & Whiskers Plot



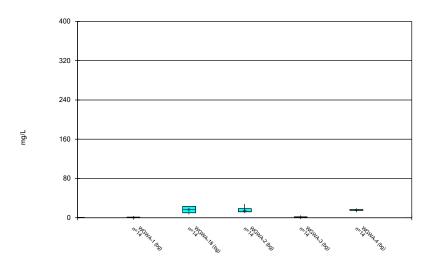
Constituent: Cadmium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot

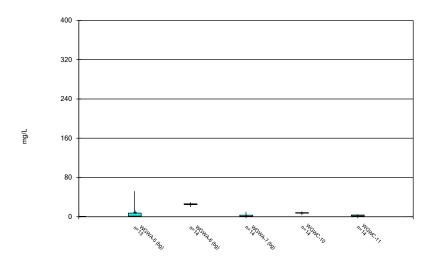


Box & Whiskers Plot



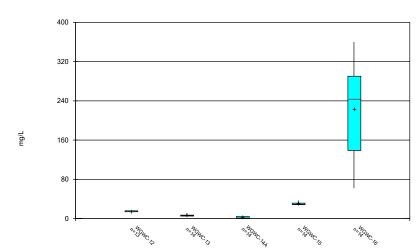
Constituent: Calcium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

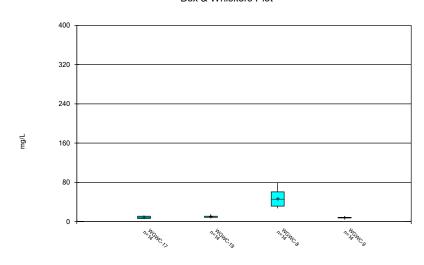
Box & Whiskers Plot



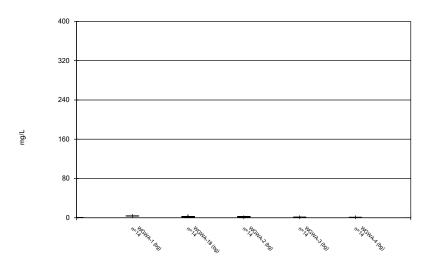
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Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot

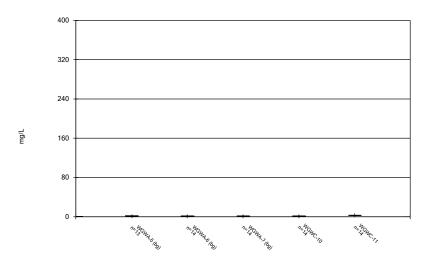


Box & Whiskers Plot



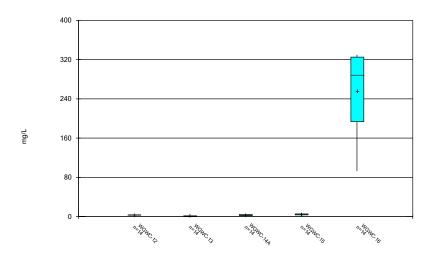
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Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot



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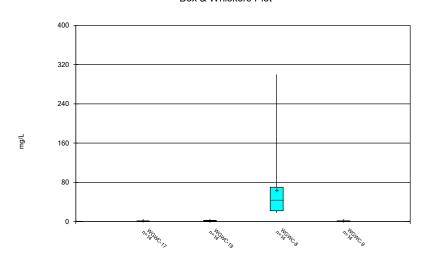
Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley AP

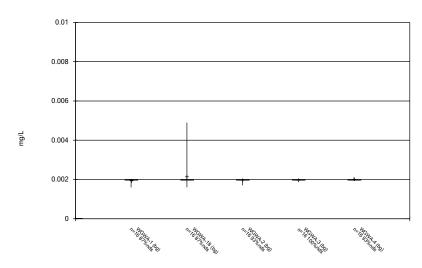
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Box & Whiskers Plot



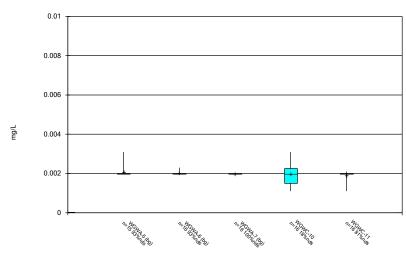
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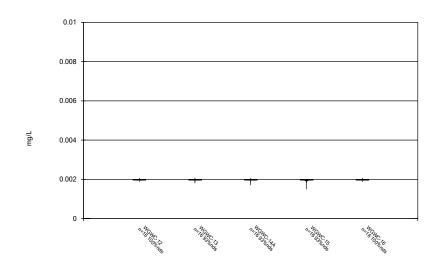
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Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot



Constituent: Chromium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

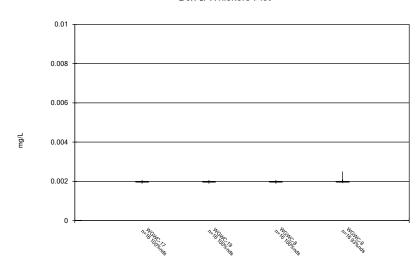
Box & Whiskers Plot



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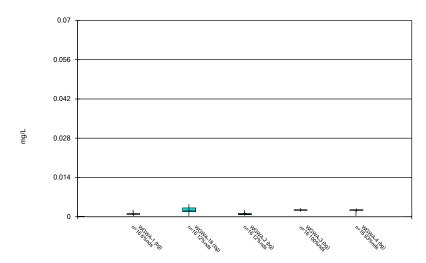
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Box & Whiskers Plot

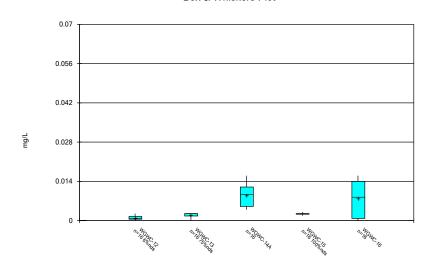


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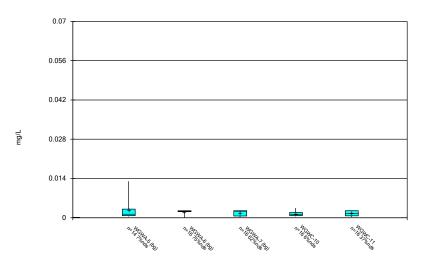


Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
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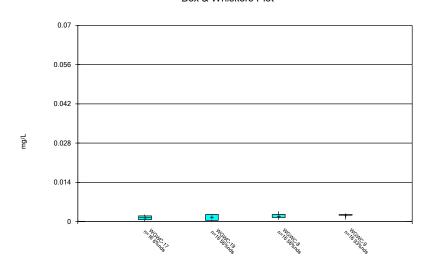
Box & Whiskers Plot



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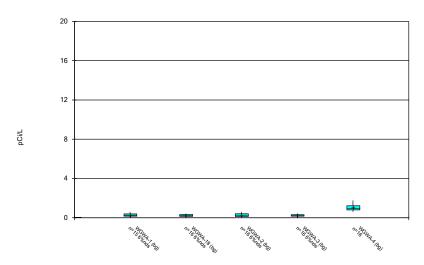
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Box & Whiskers Plot



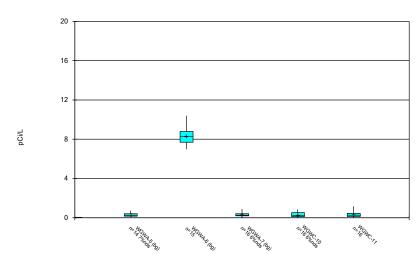
Constituent: Cobalt Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:05 PM View: All Wells and Constitu
Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot

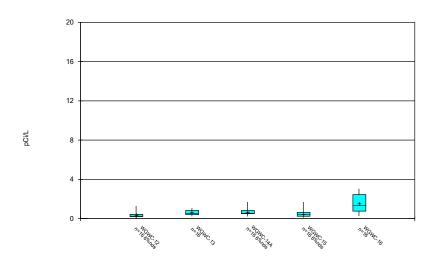


Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:05 PM View: All Wells and Constitu

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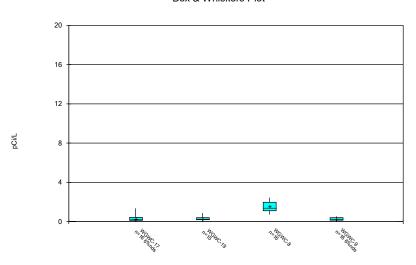
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



Sanitas™ v.9.6.26 . UG

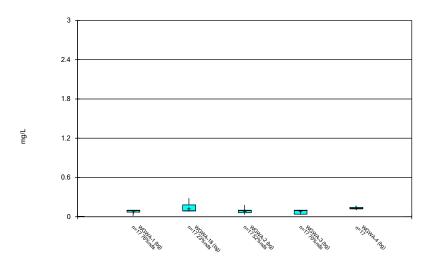
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/22/2020 12:05 PM View: All Wells and Constitu

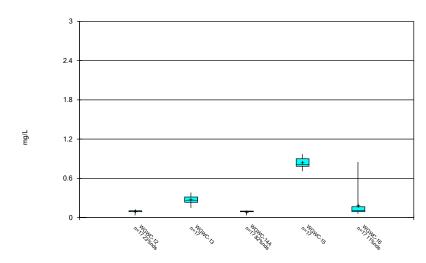
Plant Wansley Client: Southern Company Data: Wansley AP





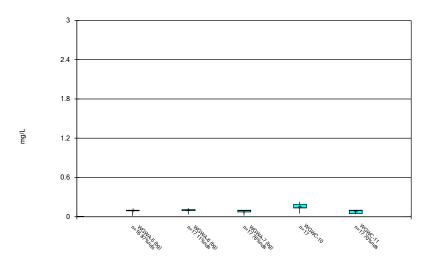
Constituent: Fluoride Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

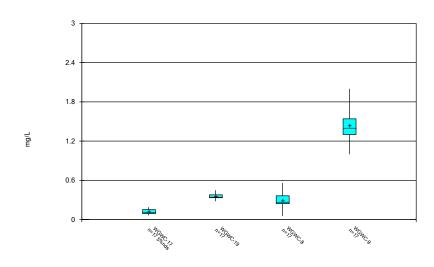
Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley AP

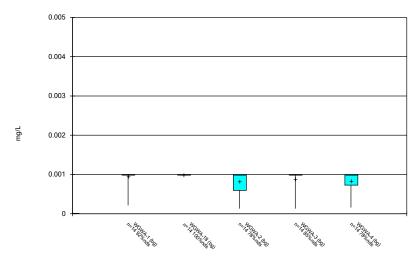
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot

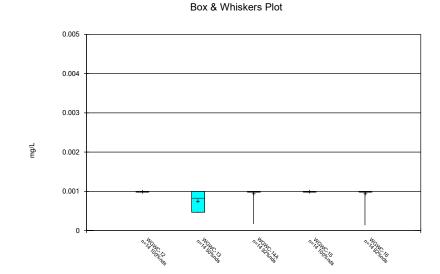


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Plant Wansley Client: Southern Company Data: Wansley AP



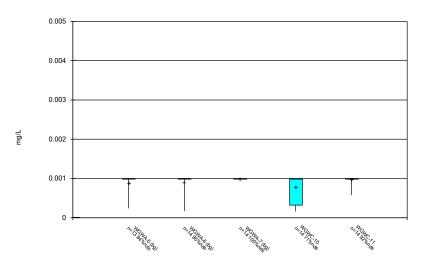


Constituent: Lead Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Lead Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

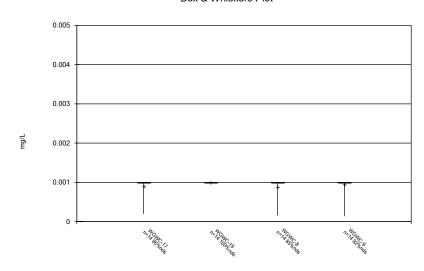
Box & Whiskers Plot



Constituent: Lead Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
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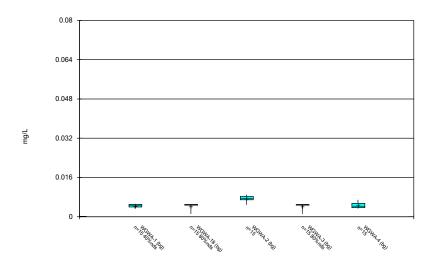
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Box & Whiskers Plot



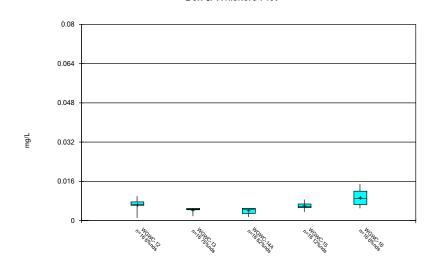
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Plant Wansley Client: Southern Company Data: Wansley AP





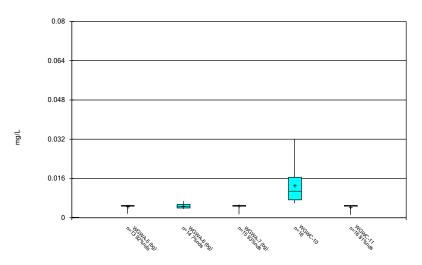
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Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot



Constituent: Lithium Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
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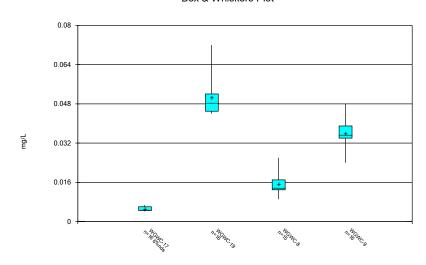
Box & Whiskers Plot



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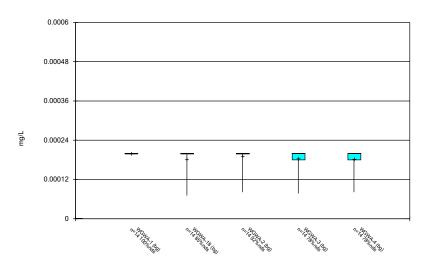
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Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley AP

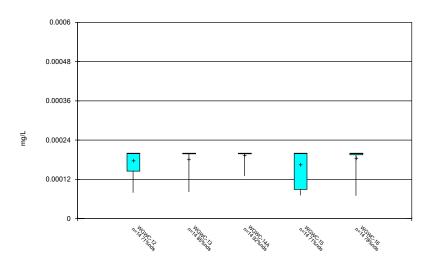
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

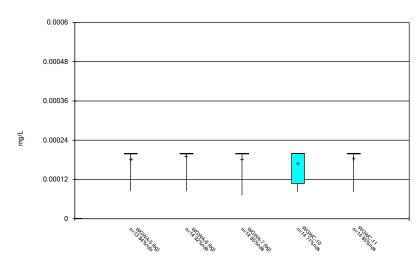
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
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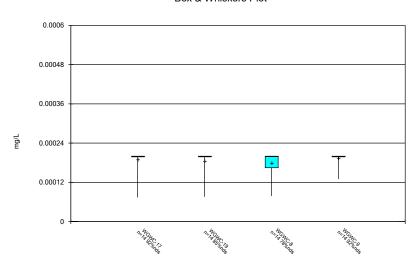
Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley AP

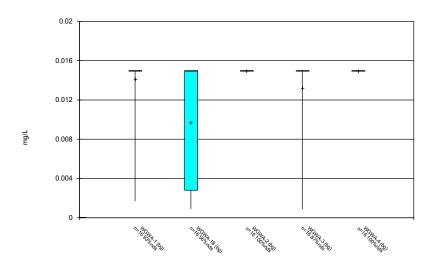
Sanitas™ v.9.6.26 . UG

Box & 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

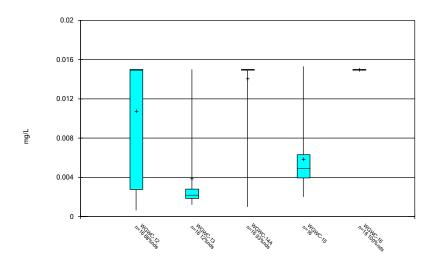
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 7/22/2020 12:05 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

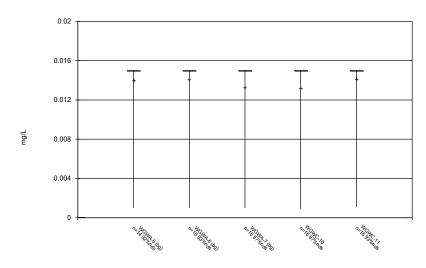
Sanitas™ v.9.6.26 . UG

Box & 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

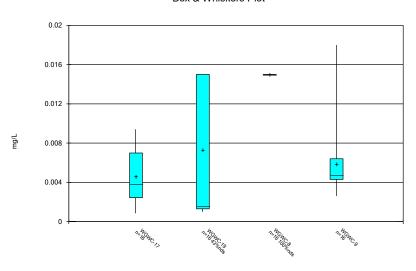
Box & Whiskers Plot



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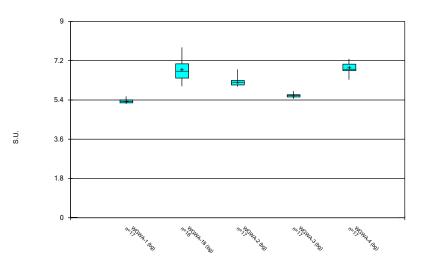
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Box & Whiskers Plot



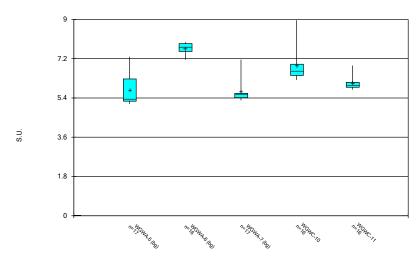
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Plant Wansley Client: Southern Company Data: Wansley AP

Box & Whiskers Plot



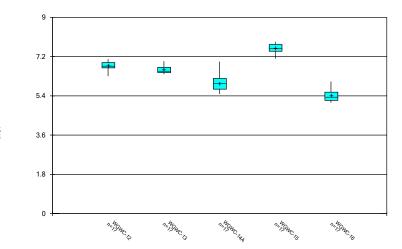
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Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

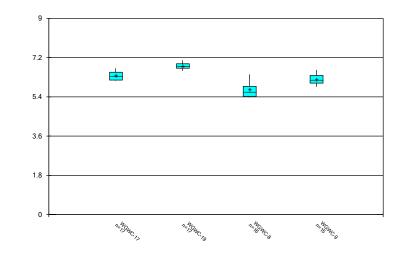
Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley AP

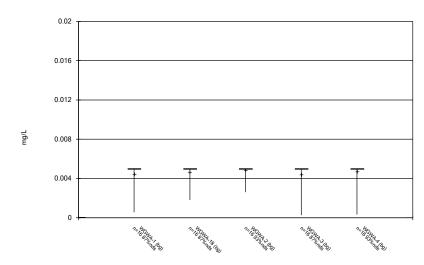
Sanitas™ v.9.6.26 . UG

Box & 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

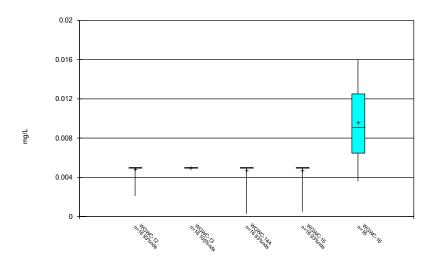
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

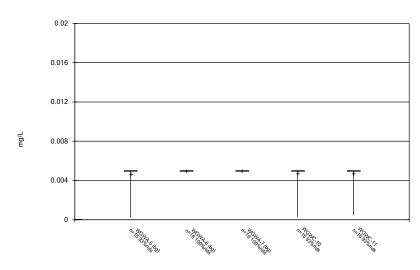
Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

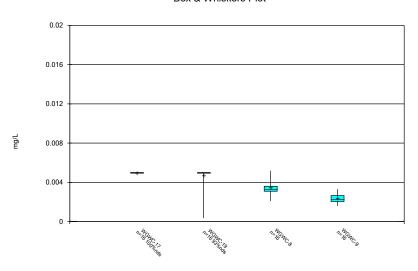
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

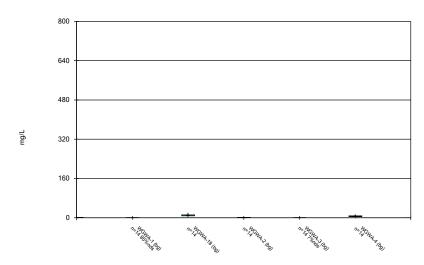
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Box & Whiskers Plot



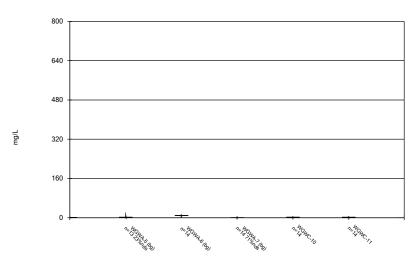
Constituent: Selenium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

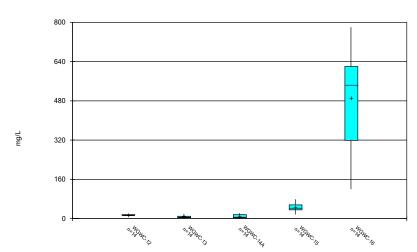
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

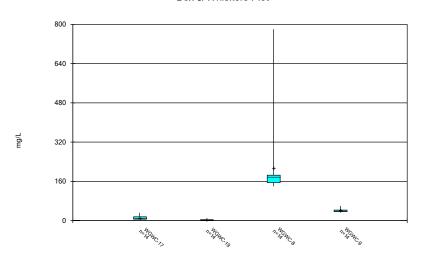
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

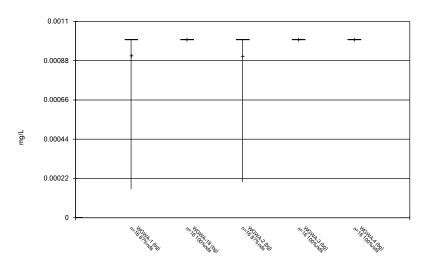
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Box & Whiskers Plot



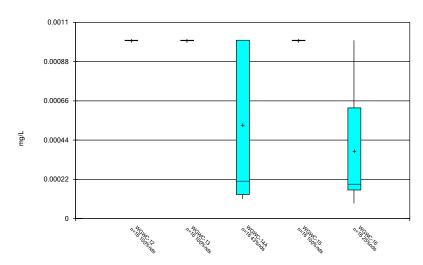
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Plant Wansley Client: Southern Company Data: Wansley AP





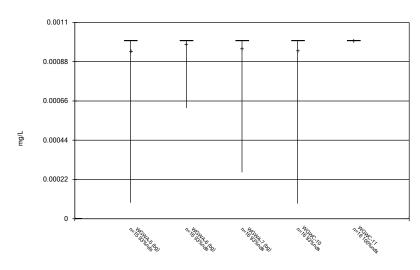
Constituent: Thallium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

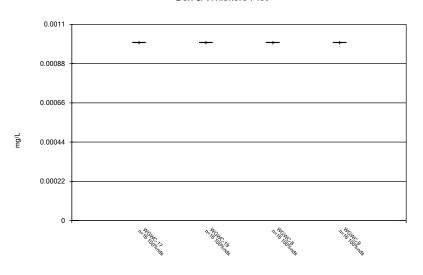
Box & Whiskers Plot



Constituent: Thallium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

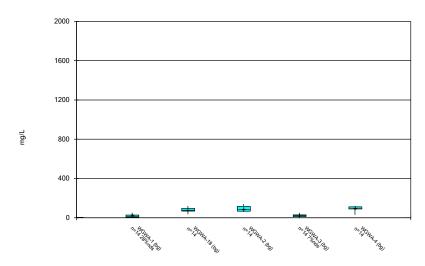
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Box & Whiskers Plot



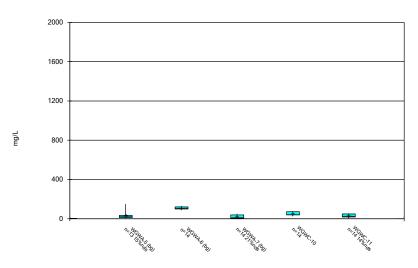
Constituent: Thallium Analysis Run 7/22/2020 12:06 PM View: All Wells and Constituents
Plant Wansley Client: Southern Company Data: Wansley AP

Box & 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

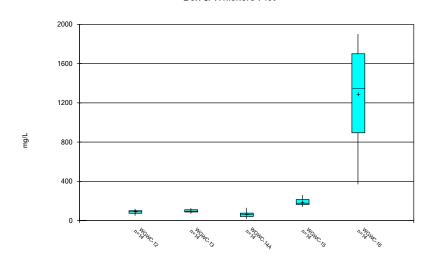
Box & Whiskers Plot



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

Sanitas™ v.9.6.26 . UG

Box & 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

Sanitas™ v.9.6.26 . UG

Box & Whiskers Plot

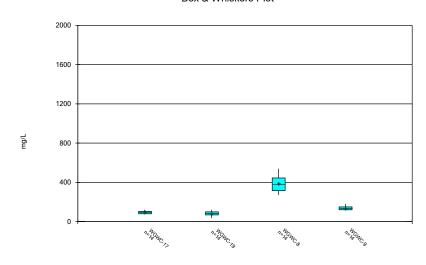


FIGURE C.

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-6 Combined Radium 226 + 228 (pCi/L)
WGWA-6 Combined Radium 226 + 228 (pCi/L)
WGWA-1 Lithium (mg/L)
WGWA-1 Lithium (mg/L)
WGWA-2 Lithium (mg/L)
WGWA-3 Lithium (mg/L)
WGWA-4 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

Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM Constituent <u>Well</u> Upper Lim. Lower Lim. <u>Date</u> Observ. Sig. Bg N %NDs Transform <u>Alpha</u> Method WGWC-16 3/18/2020 NP Inter (NDs) 1 of 2 Boron (mg/L) 2 Yes 111 99.1 0.000... 0.08 n/a n/a Boron (mg/L) WGWC-8 3/19/2020 2.2 Yes 111 99.1 0.000... NP Inter (NDs) 1 of 2 0.08 n/a 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 3/18/2020 66 111 Calcium (mg/L) WGWC-16 52 n/a Yes 0 0.000... NP Inter (normality) ... n/a Calcium (mg/L) WGWC-8 52 n/a 3/19/2020 Yes 0.000... NP Inter (normality) ... n/a Chloride (mg/L) WGWC-16 6.05 n/a 3/18/2020 93 Yes 111 0.000... NP Inter (normality) ... WGWC-8 3/19/2020 98 Yes 111 0 0.000... NP Inter (normality) ... Chloride (mg/L) 6.05 n/a n/a WGWC-15 3/18/2020 135 NP Inter (normality) ... Fluoride (mg/L) 0.284 n/a Yes 0.000... Fluoride (mg/L) WGWC-19 0.284 n/a 5/4/2020 0.36 Yes 135 49.63 0.000... NP Inter (normality) ... Fluoride (mg/L) WGWC-9 0.284 3/19/2020 Yes 135 49.63 0.000... NP Inter (normality) ... n/a n/a 3/18/2020 pH (S.U.) WGWC-16 7.96 5.13 5.08 Yes 134 n/a 0.000... NP Inter (normality) ... Sulfate (mg/L) WGWC-16 21 3/18/2020 120 Yes 111 23.42 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 3/19/2020 111 23.42 0.000... NP Inter (normality) ... 45 Yes n/a n/a Total Dissolved Solids (mg/L) WGWC-15 150 n/a 3/18/2020 160 Yes 111 9.009 0.000... NP Inter (normality) ... 3/18/2020 Yes 111 Total Dissolved Solids (mg/L) WGWC-16 150 n/a 370 9.009 0.000... NP Inter (normality) ... n/a Total Dissolved Solids (mg/L) WGWC-8 150 n/a 3/19/2020 540 Yes 111 9.009 NP Inter (normality) ... n/a Total Dissolved Solids (mg/L) WGWC-9 150 3/19/2020 160 Yes 111 9.009 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

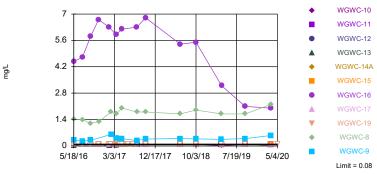
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	%NDs	Transform	<u>Alpha</u>	Method
Boron (mg/L)	WGWC-10	0.08	n/a	3/18/2020	0.049J	No	111	99.1	n/a	0.000	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.08	n/a	3/18/2020	0.08ND	No	111	99.1	n/a	0.000	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	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
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-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
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-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)
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-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)
Calcium (mg/L)	WGWC-8	52	n/a	3/19/2020	79	Yes	111	0	n/a	0.000	NP Inter (normality)
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)
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-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)
Chloride (mg/L)	WGWC-8	6.05	n/a	3/19/2020	98	Yes	111	0	n/a	0.000	NP Inter (normality)
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)
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-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)
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-8	0.284	n/a	3/19/2020	0.057J	No	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-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 WGWC-14A	7.96	5.13	3/19/2020	6.56	No	134	0	n/a	0.000	NP Inter (normality)
pH (S.U.)	WGWC-14A WGWC-15	7.96 7.96	5.13 5.13	3/19/2020	5.49 7.73	No No	134	0	n/a n/a	0.000	NP Inter (normality) NP Inter (normality)
pH (S.U.) pH (S.U.)	WGWC-15	7.96 7.96	5.13 5.13	3/18/2020 3/18/2020	7.73 5.08	No Yes	134 134	0	n/a n/a	0.000	NP Inter (normality)
рН (S.U.)	WGWC-10	7.96	5.13	3/18/2020	6.28	No	134	0	n/a	0.000	NP Inter (normality)
pH (S.U.)	WGWC-17	7.96	5.13	5/4/2020	6.9	No	134	0	n/a	0.000	NP Inter (normality)
pH (S.U.)	WGWC-18	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)
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-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)
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-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

Plant Wansley Client: Southern Company Data: Wansley AP Printed 6/18/2020, 7:42 PM Constituent <u>Well</u> Upper Lim. Lower Lim. <u>Date</u> Observ. Sig. Bg N %NDs Transform <u>Alpha</u> Method WGWC-12 Total Dissolved Solids (mg/L) 3/18/2020 73 No 111 9.009 NP Inter (normality) ... 0.000... 150 n/a n/a Total Dissolved Solids (mg/L) WGWC-13 150 3/19/2020 95 No 111 9.009 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) ... Total Dissolved Solids (mg/L) 3/18/2020 Yes 111 0.000... NP Inter (normality) ... WGWC-15 160 150 n/a 9.009 n/a Total Dissolved Solids (mg/L) WGWC-16 150 n/a 3/18/2020 Yes 111 9.009 n/a 0.000... NP Inter (normality) ... Total Dissolved Solids (mg/L) WGWC-17 150 n/a 3/18/2020 98 No 111 9.009 0.000... NP Inter (normality) ... Total Dissolved Solids (mg/L) WGWC-19 No 111 NP Inter (normality) ... 150 n/a 5/4/2020 110 9.009 n/a 0.000... Total Dissolved Solids (mg/L) WGWC-8 150 3/19/2020 540 Yes 111 9.009 0.000... NP Inter (normality) ... n/a n/a 3/19/2020 160 Total Dissolved Solids (mg/L) WGWC-9 150 Yes 111 9.009 n/a 0.000... NP Inter (normality) ...

Exceeds Limit: WGWC-16, WGWC-8, WGWC-9

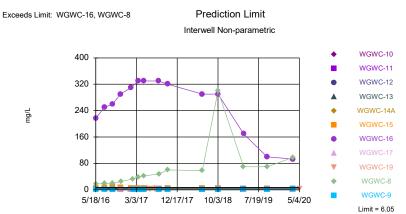
Prediction Limit Interwell Non-parametric



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.

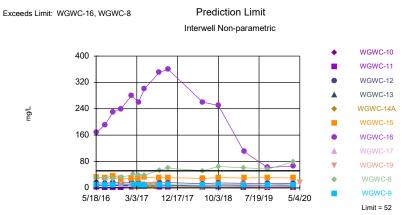
> Constituent: Boron Analysis Run 6/18/2020 7:38 PM View: AIII Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG



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

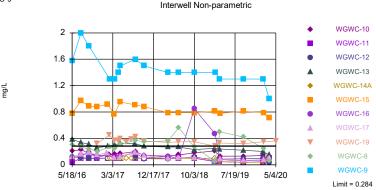


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 111 background values. Annual per-constituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

> Constituent: Calcium Analysis Run 6/18/2020 7:38 PM View: AIII Plant Wansley Client: Southern Company Data: Wansley AP



Prediction Limit



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 perconstituent alpha = 0.002377. Individual comparison alpha = 0.0001082 (1 of 2). Comparing 11 points to limit.

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 6/18/2020 7:42 PM View: AlII 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							
1/18/2017						<0.08		<0.08	
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	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
9/17/2019		<0.08	<0.08						
9/18/2019					<0.08	<0.08	2.1		<0.08
9/19/2019				<0.08					
3/16/2020	<0.08	0.048 (J)							
3/17/2020			<0.08			<0.08		<0.08	
3/18/2020				0.049 (J)	0.071 (J)		2		0.049 (J)
3/19/2020									
5/4/2020									

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016	(0,	(0,	(0,						
5/18/2016	<0.08	<0.08	<0.08						
5/19/2016				<0.08	<0.08	1.42	0.314	0.0252 (J)	
7/19/2016	<0.08							(-)	
7/20/2016	0.00	<0.08	<0.08	<0.08	<0.08	1.4	0.25	<0.08	
9/13/2016		<0.08	<0.08	40.00	40.00	1.4	0.23	40.00	
9/14/2016	<0.08	40.00	40.00	<0.08	<0.08		0.3	<0.08	
9/15/2016	~0.00			~0.00	~0.06	1.2	0.5	~ 0.08	
						1.2			
11/9/2016		~ 0.00	<0.00					<0.09	
11/10/2016		<0.08	<0.08	10.00	-0.00			<0.08	-0.00
11/11/2016				<0.08	<0.08	1.0			<0.08
11/14/2016						1.3			
1/17/2017		-0.00	-0.00						
1/18/2017		<0.08	<0.08						
1/19/2017	<0.08								
1/20/2017									
1/24/2017				0.047 (1)	0.004 (1)			0.000 (1)	
1/27/2017				0.047 (J)	0.021 (J)	4.0		0.033 (J)	0.00
2/6/2017						1.8			<0.08
2/8/2017							0.01		
2/9/2017							0.61		
2/23/2017									
3/13/2017	-0.00	10.00	-0.00						
3/14/2017	<0.08	<0.08	<0.08	0.004 (1)	0.050	4.7	0.40	-0.00	0.004 (1)
3/15/2017				0.024 (J)	0.058	1.7	0.42	<0.08	0.034 (J)
3/17/2017							0.07		-0.00
4/11/2017							0.37		<0.08
4/24/2017	-0.00	10.00	-0.00						
4/25/2017	<0.08	<0.08	<0.08	-0.00	10.00	2	0.20	-0.00	-0.00
4/26/2017				<0.08	<0.08	2	0.38	<0.08	<0.08
5/17/2017									~ 0.00
6/7/2017									<0.08
7/11/2017			<0.00						<0.08
8/8/2017	<0.00	~ 0.00	<0.08					<0.00	
8/9/2017	<0.08	<0.08		-0.00	-0.00	1.0	0.20	<0.08	~ 0.00
8/10/2017				<0.08	<0.08	1.8	0.29		<0.08
10/10/2017 10/11/2017	<0.08	~0.0°	<0.00						
	<0.06	<0.08	<0.08	-0.00	-0.00	1.0	0.26	<0.00	~ 0.00
10/12/2017	-0.00			<0.08	<0.08	1.8	0.36	<0.08	<0.08
6/13/2018	<0.08	10.00	-0.00	-0.00	10.00	4.7	0.00	-0.00	-0.00
6/14/2018		<0.08	<0.08	<0.08	<0.08	1.7	0.39	<0.08	<0.08
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018	-0.00	-0.00	-0.00						
10/3/2018	<0.08	<0.08	<0.08	.0.00	.0.00	10	0.07	.0.00	0.00
10/4/2018				<0.08	<0.08	1.9	0.37	<0.08	<0.08
4/1/2019	~0.09	-0.09	-0.09						-0.00
4/2/2019	<0.08	<0.08	<0.08	-0.00	-0.09	17	0.25	-0.09	<0.08
4/3/2019				<0.08	<0.08	1.7	0.35	<0.08	
4/4/2019	-0.0 9								
9/16/2019	<0.08								

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
9/17/2019		<0.08							
9/18/2019			<0.08					<0.08	<0.08
9/19/2019				<0.08	<0.08	1.7	0.39		
3/16/2020									
3/17/2020	<0.08	<0.08	<0.08						
3/18/2020				0.039 (J)	<0.08				
3/19/2020						2.2	0.55	0.053 (J)	
5/4/2020									<0.08

		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	5.55			
2/23/2017	<0.08			
3/13/2017	5.55			
3/14/2017				
3/15/2017				
3/17/2017	<0.08			
4/11/2017	<0.08			
4/24/2017	5.55			
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				

	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	

	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							
1/18/2017					10	26			
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	10		1.0	20	20	1.0	
3/14/2017			13	0	1.3	20	29	1.6	000
3/15/2017				9					260
3/17/2017									
4/11/2017 4/24/2017	1.1	12							
4/25/2017	1.1	12	23		1.9	28	32	1.5	300
4/26/2017			23	8.1	1.9	20	32	1.5	300
5/17/2017				0.1					
6/7/2017									
7/11/2017									
8/8/2017	1.1	18	24		4.8	26			
8/9/2017		10	24		4.0	20	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							
4/2/2019			20		1.1	25		1.1	
4/3/2019									
4/4/2019				7.9			30		110
9/16/2019	1.3					25		36	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWA-6 (bg)	WGWC-15	WGWA-5 (bg)	WGWC-16
9/17/2019		13	10						
9/18/2019					1.5		31		62
9/19/2019				7.5					
3/16/2020	1.1	10							
3/17/2020			10		0.82	26		1.4	
3/18/2020				7.5			30		66
3/19/2020									
5/4/2020									

	WGWA-4 (bg)	WGWC-17	WGWA-3 (bg)	WGWC-12	WGWC-13	WGWC-8	WGWC-11	WGWC-9	WGWC-19
5/17/2016	(-3)		(-3)						
5/18/2016	17.9	8.24	2.1						
5/19/2016				15.8	11.4	31.4	1.95	8.53	
7/19/2016									
7/20/2016	15	11	1.7	14	7.1	28	1.5	8.2	
9/13/2016	16		1.3						
9/14/2016		12		16	7.4		1.8	8.8	
9/15/2016						27			
11/9/2016									
11/10/2016	15	11	1.6		6.4				
11/11/2016				15			1.7		12
11/14/2016						32			
1/17/2017									
1/18/2017	17		1.7						
1/19/2017									
1/20/2017		10							
1/24/2017									
1/27/2017				16	6.2		3.5		
2/6/2017						41			11
2/8/2017									
2/9/2017								10	
2/23/2017									
3/13/2017									
3/14/2017	17	8.8	1.8						
3/15/2017				16	6.7	38	3.8	8.6	10
3/17/2017									
4/11/2017								8.6	11
4/24/2017									
4/25/2017	17	12	2						
4/26/2017				3 (0)	6.5	39	4	7.1	8.4
5/17/2017									
6/7/2017									9
7/11/2017									9.5
8/8/2017			2						
8/9/2017	15	11			7				
8/10/2017				15		53	3.5	7.5	8.8
10/10/2017									
10/11/2017	17	10	2.1						
10/12/2017				16	7	60	2.7	8.2	9.5
6/13/2018									
6/14/2018	15	6.2	2	13	5.5	52	2.2	7.5	8.9
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	16		1.8						
10/4/2018		6.4		15	5.9	65	2	8	10
4/1/2019									
4/2/2019	15		1.8						11
4/3/2019				14	4.7	61	1.7	7.2	
4/4/2019		5.6							
9/16/2019									
· · · · ·									

	WGWA-4 (bg)	WGWC-17	WGWA-3 (bg)	WGWC-12	WGWC-13	WGWC-8	WGWC-11	WGWC-9	WGWC-19
9/17/2019	16								
9/18/2019		5.5	1.6		4.9				8.8
9/19/2019				14		57	1.4	8.1	
3/16/2020									
3/17/2020	15		1.7						
3/18/2020		6.3		14			1.6		
3/19/2020					5	79		9.3	
5/4/2020									15

Constituent: Calcium (mg/L) Analysis Run 6/18/2020 7:42 PM View: AIII

			Plant Wansley	Client: Southern Company	Data: Wansley AP
		WGWC-14A			
5/17/201	6				
5/18/201					
5/19/201					
7/19/201					
7/20/201					
9/13/201					
9/14/201					
9/15/201					
11/9/201					
11/10/20					
11/11/20					
11/14/20					
1/17/201					
1/18/201					
1/19/201					
1/20/201	7				
1/24/201	7				
1/27/201	7				
2/6/2017					
2/8/2017		3.2			
2/9/2017	,				
2/23/201	7	4.1			
3/13/201	7				
3/14/201	7				
3/15/201	7				
3/17/201		2.4			
4/11/201		4.1			
4/24/201					
4/25/201					
4/26/201		2.5			
5/17/201		5.2			
6/7/2017		5.2			
7/11/201		2.3			
8/8/2017					
8/9/2017					
8/10/201					
10/10/20 10/11/20		3.8			
10/11/20		3.0			
6/13/201					
6/14/201		1.1			
9/24/201					
9/27/201					
9/28/201					
10/2/201					
10/3/201					
10/4/201		2			
4/1/2019					
4/2/2019					
4/3/2019		0.84			
4/4/2019					
9/16/201					

	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	

	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							
1/18/2017						1.8		1.5	
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							
3/14/2017			1.9		4.4	1.8		2.5	1.5
3/15/2017				1.4			330		
3/17/2017									
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017	0.4	2.2	1.9		4	1.8	330	1.3	1.8
4/26/2017			1.5	1.3	7	1.0	330	1.5	1.0
5/17/2017				1.5					
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2			1.9		1.4	
8/9/2017	3.0	2.3	2		3.6	1.9	330	1.4	1.4
				1.4	3.0		330		1.4
8/10/2017	2.6	2.5		1.4					
10/10/2017	3.6	2.5	1.0		_	1.0	220	1.2	1.5
10/11/2017			1.9	1.0	5	1.8	320	1.3	1.5
10/12/2017	2.0		2	1.3				4.4	
6/13/2018	3.8	0.0	2		4.0	4.7	000	1.4	4.5
6/14/2018		2.3		1.3	4.3	1.7	290		1.5
9/24/2018		2.4							
9/27/2018	4		0.1						
9/28/2018			2.1						
10/2/2018								1.4	
10/3/2018				1.0	4.8	1.8	000		4.5
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		170		1.4
9/16/2019	4							1.5	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
9/17/2019		2.4	2						
9/18/2019					3.2	2	100		1.5
9/19/2019				1.5					
3/16/2020	4.3	2.7							
3/17/2020			2.3			2.2		1.7	
3/18/2020				1.5	1.7		93		1.5
3/19/2020									
5/4/2020									

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	2.14	1.45	1.92						
5/19/2016				3.8	3.21	17.5	1.46	2.26	
7/19/2016	2.4								
7/20/2016		1.4	1.8	3.8	3.4	19	1.5	1.9	
9/13/2016		1.4	1.7						
9/14/2016	2.1			3.7	3.1		1.4	1.6	
9/15/2016						19			
11/9/2016									
11/10/2016		1.3	1.6					1.4	
11/11/2016				3.5	3.2				2.6
11/14/2016						25			
1/17/2017									
1/18/2017		1.3	1.7						
1/19/2017	1.8								
1/20/2017									
1/24/2017									
1/27/2017				3.1	3.4			1.4	
2/6/2017						33			2.6
2/8/2017									
2/9/2017							1.5		
2/23/2017									
3/13/2017									
3/14/2017	2	1.2	1.6						
3/15/2017				3.2	3.1	38	1.3	1.4	2.4
3/17/2017									
4/11/2017							1.2		2.3
4/24/2017									
4/25/2017	1.8	1.2	1.6						
4/26/2017				3.2	3.1	42	1.2	1.3	2.3
5/17/2017									
6/7/2017									2.5
7/11/2017									2.3
8/8/2017			1.7						
8/9/2017	1.9	1.2						1.4	
8/10/2017				3.4	3.1	48	1.3		2.5
10/10/2017									
10/11/2017	2.1	1.2	1.6						
10/12/2017				3.1	3	60	1.4	1.2	2.3
6/13/2018	1.7								
6/14/2018		1.2	1.6	3	3	58	1.2	1.2	2.4
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	1.8	1.2	1.6						
10/4/2018				3.1	3.1	300	1.2	1.2	2.6
4/1/2019									
4/2/2019	1.7	1.2	1.7	_			_		2.5
4/3/2019				3	3.3	70	2	1.2	
4/4/2019	1.0								
9/16/2019	1.8								

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
9/17/2019		1.2							
9/18/2019			1.7					1.2	2.7
9/19/2019				3.2	3.2	70	1.5		
3/16/2020									
3/17/2020	1.6	1.4	1.8						
3/18/2020				3.2	3.2				
3/19/2020						98	2.1	1.3	
5/4/2020									2.8

			Plant Wansley	Client: Southern Company	Data: Wansley AP
		WGWC-14A			
5	/17/2016				
	/18/2016				
	/19/2016				
	/19/2016				
	/20/2016				
	/13/2016				
	/14/2016				
	/15/2016				
	1/9/2016				
1	1/10/2016				
1	1/11/2016				
1	1/14/2016				
	/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				
	/26/2017	4.8			
	/17/2017	3.9			
	/7/2017	3.2			
	/11/2017	4.1			
	/8/2017				
	/9/2017				
	/10/2017				
	0/10/2017				
	0/11/2017	2.2			
	0/12/2017				
	/13/2018	2.0			
	/14/2018 /24/2018	2.8			
	/27/2018 /28/2018				
	0/2/2018				
	0/2/2018				
	0/4/2018	2.2			
	/1/2019				
	/2/2019				
	/3/2019	2.4			
	/4/2019				
	/16/2019				

	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	

	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 5/18/2016	0.0131 (J)	0.0538 (J)	0.284 (J)	0.206	0.018 (J)	0.779	0.106 (J)	0.1(1)	0.014 (J)
5/19/2016				0.206	0.018 (3)	0.779	0.106 (3)	0.1 (J)	0.014 (3)
7/19/2016	<0.1	<0.1	0.21		<0.1	0.97	0.11 (J)	0.14 (1)	<0.1
7/20/2016	<0.1	<0.1	0.21	0.23	<0.1	0.97	0.11(3)	0.14 (J)	V 0.1
9/13/2016	<0.1	<0.1	0.15 (J)	0.23	<0.1		0.11 (J)		
	<0.1	<0.1	0.15 (3)	0.17 (1)	<0.1	0.80	0.11(3)	0.19 (1)	0.005 (1)
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	0.085 (3)	~ 0.1		<0.1	0.88	0.1 (3)	0.11 (J)	
11/11/2016				0.14 (J)	~ 0.1	0.00		0.11(3)	
11/14/2016				0.14 (3)					
1/17/2017	<0.1	<0.1							
1/18/2017	~0.1	~0.1			<0.1		0.11 (J)		
1/19/2017			0.087 (J)		~ 0.1		0.11(3)		<0.1
1/20/2017			0.087 (3)						-0.1
1/24/2017						0.92		0.15 (J)	
1/27/2017						0.32		0.13 (0)	
2/6/2017				0.15 (J)					
2/8/2017				0.10 (0)					
2/9/2017									
2/23/2017									
3/13/2017	<0.1	<0.1							
3/13/2017	~0.1	~0.1	<0.1		<0.1	0.77	<0.1		<0.1
3/15/2017			30.1	0.16 (J)	40.1	0.77	30.1	0.1 (J)	-0.1
3/17/2017				0.10 (0)				0.1 (0)	
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)		0.00	· · ·	0.10 (0)	0.1
5/17/2017				0.17 (0)					
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)	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)							

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
2/26/2019			0.23		<0.1		0.074 (J)		<0.1
2/27/2019				0.21		0.81		0.47	
2/28/2019									
4/1/2019	<0.1	0.061 (J)							
4/2/2019			0.21		<0.1		0.09 (J)		<0.1
4/3/2019									
4/4/2019				0.13 (J)		0.78		0.08 (J)	
9/16/2019	0.03 (J)						0.1 (J)		<0.1
9/17/2019		0.061 (J)	0.079 (J)						
9/18/2019					0.027 (J)	0.81		0.058 (J)	
9/19/2019				0.13 (J)					
2/3/2020	0.032 (J)	0.061 (J)							
2/4/2020							0.13		<0.1
2/5/2020			0.12	0.14	0.026 (J)				
2/7/2020						0.79		0.072 (J)	
3/16/2020	0.042 (J)	0.052 (J)							
3/17/2020			<0.1		0.044 (J)		0.037 (J)		<0.1
3/18/2020				0.052 (J)		0.71		0.084 (J)	
3/19/2020									
5/4/2020									

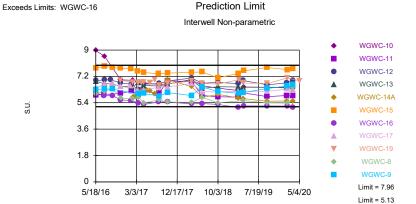
	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	0.121 (J)	0.164 (J)	0.029 (J)						
5/19/2016				0.039 (J)	0.384	0.304	1.58	0.12 (J)	
7/19/2016									
7/20/2016	0.16 (J)	0.17 (J)	<0.1	<0.1	0.34	0.27	2	0.11 (J)	
9/13/2016		0.15 (J)	<0.1						
9/14/2016	0.19 (J)			<0.1	0.31		1.8	0.095 (J)	
9/15/2016						0.24			
11/9/2016									
11/10/2016	0.15 (J)	0.12 (J)	<0.1		0.26				
11/11/2016				<0.1				<0.1	0.32
11/14/2016						0.2			
1/17/2017									
1/18/2017		0.15 (J)	<0.1						
1/19/2017		(0)							
1/20/2017	0.18 (J)								
1/24/2017	0.10 (0)								
1/27/2017				<0.1	0.28			<0.1	
2/6/2017				~0.1	0.20	0.27		~0.1	0.45
2/8/2017						0.27			0.45
							1.2		
2/9/2017							1.3		
2/23/2017									
3/13/2017		2.42.43							
3/14/2017	0.11 (J)	0.13 (J)	<0.1						
3/15/2017				<0.1	0.3	0.25	1.3	<0.1	0.37
3/17/2017									
4/11/2017							1.4		0.37
4/24/2017									
4/25/2017	0.13 (J)	0.12 (J)	<0.1						
4/26/2017				<0.1	0.33	0.31	1.5	<0.1	0.4
5/17/2017									
6/7/2017									0.35
7/11/2017									0.39
8/8/2017			<0.1						
8/9/2017	0.19 (J)	0.14 (J)			0.32				
8/10/2017				<0.1		0.37	1.6	0.11 (J)	0.42
10/10/2017									
10/11/2017	0.14 (J)	0.14 (J)	<0.1						
10/12/2017				<0.1	0.28	0.35	1.5	0.091 (J)	0.36
3/27/2018									
3/28/2018		0.12 (J)	<0.1						
3/29/2018				<0.1	0.27	0.36	1.4	0.089 (J)	0.34
3/30/2018	0.095 (J)								
6/13/2018									
6/14/2018	0.11 (J)	0.12 (J)	<0.1	<0.1	0.27	0.56	1.4	0.1 (J)	0.35
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		0.13 (J)	<0.1						
10/4/2018	0.11 (J)			<0.1	0.23	0.27	1.4	0.12 (J)	0.35
2/25/2019									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
2/26/2019	0.068 (J)	0.14 (J)	<0.1						
2/27/2019				0.047 (J)	0.25	0.054 (J)		0.06 (J)	
2/28/2019							1.4		0.28
4/1/2019									
4/2/2019		0.14 (J)	0.039 (J)						0.33
4/3/2019				0.048 (J)	0.24	0.5	1.3	0.084 (J)	
4/4/2019	0.087 (J)								
9/16/2019									
9/17/2019		0.14 (J)							
9/18/2019	0.066 (J)		0.033 (J)		0.22				0.32
9/19/2019				0.037 (J)		0.42	1.3	0.093 (J)	
2/3/2020									
2/4/2020		0.13	0.031 (J)						
2/5/2020				0.045 (J)	0.2		1.3	0.098 (J)	
2/7/2020	0.079 (J)					0.25			0.35
3/16/2020									
3/17/2020		0.11	0.04 (J)						
3/18/2020	<0.1			<0.1				0.033 (J)	
3/19/2020					0.15	0.057 (J)	1		
5/4/2020									0.36

			Plant Wansley	Client: Southern Company	Data: Wansley AP
5-17-20-20-5 5-18-20-5 5-1		WGWC-14A			
STREAMS STRE	5/17/2016				
Prisoration					
7/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20076 9/20077 1/2007					
9142016 9152018 1102018 11102018 111102018 111102018 111102018 111102019 111102019 111102019 111102019 11102010					
### ### ### ### ### ### ### ### ### ##					
11102016					
111/102016					
1111/2016					
1111/2016 1111/2017 1118/2017 11/8/2017 12/2018 12/201					
1142016 1472017 1472					
11782017					
1/18/2017 1/20/2017 1/24/2017 1/24/2017 1/26/2017 2/26/2017 2/26/2017 2/26/2017 2/26/2017 3/14/2017 3/14/2017 3/14/2017 3/14/2017 3/14/2017 3/15/2017 4/26/2018 4/26/2					
1.172017 1.2242017 1.2242017 2.822017 2.822017 2.822017 3.1732017 3.1732017 3.172017 3.172017 3.172017 3.172017 3.172017 3.172017 4.252017					
1/20/2017 1/24/2018 1/24					
1/24/2017 1/27/2017 28/2017 40.1 29/2017 40.1 29/2017 40.1 3/13/2017 3/13/2017 3/14/2017 40.1 4/12/2017 40.1 4/12/2017 40.1 4/24/2017 40.1 5/17/2017 40.1 6/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2017 40.1 8/1/2018 40.1 3/2/2018 40.1 8/1/2018 40.1 8/1/2018 40.1 8/1/2018 40.1 8/1/2018 40.1 8/1/2018 40.1 8/1/2018 40.1 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
1272017 262017					
28/2017 40.1 28/2017 40.1 28/2017 40.1 3/13/2017 3/13/2017 3/14/2017 40.1 4/1/2017 40.1 4/2/2017 40.1 4/2/2017 40.1 5/1/2017 40.1 5/1/2017 40.1 8/2/107 8/2/107 8/2/107 40.1 8/2/107 40.1 8/2/107 40.1 8/2/108 40.1 3/2/2/2018 40.1 3/2/2/2018 40.1 3/2/2/2018 40.1 9/2/2/2018 40.1 9/2/2/2018 40.1 9/2/2/2018 40.1 10/2/2018 40.1 10/2/2018 40.1 10/2/2018 40.1 10/2/2018 40.1					
28/2017					
29232017 <0.1		<0.1			
2/23/2017					
3/13/2017 3/14/2017 3/15/2017 3/17/2017 4/11/2017 4/25/2017 4/26/2018 4/26/2		<0.1			
3/14/2017 3/15/2017 3/15/2017 4/11/2017 4/21/2017 4/25/2					
3/15/2017					
3/17/2017					
4/11/2017		<0.1			
4/24/2017 4/25/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2017 4/26/2018 4/26/2					
4/25/2017 40.1 5/17/2017 <0.1	4/24/2017				
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 10/12/2018 3/28/2018 3/28/2018 3/28/2018 6/14/2018 < 0.1 9/24/2018 9/27/2018					
5/17/2017 <0.1		<0.1			
7/11/2017 <0.1 8/8/2017 8/9/2017 8/10/2017 10/10/2017 10/11/2017 3/27/2018 3/28/2018 3/29/2018 6/13/2018 6/13/2018 6/13/2018 6/13/2018 6/13/2018 9/28/2018 10/2/2018 10/2/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018	5/17/2017				
8/8/2017 8/9/2017 8/10/2017 10/10/2017 10/11/2017 3/27/2018 3/28/2018 3/29/2018 6/13/2018 6/13/2018 6/14/2018 9/27/2018 9/27/2018 9/27/2018 10/2/2018 10/2/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018 10/3/2018	6/7/2017	<0.1			
8/9/2017 8/10/2017 10/10/2017 10/11/2017 3/27/2018 3/28/2018 3/29/2018 3/39/2018 6/13/2018 6/13/2018 6/14/2018 9/27/2018 9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/3/2018	7/11/2017	<0.1			
8/10/2017 10/10/2017 10/11/2017	8/8/2017				
10/10/2017 10/11/2017	8/9/2017				
10/11/2017 <0.1 10/12/2018 3/28/2018 3/28/2018 3/29/2018 <0.1 3/30/2018 6/13/2018 6/13/2018 6/14/2018 <0.1 9/24/2018 9/27/2018 10/2/2018 10/3/2018 10/4/2018 <0.1	8/10/2017				
10/12/2017 3/27/2018 3/28/2018 3/29/2018 3/30/2018 6/13/2018 6/13/2018 6/14/2018 9/24/2018 9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/4/2018 <	10/10/2017				
3/27/2018 3/28/2018 3/29/2018 3/30/2018 6/13/2018 6/13/2018 6/14/2018 9/24/2018 9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/4/2018 < < 0.1	10/11/2017	<0.1			
3/28/2018 3/29/2018 3/30/2018 6/13/2018 6/14/2018 9/24/2018 9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/4/2018 < < 0.1	10/12/2017				
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	3/27/2018				
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	3/28/2018				
6/13/2018 6/14/2018	3/29/2018	<0.1			
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	3/30/2018				
9/24/2018 9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/4/2018 <0.1	6/13/2018				
9/27/2018 9/28/2018 10/2/2018 10/3/2018 10/4/2018 <0.1	6/14/2018	<0.1			
9/28/2018 10/2/2018 10/3/2018 10/4/2018 <0.1	9/24/2018				
10/2/2018 10/3/2018 10/4/2018 <0.1	9/27/2018				
10/3/2018 10/4/2018 <0.1	9/28/2018				
10/4/2018 <0.1	10/2/2018				
	10/3/2018				
2/25/2019		<0.1			
	2/25/2019				

	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	

Sanitas™ v.9.6.26 . UG

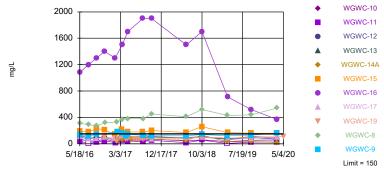


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 134 background values. Annual perconstituent alpha = 0.004832. Individual comparison alpha = 0.0002199 (1 of 2). Comparing 11 points to limit.

Constituent: pH Analysis Run 6/18/2020 7:39 PM View: AIII
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas** v.9.6.26. UG
Hollow symbols indicate censored values.
Exceeds Limit: WGWC-15, WGWC-16,
WGWC-8, WGWC-9

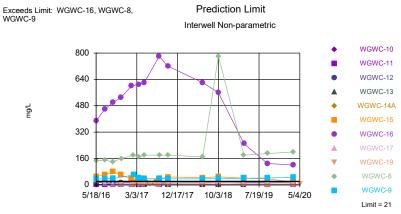
Prediction Limit
Interwell Non-parametric



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 111 background values. 9.009% NDs. Annual perconstituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:39 PM View: AllI Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG



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. 23.42% NDs. Annual perconstituent alpha = 0.003525. Individual comparison alpha = 0.0001605 (1 of 2). Comparing 11 points to limit.

	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							
1/18/2017					7.16		7.72		
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									
	5.4	6.18							
			6.45		5.82	7.57			5.86
				6.82				5.39	
	5.4	6.35							
	0	0.00	6.93		5 57	7 47	7 73	5 28	5.35
			0.00	6.73	0.07			0.20	0.00
				0.70					
	5 32	6.23	6 72		5.6		7 74		
	0.02	0.20	0.72		0.0	7 37	7.74	5.46	5.25
				6 66		7.07		0.40	0.20
				0.00					5.44
	5 26	6.32							5.44
	3.20	0.32	6.75		5.43	7.42	7 71	5.45	6.99
			0.73	6 67	5.45	7.42	7.71	3.43	0.33
	E 20	6 14		0.07					
	5.59	0.14	6.04		F 20		7.00		E OE
			0.04		J.23		1.20	E 22	5.95
				6.00		7.49		0.33	
	E 22		6 21	0.30		7.40	7 70		E 12
	5.33	6.00	0.31	6.56	F 20	7.5	1./δ	E 2E	5.13
				0.00	5.39	7.5		5.35	
	F 22	b.1							
	5.33								
			6.26						
							7.52		
10/3/2018					5.33	7.11			5.22
	5/18/2016 5/19/2016 7/18/2016 7/19/2016 7/120/2016 9/1/2016 9/13/2016 9/15/2016 11/19/2016 11/19/2016 11/19/2016 11/11/2016 11/11/2017 11/18/2017 11/18/2017 11/19/2017 11/20/2017 11/20/2017 11/27/2017 12/26/2017	5/17/2016 5.24 5/18/2016 5/19/2016 7/18/2016 5.434038 7/19/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2016 7/20/2017 7/20/2018	5/17/2016 5.24 6.23 5/18/2016 5/18/2016 5.434038 7/19/2016 6.285413 7/19/2016 6.285413 7/19/2016 6.285413 7/19/2016 6.285413 7/19/2016 6.285413 7/19/2016 6.26 7/11/2016 7.5.22 6.3 7/11/2016 7.5.57 6.26 7/11/10/2016 7.5.48 6.8 7/19/2017 7.7 7/11/2017 7.7	177/2016 5.24 6.23 7.81 5.68/8/2016 7.18/2016 7.18/2016 5.434038 7.18/2016 5.434038 7.18/2016 6.285413 7.18 7.18/2016 7.18/2016 7.18/2016 7.18/2016 7.18/2016 7.18/2016 7.18/2016 7.18	17/2016 5.24 6.23 7.81 8.96 6.93 7.81 8.96 6.91 7.81 8.96 6.91 7.81 8.96 7.81 7.91		STATEON S. 24 S. 24 S. 25 S. 26 S. 26 S. 27.75 S. 27.75 S. 27.25 S.	14172016	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
10/4/2018				6.4				5.28	
2/25/2019	5.25	6.02							
2/26/2019			7.66		5.62		7.87		5.21
2/27/2019				6.23		7.4		5.08	
2/28/2019									
4/1/2019	5.31	6.09							
4/2/2019			7.53		5.6		7.94		5.25
4/3/2019									
4/4/2019				6.46		7.58		5.19	
9/16/2019	5.28						7.55		6.94
9/17/2019		6.25	6.47						
9/18/2019					5.6	7.8		5.19	
9/19/2019				6.45					
2/3/2020	5.4	6.09							
2/4/2020							7.74		5.31
2/5/2020			6.73	6.42	5.54				
2/7/2020						7.66		5.17	
3/16/2020	5.29	6.01							
3/17/2020			6.36		5.32		7.96		5.34
3/18/2020				6.4		7.73		5.08	
3/19/2020									
5/4/2020									

		WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-12	WGWC-9	WGWC-19
5/17/2	2016									
5/18/2	2016	6.41	7.23	5.55						
5/19/2	2016				5.93	6.85	5.99	6.91	6.31	
7/18/2	2016				5.9661					
7/19/2	2016									
7/20/2	2016	6.662463	7.281557	5.656628		6.705264	6.194334	6.962608	6.345061	
9/1/20	016							6.96		
9/13/2	2016		7.15	5.63						
9/14/2	2016	6.7				6.7			6.33	
9/15/2	2016						6.38			
11/9/2	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			
1/17/2	2017									
1/18/2	2017		6.94	5.81						
1/19/2	2017									
1/20/2	2017	6.55								
1/24/2	2017									
1/27/2	2017				6.21	6.47		6.66		
2/6/20	017						5.66			6.8
2/8/20	017									
2/23/2	2017									
3/13/2	2017									
3/14/2	2017	6.27	6.75	5.53						
3/15/2					5.97	6.75	5.77	6.3	5.99	6.78
3/17/2										
4/11/2										6.79
4/24/2										
4/25/2		6.26	6.84	5.59						
4/26/2					6.17	6.57	5.39	6.67	6.03	6.82
5/17/2										
6/7/20										6.76
7/11/2										6.99
8/8/20				5.52						
8/9/20		6.47	6.67			6.55				
8/10/2					6.05		5.59	6.7	5.86	6.59
8/25/2										
)/2017									
10/11	/2017	6.47	6.75	5.51						
10/12	2/2017				6.89	6.67	5.46	6.89	6.09	6.7
3/27/2										
3/28/2			6.79	5.6						
3/29/2					6.85	6.99	5.43	7.08	5.89	6.88
3/30/2		6.71								
6/13/2	2018									
6/14/2		6.15	6.67	5.58	5.89	6.39	5.76	6.73	6.47	6.72
9/24/2										
9/27/2										
9/28/2										
10/2/2										
10/3/2			6.92	5.45						
. 0. 0/2			- 	.						

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-12	WGWC-9	WGWC-19
10/4/2018	6.14			5.81	6.5	5.39	6.79	6.17	6.67
2/25/2019									
2/26/2019	6.17	6.74	5.6						
2/27/2019				5.78	6.47		6.7		
2/28/2019								6.045 (D)	6.98
4/1/2019									
4/2/2019		6.81	5.69						6.75
4/3/2019				6.07	6.47	5.55	6.91	6.1	
4/4/2019	6.16								
9/16/2019									
9/17/2019		6.93							
9/18/2019	6.17		5.62		6.46				6.71
9/19/2019				5.82		5.39	6.63	6.38	
2/3/2020									
2/4/2020		7.29	5.66						
2/5/2020				5.89	6.44		6.76	6.54	
2/7/2020	6.34					5.38			7.08
3/16/2020									
3/17/2020		6.83	5.61						
3/18/2020	6.28			5.89			6.94		
3/19/2020					6.56	6.43		6.64	
5/4/2020									6.9

		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				

	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	

	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	<1	1.14	19.9						
5/18/2016				2.84	50.7	0.368 (J)	388	8.88	32.1
5/19/2016								_	
7/19/2016	<1	1.4	14		62	<1	460	9	
7/20/2016				2.8					9.7
9/13/2016	<1	1.1	11			<1		8.5	
9/14/2016				2.8	79		500		6.6
9/15/2016									
11/9/2016	<1	1.1	6.3					8.2	
11/10/2016					61	<1	530		5.2
11/11/2016				2.6					
11/14/2016									
1/17/2017	<1	2.1							
1/18/2017						1.4		9.4	
1/19/2017			7.4						
1/20/2017									5.3
1/24/2017					34		600		
1/27/2017									
2/6/2017				2.7					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<1	0.97 (J)							
3/14/2017		0.57 (0)	10		43	<1		2	9.6
3/15/2017			10	2.7	40	••	610	_	0.0
3/17/2017				2.7			010		
4/11/2017									
4/24/2017	_1	0.75 (J)							
	<1	0.75 (3)	10		20	-1	620	0.0	20
4/25/2017			10	2.5	39	<1	620	8.2	20
4/26/2017				2.5					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<1	1.1	12			<1		8.5	
8/9/2017					35		780		6.5
8/10/2017				2.2					
10/10/2017	<1	1.3							
10/11/2017			11		48	<1	720	8.3	13
10/12/2017				1.9					
6/13/2018	<1		8.2					8.3	
6/14/2018		0.84 (J)		2	44	<1	620		16
9/24/2018		0.79 (J)							
9/27/2018	<1								
9/28/2018			7.6						
10/2/2018								8.3	
10/3/2018					49	<1			
10/4/2018				1.9			560		15
4/1/2019	<1	1							
4/2/2019			11			0.4 (J)		8.5	
4/3/2019									
4/4/2019				2.2	41		250		9.1
9/16/2019	0.49 (J)							8.9	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
9/17/2019		1.3	8						
9/18/2019					37	<1	130		7.3
9/19/2019				2.1					
3/16/2020	0.42 (J)	1.3							
3/17/2020			8.5			0.86 (J)		12	
3/18/2020				2.1	17		120		4.2
3/19/2020									
5/4/2020									

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/2016									
5/18/2016	0.955 (J)	5.32	0.821 (J)						
5/19/2016				15.8	1.83	146	35.9	19.2	
7/19/2016	0.76 (J)								
7/20/2016		6.5	0.82 (J)	16	1.6	150	37	11	
9/13/2016		5.6	0.81 (J)						
9/14/2016	3.4			16	1.5		39	8.6	
9/15/2016						140			
11/9/2016									
11/10/2016		5.4	0.73 (J)					5.7	
11/11/2016				14	1.4				3.4
11/14/2016						160			
1/17/2017									
1/18/2017		5.1	0.99 (J)						
1/19/2017	21								
1/20/2017									
1/24/2017									
1/27/2017				15	2.5			6.8	
2/6/2017						180			3.7
2/8/2017									
2/9/2017							60		
2/23/2017									
3/13/2017									
3/14/2017	1.4	4.6	0.83 (J)						
3/15/2017				17	2.5	170	44	11	3.6
3/17/2017									
4/11/2017							36		3.2
4/24/2017									
4/25/2017	0.89 (J)	6.6	0.7 (J)						
4/26/2017				15	2.2	180	37	8.1	3.3
5/17/2017									
6/7/2017									3.8
7/11/2017									3.3
8/8/2017			0.82 (J)						
8/9/2017	0.75 (J)	7.3						8.1	
8/10/2017				16	2.3	180	38		3.7
10/10/2017									
10/11/2017	<1	6.8	0.72 (J)						
10/12/2017				14	1.9	180	37	6.1	3.6
6/13/2018	<1								
6/14/2018		6.9	<1	14	1.7	170	37	5	3.5
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	<1	7	0.73 (J)						
10/4/2018				14	1.6	780	38	4.3	4.6
4/1/2019									
4/2/2019	0.94 (J)	8.1	1.1						3.8
4/3/2019				13	1.9	180	41	3.8	
4/4/2019									
9/16/2019	2.2								

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
9/17/2019		8.1							
9/18/2019			0.78 (J)					3.9	3.6
9/19/2019				14	1.3	190	42		
3/16/2020									
3/17/2020	4	12	1.2						
3/18/2020				12	1.6				
3/19/2020						200	45	4	
5/4/2020									4.5

		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	0.4			
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				

	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	

		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	<10	100	112						
	5/18/2016				70	190	31	1080	113	107
!	5/19/2016									
	7/19/2016	14	84	80		180	<10	1200	92	
	7/20/2016				42					78
:	9/13/2016	50	70	120			<10		100	
,	9/14/2016				40	230		1300		82
	9/15/2016									
	11/9/2016	22	110	76					130	
	11/10/2016					210	44	1400		98
	11/11/2016				72					
	11/14/2016									
	1/17/2017	8	120							
	1/18/2017						50		120	
	1/19/2017			36						
	1/20/2017									82
	1/24/2017					140		1300		02
	1/27/2017					140		1000		
	2/6/2017				24					
	2/8/2017				24					
	2/9/2017									
	2/23/2017	-10	50							
	3/13/2017	<10	58	70		000	00		440	100
	3/14/2017			70	70	220	26	4500	110	120
	3/15/2017				78			1500		
	3/17/2017									
	4/11/2017									
	4/24/2017	10	94							
	4/25/2017			70		180	10	1700	100	120
	4/26/2017				48					
	5/17/2017									
	6/7/2017									
	7/11/2017									
	8/8/2017	<10	62	72			<10		90	
	8/9/2017					180		1900		92
;	8/10/2017				38					
	10/10/2017	44	140							
	10/11/2017			90		200	42	1900	98	74
	10/12/2017				72					
	6/13/2018	24		38					110	
(6/14/2018		80		40	170	14	1500		100
!	9/24/2018		76							
!	9/27/2018	28								
!	9/28/2018			68						
	10/2/2018								130	
	10/3/2018					260	6			
	10/4/2018				60			1700		98
	4/1/2019	<10	63							
	4/2/2019			100			15		110	
	4/3/2019									
	4/4/2019				30	170		710		89
	9/16/2019	27							110	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWC-15	WGWA-7 (bg)	WGWC-16	WGWA-6 (bg)	WGWC-17
9/17/2019		120	76						
9/18/2019					160	35	520		79
9/19/2019				52					
3/16/2020	23	90							
3/17/2020			81			19		120	
3/18/2020				58	160		370		98
3/19/2020									
5/4/2020									

		WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
5/17/201	6									
5/18/201	6	33	101	29						
5/19/201	6				101	39	311	134	127	
7/19/201	6	<10								
7/20/201	6		86	<10	76	<10	290	120	88	
9/13/201	6		28	12						
9/14/201	6	150			96	24		140	92	
9/15/201							270			
11/9/201	6									
11/10/20			110	30					100	
11/11/20					100	42				98
11/14/20							320			
1/17/201										
1/18/201			98	22						
1/19/201		34								
1/20/201										
1/24/201										
1/27/201					50	18			80	
2/6/2017							330			36
2/8/2017										
2/9/2017								180		
2/23/201										
3/13/201										
3/14/201		32	110	22						
3/15/201		-			120	54	370	160	100	120
3/17/201					.20	· .	0.0			.20
4/11/201								120		68
4/24/201										
4/25/201		22	86	22						
4/26/201					100	42	380	140	92	76
5/17/201										
6/7/2017										74
7/11/201										70
8/8/2017				4 (J)						
8/9/2017		20	92	(-)					120	
8/10/201					96	30	380	130		66
10/10/20										
10/11/20		4 (J)	110	10						
10/12/20		· /			100	54	450	120	110	100
6/13/201		<10								
6/14/201			92	26	94	16	410	120	88	74
9/24/201										
9/27/201										
9/28/201										
10/2/201										
10/3/201		24	100	50						
10/4/201					110	56	520	140	100	100
4/1/2019										
4/2/2019		25	100	28						88
4/3/2019					66	<10	430	120	72	
4/4/2019										
9/16/201		41								

	WGWA-5 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-19
9/17/2019		120							
9/18/2019			36					110	96
9/19/2019				89	27	440	130		
3/16/2020									
3/17/2020	18	100	20						
3/18/2020				73	26				
3/19/2020						540	160	95	
5/4/2020									110

		Plant Wansley	Client: Southern Company	Data: Wansley AP
	WGWC-14A			
5/17/2016	nane in			
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				

	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.

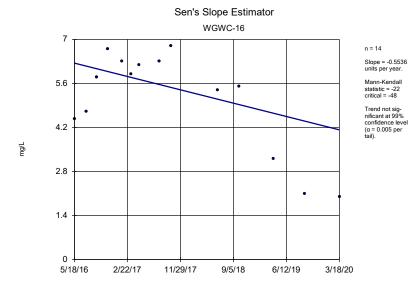
Trend Test - Significant Results

	Plant Wansley	Client: So	uthern Comp	any Data: W	ansley A	AP Print	ted 6/18/20	020, 7:49 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
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

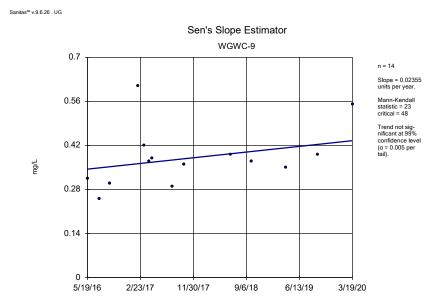
Trend Test - All Results

	Plant Wansle	y Client: S	Southern Cor	mpany Da	ita: Wansley	AP	Printed 6/18/2	2020, 7:49 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
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
Calcium (mg/L)	WGWC-8	12.62	69	48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16	-16.32	-13	-48	No	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-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
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-16	0	0	48	No	14	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
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
Total Dissolved Solids (mg/L)	WGWC-8	63.11	74	48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-9	0	-6	-48	No	14	0	n/a	n/a	0.01	NP

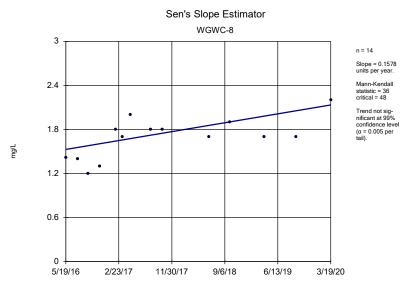
Sanitas™ v.9.6.26 . UG Sanitas™ v.9.6.26 . UG



Constituent: Boron Analysis Run 6/18/2020 7:46 PM View: AllI Trend Test Plant Wansley Client: Southern Company Data: Wansley AP



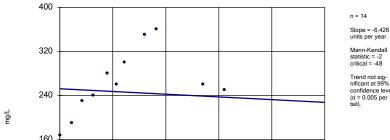
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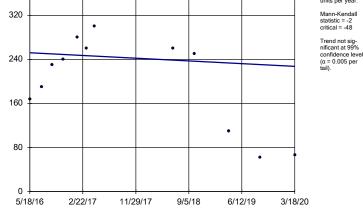
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Sen's Slope Estimator

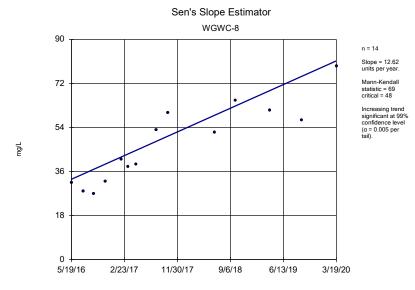
WGWC-16



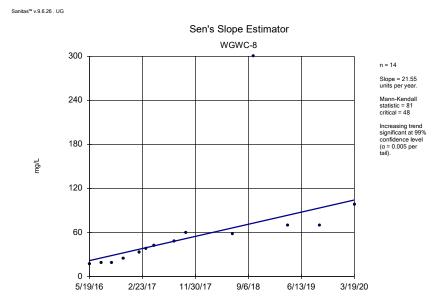
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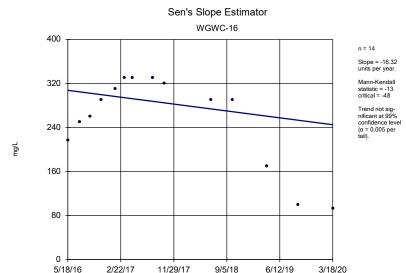
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Constituent: Calcium Analysis Run 6/18/2020 7:46 PM View: AllI Trend Test
Plant Wansley Client: Southern Company Data: Wansley AP

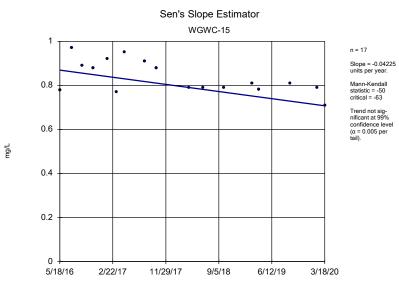


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Plant Wansley Client: Southern Company Data: Wansley AP

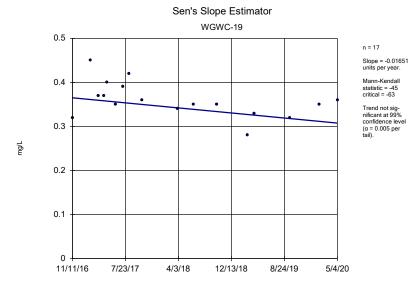


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Plant Wansley Client: Southern Company Data: Wansley AP

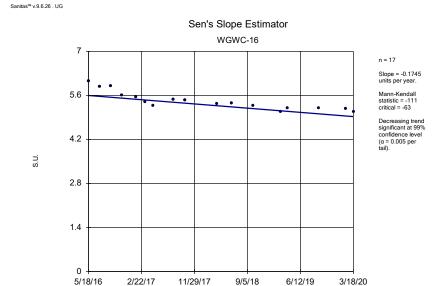




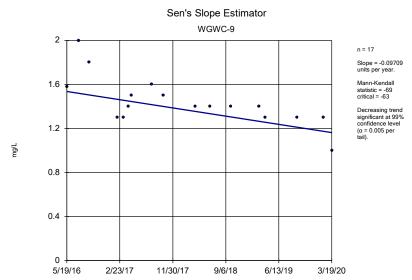
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Plant Wansley Client: Southern Company Data: Wansley AP



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Plant Wansley Client: Southern Company Data: Wansley AP

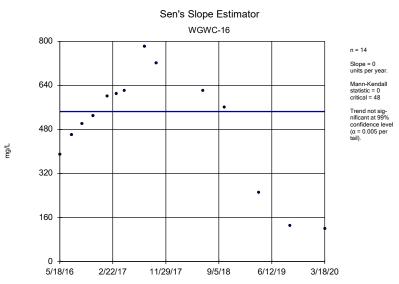


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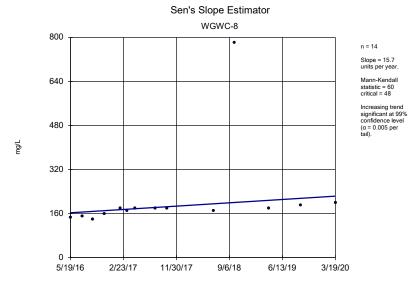


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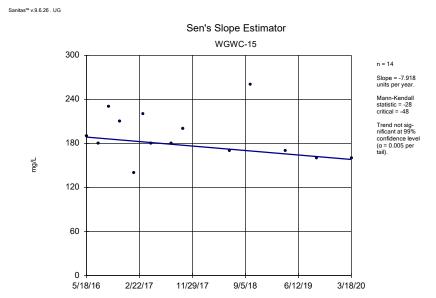




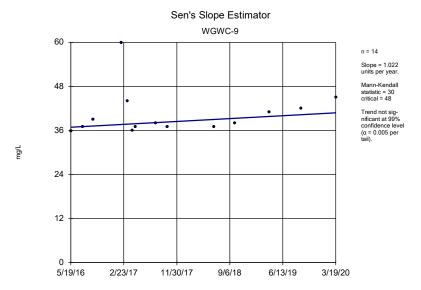
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Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Sulfate Analysis Run 6/18/2020 7:47 PM View: AllI Trend Test
Plant Wansley Client: Southern Company Data: Wansley AP

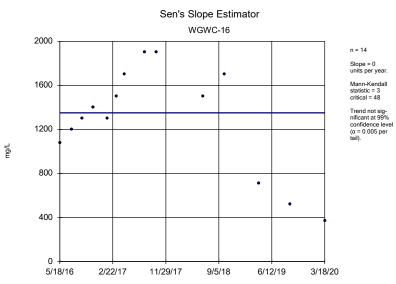


Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:47 PM View: AllI Trend Test
Plant Wansley Client: Southern Company Data: Wansley AP

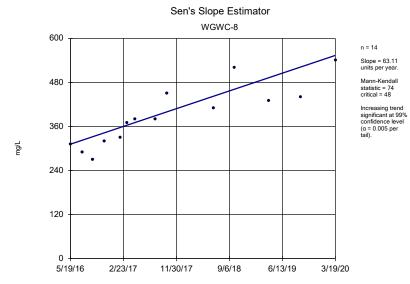


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Plant Wansley Client: Southern Company Data: Wansley AP



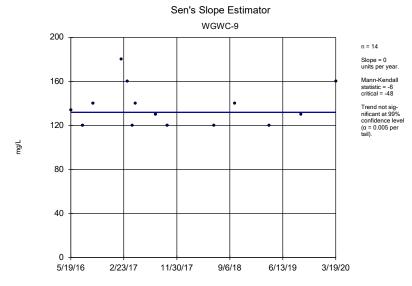


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Plant Wansley Client: Southern Company Data: Wansley AP



Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:47 PM View: AllI Trend Test
Plant Wansley Client: Southern Company Data: Wansley AP

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Constituent: Total Dissolved Solids Analysis Run 6/18/2020 7:47 PM View: AllI Trend Test
Plant Wansley Client: Southern Company Data: Wansley AP

FIGURE F.

Upper Tolerance Limits

		Plant Wansley	Client: Southe	ern Company	Data: Wans	sley AP	Printed 7/	22/2020, 1	2:08 PM		
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Bg N	Std. Dev.	%NDs	Transform	<u>Alpha</u>	Method
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											
		CCR-Rule		Federal	State						
Constituent Name	MCL	Specified	Background	GWPS	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

 ${\it Highlighted cells indicate background is higher than established limit.}$

FIGURE H.

Confidence Interval Summary Table - Significant Results

				-				-		
	Pla	ant Wansley C	lient: Southern Co	ompany Dat	a: Wan	sley AP	Printed 7	/22/2020, 1:49 PM		
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	Transform	<u>Alpha</u>	Method
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.

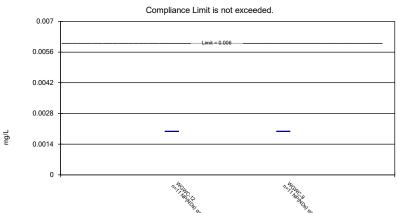
Confidence Interval Summary Table - All Results

	Cornic	Jence	interval	Juilli	па	ı y ı	abic	- /11 110	Suits	•
	P	lant Wansley	Client: Southern 0	Company Dat	ta: War	nsley AF	Printed	7/22/2020, 1:49 PM	l	
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	<u>Alpha</u>	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-12 WGWC-9	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.002	0.0005	0.00	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-11	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-13	0.001	0.00045	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A WGWC-15	0.0019	0.00093	0.01	No	16	0	No	0.01	Param.
, , ,	WGWC-15 WGWC-16	0.002399	0.00133	0.01	No	16	37.5		0.01	
Arsenic (mg/L)								No		Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No 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-13 WGWC-14A	0.3061	0.2371	4	No	17	82.35	No	0.01	NP (NDs)
	WGWC-14A WGWC-15	0.1	0.7903	4	No	17	02.33	No	0.01	Param.
Fluoride (mg/L)				4						
Fluoride (mg/L)	WGWC-16	0.18	0.084		No	17 17	11.76	No 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 No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No 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 Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:49 PM

	Plant Wansley		Client: Southern Company		Data: Wansley AP		Printed 7/22/2020, 1:49 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	%NDs	<u>Transform</u>	<u>Alpha</u>	Method
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	In(x)	0.01	Param.
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.
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)

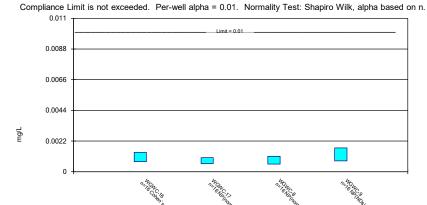
Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 7/22/2020 1:48 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

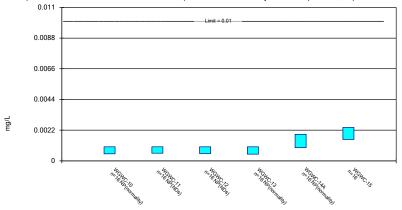
Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Arsenic 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

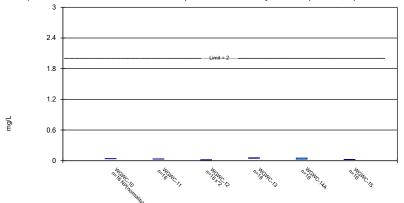
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/22/2020 1:48 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

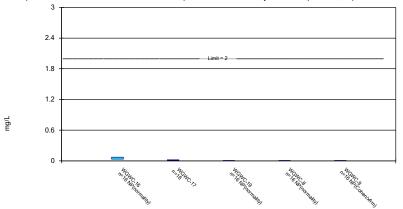
Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



Parametric and Non-Parametric (NP) Confidence Interval

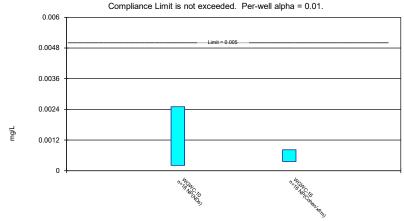
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 7/22/2020 1:48 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

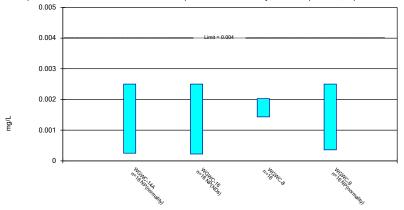
Non-Parametric Confidence Interval



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

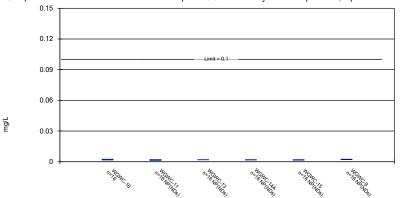
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 7/22/2020 1:48 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

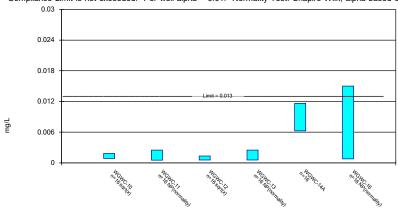
Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



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.

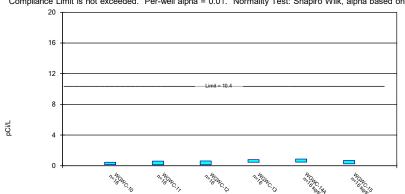


Constituent: Cobalt Analysis Run 7/22/2020 1:48 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

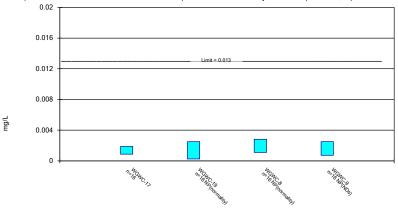
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric and Non-Parametric (NP) Confidence Interval

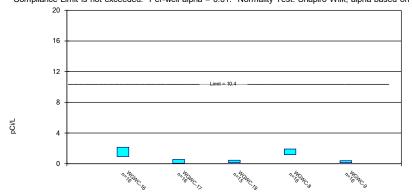
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/22/2020 1:48 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

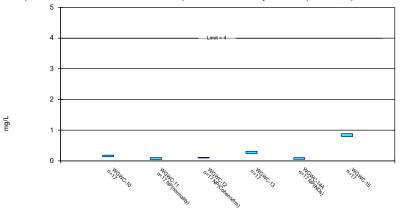
Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval



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.

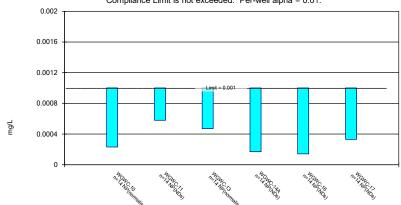


Constituent: Fluoride Analysis Run 7/22/2020 1:48 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

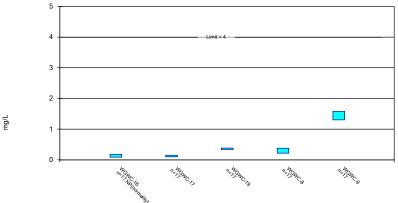
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

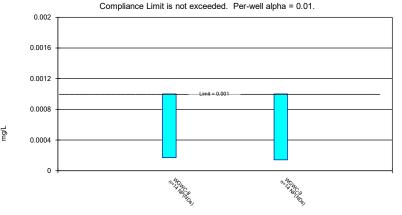
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



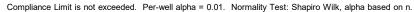
Constituent: Fluoride Analysis Run 7/22/2020 1:49 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

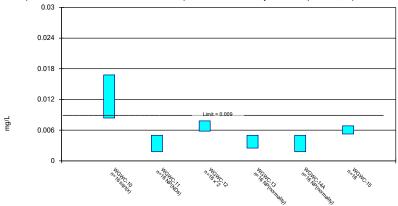
Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval



Parametric and Non-Parametric (NP) Confidence Interval

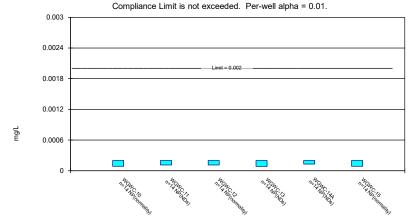




Constituent: Lithium Analysis Run 7/22/2020 1:49 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

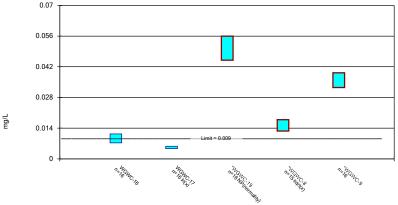
Non-Parametric Confidence Interval



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 exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

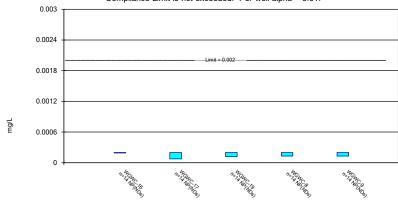


Constituent: Lithium Analysis Run 7/22/2020 1:49 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

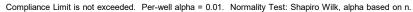
Sanitas™ v.9.6.26 . UG

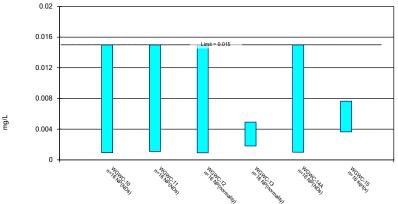
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Parametric and Non-Parametric (NP) Confidence Interval



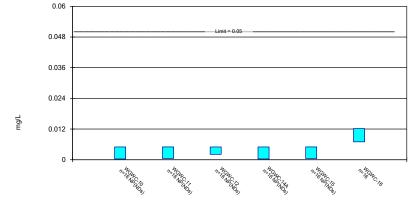


Constituent: Molybdenum Analysis Run 7/22/2020 1:49 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval

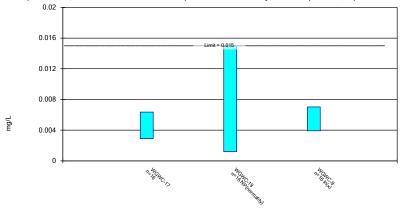
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 7/22/2020 1:49 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Parametric and Non-Parametric (NP) Confidence Interval

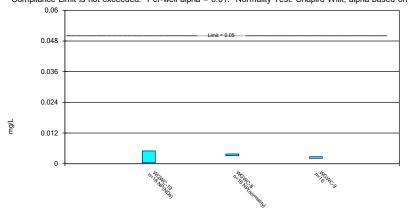
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/22/2020 1:49 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

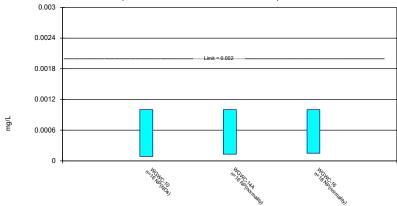
Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



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
 104
 Yes
 16
 0
 No
 0.01
 NP (normality)

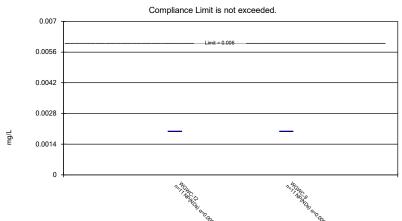
Confidence Interval Summary Table - All Results

	Commo	Jence	interval	Juilli	па	ı y ı	abic	- /11 110	Suits	•
	Р	lant Wansley	Client: Southern 0	Company Dat	ta: War	nsley AF	Printed	7/22/2020, 1:42 PM	l	
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	<u>Alpha</u>	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-12	0.002	0.002	0.006	No	11	90.91	No	0.006	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.002	0.0005	0.00	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-11	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-13	0.001	0.00045	0.01	No	16	56.25	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A WGWC-15	0.0019	0.00093	0.01	No	16	0	No	0.01	Param.
, ,	WGWC-15 WGWC-16	0.002399	0.00133	0.01	No	16	37.5		0.01	
Arsenic (mg/L)								No		Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00058	0.01	No	16	50	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00055	0.01	No	16	62.5	No No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	16	81.25	No No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	16	0	No 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-11	0.11	0.047	4	No	17	23.53	No	0.01	NP (Cohens/xfrm)
, ,	WGWC-12	0.3081	0.2371	4	No	17	0	No	0.01	Param.
Fluoride (mg/L) Fluoride (mg/L)	WGWC-13 WGWC-14A	0.3061	0.2371	4	No	17	82.35	No	0.01	NP (NDs)
	WGWC-14A WGWC-15			4		17				
Fluoride (mg/L)		0.8825	0.7903	4	No		0	No No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.18	0.084		No	17 17	11.76	No 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 No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.58	1.3	4	No	17	0	No 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 Plant Wansley Client: Southern Company Data: Wansley AP Printed 7/22/2020, 1:42 PM

	Р	lant Wansley	Client: Southern Company		Data: Wansley AP		Printed 7/22/2020, 1:42 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	<u>%NDs</u>	Transform	<u>Alpha</u>	Method
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	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-19	0.056	0.045	0.04	Yes	16	0	No	0.01	NP (normality)
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	In(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)

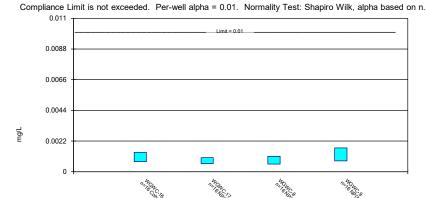
Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 7/22/2020 1:38 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

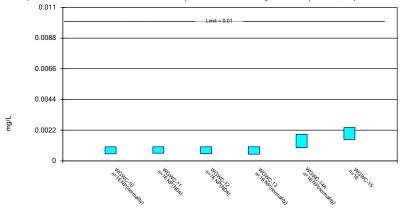
Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Arsenic 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

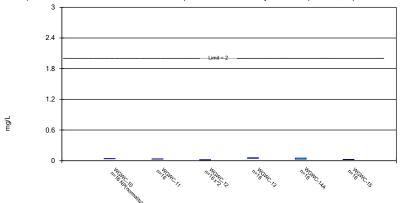
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/22/2020 1:38 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

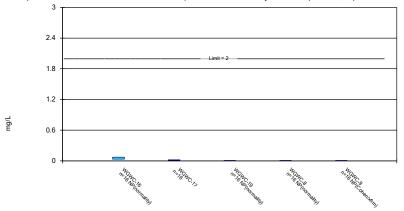
Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



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.

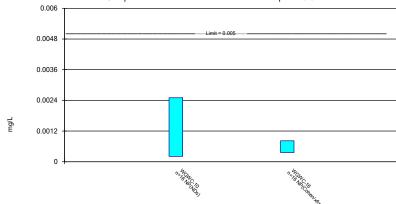


Constituent: Barium Analysis Run 7/22/2020 1:38 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

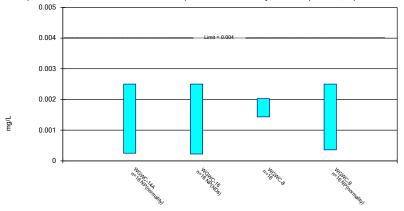
Compliance Limit is not exceeded. Per-well alpha = 0.01.



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

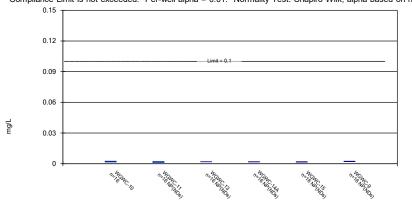
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 7/22/2020 1:38 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

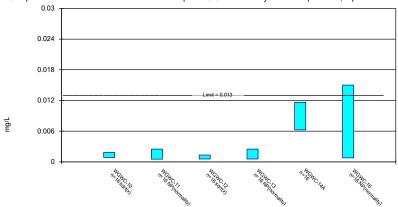
Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



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.

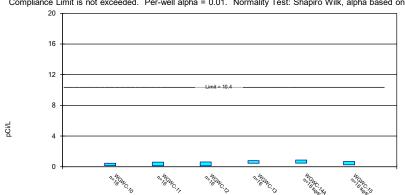


Constituent: Cobalt Analysis Run 7/22/2020 1:38 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

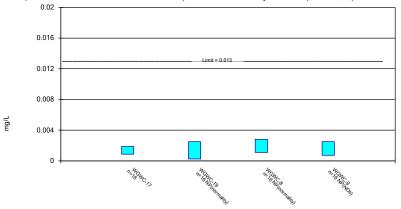
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric and Non-Parametric (NP) Confidence Interval

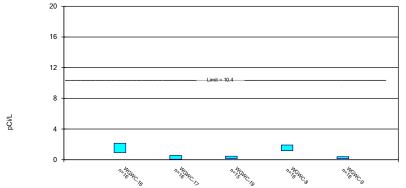
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 7/22/2020 1:38 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

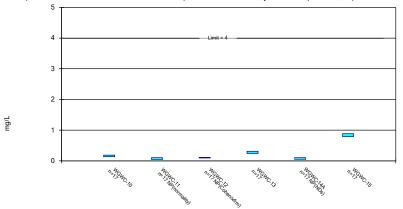
Sanitas™ v.9.6.26 . UG

Parametric Confidence Interval



Parametric and Non-Parametric (NP) Confidence Interval

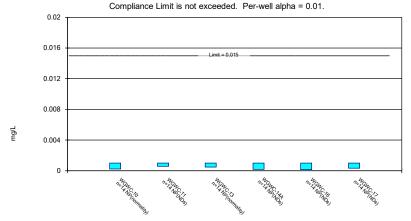
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 7/22/2020 1:39 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

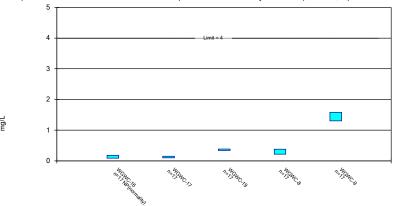
Non-Parametric Confidence Interval



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

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

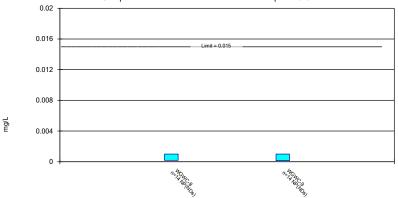


Constituent: Fluoride Analysis Run 7/22/2020 1:39 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

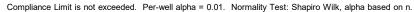
Sanitas™ v.9.6.26 . UG

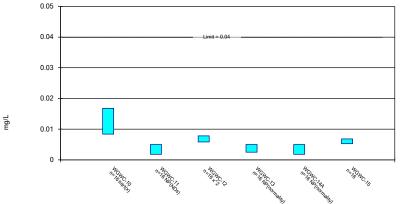
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Parametric and Non-Parametric (NP) Confidence Interval

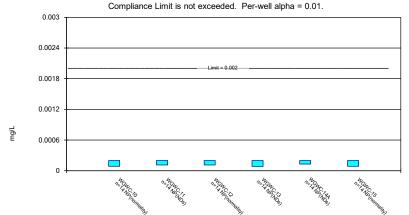




Constituent: Lithium Analysis Run 7/22/2020 1:39 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

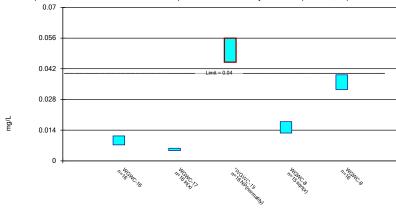
Non-Parametric Confidence Interval



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 exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

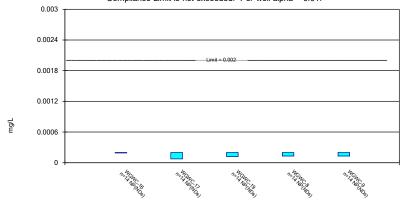


Constituent: Lithium Analysis Run 7/22/2020 1:39 PM View: AIV Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

Non-Parametric Confidence Interval

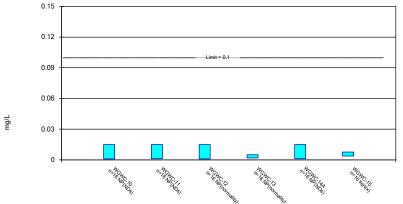
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Sanitas™ v.9.6.26 . UG

Parametric and Non-Parametric (NP) Confidence Interval



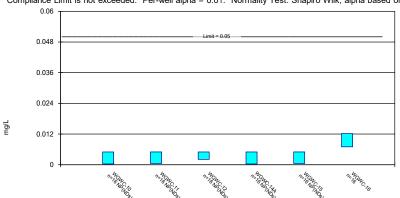


Constituent: Molybdenum Analysis Run 7/22/2020 1:39 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

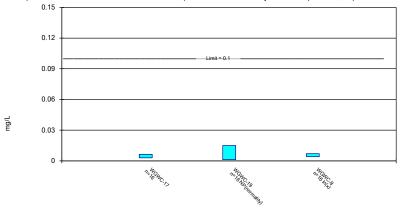
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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.

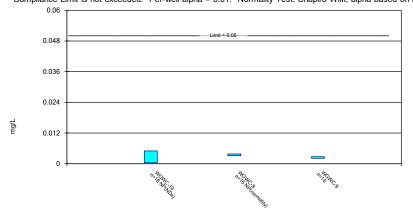


Constituent: Molybdenum Analysis Run 7/22/2020 1:39 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

Sanitas™ v.9.6.26 . UG

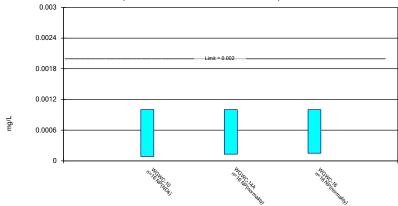
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

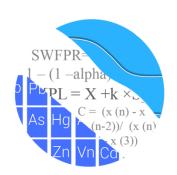


Constituent: Thallium Analysis Run 7/22/2020 1:39 PM View: AIV
Plant Wansley Client: Southern Company Data: Wansley AP

GROUNDWATER STATS CONSULTING

January 27, 2021

Southern Company Services Attn: Ms. Kristen Jurinko 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308



Re: Plant Wansley Ash Pond

Statistical Analysis – September 2020 2nd Semi-Annual Sample Event

Dear Ms. Jurinko,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2020 2nd 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, and WGWA-18
- Downgradient wells: WGWC-8, WGWC-9, WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, and WGWC-19

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 constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

- 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).

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event. During the annual Scan event conducted in February 2020, antimony was not detected, and therefore, was not required to be sampled during the September 2020 event. Antimony was included in the time series and box plots, but no formal statistics were required.

For all constituents, a substitution of the most recent reporting limit is used for nondetect data. For calculating prediction limits, the substitution is performed for individual wells and may differ across wells. This generally gives the most conservative limit in each case. In the time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group.

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.

Statistical Methods – Appendix III Parameters:

Based on the earlier evaluation described above, Appendix III parameters are evaluated using interwell prediction limits combined with a 1-of-2 resample plan for all constituents: 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.

- 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.

Note that values shown on data pages reflect raw data and any non-detects that have been substituted with one-half of the reporting limit will be shown as "<" the original reporting limit on the data pages.

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.

Statistical Evaluation of Appendix III Parameters – September 2020

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged and a summary of flagged outliers follows this report (Figure C).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2020 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well, which is September 2020 for all downgradient wells, 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. Several 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. A summary of the trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

Increasing trends:

Calcium: WGWC-8Chloride: WGWC-8

• Sulfate: WGWA-4 (upgradient) and WGWC-8

• TDS: WGWC-8

Decreasing trends:

• Chloride: WGWA-5 (upgradient)

• Fluoride: WGWC-9

• pH: WGWA-2 (upgradient) and WGWC-16

Statistical Methods – Appendix IV Parameters

Appendix IV parameters are evaluated by statistically comparing the mean or median of each downgradient well/constituent pair against corresponding Groundwater Protection Standards (GWPS). The GWPS may be either regulatory (MCL or CCR rule-specified limits) or site-specific limits that are based on upgradient background groundwater quality. Site-specific background limits are determined using upper tolerance limits, and the comparison of downgradient means or medians to GWPS is performed using confidence intervals. The methods are described below.

Statistical Evaluation of Appendix IV Parameters – September 2020

For Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Well/constituent pairs that have 100% nondetects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. Although high values for lithium in upgradient wells WGWA-5 and WGWA-6 are less than the CCR-Rule Specified level, they were previously flagged as outliers to maintain statistical limits that are conservative (i.e. lower) from a regulatory perspective. A complete list of flagged outliers follows this report (Figure C).

First, interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2020 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. 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 levels 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 Georgia EPD Rule requirements and the Federal CCR requirements, Federal and State GWPS were established for statistical comparison of Appendix IV constituents for the September 2020 sample event (Figure G). Note that a GWPS is established for antimony; however, since there were no recent detections above the reporting limit, no statistical comparison with confidence intervals was required.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well. The Sanitas software was used to calculate the upper tolerance limits and the confidence intervals, either parametric or nonparametric, as appropriate. For the State requirements, confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-

.10(6)(a). For Federal requirements, confidence intervals were compared to the GWPS prepared according to the CCR Rule. 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 interval results, along with graphical comparisons against GWPS for both Federal and States requirements, follow this letter (Figures H and I, respectively).

For the federal confidence intervals, the following exceedance was noted:

• Lithium: WGWC-19

For the state confidence intervals, the following exceedances were noted:

• Lithium: WGWC-8, WGWC-9, and WGWC-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,

Abdul Diane

Groundwater Analyst

Kristina L. Rayner

Groundwater Statistician

Kristina Rayner

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

100% Non-Detects

Analysis Run 1/6/2021 9:43 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Antimony (mg/L)

WGWC-10, WGWC-11, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19, WGWC-8

Arsenic (mg/L)

WGWC-19

Beryllium (mg/L)

WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19

Cadmium (mg/L)

WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Chromium (mg/L)

WGWC-12, WGWC-16, WGWC-17, WGWC-19, WGWC-8

Cobalt (mg/L)

WGWC-15

Lead (mg/L)

WGWC-12, WGWC-15, WGWC-19

Molybdenum (mg/L)

WGWC-16, WGWC-8

Selenium (mg/L)

WGWC-13, WGWC-17

Thallium (mg/L)

WGWC-11, WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-19, WGWC-8, WGWC-9

Appendix III - Interwell Prediction Limits - Significant Results

	F	Plant Wansley	Client: \$	Southern Com	npany Data	a: Wansley Ash Pond	Printed 1/	6/2021, 9:30	AM		
Constituent	Well	Upper Lim.	Lower Lim	n.Date	Observ.	Sig. Bg N Bg Mean	Std. Dev.	%NDs ND	Adj. Tr	ansform Alpha	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	9/23/2020	1.5	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	9/22/2020	2.5	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	9/23/2020	0.68	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	9/22/2020	81	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	9/23/2020	58	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	9/22/2020	100	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	9/23/2020	0.63	Yes 143 n/a	n/a	49.65 n/a	n/a	0.0000962	9 NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	9/23/2020	0.82	Yes 143 n/a	n/a	49.65 n/a	n/a	0.0000962	9 NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-16	7.96	5.09	9/23/2020	5.05	Yes 142 n/a	n/a	0 n/a	n/a	0.0001949	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	9/23/2020	85	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	9/22/2020	200	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	9/23/2020	54	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	9/23/2020	250	Yes 119 n/a	n/a	8.403 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	9/22/2020	600	Yes 119 n/a	n/a	8.403 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Printed 1/6/2021, 9:30 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond Constituent <u>Well</u> Bg N Bg Mean Std. Dev. %NDs ND Adj. NP Inter (NDs) 1 of 2 0.08 9/23/2020 0.08ND No 119 Boron (mg/L) n/a 99.16 n/a 0.0001382 n/a Boron (mg/L) WGWC-11 0.08 n/a 9/24/2020 0.08ND Nο 119 n/a n/a 99.16 n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) WGWC-12 0.08 n/a 9/23/2020 0.08ND n/a 99.16 n/a 0.0001382 NP Inter (NDs) 1 of 2 WGWC-13 9/24/2020 0.08ND 99.16 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 n/a Nο 119 n/a n/a n/a n/a Boron (mg/L) WGWC-14A 0.08 n/a 9/24/2020 0.08ND No n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 WGWC-15 9/23/2020 0.08ND 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 n/a No 119 n/a n/a 99.16 n/a n/a WGWC-16 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 9/23/2020 1.5 n/a WGWC-17 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 n/a 9/23/2020 0.08ND 119 n/a 99.16 No n/a n/a n/a WGWC-19 0.08 n/a 9/23/2020 0.08ND No 119 n/a 99.16 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) n/a n/a NP Inter (NDs) 1 of 2 WGWC-8 9/22/2020 0.0001382 Boron (ma/L) 0.08 n/a 2.5 Yes 119 n/a 99.16 n/a n/a n/a Boron (mg/L) WGWC-9 0.08 n/a 9/23/2020 0.68 Yes 119 99.16 n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 n/a n/a Calcium (mg/L) WGWC-10 n/a 9/23/2020 7.7 No 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) WGWC-11 58 n/a 9/24/2020 5.2 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) WGWC-12 n/a 9/23/2020 13 No 119 0 0.0001382 NP Inter (normality) 1 of 2 0.0001382 WGWC-13 0 NP Inter (normality) 1 of 2 Calcium (mg/L) 58 n/a 9/24/2020 1.4 No 119 n/a n/a n/a n/a Calcium (mg/L) WGWC-14A 9/24/2020 0 0.0001382 NP Inter (normality) 1 of 2 58 n/a 0.99 No 119 n/a n/a WGWC-15 32 0 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) 58 n/a 9/23/2020 No 119 n/a n/a n/a n/a Calcium (mg/L) WGWC-16 n/a 9/23/2020 43 119 0 0.0001382 NP Inter (normality) 1 of 2 No n/a n/a WGWC-17 0 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) n/a 9/23/2020 5.9 No 58 119 n/a n/a n/a Calcium (mg/L) WGWC-19 58 n/a 9/23/2020 13 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) WGWC-8 n/a 9/22/2020 81 Yes n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) WGWC-9 58 n/a 9/23/2020 10 Nο 119 n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 WGWC-10 0 Chloride (mg/L) 6.05 9/23/2020 1.3 n/a 0.0001382 NP Inter (normality) 1 of 2 n/a WGWC-11 0.0001382 Chloride (mg/L) 6.05 n/a 9/24/2020 1 No 119 n/a n/a 0 n/a n/a NP Inter (normality) 1 of 2 Chloride (mg/L) WGWC-12 6.05 n/a 9/23/2020 2.8 No 119 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Chloride (mg/L) WGWC-13 9/24/2020 119 0 0.0001382 NP Inter (normality) 1 of 2 6.05 n/a 1.6 No n/a n/a n/a n/a Chloride (mg/L) WGWC-14A 6.05 n/a 9/24/2020 3.1 119 0 0.0001382 NP Inter (normality) 1 of 2 No n/a n/a n/a WGWC-15 Chloride (mg/L) n/a 9/23/2020 1.5 No 119 0 0.0001382 NP Inter (normality) 1 of 2 6.05 n/a n/a n/a n/a Chloride (mg/L) WGWC-16 6.05 n/a 9/23/2020 58 Yes 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 119 n/a n/a Chloride (mg/L) WGWC-17 6.05 n/a 9/23/2020 1.2 No 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Chloride (mg/L) WGWC-19 6.05 n/a 9/23/2020 2.6 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Chloride (ma/L) WGWC-8 n/a 9/22/2020 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 WGWC-9 9/23/2020 0 0.0001382 NP Inter (normality) 1 of 2 Chloride (mg/L) 6.05 n/a 2.4 Nο 119 n/a n/a n/a n/a 0.09J Fluoride (mg/L) WGWC-10 0.284 n/a 9/23/2020 49 65 0.00009629 NP Inter (normality) 1 of 2 No 143 n/a n/a n/a n/a Fluoride (mg/L) WGWC-11 0.00009629 NP Inter (normality) 1 of 2 0.284 n/a 9/24/2020 0.18 No 143 n/a n/a 49.65 n/a n/a 0.064.1 Fluoride (mg/L) WGWC-12 0.284 n/a 9/23/2020 No 143 49.65 n/a 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) WGWC-13 0.284 n/a 9/24/2020 0.1ND No 143 49.65 0.00009629 NP Inter (normality) 1 of 2 n/a n/a Fluoride (mg/L) WGWC-14A 0.284 n/a 9/24/2020 0.028.1 No 143 49.65 n/a n/a 0.00009629 NP Inter (normality) 1 of 2 n/a n/a Fluoride (mg/L) WGWC-15 0.284 9/23/2020 0.63 Yes 49.65 0.00009629 NP Inter (normality) 1 of 2 n/a n/a n/a n/a n/a Fluoride (ma/L) WGWC-16 0.284 n/a 9/23/2020 0.049J No 143 n/a n/a 49.65 n/a n/a 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) WGWC-17 9/23/2020 No 49.65 0.00009629 NP Inter (normality) 1 of 2 n/a n/a n/a 0.00009629 NP Inter (normality) 1 of 2 WGWC-19 Fluoride (mg/L) 0.284 n/a 9/23/2020 0.25 Nο 143 n/a n/a 49.65 n/a n/a WGWC-8 9/22/2020 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) 0.284 n/a 0.14 No 143 49.65 n/a Fluoride (mg/L) WGWC-9 9/23/2020 0.82 0.00009629 NP Inter (normality) 1 of 2 0.284 n/a Yes 143 n/a n/a 49.65 n/a n/a WGWC-10 9/23/2020 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 7.96 5.09 6.14 No 0 WGWC-11 9/24/2020 0 5.09 5.5 No 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 7.96 n/a n/a n/a n/a pH (S.U.) WGWC-12 7.96 5.09 9/23/2020 6.42 No 142 n/a 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) WGWC-13 7.96 5.09 9/24/2020 6.29 0 n/a 0.0001949 NP Inter (normality) 1 of 2 n/a pH (S.U.) WGWC-14A 7.96 5.09 9/24/2020 5 16 Nο 142 n/a n/a n n/a n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-15 pH (S.U.) 7.96 5.09 9/23/2020 7.35 No 0 n/a n/a NP Inter (normality) 1 of 2 n/a pH (S.U.) WGWC-16 7.96 5.09 9/23/2020 5.05 Yes 142 n/a n/a 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) WGWC-17 7.96 5.09 9/23/2020 5.89 0 n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-19 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 5.09 9/23/2020 6.59 142 0 7.96 No n/a n/a n/a n/a pH (S.U.) WGWC-8 7.96 5.09 9/22/2020 5.17 142 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 No n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-9 5.09 9/23/2020 0 pH (S.U.) 7.96 5.8 No 142 n/a n/a n/a n/a Sulfate (mg/L) WGWC-10 21 n/a 9/23/2020 1.8 Nο 119 n/a 22.69 n/a n/a 0.0001382 NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

		Plant Wansley	Plant Wansley Client: Southern Comp			pany Data: Wansley Ash Pond				Printed 1/6	6/2021, 9	9:30 AM			
Constituent	Well	Upper Lin	n.Lower L	im.Date	Observ	<u>/.</u>	Sig. Bg	N Bo	g Mean	Std. Dev.	%NDs	ND Adj.	Transform	m <u>Alpha</u>	Method
Sulfate (mg/L)	WGWC-11	21	n/a	9/24/2020	2.7		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-12	21	n/a	9/23/2020	12		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-13	21	n/a	9/24/2020	0.63J		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-14A	21	n/a	9/24/2020	1.2		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-15	21	n/a	9/23/2020	21		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	9/23/2020	85		Yes 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-17	21	n/a	9/23/2020	4.4		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-19	21	n/a	9/23/2020	3		No 11	9 n/a	'a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	9/22/2020	200		Yes 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	9/23/2020	54		Yes 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-10	190	n/a	9/23/2020	50		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-11	190	n/a	9/24/2020	60		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-12	190	n/a	9/23/2020	90		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-13	190	n/a	9/24/2020	21		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-14A	190	n/a	9/24/2020	24		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-15	190	n/a	9/23/2020	150		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	9/23/2020	250		Yes 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-17	190	n/a	9/23/2020	60		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-19	190	n/a	9/23/2020	94		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	9/22/2020	600		Yes 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-9	190	n/a	9/23/2020	150		No 11	9 n/a	'a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

	Plant Wansley Client: Southern Compar	ny Data: War	nsley Ash I	Pond Prir	nted 1/	6/2021,	9:35 AM	Л			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Calcium (mg/L)	WGWC-8	12.48	83	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)	-0.1417	-61	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8	20.51	93	53	Yes	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9	-0.1083	-86	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-2 (bg)	-0.06212	-78	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWC-16	-0.1634	-128	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)	0.8303	68	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	12.63	71	53	Yes	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	67.41	88	53	Yes	15	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limit Exceedances - All Results

	Plant Wansley	Client: Southern Compar	ny Data: Wa	nsley Ash	Pond Pri	nted 1/	6/2021	, 9:35 AI	М			
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	WGWA-1 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-18 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-2 (bg)		0	-12	-53	No	15	93.33	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-3 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-4 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-5 (bg)		0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-6 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-7 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-16		-0.7036	-36	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8		0.193	50	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9		0.03698	37	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-1 (bg)		0.0517	38	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-18 (bg)		-0.9964	-25	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-2 (bg)		-0.5093	-24	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-3 (bg)		0	3	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-4 (bg)		0	-20	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-5 (bg)		-0.1022	-19	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-6 (bg)		0	2	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-7 (bg)		-0.09047	-22	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8		12.48	83	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-1 (bg)		0.08459	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-18 (bg)		-0.1377	-20	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-2 (bg)		0	15	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-3 (bg)		0	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-4 (bg)		-0.0272	-45	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)		-0.1417	-61	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-6 (bg)		0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-7 (bg)		0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16		-32.02	-27	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8		20.51	93	53	Yes	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-1 (bg)		0	-16	-68	No	18	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-18 (bg)		-0.007356	-35	-68	No	18	22.22	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-2 (bg)		-0.01003	-54	-68	No	18	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-3 (bg)		0	-27	-68	No	18	72.22	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-4 (bg)		-0.00869	-63	-68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-5 (bg)		0	29	63	No	17	88.24	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-6 (bg)		-0.008941	-57	-68	No	18	11.11	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-7 (bg)		0	-18	-68	No	18	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-15		-0.04873	-67	-68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9		-0.1083	-86	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-1 (bg)		-0.04386	-45	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-18 (bg)		-0.04192	-5	-63	No	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-2 (bg)		-0.06212	-78	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-3 (bg)		-0.01158	-13	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-4 (bg)		-0.007256	-10	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-5 (bg)		-0.03392	-20	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-6 (bg)		0.02612	16	63	No	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-7 (bg)		-0.05214	-38	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWC-16		-0.1634	-128	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-1 (bg)		0	-23	-53	No	15	86.67		n/a	0.01	NP
Sulfate (mg/L)	WGWA-18 (bg)		-0.8343	-25	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-2 (bg)		-0.02732	-12	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-3 (bg)		0.01035	7	53	No	15	6.667		n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)		0.8303	68	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-5 (bg)		0.07633	16	48	No	14	21.43		n/a	0.01	NP
	/											

Appendix III Trend Tests - Prediction Limit Exceedances - All Results $^{\circ}$

	Plant Wansley Client: Southern Compa	any Data: Wa	nsley Ash	Pond Pri	nted 1/	6/2021,	9:35 AI	М			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Sulfate (mg/L)	WGWA-6 (bg)	0	-2	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-7 (bg)	0	-22	-53	No	15	66.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16	-67.59	-14	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	12.63	71	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-9	1.711	42	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-1 (bg)	1.921	16	53	No	15	26.67	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-18 (bg)	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-2 (bg)	0.6073	3	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-3 (bg)	2.485	17	53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-4 (bg)	1.172	15	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-5 (bg)	0	0	48	No	14	14.29	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-6 (bg)	3.921	22	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-7 (bg)	0	3	53	No	15	20	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-16	-175.9	-11	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	67.41	88	53	Yes	15	0	n/a	n/a	0.01	NP

Upper Tolerance Limit Summary Table

Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:28 AM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Alpha</u> Method 0.0022 98.95 n/a 0.007651 Antimony (mg/L) n/a n/a 95 n/a n/a n/a NP Inter(NDs) 0.0009833 NP Inter(NDs) Arsenic (mg/L) 0.0014 n/a n/a 135 n/a n/a 77.04 n/a n/a Barium (mg/L) 0.062 0 0.0009833 NP Inter(normality) n/a n/a 135 n/a n/a n/a n/a Beryllium (mg/L) 0.0025 n/a 135 94.07 n/a 0.0009833 NP Inter(NDs) NP Inter(NDs) Cadmium (mg/L) 0.0025 n/a n/a 135 n/a n/a 100 n/a 0.0009833 n/a Chromium (mg/L) 0.0049 n/a 135 n/a 94.07 n/a 0.0009833 NP Inter(NDs) Cobalt (mg/L) 0.001035 NP Inter(normality) 0.013 n/a 46.27 n/a n/a n/a 134 n/a n/a Combined Radium 226 + 228 (pCi/L) 10.4 132 0 0.001147 NP Inter(normality) 49.65 0.0006523 NP Inter(normality) Fluoride (mg/L) 0.284 n/a n/a 143 n/a n/a n/a n/a Lead (mg/L) 0.001 119 89.08 n/a 0.002234 NP Inter(NDs) 0.001642 NP Inter(normality) Lithium (mg/L) 0.009 48.8 n/a n/a 125 n/a n/a n/a n/a Mercury (mg/L) 0.0002 119 88.24 0.002234 NP Inter(NDs) Molybdenum (mg/L) NP Inter(NDs) 0.015 0.001035 n/a n/a 134 n/a n/a 88.06 n/a n/a Selenium (mg/L) 0.005 n/a 135 93.33 n/a 0.0009833 NP Inter(NDs) NP Inter(NDs) Thallium (mg/L) 0.001 0.0009833 n/a n/a 135 n/a n/a 94.81 n/a n/a

	WANSL	EY AP GWPS			
		CCR-Rule		Federal	State
Constituent Name	MCL	Specified	Background	GWPS	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

CCR = Coal Combustion Residual

 ${\it Highlighted cells indicate background is higher than established limit.}$

Federal Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:49 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs ND Adj.
 Transform Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.056
 0.045
 0.04
 Yes 17
 0.051
 0.007331
 0
 None
 No
 0.01
 NP (normality)

Federal Confidence Intervals - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:49 AM

	Plant W	ansley Cli	ent: Souther	n Company	Dat	a: W	ansley Ash Po	ond Printed	1/6/20	21, 9:49 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Arsenic (mg/L)	WGWC-10	0.001	0.00089	0.01	No	17	0.0008894	0.000232	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	17	0.0009129	0.0001943	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	17	0.0009412	0.0001662	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	17	0.0008182	0.0003125	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0017	0.00095	0.01	No	17	0.001285	0.0006269	58.82	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-15	0.002339	0.00143	0.01	No	17	0.001885	0.0007251	0	None	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001132	0.0006062	0.01	No	17	0.001186	0.000353	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00067	0.01	No	17	0.00085	0.0001827	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00071	0.01	No	17	0.0009265	0.0002748	58.82	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	17	0.0009971	0.0002263	82.35	None	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	17	0.03948	0.00651	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.04	0.03	2	No	17	0.03565	0.008299	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-12	0.02011	0.01528	2	No	17	0.01732	0.004491	0	None	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05768	0.04573	2	No	17	0.05171		0		No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.04971	0.03134	2	No	17	0.04053		0		No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02291	0.01951	2		17	0.02121		0		No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No		0.05109		0		No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01812	0.01304	2	No		0.01558		0		No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No				23.53		No		NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.0012	2	No				29.41		No	0.01	NP (normality)
	WGWC-9	0.005	0.00076	2	No				29.41		No	0.01	` ,,
Barium (mg/L)									70.59				NP (normality)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No			0.00106			No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No				94.12		No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002075	0.001472	0.004	No		0.001774		0		No		Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No			0.001086	52.94		No		NP (NDs)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No		0.002365		94.12		No		NP (NDs)
Cadmium (mg/L)	WGWC-16	0.0025	0.00037	0.005	No				23.53		No	0.01	NP (normality)
Chromium (mg/L)	WGWC-10	0.002131	0.001397	0.1	No					•	No		Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No					•	No		NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No					•	No		NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No					•	No		NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No					•	No		NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1		17	0.002029			•	No		NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001754		0.013		17		0.0008154	5.882		sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00064	0.013	No	17	0.00163		41.18	None	No		NP (normality)
Cobalt (mg/L)	WGWC-12	0.001275	0.0005259		No	17			5.882		sqrt(x)		Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No		0.001894		70.59	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-14A	0.01125	0.005977	0.013	No	17			0		No		Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	17	0.007761	0.00628	5.882	None	No		NP (normality)
Cobalt (mg/L)	WGWC-17	0.001804	0.0008596	0.013	No	17	0.001332	0.0007536	5.882	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	17	0.001489	0.00111	52.94	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-8	0.0028	0.00092	0.013	No	17	0.002078	0.0008693	52.94	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	17	0.002396	0.0004293	94.12	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4659	0.1594	10.4	No	17	0.3127	0.2446	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6546	0.1387	10.4	No	17	0.3967	0.4117	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.6212	0.1291	10.4	No	17	0.3752	0.3927	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8156	0.4825	10.4	No	17	0.6491	0.2658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.866	0.5061	10.4	No	17	0.7028	0.3259	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6598	0.2673	10.4	No	17	0.494	0.3733	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.058	0.8666	10.4	No	17	1.462	0.9507	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5569	0.06753	10.4	No	17	0.3122	0.3905	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.471	0.126	10.4	No	17	0.3259	0.3114	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.902	1.209	10.4	No	17	1.555	0.5528	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3671	0.1214	10.4	No	17	0.2443	0.1961	0	None	No	0.01	Param.

Federal Confidence Intervals - All Results

Client: Southern Company Data: Wansley Ash Pond Constituent Well Lower Lim. Compliance Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Mean WGWC-10 0.1805 0.04325 Fluoride (mg/L) 0.1282 No 18 0.1543 0 None No 0.01 Param. Fluoride (mg/L) WGWC-11 0.18 0.047 No 18 0.08867 0.03457 66.67 None No 0.01 NP (NDs) Fluoride (ma/L) WGWC-12 0.09839 0 07499 4 Nο 18 0.09261 0.02161 22.22 Kaplan-Meier x^2 0.01 Param Fluoride (mg/L) WGWC-13 0.2216 No 18 0.06839 None 0.01 No Fluoride (mg/L) WGWC-14A 0.1 0.048 4 Nο 18 0.08617 0.02686 77 78 None No 0.01 NP (NDs) WGWC-15 Fluoride (mg/L) 0.8772 0.7727 4 18 0.8249 0.08641 0 No None No 0.01 Param. WGWC-16 No 18 0.1713 NP (normality) Fluoride (mg/L) 0.18 0.08 4 0.1929 11.11 None No 0.01 WGWC-17 Nο 0 1187 Fluoride (mg/L) 0 1445 0.09284 4 18 0.04269 5.556 None Nο 0.01 Param Fluoride (mg/L) WGWC-19 0.3816 0.3251 No 18 0.3533 0.04665 0 No 0.01 Param. None Fluoride (mg/L) WGWC-8 0.3674 0.2076 4 No 18 0.2875 0.1321 0 0.01 None No Param. Fluoride (mg/L) WGWC-9 1.563 1.248 4 No 18 1.406 0.261 0 None No 0.01 Param. Lead (mg/L) WGWC-10 0.001 0.00021 0.015 No 15 0.0007427 0.0003812 66.67 None No 0.01 NP (NDs) WGWC-11 0.001 15 0.00093 NP (NDs) Lead (mg/L) 0.00058 0.015 Nο 0.0001889 86 67 None No 0.01 Lead (mg/L) WGWC-13 0.001 0.00047 0.015 No 15 0.000778 0.0002525 0.01 NP (NDs) No Lead (mg/L) WGWC-14A 0.001 0.00018 0.015 No 15 0.00089 0.0002903 86.67 None No 0.01 NP (NDs) Lead (mg/L) WGWC-16 0.001 0.00014 0.015 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Nο WGWC-17 Lead (mg/L) 0.001 0.00033 No 0.000902 0.0002598 No NP (NDs) WGWC-8 0.0008307 0.0003506 Lead (mg/L) 0.001 0.00017 0.015 Nο 15 None Nο 0.01 NP (NDs) WGWC-9 0.001 0.00014 0.015 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Lead (mg/L) No WGWC-10 0.01611 0.008063 0.04 No 17 0.01257 0.007135 0 0.01 Lithium (mg/L) None Lithium (ma/L) WGWC-11 0.005 0.0018 No 0.004371 0.001407 82.35 None 0.01 NP (NDs) 0.04 17 Nο Lithium (mg/L) WGWC-12 0.007752 0.00589 0.04 No 0.006659 0.001801 5.882 None 0.01 NP (NDs) Lithium (mg/L) WGWC-13 0.005 0.0038 0.04 No 17 0.004429 0.001125 76.47 None No 0.01 Lithium (mg/L) WGWC-14A 0.0025 0.004094 0.00138 NP (NDs) 0.005 0.04 No 17 64.71 None 0.01 No WGWC-15 17 0.006094 0.001221 11.76 None Lithium (mg/L) 0.006859 0.005329 0.04 No No 0.01 Param. Lithium (mg/L) WGWC-16 0.01108 0.007147 17 0.009112 0.003135 0.04 Nο 5.882 None Nο 0.01 Param Lithium (mg/L) WGWC-17 0.005807 0.004711 0.04 No 0.005259 0.0008747 No 0.01 Lithium (mg/L) WGWC-19 0.056 0.045 0.04 Yes 17 0.051 0.007331 0 None No 0.01 NP (normality) WGWC-8 0.018 0.013 0.04 No 17 0.01768 0.01083 0 0.01 NP (normality) Lithium (mg/L) None No Lithium (mg/L) WGWC-9 0.03892 0.03255 0.04 No 17 0.03574 0.005081 0 None No 0.01 WGWC-10 0.000172 0.00004926 73.33 None NP (NDs) Mercury (mg/L) 0.0002 0.000085 0.002 Nο 15 Nο 0.01 Mercury (mg/L) WGWC-11 0.0002 0.00011 0.002 No 15 0.0001861 0.00003697 86.67 None No 0.01 NP (NDs) WGWC-12 0.0002 0.00011 0.002 No 15 0.0001786 0.00004172 73.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-13 No 0.0001843 0.00004152 86.67 None NP (NDs) Mercury (mg/L) 0.0002 0.000083 0.002 15 No 0.01 Mercury (mg/L) WGWC-14A 0.0002 0.00013 0.002 No 15 0.0001953 0.00001807 93.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-15 0.0002 0.000086 0.002 Nο 15 0.000169 0.00005338 73.33 None Nο 0.01 NP (NDs) Mercury (mg/L) WGWC-16 0.0002 0.00019 0.002 No 15 0.0001853 0.00003796 80 0.01 NP (NDs) No Mercury (mg/L) WGWC-17 0.0002 0.000074 0.002 No 15 0.0001916 0.00003253 93.33 None 0.01 NP (NDs) No WGWC-19 0.0002 0.00012 15 0.0001864 0.00003684 86.67 None NP (NDs) Mercury (mg/L) 0.002 No No 0.01 Mercury (mg/L) WGWC-8 0.0002 0.00013 0.002 No 0.0001812 0.00004016 80 No WGWC-9 0.0002 0.0001953 NP (NDs) Mercury (mg/L) 0.00013 0.002 Nο 15 0.00001807 93.33 None Nο 0.01 WGWC-10 0.015 0.01334 NP (NDs) Molybdenum (mg/L) 0.00093 0.1 No 17 0.004676 0.01 88.24 None No Molybdenum (mg/L) WGWC-11 0.015 0.0017 No 17 0.0134 0.004518 0.01 NP (NDs) 0.1 88.24 None No Molvbdenum (ma/L) WGWC-12 0.015 0.00095 0.1 No 17 0.01105 0.006369 70.59 None No 0.01 NP (NDs) Molybdenum (mg/L) WGWC-13 0.00491 0.0018 0.1 0.004565 0.005042 17.65 None No 0.01 NP (normality) WGWC-14A 0.001 NP (NDs) Molybdenum (mg/L) 0.015 0.1 Nο 17 0.01418 0.003395 94 12 None No 0.01 WGWC-15 Molybdenum (mg/L) 0.007348 0.003585 0.1 No 0.0057 0.003489 0 0.01 Param. 17 None sqrt(x) Molybdenum (mg/L) WGWC-17 0.006141 0.002871 0.1 No 17 0.004506 0.002609 0 None No 0.01 Param. Molybdenum (mg/L) WGWC-19 0.015 0.0012 0.1 No 17 0.006947 0.006946 41.18 None 0.01 NP (normality) No WGWC-9 Molybdenum (mg/L) 0.006736 0.003775 0.1 No 0.005678 0.003554 ln(x) 0.01 WGWC-10 NP (NDs) Selenium (mg/L) 0.005 0.00031 0.05 Nο 17 0.004724 0.001137 94 12 None Nο 0.01 WGWC-11 0.005 NP (NDs) Selenium (mg/L) 0.00049 0.05 No 17 0.004735 0.001094 94.12 None No 0.01 Selenium (mg/L) WGWC-12 0.005 0.0021 0.05 No 17 0.004829 0.0007034 94.12 None NP (NDs) No 0.01 NP (NDs) Selenium (ma/L) WGWC-14A 0.005 0.0003 0.05 Nο 0.004724 0.00114 94 12 None 0.01 17

Federal Confidence Intervals - All Results

	Plant \	Wansley Cl	ient: Souther	n Company	Data:	Wansley Ash I	Pond Printe	ed 1/6/20	21, 9:49 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	n Alpha	Method
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No 17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01182	0.006555	0.05	No 17	0.009185	0.004197	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No 17	0.004727	0.001125	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.00388	0.003034	0.05	No 17	0.003481	0.0006945	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002742	0.002115	0.05	No 17	0.002428	0.0005001	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No 17	0.0009462	0.0002219	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No 17	0.0005512	0.000437	47.06	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No 17	0.0004153	0.000391	29.41	None	No	0.01	NP (normality)

State Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Lithium (mg/L)	WGWC-19	0.056	0.045	0.009	Yes 17	0.051	0.007331	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-8	0.018	0.013	0.009	Yes 17	0.01768	0.01083	0	None	No	0.01	NP (normality)
Lithium (ma/L)	WGWC-9	0.03892	0.03255	0.009	Yes 17	0.03574	0.005081	0	None	No	0.01	Param.

State Confidence Intervals - All Results

Data: Wansley Ash Pond Client: Southern Company Constituent Well Std. Dev. %NDs ND Adj. Transform Alpha Method Lower Lim. Compliance Sig. N WGWC-10 Arsenic (mg/L) 0.001 0.00089 0.01 No 17 0.0008894 0.000232 76.47 None No 0.01 NP (NDs) Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 17 0.0009129 0.0001943 82.35 None No 0.01 NP (NDs) Arsenic (ma/L) WGWC-12 0.001 0.00052 0.01 Nο 17 0.0009412 0.0001662 88 24 None Nο 0.01 NP (NDs) Arsenic (mg/L) WGWC-13 0.001 0.00048 0.01 No 0.0008182 0.0003125 47.06 None 0.01 NP (normality) No NP (NDs) Arsenic (mg/L) WGWC-14A 0.0017 0.00095 0.01 Nο 17 0.001285 0.0006269 58.82 None No 0.01 WGWC-15 0.002339 0.00143 17 0.001885 0.0007251 0.01 Arsenic (mg/L) 0.01 No 0 None No Param. WGWC-16 0.001132 No 0.001186 0.000353 Arsenic (mg/L) 0.0006062 0.01 17 Kaplan-Meier sqrt(x) 0.01 WGWC-17 0.00085 Arsenic (mg/L) 0.001 0.00067 0.01 Nο 17 0.0001827 47.06 None Nο 0.01 NP (normality) WGWC-8 0.0011 0.00071 0.01 No 17 0.0009265 0.0002748 58.82 None 0.01 NP (NDs) Arsenic (mg/L) No WGWC-9 0.0017 0.00078 0.01 No 17 0.0009971 0.0002263 0.01 NP (NDs) Arsenic (mg/L) 82.35 None No Barium (mg/L) WGWC-10 0.041 0.035 2 No 17 0.03948 0.00651 0 None No 0.01 NP (normality) Barium (mg/L) WGWC-11 0.04 0.03 2 No 17 0.03565 0.008299 0 None No 0.01 NP (normality) WGWC-12 2 0.01732 Barium (mg/L) 0.02011 0.01528 Nο 17 0.004491 0 None x^2 0.01 Param Barium (mg/L) WGWC-13 0.05768 0.04573 2 No 0.05171 0.009538 0 0.01 No Param. None Barium (mg/L) WGWC-14A 0.04971 0.03134 2 No 17 0.04053 0.01466 0 None No 0.01 Param. Barium (mg/L) WGWC-15 0.02291 0.01951 2 No 17 0.02121 0.002709 0 0.01 Param. None Nο Barium (mg/L) WGWC-16 0.032 2 No 0.05109 0.01664 No 0.01 NP (normality) WGWC-17 2 0 Barium (mg/L) 0.01812 0.01304 Nο 17 0.01558 0.004053 None Nο 0.01 Param Barium (mg/L) WGWC-19 0.005 0.0012 2 No 17 0.002545 0.001883 23.53 None 0.01 NP (normality) No Barium (mg/L) WGWC-8 0.005 0.001 2 No 17 0.002722 0.001717 0.01 NP (normality) 29.41 None No Barium (mg/L) WGWC-9 0.005 0.00076 2 No 0.00239 0.001823 29.41 None 0.01 NP (normality) 17 Nο Beryllium (mg/L) WGWC-14A 0.0025 0.00025 0.004 No 0.001836 0.00106 70.59 None No NP (NDs) NP (NDs) Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 17 0.002366 0.000553 94.12 None No 0.01 Beryllium (mg/L) WGWC-8 0.001472 0.001774 0.0004805 0.002075 0.004 No 17 0 0.01 Param. None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 17 0.001508 0.001086 52.94 None NP (NDs) 0.004 No No 0.01 Cadmium (mg/L) WGWC-10 0.0025 0.00021 17 0.002365 0.0005554 NP (NDs) 0.005 Nο 94 12 None Nο 0.01 Cadmium (mg/L) WGWC-16 0.0025 0.00037 0.005 No 0.0009795 0.0008847 No 0.01 NP (normality) Chromium (mg/L) WGWC-10 0.002131 0.001397 0.1 No 0.001982 0.0005982 17.65 Kaplan-Meier 0.01 Param. 17 No Chromium (mg/L) WGWC-11 0.0021 0.0012 0.1 No 17 0.001906 0.0002861 82.35 Kaplan-Meier 0.01 NP (NDs) No Chromium (mg/L) WGWC-13 0.002 0.0018 0.1 No 17 0.001988 0.00004851 94.12 Kaplan-Meier No 0.01 NP (NDs) WGWC-14A 0.001982 0.00007276 NP (NDs) Chromium (mg/L) 0.002 0.0017 0.1 Nο 17 94 12 Kaplan-Meier Nο 0.01 WGWC-15 Chromium (mg/L) 0.002 0.0015 0.1 No 17 0.001971 0.0001213 94.12 Kaplan-Meier No 0.01 NP (NDs) 0.0001213 Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 17 0.002029 94.12 Kaplan-Meier 0.01 NP (NDs) WGWC-10 No 0.001355 0.0008154 Cobalt (mg/L) 0.001754 0.0008402 0.013 17 5.882 None sqrt(x) 0.01 Param. Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 0.00163 0.0009355 41.18 None No 0.01 NP (normality) Cobalt (mg/L) WGWC-12 0.001275 0.0005259 0.013 Nο 17 0.0009576 0.0006725 5.882 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 17 0.001894 0.0009765 70.59 0.01 NP (NDs) No 0.004205 Cobalt (mg/L) WGWC-14A 0.01125 0.005977 0.013 No 17 0.008612 0.01 0 None No Param. WGWC-16 Cobalt (mg/L) 0.015 17 0.007761 0.00628 NP (normality) 0.00077 0.013 No 5.882 None No 0.01 Cobalt (mg/L) WGWC-17 0.001804 0.0008596 0.013 No 0.001332 0.0007536 5.882 None No 0.01 WGWC-19 Cobalt (mg/L) 0.0025 0.00024 0.013 Nο 17 0.001489 0.00111 52 94 None Nο 0.01 NP (NDs) Cobalt (mg/L) WGWC-8 0.002078 NP (NDs) 0.0028 0.00092 0.013 No 17 0.0008693 52.94 0.01 None No 0.0025 0.013 Cobalt (mg/L) WGWC-9 0.00073 No 17 0.002396 0.0004293 0.01 NP (NDs) 94.12 None No Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4659 0.1594 10.4 No 17 0.3127 0.2446 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6546 0.1387 10.4 No 17 0.3967 0.4117 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6212 0 1291 10 4 Nο 17 0.3752 0.3927 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) WGWC-13 0.6491 0.8156 0.4825 No 17 0 0.01 10.4 0.2658 None No Param. Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.866 0.5061 10.4 No 17 0.7028 0.3259 0 None sqrt(x) 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-15 0.6598 0.2673 No 17 0.494 0 0.01 10.4 0.3733 None sart(x) Param. Combined Radium 226 + 228 (pCi/L) WGWC-16 0.8666 17 No 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-17 0.5569 0.06753 10 4 Nο 17 0.3122 0.3905 n None Nο 0.01 Param WGWC-19 NP (normality) Combined Radium 226 + 228 (pCi/L) 0.471 0.126 10.4 No 17 0.3259 0.3114 0 None No 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-8 1.902 No 17 1.555 0.01 1.209 10.4 0.5528 0 None No Param Combined Radium 226 + 228 (pCi/L) WGWC-9 0.3671 0 1214 0 2443 n 0.01 Param 10 4 Nο 17 0.1961 None Nο

State Confidence Intervals - All Results

Data: Wansley Ash Pond Client: Southern Company Constituent Well Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Lower Lim. Compliance Mean WGWC-10 0.1805 0.1282 0.04325 Fluoride (mg/L) 4 No 18 0.1543 0 None No 0.01 Param. Fluoride (mg/L) WGWC-11 0.18 0.047 No 18 0.08867 0.03457 66.67 None No 0.01 NP (NDs) Fluoride (ma/L) WGWC-12 0.09839 0 07499 4 Nο 18 0.09261 0.02161 22.22 Kaplan-Meier x^2 0.01 Param Fluoride (mg/L) WGWC-13 0.2216 No 18 0.06839 5.556 None 0.01 No Fluoride (mg/L) WGWC-14A 0.1 0.048 4 Nο 18 0.08617 0.02686 77 78 None No 0.01 NP (NDs) WGWC-15 Fluoride (mg/L) 0.8772 0.7727 4 18 0.8249 0.08641 0 No None No 0.01 Param. WGWC-16 No 18 0.1713 NP (normality) Fluoride (mg/L) 0.18 0.08 4 0.1929 11.11 None No 0.01 WGWC-17 Nο 0 1187 Fluoride (mg/L) 0 1445 0.09284 4 18 0.04269 5.556 None Nο 0.01 Param Fluoride (mg/L) WGWC-19 0.3816 0.3251 4 No 18 0.3533 0.04665 0 0.01 Param. None No Fluoride (mg/L) WGWC-8 0.3674 0.2076 4 No 18 0.2875 0.1321 0 0.01 None No Param. Fluoride (mg/L) WGWC-9 1.563 1.248 4 No 18 1.406 0.261 0 None No 0.01 Param. Lead (mg/L) WGWC-10 0.001 0.00021 0.001 No 15 0.0007427 0.0003812 66.67 None No 0.01 NP (NDs) WGWC-11 0.001 0.00093 NP (NDs) Lead (mg/L) 0.00058 0.001 Nο 15 0.0001889 86 67 None No 0.01 WGWC-13 0.001 0.00047 0.001 No 15 0.000778 0.0002525 0.01 NP (NDs) Lead (mg/L) 53.33 None No 0.001 Lead (mg/L) WGWC-14A 0.001 0.00018 No 15 0.00089 0.0002903 86.67 None No 0.01 NP (NDs) Lead (mg/L) WGWC-16 0.001 0.00014 0.001 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Nο WGWC-17 Lead (mg/L) 0.001 0.00033 No 15 0.000902 0.0002598 No NP (NDs) WGWC-8 0.0008307 0.0003506 Lead (mg/L) 0.001 0.00017 0.001 Nο 15 None Nο 0.01 NP (NDs) WGWC-9 0.001 0.00014 0.001 No 15 0.0009427 0.0002221 0.01 NP (NDs) Lead (mg/L) 93.33 None No WGWC-10 0.01611 0.008063 0.009 No 17 0.01257 0.007135 0 0.01 Lithium (mg/L) None Lithium (ma/L) WGWC-11 0.005 0.0018 0.009 No 0.004371 0.001407 82.35 None 0.01 NP (NDs) 17 Nο Lithium (mg/L) WGWC-12 0.007752 0.00589 0.009 No 0.006659 0.001801 5.882 None 0.01 Param. Lithium (mg/L) WGWC-13 0.005 0.0038 0.009 No 17 0.004429 0.001125 76.47 None No 0.01 NP (NDs) Lithium (mg/L) WGWC-14A 0.0025 0.004094 0.00138 NP (NDs) 0.005 0.009 No 17 64.71 0.01 None No WGWC-15 0.006859 17 0.006094 0.001221 11.76 None Lithium (mg/L) 0.005329 0.009 No No 0.01 Param. Lithium (mg/L) WGWC-16 0.01108 0.007147 17 0.009112 0.003135 0.009 Nο 5.882 None Nο 0.01 Param Lithium (mg/L) WGWC-17 0.005807 0.004711 0.009 No 0.005259 0.0008747 No 0.01 Lithium (mg/L) WGWC-19 0.056 0.045 0.009 Yes 17 0.051 0.007331 0 None No 0.01 NP (normality) Lithium (mg/L) WGWC-8 0.013 0.01768 0.01083 0.01 NP (normality) 0.018 0.009 Yes 17 None No Lithium (ma/L) WGWC-9 0.03255 0.03574 0.005081 0 No WGWC-10 0.000172 0.00004926 73.33 None NP (NDs) Mercury (mg/L) 0.0002 0.000085 0.002 Nο 15 Nο 0.01 Mercury (mg/L) WGWC-11 0.0002 0.00011 0.002 No 15 0.0001861 0.00003697 86.67 None No 0.01 NP (NDs) WGWC-12 0.0002 0.00011 0.002 No 15 0.0001786 0.00004172 73.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-13 0.0002 No 0.0001843 0.00004152 86.67 None NP (NDs) Mercury (mg/L) 0.000083 0.002 15 No 0.01 Mercury (mg/L) WGWC-14A 0.0002 0.00013 0.002 No 15 0.0001953 0.00001807 93.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-15 0.0002 0.000086 0.002 Nο 15 0.000169 0.00005338 73.33 None Nο 0.01 NP (NDs) Mercury (mg/L) WGWC-16 0.0002 0.00019 0.002 No 15 0.0001853 0.00003796 80 0.01 NP (NDs) No Mercury (mg/L) WGWC-17 0.0002 0.000074 0.002 No 15 0.0001916 0.00003253 93.33 None 0.01 NP (NDs) No WGWC-19 0.0002 0.00012 0.0001864 0.00003684 86.67 None NP (NDs) Mercury (mg/L) 0.002 No 15 No 0.01 Mercury (mg/L) WGWC-8 0.0002 0.00013 0.002 No 0.0001812 0.00004016 80 No NP (NDs) WGWC-9 0.0002 0.0001953 NP (NDs) Mercury (mg/L) 0.00013 0.002 Nο 15 0.00001807 93.33 None Nο 0.01 WGWC-10 0.015 0.01334 NP (NDs) Molybdenum (mg/L) 0.00093 0.015 No 17 0.004676 0.01 88.24 None No 0.015 Molybdenum (mg/L) WGWC-11 0.015 0.0017 No 17 0.0134 0.004518 0.01 NP (NDs) 88.24 None No Molvbdenum (ma/L) WGWC-12 0.015 0.00095 0.015 No 17 0.01105 0.006369 70.59 None No 0.01 NP (NDs) Molybdenum (mg/L) WGWC-13 0.00491 0.0018 0.015 No 0.004565 0.005042 17.65 None No 0.01 NP (normality) WGWC-14A 0.001 NP (NDs) Molybdenum (mg/L) 0.015 0.015 No 17 0.01418 0.003395 94 12 None No 0.01 WGWC-15 Molybdenum (mg/L) 0.007348 0.003585 0.015 No 0.0057 0.003489 0 0.01 Param. 17 None sqrt(x) Molybdenum (mg/L) WGWC-17 0.006141 0.002871 0.015 No 17 0.004506 0.002609 0 None No 0.01 Param. Molybdenum (mg/L) WGWC-19 0.015 0.0012 0.015 No 17 0.006947 0.006946 41.18 None 0.01 NP (normality) No WGWC-9 Molybdenum (mg/L) 0.006736 0.003775 0.015 No 0.005678 0.003554 ln(x) 0.01 WGWC-10 NP (NDs) Selenium (mg/L) 0.005 0.00031 0.05 Nο 17 0.004724 0.001137 94 12 None Nο 0.01 WGWC-11 0.005 NP (NDs) Selenium (mg/L) 0.00049 0.05 No 17 0.004735 0.001094 94.12 None No 0.01 Selenium (mg/L) WGWC-12 0.005 0.0021 0.05 No 17 0.004829 0.0007034 94.12 None NP (NDs) No 0.01 NP (NDs) Selenium (ma/L) WGWC-14A 0.005 0.0003 0.05 Nο 0.004724 0.00114 94 12 None 0.01 17 Nο

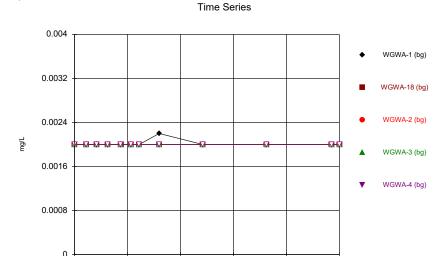
State Confidence Intervals - All Results

	Plant ¹	Nansley Cli	ent: Souther	n Company	Data: W	ansley Ash P	ond Printed	1/8/20	21, 10:32 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	n Alpha	Method
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No 17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01182	0.006555	0.05	No 17	0.009185	0.004197	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No 17	0.004727	0.001125	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.00388	0.003034	0.05	No 17	0.003481	0.0006945	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002742	0.002115	0.05	No 17	0.002428	0.0005001	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No 17	0.0009462	0.0002219	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No 17	0.0005512	0.000437	47.06	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No 17	0.0004153	0.000391	29.41	None	No	0.01	NP (normality)

FIGURE A.

5/17/16

2/21/17



Constituent: Antimony Analysis Run 1/8/2021 10:19 AM

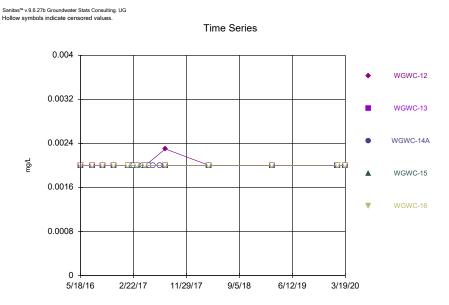
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

9/4/18

3/17/20

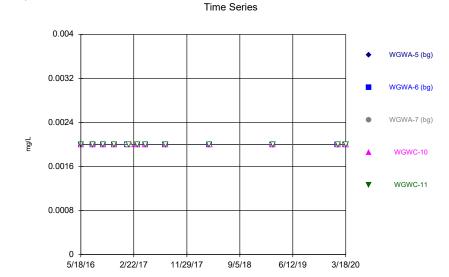
6/11/19

11/28/17



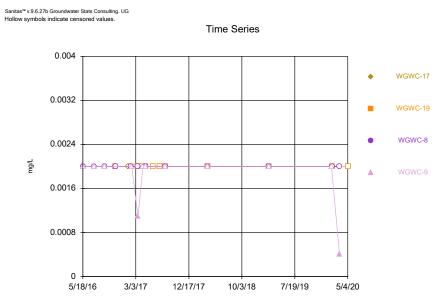
Constituent: Antimony Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Antimony Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

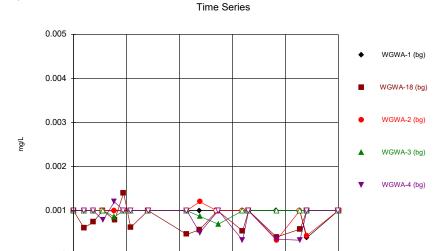


Constituent: Antimony Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

5/17/16

3/30/17



Constituent: Arsenic Analysis Run 1/8/2021 10:19 AM

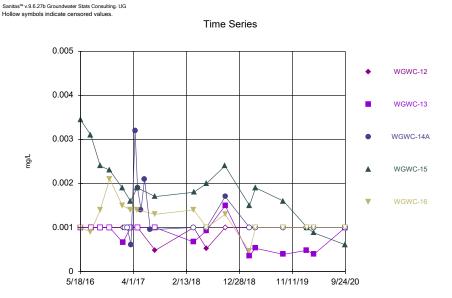
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

12/26/18

11/9/19

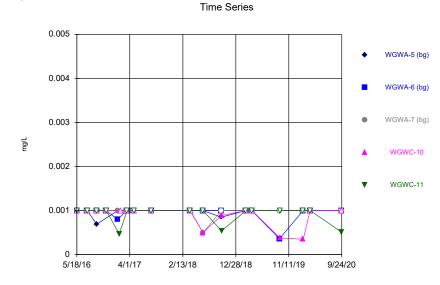
9/22/20

2/11/18



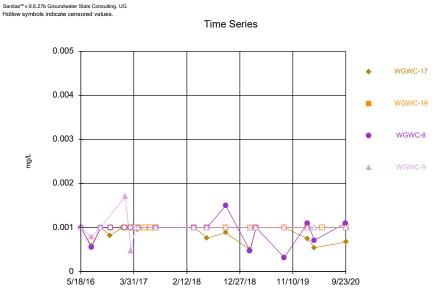
Constituent: Arsenic Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Arsenic Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Arsenic Analysis Run 1/8/2021 10:19 AM

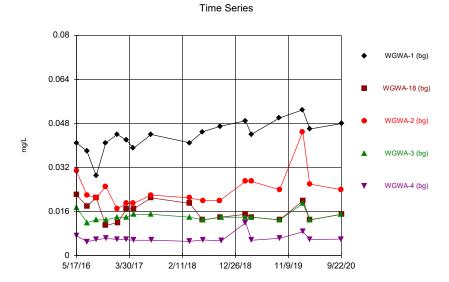
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

5/18/16

3/31/17

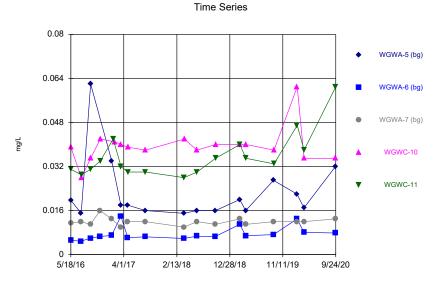


Constituent: Barium Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series 0.08 WGWC-12 0.064 WGWC-13 WGWC-14A 0.048 mg/L WGWC-15 0.032 WGWC-16 0.016 5/18/16 4/1/17 2/13/18 12/28/18 11/11/19 9/24/20

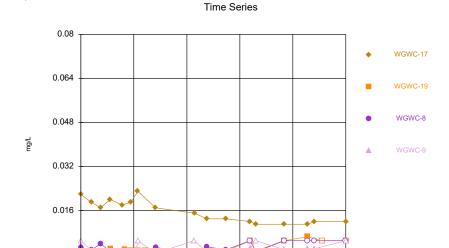
Constituent: Barium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Barium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Barium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

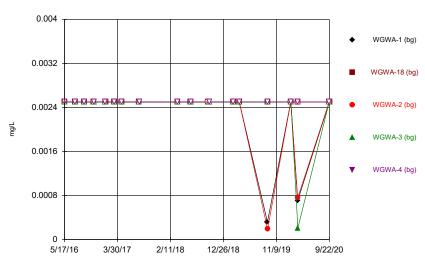
12/27/18

11/10/19

9/23/20

2/12/18

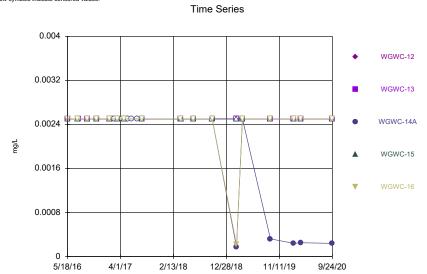




Constituent: Beryllium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

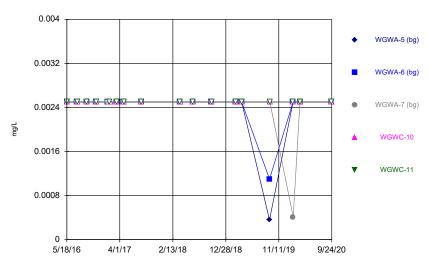
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Beryllium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

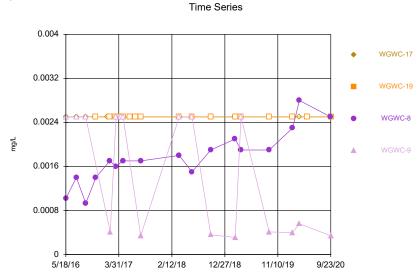
Time Series



Constituent: Beryllium Analysis Run 1/8/2021 10:19 AM

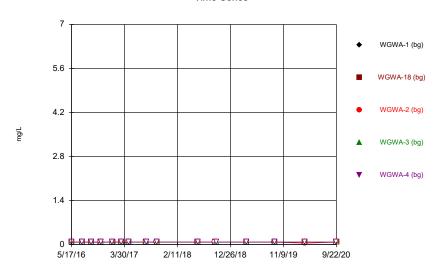
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Beryllium Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

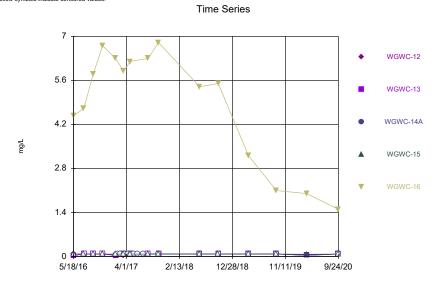




Constituent: Boron Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

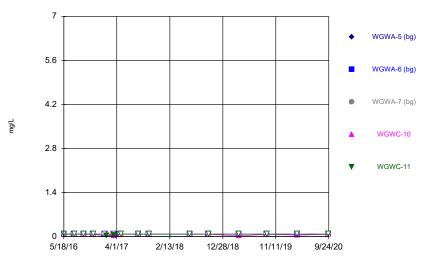
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Constituent: Boron Analysis Run 1/8/2021 10:19 AM

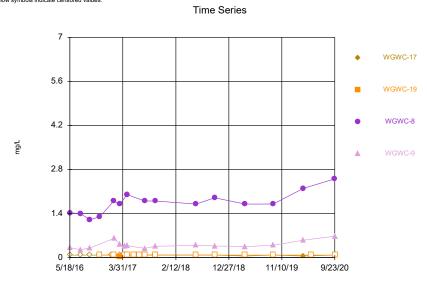
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



Constituent: Boron Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

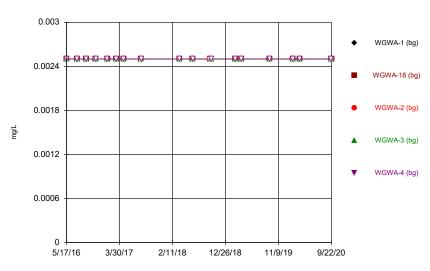
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

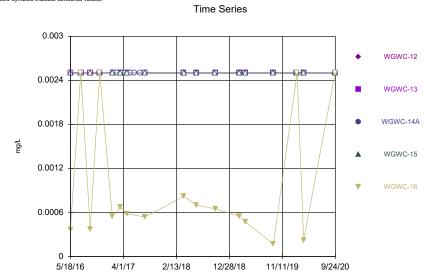




Constituent: Cadmium Analysis Run 1/8/2021 10:19 AM

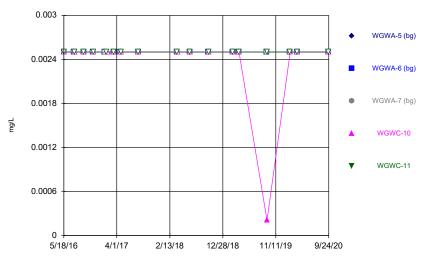
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Cadmium Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

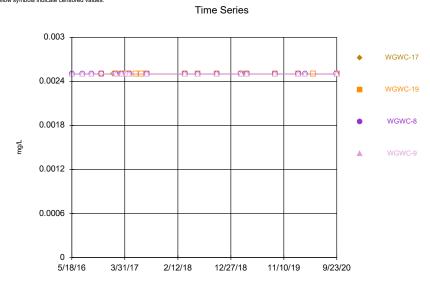
Time Series



Constituent: Cadmium Analysis Run 1/8/2021 10:19 AM

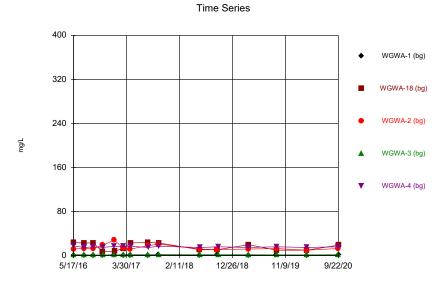
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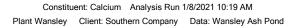
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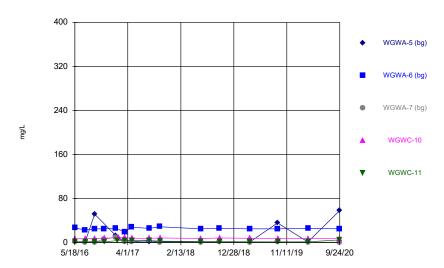


Constituent: Cadmium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



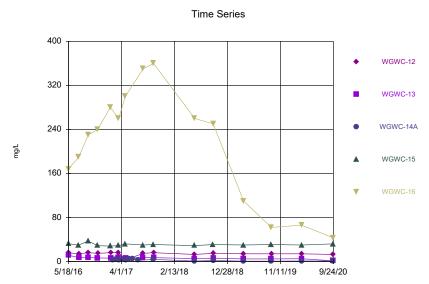




Time Series

Constituent: Calcium Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

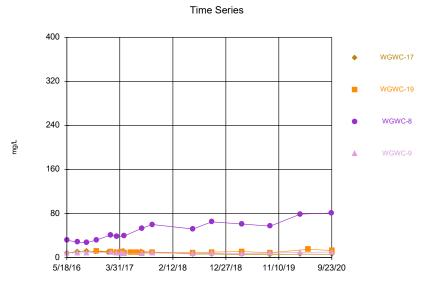
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Calcium Analysis Run 1/8/2021 10:19 AM

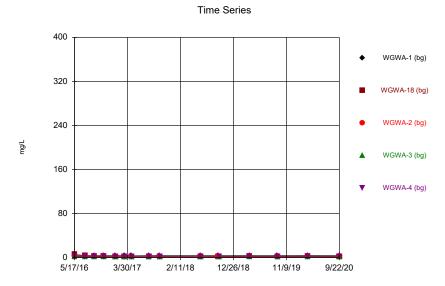
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Calcium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Chloride Analysis Run 1/8/2021 10:19 AM

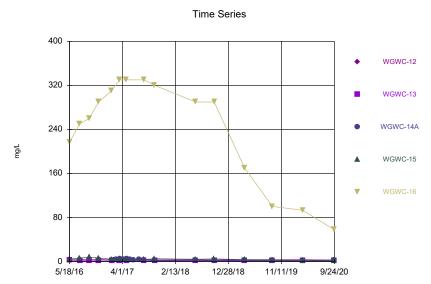
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

400 WGWA-5 (bg) 320 WGWA-6 (bg) WGWA-7 (bg) 240 mg/L WGWC-10 160 WGWC-11 80 5/18/16 4/1/17 2/13/18 12/28/18 11/11/19 9/24/20

Time Series

Constituent: Chloride Analysis Run 1/8/2021 10:19 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

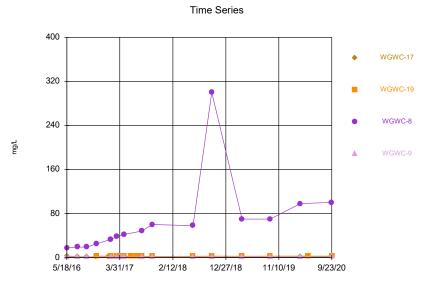
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Chloride Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

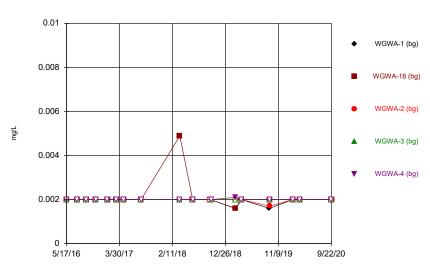
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Chloride Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

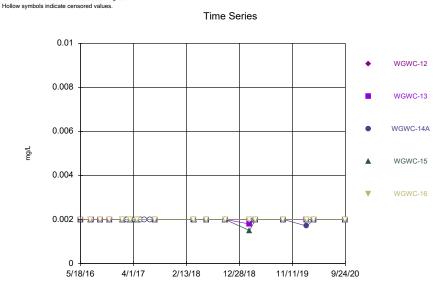




Constituent: Chromium Analysis Run 1/8/2021 10:19 AM

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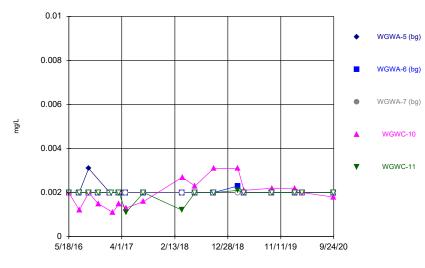
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Chromium Analysis Run 1/8/2021 10:19 AM

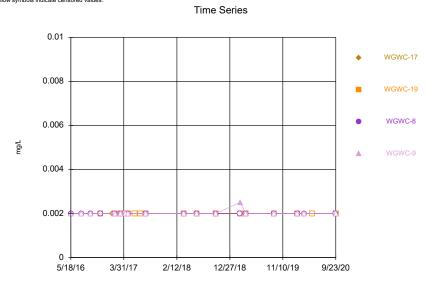
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



Constituent: Chromium Analysis Run 1/8/2021 10:19 AM

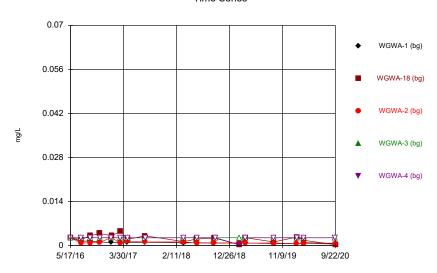
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Chromium Analysis Run 1/8/2021 10:19 AM

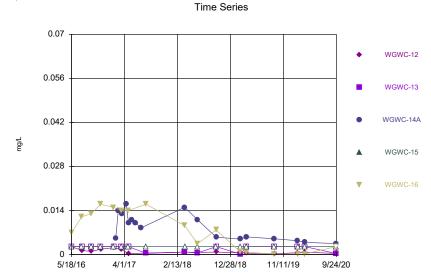
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Cobalt Analysis Run 1/8/2021 10:19 AM

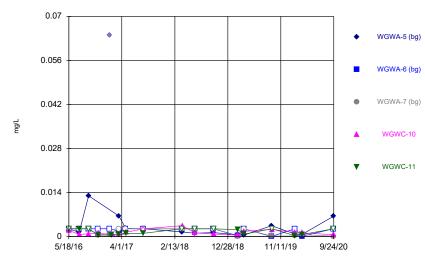
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Cobalt Analysis Run 1/8/2021 10:19 AM

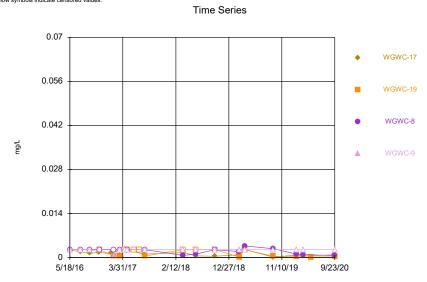
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



Constituent: Cobalt Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



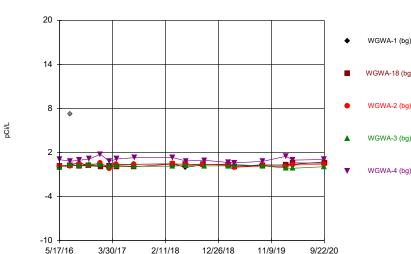
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

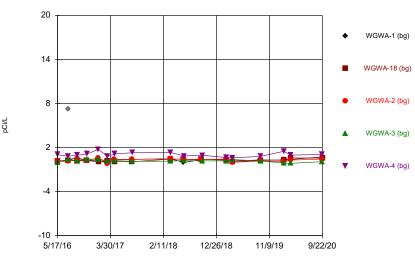
-10

5/18/16

4/1/17



Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Time Series 20 WGWC-12 14 WGWC-13 WGWC-14A pCi/L WGWC-15 WGWC-16

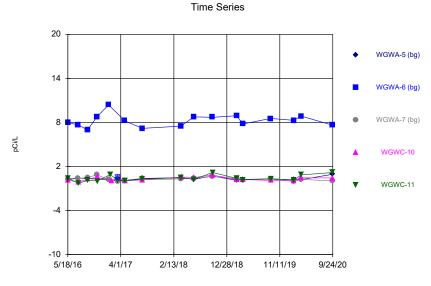
Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:19 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

12/28/18

11/11/19

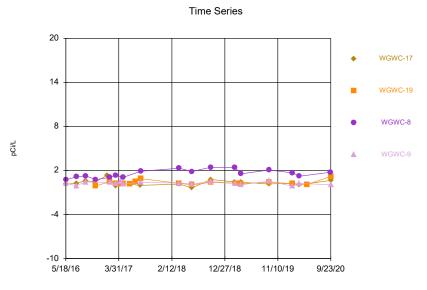
9/24/20

2/13/18



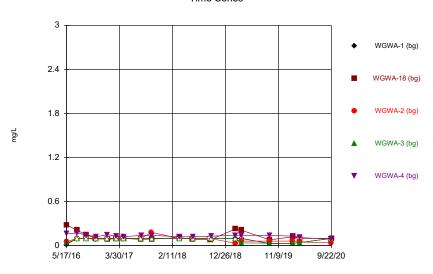
Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:19 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond





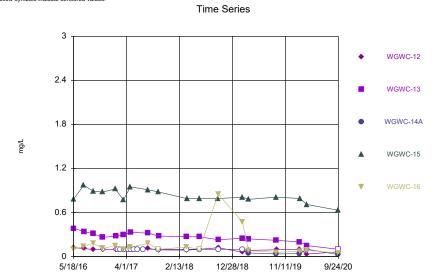
Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:19 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Fluoride Analysis Run 1/8/2021 10:19 AM

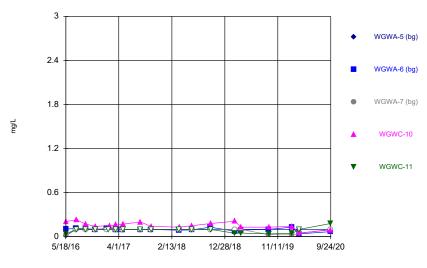
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Fluoride Analysis Run 1/8/2021 10:19 AM

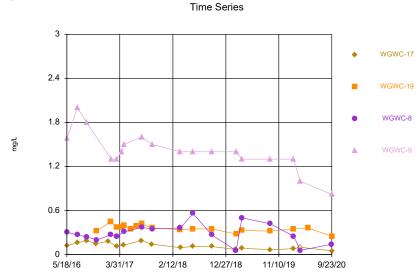
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



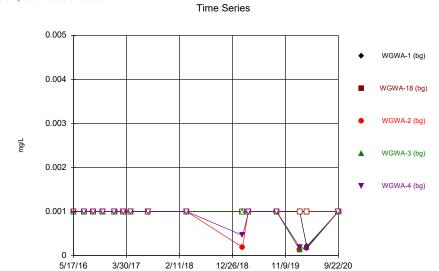
Constituent: Fluoride Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



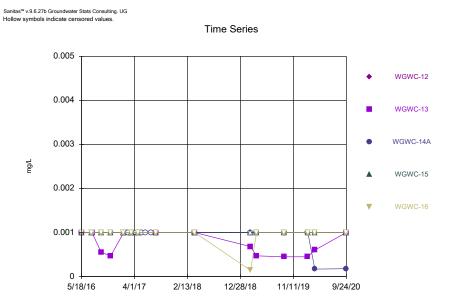
Constituent: Fluoride Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



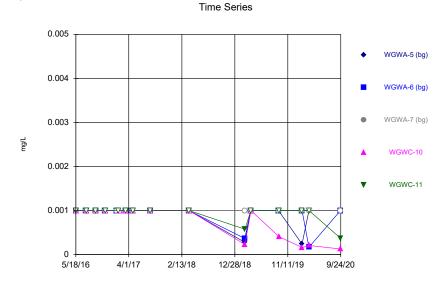
Constituent: Lead Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



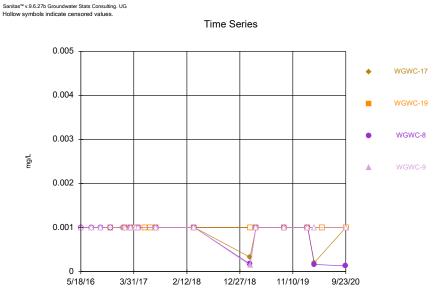
Constituent: Lead Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Lead Analysis Run 1/8/2021 10:19 AM

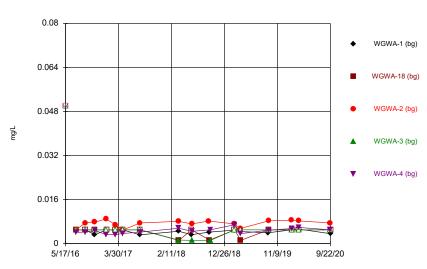
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Lead Analysis Run 1/8/2021 10:19 AM

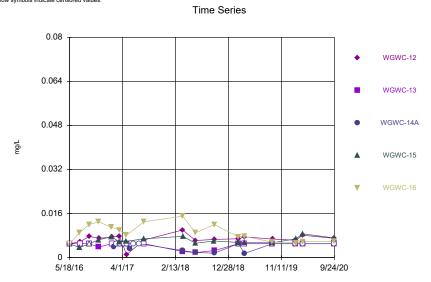
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Lithium Analysis Run 1/8/2021 10:19 AM

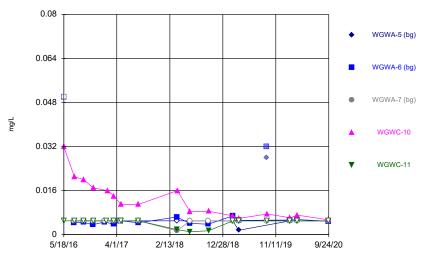
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Lithium Analysis Run 1/8/2021 10:19 AM

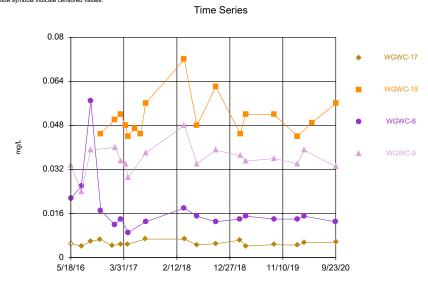
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



Constituent: Lithium Analysis Run 1/8/2021 10:19 AM

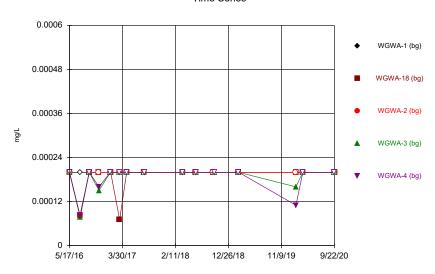
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



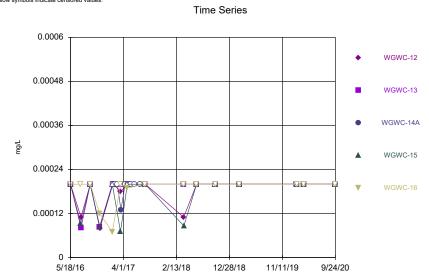
Constituent: Lithium Analysis Run 1/8/2021 10:19 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond





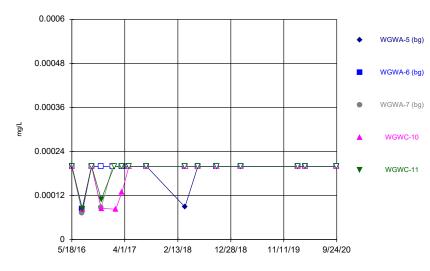
Constituent: Mercury Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



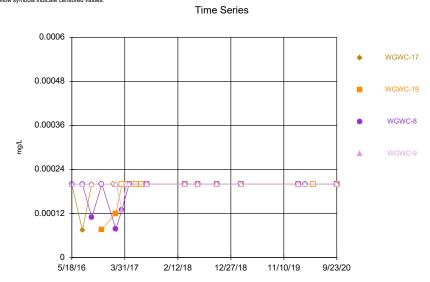
Constituent: Mercury Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



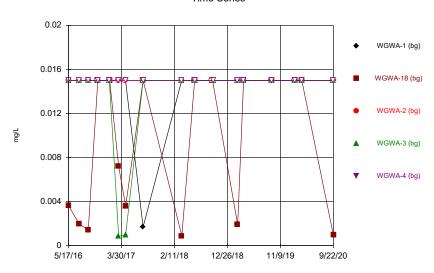
Constituent: Mercury Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Mercury Analysis Run 1/8/2021 10:20 AM

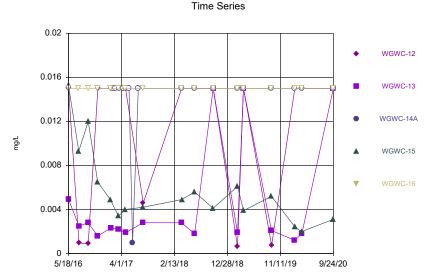
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Molybdenum Analysis Run 1/8/2021 10:20 AM

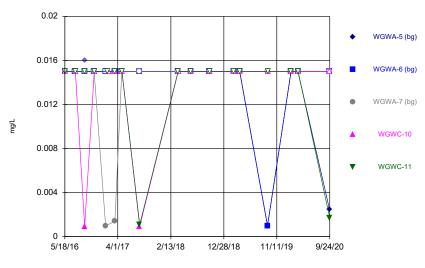
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Molybdenum Analysis Run 1/8/2021 10:20 AM

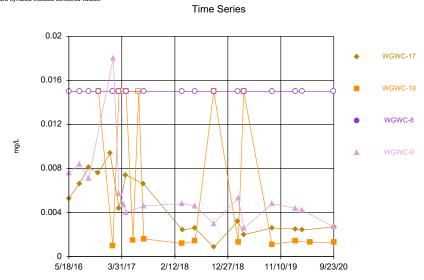
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



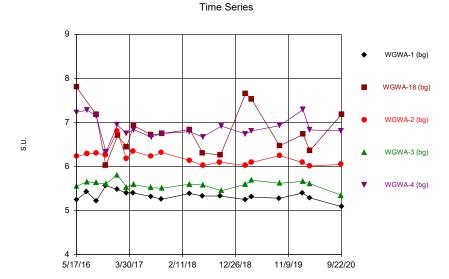
Constituent: Molybdenum Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Molybdenum Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



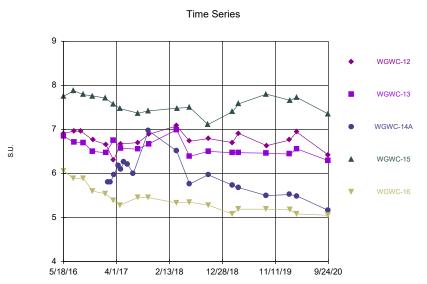
Constituent: pH Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

WGWA-5 (bg) WGWA-6 (bg) WGWA-7 (bg) WGWC-10 WGWC-11

Time Series

Constituent: pH Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

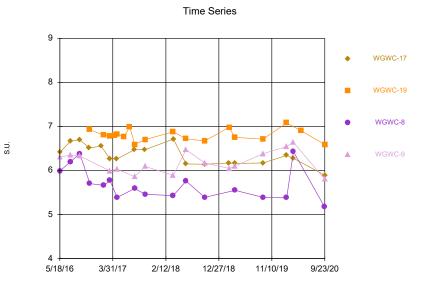
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

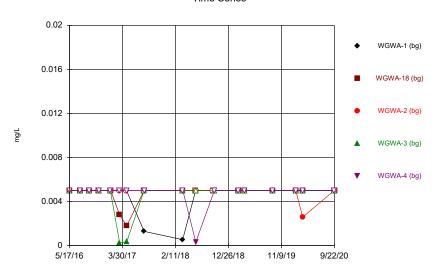
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 1/8/2021 10:20 AM

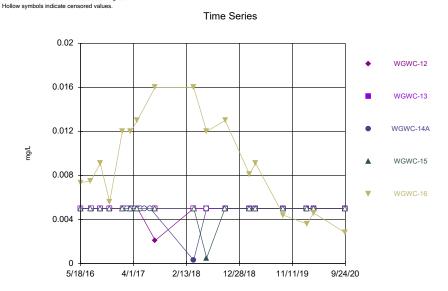
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Selenium Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

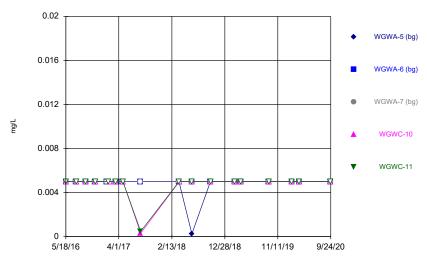
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



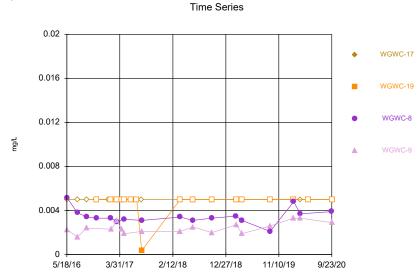
Constituent: Selenium Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



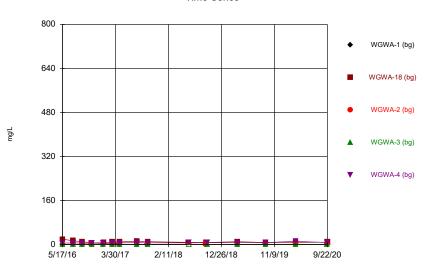
Constituent: Selenium Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Selenium Analysis Run 1/8/2021 10:20 AM

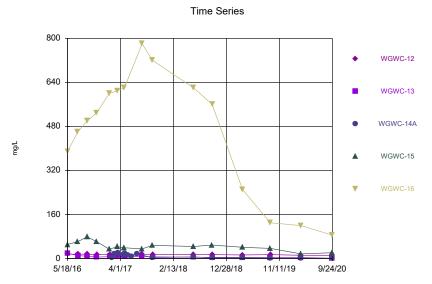
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Sulfate Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

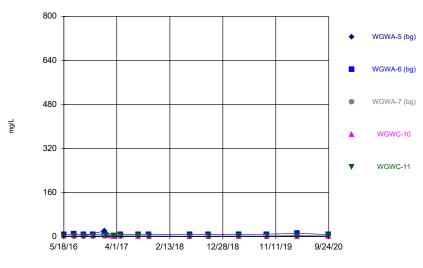
$Sanitas^{\text{\tiny TM}} \ v.9.6.27b \ Groundwater \ Stats \ Consulting. \ UG$



Constituent: Sulfate Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

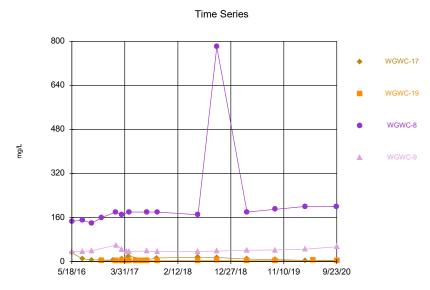
Time Series



Constituent: Sulfate Analysis Run 1/8/2021 10:20 AM

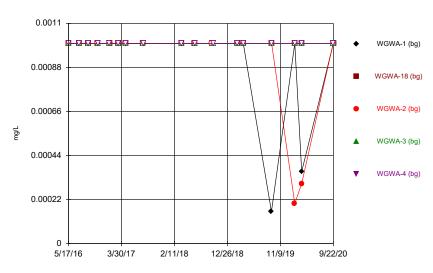
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



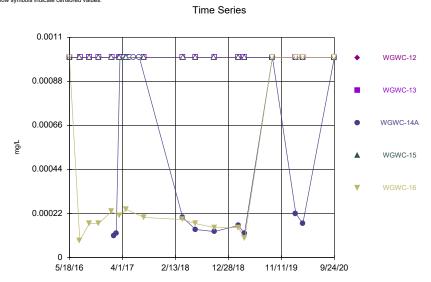
Constituent: Sulfate Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Thallium Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

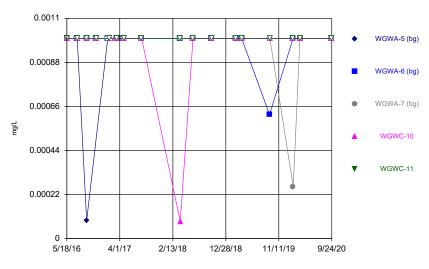
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Thallium Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series



Constituent: Thallium Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

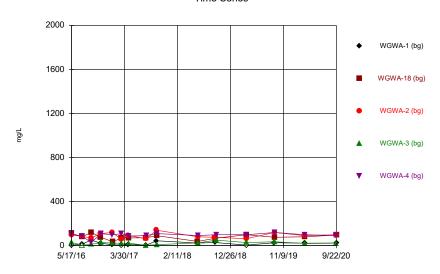
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Time Series 0.0011 71/1 WGWC-17 0.00088 WGWC-19 WGWC-8 0.00066 0.00044 0.00022 5/18/16 3/31/17 2/12/18 12/27/18 11/10/19 9/23/20

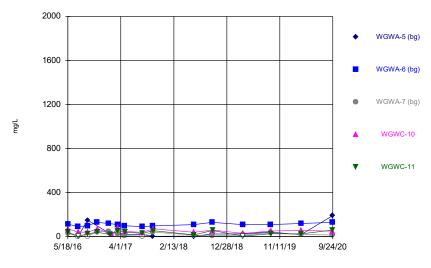
Constituent: Thallium Analysis Run 1/8/2021 10:20 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



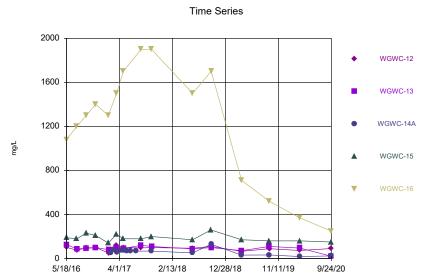


Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:20 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond



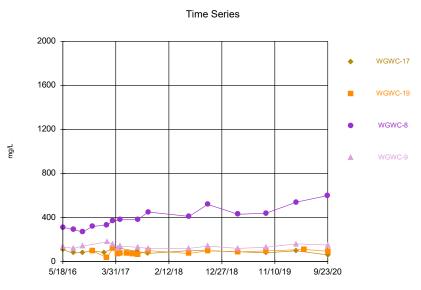
Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:20 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:20 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:20 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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			
3/16/2020	<0.002		<0.002		
3/17/2020		<0.002		<0.002	<0.002

	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				
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			
2/5/2020			<0.002	<0.002	<0.002
3/17/2020	<0.002	<0.002	<0.002		
3/18/2020				<0.002	<0.002

	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
3/18/2020	<0.002			<0.002	<0.002
3/19/2020		<0.002	<0.002		

	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	
3/18/2020	<0.002			
3/19/2020			<0.002	0.00041 (J)
5/4/2020		<0.002		

	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
9/21/2020			<0.001	<0.001	<0.001
9/22/2020	<0.001	<0.001			

	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		0.00005 (**	.0.004
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
9/22/2020	<0.001	<0.001	<0.001		
9/23/2020				<0.001	
9/24/2020					0.00051 (J)

	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		
9/23/2020	<0.001			0.00061 (J)	<0.001
9/24/2020		<0.001	<0.001		

	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		
9/22/2020			0.0011	
9/23/2020	0.00067 (J)	<0.001		<0.001

	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)
9/21/2020			0.024	0.015	0.006 (J)
9/22/2020	0.048	0.015			

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	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				
1/27/2017					0.042
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	0.000	0.000
9/19/2019	0.000	0.040		0.038	0.033
2/4/2020	0.022	0.013	0.010	0.001	0.047
2/5/2020	0.017	0.0004 (1)	0.012	0.061	0.047
3/17/2020	0.017	0.0081 (J)	0.012	0.035	0.020
3/18/2020	0.032	0.0070 / 15	0.012	0.035	0.038
9/22/2020	0.032	0.0079 (J)	0.013	0.035	
9/23/2020				0.035	0.061
9/24/2020					0.061

	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		
9/23/2020	0.016			0.027	0.037
9/24/2020		0.038	0.034		

	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			
9/22/2020			<0.01		
9/23/2020	0.012	<0.01		<0.01	

	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	<0.0025	<0.0025	<0.0025		
7/20/2016				<0.0025	<0.0025
9/13/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/9/2016	<0.0025	<0.0025	<0.0025		
11/10/2016				<0.0025	<0.0025
1/17/2017	<0.0025		<0.0025		
1/18/2017				<0.0025	<0.0025
1/19/2017		<0.0025			
3/13/2017	<0.0025		<0.0025		
3/14/2017		<0.0025		<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025		
4/25/2017		<0.0025		<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025	
8/9/2017					<0.0025
3/27/2018	<0.0025		<0.0025		
3/28/2018		<0.0025		<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025			
6/14/2018			<0.0025	<0.0025	<0.0025
9/24/2018			<0.0025		
9/27/2018	<0.0025				
9/28/2018		<0.0025			
10/3/2018				<0.0025	<0.0025
2/25/2019	<0.0025		<0.0025		
2/26/2019		<0.0025		<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025		
4/2/2019		<0.0025		<0.0025	<0.0025
9/16/2019	0.00032 (J)				
9/17/2019		<0.0025	0.00019 (J)		<0.0025
9/18/2019				<0.0025	
2/3/2020	<0.0025		<0.0025		
2/4/2020				<0.0025	<0.0025
2/5/2020		<0.0025			
3/16/2020	0.00071 (J)		0.00076 (J)		
3/17/2020		<0.0025		0.00021 (J)	<0.0025
9/21/2020			<0.0025	<0.0025	<0.0025
9/22/2020	<0.0025	<0.0025			

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	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.0025	<0.0025	<0.0025	<0.0025	
5/19/2016					<0.0025
7/19/2016	<0.0025	<0.0025	<0.0025		
7/20/2016				<0.0025	<0.0025
9/13/2016		<0.0025	<0.0025		
9/14/2016	<0.0025			<0.0025	<0.0025
11/9/2016		<0.0025			
11/10/2016			<0.0025		
11/11/2016				<0.0025	<0.0025
1/18/2017		<0.0025	<0.0025		
1/19/2017	<0.0025				
1/27/2017					<0.0025
2/6/2017				<0.0025	
3/14/2017	<0.0025	<0.0025	<0.0025		
3/15/2017				<0.0025	<0.0025
4/25/2017	<0.0025	<0.0025	<0.0025		
4/26/2017				<0.0025	<0.0025
8/8/2017		<0.0025	<0.0025		
8/9/2017	<0.0025				
8/10/2017				<0.0025	<0.0025
3/28/2018	<0.0025	<0.0025	<0.0025		
3/29/2018					<0.0025
3/30/2018				<0.0025	
6/13/2018	<0.0025	<0.0025			
6/14/2018			<0.0025	<0.0025	<0.0025
10/2/2018		<0.0025			
10/3/2018	<0.0025		<0.0025		
10/4/2018				<0.0025	<0.0025
2/26/2019	<0.0025	<0.0025	<0.0025		
2/27/2019				<0.0025	<0.0025
4/2/2019	<0.0025	<0.0025	<0.0025		
4/3/2019					<0.0025
4/4/2019				<0.0025	
9/16/2019	0.00036 (J)	0.0011			
9/18/2019			<0.0025		
9/19/2019				<0.0025	<0.0025
2/4/2020	<0.0025	<0.0025			
2/5/2020			0.00041 (J)	<0.0025	<0.0025
3/17/2020	<0.0025	<0.0025	<0.0025		
3/18/2020				<0.0025	<0.0025
9/22/2020	<0.0025	<0.0025	<0.0025		
9/23/2020				<0.0025	
9/24/2020					<0.0025

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	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.0025	<0.0025
5/19/2016	<0.0025	<0.0025			
7/19/2016				<0.0025	<0.0025
7/20/2016	<0.0025	<0.0025			
9/14/2016	<0.0025	<0.0025		<0.0025	<0.0025
11/10/2016		<0.0025		<0.0025	<0.0025
11/11/2016	<0.0025				
1/24/2017				<0.0025	<0.0025
1/27/2017	<0.0025	<0.0025			
2/8/2017			<0.0025		
2/23/2017			<0.0025		
3/14/2017				<0.0025	
3/15/2017	<0.0025	<0.0025			<0.0025
3/17/2017			<0.0025		
4/11/2017			<0.0025		
4/25/2017				<0.0025	<0.0025
4/26/2017	<0.0025	<0.0025	<0.0025		
5/17/2017			<0.0025		
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017		<0.0025		<0.0025	<0.0025
8/10/2017	<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025		<0.0025
3/30/2018				<0.0025	
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018				<0.0025	
10/4/2018	<0.0025	<0.0025	<0.0025		<0.0025
2/27/2019	<0.0025	<0.0025	0.00017 (J)	<0.0025	0.00022 (J)
4/3/2019	<0.0025	<0.0025	<0.0025		
4/4/2019				<0.0025	<0.0025
9/18/2019		<0.0025	0.00032 (J)	<0.0025	<0.0025
9/19/2019	<0.0025				
2/5/2020	<0.0025	<0.0025	0.00024 (J)		
2/7/2020				<0.0025	<0.0025
3/18/2020	<0.0025			<0.0025	<0.0025
3/19/2020		<0.0025	0.00025 (J)		
9/23/2020	<0.0025			<0.0025	<0.0025
9/24/2020		<0.0025	0.00024 (J)		

	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.0025			
5/19/2016			0.00102 (J)	<0.0025
7/20/2016	<0.0025		0.0014 (J)	<0.0025
9/14/2016	<0.0025			<0.0025
9/15/2016			0.00093 (J)	
11/10/2016	<0.0025			
11/11/2016		<0.0025		
11/14/2016			0.0014 (J)	
1/20/2017	<0.0025			
2/6/2017		<0.0025	0.0017 (J)	
2/9/2017				0.00041 (J)
3/14/2017	<0.0025			
3/15/2017		<0.0025	0.0016 (J)	<0.0025
4/11/2017		<0.0025		<0.0025
4/25/2017	<0.0025			
4/26/2017		<0.0025	0.0017 (J)	<0.0025
6/7/2017		<0.0025		
7/11/2017		<0.0025		
8/9/2017	<0.0025			
8/10/2017		<0.0025	0.0017 (J)	0.00034 (J)
3/29/2018		<0.0025	0.0018 (J)	<0.0025
3/30/2018	<0.0025			
6/14/2018	<0.0025	<0.0025	0.0015 (J)	<0.0025
10/4/2018	<0.0025	<0.0025	0.0019 (J)	0.00036 (J)
2/26/2019	<0.0025			
2/27/2019			0.0021 (J)	
2/28/2019		<0.0025		0.00031 (J)
4/2/2019		<0.0025		
4/3/2019			0.0019 (J)	<0.0025
4/4/2019	<0.0025			
9/18/2019	<0.0025	<0.0025		
9/19/2019			0.0019	0.00041 (J)
2/5/2020				0.0004 (J)
2/7/2020	<0.0025	<0.0025	0.0023	
3/18/2020	<0.0025			
3/19/2020			0.0028	0.00056 (J)
5/4/2020		<0.0025		
9/22/2020			0.0025	
9/23/2020	<0.0025	<0.0025		0.00034 (J)

	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
9/21/2020			<0.08	<0.08	<0.08
9/22/2020	<0.08	<0.08			

	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
9/22/2020	<0.08	<0.08	<0.08		
9/23/2020				<0.08	
9/24/2020					<0.08

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	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)			
7/19/2016				<0.08	4.7
7/20/2016	<0.08	<0.08			
9/14/2016	<0.08	<0.08		<0.08	5.8
11/10/2016		<0.08		<0.08	6.7
11/11/2016	<0.08				
1/24/2017				<0.08	6.3
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)		
9/23/2020	<0.08			<0.08	1.5
9/24/2020		<0.08	<0.08		

	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	2.00	<0.08		
11/14/2016		0.00	1.3	
1/20/2017	<0.08		1.3	
	~ U.U6	<0.00	1.0	
2/6/2017		<0.08	1.8	0.01
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		0.00	1.7	0.35
4/4/2019	0.049 (1)		1.7	0.33
	0.049 (J)	<0.00		
9/18/2019	<0.08	<0.08	4.7	0.00
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		
9/22/2020			2.5	
9/23/2020	<0.08	<0.08		0.68

	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	<0.0025	<0.0025	<0.0025		
7/20/2016				<0.0025	<0.0025
9/13/2016	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
11/9/2016	<0.0025	<0.0025	<0.0025		
11/10/2016				<0.0025	<0.0025
1/17/2017	<0.0025		<0.0025		
1/18/2017				<0.0025	<0.0025
1/19/2017		<0.0025			
3/13/2017	<0.0025		<0.0025		
3/14/2017		<0.0025		<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025		
4/25/2017		<0.0025		<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025	
8/9/2017					<0.0025
3/27/2018	<0.0025		<0.0025		
3/28/2018		<0.0025		<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025			
6/14/2018			<0.0025	<0.0025	<0.0025
9/24/2018			<0.0025		
9/27/2018	<0.0025				
9/28/2018		<0.0025			
10/3/2018				<0.0025	<0.0025
2/25/2019	<0.0025		<0.0025		
2/26/2019		<0.0025		<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025		
4/2/2019		<0.0025		<0.0025	<0.0025
9/16/2019	<0.0025				
9/17/2019		<0.0025	<0.0025		<0.0025
9/18/2019				<0.0025	
2/3/2020	<0.0025		<0.0025		
2/4/2020				<0.0025	<0.0025
2/5/2020	-0.0005	<0.0025	-0.0005		
3/16/2020	<0.0025	.0.005	<0.0025	.0.005	0.0005
3/17/2020		<0.0025	-0.0005	<0.0025	<0.0025
9/21/2020	<0.002E	<0.0025	<0.0025	<0.0025	<0.0025
9/22/2020	<0.0025	<0.0025			

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	WGWA-5 (bg)	WGWA-6 (bg)	WGWA-7 (bg)	WGWC-10	WGWC-11
5/18/2016	<0.0025	<0.0025	<0.0025	<0.0025	
5/19/2016					<0.0025
7/19/2016	<0.0025	<0.0025	<0.0025		
7/20/2016				<0.0025	<0.0025
9/13/2016		<0.0025	<0.0025		
9/14/2016	<0.0025			<0.0025	<0.0025
11/9/2016		<0.0025			
11/10/2016			<0.0025		
11/11/2016				<0.0025	<0.0025
1/18/2017		<0.0025	<0.0025		
1/19/2017	<0.0025				
1/27/2017					<0.0025
2/6/2017				<0.0025	
3/14/2017	<0.0025	<0.0025	<0.0025		
3/15/2017				<0.0025	<0.0025
4/25/2017	<0.0025	<0.0025	<0.0025		
4/26/2017				<0.0025	<0.0025
8/8/2017		<0.0025	<0.0025		
8/9/2017	<0.0025				
8/10/2017				<0.0025	<0.0025
3/28/2018	<0.0025	<0.0025	<0.0025		
3/29/2018					<0.0025
3/30/2018				<0.0025	
6/13/2018	<0.0025	<0.0025			
6/14/2018			<0.0025	<0.0025	<0.0025
10/2/2018		<0.0025			
10/3/2018	<0.0025		<0.0025		
10/4/2018				<0.0025	<0.0025
2/26/2019	<0.0025	<0.0025	<0.0025		
2/27/2019				<0.0025	<0.0025
4/2/2019	<0.0025	<0.0025	<0.0025		
4/3/2019					<0.0025
4/4/2019				<0.0025	
9/16/2019	<0.0025	<0.0025			
9/18/2019			<0.0025		
9/19/2019				0.00021 (J)	<0.0025
2/4/2020	<0.0025	<0.0025			
2/5/2020			<0.0025	<0.0025	<0.0025
3/17/2020	<0.0025	<0.0025	<0.0025		
3/18/2020				<0.0025	<0.0025
9/22/2020	<0.0025	<0.0025	<0.0025		
9/23/2020				<0.0025	
9/24/2020					<0.0025

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	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016				<0.0025	0.000362 (J)
5/19/2016	<0.0025	<0.0025			
7/19/2016				<0.0025	<0.0025
7/20/2016	<0.0025	<0.0025			
9/14/2016	<0.0025	<0.0025		<0.0025	0.00037 (J)
11/10/2016		<0.0025		<0.0025	<0.0025
11/11/2016	<0.0025				
1/24/2017				<0.0025	0.00055 (J)
1/27/2017	<0.0025	<0.0025			
2/8/2017			<0.0025		
2/23/2017			<0.0025		
3/14/2017				<0.0025	
3/15/2017	<0.0025	<0.0025			0.00067 (J)
3/17/2017			<0.0025		
4/11/2017			<0.0025		
4/25/2017				<0.0025	0.00058 (J)
4/26/2017	<0.0025	<0.0025	<0.0025		
5/17/2017			<0.0025		
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017		<0.0025		<0.0025	0.00054 (J)
8/10/2017	<0.0025				
3/29/2018	<0.0025	<0.0025	<0.0025		0.00082 (J)
3/30/2018				<0.0025	
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	0.0007 (J)
10/3/2018				<0.0025	
10/4/2018	<0.0025	<0.0025	<0.0025		0.00065 (J)
2/27/2019	<0.0025	<0.0025	<0.0025	<0.0025	0.00055 (J)
4/3/2019	<0.0025	<0.0025	<0.0025		
4/4/2019				<0.0025	0.00047 (J)
9/18/2019		<0.0025	<0.0025	<0.0025	0.00017 (J)
9/19/2019	<0.0025				
2/5/2020	<0.0025	<0.0025	<0.0025		
2/7/2020				<0.0025	<0.0025
3/18/2020	<0.0025			<0.0025	0.00022 (J)
3/19/2020		<0.0025	<0.0025		
9/23/2020	<0.0025			<0.0025	<0.0025
9/24/2020		<0.0025	<0.0025		

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	WGWC-17	WGWC-19	WGWC-8	WGWC-9	
5/18/2016	<0.0025				
5/19/2016			<0.0025	<0.0025	
7/20/2016	<0.0025		<0.0025	<0.0025	
9/14/2016	<0.0025			<0.0025	
9/15/2016			<0.0025		
11/10/2016	<0.0025				
11/11/2016		<0.0025			
11/14/2016			<0.0025		
1/20/2017	<0.0025				
2/6/2017		<0.0025	<0.0025		
2/9/2017				<0.0025	
3/14/2017	<0.0025				
3/15/2017		<0.0025	<0.0025	<0.0025	
4/11/2017		<0.0025		<0.0025	
4/25/2017	<0.0025				
4/26/2017		<0.0025	<0.0025	<0.0025	
6/7/2017		<0.0025			
7/11/2017		<0.0025			
8/9/2017	<0.0025				
8/10/2017		<0.0025	<0.0025	<0.0025	
3/29/2018		<0.0025	<0.0025	<0.0025	
3/30/2018	<0.0025				
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	
10/4/2018	<0.0025	<0.0025	<0.0025	<0.0025	
2/26/2019	<0.0025				
2/27/2019			<0.0025		
2/28/2019		<0.0025		<0.0025	
4/2/2019		<0.0025			
4/3/2019			<0.0025	<0.0025	
4/4/2019	<0.0025				
9/18/2019	<0.0025	<0.0025			
9/19/2019			<0.0025	<0.0025	
2/5/2020				<0.0025	
2/7/2020	<0.0025	<0.0025	<0.0025		
3/18/2020	<0.0025				
3/19/2020			<0.0025	<0.0025	
5/4/2020		<0.0025			
9/22/2020			<0.0025		
9/23/2020	<0.0025	<0.0025		<0.0025	

	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				
9/17/2019		10	13		16
9/18/2019				1.6	
3/16/2020	1.1		10		
3/17/2020		10		1.7	15
9/21/2020			13	1.8	16
9/22/2020	1.2	19			

	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
9/22/2020	58	25	0.89		
9/23/2020				7.7	
9/24/2020					5.2

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	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	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	360
10/12/2017	16	7			
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		
9/23/2020	13			32	43
9/24/2020		1.4	0.99		

·	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		
9/22/2020			81	
9/23/2020	5.9	13		10

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	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
9/21/2020			2.5	1.5	1.2
9/22/2020	4	2.1			

	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
9/22/2020	1.5	1.4	1.8		
9/23/2020				1.3	
9/24/2020					1

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	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		290
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		
9/23/2020	2.8			1.5	58
9/24/2020		1.6	3.1		

	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		
9/22/2020			100	
9/23/2020	1.2	2.6		2.4

	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	<0.002	<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	<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
9/21/2020			<0.002	<0.002	<0.002
9/22/2020	<0.002	<0.002			

	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				
1/27/2017					<0.002
2/6/2017				0.0011 (J)	
3/14/2017	<0.002	<0.002	<0.002		
3/15/2017				0.0015 (J)	<0.002
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
9/22/2020	<0.002	<0.002	<0.002		
9/23/2020				0.0018 (J)	
9/24/2020					<0.002

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	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		
9/23/2020	<0.002			<0.002	<0.002
9/24/2020		<0.002	<0.002		

	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			2.002
3/15/2017		<0.002	<0.002	<0.002
4/11/2017		<0.002		<0.002
4/25/2017	<0.002	5.50 <u>L</u>		0.002
4/26/2017	-0.002	<0.002	<0.002	<0.002
6/7/2017		<0.002	-0.002	70.002
7/11/2017		<0.002		
8/9/2017	<0.002	10.002		
8/10/2017	10.002	<0.002	<0.002	<0.002
3/29/2018		<0.002	<0.002	<0.002
3/30/2018	<0.002	-0.002	-0.002	-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	~ 0.002	~ 0.002	~U.UUZ
2/26/2019	\0.002		<0.002	
2/27/2019		<0.002	~ 0.002	0.0025
				0.0025
4/2/2019		<0.002	<0.002	-0.00 2
4/3/2019	40.000		<0.002	<0.002
4/4/2019	<0.002	<0.000		
9/18/2019	<0.002	<0.002	<0.000	-0.000
9/19/2019			<0.002	<0.002
2/5/2020	.0.055	.0.000		<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		
9/22/2020			<0.002	
9/23/2020	<0.002	<0.002		<0.002

	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
9/21/2020			0.00054 (J)	<0.0025	<0.0025
9/22/2020	0.00072 (J)	0.00033 (J)			

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	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)
9/22/2020	0.0065	<0.0025	0.00015 (J)		
9/23/2020				0.00062 (J)	
9/24/2020					<0.0025

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	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		
9/23/2020	0.00039 (J)			<0.0025	<0.0025
9/24/2020		0.00032 (J)	0.0035		

	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)			
9/22/2020			0.00065 (J)		
9/23/2020	0.0009 (J)	0.00024 (J)		<0.0025	

	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	0.394 (U)		0.289 (U)		
3/17/2020		0.6 (U)		-0.139 (U)	0.964
9/21/2020			0.418 (U)	0.0688 (U)	1.07
9/22/2020	0.729	0.557 (U)			

	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)				
1/27/2017					0.898
2/6/2017				0.104 (U)	
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	0.207 (U)	8.88	0.258 (U)		
3/18/2020				0.461 (U)	0.866
9/22/2020	0.954	7.65	0.0523 (U)		
9/23/2020				0.442 (U)	
9/24/2020					1.2

				,	,
	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	-0.0262 (U)			0.303 (U)	0.437
3/19/2020		0.47	0.376 (U)		
9/23/2020	0.785			0.448 (U)	0.276 (U)
9/24/2020		1.02	0.796		

	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	0.0655 (U)			
3/19/2020			1.21	0.23 (U)
5/4/2020		0.0697 (U)		
9/22/2020			1.75	
9/23/2020	0.643	1.18		0.0587 (U)

	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
9/21/2020			0.037 (J)	<0.1	0.091 (J)
9/22/2020	<0.1	0.1			

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	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	(1)			
8/10/2017				0.2	<0.1
10/11/2017	<0.1	0.098 (J)	<0.1		
10/12/2017		(1)		0.14 (J)	<0.1
3/28/2018	<0.1	0.088 (J)	<0.1	. ,	
3/29/2018		(1)			<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)	0.13 (J)	0.037 (J)
2/4/2020	<0.1	0.13		(4)	(-)
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	2	00. (0)	(0)	0.052 (J)	<0.1
9/22/2020	<0.1	0.068 (J)	<0.1	(2)	
9/23/2020		(-)		0.09 (J)	
9/24/2020				00 (0)	0.18

	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			
7/19/2016				0.97	0.14 (J)
7/20/2016	0.11 (J)	0.34			
9/14/2016	0.095 (J)	0.31		0.89	0.18 (J)
11/10/2016		0.26		0.88	0.11 (J)
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		
9/23/2020	0.064 (J)			0.63	0.049 (J)
9/24/2020		<0.1	0.028 (J)		

	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			
9/22/2020			0.14		
9/23/2020	0.05 (J)	0.25		0.82	

	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				
9/17/2019		<0.001	<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)
9/21/2020			<0.001	<0.001	<0.001
9/22/2020	<0.001	<0.001			

	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				
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
9/22/2020	<0.001	<0.001	<0.001		
9/23/2020				0.00013 (J)	0.0000777
9/24/2020					0.00037 (J)

	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)			
9/23/2020	<0.001			<0.001	<0.001	
9/24/2020		<0.001	0.00018 (J)			

	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		
9/22/2020			0.00013 (J)	
9/23/2020	<0.001	<0.001		<0.001

	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
9/21/2020			0.0075	<0.005	0.005
9/22/2020	0.0036 (J)	<0.005			

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	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				
1/27/2017					<0.005
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
9/22/2020	<0.005	0.0049 (J)	<0.005		
9/23/2020				0.0054	
9/24/2020					<0.005

	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		
9/23/2020	0.007			0.0071	0.0059
9/24/2020		<0.005	<0.005		

	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	
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		
9/22/2020			0.013	
9/23/2020	0.0056	0.056		0.033

	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
9/21/2020			<0.0002	<0.0002	<0.0002
9/22/2020	<0.0002	<0.0002			

	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				
1/27/2017					<0.0002
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
9/22/2020	<0.0002	<0.0002	<0.0002		
9/23/2020				<0.0002	
9/24/2020					<0.0002

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	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		
9/23/2020	<0.0002			<0.0002	<0.0002
9/24/2020		<0.0002	<0.0002		

	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			
9/22/2020			<0.0002		
9/23/2020	<0.0002	<0.0002		<0.0002	

	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
9/21/2020			<0.015	<0.015	<0.015
9/22/2020	<0.015	0.00097 (J)			

	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				
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
9/22/2020	0.0025 (J)	<0.015	<0.015		
9/23/2020				<0.015	
9/24/2020					0.0017 (J)

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	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		
9/23/2020	<0.015			0.0031 (J)	<0.015
9/24/2020		<0.015	<0.015		

	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)		
9/22/2020			<0.015	
9/23/2020	0.0027 (J)	0.0013 (J)		0.0027 (J)

	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
9/21/2020			6.05	5.35	6.81
9/22/2020	5.09	7.18			

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	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	5.2.			6.23	5.78
4/2/2019	5.25	7.94	5.6	0.20	
4/3/2019					6.07
4/4/2019				6.46	
9/16/2019	6.94	7.55		0.70	
9/18/2019	0.0 .		5.6		
9/19/2019			0.0	6.45	5.82
2/4/2020	5.31	7.74		0.40	5.5 <u>-</u>
2/5/2020	0.01	7.77	5.54	6.42	5.89
3/17/2020	5.34	7.96	5.32	U.4Z	5.00
	J.J 4	7.30	J.32	6.4	E 90
3/18/2020	6 79	7.4	5.36	6.4	5.89
9/22/2020	6.78	7.4	5.36	6 14	
9/23/2020				6.14	
9/24/2020					5.5

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	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		
9/23/2020	6.42			7.35	5.05
9/24/2020		6.29	5.16		

				,
	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		
9/22/2020			5.17	
9/23/2020	5.89	6.59		5.8

	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
9/21/2020			<0.005	<0.005	<0.005
9/22/2020	<0.005	<0.005			

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	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				
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	.0.005	.0.005	.0.005
2/5/2020	.0.005	.0.005	<0.005	<0.005	<0.005
3/17/2020	<0.005	<0.005	<0.005	-0.005	10.005
3/18/2020	.0.005	.0.005	.0.005	<0.005	<0.005
9/22/2020	<0.005	<0.005	<0.005	-0.005	
9/23/2020				<0.005	<0.00E
9/24/2020					<0.005

	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		
9/23/2020	<0.005			<0.005	0.0028 (J)
9/24/2020		<0.005	<0.005		

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	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		
9/22/2020			0.0039 (J)	
9/23/2020	<0.005	<0.005		0.0029 (J)

	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
9/21/2020			1.1	0.77 (J)	7.7
9/22/2020	<1	9			

	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
9/22/2020	1.5	8	0.38 (J)		
9/23/2020				1.8	
9/24/2020					2.7

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	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	720
10/12/2017	14	6.1			
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		
9/23/2020	12			21	85
9/24/2020		0.63 (J)	1.2		

	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	200	-	
9/22/2020			200		
9/23/2020	4.4	3	200	54	
3/23/2020	7.7	3		VT	

	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
9/21/2020			<0.001	<0.001	<0.001
9/22/2020	<0.001	<0.001			

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	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				
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
9/22/2020	<0.001	<0.001	<0.001		
9/23/2020				<0.001	
9/24/2020					<0.001

	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)			
9/23/2020	<0.001		. ,	<0.001	<0.001	
9/24/2020		<0.001	<0.001			

	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		
9/22/2020			<0.001	
9/23/2020	<0.001	<0.001		<0.001

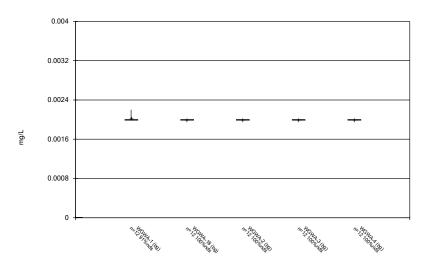
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)
5/17/2016	<10	112	100		
5/18/2016				29	101
7/19/2016	14	80	84		
7/20/2016				<10	86
9/13/2016	50	120	70	12	28
11/9/2016	22	76	110		
11/10/2016				30	110
1/17/2017	8		120		
1/18/2017				22	98
1/19/2017		36			
3/13/2017	<10		58		
3/14/2017		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
9/21/2020			100	22	92
9/22/2020	24	96			

	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				
1/27/2017					18
2/6/2017				24	
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
9/22/2020	190	130	15		
9/23/2020				50	
9/24/2020					60

		WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/1	18/2016				190	1080
5/1	19/2016	101	127			
7/1	19/2016				180	1200
7/2	20/2016	76	88			
9/1	14/2016	96	92		230	1300
11/	/10/2016		100		210	1400
11/	/11/2016	100				
1/2	24/2017				140	1300
1/2	27/2017	50	80			
2/8	3/2017			54		
2/2	23/2017			78		
3/1	14/2017				220	
3/1	15/2017	120	100			1500
3/1	17/2017			56		
4/1	11/2017			76		
4/2	25/2017				180	1700
4/2	26/2017	100	92	76		
5/1	17/2017			68		
6/7	7/2017			72		
7/1	11/2017			68		
8/9	9/2017		120		180	1900
8/1	10/2017	96				
10/	/11/2017			68	200	1900
10/	/12/2017	100	110			
6/1	14/2018	94	88	52	170	1500
10/	/3/2018				260	
10/	/4/2018	110	100	130		1700
4/3	3/2019	66	72	31		
4/4	1/2019				170	710
9/1	18/2019		110	33	160	520
	19/2019	89				
3/1	18/2020	73			160	370
3/1	19/2020		95	18		
	23/2020	90			150	250
9/2	24/2020		21	24		

	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		
9/22/2020			600	
9/23/2020	60	94		150

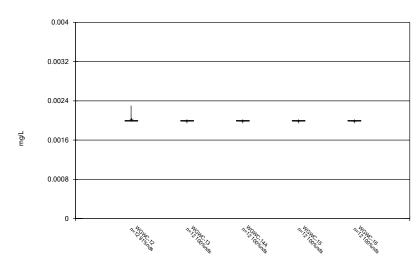
FIGURE B.



Constituent: Antimony Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

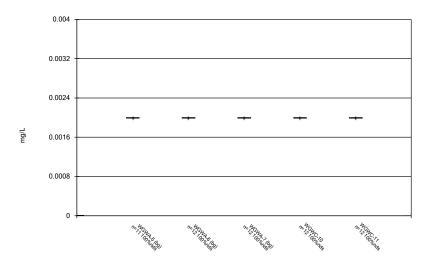
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

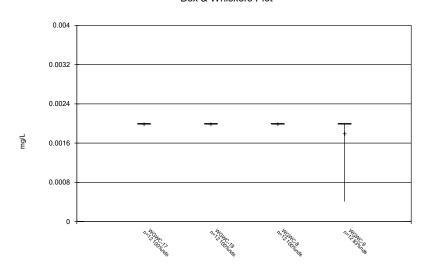
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/8/2021 10:21 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

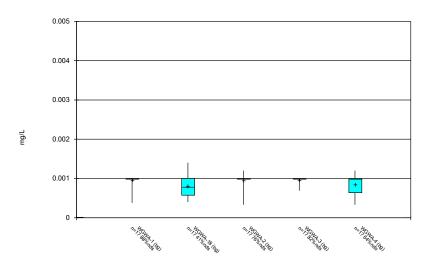
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

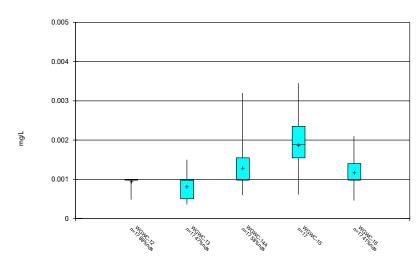




Constituent: Arsenic Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

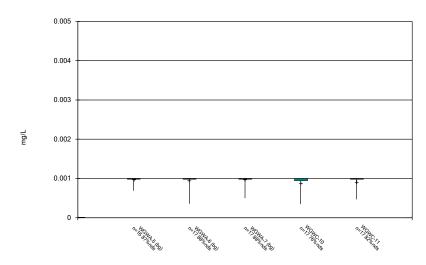
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

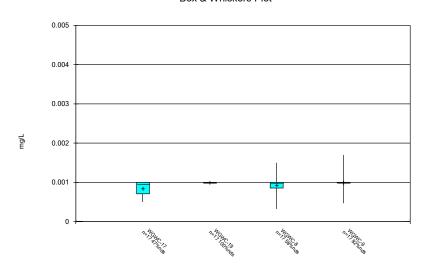


Constituent: Arsenic Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

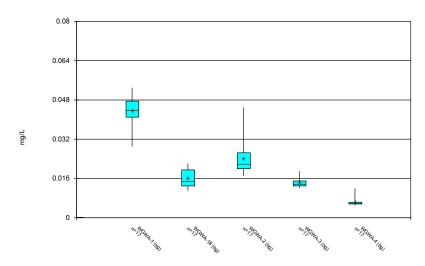
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

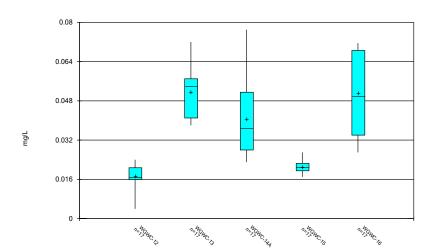
Box & Whiskers Plot



Constituent: Barium Analysis Run 1/8/2021 10:21 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

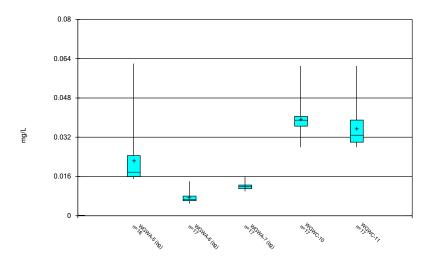
Box & Whiskers Plot



Constituent: Barium Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

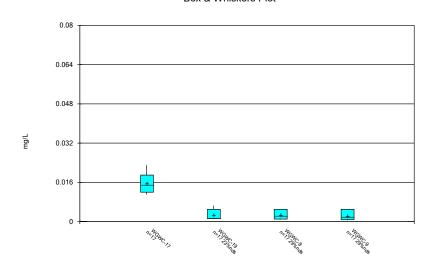


Constituent: Barium Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

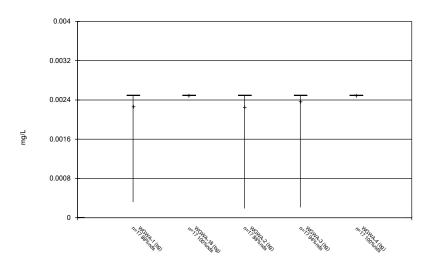
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



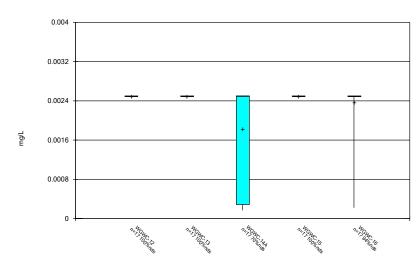
Constituent: Barium Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Beryllium Analysis Run 1/8/2021 10:21 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

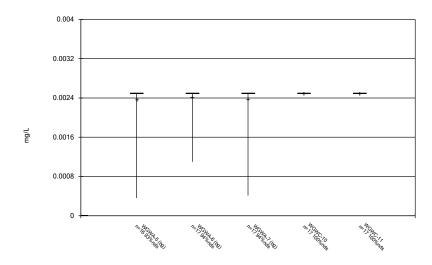
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

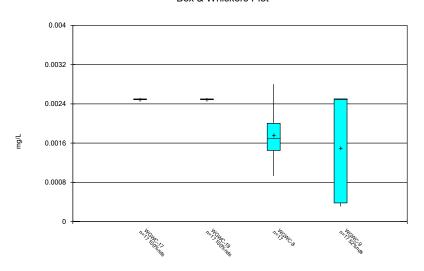
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 1/8/2021 10:21 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

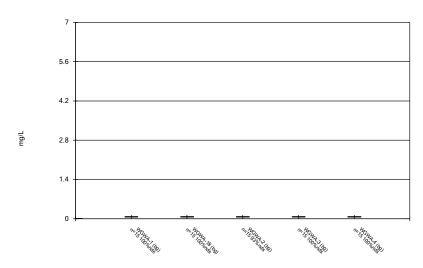
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

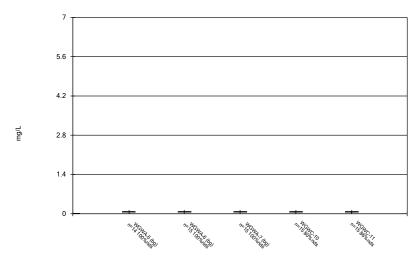
Box & Whiskers Plot



Constituent: Boron Analysis Run 1/8/2021 10:21 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

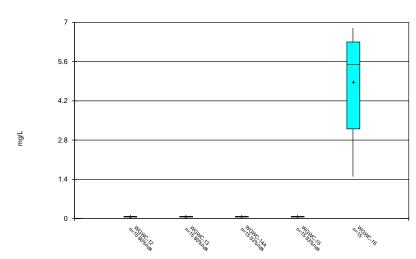
Box & Whiskers Plot



Constituent: Boron Analysis Run 1/8/2021 10:21 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

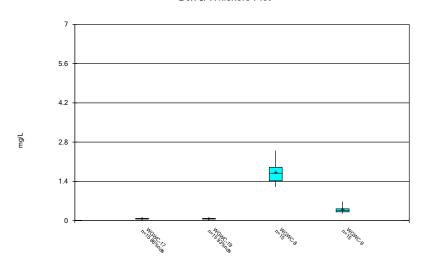


Constituent: Boron Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

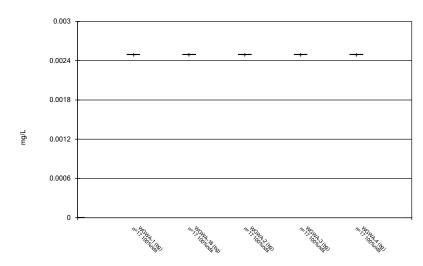
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



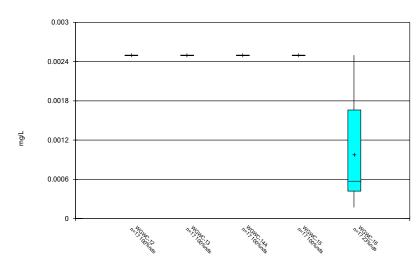
Constituent: Boron Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Cadmium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

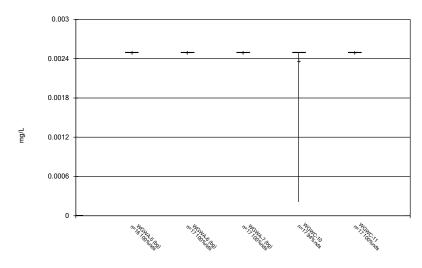
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

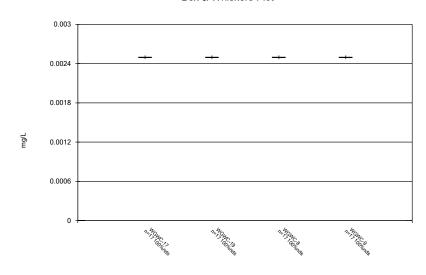
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

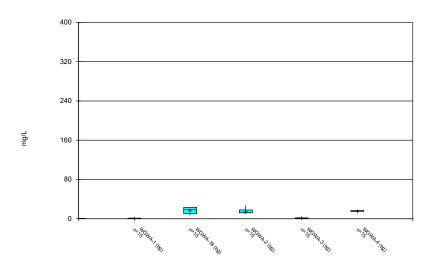
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

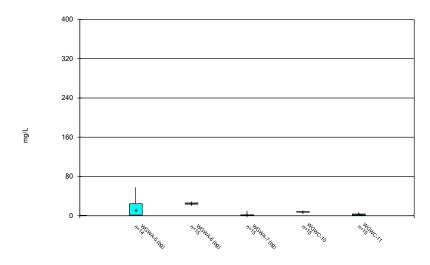


Constituent: Cadmium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





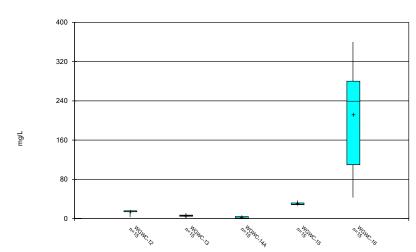
Constituent: Calcium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Calcium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

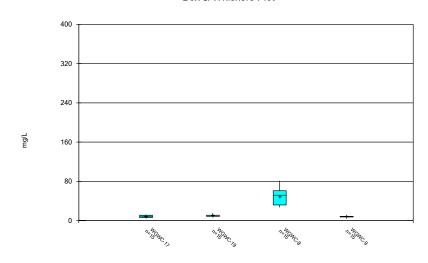


Constituent: Calcium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

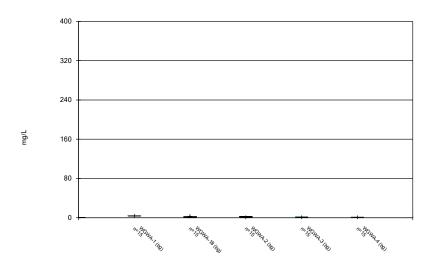
Box & Whiskers Plot



Constituent: Calcium Analysis Run 1/8/2021 10:22 AM

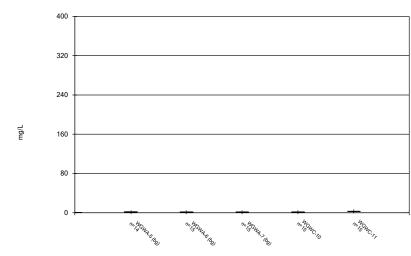
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



Constituent: Chloride Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

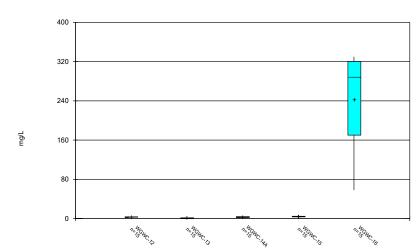
Box & Whiskers Plot



Constituent: Chloride Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

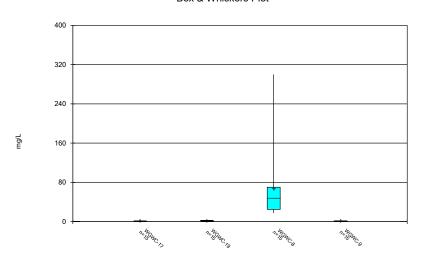


Constituent: Chloride Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

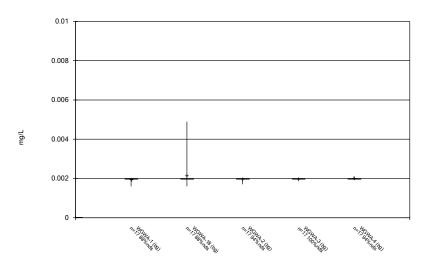
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

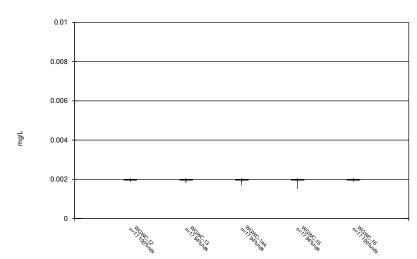


Constituent: Chromium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

$Sanitas^{\text{\tiny TM}} \ v.9.6.27b \ Groundwater \ Stats \ Consulting. \ UG$

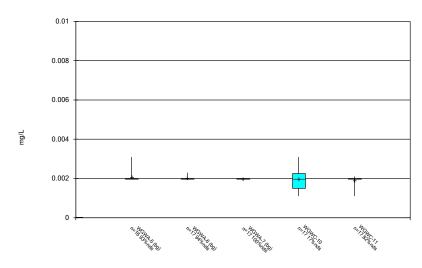
Box & Whiskers Plot



Constituent: Chromium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

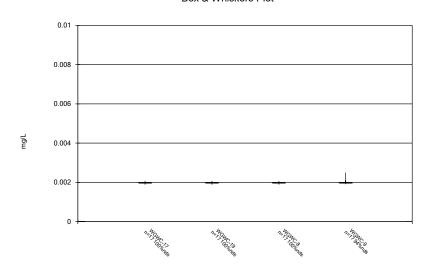
Box & Whiskers Plot



Constituent: Chromium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

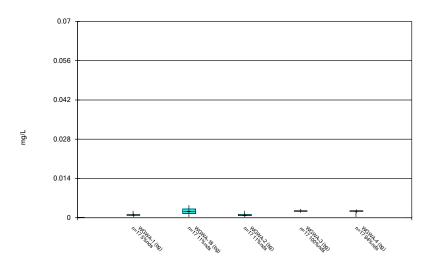
Box & Whiskers Plot



Constituent: Chromium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

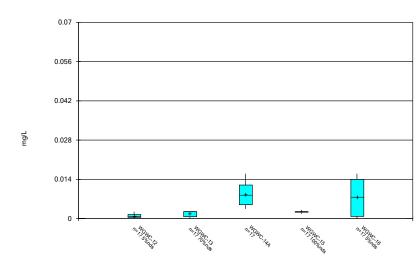


Constituent: Cobalt Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 $Sanitas^{\text{\tiny TM}} \ v. 9.6.27b \ Groundwater \ Stats \ Consulting. \ UG$

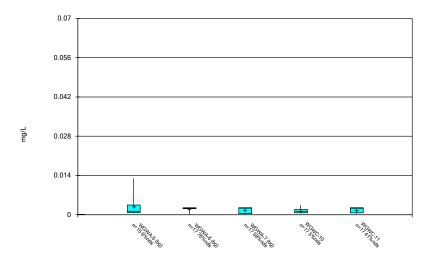
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

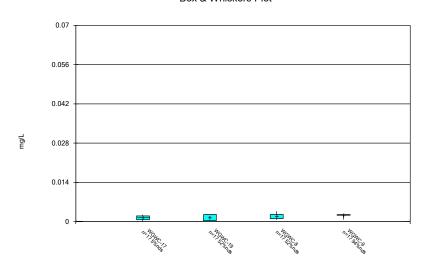


Constituent: Cobalt Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

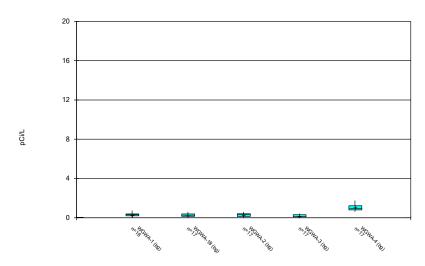
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



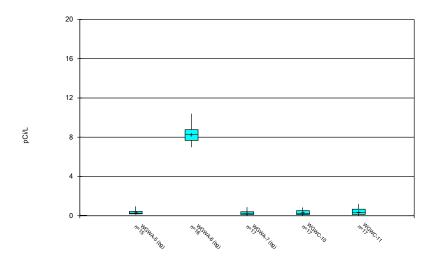
Constituent: Cobalt Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

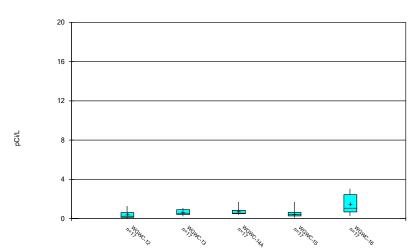
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

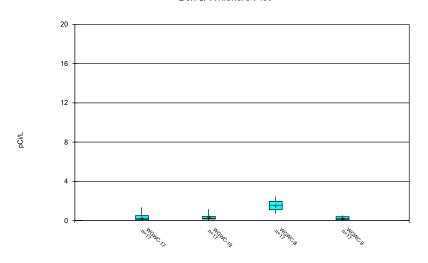


Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

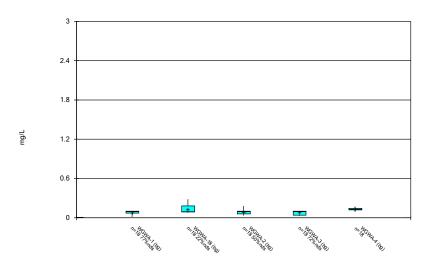
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

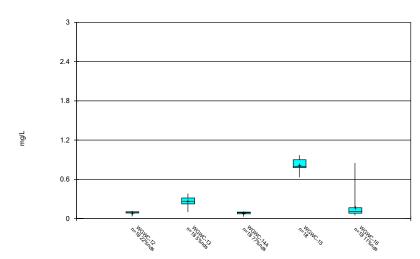


Constituent: Fluoride Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas[™] v.9.6.27b Groundwater Stats Consulting. UG

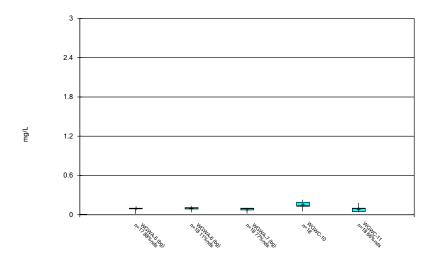
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

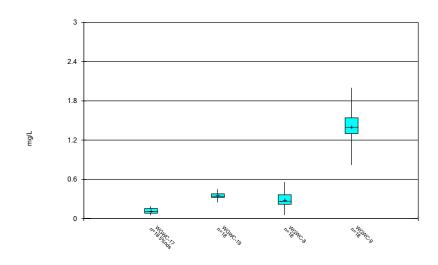
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

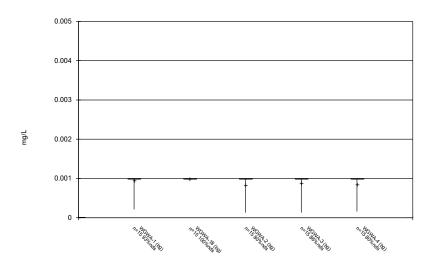
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

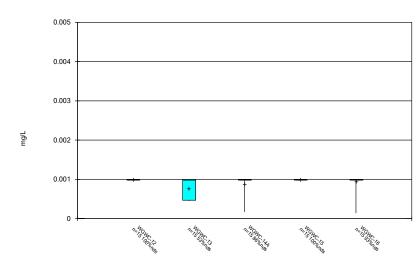




Constituent: Lead Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

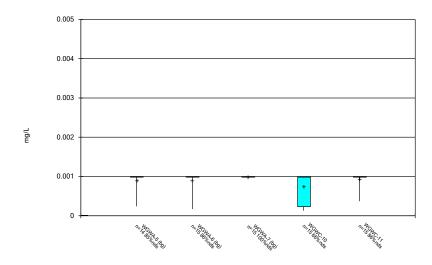
Box & Whiskers Plot



Constituent: Lead Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

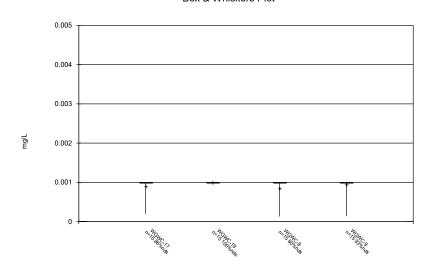


Constituent: Lead Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

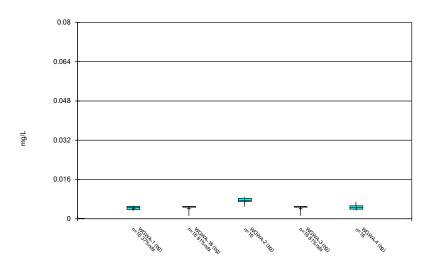
Box & Whiskers Plot



Constituent: Lead Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

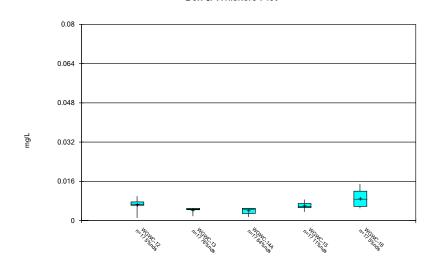




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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

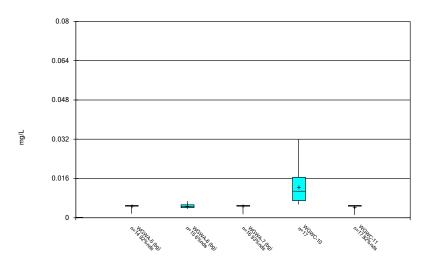
Box & Whiskers Plot



Constituent: Lithium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

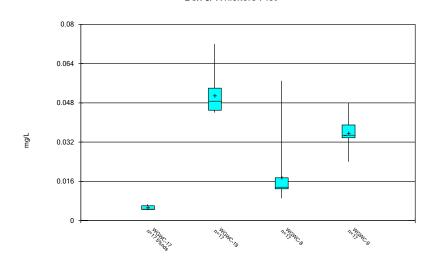


Constituent: Lithium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

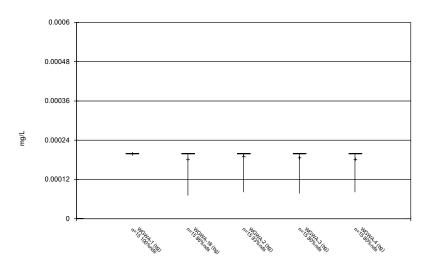
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Lithium Analysis Run 1/8/2021 10:22 AM

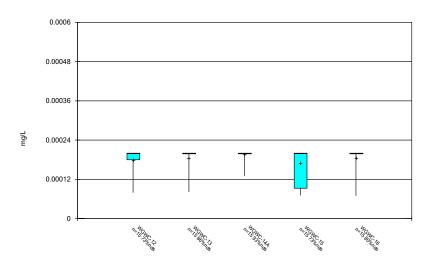
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Mercury Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

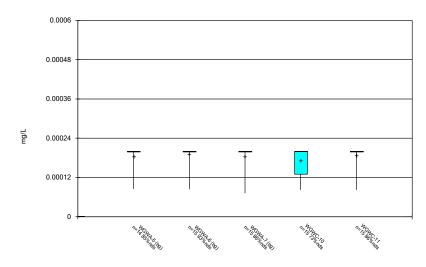
Box & Whiskers Plot



Constituent: Mercury Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

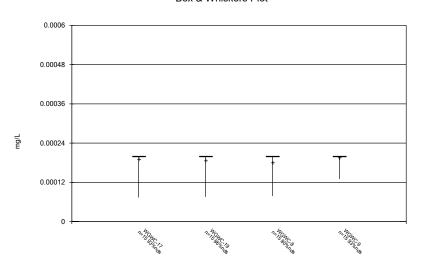
Box & Whiskers Plot

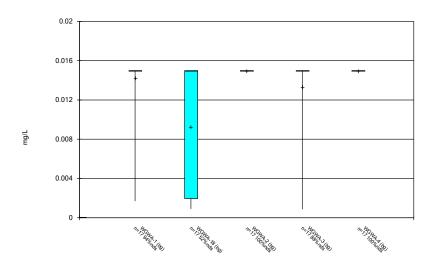


Constituent: Mercury Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

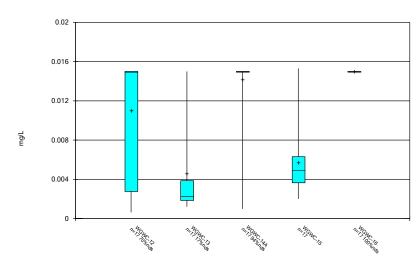
Box & Whiskers Plot





Constituent: Molybdenum Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

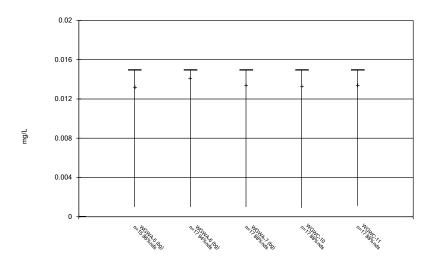
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

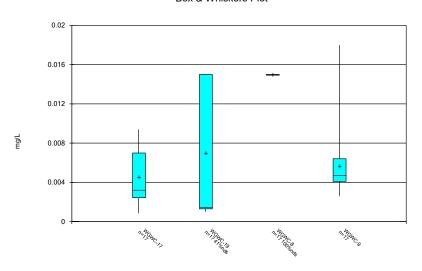
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

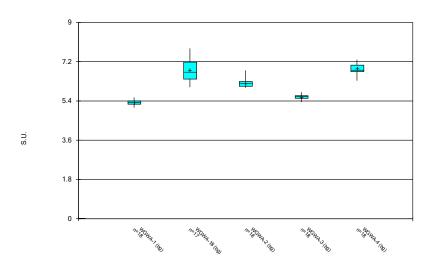
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

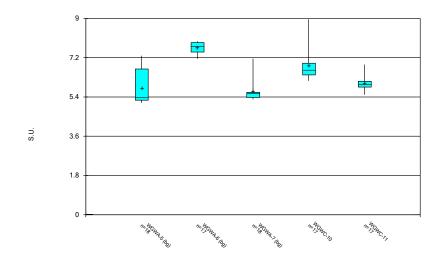


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond





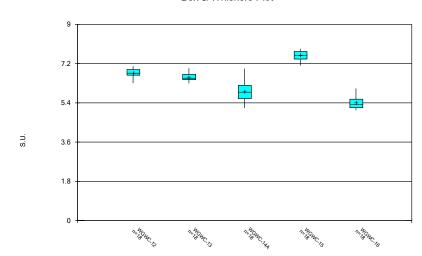
Constituent: pH Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: pH Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

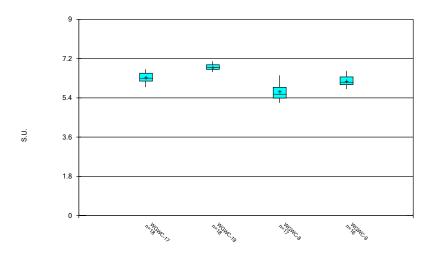
Box & Whiskers Plot



Constituent: pH Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

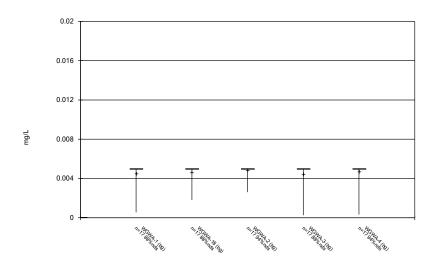
Box & Whiskers Plot



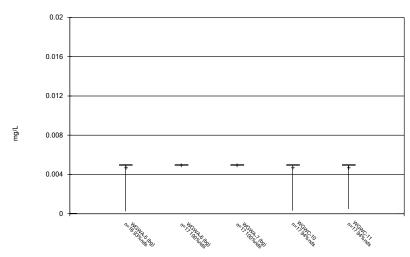
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond





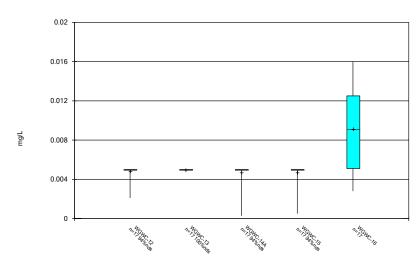
Constituent: Selenium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Selenium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

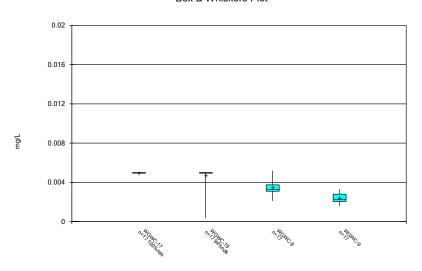


Constituent: Selenium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

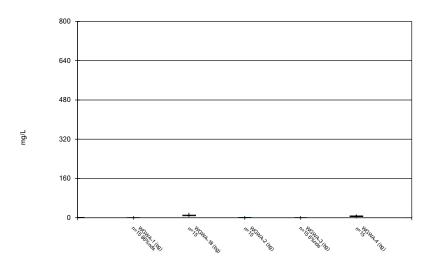
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



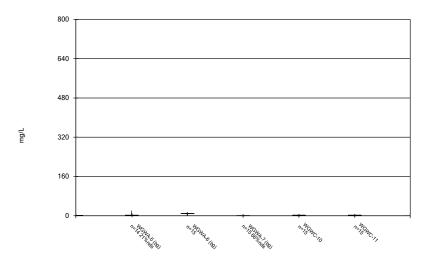
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond





Constituent: Sulfate Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

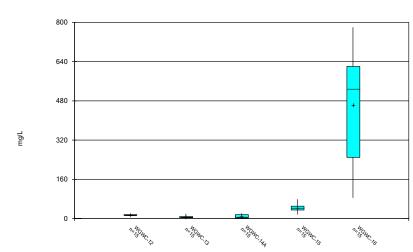


Constituent: Sulfate Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot

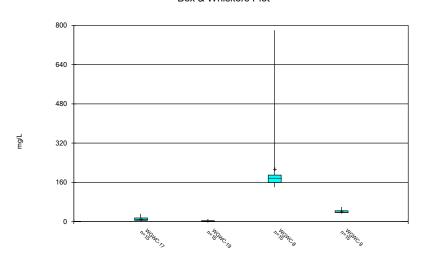


Constituent: Sulfate Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

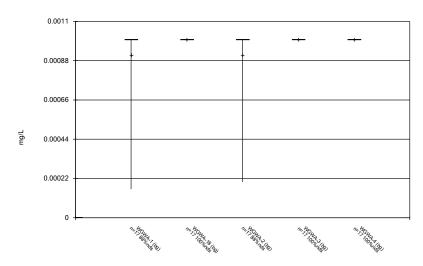
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

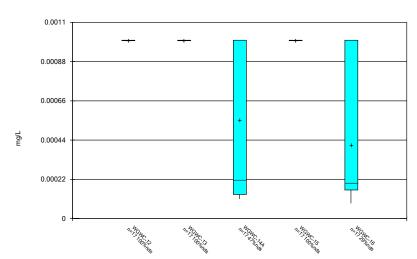


Constituent: Thallium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

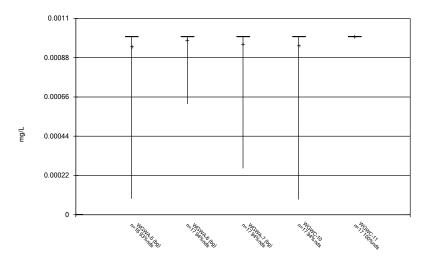
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

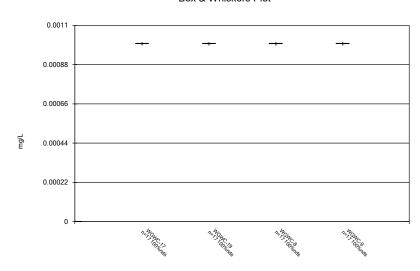
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/8/2021 10:22 AM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

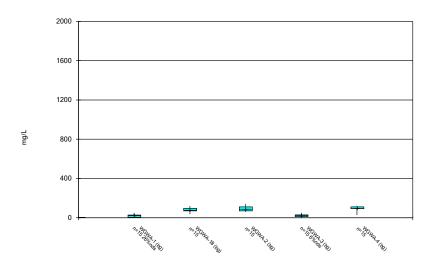
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/8/2021 10:22 AM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

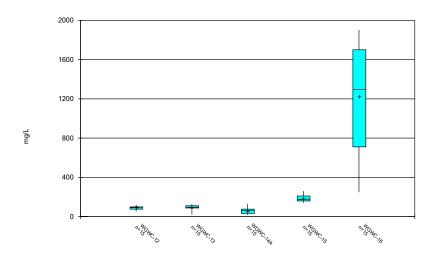
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:22 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

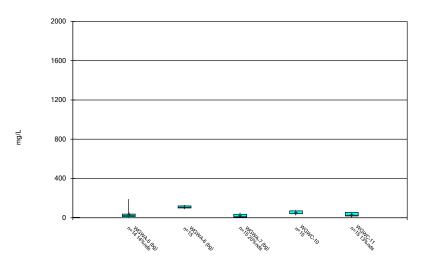
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:22 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

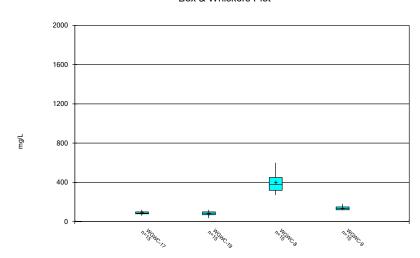
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:22 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/8/2021 10:23 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

FIGURE C.

Outlier Summary

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:26 AM

	WGWA-5 CO	_{balt} (mg/L) WGWA-1 Co	ombined Radiu WGWA-6 Co	im 226 + 228 ombined Radii WGWA-1 Li	(pCi/L) um 226 + 228 thium (mg/L) WGWA-18 I	(pCi/L) _{-ithium} (mg/L) WGWA-2 Li	_{tthium} (mg/L) WGWA-3 Li	_{thium} (mg/L) WGWA-4 Li	_{thium} (mg/L) WGWA-5 Li	_{tthium} (mg/L) WGWA-6 Lithium (mg/L)
5/17/2016				<0.05 (o)	<0.05 (o)	<0.05 (o)				
5/18/2016							<0.05 (o)	<0.05 (o)	<0.05 (o)	<0.05 (o)
7/19/2016		7.25 (o)								
9/14/2016										
1/19/2017	0.064 (O)									
3/14/2017			0.589 (O)							
9/16/2019									0.028 (o)	0.032 (o)

WGWA-7 Lithium (mg/L) WGWA-5 Molybdenum (mg/L)

5/17/2016

5/18/2016 <0.05 (o)

7/19/2016

9/14/2016 0.016 (o)

1/19/2017

3/14/2017

9/16/2019

FIGURE D.

Appendix III - Interwell Prediction Limits - Significant Results

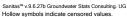
	F	Plant Wansley	Client: \$	Southern Com	npany Data	a: Wansley Ash Pond	Printed 1/	6/2021, 9:30 AN			
Constituent	Well	Upper Lim.	Lower Lim	n.Date	Observ.	Sig. Bg N Bg Mean	Std. Dev.	%NDs ND A	lj. <u>Transf</u>	orm Alpha	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	9/23/2020	1.5	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	9/22/2020	2.5	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	9/23/2020	0.68	Yes 119 n/a	n/a	99.16 n/a	n/a	0.0001382	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	9/22/2020	81	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	9/23/2020	58	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	9/22/2020	100	Yes 119 n/a	n/a	0 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	9/23/2020	0.63	Yes 143 n/a	n/a	49.65 n/a	n/a	0.0000962	9 NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	9/23/2020	0.82	Yes 143 n/a	n/a	49.65 n/a	n/a	0.0000962	9 NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-16	7.96	5.09	9/23/2020	5.05	Yes 142 n/a	n/a	0 n/a	n/a	0.0001949	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	9/23/2020	85	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	9/22/2020	200	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	9/23/2020	54	Yes 119 n/a	n/a	22.69 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	9/23/2020	250	Yes 119 n/a	n/a	8.403 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	9/22/2020	600	Yes 119 n/a	n/a	8.403 n/a	n/a	0.0001382	NP Inter (normality) 1 of 2

Appendix III - Interwell Prediction Limits - All Results

Printed 1/6/2021, 9:30 AM Plant Wansley Client: Southern Company Data: Wansley Ash Pond Constituent <u>Well</u> Bg N Bg Mean Std. Dev. %NDs ND Adj. NP Inter (NDs) 1 of 2 0.08 9/23/2020 0.08ND No 119 Boron (mg/L) n/a n/a 99.16 n/a 0.0001382 Boron (mg/L) WGWC-11 0.08 n/a 9/24/2020 0.08ND Nο 119 n/a n/a 99.16 n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) WGWC-12 0.08 n/a 9/23/2020 0.08ND n/a 99.16 n/a 0.0001382 NP Inter (NDs) 1 of 2 0.0001382 Boron (mg/L) WGWC-13 0.08 n/a 9/24/2020 0.08ND Nο 119 n/a n/a 99 16 n/a n/a NP Inter (NDs) 1 of 2 Boron (mg/L) WGWC-14A 0.08 n/a 9/24/2020 0.08ND No n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 WGWC-15 9/23/2020 0.08ND 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 n/a No 119 n/a n/a 99.16 n/a n/a WGWC-16 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 9/23/2020 1.5 n/a WGWC-17 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) 0.08 n/a 9/23/2020 0.08ND 119 n/a 99.16 No n/a n/a n/a WGWC-19 0.08 n/a 9/23/2020 0.08ND No 119 n/a 99.16 0.0001382 NP Inter (NDs) 1 of 2 Boron (mg/L) n/a n/a NP Inter (NDs) 1 of 2 WGWC-8 9/22/2020 0.0001382 Boron (ma/L) 0.08 n/a 2.5 Yes 119 n/a 99.16 n/a n/a n/a Boron (mg/L) WGWC-9 0.08 n/a 9/23/2020 0.68 Yes 119 n/a 99.16 n/a n/a 0.0001382 NP Inter (NDs) 1 of 2 n/a Calcium (mg/L) WGWC-10 n/a 9/23/2020 7.7 No 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) WGWC-11 58 n/a 9/24/2020 5.2 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) WGWC-12 n/a 9/23/2020 13 No 119 0 0.0001382 NP Inter (normality) 1 of 2 0.0001382 WGWC-13 0 NP Inter (normality) 1 of 2 Calcium (mg/L) 58 n/a 9/24/2020 1.4 No 119 n/a n/a n/a n/a Calcium (mg/L) WGWC-14A 9/24/2020 0 0.0001382 NP Inter (normality) 1 of 2 58 n/a 0.99 No 119 n/a n/a WGWC-15 32 0 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) 58 n/a 9/23/2020 No 119 n/a n/a n/a n/a Calcium (mg/L) WGWC-16 n/a 9/23/2020 43 119 0 0.0001382 NP Inter (normality) 1 of 2 No n/a n/a WGWC-17 0 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) n/a 9/23/2020 5.9 No 58 119 n/a n/a n/a Calcium (mg/L) WGWC-19 58 n/a 9/23/2020 13 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Calcium (mg/L) WGWC-8 n/a 9/22/2020 81 Yes n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Calcium (mg/L) WGWC-9 58 n/a 9/23/2020 10 Nο 119 n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 WGWC-10 0 Chloride (mg/L) 6.05 9/23/2020 1.3 n/a 0.0001382 NP Inter (normality) 1 of 2 n/a 0.0001382 Chloride (mg/L) WGWC-11 6.05 n/a 9/24/2020 1 No 119 n/a n/a 0 n/a n/a NP Inter (normality) 1 of 2 Chloride (mg/L) WGWC-12 6.05 n/a 9/23/2020 2.8 No 119 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Chloride (mg/L) WGWC-13 9/24/2020 119 0 0.0001382 NP Inter (normality) 1 of 2 6.05 n/a 1.6 No n/a n/a n/a n/a Chloride (mg/L) WGWC-14A 6.05 n/a 9/24/2020 3.1 119 0 0.0001382 NP Inter (normality) 1 of 2 No n/a n/a n/a WGWC-15 Chloride (mg/L) n/a 9/23/2020 1.5 No 119 0 0.0001382 NP Inter (normality) 1 of 2 6.05 n/a n/a n/a n/a Chloride (mg/L) WGWC-16 6.05 n/a 9/23/2020 58 Yes 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 119 n/a n/a Chloride (mg/L) WGWC-17 6.05 n/a 9/23/2020 1.2 No 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 n/a Chloride (mg/L) WGWC-19 6.05 n/a 9/23/2020 2.6 Nο 119 n/a n/a 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 Chloride (ma/L) WGWC-8 n/a 9/22/2020 0 n/a n/a 0.0001382 NP Inter (normality) 1 of 2 WGWC-9 9/23/2020 0 0.0001382 NP Inter (normality) 1 of 2 Chloride (mg/L) 6.05 n/a 2.4 Nο 119 n/a n/a n/a n/a 0.09J Fluoride (mg/L) WGWC-10 0.284 n/a 9/23/2020 49 65 0.00009629 NP Inter (normality) 1 of 2 No 143 n/a n/a n/a n/a Fluoride (mg/L) WGWC-11 0.00009629 NP Inter (normality) 1 of 2 0.284 n/a 9/24/2020 0.18 No 143 n/a n/a 49.65 n/a n/a 0.064.1 Fluoride (mg/L) WGWC-12 0.284 n/a 9/23/2020 No 143 49.65 n/a 0.00009629 NP Inter (normality) 1 of 2 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) WGWC-13 0.284 n/a 9/24/2020 0.1ND No 143 49.65 n/a n/a Fluoride (mg/L) WGWC-14A 0.284 n/a 9/24/2020 0.028.1 No 143 49.65 n/a n/a 0.00009629 NP Inter (normality) 1 of 2 n/a n/a Fluoride (mg/L) WGWC-15 0.284 9/23/2020 0.63 Yes 49.65 0.00009629 NP Inter (normality) 1 of 2 n/a n/a n/a n/a n/a Fluoride (ma/L) WGWC-16 0.284 n/a 9/23/2020 0.049J No 143 n/a n/a 49.65 n/a n/a 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) WGWC-17 9/23/2020 No 49.65 0.00009629 NP Inter (normality) 1 of 2 n/a n/a n/a 0.00009629 NP Inter (normality) 1 of 2 WGWC-19 Fluoride (mg/L) 0.284 n/a 9/23/2020 0.25 Nο 143 n/a n/a 49.65 n/a n/a WGWC-8 9/22/2020 0.00009629 NP Inter (normality) 1 of 2 Fluoride (mg/L) 0.284 n/a 0.14 No 143 49.65 n/a Fluoride (mg/L) WGWC-9 9/23/2020 0.82 0.00009629 NP Inter (normality) 1 of 2 0.284 n/a Yes 143 n/a n/a 49.65 n/a n/a WGWC-10 9/23/2020 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 7.96 5.09 6.14 No 0 WGWC-11 9/24/2020 0 5.09 5.5 No 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 7.96 n/a n/a n/a pH (S.U.) WGWC-12 7.96 5.09 9/23/2020 6.42 No 142 n/a n/a 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) WGWC-13 7.96 5.09 9/24/2020 6.29 0 n/a 0.0001949 NP Inter (normality) 1 of 2 n/a n/a pH (S.U.) WGWC-14A 7.96 5.09 9/24/2020 5 16 Nο 142 n/a n n/a n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-15 pH (S.U.) 7.96 5.09 9/23/2020 7.35 No 0 n/a n/a NP Inter (normality) 1 of 2 n/a pH (S.U.) WGWC-16 7.96 5.09 9/23/2020 5.05 Yes n/a n/a 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) WGWC-17 7.96 5.09 9/23/2020 5.89 0 n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-19 0 0.0001949 NP Inter (normality) 1 of 2 pH (S.U.) 5.09 9/23/2020 6.59 142 7.96 No n/a n/a n/a n/a pH (S.U.) WGWC-8 7.96 5.09 9/22/2020 5.17 142 0 n/a n/a 0.0001949 NP Inter (normality) 1 of 2 No n/a 0.0001949 NP Inter (normality) 1 of 2 WGWC-9 5.09 9/23/2020 0 pH (S.U.) 7.96 5.8 No 142 n/a n/a n/a n/a Sulfate (mg/L) WGWC-10 21 n/a 9/23/2020 1.8 Nο 119 n/a 22.69 n/a n/a 0.0001382 NP Inter (normality) 1 of 2

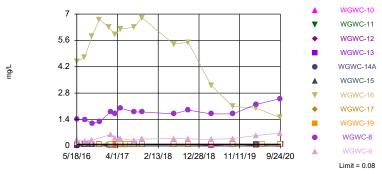
Appendix III - Interwell Prediction Limits - All Results

		Plant Wansley	/ Client	: Southern Con	npany I	Data: '	Wansle	y Ash	n Pond	Printed 1/6	6/2021, 9	9:30 AM			
Constituent	Well	Upper Lin	n.Lower Li	im.Date	Observ	<u>/.</u>	Sig. Bo	N Bo	g Mean	Std. Dev.	%NDs	ND Adj.	Transform	m <u>Alpha</u>	Method
Sulfate (mg/L)	WGWC-11	21	n/a	9/24/2020	2.7	1	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-12	21	n/a	9/23/2020	12	-	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-13	21	n/a	9/24/2020	0.63J	1	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-14A	21	n/a	9/24/2020	1.2	1	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-15	21	n/a	9/23/2020	21	-	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	9/23/2020	85	,	Yes 11	9 n/	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-17	21	n/a	9/23/2020	4.4	ı	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-19	21	n/a	9/23/2020	3	1	No 11	9 n/a	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	9/22/2020	200	,	Yes 11	9 n/	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	9/23/2020	54	,	Yes 11	9 n/	/a	n/a	22.69	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-10	190	n/a	9/23/2020	50		No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-11	190	n/a	9/24/2020	60		No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-12	190	n/a	9/23/2020	90		No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-13	190	n/a	9/24/2020	21	- 1	No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-14A	190	n/a	9/24/2020	24	ı	No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-15	190	n/a	9/23/2020	150	- 1	No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	9/23/2020	250	,	Yes 11	9 n/	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-17	190	n/a	9/23/2020	60	- 1	No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-19	190	n/a	9/23/2020	94	- 1	No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	9/22/2020	600	,	Yes 11	9 n/	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-9	190	n/a	9/23/2020	150		No 11	9 n/a	/a	n/a	8.403	n/a	n/a	0.0001382	NP Inter (normality) 1 of 2



Exceeds Limit: WGWC-16, WGWC-8, WGWC-9

Prediction Limit Interwell Non-parametric

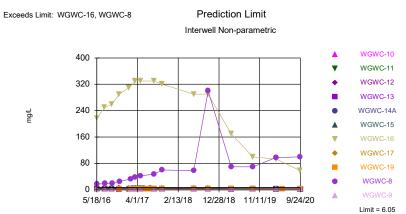


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 119 background values. 99.16% NDs. Annual per-constituent alpha = 0.0008288. Individual comparison alpha = 0.0001382 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 1/6/2021 9:19 AM View: Appendix III

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

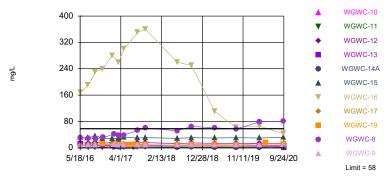
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



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 119 background values. Annual per-constituent alpha = 0.0008288. Individual comparison alpha = 0.0001382 (1 of 2). Comparing 11 points to limit.

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



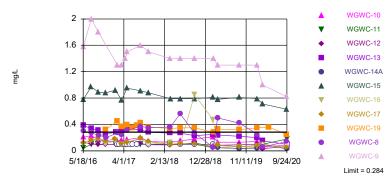


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 119 background values. Annual per-constituent alpha = 0.0008288. Individual comparison alpha = 0.0001382 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 1/6/2021 9:19 AM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 $\label{eq:Sanitas} {\tt Sanitas^{TM}} \ v. 9. 6. 27 b \ Groundwater \ Stats \ Consulting. \ UG \\ Hollow \ symbols \ indicate \ censored \ values.$

Exceeds Limit: WGWC-15, 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 143 background values. 49.65% NDs. Annual perconstituent alpha = 0.0005776. Individual comparison alpha = 0.00009629 (1 of 2). Comparing 11 points to limit.

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Prediction Limit Exceeds Limits: WGWC-16 Interwell Non-parametric WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-16 3.6 WGWC-17 WGWC-19 1.8 WGWC-8 0 Limit = 7.96 4/1/17 2/13/18 12/28/18 11/11/19 9/24/20 5/18/16

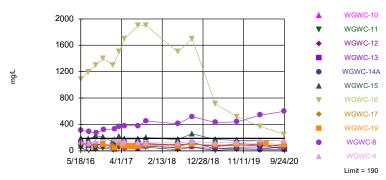
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 142 background values. Annual perconstituent alpha = 0.001169. Individual comparison alpha = 0.0001949 (1 of 2). Comparing 11 points to limit.

Limit = 5.09

Constituent: pH Analysis Run 1/6/2021 9:19 AM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 $\mbox{Sanitas}^{\mbox{\tiny{1N}}} \ \mbox{v.9.6.27b Groundwater Stats Consulting. UG} \\ \mbox{Hollow symbols indicate censored values.}$

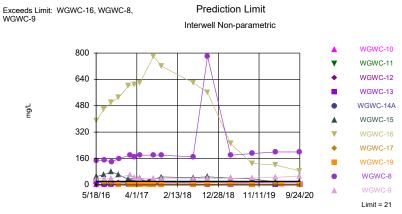
Exceeds Limit: WGWC-16, WGWC-8 Prediction Limit
Interwell Non-parametric



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 119 background values. 8.403% NDs. Annual perconstituent alpha = 0.0008288. Individual comparison alpha = 0.0001382 (1 of 2). Comparing 11 points to limit.

Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:19 AM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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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 119 background values. 22.69% NDs. Annual perconstituent alpha = 0.0008288. Individual comparison alpha = 0.0001382 (1 of 2). Comparing 11 points to limit.

	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	<0.08	<0.08	<0.08						
5/18/2016				<0.08	<0.08	<0.08	<0.08	4.48	<0.08
5/19/2016									
7/19/2016	<0.08	<0.08	<0.08		<0.08	<0.08	<0.08	4.7	<0.08
7/20/2016				<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	
11/11/2016				<0.08					
11/14/2016									
1/17/2017	<0.08	<0.08							
1/18/2017					<0.08		<0.08		
1/19/2017			<0.08						<0.08
1/20/2017									
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	<0.08	6.2	<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	<0.08	6.8	<0.08
10/12/2017				<0.08					
6/13/2018	<0.08		<0.08				<0.08		<0.08
6/14/2018		<0.08		<0.08	<0.08	<0.08		5.4	
9/24/2018		<0.08							
9/27/2018	<0.08								
9/28/2018			<0.08						
10/2/2018			0.00				<0.08		
10/3/2018					<0.08	<0.08			<0.08
10/4/2018				<0.08				5.5	-:==
4/1/2019	<0.08	<0.08		0.00				3.0	
4/1/2019	5.00	5.00	<0.08		<0.08		<0.08		<0.08
4/3/2019			5.00		3.00		5.00		5.50
4/4/2019				0.024 (J)		<0.08		3.2	
9/16/2019	<0.08			0.024 (0)		-0.00	<0.08	U. <u>L</u>	<0.08
5/ 10/2013	-0.00						-0.00		-0.00

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
9/17/2019		<0.08	<0.08						
9/18/2019					<0.08	<0.08		2.1	
9/19/2019				<0.08					
3/16/2020	<0.08	0.048 (J)							
3/17/2020			<0.08		<0.08		<0.08		<0.08
3/18/2020				0.049 (J)		0.071 (J)		2	
3/19/2020									
5/4/2020									
9/21/2020		<0.08							
9/22/2020	<0.08		<0.08		<0.08		<0.08		<0.08
9/23/2020				<0.08		<0.08		1.5	
9/24/2020									

		WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/20	16									
5/18/20	16	<0.08	<0.08	<0.08						
5/19/20	16				<0.08	0.0252 (J)	1.42	0.314	<0.08	
7/19/20	16									
7/20/20	16	<0.08	<0.08	<0.08	<0.08	<0.08	1.4	0.25	<0.08	
9/13/20	16		<0.08	<0.08						
9/14/20	16	<0.08			<0.08	<0.08		0.3	<0.08	
9/15/20	16						1.2			
11/9/20	16									
11/10/2	016	<0.08	<0.08	<0.08		<0.08				
11/11/2	016				<0.08				<0.08	<0.08
11/14/2	016						1.3			
1/17/20	17									
1/18/20	17		<0.08	<0.08						
1/19/20	17									
1/20/20	17	<0.08								
1/24/20	17									
1/27/20	17				0.021 (J)	0.033 (J)			0.047 (J)	
2/6/201	7						1.8			<0.08
2/8/201	7									
2/9/201	7							0.61		
2/23/20	17									
3/13/20	17									
3/14/20	17	<0.08	<0.08	<0.08						
3/15/20	17				0.058	<0.08	1.7	0.42	0.024 (J)	0.034 (J)
3/17/20	17									
4/11/20	17							0.37		<0.08
4/24/20	17									
4/25/20	17	<0.08	<0.08	<0.08						
4/26/20					<0.08	<0.08	2	0.38	<0.08	<0.08
5/17/20										
6/7/201										<0.08
7/11/20										<0.08
8/8/201				<0.08						
8/9/201		<0.08	<0.08			<0.08				
8/10/20					<0.08		1.8	0.29	<0.08	<0.08
10/10/2										
10/11/2		<0.08	<0.08	<0.08						
10/12/2					<0.08	<0.08	1.8	0.36	<0.08	<0.08
6/13/20										
6/14/20		<0.08	<0.08	<0.08	<0.08	<0.08	1.7	0.39	<0.08	<0.08
9/24/20										
9/27/20										
9/28/20										
10/2/20										
10/3/20			<0.08	<0.08						
10/4/20		<0.08			<0.08	<0.08	1.9	0.37	<0.08	<0.08
4/1/201			-0.09	~0.08						-0.00
4/2/201			<0.08	<0.08	-0.00	-0.00	17	0.25	~0.08	<0.08
4/3/201		0.040 (1)			<0.08	<0.08	1.7	0.35	<0.08	
4/4/201		0.049 (J)								
9/16/20	19									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
9/17/2019		<0.08							
9/18/2019	<0.08		<0.08		<0.08				<0.08
9/19/2019				<0.08		1.7	0.39	<0.08	
3/16/2020									
3/17/2020		<0.08	<0.08						
3/18/2020	0.049 (J)			<0.08				0.039 (J)	
3/19/2020					0.053 (J)	2.2	0.55		
5/4/2020									<0.08
9/21/2020		<0.08	<0.08						
9/22/2020						2.5			
9/23/2020	<0.08						0.68	<0.08	<0.08
9/24/2020				<0.08	<0.08				

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	<0.08			
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				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	<0.08

	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	0.927	12.2	23.7						
5/18/2016				7.17	1.36	32.5	27	168	1.7
5/19/2016									
7/19/2016	1	13	23		0.88	30	23	190	1.5
7/20/2016				7					
9/13/2016	0.44	13	23		0.93		25		
9/14/2016				7.7		37		230	52
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							
1/18/2017					10		26		
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	29	20		1.6
3/15/2017			.0	9		20	20	260	
3/17/2017				•				200	
4/11/2017									
4/24/2017	1.1	12							
4/25/2017	1.1	12	23		1.9	32	28	300	1.5
4/26/2017			25	8.1	1.5	32	20	300	1.0
5/17/2017				0.1					
6/7/2017									
7/11/2017									
	1.1	10	24		4.0		26		
8/8/2017 8/9/2017	1.1	18	24		4.8	30	26	350	1.3
8/10/2017				8.1		30		330	1.3
10/10/2017	1.2	21		0.1					
10/10/2017	1.2	21	22		0.03	21	20	260	1.5
10/11/2017			23	8.6	0.93	31	29	360	1.5
6/13/2018	1.1		11	8.0			25		1.2
	1.1	10	11	7.7	0.94	20	25	260	1.2
6/14/2018		12 11		7.7	0.94	29		260	
9/24/2018	1.0	11							
9/27/2018	1.2								
9/28/2018			11				00		
10/2/2018					1.0	21	26		1.4
10/3/2018				0.5	1.2	31		250	1.4
10/4/2018	_	40		8.5				250	
4/1/2019	1	12	00				05		
4/2/2019			20		1.1		25		1.1
4/3/2019									
4/4/2019				7.9		30		110	••
9/16/2019	1.3						25		36

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
9/17/2019		13	10						
9/18/2019					1.5	31		62	
9/19/2019				7.5					
3/16/2020	1.1	10							
3/17/2020			10		0.82		26		1.4
3/18/2020				7.5		30		66	
3/19/2020									
5/4/2020									
9/21/2020		13							
9/22/2020	1.2		19		0.89		25		58
9/23/2020				7.7		32		43	
9/24/2020									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	8.24	17.9	2.1						
5/19/2016				1.95	11.4	31.4	8.53	15.8	
7/19/2016									
7/20/2016	11	15	1.7	1.5	7.1	28	8.2	14	
9/13/2016		16	1.3						
9/14/2016	12			1.8	7.4		8.8	16	
9/15/2016						27			
11/9/2016									
11/10/2016	11	15	1.6		6.4				
11/11/2016				1.7				15	12
11/14/2016						32			
1/17/2017									
1/18/2017		17	1.7						
1/19/2017									
1/20/2017	10								
1/24/2017									
1/27/2017				3.5	6.2			16	
2/6/2017						41			11
2/8/2017									
2/9/2017							10		
2/23/2017									
3/13/2017									
3/14/2017	8.8	17	1.8						
3/15/2017				3.8	6.7	38	8.6	16	10
3/17/2017									
4/11/2017							8.6		11
4/24/2017									
4/25/2017	12	17	2						
4/26/2017				4	6.5	39	7.1	3	8.4
5/17/2017									
6/7/2017									9
7/11/2017									9.5
8/8/2017			2						
8/9/2017	11	15			7				
8/10/2017				3.5		53	7.5	15	8.8
10/10/2017									
10/11/2017	10	17	2.1						
10/12/2017				2.7	7	60	8.2	16	9.5
6/13/2018									
6/14/2018	6.2	15	2	2.2	5.5	52	7.5	13	8.9
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		16	1.8						
10/4/2018	6.4			2	5.9	65	8	15	10
4/1/2019									
4/2/2019		15	1.8						11
4/3/2019				1.7	4.7	61	7.2	14	
4/4/2019	5.6								
9/16/2019									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
9/17/2019		16							
9/18/2019	5.5		1.6		4.9				8.8
9/19/2019				1.4		57	8.1	14	
3/16/2020									
3/17/2020		15	1.7						
3/18/2020	6.3			1.6				14	
3/19/2020					5	79	9.3		
5/4/2020									15
9/21/2020		16	1.8						
9/22/2020						81			
9/23/2020	5.9						10	13	13
9/24/2020				5.2	1.4				

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	3.2			
2/9/2017	0.2			
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				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	0.99

	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	3.8	2.5	6.05						
5/18/2016				1.45	2.06	4.59	1.58	217	2.14
5/19/2016									
7/19/2016	3.9	2.6	4		2.1	5.9	1.6	250	2.4
7/20/2016				1.6					
9/13/2016	3.6	2.4	3.1		2		1.4		
9/14/2016				1.5		7.9		260	2.1
9/15/2016									
11/9/2016	3.9	2.3	2.3				1.5		
11/10/2016					1.8	6.5		290	
11/11/2016				1.5					
11/14/2016									
1/17/2017	3.8	2.3							
1/18/2017					1.8		1.5		
1/19/2017			2						1.8
1/20/2017									
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							
3/14/2017	.		1.9		1.8	4.4	2.5		2
3/15/2017				1.4			2.0	330	-
3/17/2017				1				000	
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017	0.4	2.2	1.9		1.8	4	1.3	330	1.8
4/26/2017			1.5	1.3	1.0	7	1.5	330	1.0
5/17/2017				1.5					
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2		1.9		1.4		
8/9/2017	3.0	2.3	2		1.9	3.6	1.4	330	1.9
8/10/2017				1.4		3.0		330	1.9
10/10/2017	3.6	2.5		1.4					
10/10/2017	3.0	2.5	1.0		10	5	1.2	220	2.1
10/11/2017			1.9	1.3	1.8	3	1.3	320	2.1
6/13/2018	3.8		2	1.3			1.4		1.7
	3.0	2.2	2	1.2	17	4.2	1.4	200	1.7
6/14/2018		2.3		1.3	1.7	4.3		290	
9/24/2018	4	2.4							
9/27/2018	4		0.4						
9/28/2018			2.1						
10/2/2018					1.0	4.0	1.4		1.0
10/3/2018				1.0	1.8	4.8		202	1.8
10/4/2018		0.4		1.3				290	
4/1/2019	4	2.4	2.0		1.0		1.5		4.7
4/2/2019			2.6		1.9		1.5		1.7
4/3/2019								.=-	
4/4/2019				1.4		3.7		170	
9/16/2019	4						1.5		1.8

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
9/17/2019		2.4	2						
9/18/2019					2	3.2		100	
9/19/2019				1.5					
3/16/2020	4.3	2.7							
3/17/2020			2.3		2.2		1.7		1.6
3/18/2020				1.5		1.7		93	
3/19/2020									
5/4/2020									
9/21/2020		2.5							
9/22/2020	4		2.1		1.8		1.4		1.5
9/23/2020				1.3		1.5		58	
9/24/2020									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	2.72	1.45	1.92						
5/19/2016				3.21	2.26	17.5	1.46	3.8	
7/19/2016									
7/20/2016	1.9	1.4	1.8	3.4	1.9	19	1.5	3.8	
9/13/2016		1.4	1.7						
9/14/2016	1.6			3.1	1.6		1.4	3.7	
9/15/2016						19			
11/9/2016									
11/10/2016	1.6	1.3	1.6		1.4				
11/11/2016				3.2				3.5	2.6
11/14/2016						25			
1/17/2017									
1/18/2017		1.3	1.7						
1/19/2017									
1/20/2017	1.5								
1/24/2017									
1/27/2017				3.4	1.4			3.1	
2/6/2017						33			2.6
2/8/2017							4.5		
2/9/2017							1.5		
2/23/2017									
3/13/2017	1 5	1.0	1.6						
3/14/2017	1.5	1.2	1.6	0.1	4.4	20	1.0	2.2	0.4
3/15/2017				3.1	1.4	38	1.3	3.2	2.4
3/17/2017							1.0		2.2
4/11/2017							1.2		2.3
4/24/2017	1.0	1.0	1.6						
4/25/2017	1.8	1.2	1.6	2.1	1.2	40	1.0	2.2	2.2
4/26/2017 5/17/2017				3.1	1.3	42	1.2	3.2	2.3
6/7/2017									2.5
7/11/2017									2.3
8/8/2017			1.7						2.5
8/9/2017	1.4	1.2	1.7		1.4				
8/10/2017				3.1		48	1.3	3.4	2.5
10/10/2017									
10/11/2017	1.5	1.2	1.6						
10/12/2017				3	1.2	60	1.4	3.1	2.3
6/13/2018									
6/14/2018	1.5	1.2	1.6	3	1.2	58	1.2	3	2.4
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		1.2	1.6						
10/4/2018	1.5			3.1	1.2	300	1.2	3.1	2.6
4/1/2019									
4/2/2019		1.2	1.7						2.5
4/3/2019				3.3	1.2	70	2	3	
4/4/2019	1.4								
9/16/2019									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
9/17/2019		1.2							
9/18/2019	1.5		1.7		1.2				2.7
9/19/2019				3.2		70	1.5	3.2	
3/16/2020									
3/17/2020		1.4	1.8						
3/18/2020	1.5			3.2				3.2	
3/19/2020					1.3	98	2.1		
5/4/2020									2.8
9/21/2020		1.2	1.5						
9/22/2020						100			
9/23/2020	1.2						2.4	2.8	2.6
9/24/2020				1	1.6				

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	2.5			
2/9/2017	2.0			
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				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	3.1

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-15	WGWC-10	WGWC-17	WGWA-5 (bg)
5/17/2016	0.0131 (J)	0.284 (J)	0.0538 (J)	0.1 (1)	0.040 (1)	0.770	0.000	0.101 (1)	0.04470
5/18/2016				0.1 (J)	0.018 (J)	0.779	0.206	0.121 (J)	0.014 (J)
5/19/2016	0.4	0.04	0.4	0.11(1)		0.07			
7/19/2016	<0.1	0.21	<0.1	0.14 (J)	<0.1	0.97	0.00	0.40 (1)	<0.1
7/20/2016	-0.4	0.45 (1)	-0.1		-0.1		0.23	0.16 (J)	
9/13/2016	<0.1	0.15 (J)	<0.1	0.40 ())	<0.1	0.00	0.4770	0.40 (1)	0.005 (1)
9/14/2016				0.18 (J)		0.89	0.17 (J)	0.19 (J)	0.095 (J)
9/15/2016									
11/9/2016	<0.1	<0.1	0.085 (J)	0.44 (1)	.0.4	0.00		0.45 (1)	
11/10/2016				0.11 (J)	<0.1	0.88	0.4470	0.15 (J)	
11/11/2016							0.14 (J)		
11/14/2016	.0.4								
1/17/2017	<0.1		<0.1						
1/18/2017					<0.1				
1/19/2017		0.087 (J)							<0.1
1/20/2017				0.45 (1)		0.00		0.18 (J)	
1/24/2017				0.15 (J)		0.92			
1/27/2017							0.45 (1)		
2/6/2017							0.15 (J)		
2/8/2017									
2/9/2017									
2/23/2017	0.4		0.4						
3/13/2017	<0.1	-0.1	<0.1		-0.1	0.77		0.11 (1)	-0.1
3/14/2017		<0.1		0.171)	<0.1	0.77	0.16 (1)	0.11 (J)	<0.1
3/15/2017				0.1 (J)			0.16 (J)		
3/17/2017 4/11/2017									
4/11/2017	<0.1		<0.1						
4/25/2017	~0.1	<0.1	~0.1	0.13 (J)	<0.1	0.95		0.13 (J)	<0.1
4/26/2017		~ 0.1		0.13 (3)	~ 0.1	0.93	0.17 (J)	0.13 (3)	~0.1
5/17/2017							0.17 (3)		
6/7/2017									
7/11/2017									
8/8/2017	<0.1	0.087 (J)	<0.1		<0.1				
8/9/2017	-0.1	0.007 (0)	-0.1	0.18 (J)	-0.1	0.91		0.19 (J)	<0.1
8/10/2017				0.10 (0)		0.01	0.2	0.10 (0)	
10/10/2017	<0.1		0.18 (J)						
10/11/2017		0.09 (J)	(4)	<0.1	<0.1	0.88		0.14 (J)	<0.1
10/12/2017		(,,					0.14 (J)		
3/27/2018	<0.1		<0.1				(0)		
3/28/2018		0.11 (J)			<0.1				<0.1
3/29/2018		(3)		0.13 (J)					
3/30/2018				. ,		0.79	0.13 (J)	0.095 (J)	
6/13/2018	<0.1	0.085 (J)					. ,	,	<0.1
6/14/2018		· · ·	<0.1	<0.1	<0.1	0.79	0.15 (J)	0.11 (J)	
9/24/2018			<0.1				, ,	, ,	
9/27/2018	<0.1								
9/28/2018		0.082 (J)							
10/2/2018		` '							
10/3/2018					<0.1	0.79			<0.1
10/4/2018				0.85 (J)			0.18 (J)	0.11 (J)	
2/25/2019	<0.1		0.032 (J)	-			•	•	

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-15	WGWC-10	WGWC-17	WGWA-5 (bg)
2/26/2019		0.23			<0.1			0.068 (J)	<0.1
2/27/2019				0.47		0.81	0.21		
2/28/2019									
4/1/2019	<0.1		0.061 (J)						
4/2/2019		0.21			<0.1				<0.1
4/3/2019									
4/4/2019				0.08 (J)		0.78	0.13 (J)	0.087 (J)	
9/16/2019	0.03 (J)								<0.1
9/17/2019		0.079 (J)	0.061 (J)						
9/18/2019				0.058 (J)	0.027 (J)	0.81		0.066 (J)	
9/19/2019							0.13 (J)		
2/3/2020	0.032 (J)		0.061 (J)						
2/4/2020									<0.1
2/5/2020		0.12			0.026 (J)		0.14		
2/7/2020				0.072 (J)		0.79		0.079 (J)	
3/16/2020	0.042 (J)		0.052 (J)						
3/17/2020		<0.1			0.044 (J)				<0.1
3/18/2020				0.084 (J)		0.71	0.052 (J)	<0.1	
3/19/2020									
5/4/2020									
9/21/2020			0.037 (J)						
9/22/2020	<0.1	0.1			<0.1				<0.1
9/23/2020				0.049 (J)		0.63	0.09 (J)	0.05 (J)	
9/24/2020									

	WGWA-6 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-9	WGWC-11	WGWC-13	WGWC-12	WGWC-8	WGWC-19
5/17/2016	WGWA-0 (bg)	WaWA-4 (bg)	WGWA-3 (bg)	Wawo-3	WdW0-11	WaW0-13	WGW0-12	Wawo-o	WGW0-13
5/18/2016	0.106 (J)	0.164 (J)	0.029 (J)						
5/19/2016	0.100 (0)	0.101(0)	0.020 (0)	1.58	0.039 (J)	0.384	0.12 (J)	0.304	
7/19/2016	0.11 (J)				0.000 (0)	0.001	0.12 (0)	0.00	
7/20/2016	0.11(0)	0.17 (J)	<0.1	2	<0.1	0.34	0.11 (J)	0.27	
9/13/2016	0.11 (J)	0.15 (J)	<0.1	-	-0.1	0.04	0.11(0)	0.27	
9/14/2016	0.11(0)	0.10 (0)		1.8	<0.1	0.31	0.095 (J)		
9/15/2016				1.0	-0.1	0.01	0.000 (0)	0.24	
11/9/2016	0.1 (J)							0.24	
11/10/2016	0.1 (0)	0.12 (J)	<0.1			0.26			
11/11/2016		0.12 (0)			<0.1	0.20	<0.1		0.32
11/14/2016					-0.1		-0.1	0.2	0.02
1/17/2017								0.2	
1/18/2017	0.11 (J)	0.15 (J)	<0.1						
1/19/2017	0.11(0)	0.13 (0)	-0.1						
1/20/2017									
1/24/2017									
1/27/2017					<0.1	0.28	<0.1		
2/6/2017					-0.1	0.20	40.1	0.27	0.45
2/8/2017								0.27	0.43
2/9/2017				1.3					
2/23/2017				1.5					
3/13/2017									
3/13/2017	<0.1	0.13 (J)	<0.1						
3/15/2017	~0.1	0.13 (3)	~0.1	1.3	<0.1	0.3	<0.1	0.25	0.37
3/17/2017				1.5	-0.1	0.5	~0.1	0.23	0.37
4/11/2017				1.4					0.37
4/24/2017				1.4					0.07
4/25/2017	<0.1	0.12 (J)	<0.1						
4/26/2017	-0.1	0.12 (0)		1.5	<0.1	0.33	<0.1	0.31	0.4
5/17/2017				1.0	-0.1	0.00	-0.1	0.01	0.4
6/7/2017									0.35
7/11/2017									0.39
8/8/2017	0.099 (J)		<0.1						0.00
8/9/2017	0.000 (0)	0.14 (J)	-0.1			0.32			
8/10/2017		0.11(0)		1.6	<0.1	0.02	0.11 (J)	0.37	0.42
10/10/2017							0(0)	0.07	V.12
10/11/2017	0.098 (J)	0.14 (J)	<0.1						
10/12/2017	(-)	(-)		1.5	<0.1	0.28	0.091 (J)	0.35	0.36
3/27/2018							(-)		
3/28/2018	0.088 (J)	0.12 (J)	<0.1						
3/29/2018	(-)	()		1.4	<0.1	0.27	0.089 (J)	0.36	0.34
3/30/2018							(1)		
6/13/2018	0.093 (J)								
6/14/2018		0.12 (J)	<0.1	1.4	<0.1	0.27	0.1 (J)	0.56	0.35
9/24/2018		(-)					(-)		
9/27/2018									
9/28/2018									
10/2/2018	0.13 (J)								
10/3/2018	- \-/	0.13 (J)	<0.1						
10/4/2018		(-/		1.4	<0.1	0.23	0.12 (J)	0.27	0.35
2/25/2019						-	V-7		

	WGWA-6 (bg)	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-9	WGWC-11	WGWC-13	WGWC-12	WGWC-8	WGWC-19
2/26/2019	0.074 (J)	0.14 (J)	<0.1						
2/27/2019					0.047 (J)	0.25	0.06 (J)	0.054 (J)	
2/28/2019				1.4					0.28
4/1/2019									
4/2/2019	0.09 (J)	0.14 (J)	0.039 (J)						0.33
4/3/2019				1.3	0.048 (J)	0.24	0.084 (J)	0.5	
4/4/2019									
9/16/2019	0.1 (J)								
9/17/2019		0.14 (J)							
9/18/2019			0.033 (J)			0.22			0.32
9/19/2019				1.3	0.037 (J)		0.093 (J)	0.42	
2/3/2020									
2/4/2020	0.13	0.13	0.031 (J)						
2/5/2020				1.3	0.045 (J)	0.2	0.098 (J)		
2/7/2020								0.25	0.35
3/16/2020									
3/17/2020	0.037 (J)	0.11	0.04 (J)						
3/18/2020					<0.1		0.033 (J)		
3/19/2020				1		0.15		0.057 (J)	
5/4/2020									0.36
9/21/2020		0.091 (J)	<0.1						
9/22/2020	0.068 (J)							0.14	
9/23/2020				0.82			0.064 (J)		0.25
9/24/2020					0.18	<0.1			

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	<0.1			
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				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	0.028 (J)

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWC-17
5/17/2016	5.24	6.23	7.81						
5/18/2016				8.96	5.5	7.75	7.92	6.06	6.41
5/19/2016									
7/18/2016	5.434038							5.884339	
7/19/2016		6.285413			5.43	7.876073	7.154587		
7/20/2016				8.56774					6.662463
9/1/2016									
9/13/2016	5.22	6.3	7.18		5.57		7.96		
9/14/2016						7.79		5.89	6.7
9/15/2016									
11/9/2016	5.57	6.26	6.03				7.27		
11/10/2016					6.93	7.76		5.6	6.51
11/11/2016				6.96					
11/14/2016									
1/17/2017	5.48	6.8							
1/18/2017					7.16		7.72		
1/19/2017			6.71						
1/20/2017									6.55
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			6.27
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	6.26
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	6.47
8/10/2017				6.66					
8/25/2017									
10/10/2017	5.26	6.32							
10/11/2017			6.75		5.43	7.42	7.71	5.45	6.47
10/12/2017				6.67					
3/27/2018	5.39	6.14							
3/28/2018			6.84		5.29		7.28		
3/29/2018								5.33	
3/30/2018				6.98		7.48			6.71
6/13/2018	5.33		6.31				7.78		
6/14/2018		6.02		6.56	5.39	7.5		5.35	6.15
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			

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWC-17
10/4/2018				6.4				5.28	6.14
2/25/2019	5.25	6.02							
2/26/2019			7.66		5.62		7.87		6.17
2/27/2019				6.23		7.4		5.08	
2/28/2019									
4/1/2019	5.31	6.09							
4/2/2019			7.53		5.6		7.94		
4/3/2019									
4/4/2019				6.46		7.58		5.19	6.16
9/16/2019	5.28						7.55		
9/17/2019		6.25	6.47						
9/18/2019					5.6	7.8		5.19	6.17
9/19/2019				6.45					
2/3/2020	5.4	6.09							
2/4/2020							7.74		
2/5/2020			6.73	6.42	5.54				
2/7/2020						7.66		5.17	6.34
3/16/2020	5.29	6.01							
3/17/2020			6.36		5.32		7.96		
3/18/2020				6.4		7.73		5.08	6.28
3/19/2020									
5/4/2020									
9/21/2020		6.05							
9/22/2020	5.09		7.18		5.36		7.4		
9/23/2020				6.14		7.35		5.05	5.89
9/24/2020									

						, , .				
		WGWA-4 (bg)	WGWA-3 (bg)	WGWA-5 (bg)	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-19
5/17	7/2016									
5/18	3/2016	7.23	5.55	5.47						
5/19	9/2016				5.93	5.99	6.31	6.85	6.91	
7/18	3/2016				5.9661					
7/19	9/2016			5.336672						
7/20)/2016	7.281557	5.656628			6.194334	6.345061	6.705264	6.962608	
9/1/2	2016								6.96	
9/13	3/2016	7.15	5.63							
9/14	1/2016			7.29			6.33	6.7		
9/15	5/2016					6.38				
11/9	9/2016									
	10/2016	6.33	5.61					6.5		
11/1	11/2016				6.03				6.76	6.93
	14/2016					5.7				
	7/2017									
	3/2017	6.94	5.81							
	9/2017	0.0 .	0.01	6.59						
)/2017			0.00						
	1/2017									
	7/2017				6.21			6.47	6.66	
	2017				0.21	5.66		0.47	0.00	6.8
	2017					3.00				0.0
	3/2017									
	3/2017	6.75	F F2	F 00						
	1/2017	6.75	5.53	5.86	5.07	5.77	5.00	0.75	0.0	0.70
	5/2017				5.97	5.77	5.99	6.75	6.3	6.78
	7/2017									
	1/2017									6.79
	1/2017									
	5/2017	6.84	5.59	5.35						
	5/2017				6.17	5.39	6.03	6.57	6.67	6.82
	7/2017									
	2017									6.76
	1/2017									6.99
	2017		5.52							
8/9/2	2017	6.67		5.25				6.55		
8/10)/2017				6.05	5.59	5.86		6.7	6.59
8/25	5/2017			5.44						
10/1	10/2017									
10/1	11/2017	6.75	5.51	6.99						
10/1	12/2017				6.89	5.46	6.09	6.67	6.89	6.7
3/27	7/2018									
3/28	3/2018	6.79	5.6	5.95						
3/29	9/2018				6.85	5.43	5.89	6.99	7.08	6.88
3/30)/2018									
6/13	3/2018			5.13						
6/14	1/2018	6.67	5.58		5.89	5.76	6.47	6.39	6.73	6.72
9/24	1/2018									
9/27	7/2018									
9/28	3/2018									
10/2	2/2018									
	3/2018	6.92	5.45	5.22						

	WGWA-4 (bg)	WGWA-3 (bg)	WGWA-5 (bg)	WGWC-11	WGWC-8	WGWC-9	WGWC-13	WGWC-12	WGWC-19
10/4/2018				5.81	5.39	6.17	6.5	6.79	6.67
2/25/2019									
2/26/2019	6.74	5.6	5.21						
2/27/2019				5.78			6.47	6.7	
2/28/2019						6.045 (D)			6.98
4/1/2019									
4/2/2019	6.81	5.69	5.25						6.75
4/3/2019				6.07	5.55	6.1	6.47	6.91	
4/4/2019									
9/16/2019			6.94						
9/17/2019	6.93								
9/18/2019		5.62					6.46		6.71
9/19/2019				5.82	5.39	6.38		6.63	
2/3/2020									
2/4/2020	7.29	5.66	5.31						
2/5/2020				5.89		6.54	6.44	6.76	
2/7/2020					5.38				7.08
3/16/2020									
3/17/2020	6.83	5.61	5.34						
3/18/2020				5.89				6.94	
3/19/2020					6.43	6.64	6.56		
5/4/2020									6.9
9/21/2020	6.81	5.35							
9/22/2020			6.78		5.17				
9/23/2020						5.8		6.42	6.59
9/24/2020				5.5			6.29		

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	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	6.97			
10/11/2017	6.97			
10/12/2017				
3/27/2018				
3/28/2018	6.51			
3/29/2018	6.51			
3/30/2018				
6/13/2018	F 76			
6/14/2018	5.76			
9/24/2018				
9/27/2018				
9/28/2018				
10/2/2018				
10/3/2018				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	5.16

	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	<1	1.14	19.9						
5/18/2016				2.84	0.368 (J)	50.7	8.88	388	0.955 (J)
5/19/2016									
7/19/2016	<1	1.4	14		<1	62	9	460	0.76 (J)
7/20/2016				2.8					
9/13/2016	<1	1.1	11		<1		8.5		
9/14/2016				2.8		79		500	3.4
9/15/2016									
11/9/2016	<1	1.1	6.3				8.2		
11/10/2016					<1	61		530	
11/11/2016				2.6					
11/14/2016									
1/17/2017	<1	2.1							
1/18/2017					1.4		9.4		
1/19/2017			7.4						21
1/20/2017									
1/24/2017						34		600	
1/27/2017									
2/6/2017				2.7					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<1	0.97 (J)							
3/14/2017			10		<1	43	2		1.4
3/15/2017				2.7				610	
3/17/2017									
4/11/2017									
4/24/2017	<1	0.75 (J)							
4/25/2017		(,,	10		<1	39	8.2	620	0.89 (J)
4/26/2017				2.5					5.55 (4)
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<1	1.1	12		<1		8.5		
8/9/2017						35		780	0.75 (J)
8/10/2017				2.2					
10/10/2017	<1	1.3							
10/11/2017			11		<1	48	8.3	720	<1
10/12/2017				1.9					
6/13/2018	<1		8.2				8.3		<1
6/14/2018		0.84 (J)		2	<1	44		620	
9/24/2018		0.79 (J)							
9/27/2018	<1	(,,							
9/28/2018			7.6						
10/2/2018							8.3		
10/3/2018					<1	49			<1
10/4/2018				1.9				560	
4/1/2019	<1	1		-					
4/2/2019	•	-	11		0.4 (J)		8.5		0.94 (J)
4/3/2019					- \-/				- \-/
4/4/2019				2.2		41		250	
9/16/2019	0.49 (J)						8.9		2.2
5 3.20.10	(0)								-

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
9/17/2019		1.3	8						
9/18/2019					<1	37		130	
9/19/2019				2.1					
3/16/2020	0.42 (J)	1.3							
3/17/2020			8.5		0.86 (J)		12		4
3/18/2020				2.1		17		120	
3/19/2020									
5/4/2020									
9/21/2020		1.1							
9/22/2020	<1		9		0.38 (J)		8		1.5
9/23/2020				1.8		21		85	
9/24/2020									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	32.1	5.32	0.821 (J)						
5/19/2016				1.83	19.2	146	35.9	15.8	
7/19/2016									
7/20/2016	9.7	6.5	0.82 (J)	1.6	11	150	37	16	
9/13/2016		5.6	0.81 (J)						
9/14/2016	6.6			1.5	8.6		39	16	
9/15/2016						140			
11/9/2016									
11/10/2010	6 5.2	5.4	0.73 (J)		5.7				
11/11/201	6			1.4				14	3.4
11/14/2010	6					160			
1/17/2017									
1/18/2017		5.1	0.99 (J)						
1/19/2017									
1/20/2017	5.3								
1/24/2017									
1/27/2017				2.5	6.8			15	
2/6/2017						180			3.7
2/8/2017									
2/9/2017							60		
2/23/2017									
3/13/2017									
3/14/2017	9.6	4.6	0.83 (J)						
3/15/2017				2.5	11	170	44	17	3.6
3/17/2017									
4/11/2017							36		3.2
4/24/2017									
4/25/2017	20	6.6	0.7 (J)						
4/26/2017				2.2	8.1	180	37	15	3.3
5/17/2017									
6/7/2017									3.8
7/11/2017									3.3
8/8/2017			0.82 (J)						
8/9/2017	6.5	7.3			8.1				
8/10/2017				2.3		180	38	16	3.7
10/10/201		0.0	0.70 (1)						
10/11/201		6.8	0.72 (J)	4.0	0.4	100	07		0.0
10/12/201				1.9	6.1	180	37	14	3.6
6/13/2018		0.0		4.7	-	170	07		0.5
6/14/2018		6.9	<1	1.7	5	170	37	14	3.5
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018		7	0.72 (1)						
10/3/2018		7	0.73 (J)	1.6	4.2	790	20	1.4	4.6
10/4/2018 4/1/2019	15			1.6	4.3	780	38	14	4.6
4/1/2019 4/2/2019		8.1	1.1						3.8
4/2/2019		0.1	1.1	1.9	3.8	180	41	13	5.0
4/3/2019	9.1			1.3	3.0	100	41	13	
9/16/2019									
5, 15,2019									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
9/17/2019		8.1							
9/18/2019	7.3		0.78 (J)		3.9				3.6
9/19/2019				1.3		190	42	14	
3/16/2020									
3/17/2020		12	1.2						
3/18/2020	4.2			1.6				12	
3/19/2020					4	200	45		
5/4/2020									4.5
9/21/2020		7.7	0.77 (J)						
9/22/2020						200			
9/23/2020	4.4						54	12	3
9/24/2020				2.7	0.63 (J)				

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
	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 5/17/2017	20 12			
6/7/2017	8.1			
	17			
8/8/2017	17			
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				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	1.2

	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	<10	100	112						
5/18/2016				70	31	190	113	1080	33
5/19/2016									
7/19/2016	14	84	80		<10	180	92	1200	<10
7/20/2016				42					
9/13/2016	50	70	120		<10		100		
9/14/2016				40		230		1300	150
9/15/2016									
11/9/2016	22	110	76				130		
11/10/2016					44	210		1400	
11/11/2016				72					
11/14/2016									
1/17/2017	8	120							
1/18/2017					50		120		
1/19/2017			36						34
1/20/2017									
1/24/2017						140		1300	
1/27/2017									
2/6/2017				24					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<10	58							
3/14/2017			70		26	220	110		32
3/15/2017				78				1500	
3/17/2017									
4/11/2017									
4/24/2017	10	94							
4/25/2017			70		10	180	100	1700	22
4/26/2017				48					
5/17/2017				.0					
6/7/2017									
7/11/2017									
8/8/2017	<10	62	72		<10		90		
8/9/2017		02				180		1900	20
8/10/2017				38		.00		.000	
10/10/2017	44	140							
10/11/2017		140	90		42	200	98	1900	4 (J)
10/12/2017				72					. (-)
6/13/2018	24		38	,_			110		<10
6/14/2018	24	80	00	40	14	170	110	1500	-10
9/24/2018		76		40	1-7	170		1000	
9/27/2018	28	, ,							
9/28/2018	20		68						
10/2/2018			00				130		
10/3/2018					6	260	100		24
10/4/2018				60	J	200		1700	
4/1/2019	<10	63		30				1700	
4/1/2019	~10	03	100		15		110		25
4/3/2019			100		10		110		20
4/4/2019				30		170		710	
9/16/2019	27			30		170	110	/10	41
9/10/2019	21						110		41

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
9/17/2019		120	76						
9/18/2019					35	160		520	
9/19/2019				52					
3/16/2020	23	90							
3/17/2020			81		19		120		18
3/18/2020				58		160		370	
3/19/2020									
5/4/2020									
9/21/2020		100							
9/22/2020	24		96		15		130		190
9/23/2020				50		150		250	
9/24/2020									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	107	101	29						
5/19/2016				39	127	311	134	101	
7/19/2016									
7/20/2016	78	86	<10	<10	88	290	120	76	
9/13/2016		28	12						
9/14/2016	82			24	92		140	96	
9/15/2016						270			
11/9/2016									
11/10/2016	98	110	30		100				
11/11/2016				42				100	98
11/14/2016						320			
1/17/2017									
1/18/2017		98	22						
1/19/2017									
1/20/2017	82								
1/24/2017									
1/27/2017				18	80			50	
2/6/2017						330			36
2/8/2017									
2/9/2017							180		
2/23/2017									
3/13/2017									
3/14/2017	120	110	22						
3/15/2017				54	100	370	160	120	120
3/17/2017									
4/11/2017							120		68
4/24/2017									
4/25/2017	120	86	22						
4/26/2017				42	92	380	140	100	76
5/17/2017									
6/7/2017									74
7/11/2017									70
8/8/2017			4 (J)						
8/9/2017	92	92			120				
8/10/2017				30		380	130	96	66
10/10/2017									
10/11/2017	74	110	10						
10/12/2017				54	110	450	120	100	100
6/13/2018									
6/14/2018	100	92	26	16	88	410	120	94	74
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		100	50						
10/4/2018	98			56	100	520	140	110	100
4/1/2019									
4/2/2019		100	28						88
4/3/2019				<10	72	430	120	66	
4/4/2019	89								
9/16/2019									

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
9/17/2019		120							
9/18/2019	79		36		110				96
9/19/2019				27		440	130	89	
3/16/2020									
3/17/2020		100	20						
3/18/2020	98			26				73	
3/19/2020					95	540	160		
5/4/2020									110
9/21/2020		92	22						
9/22/2020						600			
9/23/2020	60						150	90	94
9/24/2020				60	21				

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	54			
2/9/2017	•			
2/23/2017	78			
3/13/2017	,,			
3/14/2017				
3/15/2017				
3/17/2017	56			
4/11/2017	76			
4/24/2017				
4/25/2017				
4/26/2017	76			
5/17/2017	68			
6/7/2017	72			
7/11/2017	68			
8/8/2017				
8/9/2017				
8/10/2017				
10/10/2017				
10/11/2017	68			
10/12/2017				
6/13/2018				
6/14/2018	52			
9/24/2018				
9/27/2018				
9/28/2018				
10/2/2018				
10/3/2018				
10/4/2018	130			
4/1/2019				
4/2/2019				
4/3/2019	31			
4/4/2019				
9/16/2019				

	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	
9/21/2020	
9/22/2020	
9/23/2020	
9/24/2020	24

FIGURE E.

Appendix III Trend Tests - Prediction Limit Exceedances - Significant Results

	Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:35 AM											
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method	
Calcium (mg/L)	WGWC-8	12.48	83	53	Yes	15	0	n/a	n/a	0.01	NP	
Chloride (mg/L)	WGWA-5 (bg)	-0.1417	-61	-48	Yes	14	0	n/a	n/a	0.01	NP	
Chloride (mg/L)	WGWC-8	20.51	93	53	Yes	15	0	n/a	n/a	0.01	NP	
Fluoride (mg/L)	WGWC-9	-0.1083	-86	-68	Yes	18	0	n/a	n/a	0.01	NP	
pH (S.U.)	WGWA-2 (bg)	-0.06212	-78	-68	Yes	18	0	n/a	n/a	0.01	NP	
pH (S.U.)	WGWC-16	-0.1634	-128	-68	Yes	18	0	n/a	n/a	0.01	NP	
Sulfate (mg/L)	WGWA-4 (bg)	0.8303	68	53	Yes	15	0	n/a	n/a	0.01	NP	
Sulfate (mg/L)	WGWC-8	12.63	71	53	Yes	15	0	n/a	n/a	0.01	NP	
Total Dissolved Solids (mg/L)	WGWC-8	67.41	88	53	Yes	15	0	n/a	n/a	0.01	NP	

Appendix III Trend Tests - Prediction Limit Exceedances - All Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:35 AM

	Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:35 AM											
Constituent	Well		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	WGWA-1 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-18 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-2 (bg)		0	-12	-53	No	15	93.33	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-3 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-4 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-5 (bg)		0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-6 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-7 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-16		-0.7036	-36	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8		0.193	50	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9		0.03698	37	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-1 (bg)		0.0517	38	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-18 (bg)		-0.9964	-25	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-2 (bg)		-0.5093	-24	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-3 (bg)		0	3	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-4 (bg)		0	-20	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-5 (bg)		-0.1022	-19	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-6 (bg)		0	2	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-7 (bg)		-0.09047	-22	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8		12.48	83	53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-1 (bg)		0.08459	41	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-18 (bg)		-0.1377	-20	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-2 (bg)		0	15	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-3 (bg)		0	-25	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-4 (bg)		-0.0272	-45	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)		-0.1417	-61	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-6 (bg)		0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-7 (bg)		0	-10	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16		-32.02	-27	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8		20.51	93	53	Yes	15	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-1 (bg)		0	-16	-68	No	18	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-18 (bg)		-0.007356	-35	-68	No	18	22.22	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-2 (bg)		-0.01003	-54	-68	No	18	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-3 (bg)		0	-27	-68	No	18	72.22	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-4 (bg)		-0.00869	-63	-68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-5 (bg)		0	29	63	No	17	88.24	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-6 (bg)		-0.008941	-57	-68	No	18	11.11	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-7 (bg)		0	-18	-68	No	18	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-15		-0.04873	-67	-68	No	18	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9		-0.1083	-86	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-1 (bg)		-0.04386	-45	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-18 (bg)		-0.04192	-5	-63	No	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-2 (bg)		-0.06212	-78	-68	Yes	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-3 (bg)		-0.01158	-13	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-4 (bg)		-0.007256	-10	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-5 (bg)		-0.03392	-20	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-6 (bg)		0.02612	16	63	No	17	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWA-7 (bg)		-0.05214	-38	-68	No	18	0	n/a	n/a	0.01	NP
pH (S.U.)	WGWC-16		-0.1634	-128	-68	Yes	18	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-1 (bg)		0	-23	-53	No	15	86.67		n/a	0.01	NP
Sulfate (mg/L)	WGWA-18 (bg)		-0.8343	-25	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-2 (bg)		-0.02732	-12	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-3 (bg)		0.01035	7	53	No	15	6.667		n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)		0.8303	68	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-5 (bg)		0.07633	16	48	No	14	21.43	n/a	n/a	0.01	NP

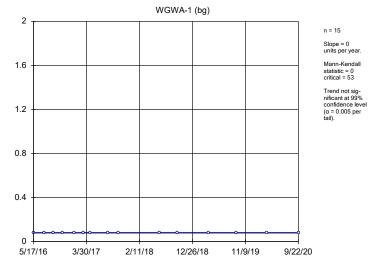
Appendix III Trend Tests - Prediction Limit Exceedances - All Results $^{\circ}$

	Plant Wansley Client: Southern Compa	any Data: Wa	nsley Ash	Pond Pri	nted 1/	6/2021,	9:35 AI	М			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Sulfate (mg/L)	WGWA-6 (bg)	0	-2	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-7 (bg)	0	-22	-53	No	15	66.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16	-67.59	-14	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	12.63	71	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-9	1.711	42	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-1 (bg)	1.921	16	53	No	15	26.67	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-18 (bg)	0	-1	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-2 (bg)	0.6073	3	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-3 (bg)	2.485	17	53	No	15	6.667	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-4 (bg)	1.172	15	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-5 (bg)	0	0	48	No	14	14.29	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-6 (bg)	3.921	22	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-7 (bg)	0	3	53	No	15	20	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-16	-175.9	-11	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	67.41	88	53	Yes	15	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

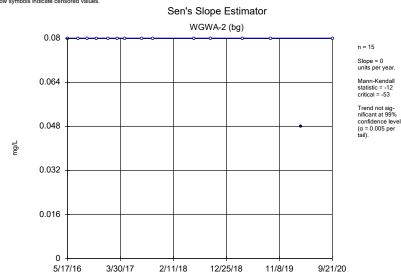
mg/L

Sen's Slope Estimator



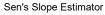
Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

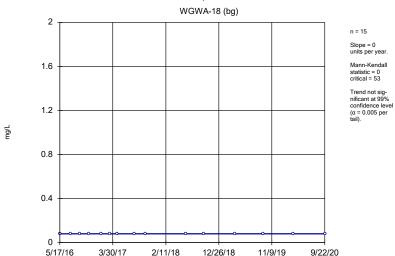
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

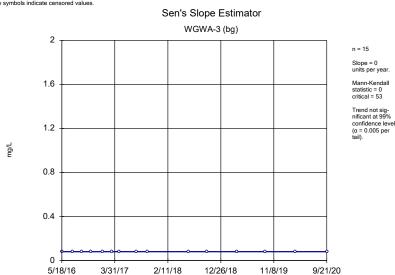
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Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

2

mg/L

Sen's Slope Estimator
WGWA-4 (bg)

Slope = 0

units per year

Mann-Kendall

Trend not significant at 99% confidence level

(α = 0.005 per tail).

statistic = 0 critical = 53

1.2

0.8

0.4

0.4

0.5/18/16 3/31/17 2/11/18 12/26/18 11/8/19 9/21/20

Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

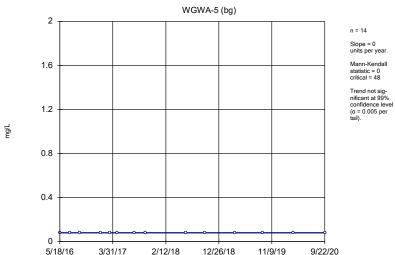
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Sen's Slope Estimator WGWA-6 (bg) 2 n = 15 Slope = 0 units per year. Mann-Kendall 1.6 critical = 53 Trend not sig-nificant at 99% confidence level 1.2 (α = 0.005 per tail). 0.8 0.4 5/18/16 3/31/17 2/12/18 12/26/18 11/9/19 9/22/20

Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

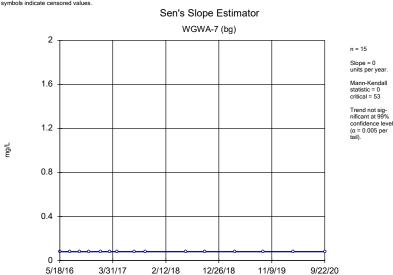
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Sen's Slope Estimator

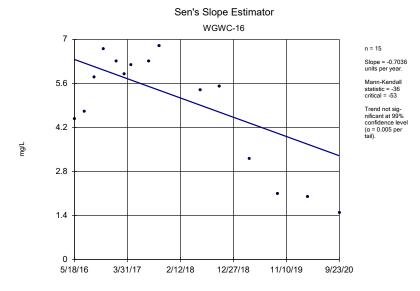


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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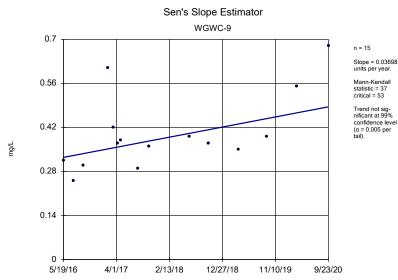


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

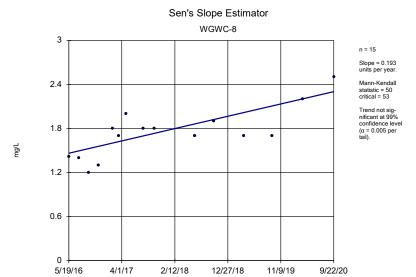


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

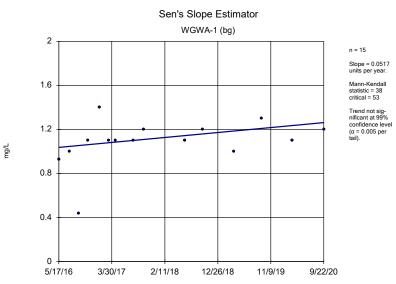
Sanitas $^{\text{\tiny TM}}$ v.9.6.27b Groundwater Stats Consulting. UG



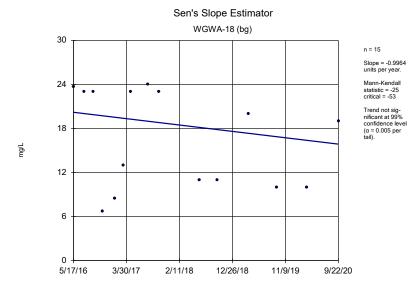
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Boron Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

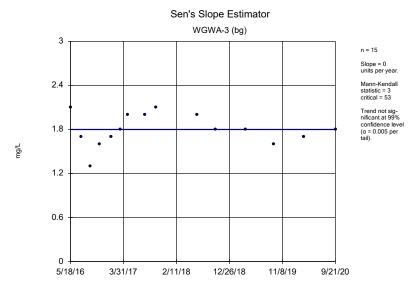


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

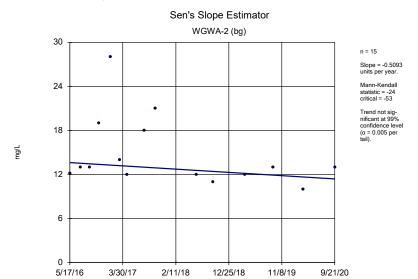


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

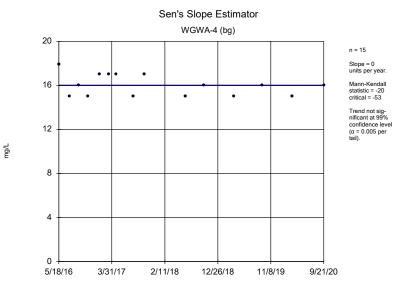
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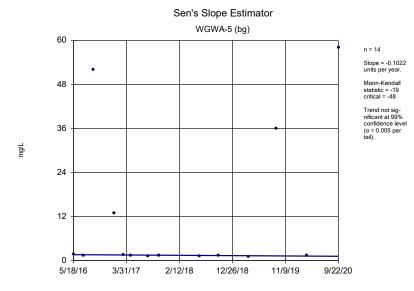
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Calcium Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

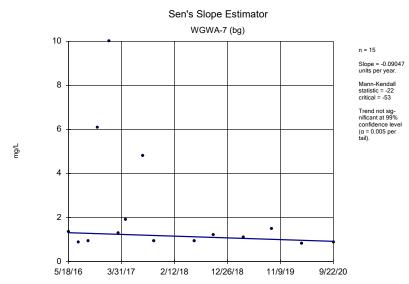


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

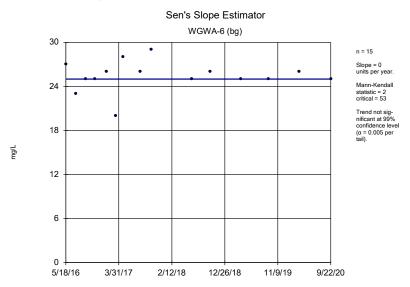


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

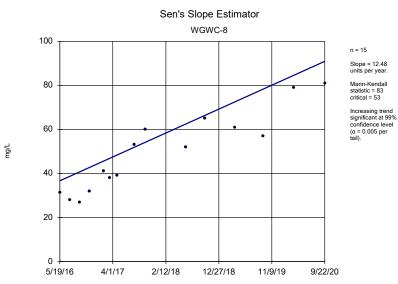
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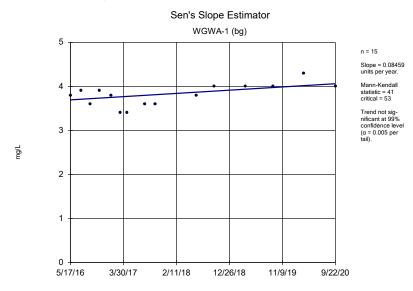
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

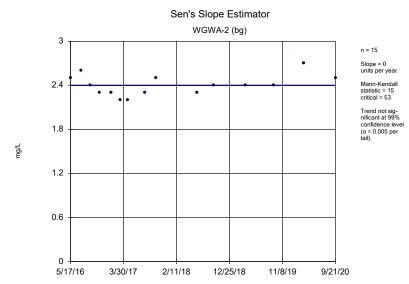


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

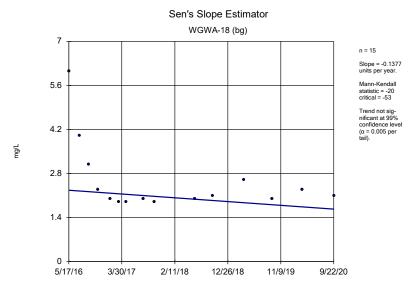


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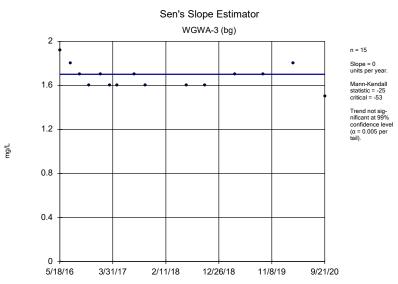




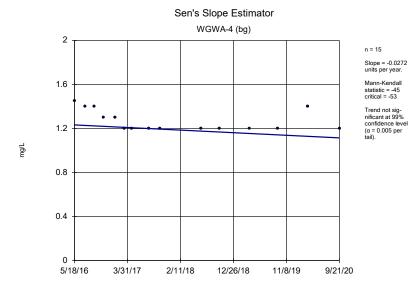
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



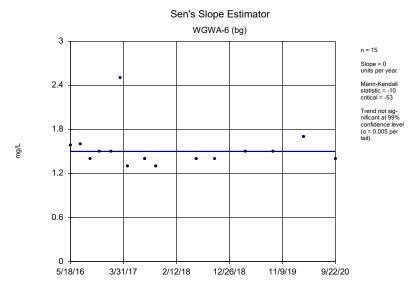
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



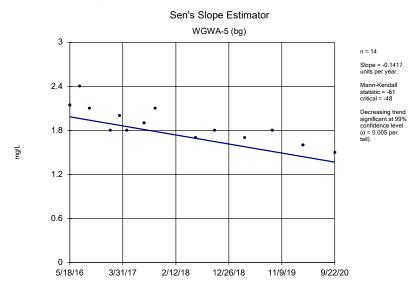
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



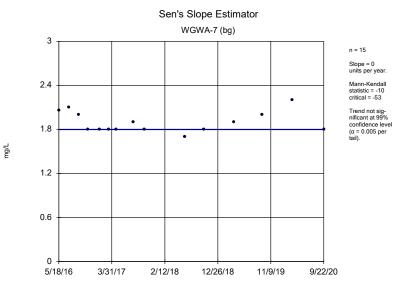
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



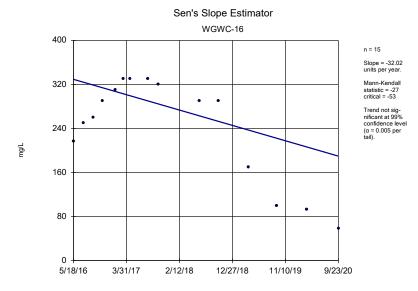
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



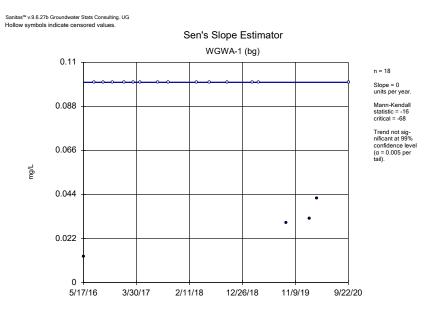
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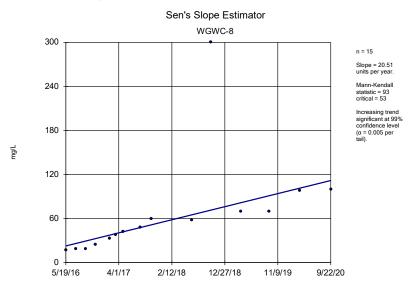
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Chloride Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

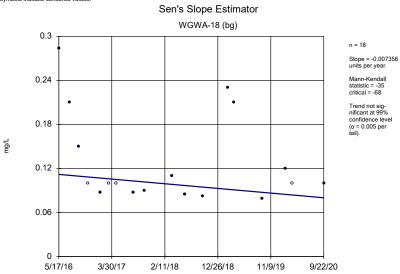


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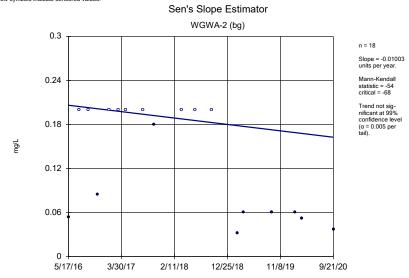
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond





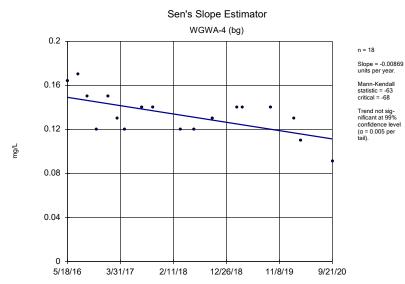
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



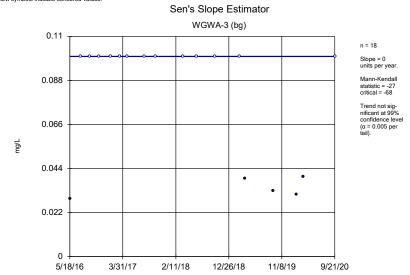
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



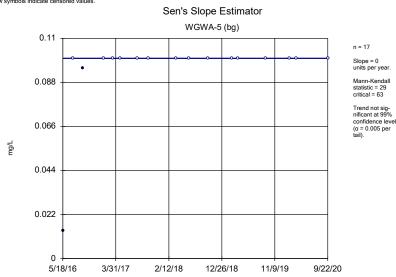
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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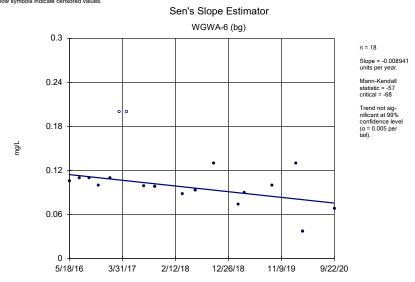
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



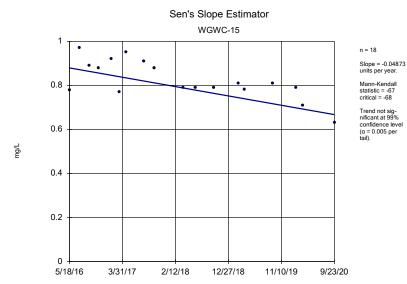
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



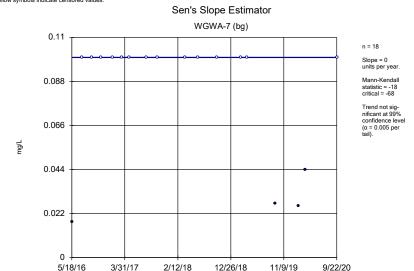
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

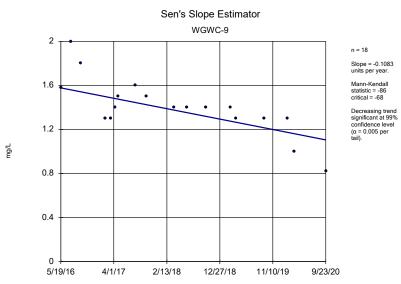


Constituent: Fluoride Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Fluoride Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Fluoride Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

6.4

4.8

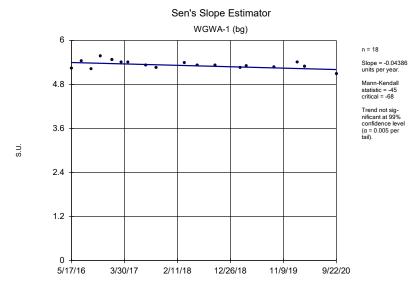
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1.6

5/17/16

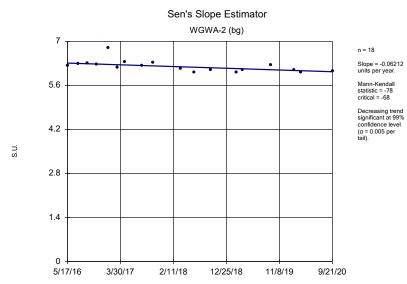
3/30/17

S.U.



Constituent: pH Analysis Run 1/6/2021 9:31 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG



Constituent: pH Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sen's Slope Estimator WGWA-18 (bg) n = 17 Slope = -0.04192 units per year. Mann-Kendall statistic = -5 critical = -83 rificant at 99% confidence level (a = 0.005 per lail).

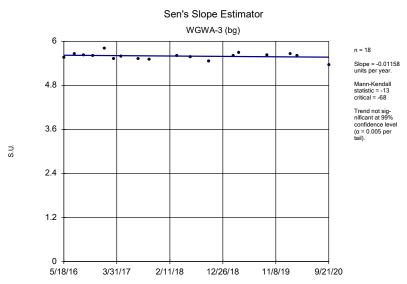
11/9/19

9/22/20

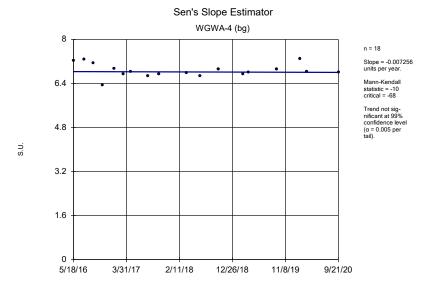
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

12/26/18

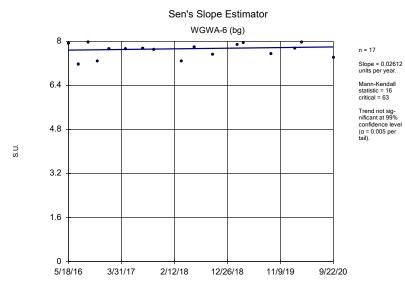
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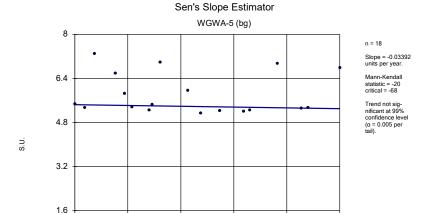
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: pH Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: pH Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: pH Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

12/26/18

2/12/18

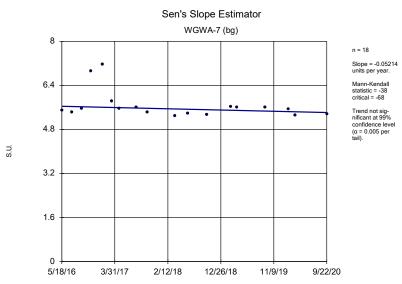
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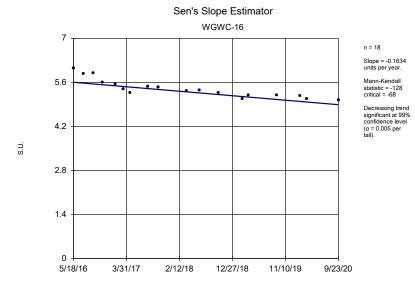
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

5/18/16

3/31/17

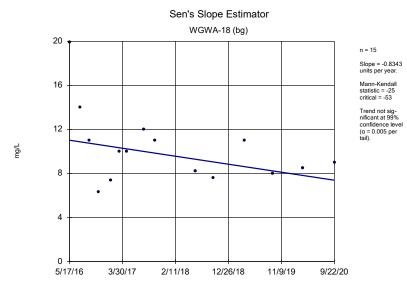


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

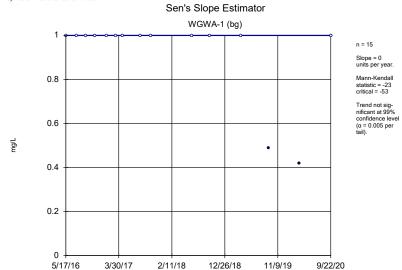


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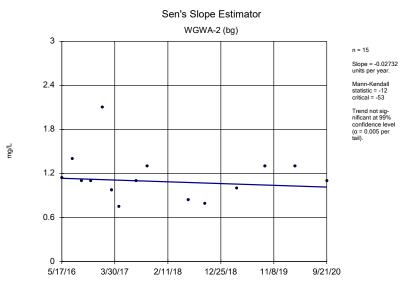
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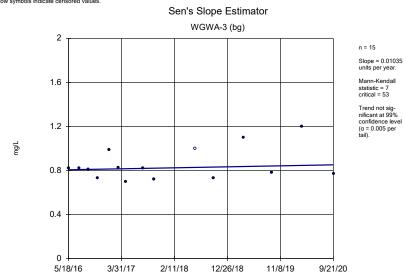
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



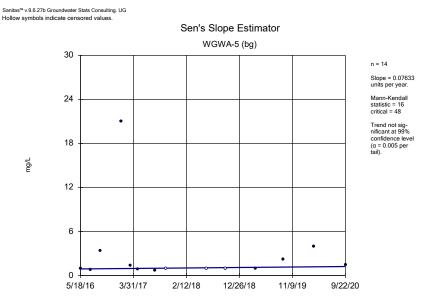
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



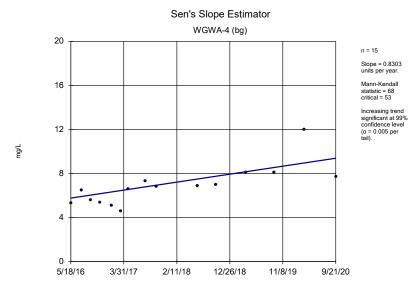
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



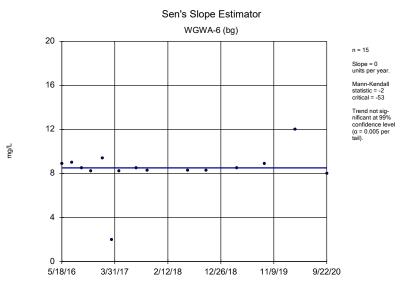
Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

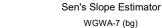


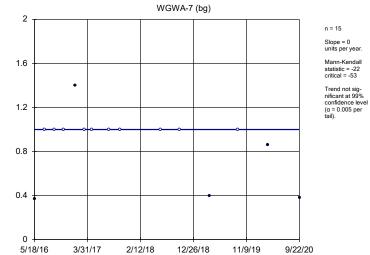
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

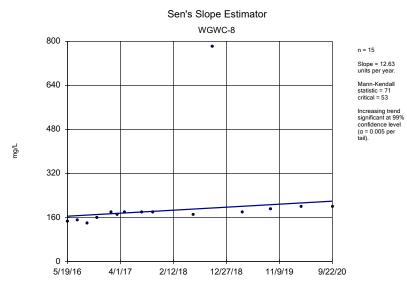
mg/L





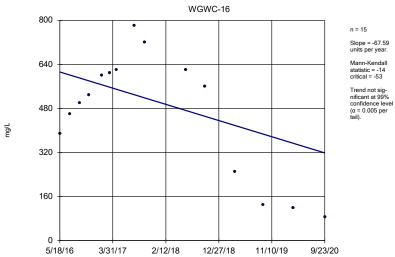
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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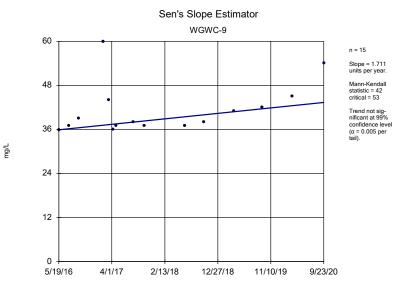


Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

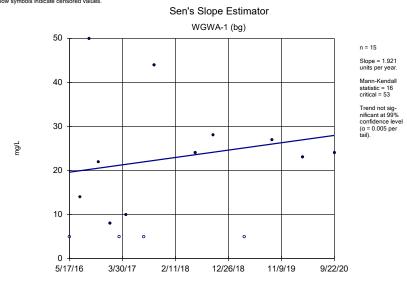
Sen's Slope Estimator



Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

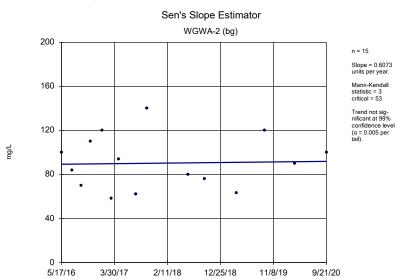


Constituent: Sulfate Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

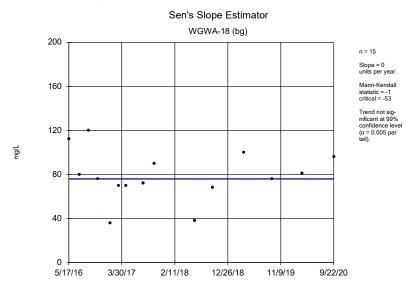


Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



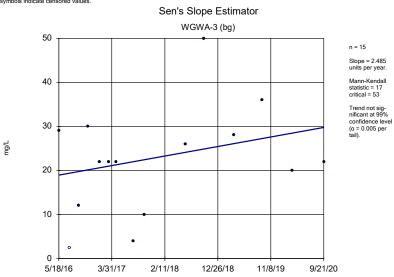


Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

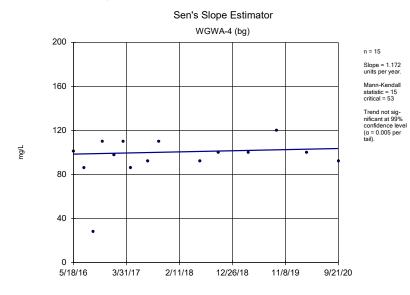
Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



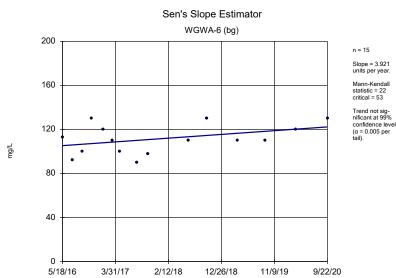
Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

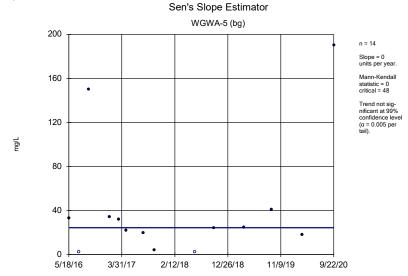




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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

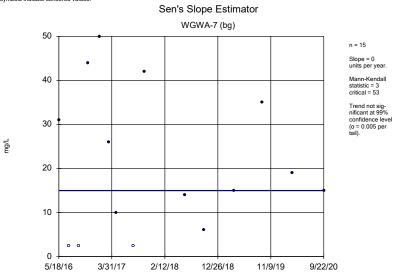


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



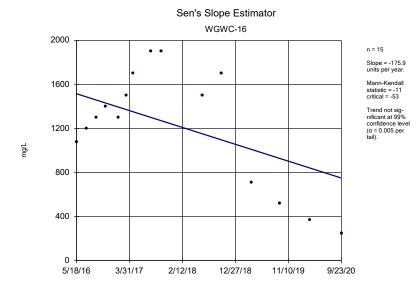
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

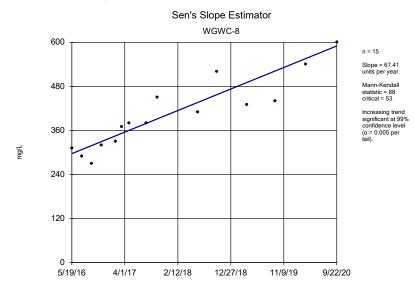


Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids Analysis Run 1/6/2021 9:32 AM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

FIGURE F.

Upper Tolerance Limit Summary Table

Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:28 AM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Alpha</u> Method 0.0022 98.95 n/a 0.007651 Antimony (mg/L) n/a n/a 95 n/a n/a n/a NP Inter(NDs) 0.0009833 NP Inter(NDs) Arsenic (mg/L) 0.0014 n/a n/a 135 n/a n/a 77.04 n/a n/a Barium (mg/L) 0.062 0 0.0009833 NP Inter(normality) n/a n/a 135 n/a n/a n/a n/a Beryllium (mg/L) 0.0025 n/a 135 94.07 n/a 0.0009833 NP Inter(NDs) NP Inter(NDs) Cadmium (mg/L) 0.0025 n/a n/a 135 n/a n/a 100 n/a 0.0009833 n/a Chromium (mg/L) 0.0049 n/a 135 n/a 94.07 n/a 0.0009833 NP Inter(NDs) Cobalt (mg/L) 0.001035 NP Inter(normality) 0.013 n/a 46.27 n/a n/a n/a 134 n/a n/a Combined Radium 226 + 228 (pCi/L) 10.4 132 0 0.001147 NP Inter(normality) 49.65 0.0006523 NP Inter(normality) Fluoride (mg/L) 0.284 n/a n/a 143 n/a n/a n/a n/a Lead (mg/L) 0.001 119 89.08 n/a 0.002234 NP Inter(NDs) 0.001642 NP Inter(normality) Lithium (mg/L) 0.009 48.8 n/a n/a 125 n/a n/a n/a n/a Mercury (mg/L) 0.0002 119 88.24 0.002234 NP Inter(NDs) Molybdenum (mg/L) NP Inter(NDs) 0.015 0.001035 n/a n/a 134 n/a n/a 88.06 n/a n/a Selenium (mg/L) 0.005 n/a 135 93.33 n/a 0.0009833 NP Inter(NDs) NP Inter(NDs) Thallium (mg/L) 0.001 0.0009833 n/a n/a 135 n/a n/a 94.81 n/a n/a

FIGURE G.

WANSLEY AP GWPS										
		CCR-Rule	Federal	State						
Constituent Name	MCL	Specified	Background	GWPS	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

CCR = Coal Combustion Residual

 ${\it Highlighted cells indicate background is higher than established limit.}$

FIGURE H.

Federal Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:49 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs ND Adj.
 Transform Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.056
 0.045
 0.04
 Yes 17
 0.051
 0.007331
 0
 None
 No
 0.01
 NP (normality)

Federal Confidence Intervals - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/6/2021, 9:49 AM

	Plant V	Vansley C	lient: Souther	n Company	Da	ita: W	/ansley Ash F	Pond Printe	d 1/6/20	021, 9:49 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	e Sig.	<u>N</u>	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	n <u>Alpha</u>	Method
Arsenic (mg/L)	WGWC-10	0.001	0.00089	0.01	No	17	0.0008894	0.000232	76.47	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No	17	0.0009129	0.0001943	82.35	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No	17	0.0009412	0.0001662	88.24	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00048	0.01	No	17	0.0008182	0.0003125	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0017	0.00095	0.01	No	17	0.001285	0.0006269	58.82	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-15	0.002339	0.00143	0.01	No	17	0.001885	0.0007251	0	None	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.001132	0.0006062	0.01	No	17	0.001186	0.000353	41.18	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	WGWC-17	0.001	0.00067	0.01	No	17	0.00085	0.0001827	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0011	0.00071	0.01	No	17	0.0009265	0.0002748	58.82	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No	17	0.0009971	0.0002263	82.35	None	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No	17	0.03948	0.00651	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.04	0.03	2	No	17	0.03565	0.008299	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-12	0.02011	0.01528	2	No	17	0.01732	0.004491	0	None	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05768	0.04573	2	No	17	0.05171	0.009538	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.04971	0.03134	2	No	17	0.04053	0.01466	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02291	0.01951	2	No	17	0.02121	0.002709	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.069	0.032	2	No	17	0.05109	0.01664	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-17	0.01812	0.01304	2	No	17	0.01558	0.004053	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-19	0.005	0.0012	2	No	17	0.002545	0.001883	23.53	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.001	2	No	17	0.002722	0.001717	29.41	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.005	0.00076	2	No	17	0.00239	0.001823	29.41	None	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-14A	0.0025	0.00025	0.004	No	17	0.001836	0.00106	70.59	None	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No	17	0.002366	0.000553	94.12	None	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002075	0.001472	0.004	No	17	0.001774	0.0004805	0	None	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No	17	0.001508	0.001086	52.94	None	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-10	0.0025	0.00021	0.005	No	17	0.002365	0.0005554	94.12	None	No	0.01	NP (NDs)
Cadmium (mg/L)	WGWC-16	0.0025	0.00037	0.005	No	17	0.0009795	0.0008847	23.53	None	No	0.01	NP (normality)
Chromium (mg/L)	WGWC-10	0.002131	0.001397	0.1	No	17	0.001982	0.0005982	17.65	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0012	0.1	No	17	0.001906	0.0002861	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0018	0.1	No	17	0.001988	0.00004851	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No	17	0.001982	0.00007276	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No	17	0.001971	0.0001213	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No	17	0.002029	0.0001213	94.12	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001754	0.0008402	0.013	No	17	0.001355	0.0008154	5.882	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00064	0.013	No	17	0.00163	0.0009355	41.18	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001275	0.0005259	0.013	No	17	0.0009576	0.0006725	5.882	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.00054	0.013	No	17	0.001894	0.0009765	70.59	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-14A	0.01125	0.005977	0.013	No	17	0.008612	0.004205	0	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-16	0.015	0.00077	0.013	No	17	0.007761	0.00628	5.882	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.001804	0.0008596	0.013	No	17	0.001332	0.0007536	5.882	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No	17	0.001489	0.00111	52.94	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-8	0.0028	0.00092	0.013	No	17	0.002078	0.0008693	52.94	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013	No	17	0.002396	0.0004293	94.12	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4659	0.1594	10.4	No	17	0.3127	0.2446	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6546	0.1387	10.4	No	17	0.3967	0.4117	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.6212	0.1291	10.4	No	17	0.3752	0.3927	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.8156	0.4825	10.4	No	17	0.6491	0.2658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.866	0.5061	10.4	No	17	0.7028	0.3259	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6598	0.2673	10.4	No	17	0.494	0.3733	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	2.058	0.8666	10.4	No	17	1.462	0.9507	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5569	0.06753	10.4	No	17	0.3122	0.3905	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.471	0.126	10.4	No	17	0.3259	0.3114	0	None	No	0.01	NP (normality)
Combined Radium 226 + 228 (pCi/L)	WGWC-8	1.902	1.209	10.4	No	17	1.555	0.5528	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.3671	0.1214	10.4	No	17	0.2443	0.1961	0	None	No	0.01	Param.

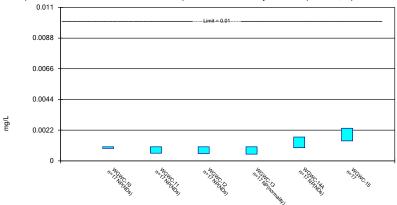
Federal Confidence Intervals - All Results

Client: Southern Company Data: Wansley Ash Pond Constituent Well Lower Lim. Compliance Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Mean WGWC-10 0.1805 0.04325 Fluoride (mg/L) 0.1282 No 18 0.1543 0 None No 0.01 Param. Fluoride (mg/L) WGWC-11 0.18 0.047 No 18 0.08867 0.03457 66.67 None No 0.01 NP (NDs) Fluoride (ma/L) WGWC-12 0.09839 0 07499 4 Nο 18 0.09261 0.02161 22.22 Kaplan-Meier x^2 0.01 Param Fluoride (mg/L) WGWC-13 0.2216 No 18 0.06839 None 0.01 No Fluoride (mg/L) WGWC-14A 0.1 0.048 4 Nο 18 0.08617 0.02686 77 78 None No 0.01 NP (NDs) WGWC-15 Fluoride (mg/L) 0.8772 0.7727 4 18 0.8249 0.08641 0 No None No 0.01 Param. WGWC-16 No 18 0.1713 NP (normality) Fluoride (mg/L) 0.18 0.08 4 0.1929 11.11 None No 0.01 WGWC-17 Nο 0 1187 Fluoride (mg/L) 0 1445 0.09284 4 18 0.04269 5.556 None Nο 0.01 Param Fluoride (mg/L) WGWC-19 0.3816 0.3251 No 18 0.3533 0.04665 0 No 0.01 Param. None Fluoride (mg/L) WGWC-8 0.3674 0.2076 4 No 18 0.2875 0.1321 0 0.01 None No Param. Fluoride (mg/L) WGWC-9 1.563 1.248 4 No 18 1.406 0.261 0 None No 0.01 Param. Lead (mg/L) WGWC-10 0.001 0.00021 0.015 No 15 0.0007427 0.0003812 66.67 None No 0.01 NP (NDs) WGWC-11 0.001 15 0.00093 NP (NDs) Lead (mg/L) 0.00058 0.015 Nο 0.0001889 86 67 None No 0.01 Lead (mg/L) WGWC-13 0.001 0.00047 0.015 No 15 0.000778 0.0002525 0.01 NP (NDs) No Lead (mg/L) WGWC-14A 0.001 0.00018 0.015 No 15 0.00089 0.0002903 86.67 None No 0.01 NP (NDs) Lead (mg/L) WGWC-16 0.001 0.00014 0.015 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Nο WGWC-17 Lead (mg/L) 0.001 0.00033 No 0.000902 0.0002598 No NP (NDs) WGWC-8 0.0008307 0.0003506 Lead (mg/L) 0.001 0.00017 0.015 Nο 15 None Nο 0.01 NP (NDs) WGWC-9 0.001 0.00014 0.015 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Lead (mg/L) No WGWC-10 0.01611 0.008063 0.04 No 17 0.01257 0.007135 0 0.01 Lithium (mg/L) None Lithium (ma/L) WGWC-11 0.005 0.0018 No 0.004371 0.001407 82.35 None 0.01 NP (NDs) 0.04 17 Nο Lithium (mg/L) WGWC-12 0.007752 0.00589 0.04 No 0.006659 0.001801 5.882 None 0.01 NP (NDs) Lithium (mg/L) WGWC-13 0.005 0.0038 0.04 No 17 0.004429 0.001125 76.47 None No 0.01 Lithium (mg/L) WGWC-14A 0.0025 0.004094 0.00138 NP (NDs) 0.005 0.04 No 17 64.71 None 0.01 No WGWC-15 17 0.006094 0.001221 11.76 None Lithium (mg/L) 0.006859 0.005329 0.04 No No 0.01 Param. Lithium (mg/L) WGWC-16 0.01108 0.007147 17 0.009112 0.003135 0.04 Nο 5.882 None Nο 0.01 Param Lithium (mg/L) WGWC-17 0.005807 0.004711 0.04 No 0.005259 0.0008747 No 0.01 Lithium (mg/L) WGWC-19 0.056 0.045 0.04 Yes 17 0.051 0.007331 0 None No 0.01 NP (normality) WGWC-8 0.018 0.013 0.04 No 17 0.01768 0.01083 0 0.01 NP (normality) Lithium (mg/L) None No Lithium (mg/L) WGWC-9 0.03892 0.03255 0.04 No 17 0.03574 0.005081 0 None No 0.01 WGWC-10 0.000172 0.00004926 73.33 None NP (NDs) Mercury (mg/L) 0.0002 0.000085 0.002 Nο 15 Nο 0.01 Mercury (mg/L) WGWC-11 0.0002 0.00011 0.002 No 15 0.0001861 0.00003697 86.67 None No 0.01 NP (NDs) WGWC-12 0.0002 0.00011 0.002 No 15 0.0001786 0.00004172 73.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-13 No 0.0001843 0.00004152 86.67 None NP (NDs) Mercury (mg/L) 0.0002 0.000083 0.002 15 No 0.01 Mercury (mg/L) WGWC-14A 0.0002 0.00013 0.002 No 15 0.0001953 0.00001807 93.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-15 0.0002 0.000086 0.002 Nο 15 0.000169 0.00005338 73.33 None Nο 0.01 NP (NDs) Mercury (mg/L) WGWC-16 0.0002 0.00019 0.002 No 15 0.0001853 0.00003796 80 0.01 NP (NDs) No Mercury (mg/L) WGWC-17 0.0002 0.000074 0.002 No 15 0.0001916 0.00003253 93.33 None 0.01 NP (NDs) No WGWC-19 0.0002 0.00012 15 0.0001864 0.00003684 86.67 None NP (NDs) Mercury (mg/L) 0.002 No No 0.01 Mercury (mg/L) WGWC-8 0.0002 0.00013 0.002 No 0.0001812 0.00004016 80 No WGWC-9 0.0002 0.0001953 NP (NDs) Mercury (mg/L) 0.00013 0.002 Nο 15 0.00001807 93.33 None Nο 0.01 WGWC-10 0.015 0.01334 NP (NDs) Molybdenum (mg/L) 0.00093 0.1 No 17 0.004676 0.01 88.24 None No Molybdenum (mg/L) WGWC-11 0.015 0.0017 No 17 0.0134 0.004518 0.01 NP (NDs) 0.1 88.24 None No Molvbdenum (ma/L) WGWC-12 0.015 0.00095 0.1 No 17 0.01105 0.006369 70.59 None No 0.01 NP (NDs) Molybdenum (mg/L) WGWC-13 0.00491 0.0018 0.1 0.004565 0.005042 17.65 None No 0.01 NP (normality) WGWC-14A 0.001 NP (NDs) Molybdenum (mg/L) 0.015 0.1 Nο 17 0.01418 0.003395 94 12 None No 0.01 WGWC-15 Molybdenum (mg/L) 0.007348 0.003585 0.1 No 0.0057 0.003489 0 0.01 Param. 17 None sqrt(x) Molybdenum (mg/L) WGWC-17 0.006141 0.002871 0.1 No 17 0.004506 0.002609 0 None No 0.01 Param. Molybdenum (mg/L) WGWC-19 0.015 0.0012 0.1 No 17 0.006947 0.006946 41.18 None 0.01 NP (normality) No WGWC-9 Molybdenum (mg/L) 0.006736 0.003775 0.1 No 0.005678 0.003554 ln(x) 0.01 WGWC-10 NP (NDs) Selenium (mg/L) 0.005 0.00031 0.05 Nο 17 0.004724 0.001137 94 12 None Nο 0.01 WGWC-11 0.005 NP (NDs) Selenium (mg/L) 0.00049 0.05 No 17 0.004735 0.001094 94.12 None No 0.01 Selenium (mg/L) WGWC-12 0.005 0.0021 0.05 No 17 0.004829 0.0007034 94.12 None NP (NDs) No 0.01 NP (NDs) Selenium (ma/L) WGWC-14A 0.005 0.0003 0.05 Nο 0.004724 0.00114 94 12 None 0.01 17

Federal Confidence Intervals - All Results

	Plant \	Nansley Cl	ient: Souther	n Company	Data: \	Vansley Ash F	Pond Printe	d 1/6/20	021, 9:49 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No 17	0.004735	0.001091	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01182	0.006555	0.05	No 17	0.009185	0.004197	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No 17	0.004727	0.001125	94.12	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.00388	0.003034	0.05	No 17	0.003481	0.0006945	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002742	0.002115	0.05	No 17	0.002428	0.0005001	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No 17	0.0009462	0.0002219	94.12	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No 17	0.0005512	0.000437	47.06	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No. 17	0.0004153	0.000391	29 41	None	No	0.01	NP (normality)

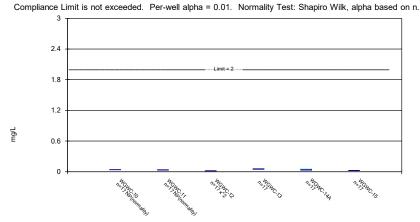
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

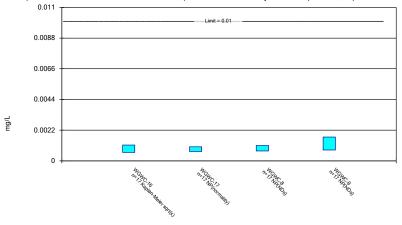
Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Barium Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

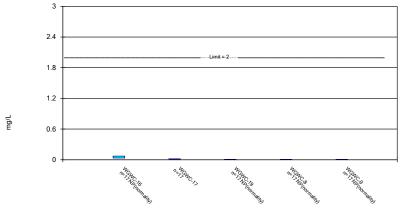
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

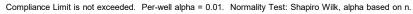


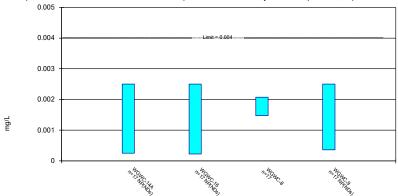
Constituent: Arsenic Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval







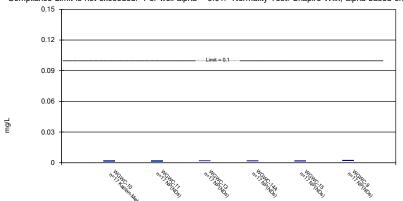
Constituent: Beryllium Analysis Run 1/6/2021 9:48 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

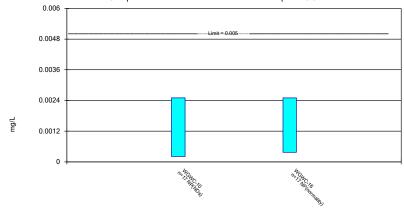
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 1/6/2021 9:48 AM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

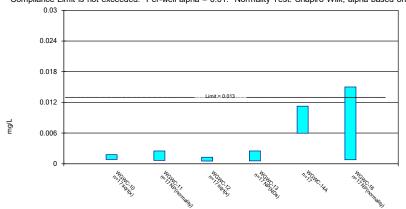


Constituent: Cadmium Analysis Run 1/6/2021 9:48 AM View: Appendix IV

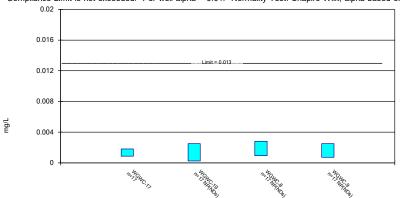
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

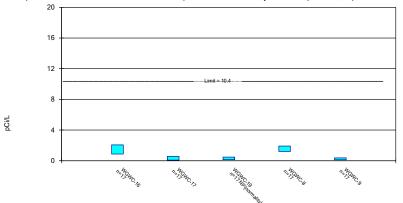


Constituent: Cobalt Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

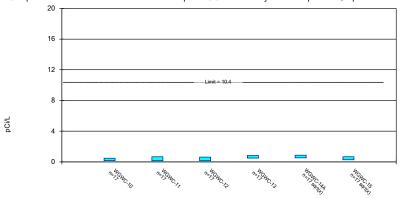
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



P

Parametric Confidence Interval

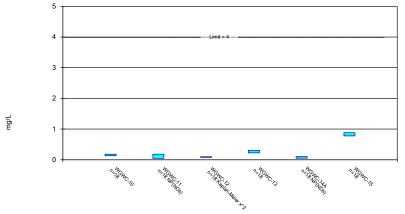
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



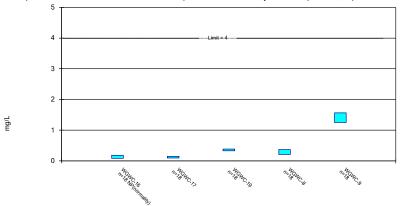
Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



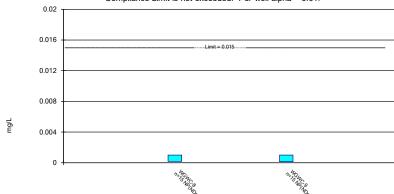
Constituent: Fluoride Analysis Run 1/6/2021 9:48 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

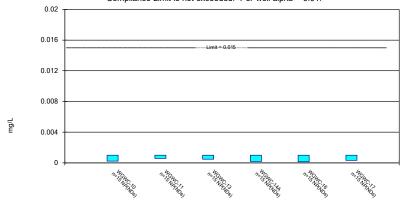
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

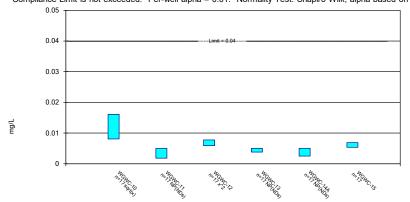
Compliance Limit is not exceeded. Per-well alpha = 0.01.

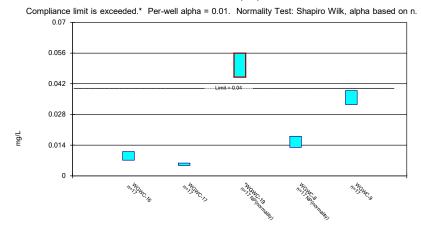


Constituent: Lead Analysis Run 1/6/2021 9:48 AM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

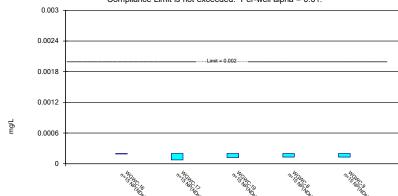




Constituent: Lithium Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval Compliance Limit is not exceeded. Per-well alpha = 0.01.

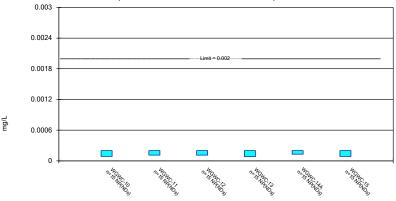


Constituent: Mercury Analysis Run 1/6/2021 9:48 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

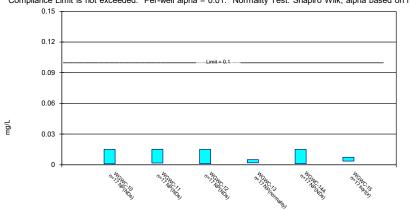
Compliance Limit is not exceeded. Per-well alpha = 0.01.



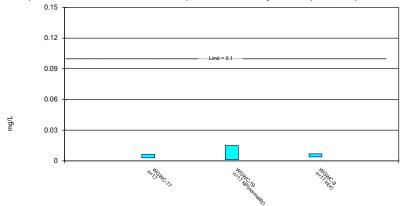
Constituent: Mercury Analysis Run 1/6/2021 9:48 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

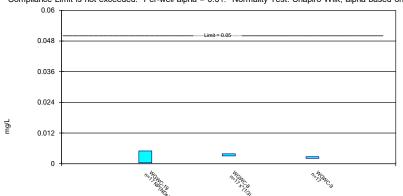


Constituent: Molybdenum Analysis Run 1/6/2021 9:49 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

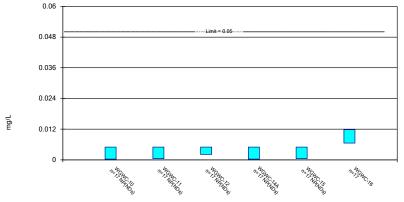
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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 1/6/2021 9:49 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

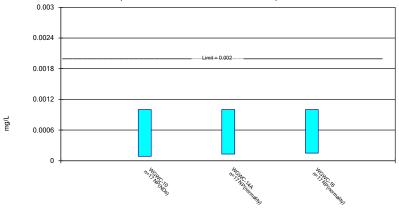


FIGURE I.

State Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:32 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Lithium (mg/L)	WGWC-19	0.056	0.045	0.009	Yes 17	0.051	0.007331	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-8	0.018	0.013	0.009	Yes 17	0.01768	0.01083	0	None	No	0.01	NP (normality)
Lithium (ma/L)	WGWC-9	0.03892	0.03255	0.009	Yes 17	0.03574	0.005081	0	None	No	0.01	Param.

State Confidence Intervals - All Results

Data: Wansley Ash Pond Client: Southern Company Constituent Well Std. Dev. %NDs ND Adj. Transform Alpha Method Lower Lim. Compliance Sig. N WGWC-10 Arsenic (mg/L) 0.001 0.00089 0.01 No 17 0.0008894 0.000232 76.47 None No 0.01 NP (NDs) Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 17 0.0009129 0.0001943 82.35 None No 0.01 NP (NDs) Arsenic (ma/L) WGWC-12 0.001 0.00052 0.01 Nο 17 0.0009412 0.0001662 88 24 None Nο 0.01 NP (NDs) Arsenic (mg/L) WGWC-13 0.001 0.00048 0.01 No 0.0008182 0.0003125 47.06 None 0.01 NP (normality) No NP (NDs) Arsenic (mg/L) WGWC-14A 0.0017 0.00095 0.01 Nο 17 0.001285 0.0006269 58.82 None No 0.01 WGWC-15 0.002339 0.00143 17 0.001885 0.0007251 0.01 Arsenic (mg/L) 0.01 No 0 None No Param. WGWC-16 No 0.001186 0.000353 Arsenic (mg/L) 0.001132 0.0006062 0.01 17 Kaplan-Meier sqrt(x) 0.01 WGWC-17 0.00085 Arsenic (mg/L) 0.001 0.00067 0.01 Nο 17 0.0001827 47.06 None Nο 0.01 NP (normality) Arsenic (mg/L) WGWC-8 0.0011 0.00071 0.01 No 17 0.0009265 0.0002748 58.82 None 0.01 NP (NDs) No WGWC-9 0.0017 0.00078 0.01 No 17 0.0009971 0.0002263 0.01 NP (NDs) Arsenic (mg/L) 82.35 None No Barium (mg/L) WGWC-10 0.041 0.035 2 No 17 0.03948 0.00651 0 None No 0.01 NP (normality) Barium (mg/L) WGWC-11 0.04 0.03 2 No 0.03565 0.008299 None No 0.01 NP (normality) WGWC-12 2 0.01732 Barium (mg/L) 0.02011 0.01528 Nο 17 0.004491 0 None x^2 0.01 Param Barium (mg/L) WGWC-13 0.05768 0.04573 2 No 0.05171 0.009538 0 0.01 No Param. None Barium (mg/L) WGWC-14A 0.04971 0.03134 2 No 17 0.04053 0.01466 0 None No 0.01 Param. Barium (mg/L) WGWC-15 0.02291 0.01951 2 No 17 0.02121 0.002709 0 0.01 Param. None Nο Barium (mg/L) WGWC-16 0.032 2 No 0.05109 0.01664 No 0.01 NP (normality) WGWC-17 2 0 Barium (mg/L) 0.01812 0.01304 Nο 17 0.01558 0.004053 None Nο 0.01 Param Barium (mg/L) WGWC-19 0.005 0.0012 2 No 17 0.002545 0.001883 23.53 None 0.01 NP (normality) No Barium (mg/L) WGWC-8 0.005 0.001 2 No 17 0.002722 0.001717 0.01 NP (normality) 29.41 None No Barium (mg/L) WGWC-9 0.005 0.00076 2 No 0.00239 0.001823 29.41 None 0.01 NP (normality) 17 Nο Beryllium (mg/L) WGWC-14A 0.0025 0.00025 0.004 No 0.001836 0.00106 70.59 None No NP (NDs) NP (NDs) Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 17 0.002366 0.000553 94.12 None No 0.01 Beryllium (mg/L) WGWC-8 0.001472 0.001774 0.0004805 0.002075 0.004 No 17 0 0.01 Param. None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 17 0.001508 0.001086 52.94 None NP (NDs) 0.004 No No 0.01 Cadmium (mg/L) WGWC-10 0.0025 0.00021 17 0.002365 0.0005554 NP (NDs) 0.005 Nο 94 12 None Nο 0.01 Cadmium (mg/L) WGWC-16 0.0025 0.00037 0.005 No 0.0009795 0.0008847 No 0.01 NP (normality) Chromium (mg/L) WGWC-10 0.002131 0.001397 0.1 No 0.001982 0.0005982 17.65 Kaplan-Meier 0.01 Param. 17 No Chromium (mg/L) WGWC-11 0.0021 0.0012 0.1 No 17 0.001906 0.0002861 0.01 NP (NDs) 82.35 Kaplan-Meier No Chromium (mg/L) WGWC-13 0.002 0.0018 0.1 No 17 0.001988 0.00004851 94.12 Kaplan-Meier No 0.01 NP (NDs) WGWC-14A 0.001982 0.00007276 NP (NDs) Chromium (mg/L) 0.002 0.0017 0.1 Nο 17 94 12 Kaplan-Meier Nο 0.01 Chromium (mg/L) WGWC-15 0.002 0.0015 0.1 No 17 0.001971 0.0001213 94.12 Kaplan-Meier No 0.01 NP (NDs) 0.0001213 Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 17 0.002029 94.12 Kaplan-Meier 0.01 NP (NDs) WGWC-10 No 0.001355 0.0008154 Cobalt (mg/L) 0.001754 0.0008402 0.013 17 5.882 None sqrt(x) 0.01 Param. Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 0.00163 0.0009355 41.18 None No 0.01 NP (normality) Cobalt (mg/L) WGWC-12 0.001275 0.0005259 0.013 Nο 17 0.0009576 0.0006725 5.882 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 17 0.001894 0.0009765 70.59 0.01 NP (NDs) No 0.004205 Cobalt (mg/L) WGWC-14A 0.01125 0.005977 0.013 No 17 0.008612 0.01 0 None No Param. WGWC-16 Cobalt (mg/L) 0.015 17 0.007761 0.00628 NP (normality) 0.00077 0.013 No 5.882 None No 0.01 Cobalt (mg/L) WGWC-17 0.001804 0.0008596 0.013 No 0.001332 0.0007536 5.882 None No 0.01 WGWC-19 Cobalt (mg/L) 0.0025 0.00024 0.013 Nο 17 0.001489 0.00111 52 94 None Nο 0.01 NP (NDs) Cobalt (mg/L) WGWC-8 0.002078 NP (NDs) 0.0028 0.00092 0.013 No 17 0.0008693 52.94 0.01 None No 0.0025 0.013 Cobalt (mg/L) WGWC-9 0.00073 No 17 0.002396 0.0004293 0.01 NP (NDs) 94.12 None No Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4659 0.1594 10.4 No 17 0.3127 0.2446 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6546 0.1387 10.4 No 17 0.3967 0.4117 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6212 0 1291 10.4 Nο 17 0.3752 0.3927 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) 0.6491 WGWC-13 0.8156 0.4825 No 17 0 0.01 10.4 0.2658 None No Param. Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.866 0.5061 10.4 No 17 0.7028 0.3259 0 None sqrt(x) 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-15 0.6598 0.2673 No 17 0.494 0 0.01 10.4 0.3733 None sart(x) Param. Combined Radium 226 + 228 (pCi/L) WGWC-16 0.8666 17 No 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-17 0.5569 0.06753 10.4 Nο 17 0.3122 0.3905 n None Nο 0.01 Param WGWC-19 NP (normality) Combined Radium 226 + 228 (pCi/L) 0.471 0.126 10.4 No 17 0.3259 0.3114 0 None No 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-8 1.902 No 17 1.555 0.01 1.209 10.4 0.5528 0 None No Param Combined Radium 226 + 228 (pCi/L) WGWC-9 0.3671 0 1214 0 2443 n 0.01 Param 10.4 Nο 17 0.1961 None Nο

State Confidence Intervals - All Results

Client: Southern Company

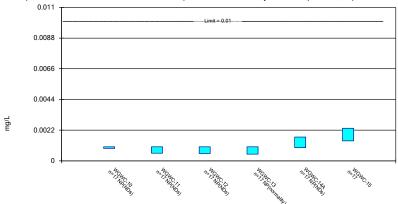
Data: Wansley Ash Pond

Constituent Well Sig. N Std. Dev. %NDs ND Adj. Transform Alpha Method Lower Lim. Compliance Mean WGWC-10 0.1805 0.1282 0.04325 Fluoride (mg/L) 4 No 18 0.1543 0 None No 0.01 Param. Fluoride (mg/L) WGWC-11 0.18 0.047 No 18 0.08867 0.03457 66.67 None No 0.01 NP (NDs) Fluoride (ma/L) WGWC-12 0.09839 0 07499 4 Nο 18 0.09261 0.02161 22.22 Kaplan-Meier x^2 0.01 Param Fluoride (mg/L) WGWC-13 0.2216 No 18 0.06839 5.556 None 0.01 No Fluoride (mg/L) WGWC-14A 0.1 0.048 4 Nο 18 0.08617 0.02686 77 78 None No 0.01 NP (NDs) WGWC-15 Fluoride (mg/L) 0.8772 0.7727 4 18 0.8249 0.08641 0 No None No 0.01 Param. WGWC-16 No 18 0.1713 NP (normality) Fluoride (mg/L) 0.18 0.08 4 0.1929 11.11 None No 0.01 WGWC-17 Nο 0 1187 Fluoride (mg/L) 0 1445 0.09284 4 18 0.04269 5.556 None Nο 0.01 Param Fluoride (mg/L) WGWC-19 0.3816 0.3251 4 No 18 0.3533 0.04665 0 0.01 Param. None No Fluoride (mg/L) WGWC-8 0.3674 0.2076 4 No 18 0.2875 0.1321 0 0.01 Param. None No Fluoride (mg/L) WGWC-9 1.563 1.248 4 No 18 1.406 0.261 0 None No 0.01 Param. Lead (mg/L) WGWC-10 0.001 0.00021 0.001 No 15 0.0007427 0.0003812 66.67 None No NP (NDs) WGWC-11 0.001 0.00093 NP (NDs) Lead (mg/L) 0.00058 0.001 Nο 15 0.0001889 86 67 None No 0.01 WGWC-13 0.001 0.00047 0.001 No 15 0.000778 0.0002525 0.01 NP (NDs) Lead (mg/L) No 0.001 Lead (mg/L) WGWC-14A 0.001 0.00018 No 15 0.00089 0.0002903 86.67 None No 0.01 NP (NDs) Lead (mg/L) WGWC-16 0.001 0.00014 0.001 No 15 0.0009427 0.0002221 93.33 None 0.01 NP (NDs) Nο WGWC-17 Lead (mg/L) 0.001 0.00033 No 15 0.000902 0.0002598 No NP (NDs) WGWC-8 0.0008307 0.0003506 Lead (mg/L) 0.001 0.00017 0.001 Nο 15 None Nο 0.01 NP (NDs) WGWC-9 0.001 0.00014 0.001 No 15 0.0009427 0.0002221 0.01 NP (NDs) Lead (mg/L) 93.33 None No WGWC-10 0.01611 0.008063 No 17 0.01257 0.007135 0 0.01 Lithium (mg/L) 0.009 None Lithium (ma/L) WGWC-11 0.005 0.0018 0.009 No 0.004371 0.001407 82.35 None 0.01 NP (NDs) 17 Nο Lithium (mg/L) WGWC-12 0.007752 0.00589 0.009 No 0.006659 0.001801 5.882 None 0.01 Param. Lithium (mg/L) WGWC-13 0.005 0.0038 0.009 No 17 0.004429 0.001125 76.47 None No 0.01 NP (NDs) Lithium (mg/L) WGWC-14A 0.005 0.0025 0.004094 0.00138 NP (NDs) 0.009 No 17 64.71 0.01 None No WGWC-15 0.006859 17 0.006094 0.001221 11.76 None Lithium (mg/L) 0.005329 0.009 No No 0.01 Param. Lithium (mg/L) WGWC-16 0.01108 0.007147 17 0.009112 0.003135 0.009 Nο 5.882 None Nο 0.01 Param Lithium (mg/L) WGWC-17 0.005807 0.004711 0.009 No 0.005259 0.0008747 No 0.01 Lithium (mg/L) WGWC-19 0.056 0.045 0.009 Yes 17 0.051 0.007331 0 None No 0.01 NP (normality) Lithium (mg/L) WGWC-8 0.013 0.01768 0.01083 0.01 NP (normality) 0.018 0.009 Yes 17 None No Lithium (ma/L) WGWC-9 0.03255 0.03574 0.005081 0 No WGWC-10 0.000172 0.00004926 73.33 None NP (NDs) Mercury (mg/L) 0.0002 0.000085 0.002 Nο 15 Nο 0.01 Mercury (mg/L) WGWC-11 0.0002 0.00011 0.002 No 15 0.0001861 0.00003697 86.67 None No 0.01 NP (NDs) WGWC-12 0.0002 0.00011 0.002 No 15 0.0001786 0.00004172 73.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-13 0.0002 No 0.0001843 0.00004152 86.67 None NP (NDs) Mercury (mg/L) 0.000083 0.002 15 No 0.01 Mercury (mg/L) WGWC-14A 0.0002 0.00013 0.002 No 15 0.0001953 0.00001807 93.33 None No 0.01 NP (NDs) Mercury (mg/L) WGWC-15 0.0002 0.000086 0.002 Nο 15 0.000169 0.00005338 73.33 None Nο 0.01 NP (NDs) Mercury (mg/L) WGWC-16 0.0002 0.00019 0.002 No 15 0.0001853 0.00003796 80 0.01 NP (NDs) No Mercury (mg/L) WGWC-17 0.0002 0.000074 0.002 No 15 0.0001916 0.00003253 93.33 None 0.01 NP (NDs) No WGWC-19 0.0002 0.00012 0.0001864 0.00003684 86.67 None NP (NDs) Mercury (mg/L) 0.002 No 15 No 0.01 Mercury (mg/L) WGWC-8 0.0002 0.00013 0.002 No 0.0001812 0.00004016 80 No NP (NDs) WGWC-9 0.0002 0.0001953 NP (NDs) Mercury (mg/L) 0.00013 0.002 Nο 15 0.00001807 93.33 None Nο 0.01 WGWC-10 0.015 0.01334 NP (NDs) Molybdenum (mg/L) 0.00093 0.015 No 17 0.004676 0.01 88.24 None No 0.015 Molybdenum (mg/L) WGWC-11 0.015 0.0017 No 17 0.0134 0.004518 0.01 NP (NDs) 88.24 None No Molvbdenum (ma/L) WGWC-12 0.015 0.00095 0.015 No 17 0.01105 0.006369 70.59 None No 0.01 NP (NDs) Molybdenum (mg/L) WGWC-13 0.00491 0.0018 0.015 No 0.004565 0.005042 17.65 None No 0.01 NP (normality) WGWC-14A 0.001 NP (NDs) Molybdenum (mg/L) 0.015 0.015 No 17 0.01418 0.003395 94 12 None No 0.01 WGWC-15 Molybdenum (mg/L) 0.007348 0.003585 0.015 No 0.0057 0.003489 0 0.01 Param. 17 None sqrt(x) Molybdenum (mg/L) WGWC-17 0.006141 0.002871 0.015 No 17 0.004506 0.002609 0 None No 0.01 Param. Molybdenum (mg/L) WGWC-19 0.015 0.0012 0.015 No 17 0.006947 0.006946 41.18 None 0.01 NP (normality) No Molybdenum (mg/L) WGWC-9 0.006736 0.003775 0.015 No 0.005678 0.003554 ln(x) 0.01 WGWC-10 Selenium (mg/L) 0.005 0.00031 0.05 Nο 17 0.004724 0.001137 94 12 None Nο 0.01 NP (NDs) WGWC-11 NP (NDs) Selenium (mg/L) 0.005 0.00049 0.05 No 17 0.004735 0.001094 94.12 None No 0.01 Selenium (mg/L) WGWC-12 0.005 0.0021 0.05 No 17 0.004829 0.0007034 94.12 None NP (NDs) No 0.01 NP (NDs) Selenium (ma/L) WGWC-14A 0.005 0.0003 0.05 Nο 0.004724 0.00114 94 12 None 0.01 17 Nο

State Confidence Intervals - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 1/8/2021, 10:32 AM <u>Well</u> %NDs ND Adj. Constituent Upper Lim. Lower Lim. Compliance Sig. N <u>Mean</u> Std. Dev. Transform Alpha Method Selenium (mg/L) WGWC-15 0.005 0.0005 0.05 No 17 0.004735 0.001091 94.12 None No 0.01 NP (NDs) No 17 0.009185 Selenium (mg/L) WGWC-16 0.01182 0.006555 0.05 0.004197 0.01 Param. WGWC-19 0.005 0.00036 0.01 NP (NDs) Selenium (mg/L) 0.05 No 17 0.004727 0.001125 94.12 None No Selenium (mg/L) WGWC-8 0.00388 0.003034 0.05 No 17 0.003481 0.0006945 0 None x^(1/3) 0.01 Param. WGWC-9 No 17 0.002428 0.0005001 0 Selenium (mg/L) 0.01 Param. None No Thallium (mg/L) WGWC-10 0.001 0.000085 0.002 No 17 0.0009462 0.0002219 94.12 None 0.01 NP (NDs) No Thallium (mg/L) WGWC-14A 0.001 0.00013 0.002 No 17 0.0005512 0.000437 47.06 None No 0.01 NP (normality) WGWC-16 0.001 0.00015 0.002 No 17 0.0004153 0.000391 0.01 NP (normality) Thallium (mg/L) 29.41 None

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



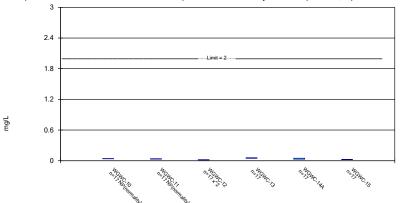
Constituent: Arsenic Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

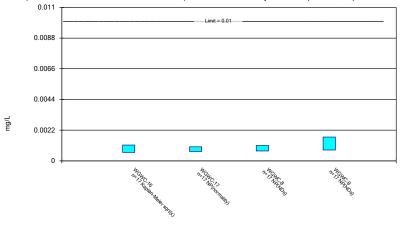


Constituent: Barium Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

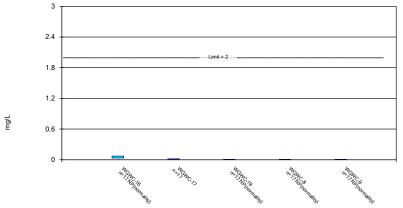
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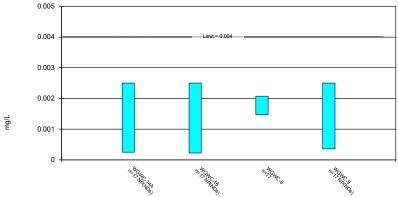
Constituent: Arsenic Analysis Run 1/8/2021 10:30 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



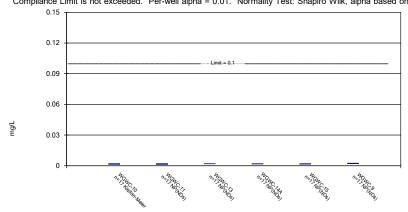




Constituent: Beryllium Analysis Run 1/8/2021 10:30 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

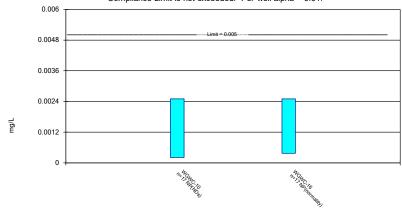


Constituent: Chromium Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

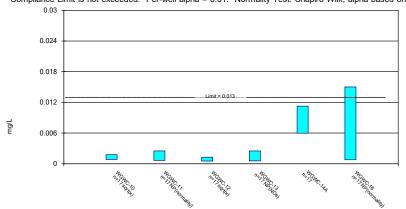


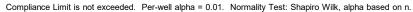
Constituent: Cadmium Analysis Run 1/8/2021 10:30 AM View: Appendix IV

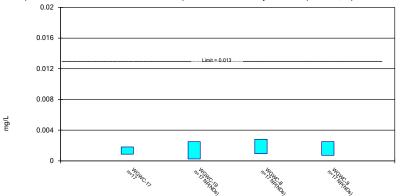
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval







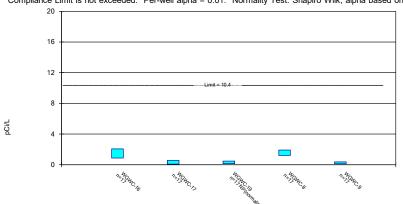
Constituent: Cobalt Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

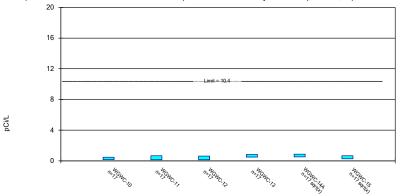
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric Confidence Interval

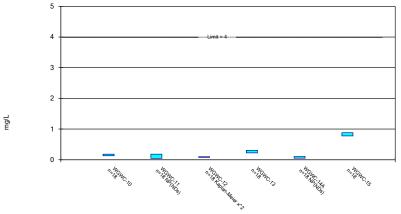
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



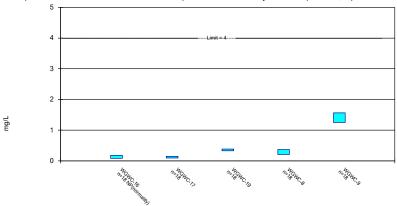
Constituent: Combined Radium 226 + 228 Analysis Run 1/8/2021 10:30 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

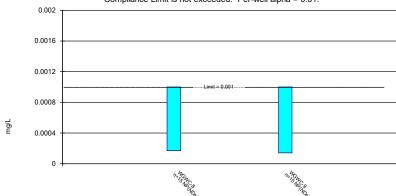


Constituent: Fluoride Analysis Run 1/8/2021 10:30 AM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

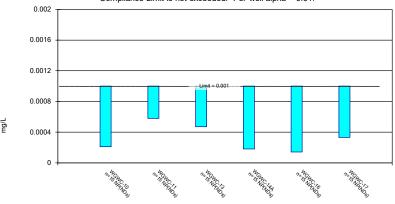
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Constituent: Lead Analysis Run 1/8/2021 10:30 AM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

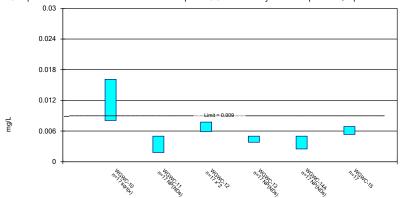
Compliance Limit is not exceeded. Per-well alpha = 0.01.



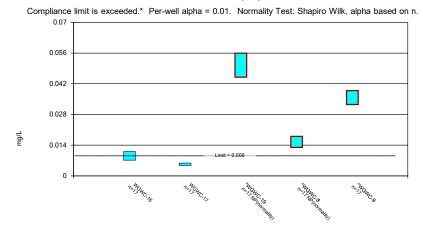
Constituent: Lead Analysis Run 1/8/2021 10:30 AM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval



Parametric and Non-Parametric (NP) Confidence Interval

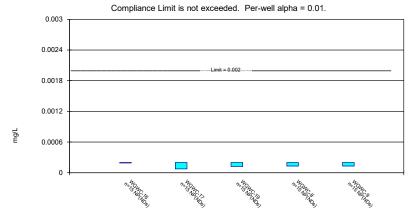


Constituent: Lithium Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

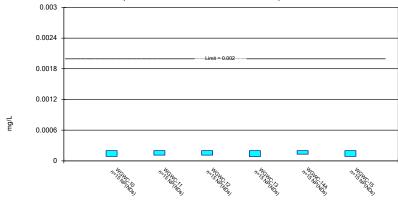
Non-Parametric Confidence Interval



Constituent: Mercury Analysis Run 1/8/2021 10:30 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



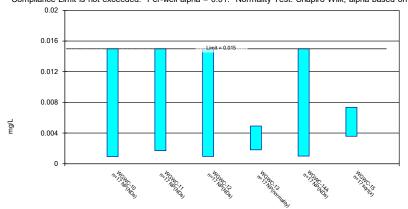
Constituent: Mercury Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

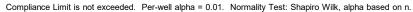
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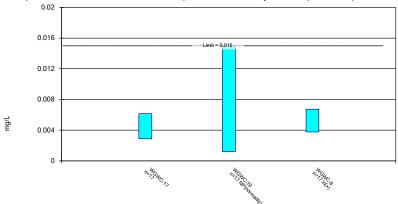
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Parametric and Non-Parametric (NP) Confidence Interval



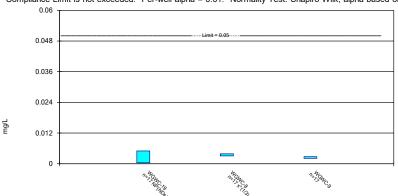


Constituent: Molybdenum Analysis Run 1/8/2021 10:30 AM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

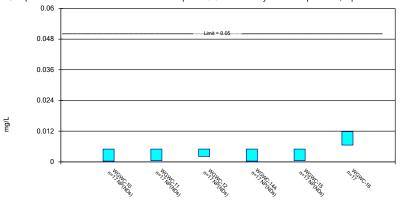
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



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.



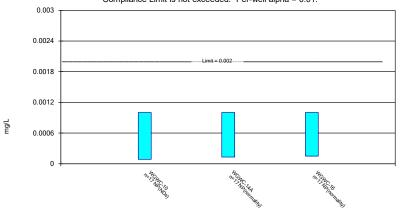
Constituent: Selenium Analysis Run 1/8/2021 10:30 AM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.27b Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



APPENDIX F

November 2020 Alternate Source Demonstration (ASD) Addendum Plant Wansley Ash Pond 1 (AP-1) Georgia Power Company

Prepared for



Georgia Power Company 241 Ralph McGill Blvd NE Atlanta, Georgia 30308

ALTERNATE SOURCE DEMONSTRATION ADDENDUM-LITHIUM

PLANT WANSLEY ASH POND 1 (AP-1)

Prepared by



engineers | scientists | innovators

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Project Number GW7327

November 2020



ALTERNATE SOURCE DEMONSTRATION ADDENDUM - LITHIUM

Plant Wansley Ash Pond 1 (AP-1)

November 30, 2020

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Certification Statement

Alternate Source Demonstration Addendum – Lithium Plant Wansley Ash Pond 1 (AP-1) November 30, 2020

I hereby certify that the facts used to prepare this Alternate Source Demonstration Addendum for Georgia Power Company – Plant Wansley Ash Pond 1 are accurate pursuant to the requirements stipulated in 40 CFR 257.95(g)(3)(ii) and Georgia regulations stipulated in Rule 391-3-4-.10(6) of the Georgia Administrative Code, which incorporates 40 CFR 257.95(g)(3)(ii) by reference.



Seal and Signature

11/30/2020

Date



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LIST OF ACRONYMS

AP Ash Pond

ASD Alternate Source Demonstration

CCR Coal Combustion Residual CFR Code of Federal Regulations

GA EPD Environmental Protection Division
GWPS Groundwater Protection Standard

 $\begin{array}{ll} K_d & \text{distribution coefficient} \\ mg/kg & \text{milligram per kilogram} \\ mg/L & \text{milligram per liter} \end{array}$

PWR partially weathered rock

SEP sequential extraction procedure SSL statistically significant level

TDS total dissolved solids

USEPA United States Environmental Protection Agency

1. INTRODUCTION

1.1 Background and Purpose

This document presents an addendum to the alternate source demonstration (ASD) provided in the 2018 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Company – Plant Wansley – Ash Pond 1 (AP-1) (ACC, 2019) for the statistically significant levels (SSLs) of lithium detected in compliance groundwater monitoring wells located at Georgia Power Company's (Georgia Power's) Plant Wansley (the Site) Ash Pond 1 (AP-1). Based on lithium SSLs identified in several wells during the 2018 reporting year, the 2018 ASD presented evidence that the source of lithium in groundwater was naturally derived from subsurface rock formations and did not originate from AP-1. Since submittal of the 2018 ASD, supplemental data have been collected which provide additional evidence of the natural occurrence of lithium in rock units at AP-1. The supplemental data presented in this ASD Addendum support the conclusions provided in the 2018 ASD.

AP-1 is currently regulated by the Georgia Environmental Protection Division (GA EPD) in accordance with Georgia Rules for Solid Waste Management 391-3-4-.10. The unit is also subject to the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) rule [40 Code of Federal Regulations (CFR) Part 257 Subpart D. The 2018 ASD and this ASD Addendum have been prepared pursuant to Rule 391-3-4-.14(30)(e) of the Georgia Administrative Code, which states that "the owner or operator may demonstrate that a source other than a MSWLF (municipal solid waste landfill) unit caused the contamination or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality." This language is consistent with the requirements of the Federal CCR Rule stipulated in 40 CFR 257.95(g)(3), which has been incorporated by reference into Rule 391-3-4-.10(23)(c) of the Georgia Administrative Code.

1.2 <u>Basis of the Evaluation of Statistically Significant Level Exceedances</u>

In accordance with § 257.95(h)(2)(iii), the federal groundwater protection standard (GWPS) for lithium at AP-1 is 0.040 milligrams per liter (mg/L). In accordance with the GA EPD CCR Rule, the state GWPS for lithium is the background concentration, which has been established at 0.009 mg/L. Statistical analysis of Appendix IV data identified lithium concentrations at SSLs above established state and/or federal GWPS in certain compliance wells at AP-1, as documented in reports previously submitted to GA EPD and summarized below.

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	GWPS		Compl	iance Well	
Assessment Event	Exceedance for Lithium	WGWC-8	WGWC-9	WGWC-10	WGWC-19
June 2018 (1)	Federal				X
Julie 2018	State	X	X	X	X
September 2018 (1)	Federal				X
September 2018	State	X	X	X	X
April 2019 (2)	Federal				X
April 2019	State	X	X	X	X
Santambar 2010 (2)	Federal				X
September 2019 (2)	State	X	X		X
March 2020 (3)	Federal				X
Maich 2020	State	X	X		X

- (1) 2018 Annual Groundwater Monitoring and Corrective Action Report (ACC, 2019)
- (2) 2019 Annual Groundwater Monitoring and Corrective Action Report (ACC, 2020)
- (3) 2020 Semiannual Groundwater Monitoring and Corrective Action Report (Geosyntec, 2020)

Decreasing lithium concentrations detected at WGWC-10 reduced the lower confidence interval to below the state GWPS of 0.009 mg/L following the second semiannual groundwater assessment event in September 2019, thereby no longer identifying an SSL of lithium at this compliance well.

1.3 Summary of 2018 ASD

As detailed in the 2018 ASD, the lithium SSLs reported for wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19, located southeast and south of AP-1 are not associated with a release from the ash pond (**Figure 1**). The source of lithium in the groundwater at these locations is naturally derived from the subsurface rock units present southeast and south of AP-1. Various lines of evidence supporting this conclusion were presented in the 2018 ASD. Key points are summarized below.

 There are several lithologic units present at AP-1, with rock units north and northwest of AP-1 differing from those southeast and south of the ash pond. Correspondingly, the lithium groundwater concentrations originating from natural geologic sources are expected to vary spatially across the Site with changing geologic units.

- Laboratory analysis of rock samples collected from locations southeast and south
 of AP-1 within or adjacent to the schist-amphibolite rock unit indicated naturally
 occurring lithium concentrations ranging from approximately 40 milligrams per
 kilogram (mg/kg) to 116 mg/kg.
- Boron is an Appendix III constituent commonly used as a tracer to indicate CCR impacts to groundwater downgradient of a CCR unit. Groundwater data for sampling events conducted in 2016 and 2017 indicated no correlation between boron and lithium groundwater concentrations for select compliance wells.
- The lack of boron detections and low concentrations of other CCR indicator parameters (Appendix III constituents) at WGWC-19, the well with the highest lithium detections in groundwater, further indicated that lithium in groundwater did not originate from a release of AP-1. In fact, the highest concentrations of lithium in rock core samples collected in support of the 2018 ASD were reported in the schist-amphibolite samples collected at WGWC-19.

1.4 Summary of ASD Addendum

This ASD Addendum provides supplemental groundwater and rock sample laboratory analytical data collected since submittal of the 2018 ASD. The data support the conclusions of the 2018 ASD, specifically:

- Lithium concentrations detected at WGWC-10 have shown a decreasing trend since 2016, resulting in a reduction of the statistically derived lower confidence interval to below the state GWPS of 0.009 mg/L, thereby no longer identifying an SSL for lithium at this compliance well.
- This ASD Addendum includes an evaluation of the correlation between lithium and Appendix III constituents using groundwater data from compliance monitoring well samples collected between 2016 and 2020. Results indicate that there is no statistically significant positive correlation between lithium and boron at WGWC-9, and that there is a statistically significant negative correlation between boron and lithium at WGWC-8, indicating that these constituents are from different sources. Non-detect to intermittent low detections of boron consistent with background conditions at wells WGWC-10 and WGWC-19 further support an alternate source for lithium in groundwater.
- Laboratory analyses of rock core samples collected from locations with lithium SSLs and from locations in proximity to locations with lithium SSLs indicate

substantial total concentrations of naturally occurring lithium in the rock, with lithium concentrations ranging from 17 mg/kg (WGWC-8 and PB-3) to 130 mg/kg (PB-7).

- Laboratory analyses using sequential extraction procedures (SEPs) for rock core samples collected from boreholes corresponding to or in vicinity of wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19 indicate lithium in rock cores is mostly associated with hydroxides of iron, manganese and/or aluminum as well as more recalcitrant fractions that will liberate lithium through mineral weathering.
- Using a literature-derived distribution coefficient (K_d) of 300 liters per kilogram (L/kg) to calculate predicted groundwater concentrations of lithium based on lithium concentrations in rock indicates that observed groundwater concentrations, which are generally lower than predicted concentrations, can be explained by lithium originating from weathering of the natural formation.

1.5 Site Setting

AP-1 is located in the Piedmont Physiographic Province of western Georgia, which is characterized by gently rolling hills and narrow valleys with locally pronounced linear ridges, trending northeast-southwest, and separated by valleys. Geologic mapping performed by Golder (2015) and revised by Geosyntec (2018) indicates that the Site is underlain by schist, amphibolite, gneiss, and quartzite. AP-1 is underlain primarily by five lithologic units; (i) CCR material, (ii) alluvial deposits (iii) saprolite, (iv) partially weathered rock (PWR), and (v) metamorphic crystalline bedrock.

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 investigations, the potentiometric surface is a subdued reflection of the topography. The top of rock 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.

Additional information regarding the geologic and hydrogeologic setting of AP-1 is available in reports previously submitted to GA EPD, including semiannual groundwater monitoring and corrective action reports for AP-1 submitted in 2017, 2018, 2019, and



2020, and the *Hydrogeologic Assessment Report (Revision 1)* submitted in November 2019 (Geosyntec, 2019).

2. ALTERNATE SOURCE DEMONSTRATION

Based on review of Site information, the SSLs for lithium at monitoring wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19 are not related to a release from AP-1 but are instead caused by naturally occurring lithium present in rock units at AP-1. The following sections present information supporting this conclusion.

2.1 Lack of Correlation Between Lithium and Indicator Parameters

The 2018 ASD included an evaluation of the correlation between boron and other Appendix III constituents for groundwater samples collected between 2016 and 2017 to assess the potential for AP-1 to be the source of lithium in groundwater at AP-1. The assessment was completed by analysis of Pearson correlation coefficients. Highly positive correlations (i.e., correlation coefficient r near 1.0) may indicate that two parameter sets are from a common influence, while statistically non-significant low correlations or negative r values indicate that the occurrence of two parameters are unrelated or potentially from different sources. Results indicated that while boron had a positive correlation with some other Appendix III constituents at individual wells, lithium did not significantly correlate with boron and/or showed a negative correlation between these two constituents, suggesting potentially different sources for boron and lithium in groundwater.

This ASD Addendum expands upon the evaluation by inclusion of groundwater data collected after submittal of the 2018 ASD to provide an update to the correlation coefficient analyses. As shown in **Table 1**, potential correlations between boron and other Appendix III constituents, and between lithium and Appendix III constituents, were evaluated for WGWC-8, WGWC-9, WGWC-10, and WGWC-19. To summarize data presented in **Table 1**:

- WGWC-8: Boron shows a statistically significant negative correlation with lithium and positive correlations with calcium and TDS. Lithium does not show a statistically significant correlation with Appendix III constituents. This suggests a common source of boron, calcium, and TDS, but a different source for lithium in this well.
- WGWC-9: Boron does not statistically correlate with lithium but does show statistically significant positive correlations with calcium, sulfate, and TDS and a negative correlation with fluoride. Lithium does not correlate at a statistically significant level with Appendix III constituents. Similar to WGWC-8, this



suggests a common source of boron, calcium, sulfate and TDS, but different sources for lithium and fluoride in this well.

- WGWC-10: Due to insufficient detections of boron, no correlation analyses could be completed for this constituent to other Appendix III constituents or lithium. Lithium shows statistically significant positive correlations with fluoride and sulfate. This suggests a common source for these constituents in this well. Given that boron concentrations were mostly non-detect and/or consistent with background conditions, and concentrations of fluoride and sulfate were very low (and much lower compared to other wells), this common source of constituents in this well is likely derived from weathering/dissolution of the natural formation.
- WGWC-19: Similar to WGWC-10, due to insufficient detections of boron, no correlation analyses could be completed for this constituent to other Appendix III constituents or lithium. Lithium shows a statistically significant positive correlation with sulfate but no other Appendix III constituents. Again, this suggests a common source for lithium and sulfate, which is likely the natural formation due to low concentrations of sulfate and mostly non-detect concentrations of boron.

If AP-1 were the source of lithium at these locations, particularly at WGWC-19 (the location with the highest lithium concentrations in groundwater), elevated detections of boron in groundwater would be expected, and statistically significant positive correlations should exist between lithium and boron. Furthermore, with the exception of well WGWC-8, there are no statistically significant increases of Appendix III constituents in these wells. The statistically significant negative correlation between boron and lithium in well WGWC-8 suggests that lithium is not derived from AP-1.

2.2 <u>Laboratory Analytical Results of Rock Samples</u>

As part of the 2018 ASD demonstration, twelve rock core samples from drilling investigations previously completed at AP-1 were selected from a range of lithologies for laboratory analyses of total metals. As summarized in Table 2 of the 2018 ASD, lithium concentrations were higher in samples of the schist-amphibolite unit at AP-1 compared to other site lithologies.

Additional rock cores were retrieved from Georgia Power's storage facility in 2020 and submitted for laboratory analyses of total lithium and, at the request of GA EPD, cores were also subjected to a SEP for lithium. Core samples from the approximate well screen intervals of WGWC-8 and WGWC-19 were available and selected for total lithium and



SEP analysis. A core sample from PB-8, obtained from the same lithologic formation as WGWC-19, was also selected. Core samples from WGWC-9 and WGWC-10 were not available. However, rock cores from the drilling of PB-3 and PB-4, located in proximity to and installed in the same lithologic formation as WGWC-9, were available, and samples from the approximate screen interval of WGWC-9 were collected and submitted for laboratory analyses. Core samples from PB-7, located in proximity to and installed in the same lithologic formation as WGWC-10 were available. A PB-7 core sample from the approximate well screen interval of WGWC-10 was collected and submitted for analysis. The locations where rock cores were collected are shown on **Figure 2.** Boring logs for locations where rock cores were collected are provided in **Appendix A** for reference.

Rock cores were shipped under chain-of-custody protocol to the Eurofins TestAmerica Laboratory in Canton, Ohio, for rock core sample preparation prior to shipment to the Eurofins TestAmerica Laboratory in Knoxville, Tennessee, for total and SEP analyses of lithium. Upon receipt at the laboratory in Canton, each core sample was crushed to achieve a particle size of less than 10 millimeters (mm) and the sample was homogenized. The crushed samples were then shipped to the Knoxville laboratory for analyses.

A 1-gram (g) portion of each sample was digested using hydrofluoric acid, nitric acid, and boric acid, and subsequently analyzed by USEPA Method 6010B for total lithium. To perform SEP analyses, an aliquot of each sample was sequentially extracted through a series of seven steps to remove lithium from specific solid-associated phases using progressively stronger reagents to solubilize metals from increasingly recalcitrant phases. Details of the reagents and digestion method used at each step are provided in **Table 2**, and in the Eurofins TestAmerica laboratory analytical reports provided in **Appendix B**. Laboratory analytical results of the ten core samples analyzed for total lithium and lithium by SEP in 2020 are provided in **Table 3**.

As a first step to evaluate data quality in an SEP analysis, a comparison of the total concentrations of a metal with the sum of the individual extraction steps should be made. While not expected to be exactly the same, these results should be consistent with each other. As can be seen in **Table 3**, the totals analyses for lithium and the sum of lithium from extraction steps 1 through 7 match very well, indicating good metal recovery in the SEP steps and data quality.

Total lithium concentrations in these cores ranged from 17 mg/kg to 130 mg/kg, indicating substantial concentrations of naturally occurring lithium, which is consistent with the findings presented in the 2018 ASD. In addition, little to no lithium was recovered in the first three extractions steps, which include the Exchangeable Phase (Step



1), the Carbonate Phase (Step 2), and the Non-Crystalline Materials Phase (Step 3). This is not surprising given that these mineral phases are either not present at the Site (i.e., carbonates) and that lithium does not readily sorb to these mineral phases. Extraction Step 4 (Metal Hydroxide Phase) was the first step to liberate substantial levels of lithium, suggesting that some naturally occurring lithium can go into solution through weathering/dissolution of hydroxides of iron, manganese, and/or aluminum. Extraction Step 5 (Organic Phase) yielded some detectable concentrations of lithium, but generally at lower levels compared to Step 4. This suggests that relatively little lithium is associated with organic phases in these samples. This is also not surprising given that little to no organic matter would be expected in these rock core samples. The bulk of the total lithium was leached in Steps 6 (Acid/Sulfide Fraction) and 7 (Residual Fraction), indicating a fairly recalcitrant fraction of lithium that can only be liberated through weathering of the rock/mineral matrix containing the lithium.

The SEP results suggest that lithium in rock cores is mostly associated with hydroxides of iron, manganese and/or aluminum as well as the refractory fractions that will liberate lithium through mineral weathering. The association of lithium in these fractions strongly suggests a natural occurrence of lithium in the mineral fraction and that weathering of lithium-bearing minerals releases lithium to groundwater at the Site.

2.3 Natural Variation of Groundwater Quality

Based on the lack of correlations between lithium and Appendix III parameters described in Section 2.1 and the presence of substantial concentrations of total lithium of up to 130 mg/kg in rock cores at the Site analyzed in 2020, it is apparent that lithium found in groundwater at the Site is likely derived from natural sources. Site-specific lithium concentrations in rock cores are substantially higher than mean lithium concentrations of about 17 mg/kg found in soils and regoliths from the Eastern United States (Shacklette et al., 1973) and higher than the upper concentration range of 60 mg/kg found in soils of the Georgia Piedmont (Anderson et al., 1988). Further, as presented in the 2018 ASD, site-specific lithium concentrations in rock cores are higher than those reported as naturally occurring in earth's crust (Taylor, 1964; Turekian and Wedepohl, 1961).

To further evaluate whether these naturally elevated lithium concentrations in rock cores could explain the lithium concentrations found in groundwater, theoretical groundwater lithium concentrations were calculated. To do that, site-specific total lithium concentrations in rock cores were divided by a literature-derived K_d of 300 L/kg for lithium (Baes et al., 1984). The resulting predicted groundwater concentrations were compared with actual groundwater concentrations found in wells associated with these rock samples. The results are summarized in **Table 4**.



As can be seen in **Table 4**, the calculated (i.e., predicted) groundwater concentrations based on total lithium concentrations in individual rock cores and using a K_d of 300 L/kg ranged from 0.057 mg/L to 0.433 mg/L, and were consistently higher than the observed groundwater concentrations in the four wells of interest, which ranged from 0.0071 mg/L in WGWC-10 to 0.049 mg/L in WGWC-19 during the March 2020 sampling event. This was especially pronounced in rock cores with higher lithium concentrations that overpredicted groundwater lithium concentrations by a factor of up to 60 in boring PB-7. This suggests that lithium concentrations observed in site-specific groundwater can be explained by naturally occurring lithium in rock cores. The overprediction of groundwater concentrations indicates that site-specific K_d values are variable and much higher than 300 L/kg, which is consistent with the SEP results that showed a substantial portion of lithium bound to recalcitrant mineral phases that require weathering of the minerals within the rock matrix to liberate lithium. In summary, lithium concentrations in Site groundwater reflect natural variations of groundwater quality through groundwater interactions with the rock formations.

3. CONCLUSIONS

Based on the information presented in the 2018 ASD and this ASD Addendum, the lithium SSLs reported in the 2018 Annual Groundwater Monitoring and Corrective Action Report, the 2019 Annual Groundwater Monitoring and Corrective Action Report, and the 2020 Semiannual Groundwater Monitoring and Corrective Action Report are not attributed to a release from AP-1 at the Site. Furthermore, subsequent to the second semiannual groundwater assessment event in 2019, lithium concentrations in well WGWC-10 no longer constitute an SSL for lithium in this well. The following lines of evidence demonstrate that the SSLs are likely the result of natural variation in groundwater quality due to naturally occurring lithium in rock units southeast and south of the Site and not a release from AP-1:

• Lack of Correlation Between Lithium and Boron:

- Where detected (i.e., in wells WGWC-8 and WGWC-9), boron either does not show a correlation with lithium (WGWC-9), or it is negatively correlated (WGWC-8), suggesting different sources for boron and lithium. Groundwater samples from wells WGWC-10 and WGWC-19 are either non-detect for boron or have low-level estimated concentrations consistent with background conditions.
- The lack of boron detections and low concentrations of other CCR indicator parameters at WGWC-19, the well with the highest lithium detections in groundwater, further indicates that lithium in groundwater does not originate from a release of AP-1.

• Rock Core Samples:

- O Rock cores representative of the screened intervals of wells showing lithium SSLs contain lithium ranging from 17 mg/kg to 130 mg/kg indicating a significant source of lithium, above average crustal abundance, in the subsurface formations.
- A seven-step sequential extraction of rock cores representative of the screened intervals of wells showing lithium SSLs indicate that lithium is associated with the hydroxide-phases of iron, manganese and/or aluminum, and the refractory fraction. This supports a natural occurrence of lithium in the mineral fraction that can be released to groundwater through mineral weathering.



• Natural Variation of Groundwater Conditions:

O Using the results from the total lithium analyses, predicted groundwater concentrations were calculated using a literature-derived K_d value of 300 L/kg for lithium. The predicted groundwater results were consistently higher than the observed groundwater concentrations, suggesting that the lithium detected in these groundwater locations can be explained by naturally occurring lithium from weathering of the formation.

Plant Wansley AP-1 will remain in assessment monitoring and assessment of corrective measures is not required. Assessment monitoring results will continue to be presented in Annual and Semiannual Groundwater Monitoring and Corrective Action Reports. A copy of the ASD Addendum will be provided as an appendix to the 2020 Annual Groundwater Monitoring and Corrective Action Report due to GA EPD in January 2021.

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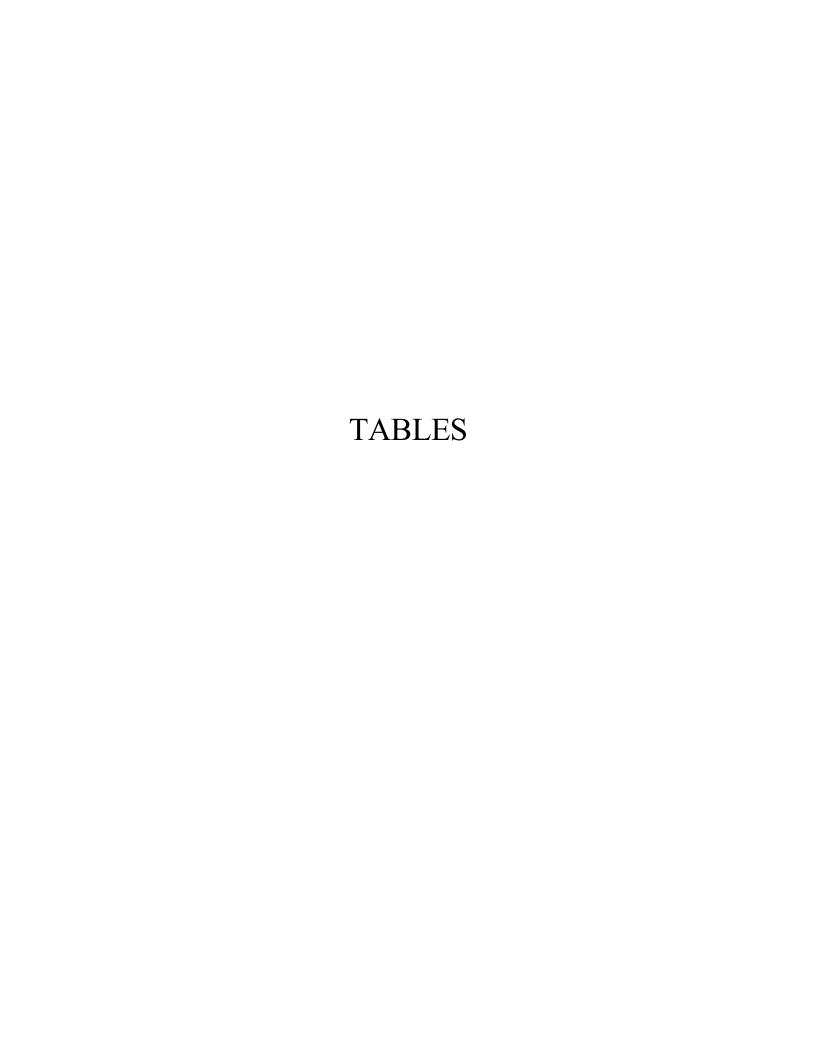


Table 1

Lithium and Appendix III Concentrations in Groundwater and Pearson's Correlation Coefficients
Plant Wansley AP-1, Carroll and Heard Counties, Georgia

		V	VGWC-8				
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS
5/19/2016	1.42	0.0215	31.4	17.5	0.304	146	311
7/20/2016	1.4	0.0260	28	19	0.27	150	290
9/15/2016	1.2	0.0570	27	19	0.24	140	270
11/14/2016	1.3	0.0170	32	25	0.2	160	320
2/6/2017	1.8	0.0120	41	33	0.27	180	330
3/15/2017	1.7	0.0140	38	38	0.25	170	370
4/26/2017	2	0.0091	39	42	0.31	180	380
8/10/2017	2017 1.8 0.0130		53	48	0.37	180	380
10/12/2017	1.8	0.0180	60	60	0.35	180	450
6/14/2018	1.7	0.0150	52	58	0.56	170	410
10/4/2018	1.9	0.0130	65	300	0.27	780	520
4/3/2019	1.7	0.0150	61	70	0.5	180	430
9/19/2019	1.7	0.0140	57	70	0.42	190	440
3/19/2020	2.2	0.0150	79	98	0.057	200	540
Pearson's Correlation							
Coefficient (r) - Boron		-0.68	0.78	0.46	-0.08	0.31	0.81
p-value		0.0079	0.0009	0.1017	0.7891	0.2774	0.0005
Pearson's Correlation			0.45	0.27	0.10	0.21	0.50
Coefficient (r) - Lithium			-0.47	-0.27	-0.19	-0.21	-0.52
p-value			0.0912	0.3509	0.5237	0.4788	0.0554

- (1) Results reported in milligrams per liter (mg/L)
- (2) Pearson's correlation coefficients for boron at WGWC-10 and WGWC-19 cannot be calculated due to insufficient boron detections.
- (3) Positive correlations are shown in black font. Negative correlations are shown in red font.
- (4) Statistically significant correlations are bold. p-value ≤ 0.05 indicate the correlation is statistically significant.

TDS = Total dissolved solids

ND = Not detected at the laboratory method detection limit (MDL)

Table 1
Lithium and Appendix III Concentrations in Groundwater and Pearson's Correlation Coefficients
Plant Wansley AP-1, Carroll and Heard Counties, Georgia

		V	VGWC-9				
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS
5/19/2016	0.314	0.0335	8.53	1.46	1.58	35.9	134
7/20/2016	0.25	0.024	8.2	1.5	2.0	37	120
9/14/2016	0.3	0.039	8.8	1.4	1.8	39	140
2/9/2017	0.61	0.04	10	1.5	1.3	60	180
3/15/2017	0.42	0.035	8.6	1.3	1.3	44	160
4/11/2017	0.37	0.034	8.6	1.2	1.4	36	120
4/26/2017	0.38	0.029	7.1	1.2	1.5	37	140
8/10/2017	0.29	0.038	7.5	1.3	1.6	38	130
10/12/2017	0.36	0.048	8.2	1.4	1.5	37	120
6/14/2018	0.39	0.034	7.5	1.2	1.4	37	120
10/4/2018	0.37	0.039	8.0	1.2	1.4	38	140
4/3/2019	0.35	0.035	7.2	2.0	1.3	41	120
9/19/2019	0.39	0.036	8.1	1.5	1.3	42	130
3/19/2020	0.55	0.039	9.3	2.1	1.0	45	160
Pearson's Correlation							
Coefficient (r) - Boron		0.35	0.62	0.32	-0.78	0.83	0.79
p-value		0.2155	0.0173	0.2607	0.0011	0.0002	0.0009
Pearson's Correlation							
Coefficient (r) - Lithium			0.32	0.10	-0.39	0.27	0.22
p-value			0.2697	0.7286	0.1627	0.3535	0.4520

- (1) Results reported in milligrams per liter (mg/L)
- (2) Pearson's correlation coefficients for boron at WGWC-10 and WGWC-19 cannot be calculated due to insufficient boron detections.
- (3) Positive correlations are shown in black font. Negative correlations are shown in red font.
- (4) Statistically significant correlations are bold. p-value ≤ 0.05 indicate the correlation is statistically significant.

TDS = Total dissolved solids

ND = Not detected at the laboratory method detection limit (MDL)

Table 1
Lithium and Appendix III Concentrations in Groundwater and Pearson's Correlation Coefficients
Plant Wansley AP-1, Carroll and Heard Counties, Georgia

		W	GWC-10				
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS
5/18/2016	ND	0.0320	7.17	1.45	0.206	2.84	70
7/20/2016	ND	0.0210	7	1.6	0.23	2.8	42
9/14/2016	ND	0.0200	7.7	1.5	0.17	2.8	40
11/11/2016	ND	0.0170	8.2	1.5	0.14	2.6	72
2/6/2017	ND	0.0160	9.1	1.4	0.15	2.7	24
3/15/2017	0.032	0.0140	9	1.4	0.16	2.7	78
4/26/2017	ND	0.0110	8.1	1.3	0.17	2.5	48
8/10/2017	ND	0.0110	8.1	1.4	0.2	2.2	38
10/12/2017	ND	0.0160	8.6	1.3	0.14	1.9	72
6/14/2018	ND	0.0084	7.7	1.3	0.15	2	40
10/4/2018	ND	0.0085	8.5	1.3	0.18	1.9	60
4/4/2019	0.024	0.0059	7.9	1.4	0.13	2.2	30
9/19/2019	ND	0.0075	7.5	1.5	0.13	2.1	52
3/18/2020	0.049	0.0071	7.5	1.5	0.052	2.1	58
Pearson's Correlation Coefficient (r) - Boron p-value							
Pearson's Correlation							
Coefficient (r) - Lithium			-0.24	0.35	0.57	0.73	0.28
p-value			0.4172	0.2217	0.0349	0.0029	0.3346

- (1) Results reported in milligrams per liter (mg/L)
- (2) Pearson's correlation coefficients for boron at WGWC-10 and WGWC-19 cannot be calculated due to insufficient boron detections.
- (3) Positive correlations are shown in black font. Negative correlations are shown in red font.
- (4) Statistically significant correlations are bold. p-value ≤ 0.05 indicate the correlation is statistically significant.

TDS = Total dissolved solids

ND = Not detected at the laboratory method detection limit (MDL)

Table 1

Lithium and Appendix III Concentrations in Groundwater and Pearson's Correlation Coefficients
Plant Wansley AP-1, Carroll and Heard Counties, Georgia

		W	GWC-19				
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS
11/11/2016	ND	0.0450	12	2.6	0.32	3.4	98
2/6/2017	ND	0.0500	11	2.6	0.45	3.7	36
3/15/2017	ND	0.0520	10	2.4	0.37	3.6	120
4/11/2017	ND	0.0480	11	2.3	0.37	3.2	68
4/26/2017	ND	0.0440	8.4	2.3	0.4	3.3	76
6/7/2017	ND	0.0470	9	2.5	0.35	3.8	74
7/11/2017	ND	0.0450	9.5	2.3	0.39	3.3	70
8/10/2017	ND	0.0560	8.8	2.5	0.42	3.7	66
6/14/2018	ND	0.0480	8.9	2.4	0.35	3.5	74
10/4/2018	ND	0.0620	10	2.6	0.35	4.6	100
4/2/2019	ND	0.0520	11	2.5	0.33	3.8	88
9/18/2019	0.024	0.0520	8.8	2.7	0.32	3.6	96
5/4/2020	ND	0.049	15	2.8	0.36	4.5	110
Pearson's Correlation Coefficient (r) - Boron p-value							
Pearson's Correlation Coefficient (r) - Lithium p-value			-0.07 0.8255	0.36	-0.02 0.9552	0.66 0.0141	0.22

- (1) Results reported in milligrams per liter (mg/L)
- (2) Pearson's correlation coefficients for boron at WGWC-10 and WGWC-19 cannot be calculated due to insufficient boron detections.
- (3) Positive correlations are shown in black font. Negative correlations are shown in red font.
- (4) Statistically significant correlations are bold. p-value ≤ 0.05 indicate the correlation is statistically significant.

TDS = Total dissolved solids

ND = Not detected at the laboratory method detection limit (MDL)

Table 2 Summary of Seven-Step Sequential Extraction Procedure Plant Wansley AP-1, Carroll and Heard Counties, Georgia

	Sequential Extraction Procedure Steps (1)
Step 1 - Exchangeable Phase	This extraction includes trace elements that are reversibly sorbed to soil minerals, amorphous solids, and/or organic material by electrostatic forces. These forces may be overcome by exposing the soil to a concentrated electrolyte solution, such as magnesium sulfate (MgSO ₄) that displaces the trace elements from solid surfaces.
Step 2 - Carbonate Phase	This extraction targets trace elements that are sorbed or otherwise bound to carbonate minerals. This phase is soluble in a mild acid solution such as sodium acetate/acetic acid (NaOAc/HOAc) at pH 5.
Step 3 - Non-Crystalline Materials Phase	This extraction targets trace elements that are complexed by amorphous minerals (e.g. iron). This phase is extracted with ammonium oxalate (pH 3).
Step 4 - Metal Hydroxide Phase	Trace elements bound to hydroxides of iron, manganese, and/or aluminum are extracted using a solution of hydroxylamine hydrochloride in acetic acid.
Step 5 - Organic-Bound Phase	This extraction targets trace elements strongly bound via chemisorption to organic material. Oxidation of soil organic matter using sodium hypochlorite (NaClO at pH 9.5), will bring into solution metals bound to organic functional groups.
Step 6 - Acid/Sulfide Fraction	The extraction is used to identify trace elements precipitated as sulfide minerals. Metals associated with sulfide minerals will be extracted by leaching the soils with a solution of hydrochloric acid, nitric acid, and water (HCl-HNO ₃ -H ₂ O) to dissolve the metal sulfide minerals.
Step 7 - Residual Fraction	Trace elements remaining in the soil after the previous extractions will be distributed between silicates, phosphates, and refractory oxides. These residual metals can be removed from the soil through total dissolution with hydrofluoric acid (HF), nitric acid (HNO ₃), hydrochloric acid (HCl), and boric acid (H ₃ BO ₃).

Notes:

(1) Sample were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0008, "7-Step Sequential Extraction Procedure". EPA Method 6010B as incorporated in Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0007 was used to perform the final instrument analyses.

Table 3 Total and Sequential Extraction Concentrations of Lithium in Rock Core Samples Plant Wansley AP-1, Carroll and Heard Counties, Georgia

Sample Location:	PB-3 (same formation as WGWC-9)	PB-3 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-7 (adjacent to WGWC-10)	PB-8 (same formation as WGWC-19)	WGWC-8	WGWC-19	WGWC-19
Sample Depth (ft bgs):	47 - 52	57-61	49-59	64-68	73-80	144 - 154	135 - 145	47 - 57	87 - 88	89 - 90
Sample Elevation (ft NAVD88):	757 - 752	747 - 743	760 - 750	745 - 741	736 - 729	672 - 662	712 - 702	731 - 721	694 - 693	692 - 691
Screen Interval of Compliance Well (ft NAVD88) (1):	NA	NA	NA	NA	NA	NA	NA	730 - 720	699 - 689	699 - 689
Adjacent Compliance Well and Screen Interval (ft NAVD88) (2):	WGWC-9 (760-750)	WGWC-10 (673 - 663)	WGWC-19 (699 - 689)	NA	NA	NA				
Sample Analysis Date:	Sept - Nov 2020	Sept - Nov 2020	Sept - Nov 2020	Oct-Nov 2020	Sept - Oct 2020	Sept - Oct 2020				
Rock Type:	Gneiss	Gneiss	Gneiss	Gneiss	Gneiss	Schist-Amphibolite	Schist-Amphibolite	Quartzite	Schist-Amphibolite	Schist-Amphibolite
Sequential Extraction Results (mg/kg)										
Extraction - Step 1	< 0.60	< 0.61	< 0.61	< 0.61	< 0.60	< 0.60	< 0.60	< 0.61	< 0.62	< 0.62
Extraction - Step 2	< 0.45	< 0.45	< 0.45	0.56 J	< 0.45	0.69 J	0.63 J	< 0.46	< 0.46	< 0.47
Extraction - Step 3	0.20 J	0.37 J	0.23 J	0.52 J	0.25 J	0.57 J	0.34 J	< 0.15	0.52 J	0.52 J
Extraction - Step 4	5.7	1.3 J	8.1	8.1	6.7	11	2.3 J	1.2 J	11	12
Extraction - Step 5	3.1 J	2.7 J	3.2 J	3.7 J	3.9 J	6.9 J	2.6 J	<2.2	5.7 J	5.1 J
Extraction - Step 6	4.1	1.8 J	4.7 J	14	7.9	69	35	1.1 J	55	45
Extraction - Step 7	10	11	14	10	14	53	18	10	26	20
Sum of Steps 1-7	23	17	31	37	32	140	59	12	98	83
Total Lithium Concentration in Core (mg/kg)	22	17	36	43	36	130	53	17	86	70

Notes:

ft bgs = feet below ground surface ft NAVD88 = North American Vertical Datum of 1988.

mg/kg = milligram per kilogram

(1) Screen interval of compliance well shown for comparison to core sample collection interval. NA if core sample location is not a compliance well.

(2) Screen interval of adjacent compliance well or compliance well compliance well.

1 of 1 November 2020

Table 4 Comparison of Predicted and Measured Lithium Concentrations in Groundwater Plant Wansley AP-1, Carroll and Heard Counties, Georgia

Sample Location:	PB-3 (same formation as WGWC-9)	PB-3 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-4 (same formation as WGWC-9)	PB-7 (adjacent to WGWC-10)	PB-8 (same formation as WGWC-19)	WGWC-8	WGWC-19	WGWC-19
Sample Depth (ft bgs):	47 - 52	57-61	49-59	64-68	73-80	144 - 154	135 - 145	47 - 57	87 - 88	89 - 90
Sample Elevation (ft NAVD88):	757 - 752	747 - 743	760 - 750	745 - 741	736 - 729	672 - 662	712 - 702	731 - 721	694 - 693	692 - 691
Screen Interval of Compliance Well (ft NAVD88) (1):	NA	NA	NA	NA	NA	NA	NA	730 - 720	699 - 689	699 - 689
Adjacent Compliance Well and Screen Interval (ft NAVD88) (2):	WGWC-9 (760-750)	WGWC-10 (673 - 663)	WGWC-19 (699 - 689)	NA	NA	NA				
Sample Analysis Date:	Sept - Nov 2020	Sept - Nov 2020	Sept - Nov 2020	Oct-Nov 2020	Sept - Oct 2020	Sept - Oct 2020				
Rock Type:	Gneiss	Gneiss	Gneiss	Gneiss	Gneiss	Schist-Amphibolite	Schist-Amphibolite	Quartzite	Schist-Amphibolite	Schist-Amphibolite
Total Lithium Concentration in Core (mg/kg)	22	17	36	43	36	130	53	17	86	70
Predicted Lithium in Groundwater (mg/L) (3)	0.073	0.057	0.120	0.143	0.120	0.433	0.177	0.057	0.287	0.233
Actual Lithium in Groundwater (mg/L) (4)	0.039 (5)	0.039 (5)	0.039 (5)	0.039 (5)	0.039 (5)	0.0071 (6)	0.049 (7)	0.015	0.049	0.049

1 of 1

ft bgs = feet below ground surface

ft NAVD88 = North American Vertical Datum of 1988.

mg/kg = milligram per kilogram

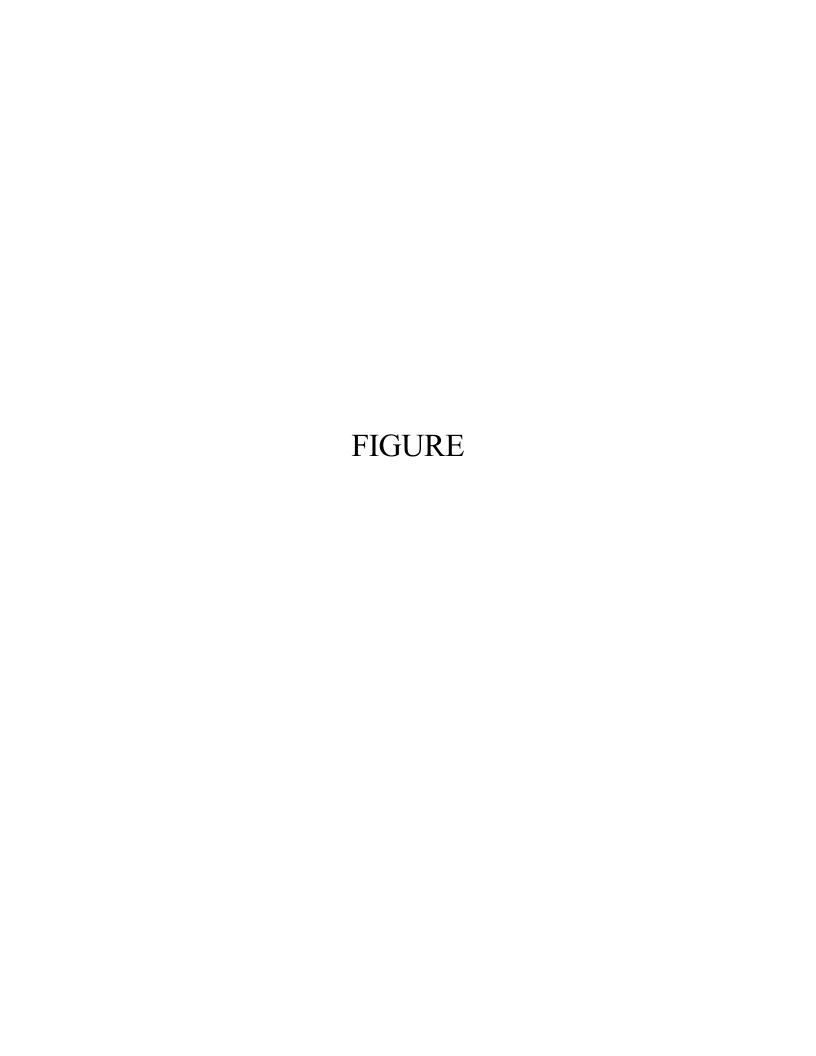
mg/L - milligram per liter

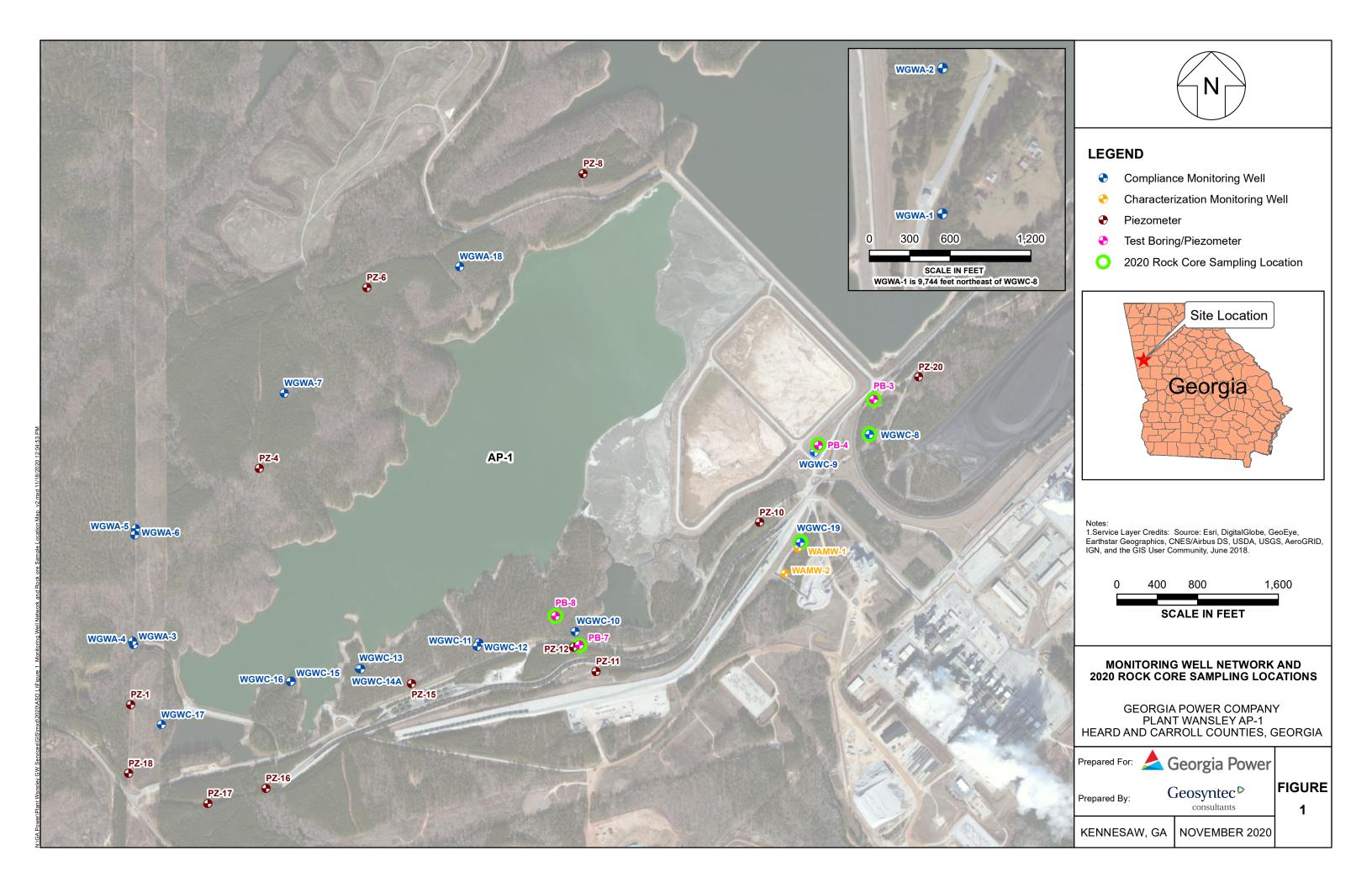
- (1) Screen interval of compliance well shown for comparison to core sample collection interval. NA if core sample location is not a compliance well.

 (2) Screen interval of adjacent compliance well or compliance well completed in same geologic formation for comparison to core sample collection interval. NA if core sample location is a compliance well.
- (3) Predicted concentrations of lithium in groundwater based on distribution coefficent ($K_B = 300 \text{ L/kg}$ (Base et al., 1984). Predicted concentrations calculated by dividing lithium concentrations in cores (mg/kg) by 300 L/kg. (4) Lithium concentration in compliance well detected during the March 2020 semi-annual groundwater assessment event.
- (5) Lithium concentration in compliance well WGWC-9.

 (6) Lithium concentration in compliance well WGWC-10.
- (7) Lithium concentration in compliance well WGWC-19.

November 2020





APPENDIX A

Select Boring Logs

RECORD OF BOREHOLE WGWC8/APC-1

PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 57.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/29/15 DATE COMPLETED: 10/29/15 NORTHING: 1242929.40 EASTING: 2029644.58 GS ELEVATION: 777.70 TOC ELEVATION: 780.08 SHEET 1 of 2
DEPTH W.L.: 36' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 11/02/2015
TIME W.L.: 12:00

	z	SOIL PROFILE						AMPLE	S		
(£f)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	FOG	ELEV.	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
0 -	- -	0.00 - 2.00 SAPROLITE; overburden, dry to moist, brown to reddish orange	ML			(ft) 775.70	8				VELL CASING Interval: -2.5'-47' Material: Schedule 40 PV
-	– 775	2.00 - 4.00 CLAYEY SILT; dry to moist, brown overburden (saprolite)				2.00					Diameter: 2" Joint Type: Threaded
- - - -	_	4.00 - 8.00 red orange overburden (saprolite)	ML			773.70 4.00					VELL SCREEN nterval: 47'-57' Material: Schedule 40 PV Diameter: 2" Slot Size: 0.010" End Cap: Schedule 40 P'
-	— 770 —	8.00 - 24.00				769.70 8.00					FILTER PACK Interval: 45'-57' Type: #1 Sand/Prepacke Filter
- - - -	-	dry to moist, brown to reddish orange									FILTER PACK SEAL Interval: 41.5'-45' Type: 3/8" Bentonite Pelle
	- 765										NNULUS SEAL Interval: 0'-41.5' Type: Portland Type 1
- - - -	- -										VELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodi Aluminum
-	- - - 760										ORILLING METHODS Soil Drill: Hydrovac/4-inch Sonic
-	-									F	Rock Drill: 4-inch Sonic
(-									Portland Type 1	
	— 755 –					753.70					
5 – - -	- -	24.00 - 28.00 GRAVELLY CLAY; wet, yellow-orange, trace black and white stringers, manganese oxide and weathered feldspar, lean clay	GC			24.00					
-	— 750 –	28.00 - 29.00	TWR	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		749.70 28.00 748.70					
- - - -	-	CLAYEY SAND/TRANSITIONALLY WEATHERED ROCK; wet, brown, clayey silt, some fine to coarse sand, some fine gravel size rock fragments 29.00 - 57.00 Mylonitic QUARTZITE ROCK; white to light brown, rock is less				29.00					
-	- 745	coherent and likely fractured around 54-56' interval									
- - - -	- -										
-	- - 740		BR							3/8" Bentonite — Pellets	
-	- -										
) =	-										
	— 735 –									3/8" Bentonite – Pellets	
; _ ; _	-			K	/>						

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: Tom Ardito

GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.

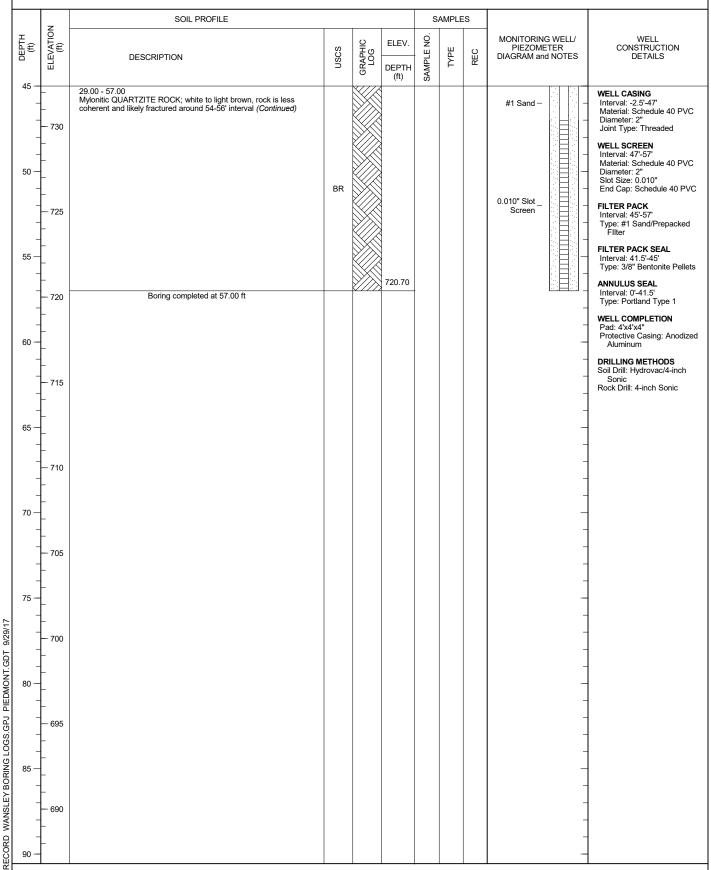
DATE: 9/29/17



RECORD OF BOREHOLE WGWC8/APC-1

PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 57.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/29/15 DATE COMPLETED: 10/29/15 NORTHING: 1242929.40 EASTING: 2029644.58 GS ELEVATION: 777.70 TOC ELEVATION: 780.08 SHEET 2 of 2
DEPTH W.L.: 36' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 11/02/2015
TIME W.L.: 12:00



LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: Tom Ardito

GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.

DATE: 9/29/17



	4
SOUTHERN	
COMPA	NY

WGWC-9 PAGE 1 OF 2

S	LOG OF TEST AND WELL INST					PAGE ECS	
SO	UTHERN COMPANY SERVICES, INC. PROJEC	T Ash F	ond	Piezo	meters		
EA1	RTH SCIENCE AND ENVIRONMENTAL ENGINEERING LOCATION LOCATI	ON Plan	ıt Waı	nsley			
DATE	STARTED 12/4/2014 COMPLETED 12/4/2014 SURF. ELEV. 5					9115.75	
DRIL	LED BY T.Ardito LOGGED BY S. Baxter CHECKED	BY L.	∕lillet		ANGLE BEAF	RING	
BORI	NG DEPTH 58 ft. GROUND WATER DEPTH: DURING	COM	P. <u>1</u>	7 ft.	DELAYED 12.78 ft. after 2	24 hrs.	
(#) <u>O</u>	STRATA DESCRIPTION				WELL DATA		
DEPTH (ft)	000	ELEV			Protective aluminum cover with 4-foot square concrete pad Top of casing Elev. = 812.03	bollards	ELE\ (DEPTH
	Utility Clearance (HYDROEXCAVATION)	LLLV	· \bar{\bar{\bar{\bar{\bar{\bar{\bar{	· \$ ^	Surface Seal: concrete		(BEI II
20 Table 10	Well-graded Sandy Gravel (GM) - tan, dry, fine to coarse grain, mottled brown and orange ✓	799.33					(2.0
5	Silt (ML) - orange, wet, clayey, mottled yellow, with coarse gravel	786.33			Annular Fill: Cement-Bentonite bags, 46 lbs, Portland Type I/II		
40: 0.00 35 30 25 30 30 30 30 30 30 30 3	Silty Gravel (GM) - white, dry, fine to coarse grain, light brown mottling, some oxidation						
	- mottled orange	771.33					
40.0	Partially Weathered Rock						
4:02	- gray, fine to medium grain, medium hard to hard, moderately to			\mathcal{Y}			

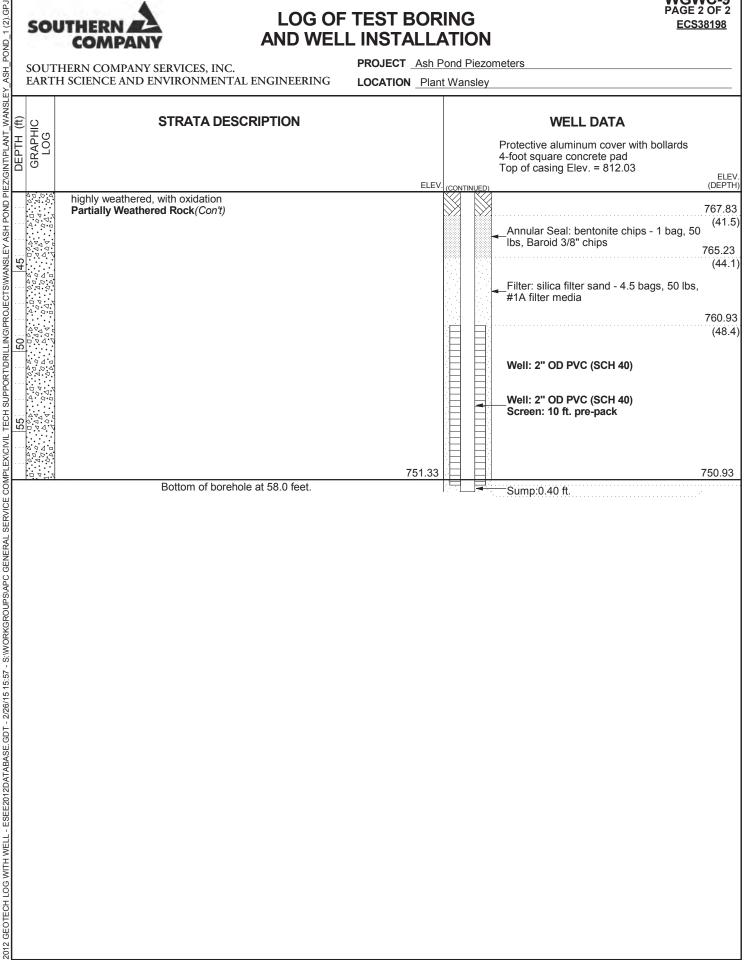


LOG OF TEST BORING AND WELL INSTALLATION

WGWC-9 PAGE 2 OF 2 ECS38198

SOUTHERN COMPANY SERVICES, INC. EARTH SCIENCE AND ENVIRONMENTAL ENGINEERING PROJECT Ash Pond Piezometers

LOCATION Plant Wansley



PROJECT: SCS Wansley
PROJECT NUMBER: 154117
DRILLED DEPTH: 146.00 ft
LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig
DATE STARTED: 10/27/15
DATE COMPLETED: 10/27/15

NORTHING: 1240971.96 EASTING: 2026725.61 GS ELEVATION: 809.61 TOC ELEVATION: 812.38

SHEET 1 of 4 DEPTH W.L.: 7.73' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 10/27/15 TIME W.L.: 14:41

		SOIL PROFILE				s	AMPLE	ES		
(#)	ELEVALION (ft)		(0	일	ELEV.	o O			MONITORING WELL/ PIEZOMETER	WELL CONSTRUCTION
	ELEV (DESCRIPTION	nscs	GRAPHIC	DEPTH (ft)	SAMPLE NO.	TYPE	REC	DIAGRAM and NOTES	DETAILS
5 —	805	0.00 - 11.00 SILT; dry to moist, yellow to orange-red, some clay, some very fine sand, trace muscovite 6.00: Shelby Tube Collected: 6'-8'	ML			8				WELL CASING Interval: -2.5'-136' Material: Schedule 40 P\ Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 136'-146' Material: Schedule 40 P\ Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 P FILTER PACK Interval: 134'-136 Type: #1 Sand Prepacke Filter
10 -	795	11.00 - 23.00 CLAYEY SILT; dry to moist, orange to red, 5-10% muscovite, trace black MnO, trace garnet, trace quartz, saprolite	ML		798.61 11.00					FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pell ANNULUS SEAL Interval: 0'-131.5' Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodi Aluminum DRILLING METHODS Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic
20 -	790	23.00 - 37.00 SILT; moist, yellow brown, some clay, come very fine sand, layers			786.61 23.00					
25 -	785	of white CLAYEY SILT, 3" thick lense of weathered pegmatite material at 25", 39", and 42"	ML							
35 -	775	36.00: Shelby Tube Collected: 36'-38'			772.61					
10	770	37.00 - 40.00 CLAYEY SILT; some weathered pegmatite material, white/pink weathered potassium feldspar and plagioclase	ML		37.00 769.61					
40 —	-	40.00 - 47.00 SILT; moist, yellow brown, some clay, come very fine sand, layers of white CLAYEY SILT, 3" thick lense of weathered pegmatitic material at 42'	ML		40.00					
45 —	765	Log continued on next page							5000 100000 1000000	
DRILL	ING	LE: 1 in = 5.5 ft COMPANY: Cascade Drilling Tom Ardito	(CHEC		r: Ra			George, P.G. rkman, P.G.	Golder



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 146.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/27/15 DATE COMPLETED: 10/27/15

NORTHING: 1240971.96 EASTING: 2026725.61 GS ELEVATION: 809.61 TOC ELEVATION: 812.38 SHEET 2 of 4
DEPTH W.L.: 7.73' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 10/27/15
TIME W.L.: 14:41

	Z	SOIL PROFILE	1	1				AMPLE	S		
(£)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	POO	DEPTH (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
5 —	- - - - - 760	47.00 - 58.00 SAPROLITE; moist, grayish brown with some orange mineral oxidation, weathered muscovite schist, predominately weathered feldspars, 10-15%muscovite, <10% quartz	ML			762.61 47.00					WELL CASING Interval: -2.5'-136' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 136'-146' Material: Schedule 40 PVC
0 -	- - - - - 755		ML								Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PV FILTER PACK Interval: 134'-136 Type: #1 Sand Prepacked Filter FILTER PACK SEAL
5 —	- - -	58.00 - 58.10 1" black layer with gravel size quarts grains, silt sized black particles				751.61 58.10					Interval: 131.5'-134' Type: 3/8" Bentonite Pelle ANNULUS SEAL Interval: 0'-131.5' Type: Portland Type 1 WELL COMPLETION
-0	— 750 - - -	58.10 - 88.00 moist, grayish brown with some orange mineral oxidation, weathered muscovite schist, predominately weathered feldspars									Pad: 4'x4'x4" Protective Casing: Anodiz Aluminum DRILLING METHODS Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic
5 —	- 745 - - -									Portland Type 1	
0 —	740 										
5 —	735 									0000(0000)	
0 — - -	730 										
5 —	725 	88.00 - 92.00				721.61 88.00					
+	- 720	88.00 - 92.00 SANDY SILT; moist to wet, orange brown, sandy silt, very fine to fine sand, trace fine gravel, micaceous	ML			00.00					

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: Tom Ardito

GA INSPECTOR: Shannon George, P.G. CHECKED BY: Rachel P. Kirkman, P.G.



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 146.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/27/15 DATE COMPLETED: 10/27/15

NORTHING: 1240971.96 EASTING: 2026725.61 GS ELEVATION: 809.61 TOC ELEVATION: 812.38

SHEET 3 of 4 DEPTH W.L.: 7.73' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 10/27/15 TIME W.L.: 14:41

	1	2011 202511 5		10	C ELEVA				
_	NO N	SOIL PROFILE					AMPLE	:s	
UEPIH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	DEPTH	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES WELL CONSTRUCTION DETAILS
90 -	-	88.00 - 92.00 SANDY SILT; moist to wet, orange brown, sandy silt, very fine to fine sand, trace fine gravel, micaceous (Continued)	ML		(ft) 717.61	<u> </u>			WELL CASING Interval: -2.5'-136' Material: Schedule 40 P\
95 —	- - 715	92.00 - 96.00 SAPROLITE; moist, grayish brown with some orange mineral oxidation, weathered muscovite schist, predominantly feldspar, trace quartz, trace biotite, trace garnet	ML		92.00				WELL CASING Interval: -2.5-136' Material: Schedule 40 P\ Diameter: 2" Joint Type: Threaded WELL SCREEN Interval: 136-146' Material: Schedule 40 P\ Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 P\ Diameter: 0.010
	- -	96.00 - 97.00 SANDY SILT; moist to wet, orange brown, sandy silt, very fine to fine sand, trace fine gravel, micaceous	ML		713.61 96.00 712.61 97.00				End Cap: Schedule 40 P FILTER PACK Interval: 134-136
00 -	- 710 -	97.00 - 106.00 SAPROLITE; moist, grayish brown with some orange mineral oxidation, weathered muscovite schist, predominantly feldspar, trace quartz, trace biotite, trace garnet							Type: #1 Sand Prepacke Filter FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pell
-	- - -		ML						ANNULUS SEAL Interval: 0-131.5' Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4"
05 -	— 705 - -	106.00 - 116.00 NO RECOVERY			703.61 106.00				Protective Casing: Anod Aluminum DRILLING METHODS Soil Drill: 4-inch Sonic
-	- - - 700	NO RECOVERY							Rock Drill: 4-inch Sonic
10 -	- 700 - -								
15 —	- 695				693.61				
	- - -	116.00 - 119.00 SAPROLITE ROCK; garnetiferous, muscovite meta quartzite rock fragments up to 2.5" interbedded with weathered muscovite schist	TWR		116.00				
20 —	690 	119.00 - 139.00 moist to wet, silty clay and silt, weathered garnet, muscovite, plagioclase, schist, trace quartz		2 4 5 4 5 4 5 4 5 4 5 5 5 5 5 5 5 5 5 5	119.00				
25 —	- 685 - -			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
30 —	- - 680			4					
-	- - -			04444444444444444444444444444444444444					3/8" – Bentonite – Pellets
135 —	 675	Log continued on next page		DA DA					
DRIL	LLING	LE: 1 in = 5.5 ft COMPANY: Cascade Drilling Tom Ardito	(CHEC		': Ra			George, P.G. rkman, P.G. Golder



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 146.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/27/15 DATE COMPLETED: 10/27/15

NORTHING: 1240971.96 EASTING: 2026725.61 GS ELEVATION: 809.61 TOC ELEVATION: 812.38

SHEET 4 of 4 DEPTH W.L.: 7.73' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 10/27/15 TIME W.L.: 14:41

				10	CELEVA					
	z	SOIL PROFILE					AMPLE	S		
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	DEPTH (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
135 —	-	119.00 - 139.00 moist to wet, silty clay and silt, weathered garnet, muscovite, plagioclase, schist, trace quartz (Continued)		Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q					#1 Sand /	WELL CASING Interval: -2.5'-136' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded
140 —	- 670 	139.00 - 142.00 SILTY SAND; wet, very fine to fine sand, mottled texture	SM	A D D D D D D D D D D D D D D D D D D D	670.61 139.00 667.61				0.010" Slot	WELL SCREEN Interval: 136'-146' Material: Schedule 40 PV0 Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PV
-	-	142.00 - 145.00 SAPROLITE-ROCK/TRANSITIONALLY WEATHERED ROCK; wet, transitionally weathered garnet quartz muscovite plagioclase schist	TWR		142.00					FILTER PACK Interval: 134'-136 Type: #1 Sand Prepacked Filter
145 —	665 	145.00 - 146.00 wet, wilty sand, some mineral oxidation, 15-20% quartz Boring completed at 146.00 ft		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	664.61 145.00 663.61					FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pelle ANNULUS SEAL
	_ _ 660								- -	Interval: 0'-131.5' Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodiz
150 —	-								- - -	Aluminum DRILLING METHODS Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic
155 —	_ _ 655								- - -	
-	- - -								_	
160 —	- 650								_ 	
-	-								- - -	
165 —	- 645 -								_ _ _	
-	- -								- -	
170 — -	— 640 –								- - -	
-	- -								- - -	
175 — - -	635 								_ - -	
180 —	_ _ _ 630								- - -	
LOG DRII	LLING	LE: 1 in = 5.5 ft COMPANY: Cascade Drilling Tom Ardito	(CHEC		: Ra			George, P.G. rkman, P.G.	Golder



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 92.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/28/15 DATE COMPLETED: 10/28/15 NORTHING: 1241851.51 EASTING: 2028949.19 GS ELEVATION: 780.60 TOC ELEVATION: 783.42 SHEET 1 of 3
DEPTH W.L.: 20.5' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 10/28/15
TIME W.L.: 13:10

		SOIL PROFILE			DC ELEV		AMPLE			
_	NOI								MONITORING WELL/	WELL
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	DEPTH (ft)	SAMPLE NO.	TYPE	REC	PIEZOMETER DIAGRAM and NOTES	CONSTRUCTION DETAILS
0 -	— 780 —	0.00 - 27.00 SILTY SAND; reddish orange overburden				<u> </u>				WELL CASING Interval: -2.5'-82' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded
5 —	- - 775 -									WELL SCREEN Interval: 82'-92' Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC
-	-									FILTER PACK Interval: 79.1'-92' Type: #1 Sand/Prepacked Filter
10 —	— 770 —									FILTER PACK SEAL Interval: 77'-79.1' Type: 3/8" Bentonite Pellets ANNULUS SEAL Interval: 0'-77'
-	-		SM							Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodized
15 —	— 765 –									Aluminum DRILLING METHODS Soil Drill: Hydrovac/4-inch Sonic
20 —	-									Rock Drill: 4-inch Sonic
-	 760 	22.00: Shelby Tube Collected: 22'-24'								
25 —	- - 755				753.60					
-	-	27.00 - 30.00 SILT; dry to moist, light brown, brown, orange brown and grey. Trace white feldspar and black MnO laminations, trace fine gravel, quartz-rich lense from 30-33' (35% quartz). some weathered schist (saprolite)	ML		27.00					
30 —	750 	30.00 - 33.00 some severely weathered gneiss			750.60 30.00					
- 35 — -	- - - 745 -	33.00 - 60.00 dry to moist, light brown, brown, orange brown and grey. Trace white feldspar and black MnO laminations, trace fine gravel, quartz-rich lense from 30-33' (35% quartz). some weathered schist (saprolite)			747.60	-			Portland	
40 —	- - - - 740									
45 —	-	Log continued on next page								

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: Tom Ardito

GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 92.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/28/15 DATE COMPLETED: 10/28/15

NORTHING: 1241851.51 EASTING: 2028949.19 GS ELEVATION: 780.60 TOC ELEVATION: 783.42

SHEET 2 of 3 DEPTH W.L.: 20.5' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 10/28/15 TIME W.L.: 13:10

		SOIL PROFILE				S	AMPLE	S		
(#)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV.	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
45 —	735 730 725	33.00 - 60.00 dry to moist, light brown, brown, orange brown and grey. Trace white feldspar and black MnO laminations, trace fine gravel, quartz-rich lense from 30-33' (35% quartz). some weathered schist (saprolite) (Continued)			(ft)	Y S			Intermodulation of the control of th	L CASING rval: -2.5'-82' erial: Schedule 40 PV. meter: 2" it Type: Threaded L SCREEN rval: 82'-92' erial: Schedule 40 PV. meter: 2' Size: 0.010" I Cap: Schedule 40 PV. rval: 79.1'-92' e: #1 Sand/Prepacke liter ER PACK SEAL rval: 77'-79.1' e: 3/8" Bentonite Pelli
60 —	- - - - 720	60.00 - 63.00 stiffer with trace gravel			720.60 60.00				Inte Typ WEL Pad Prod A	rval: 0'-77' e: Portland Type 1 L COMPLETION l: 4'x4'x4" tective Casing: Anodi luminum
-	-	suitei wiiti tidee gravei			717.60				DRIL Soil Soil Rock	LLING METHODS Drill: Hydrovac/4-inch onic k Drill: 4-inch Sonic
65 —	- - 715 - - -	63.00 - 70.00 TRANSITIONALLY WEATHERED ROCK; brown micaceous schist and garnetiferous greywacke, dry	PWR		' 1					
70 —	710 705 	70.00 - 87.00 ROCK; gametiferous greywacke with white plagioclase laminations	BR		70.00				J/8" Bentonite – Pellets	
80 —	- 700 695				693.60				#1 Sand –	
90 —	- -	87.00 - 92.00 ROCK; wet, dark grey micaceous schist	BR		87.00				0.010" Slot	
LOG DRII	LLING	LE: 1 in = 5.5 ft COMPANY: Cascade Drilling Tom Ardito	(CHEC	SPECTO KED BY : 9/29/1	′: Ra			rinko rkman, P.G.	H Golder Associat



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 92.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 10/28/15 DATE COMPLETED: 10/28/15 NORTHING: 1241851.51 EASTING: 2028949.19 GS ELEVATION: 780.60 TOC ELEVATION: 783.42 SHEET 3 of 3
DEPTH W.L.: 20.5' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 10/28/15
TIME W.L.: 13:10

SOIL PROFILE SAMPLES ELEVATION (ft) DEPTH (ft) MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES WELL CONSTRUCTION Š GRAPHIC LOG ELEV. **NSCS** TYPE SAMPLE REC DESCRIPTION **DETAILS** DEPTH (ft) 90 87.00 - 92.00 690 WELL CASING ROCK; wet, dark grey micaceous schist (Continued) BR Interval: -2.5'-82' Material: Schedule 40 PVC 688.60 Diameter: 2"
Joint Type: Threaded Boring completed at 92.00 ft WELL SCREEN Interval: 82'-92' Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC 95 685 FILTER PACK Interval: 79.1'-92'
Type: #1 Sand/Prepacked
Filter FILTER PACK SEAL Interval: 77'-79.1'
Type: 3/8" Bentonite Pellets 100 680 ANNULUS SEAL Interval: 0'-77'
Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodized 105 Aluminum 675 DRILLING METHODS Soil Drill: Hydrovac/4-inch Sonic Rock Drill: 4-inch Sonic 110 670 115 665 120 660 PIEDMONT.GDT 655 WANSLEY BORING LOGS.GPJ 130 650 135

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: Tom Ardito

GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.





Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.PB-3
Page: 1 of 4

(28-38) & (52-62)

Drilling Start Date: 2/23/2017
Drilling End Date: 2/24/2017

Drilling Company: Cascade
Drilling Method: Sonic/HQ Rock Coring

Drilling Equipment: Full size truck
Driller Name: V. Scott

NOTE:

Boring Depth (ft): 63
Boring Diameter (in): 6" x

Boring Diameter (in): **6" x 4"**Sampling Method(s): **ST, SC, HQ**

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 804.57

Screen Slot (in): 0.01
Riser Material: PVC

Well Depth (ft):

Well Diameter (in):

Screen Material: PVC
Seal Material(s): Bentonite

20/40 silica sand Logged By: J. Ivanowski Location (Y, X): 1243273.69, 2029686.62 Filter Pack: COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) GRAPHIC LOG DEPTH (ft) Sample Type Recovery (ft) RQD (%) Photo MATERIAL DESCRIPTION **SAMPLE REMARKS** 0 (0') SILTY CLAY with gravel, with railroad ballast, fill Air-knifed to top of rock Photo 1 Good water return of photo (2') METAQUARTZITE, intensely fractured, pale yellow to $(\sim 50\%)$ log white, granular, very hard, iron oxide staining, cataclasite, iron oxide scale 800 Hard drilling, (7') METAQUARTZITE, intensely fractured, white to pale ~50% return brown, granular, iron oxide staining, cataclasite, iron oxide scaling, increasing competency with depth 795 10 790 15 Softer drilling, slightly less water (17') Same as above, more fractured return 785 20



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-3

Page: 2 of 4

2/23/2017 Drilling Start Date: Drilling End Date: 2/24/2017

Drilling Company: Cascade Drilling Method: Sonic/HQ Rock Coring

Full size truck Drilling Equipment: V. Scott Driller Name: Logged By: J. Ivanowski

NOTE:

Boring Depth (ft):

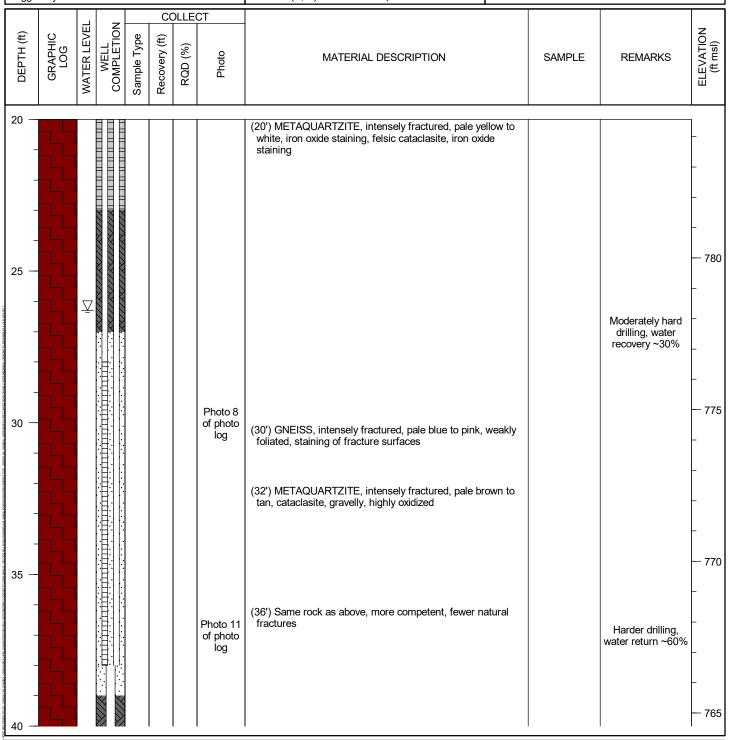
Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): 804.57 Top of Casing Elev. (ft): Location (Y, X): 1243273.69, 2029686.62

(28-38) & (52-62) Well Depth (ft): Well Diameter (in):

Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** Filter Pack:

20/40 silica sand





Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

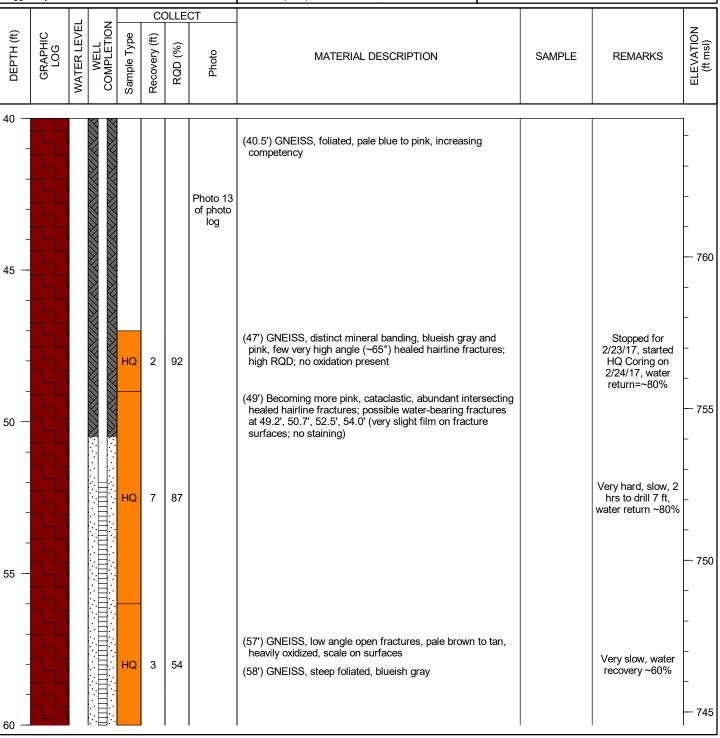
Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.PB-3
Page: 3 of 4

2/23/2017 (28-38) & (52-62) Drilling Start Date: Boring Depth (ft): Well Depth (ft): Drilling End Date: 2/24/2017 Boring Diameter (in): 6" x 4" Well Diameter (in): Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01 DTW During Drilling (ft): Drilling Method: Sonic/HQ Rock Coring Riser Material: **PVC**

Full size truck **PVC** Drilling Equipment: DTW After Drilling (ft): Screen Material: V. Scott Top of Casing Elev. (ft): 804.57 Seal Material(s): **Bentonite** Driller Name: Logged By: J. Ivanowski Location (Y, X): 1243273.69, 2029686.62 Filter Pack: 20/40 silica sand



NOTE:



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-3

Page: **4 of 4**

(28-38) & (52-62) 2/23/2017 Boring Depth (ft): Well Depth (ft): Drilling Start Date: 6" x 4" Well Diameter (in): Drilling End Date: 2/24/2017 Boring Diameter (in): Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01 Drilling Method: Sonic/HQ Rock Coring DTW During Drilling (ft): Riser Material: **PVC** Drilling Equipment: Full size truck DTW After Drilling (ft): **PVC** Screen Material: Driller Name: V. Scott Top of Casing Elev. (ft): 804.57 Seal Material(s): Bentonite 20/40 silica sand Logged By: J. Ivanowski Location (Y, X): 1243273.69, 2029686.62 Filter Pack:

DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	CT Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft msl)
60 -								(58') GNEISS, steep foliated, blueish gray(continued)			_

(63.0') Boring Terminated

NOTE:



NOTE:

Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.**PB-4**Page: **1 of 4**

(25-35) & (63-73)

20/40 silica sand

0.01

PVC

PVC

Bentonite

Drilling Start Date: 2/21/2017 Boring Depth (ft): 80 Well Depth (ft):
Drilling End Date: 2/22/2017 Boring Diameter (in): 6" x 4" Well Diameter (in):
Drilling Company: Cascade Sampling Method(s): ST, SC, HQ
Screen Slot (in):

Screen Slot (in): Drilling Method: Sonic/HQ Rock Coring DTW During Drilling (ft): --Riser Material: Drilling Equipment: Full size truck DTW After Drilling (ft): Screen Material: Driller Name: V. Scott Top of Casing Elev. (ft): 809.43 Seal Material(s): Location (Y, X): 1242790.61, 2029126.42 Logged By: J. Ivanowski Filter Pack:

Loggo		1						Location (1, 7).			
			_		CC	PLLE	CT				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft msl)
											1
0 -								(0') SANDY SILT with cobbles (ML)		0-10' removed by air knife	-
_											
											_
-											
5 —											— 805
											-
_											
2 B 015 001											_
	.										
JONET FILES											_
								(8') Becomes very hard			
S D NOCES								(0) 2000			_
- Downown											000
4.0											
10 —								(10') SILT with angular gravel (ML); very dense, wet, pale			
- HAREA.								yellow to white, relict rock fabric, SAPROLITE	PB-4 (11-12)		
A GWOOT									PD-4 (11-12)		_
Sam Grazilia											_
-							Photo 2				
MERCHANI V				SC	8		of photo			~75% water	_
- magaza							İog	(14) DARTIALLY WEATHERED BOOK hard day		recovery	
181008 2	1						Photo 4	(14') PARTIALLY WEATHERED ROCK, hard, dry, fragments of gneiss		Driller reporterd	 795
15 —		1					of photo	(15') SILT with angular gravel (ML); very dense, wet, pale	PB-4 (15-16)	very hard drilling ~50% water	
MTM MTM							log	yellow to white, relict rock fabric, SAPROLITE		recover	-
TI SBOGRAD											
ON OR BUTTON								(16.5') METAQUARTZITE, banded, pale gray to white			_
TIMOS DOWN											
SA2TE D								(17.5') METAQUARTZITE, granular, intensely fractured			
EA. OWTH								rock, felsic gneiss to quartzite, abundant oxidation along fractures			
- H								Hadiards			
MO AGUE											- 790
20 —											
<u></u>											



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.PB-4
Page: 2 of 4

Drilling Start Date: 2/21/2017
Drilling End Date: 2/22/2017

Drilling Company: Cascade
Drilling Method: Sonic/HQ Rock Coring

Drilling Equipment: Full size truck
Driller Name: V. Scott
Logged By: J. Ivanowski

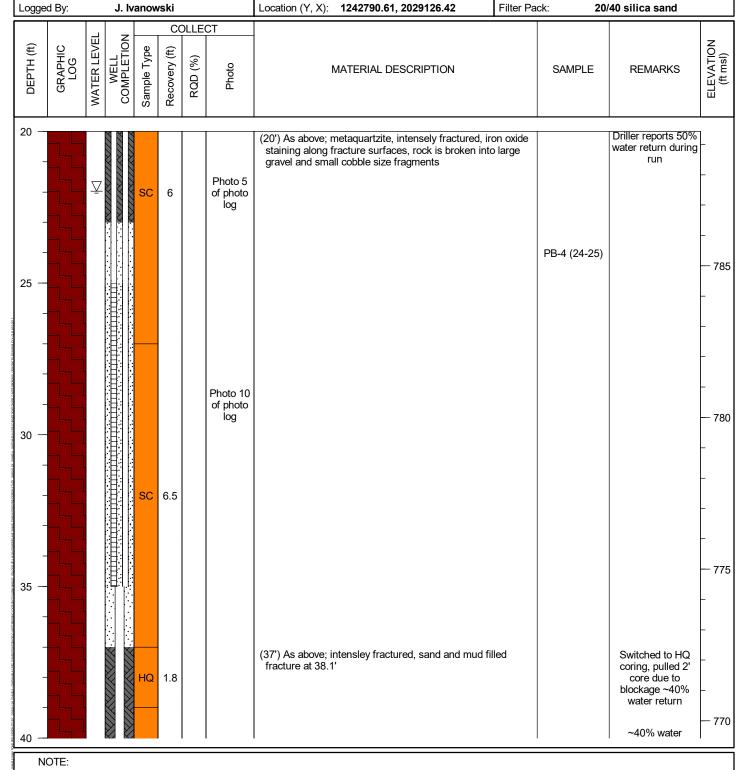
Boring Depth (ft): 80
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

Sampling Method(s): ST, SC,
DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 809.43

Well Depth (ft): (25-35) & (63-73) Well Diameter (in): 1

Screen Slot (in):
Riser Material:
Screen Material:
PVC
PVC
PVC
Seal Material(s):
Filter Pack:

0.01
PVC
PVC
Bentonite
20/40 silica sand





Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.**PB-4**Page: **3 of 4**

Drilling Start Date: 2/21/2017
Drilling End Date: 2/22/2017

Drilling Company: Cascade
Drilling Method: Conic/HQ Rock Coring

Drilling Equipment: Full size truck
Driller Name: V. Scott
Logged By: J. Ivanowski

Boring Depth (ft): 80
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 809.43
Location (Y, X): 1242790.61, 2029126.42

Well Depth (ft): (25-35) & (63-73) Well Diameter (in): 1

Screen Slot (in):

Riser Material:

Screen Material:

Seal Material(s):

Filter Pack:

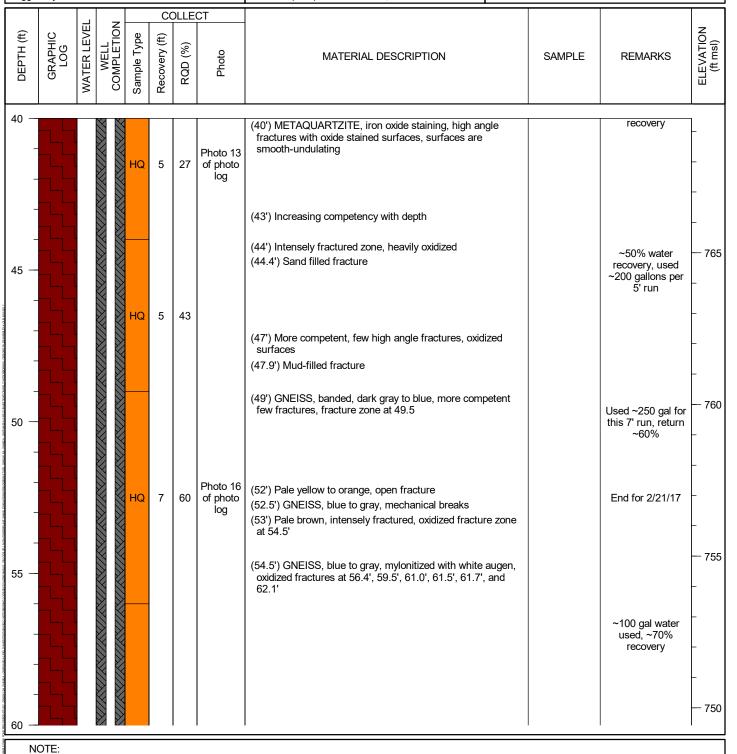
0.01

PVC

PVC

Bentonite

20/40 silica sand





NOTE:

Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.**PB-4**Page: **4 of 4**

2/21/2017 (25-35) & (63-73) Boring Depth (ft): Well Depth (ft): Drilling Start Date: 2/22/2017 6" x 4" Well Diameter (in): Drilling End Date: Boring Diameter (in): Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01

Drilling Method: Sonic/HQ Rock Coring DTW During Drilling (ft): --Riser Material: **PVC** Drilling Equipment: Full size truck DTW After Drilling (ft): **PVC** Screen Material: Driller Name: V. Scott Top of Casing Elev. (ft): 809.43 Seal Material(s): Bentonite 20/40 silica sand J. Ivanowski Location (Y, X): 1242790.61, 2029126.42 Logged By: Filter Pack:

								` ' '			
æ	0	VEL	NO	Φ		OLLE	CT				N
DEРТН (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft msl)
	Ö	WAT	S	Sam	Reco	RG	Δ.				ELI
60 -			XX	HQ	8	64		(54.5') GNEISS, blue to gray, mylonitized with white augen,			1
-							Photo 20 of photo log	oxidized fractures at 56.4', 59.5', 61.0', 61.5', 61.7', and 62.1'(continued)			
-							1-9				_
-											_
-								(64') GNEISS, dark blue to gray, no staining, high angle fractures; open fractures at 64.5', 65.2', 65.4', 65.5', and			— 745
65 —								66.0'		000/	_
18 R16/2017				HQ	4	21		(CC EI) Interpolal front and from CC EI to C7 OI filled with		~20% water recovery	-
avinuswas pv4.0								(66.5') Intensely fractured from 66.5' to 67.0', filled with sand and gravel, stained with iron-oxide			_
L D. NOTES SEPTEMBLE LOSS								(68') GNEISS, poorly weathered, very dark blue to gray, strong quartz banding with epidote, few hairline fractures			-
THO DESCRIPTION OF THE PROPERTY OF THE PROPERT							Photo 27 of photo	(high angle)			 740
70 —							log			Very hard, slow	_
ansano Jonesna				HQ	6	74				drilling, good water return >70%	-
при											_
NATION TO ANTINO ANT ANY											_
75 —								(74') As above; pink potassium feldspar pegmatites, nearly unfractured			 735
Genal costantillis											-
nsanos dans o pomen				HQ	6	90	Photo 31 of photo			Very hard, slow drilling, water	-
WHANGAZTE DING							log			return ~70%	-
GW0041 D4 PH006 A-C											-
80 —								(80.0') Boring Terminated			730
1	OTE							(ou.u) buring Terminated			



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOGBoring No.**PB-7**

Page: 1 of 9

(65-75)

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring
Drilling Equipment: Terra Sonic

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

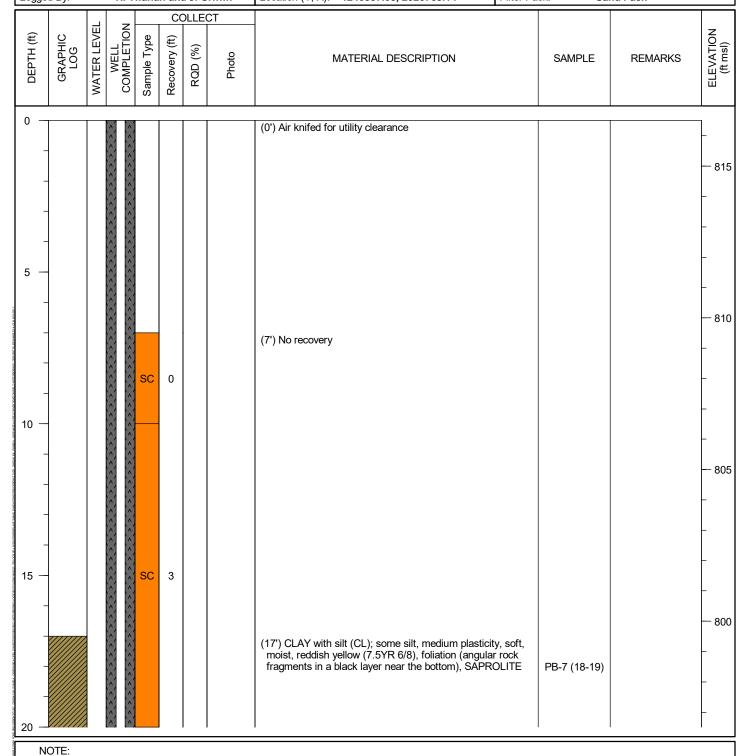
Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Well Depth (ft):

Filter Pack: Sand Pack





Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.PB-7
Page: 2 of 9

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

NOTE:

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

Well Depth (ft): (65-75)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack: Sand Pack

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) GRAPHIC LOG DEPTH (ft) Recovery (ft) Sample Type RQD (%) Photo SAMPLE **REMARKS** MATERIAL DESCRIPTION 20 (17') CLAY with silt (CL); some silt, medium plasticity, soft, Photo 2 moist, reddish yellow (7.5YR 6/8), foliation (angular rock fragments in a black layer near the bottom), of photo SAPROLITE(continued) log 795 PB-7 (24-25) SC 25 6.5 790 PB-7 (29-30) 30 (30') Becomes red (2.5YR 5/8) 785 SC 7 PB-7 (34-35) 35 (35') Angular fine gravel (quartz) in black layer at 49' ST 2 PB-7 (35-37) 780 SC 3 40



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-7

Page: 3 of 9

3/23/2017 Drilling Start Date: Drilling End Date: 3/31/2017 Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring

Terra Sonic Drilling Equipment: Driller Name: A. Blackwood

N. Tilahun and J. Griffin

167 Boring Depth (ft): Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): 816.51 Top of Casing Elev. (ft):

Location (Y, X): 1240837.08, 2026768.14

Well Depth (ft): (65-75)Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite**

Logged By: Filter Pack: Sand Pack COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) DEPTH (ft) Sample Type Recovery (ft) **RQD** (%) Photo SAMPLE **REMARKS** MATERIAL DESCRIPTION 40 (35') Angular fine gravel (quartz) in black layer at 49'(continued) 775 PB-7 (44-45) SC 45 10 770 50 (51') As above, abundant white banding 765 PB-7 (54-55) SC 12 760 60

NOTE:



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-7

Page: 4 of 9

Sand Pack

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Method:

NOTE:

Cascade Sonic/HQ Rock Coring

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

Well Depth (ft): (65-75)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack:

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) GRAPHIC LOG DEPTH (ft) Recovery (ft) Sample Type **RQD** (%) Photo SAMPLE **REMARKS** MATERIAL DESCRIPTION 60 (51') As above, abundant white banding(continued) 755 PB-7 (64-65) 65 SC 11 (65') Coarse angular cobbles (quartz?) 750 70 · HOROPORTERS > 745 PB-7 (74-75) 75 10 (75') Becomes light olive brown (2.5Y 5/3) 740 80



3/23/2017

3/31/2017

Cascade

Drilling Start Date:

Drilling End Date:

Drilling Company:

Drilling Method:

Client: **Southern Company Services** Project: **Plant Wansley Pre-Design Investigation**

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

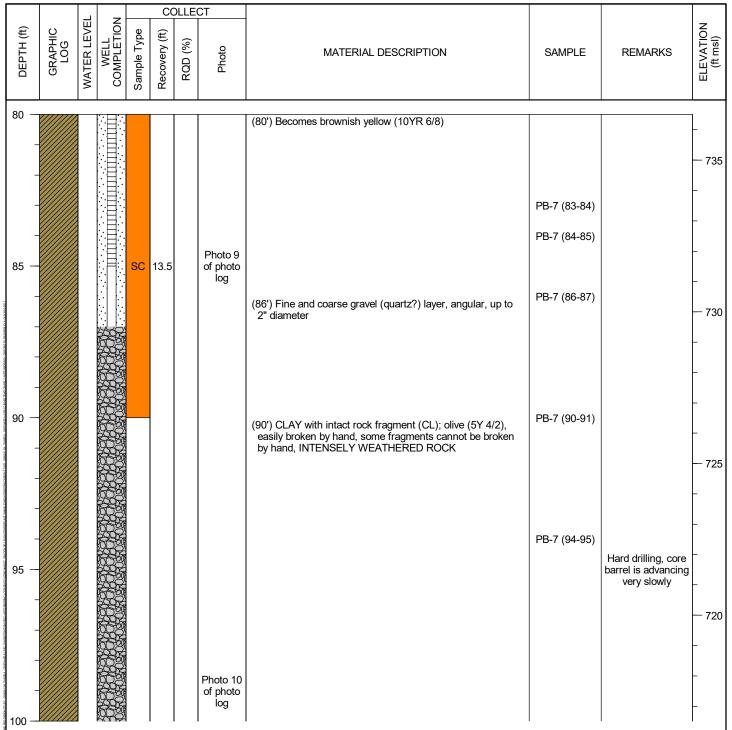
BORING LOG Boring No.PB-7

5 of 9

Page:

167 Well Depth (ft): (65-75)Boring Depth (ft): Boring Diameter (in): 6" x 4" Well Diameter (in): Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01 Sonic/HQ Rock Coring DTW During Drilling (ft): Riser Material: **PVC PVC** DTW After Drilling (ft): Screen Material:

Terra Sonic Drilling Equipment: Driller Name: A. Blackwood Top of Casing Elev. (ft): 816.51 Seal Material(s): **Bentonite** Logged By: N. Tilahun and J. Griffin Location (Y, X): 1240837.08, 2026768.14 Filter Pack: Sand Pack



NOTE:



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

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BORING LOG Boring No.PB-7

Page: **6 of 9**

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

NOTE:

Drilling Method: Sonic/HQ Rock Coring
Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood
Logged By: N. Tilahun and J. Griffin

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

Well Depth (ft): (65-75)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack: Sand Pack

					CC	DLLE	СТ				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft msl)
100 —											_
-							Photo 11	(100') PARTIALLY WEATHERED ROCK, slightly weathered, gray (7.5YR 5/1), fine to coarse, moist, thinly to thickly bedded, loose, hard rock fragments (abundant mica, some grains of garnet and quartz) (104') Becomes reddish yellow (7.5YR 6/8)	PB-7 (104-105)		- - 715 - -
105 —				SC	11.5		Photo 11 of photo log		PB-7 (108-109)	Hard drilling	- 710 - -
- 110 —				SC	4					Hard drilling	- - 705 -
- 115 —								(115') Becomes gray (7.5YR 5/1)	PB-7 (114-115)		- - - - 700
				SC SC	6			(118') Becomes pinkish gray (7.5YR 6/2), dry	PB (117-119)	Hard drilling	 - -



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

167

6" x 4"

BORING LOG Boring No.PB-7

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Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Company: Cascade
Drilling Method: Sonic/HQ Rock C

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

Cascade Sampling Method(s): ST, SC, HQ
Sonic/HQ Rock Coring
Terra Sonic DTW After Drilling (ft): -DTW After Drilling (ft): --

Boring Depth (ft):

Boring Diameter (in):

Top of Casing Elev. (ft): 816.51 Location (Y, X): 1240837.08, 2026768.14 Well Depth (ft): (65-75)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite
Filter Pack: Sand Pack

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) DEPTH (ft) Sample Type Recovery (ft) RQD (%) Photo SAMPLE **REMARKS** MATERIAL DESCRIPTION 120 (118') Becomes pinkish gray (7.5YR 6/2), dry(continued) (121') No Recovery 695 (122') Becomes gray (7.5YR 5/1), moist PB-7 (124-125)125 Hard drilling 9 690 PB-7 (127-128)(128.5') Becomes pinkish gray (7.5YR 6/2), dry PB-7 (129-130)130 (130') Becomes pinkish gray (7.5YR 5/1), moist, abundant platy rock fragments (schist), some rock fragments contain large grains of quartz and have irregular shape (non-platy) 685 6 Hard drilling 680 PB-7 (137-138)

NOTE:		



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG

Boring No.PB-7
Page: 8 of 9

(65-75)

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

 Well Diameter (in):
 2

 Screen Slot (in):
 0.01

 Riser Material:
 PVC

 Screen Material:
 PVC

 Seal Material(s):
 Bentonite

 Filter Pack:
 Sand Pack

Well Depth (ft):

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) GRAPHIC LOG DEPTH (ft) Sample Type Recovery (ft) **RQD** (%) Photo MATERIAL DESCRIPTION **SAMPLE** REMARKS 140 (140') SCHIST, thinly to thickly bedded, gray (7.5YR 5/1), fine to coarse, very hard, fresh, weak bedding planes and high angle joints, some quartz banding, TOP OF ROCK Photo 16 3 of photo Hard drilling 675 log (143') SCHIST, thinly to thickly bedded, gray (7.5YR 5/1), fine to coarse, very hard, fresh, unfractured, mechanical breaks along high angled joints, few quartz banding, some Sonic drilling ends coarse quartz grains, abundant mica at 143 (3/29/2017), HQ 100 145 rock coring begins at 143' (3/30/2017)670 5.5 100 150 665 155 100 660 Photo 20 160

NOTE:



Client: Southern Company Services Project: Plant Wansley Pre-Design Investigation

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BORING LOG

Boring No.**PB-7**Page: **9 of 9**

Sand Pack

650

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

Drilling Company: Cascade
Drilling Method: Sonic/HQ Rock Coring

Drilling Equipment: Terra Sonic

Driller Name: A. Blackwood

Logged By: N. Tilahun and J. Griffin

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 816.51
Location (Y, X): 1240837.08, 2026768.14

Well Depth (ft): (65-75)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack:

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft msl) GRAPHIC LOG DEPTH (ft) Recovery (ft) Sample Type RQD (%) Photo SAMPLE **REMARKS** MATERIAL DESCRIPTION 160 of photo (143') SCHIST, thinly to thickly bedded, gray (7.5YR 5/1), log fine to coarse, very hard, fresh, unfractured, mechanical breaks along high angled joints, few quartz banding, some coarse quartz grains, abundant mica(continued) 655 100 4.5 165 -

(167.0') Boring Terminated

NOTE:			



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8

Page: 1 of 8

4/12/2017 Drilling Start Date: Drilling End Date: 4/20/2017

Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method:

Drilling Equipment: **Terra Sonic** Driller Name:

M. Hanson and J. Triepke

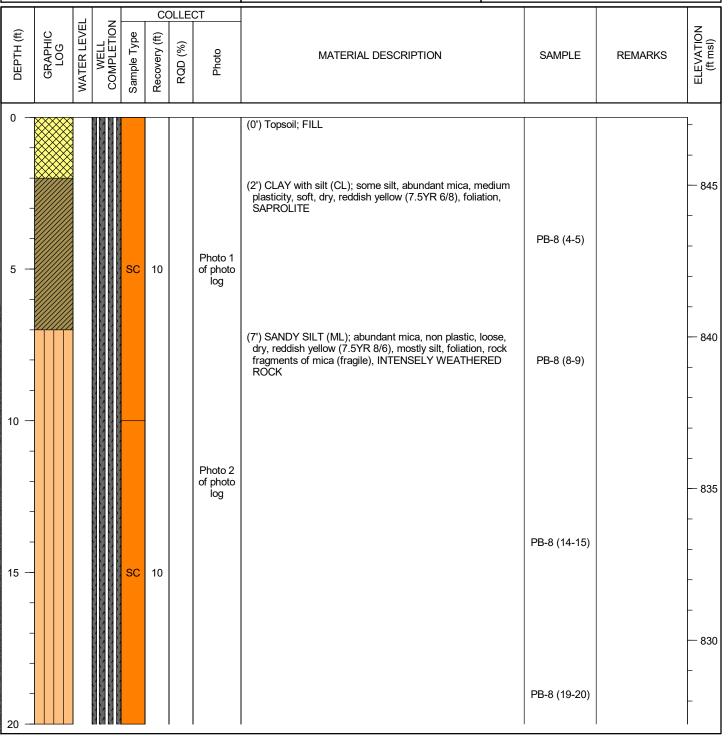
Logged By: N. Tilahun

NOTE:

147 (45-55) (121-131) Boring Depth (ft): Well Depth (ft): N/A

Boring Diameter (in): 6" x 4" Well Diameter (in): Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01 Riser Material: **PVC** DTW During Drilling (ft):

PVC DTW After Drilling (ft): Screen Material: 847.24 Seal Material(s): **Bentonite** Top of Casing Elev. (ft): Location (Y, X): 1241128.67, 2026529.99 Filter Pack: Sand Pack





Address: 1371 Liberty Church Rd. Carrollton, GA 30116 **BORING LOG**

Boring No.PB-8 Page: 2 of 8

4/12/2017 Drilling Start Date: Drilling End Date: 4/20/2017

Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring **Terra Sonic** Drilling Equipment:

Driller Name:

Logged By:

M. Hanson and J. Triepke

N. Tilahun

Boring Depth (ft): Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

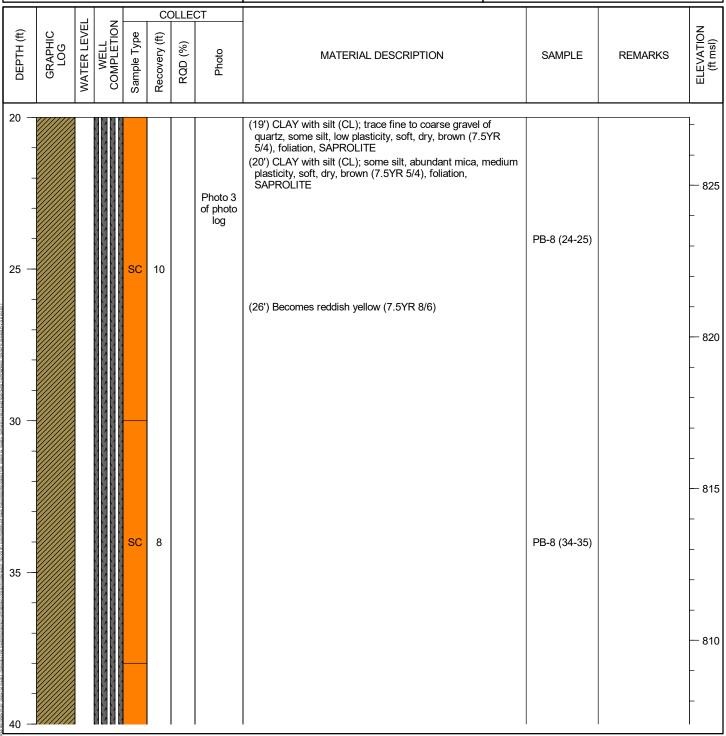
DTW During Drilling (ft): DTW After Drilling (ft): 847.24 Top of Casing Elev. (ft):

Location (Y, X): 1241128.67, 2026529.99

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** Filter Pack:

Sand Pack



NOTE:



Address: 1371 Liberty Church Rd. Carrollton, GA 30116 **BORING LOG**

Boring No.PB-8 Page: 3 of 8

4/12/2017 Drilling Start Date: Drilling End Date: 4/20/2017

Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method: Drilling Equipment: **Terra Sonic**

M. Hanson and J. Triepke Driller Name:

Logged By: N. Tilahun

NOTE:

Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): 847.24 Top of Casing Elev. (ft):

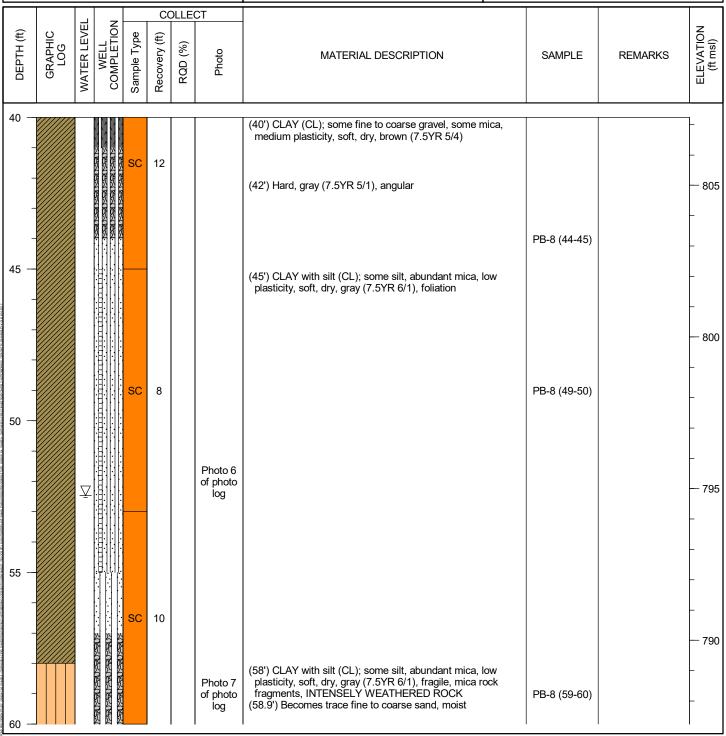
Boring Depth (ft):

Location (Y, X): 1241128.67, 2026529.99

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** Filter Pack:

Sand Pack





Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8

Page: 4 of 8

Drilling Start Date: 4/12/2017
Drilling End Date: 4/20/2017

Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring
Drilling Equipment: Terra Sonic

Driller Name: M. Hanson and J. Triepke

Logged By: N. Tilahun

NOTE:

Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Top of Casing Elev. (ft): 847.24

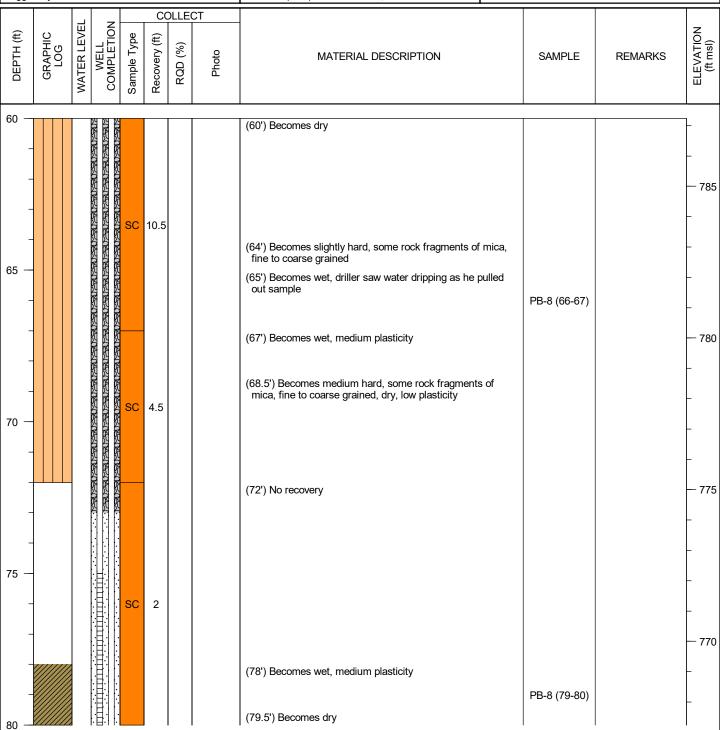
Boring Depth (ft):

Location (Y, X): 1241128.67, 2026529.99

Well Depth (ft): (45-55) (121-131)

Well Diameter (in): N/A
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack: Sand Pack





Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8

Page: 5 of 8

4/12/2017 Drilling Start Date: Drilling End Date: 4/20/2017

Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method:

Drilling Equipment: Terra Sonic M. Hanson and J. Triepke Driller Name:

Logged By:

N. Tilahun

NOTE:

147 Boring Depth (ft): Boring Diameter (in): 6" x 4"

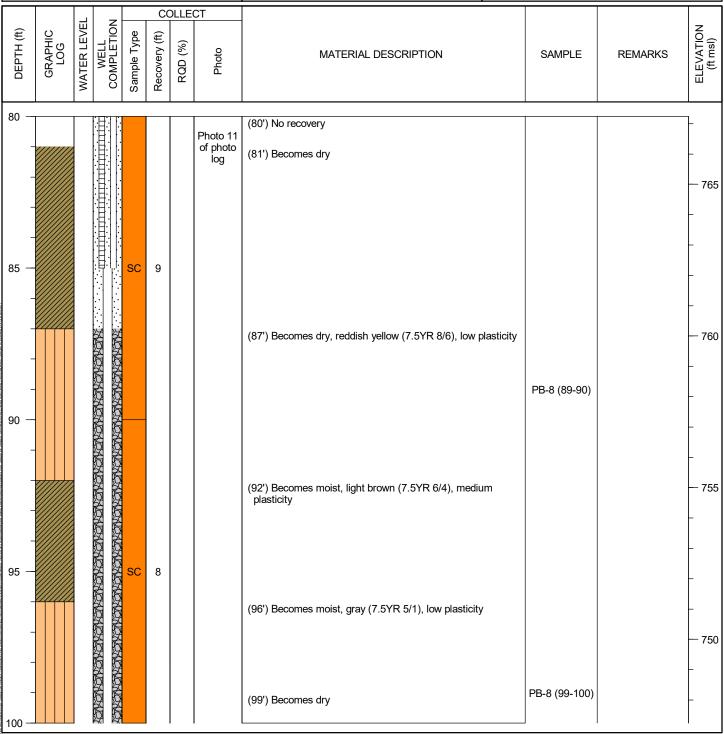
Sampling Method(s): ST, SC, HQ DTW During Drilling (ft): DTW After Drilling (ft): 847.24 Top of Casing Elev. (ft):

Location (Y, X): 1241128.67, 2026529.99

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: **Bentonite** Seal Material(s): Filter Pack:

Sand Pack





Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8

Page: 6 of 8

4/12/2017 Drilling Start Date: Drilling End Date: 4/20/2017

Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method: Drilling Equipment: **Terra Sonic**

M. Hanson and J. Triepke Driller Name:

Logged By: N. Tilahun Boring Depth (ft): 147 Boring Diameter (in): 6" x 4"

Sampling Method(s): ST, SC, HQ

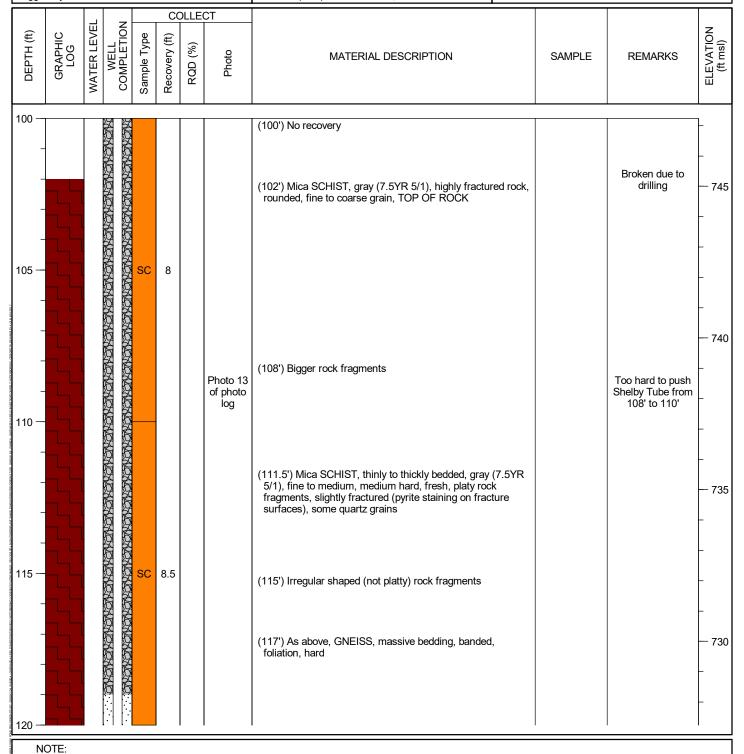
DTW During Drilling (ft): DTW After Drilling (ft): 847.24 Top of Casing Elev. (ft):

Location (Y, X): 1241128.67, 2026529.99

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material:

Bentonite Seal Material(s): Filter Pack: Sand Pack





Client: **Southern Company Services Plant Wansley Pre-Design Investigation** Project:

Address: 1371 Liberty Church Rd. Carrollton, GA 30116 **BORING LOG**

Boring No.PB-8 Page: 7 of 8

4/12/2017 Drilling Start Date: 4/20/2017 Drilling End Date:

Drilling Company: Cascade

Drilling Method: Drilling Equipment: Terra Sonic

Sonic/HQ Rock Coring

M. Hanson and J. Triepke Driller Name: Logged By:

147 Boring Depth (ft): 6" x 4" Boring Diameter (in): ST, SC, HQ

Sampling Method(s): DTW During Drilling (ft): --DTW After Drilling (ft): Top of Casing Elev. (ft): 847.24

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): Bentonite

Logged By:	N. Tilahun					перке	. ,	Filter Pack:	` '	nd Pack	
DEPTH (ft)	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	S	SAMPLE	REMARKS	ELEVATION (ft msl)
120						·	(120') No recovery			Carria deillian anda	
			HQ	1.5	75	Photo 15 of photo log	(120.5') GNEISS, massive, gray (7.5YR 5/1), medium coarse, very hard, fresh, black and white (mafic and banding, abundant mica, pyrite fillings in tight/healed fractures (122') Mica SCHIST, thinly to thickly bedded, gray (7.5/1), fine to medium, hard, fresh, platy rock fragmer abundant mica, fracture zone from 122'-124', return is clayey which indicated clay filled fractures	I felsic) d .5YR nts,		Sonic drilling ends at 120' (4/13/2017), HQ coring begins at 120' (4/20/2017)	- 725 -
125 —			HQ	5	87		(124') Massive mechanical breaks along tight fracture slight banding	es,			_
130 —			HQ	5	90		(127') As above, slight banding, fracture at 128'				720 -
135 —			HQ	5	100		(132') As above, fracture at 133' and 134', thin white banding, ~4" quartz layer near bottom (137')				715
			E	5	100		(137') As above, fracture at 138.5' and 140', thin whit banding, ~4" thich quartz layer near top (137')	te			- 710 -
140 —	L		1100	3	100						

NOTE:



Client: **Southern Company Services**

Plant Wansley Pre-Design Investigation Project: Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8 Page: 8 of 8

4/12/2017 Drilling Start Date: 4/20/2017 Drilling End Date:

Drilling Company: Cascade

Drilling Method: Sonic/HQ Rock Coring Drilling Equipment: Terra Sonic

Driller Name: Logged By: N. Tilahun

M. Hanson and J. Triepke

147 Boring Depth (ft): 6" x 4" Boring Diameter (in):

Sampling Method(s): ST, SC, HQ DTW During Drilling (ft): --DTW After Drilling (ft): Top of Casing Elev. (ft): 847.24

Location (Y, X): 1241128.67, 2026529.99

(45-55) (121-131) Well Depth (ft):

Well Diameter (in): N/A Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): Bentonite

Filter Pack:

Sand Pack

(137') As above, fracture at 138.5' and 140', thin white banding, ~4" thich quartz layer near top (137')(continued)	33 7							 (, , , , , , , , , , , , , , , , , , ,			
(137) As above, fracture at 138.5 and 140, triin white banding, ~4" thich quartz layer near top (137')(continued) (142') As above, tight fractures at 143.5' and 144', thin white banding HQ 5 100	DEPTH (ft)	GRAPHIC LOG	凹	WELL COMPLETION	Sample Type			MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft msl)
(147.0') Boring Terminated	-				HQ	5	100	banding, ~4" thich quartz layer near top (137')(continued) (142') As above, tight fractures at 143.5' and 144', thin white banding	;		- - - - -

NOTE:			

APPENDIX B

Laboratory Analytical Reports



Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh 301 Alpha Drive **RIDC Park** Pittsburgh, PA 15238

Tel: (412)963-7058

Laboratory Job ID: 180-109917-1

Client Project/Site: Plant Wansley GW7327

For:

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

Attn: Kristen N Jurinko

Authorized for release by: 11/10/2020 6:24:13 AM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

Review your project results through Total Access

Have a Question?



Visit us at:

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

Client: Southern Company Project/Site: Plant Wansley GW7327 Laboratory Job ID: 180-109917-1

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Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-109917-1

Comments

No additional comments.

Receipt

The samples were received on 8/21/2020 9:45 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.9° C.

Metals

7 Step Sequential Extraction Procedure

These soil samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0008, "7 Step Sequential Extraction Procedure". SW-846 Method 6010B as incorporated in Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0007 was used to perform the final instrument analyses.

An aliquot of each sample was sequentially extracted using the steps listed below:

- · Step 1 Exchangeable Fraction: A 5 gram aliquot of sample was extracted with 25 mL of 1M magnesium sulfate (MgSO4), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 2 Carbonate Fraction: The sample residue from step 1 was extracted with 25 mL of 1M sodium acetate/acetic acid (NaOAc/HOAc) at pH 5, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 3 Non-crystalline Materials Fraction: The sample residue from step 2 was extracted with 25 mL of 0.2M ammonium oxalate (pH 3), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- · Step 4 Metal Hydroxide Fraction: The sample residue from step 3 was extracted with 25 mL of 1M hydroxylamine hydrochloride solution in 25% v/v acetic acid, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- · Step 5 Organic-bound Fraction: The sample residue from step 4 was extracted three times with 25 mL of 5% sodium hypochlorite (NaClO) at pH 9.5, centrifuged and filtered. The resulting leachates were combined and 5 mL were digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 6 Acid/Sulfide Fraction: The sample residue from step 5 was extracted with 25 mL of a 3:1:2 v/v solution of HCI-HNO3-H2O, centrifuged and filtered. 5 mL of the resulting leachate was diluted to 50 mL with reagent water and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 7 Residual Fraction: A 1.0 g aliquot of the sample residue from step 6 was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Results are reported in mg/kg on a dry weight basis.

In addition, a 1.0 g aliquot of the original sample was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Total metal results are reported in mg/kg on a dry weight basis.

Results were calculated using the following equation:

Result, $\mu g/g$ or mg/Kg, dry weight = $(C \times V \times V1 \times D) / (W \times S \times V2)$

Where:

C = Concentration from instrument readout, μg/mL

V = Final volume of digestate, mL

D = Instrument dilution factor

V1 = Total volume of leachate, mL

V2 = Volume of leachate digested, mL

W = Wet weight of sample, g

S = Percent solids/100

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Job ID: 180-109917-1

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Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

A method blank, laboratory control sample and laboratory control sample duplicate were prepared and analyzed with each SEP step in order to provide information about both the presence of elements of interest in the extraction solutions, and the recovery of elements of interest from the extraction solutions. Results outside of laboratory QC limits do not reflect out of control performance, but rather the effect of the extraction solution upon the analyte.

A laboratory sample duplicate was prepared and analyzed with each batch of samples in order to provide information regarding the reproducibility of the procedure.

SEP Report Notes:

The final report lists the results for each step, the result for the total digestion of the sample, and a sum of the results of steps 1 through 7 by element.

The digestates for steps 1, 2 and 5 were analyzed at a dilution due to instrument problems caused by the high solids content of the digestates. The reporting limits were adjusted accordingly.

Method 6010B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following samples: PB-3 57-61 (180-109917-1), PB-3 47-52 (180-109917-2), PB-4 49-59 (180-109917-3), PB-4 64-68 (180-109917-4) and PB-4 73-80 (180-109917-5).

Method 6010B SEP: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following samples: PB-3 57-61 (180-109917-1), PB-4 49-59 (180-109917-3) and PB-4 73-80 (180-109917-5).

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

General Chemistry

% Moisture: The samples were analyzed for percent moisture using SOP number KNOX-WC-0012 (based on Modified MCAWW 160.3 and SM2540B and on the percent moisture determinations described in methods 3540C and 3550B).

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

Job ID: 180-109917-1

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Definitions/Glossary

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Qualifiers

M	eta	Is

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
CFU Colony Forming Unit
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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
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)

TNTC Too Numerous To Count

Eurofins TestAmerica, Pittsburgh

Accreditation/Certification Summary

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	Identification Number	Expiration Dat
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-22
ANAB	Dept. of Energy	L2311.01	02-13-22
ANAB	ISO/IEC 17025	L2311	02-13-22
ANAB	ISO/IEC 17025	L2311	02-14-22
Arkansas DEQ	State	88-0688	06-17-21
California	State	2423	06-30-21
Colorado	State	TN00009	02-28-21
Connecticut	State	PH-0223	09-30-21
Florida	NELAP	E87177	07-01-21
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-21
Kansas	NELAP	E-10349	11-01-20 *
Kentucky (DW)	State	90101	01-01-21
Louisiana	NELAP	LA110001	12-31-12 *
Louisiana	NELAP	83979	06-30-21
Louisiana (DW)	State	LA019	12-31-20
Maryland	State	277	03-31-21
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-21
New Hampshire	NELAP	299919	01-17-21
New Jersey	NELAP	TN001	07-01-21
New York	NELAP	10781	03-31-21
North Carolina (DW)	State	21705	07-31-21
North Carolina (WW/SW)	State	64	12-31-20
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-21
Oregon	NELAP	TNI0189	01-02-21
Pennsylvania	NELAP	68-00576	12-31-20
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-21
Virginia	NELAP	460176	09-14-21
Washington	State	C593	01-19-21
West Virginia (DW)	State	9955C	01-01-21
West Virginia DEP	State	345	05-01-21
Wisconsin	State	998044300	08-31-21

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins TestAmerica, Pittsburgh

Sample Summary

Client: Southern Company Project/Site: Plant Wansley GW7327 Job ID: 180-109917-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset
180-109917-1	PB-3 57-61	Solid		08/21/20 09:45	A3301
180-109917-2	PB-3 47-52	Solid	07/14/20 11:00	08/21/20 09:45	
80-109917-3	PB-4 49-59	Solid	07/14/20 12:10	08/21/20 09:45	
80-109917-4	PB-4 64-68	Solid	07/14/20 12:15	08/21/20 09:45	
80-109917-5	PB-4 73-80	Solid	07/14/20 12:20	08/21/20 09:45	
80-109917-6	PB-7 144-154	Solid	07/14/20 12:45	08/21/20 09:45	
180-109917-7	PB-8 135-145	Solid	07/14/20 15:15	08/21/20 09:45	

Method Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Method **Method Description** Protocol Laboratory TAL KNX 6010B SEP Metals (ICP) - Total SW846 6010B SEP SEP Metals (ICP) SW846 TAL KNX 3010A SW846 TAL KNX Preparation, Total Metals Acid/Sulfide Sequential Extraction Procedure, Acid/Sulfide Fraction TAL-KNOX TAL KNX Carbonate Sequential Extraction Procedure, Carbonate Fraction TAL-KNOX TAL KNX Exchangeable Sequential Extraction Procedure, Exchangeable Fraction TAL-KNOX TAL KNX Metal Hydroxide Sequential Extraction Procedure, Metal Hydroxide Fraction TAL-KNOX TAL KNX Non-Crystalline Sequential Extraction Procedure, Non-crystalline Materials TAL-KNOX TAL KNX Organic-Bound Sequential Extraction Procedure, Organic Bound Fraction TAL-KNOX TAL KNX Residual Sequential Extraction Procedure, Residual Fraction TAL-KNOX TAL KNX Total Preparation, Total Material TAL-KNOX TAL KNX

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. TAL-KNOX = TestAmerica Laboratories, Knoxville, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Job ID: 180-109917-1

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1:

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-3 57-61

Date Collected: 07/14/20 11:05

Date Received: 08/21/20 09:45

Lab Sample ID: 180-109917-1

Matrix: Solid

Job ID: 180-109917-1

Batch Batch Dil Initial Final Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor Amount Amount** Number Analyst Sum of Steps 1-7 Analysis 6010B SEP 44105 11/02/20 10:23 DKW TAL KNX Instrument ID: NOEQUIP

Client Sample ID: PB-3 57-61

Date Collected: 07/14/20 11:05 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-1

Matrix: Solid Percent Solids: 99.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis Instrumer	6010B at ID: DUO		5			44042	10/29/20 16:33	KNC	TAL KNX
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumer	6010B SEP at ID: DUO		4			43944	10/27/20 12:12	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumer	6010B SEP at ID: DUO		3			43944	10/27/20 13:53	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumer	6010B SEP at ID: DUO		1			43944	10/27/20 15:39	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumer	6010B SEP at ID: DUO		2			43997	10/28/20 16:31	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumer	6010B SEP at ID: DUO		5			43997	10/28/20 13:46	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumer	6010B SEP nt ID: DUO		1			43997	10/28/20 15:32	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumer	6010B SEP nt ID: DUO		1			44042	10/29/20 12:12	KNC	TAL KNX

Client Sample ID: PB-3 47-52

Date Collected: 07/14/20 11:00 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-2

Matrix: Solid

11/10/2020

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Instrumen	t ID: NOFOLIP								

Eurofins TestAmerica, Pittsburgh

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Project/Site: Plant Wansley GW7327

Client Sample ID: PB-3 47-52

Date Collected: 07/14/20 11:00 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-2

Matrix: Solid

Percent Solids: 99.5

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis Instrumen	6010B at ID: DUO		5			44042	10/29/20 16:38	KNC	TAL KNX
Ct 4						05 1	42000	00/00/00 00:00	KNO	TALLIZADY
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060 43133	09/28/20 08:00		TAL KNX
Step 1	Prep	3010A			5 mL	50 mL		09/29/20 08:00		TAL KNX
Step 1	Analysis Instrumen	6010B SEP at ID: DUO		4			43944	10/27/20 12:17	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumen	6010B SEP at ID: DUO		3			43944	10/27/20 13:58	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumen	6010B SEP at ID: DUO		1			43944	10/27/20 15:44	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumen	6010B SEP at ID: DUO		1			43997	10/28/20 12:04	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumen	6010B SEP at ID: DUO		5			43997	10/28/20 13:51	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumen	6010B SEP at ID: DUO		1	-		43997	10/28/20 15:37	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumen	6010B SEP at ID: DUO		1	ŭ		44042	10/29/20 12:17	KNC	TAL KNX

Client Sample ID: PB-4 49-59

Date Collected: 07/14/20 12:10

Date Received: 08/21/20 09:45

Lab Sample ID: 180-109917-3

Lab Sample ID: 180-109917-3

Matrix: Solid

Matrix: Solid

Percent Solids: 99.1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Inetrumen	+ ID: NOFOLID								

Client Sample ID: PB-4 49-59

Date Collected: 07/14/20 12:10

Date Received: 08/21/20 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		5			44042	10/29/20 16:43	KNC	TAL KNX
	Instrumer	nt ID: DUO								

Eurofins TestAmerica, Pittsburgh

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 49-59

Date Collected: 07/14/20 12:10 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-3

Matrix: Solid

Percent Solids: 99.1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumer	6010B SEP at ID: DUO		4			43944	10/27/20 12:36	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumer	6010B SEP at ID: DUO		3			43944	10/27/20 14:03	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumer	6010B SEP at ID: DUO		1			43944	10/27/20 15:49	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumer	6010B SEP nt ID: DUO		1			43997	10/28/20 12:28	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumer	6010B SEP at ID: DUO		5			43997	10/28/20 13:56	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumer	6010B SEP nt ID: DUO		2			43997	10/28/20 16:40	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis	6010B SEP at ID: DUO		1	ŭ		44042	10/29/20 12:32	KNC	TAL KNX

Client Sample ID: PB-4 64-68

Date Collected: 07/14/20 12:15 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-4

Matrix: Solid

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Instrumer	ATID: NOFOLIIP								

Client Sample ID: PB-4 64-68

Date Collected: 07/14/20 12:15 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-4

Matrix: Solid
Percent Solids: 98.8

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		5			44042	10/29/20 16:47	KNC	TAL KNX
	Instrumer	nt ID: DUO								

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 64-68

Date Collected: 07/14/20 12:15 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-4

Matrix: Solid

Percent Solids: 98.8

Job ID: 180-109917-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumen	6010B SEP at ID: DUO		4			43944	10/27/20 12:41	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumen	6010B SEP at ID: DUO		3			43944	10/27/20 14:07	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumen	6010B SEP at ID: DUO		1			43944	10/27/20 15:54	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumen	6010B SEP at ID: DUO		1			43997	10/28/20 12:33	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumen	6010B SEP at ID: DUO		5			43997	10/28/20 14:00	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumen	6010B SEP at ID: DUO		1			43997	10/28/20 15:47	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumen	6010B SEP at ID: DUO		1	-		44042	10/29/20 12:37	KNC	TAL KNX

Client Sample ID: PB-4 73-80

Date Collected: 07/14/20 12:20 Date Received: 08/21/20 09:45

Lab Sample ID: 180-109917-5 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1		-	44105	11/02/20 10:23	DKW	TAL KNX
	Inetrumer	TID: NOEOLIID								

Client Sample ID: PB-4 73-80 Lab Sample ID: 180-109917-5 Date Collected: 07/14/20 12:20 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.6

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		5			44042	10/29/20 16:52	KNC	TAL KNX
	Instrumer	nt ID: DUO								

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 73-80

Date Collected: 07/14/20 12:20 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-5

Matrix: Solid

Percent Solids: 99.6

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumen	6010B SEP at ID: DUO		4			43944	10/27/20 12:45	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumen	6010B SEP at ID: DUO		3			43944	10/27/20 14:12	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumen	6010B SEP at ID: DUO		1			43944	10/27/20 15:58	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumen	6010B SEP at ID: DUO		2			43997	10/28/20 16:36	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumen	6010B SEP at ID: DUO		5			43997	10/28/20 14:05	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumen	6010B SEP at ID: DUO		1	-		43997	10/28/20 15:52	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumen	6010B SEP at ID: DUO		1	-		44042	10/29/20 12:42	KNC	TAL KNX

Client Sample ID: PB-7 144-154

Date Collected: 07/14/20 12:45 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-6

Matrix: Solid

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: PB-7 144-154

Date Collected: 07/14/20 12:45

Date Received: 08/21/20 09:45

Lab Sample ID:	180-109917-6
	Matrix: Solid

Percent Solids: 99.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		1			44042	10/29/20 14:36	KNC	TAL KNX
	Instrumer	nt ID: DUO								

Client Sample ID: PB-7 144-154

Date Collected: 07/14/20 12:45 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-6

Matrix: Solid

Percent Solids: 99.7

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumen	6010B SEP at ID: DUO		4			43944	10/27/20 12:50	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumen	6010B SEP at ID: DUO		3			43944	10/27/20 14:31	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumen	6010B SEP at ID: DUO		1			43944	10/27/20 16:03	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumen	6010B SEP at ID: DUO		1			43997	10/28/20 12:43	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumen	6010B SEP at ID: DUO		5			43997	10/28/20 14:25	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumen	6010B SEP at ID: DUO		1			43997	10/28/20 15:57	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumen	6010B SEP at ID: DUO		1			44042	10/29/20 12:46	KNC	TAL KNX

Client Sample ID: PB-8 135-145

Date Collected: 07/14/20 15:15 Date Received: 08/21/20 09:45 Lab Sample ID: 180-109917-7

Lab Sample ID: 180-109917-7

Matrix: Solid

Matrix: Solid

Percent Solids: 99.5

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Instrumer	ATID: NOFOLIIP								

Client Sample ID: PB-8 135-145

Date Collected: 07/14/20 15:15

Date Received: 08/21/20 09:45

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		1			44042	10/29/20 14:42	KNC	TAL KNX
	Instrumen	t ID: DUO								

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-8 135-145 Lab Sample ID: 180-109917-7

Date Collected: 07/14/20 15:15 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.5

Dil Batch Batch Batch Initial Final Prepared Method Factor Number or Analyzed **Prep Type** Type Run **Amount** Amount Analyst Lab Step 1 SEP 5.000 g 43060 09/28/20 08:00 KNC TAL KNX Exchangeable 25 mL Step 1 5 mL 50 mL 43133 09/29/20 08:00 KNC TAL KNX Prep 3010A Step 1 Analysis 6010B SEP 4 43944 10/27/20 12:55 KNC TAL KNX Instrument ID: DUO Step 2 SEP Carbonate 5.000 g 25 mL 43447 10/12/20 10:01 KNC TAL KNX 3010A 50 mL 43460 TAL KNX Step 2 Prep 5 mL 10/13/20 08:00 KNC 6010B SEP 3 43944 10/27/20 14:36 KNC TAL KNX Step 2 Analysis Instrument ID: DUO Step 3 SEP Non-Crystalline 5.000 g 25 mL 43465 10/13/20 08:00 KNC TAL KNX 3010A Step 3 Prep 5 mL 50 mL 43495 10/14/20 08:00 KNC TAL KNX 6010B SEP TAL KNX Step 3 Analysis 1 43944 10/27/20 16:08 KNC Instrument ID: DUO Step 4 SEP Metal Hydroxide 5.000 g 25 mL 43496 10/14/20 08:00 KNC TAL KNX Step 4 Prep 3010A 5 mL 50 mL 43539 10/15/20 08:00 KNC TAL KNX Step 4 Analysis 6010B SEP 43997 10/28/20 12:48 KNC TAL KNX 1 Instrument ID: DUO SEP 5.000 g 75 mL 43540 10/15/20 08:00 KNC TAL KNX Step 5 Organic-Bound Step 5 Prep 3010A 5 mL 50 mL 43604 10/19/20 08:00 KNC TAL KNX 6010B SEP 5 43997 TAL KNX Step 5 Analysis 10/28/20 14:30 KNC Instrument ID: DUO Acid/Sulfide Step 6 SEP 5.00 g 250 mL 43605 10/19/20 08:00 KNC TAL KNX Step 6 Analysis 6010B SEP 1 43997 10/28/20 16:02 KNC TAL KNX Instrument ID: DUO Step 7 Prep Residual 1.000 g 50 mL 43637 10/20/20 08:00 KNC TAL KNX Analysis 6010B SEP 44042 Step 7 1 10/29/20 12:52 KNC TAL KNX

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Analyst References:

Lab: TAL KNX

Batch Type: SEP

KNC = Kerry Collins

Instrument ID: DUO

Batch Type: Prep

KNC = Kerry Collins

Batch Type: Analysis

DKW = Donna Wilburn KNC = Kerry Collins

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-3 57-61 Lab Sample ID: 180-109917-1

Date Collected: 07/14/20 11:05

Date Received: 08/21/20 09:45

Matrix: Solid
Percent Solids: 99.1

Date Received: 08/21/20	0 09:45							Percent Solid	IS: 99.1
Method: 6010B SEP - S	SEP Metals (ICP) - S	tep 1							
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61		10	0.61	mg/Kg	₽	09/29/20 08:00	10/27/20 12:12	4
	SEP Metals (ICP) - S	tep 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.45		7.6	0.45	mg/Kg	₩	10/13/20 08:00	10/27/20 13:53	3
- Method: 6010B SEP - \$	SEP Metals (ICP) - S	tep 3							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.37	J	2.5	0.15	mg/Kg	☼	10/14/20 08:00	10/27/20 15:39	1
_ Method: 6010B SEP - \$	SEP Metals (ICP) - S	tep 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	J	5.0	0.30	mg/Kg	☼	10/15/20 08:00	10/28/20 16:31	2
_ Method: 6010B SEP - \$	SEP Metals (ICP) - S	tep 5							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.7	J	38	2.2	mg/Kg	\	10/19/20 08:00	10/28/20 13:46	5
	SEP Metals (ICP) - S	tep 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.8	J	2.5	0.15	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 15:32	1
	SEP Metals (ICP) - S	tep 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	11		2.5	0.15	mg/Kg	<u></u>	10/20/20 08:00	10/29/20 12:12	1
	SEP Metals (ICP) - S	um of Steps	s 1-7						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	17		2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP I	Metals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	17		13	0.76	mg/Kg	-	09/28/20 08:00	10/29/20 16:33	5

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Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Lithium

Client Sample ID: PB-3 47-52 Lab Sample ID: 180-109917-2

Date Collected: 07/14/20 11:00

Matrix: Solid

Date Received: 08/21/20 09:45

Percent Solids: 99.5

Date Received, 00/21/2	10 09.45						l l	Percent Sono	15. 33.3
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 1							
Analyte	· ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60		10	0.60	mg/Kg	*	09/29/20 08:00	10/27/20 12:17	4
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.45		7.5	0.45	mg/Kg	₩	10/13/20 08:00	10/27/20 13:58	3
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 3							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.20	J	2.5	0.15	mg/Kg	₽	10/14/20 08:00	10/27/20 15:44	1
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	5.7		2.5	0.15	mg/Kg	\$	10/15/20 08:00	10/28/20 12:04	1
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 5							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.1	J	38	2.2	mg/Kg	-	10/19/20 08:00	10/28/20 13:51	5
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	4.1		2.5	0.15	mg/Kg	-	10/19/20 08:00	10/28/20 15:37	1
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	10		2.5	0.15	mg/Kg	-	10/20/20 08:00	10/29/20 12:17	1
Method: 6010B SEP -	SEP Metals (ICP) - S	Sum of Steps	s 1-7						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	23		2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP	Metals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

13

0.75 mg/Kg

11/10/2020

© 09/28/20 08:00 10/29/20 16:38

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Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 49-59 Lab Sample ID: 180-109917-3

7410 1100011041 00/2 1/20	001-10							Oroonic Coma	0. 00
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 1							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61		10	0.61	mg/Kg	*	09/29/20 08:00	10/27/20 12:36	4
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.45		7.6	0.45	mg/Kg	*	10/13/20 08:00	10/27/20 14:03	3
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 3							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.23	J	2.5	0.15	mg/Kg	☼	10/14/20 08:00	10/27/20 15:49	1
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	8.1		2.5	0.15	mg/Kg	-	10/15/20 08:00	10/28/20 12:28	
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 5							
Analyte	· ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.2	J	38	2.2	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 13:56	į
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 6							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	4.7	J	5.0	0.30	mg/Kg	-	10/19/20 08:00	10/28/20 16:40	2
Method: 6010B SEP - S	EP Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	14		2.5	0.15	mg/Kg	<u></u>	10/20/20 08:00	10/29/20 12:32	1
Method: 6010B SEP - S	EP Metals (ICP) - S	Sum of Steps	s 1-7						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	31		2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP N	letals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Allalyte		-,						· · · · · · · · · · · · · · · · · · ·	

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Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 64-68 Lab Sample ID: 180-109917-4

Date Collected: 07/14/20 12:15

Date Received: 08/21/20 09:45

Matrix: Solid
Percent Solids: 98.8

Date 1100011001 00/21/20	7 001-10						ordonic donic	0. 00.0
Method: 6010B SEP - S	SEP Metals (ICP) - Step 1							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61	10	0.61	mg/Kg	*	09/29/20 08:00	10/27/20 12:41	4
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 2							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.56 J	7.6	0.46	mg/Kg	<u></u>	10/13/20 08:00	10/27/20 14:07	3
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 3							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.52 J	2.5	0.15	mg/Kg	₩	10/14/20 08:00	10/27/20 15:54	1
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 4							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	8.1	2.5	0.15	mg/Kg	☼	10/15/20 08:00	10/28/20 12:33	1
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 5							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.7 J	38	2.2	mg/Kg	₩	10/19/20 08:00	10/28/20 14:00	5
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 6							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	14	2.5	0.15	mg/Kg	_	10/19/20 08:00	10/28/20 15:47	1
Method: 6010B SEP - 9	SEP Metals (ICP) - Step 7							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	10	2.5	0.15	mg/Kg	<u></u>	10/20/20 08:00	10/29/20 12:37	1
Method: 6010B SEP - S	SEP Metals (ICP) - Sum of Steps	s 1-7						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	37	2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP I	Metals (ICP) - Total							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	43	13	0.76	mg/Kg	-	09/28/20 08:00	10/29/20 16:47	5

2

3

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12

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-4 73-80 Lab Sample ID: 180-109917-5

Date Collected: 07/14/20 12:20 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.6

Date Received. 06/21/20 0	9.45							Percent Sond	5. 33.0
Method: 6010B SEP - SE	P Metals (ICP) - \$	Step 1							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60		10	0.60	mg/Kg	-	09/29/20 08:00	10/27/20 12:45	4
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.45		7.5	0.45	mg/Kg	*	10/13/20 08:00	10/27/20 14:12	3
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 3							
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.25	J	2.5	0.15	mg/Kg	-	10/14/20 08:00	10/27/20 15:58	1
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	6.7		5.0	0.30	mg/Kg	≎	10/15/20 08:00	10/28/20 16:36	2
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 5							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.9	J	38	2.2	mg/Kg	*	10/19/20 08:00	10/28/20 14:05	5
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	7.9		2.5	0.15	mg/Kg	*	10/19/20 08:00	10/28/20 15:52	1
Method: 6010B SEP - SE	P Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	14		2.5	0.15	mg/Kg	-	10/20/20 08:00	10/29/20 12:42	1
Method: 6010B SEP - SE	P Metals (ICP) - S	Sum of Step	s 1-7						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	32		2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP Me	tals (ICP) - Total								
		0	ъ.	MADI	I Imit	D	Prepared	A malumad	Dil Fac
Analyte	Result	Qualifier	RL	MDL	Unit	ט	Prepareu	Analyzed	DII Fac

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Analyte

Lithium

Client Sample ID: PB-7 144-154 Lab Sample ID: 180-109917-6

Date Collected: 07/14/20 12:45 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99 7

Method: 6010B SEP -	SEP Metals (ICP) - S	Step 1							
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60		10	0.60	mg/Kg	-	09/29/20 08:00	10/27/20 12:50	
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.69	J	7.5	0.45	mg/Kg	*	10/13/20 08:00	10/27/20 14:31	;
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 3							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lithium	0.57	J	2.5	0.15	mg/Kg	₩	10/14/20 08:00	10/27/20 16:03	•
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
_ithium	11		2.5	0.15	mg/Kg	₽	10/15/20 08:00	10/28/20 12:43	•
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 5							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lithium	6.9	J	38	2.2	mg/Kg	\$	10/19/20 08:00	10/28/20 14:25	į
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 6							
Analyte	Result	Qualifier	RL _	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	69		2.5	0.15	mg/Kg	₩	10/19/20 08:00	10/28/20 15:57	•
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
_ithium	53		2.5	0.15	mg/Kg	₩	10/20/20 08:00	10/29/20 12:46	
Method: 6010B SEP -	SEP Metals (ICP) - S	Sum of Steps	s 1-7						
Analyte	Result	Qualifier	RL _	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	140		2.5	0.15	mg/Kg			11/02/20 10:23	

RL

2.5

MDL Unit

0.15 mg/Kg

Prepared

© 09/28/20 08:00 10/29/20 14:36

Result Qualifier

130

Analyzed

Dil Fac

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client Sample ID: PB-8 135-145 Lab Sample ID: 180-109917-7

Date Collected: 07/14/20 15:15

Matrix: Solid

Date Received: 08/21/20 09:45

Percent Solids: 99.5

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60	10	0.60	mg/Kg	-	09/29/20 08:00	10/27/20 12:55	4
Method: 6010B SEP	- SEP Metals (ICP) - Step 2							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.63 J	7.5	0.45	mg/Kg	*	10/13/20 08:00	10/27/20 14:36	3
Method: 6010B SEP	- SEP Metals (ICP) - Step 3							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.34 J	2.5	0.15	mg/Kg	₩	10/14/20 08:00	10/27/20 16:08	1
Method: 6010B SEP	- SEP Metals (ICP) - Step 4							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.3 J	2.5	0.15	mg/Kg	₩	10/15/20 08:00	10/28/20 12:48	1
Method: 6010B SEP	- SEP Metals (ICP) - Step 5							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.6 J	38	2.2	mg/Kg		10/19/20 08:00	10/28/20 14:30	5
Method: 6010B SEP	- SEP Metals (ICP) - Step 6							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	35	2.5	0.15	mg/Kg	*	10/19/20 08:00	10/28/20 16:02	1
Method: 6010B SEP	- SEP Metals (ICP) - Step 7							
Analyte	Result Qualifier	RL	MDL	I Imit	D	Prepared	Analyzed	Dil Fac

Lithium	18	2.5	0.15 mg/Kg		10/20/20 08:00	10/29/20 12:52	1
Method: 6010B SEP - SEP Met	als (ICP) - Sum of Steps	1-7					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Lithium	59	2.5	0.15 mg/Kg			11/02/20 10:23	1

Method: 6010B - SEP Metals (IC	CP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	53		2.5	0.15	mg/Kg	₽	09/28/20 08:00	10/29/20 14:42	1

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Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

Method: 6010B - SEP Metals (ICP) - Total

Lab Sample ID: MB 140-43059/14-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 44042

Prep Type: Total/NA Prep Batch: 43059

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared Lithium 2.5 0.15 mg/Kg 09/28/20 08:00 10/29/20 10:56 < 0.15

Lab Sample ID: LCS 140-43059/15-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 43059

Analysis Batch: 44042

Analyte

Spike Added 5.00

LCS LCS 5.17

Result Qualifier Unit mg/Kg

D %Rec 103 Limits 75 - 125

%Rec.

Lab Sample ID: LCSD 140-43059/16-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Lithium

Analyte

Lithium

Lithium

Analyte

Lithium

Analyte

Lithium

Lithium

Analysis Batch: 44042

Spike Added 5.00

LCSD LCSD 5.03

RL

10

Result Qualifier Unit mg/Kg %Rec

%Rec. Limits RPD 75 - 125

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Batch: 43059

Limit 30

RPD

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4

Matrix: Solid

Analysis Batch: 43944

Analyte

MB MB

Result Qualifier

<0.60

MDL Unit 0.60 mg/Kg Prepared

Prep Batch: 43133 Analyzed Dil Fac

Prep Type: Step 1

09/29/20 08:00 10/27/20 11:39

Prep Type: Step 1

Lab Sample ID: LCS 140-43060/15-B ^5

Matrix: Solid

Analysis Batch: 43944

Spike Added

5.00

LCS LCS Result Qualifier 5.09 J

Unit mg/Kg %Rec 102

Prep Batch: 43133 %Rec. Limits

75 - 125

Client Sample ID: Method Blank

Lab Sample ID: LCSD 140-43060/16-B ^5

Matrix: Solid

Analysis Batch: 43944

Spike Added 5.00

LCSD LCSD Result Qualifier 4.61 J

Unit mg/Kg

%Rec. %Rec Limits 92 75 - 125

Client Sample ID: Lab Control Sample Dup

RPD Limit 10

Prep Type: Step 2

Prep Batch: 43460

RPD

Prep Type: Step 1

Prep Batch: 43133

Lab Sample ID: MB 140-43447/14-B ^3

Matrix: Solid

Analysis Batch: 43944

Analyte

MR MR Result Qualifier

<0.45

MDL Unit 0.45 mg/Kg

Prepared

Analyzed 10/13/20 08:00 10/27/20 13:09

Dil Fac

RL

7.5

2

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

Prep Batch: 43495

Method: 6010B SEP - SEP Metals (ICP) (Continued)

Lab Sample ID: LCS 140-43447/15-B ^5

Matrix: Solid

Analysis Batch: 43944

Spike

Client Sample ID: Lab Control Sample
Prep Type: Step 2
Prep Batch: 43460

Rec.

AnalyteAddedResult LithiumQualifier SouthUnit LithiumDescription%Rec LimitsLithium5.004.57Jmg/Kg9175 - 125

Lab Sample ID: LCSD 140-43447/16-B ^5 Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Step 2 **Analysis Batch: 43944** Prep Batch: 43460 Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Unit D %Rec Limits RPD Limit Analyte 5.00 4.38 J 75 - 125 Lithium mg/Kg 88 4

Lab Sample ID: MB 140-43465/14-B

Matrix: Solid

Client Sample ID: Method Blank
Prep Type: Step 3

Analysis Batch: 43944

MB MB

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

Lithium <0.15 2.5 0.15 mg/Kg 10/14/20 08:00 10/27/20 14:51 1

Lab Sample ID: LCS 140-43465/15-B Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Step 3

Analysis Batch: 43944

Spike LCS LCS %Rec.

Analysis Batch: 43944

Spike LCS LCS %Rec.

 Analyte
 Added Lithium
 Result 5.00
 Qualifier 5.29
 Unit mg/Kg
 D mg/Kg
 %Rec 106
 Limits 75 - 125

Lab Sample ID: LCSD 140-43465/16-B

Matrix: Solid

Analysis Batch: 43944

Spike

Client Sample ID: Lab Control Sample Dup
Prep Type: Step 3
Prep Batch: 43495
RPD

AnalyteAdded LithiumResult 5.00Qualifier 5.00Unit mg/KgD was represented by the mg/KgLimits represented by the mg/KgRPD Limit mg/KgLimits represented by the mg/Kg

Lab Sample ID: MB 140-43496/14-B

Matrix: Solid

Client Sample ID: Method Blank
Prep Type: Step 4

Analysis Batch: 43997

MB MB

Prep Batch: 43539

 Analyte
 Result Lithium
 Qualifier Qualifier
 RL 2.5
 MDL mg/Kg
 Unit mg/Kg
 D mg/Kg
 Prepared 10/15/20 08:00 10/28/20 11:26
 Analyzed Dil Fac 10/15/20 08:00 10/28/20 11:26

Lab Sample ID: LCS 140-43496/15-B

Matrix: Solid

Client Sample ID: Lab Control Sample
Prep Type: Step 4

Analyte Added Result Qualifier Unit D WREC Limits

Lithium 5.00 5.32 Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Step 4 **Analysis Batch: 43997** Prep Batch: 43539 Spike LCSD LCSD %Rec. **RPD RPD** Added Result Qualifier Limits Analyte Unit %Rec Limit Lithium 5.00 104 75 - 125 5.20 mg/Kg 30

Eurofins TestAmerica, Pittsburgh

Job ID: 180-109917-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

D %Rec

109

%Rec

Prepared

%Rec

D %Rec

Prepared

101

99

Client Sample ID: Lab Control Sample Dup

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

Client Sample ID: Method Blank

Analyzed

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

Matrix: Solid

Analysis Batch: 43997

Client: Southern Company

MB MB

MB MB

MB MB Result Qualifier

< 0.15

< 0.15

Result Qualifier

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared 38 <u>10/19/20 08:00</u> <u>10/28/20 13:02</u> Lithium <2.2 2.2 mg/Kg

LCS LCS

16.4 J

LCSD LCSD

17.4 J

Result Qualifier

MDL Unit

LCS LCS

LCSD LCSD

5.03

Result Qualifier

4.96

Result Qualifier

0.15 mg/Kg

Result Qualifier

Unit

Unit

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

Spike

Added

15.0

Spike

Added

15.0

Spike

Added

5.00

Spike

Added

5 00

RL

2.5

Lab Sample ID: LCS 140-43540/15-B ^5

Matrix: Solid

Analysis Batch: 43997

Analyte

Lithium

Lab Sample ID: LCSD 140-43540/16-B ^5

Analysis Batch: 43997

Lithium

Matrix: Solid

Analyte

Lab Sample ID: MB 140-43605/14-A

Matrix: Solid

Analysis Batch: 43997

Analyte

Lithium

Lab Sample ID: LCS 140-43605/15-A

Matrix: Solid

Analysis Batch: 43997

Analyte

Lithium Lab Sample ID: LCSD 140-43605/16-A

Matrix: Solid

Analysis Batch: 43997

Lithium

Lab Sample ID: MB 140-43637/14-A

Matrix: Solid

Analyte

Analyte

Analysis Batch: 44042

Lithium

Lab Sample ID: LCS 140-43637/15-A

Matrix: Solid

Analysis Batch: 44042

Spike Analyte Lithium

Added 5.00

5.04

Result Qualifier

LCS LCS

MDL Unit

0.15 mg/Kg

Unit mg/Kg

%Rec 101

75 - 125

%Rec.

<u>10/20/20 08:00</u> <u>10/29/20 10:42</u>

Client Sample ID: Lab Control Sample

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RL

2.5

Prep Type: Step 5

Prep Batch: 43604

Prep Type: Step 5 Prep Batch: 43604

Prep Type: Step 5

Prep Batch: 43604

RPD

Prep Type: Step 6

Prep Batch: 43605

RPD

Limit

Dil Fac

Client Sample ID: Lab Control Sample Prep Type: Step 6

> Prep Batch: 43605 %Rec.

Limits

75 - 125

Client Sample ID: Lab Control Sample Dup Prep Type: Step 6

10/19/20 08:00 10/28/20 14:45

Prep Batch: 43605

%Rec. **RPD** Limits **RPD** Limit

75 - 125

Client Sample ID: Method Blank **Prep Type: Step 7**

Prep Batch: 43637

Prep Type: Step 7

Prep Batch: 43637

QC Sample Results

Spike

5.00

Client: Southern Company Job ID: 180-109917-1

LCSD LCSD

5.05

Result Qualifier Unit

mg/Kg

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: LCSD 140-43637/16-A **Matrix: Solid**

Analysis Batch: 44042

Added Analyte Lithium

Client Sample ID: Lab Control Sample Dup

101

Prep Type: Step 7 Prep Batch: 43637

RPD Limits RPD Limit D %Rec

75 - 125 30 0

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

Metals

Prep Batch: 43059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Total/NA	Solid	Total	
180-109917-2	PB-3 47-52	Total/NA	Solid	Total	
180-109917-3	PB-4 49-59	Total/NA	Solid	Total	
180-109917-4	PB-4 64-68	Total/NA	Solid	Total	
180-109917-5	PB-4 73-80	Total/NA	Solid	Total	
180-109917-6	PB-7 144-154	Total/NA	Solid	Total	
180-109917-7	PB-8 135-145	Total/NA	Solid	Total	
MB 140-43059/14-A	Method Blank	Total/NA	Solid	Total	
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	Total	
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	Total	

SEP Batch: 43060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 1	Solid	Exchangeable	
180-109917-2	PB-3 47-52	Step 1	Solid	Exchangeable	
180-109917-3	PB-4 49-59	Step 1	Solid	Exchangeable	
180-109917-4	PB-4 64-68	Step 1	Solid	Exchangeable	
180-109917-5	PB-4 73-80	Step 1	Solid	Exchangeable	
180-109917-6	PB-7 144-154	Step 1	Solid	Exchangeable	
180-109917-7	PB-8 135-145	Step 1	Solid	Exchangeable	
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	Exchangeable	
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	Exchangeable	
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	Exchangeable	

Prep Batch: 43133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 1	Solid	3010A	43060
180-109917-2	PB-3 47-52	Step 1	Solid	3010A	43060
180-109917-3	PB-4 49-59	Step 1	Solid	3010A	43060
180-109917-4	PB-4 64-68	Step 1	Solid	3010A	43060
180-109917-5	PB-4 73-80	Step 1	Solid	3010A	43060
180-109917-6	PB-7 144-154	Step 1	Solid	3010A	43060
180-109917-7	PB-8 135-145	Step 1	Solid	3010A	43060
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	3010A	43060
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	3010A	43060
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	3010A	43060

SEP Batch: 43447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 2	Solid	Carbonate	
180-109917-2	PB-3 47-52	Step 2	Solid	Carbonate	
180-109917-3	PB-4 49-59	Step 2	Solid	Carbonate	
180-109917-4	PB-4 64-68	Step 2	Solid	Carbonate	
180-109917-5	PB-4 73-80	Step 2	Solid	Carbonate	
180-109917-6	PB-7 144-154	Step 2	Solid	Carbonate	
180-109917-7	PB-8 135-145	Step 2	Solid	Carbonate	
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	Carbonate	
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	Carbonate	
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	Carbonate	

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Client: Southern Company Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

Metals

Prep Batch: 43460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 2	Solid	3010A	43447
180-109917-2	PB-3 47-52	Step 2	Solid	3010A	43447
180-109917-3	PB-4 49-59	Step 2	Solid	3010A	43447
180-109917-4	PB-4 64-68	Step 2	Solid	3010A	43447
180-109917-5	PB-4 73-80	Step 2	Solid	3010A	43447
180-109917-6	PB-7 144-154	Step 2	Solid	3010A	43447
180-109917-7	PB-8 135-145	Step 2	Solid	3010A	43447
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	3010A	43447
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	3010A	43447
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	3010A	43447

SEP Batch: 43465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Ba
180-109917-1	PB-3 57-61	Step 3	Solid	Non-Crystalline
180-109917-2	PB-3 47-52	Step 3	Solid	Non-Crystalline
180-109917-3	PB-4 49-59	Step 3	Solid	Non-Crystalline
180-109917-4	PB-4 64-68	Step 3	Solid	Non-Crystalline
180-109917-5	PB-4 73-80	Step 3	Solid	Non-Crystalline
180-109917-6	PB-7 144-154	Step 3	Solid	Non-Crystalline
180-109917-7	PB-8 135-145	Step 3	Solid	Non-Crystalline
MB 140-43465/14-B	Method Blank	Step 3	Solid	Non-Crystalline
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	Non-Crystalline
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	Non-Crystalline

Prep Batch: 43495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 3	Solid	3010A	43465
180-109917-2	PB-3 47-52	Step 3	Solid	3010A	43465
180-109917-3	PB-4 49-59	Step 3	Solid	3010A	43465
180-109917-4	PB-4 64-68	Step 3	Solid	3010A	43465
180-109917-5	PB-4 73-80	Step 3	Solid	3010A	43465
180-109917-6	PB-7 144-154	Step 3	Solid	3010A	43465
180-109917-7	PB-8 135-145	Step 3	Solid	3010A	43465
MB 140-43465/14-B	Method Blank	Step 3	Solid	3010A	43465
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	3010A	43465
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	3010A	43465

SEP Batch: 43496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 4	Solid	Metal Hydroxide	-
180-109917-2	PB-3 47-52	Step 4	Solid	Metal Hydroxide	
180-109917-3	PB-4 49-59	Step 4	Solid	Metal Hydroxide	
180-109917-4	PB-4 64-68	Step 4	Solid	Metal Hydroxide	
180-109917-5	PB-4 73-80	Step 4	Solid	Metal Hydroxide	
180-109917-6	PB-7 144-154	Step 4	Solid	Metal Hydroxide	
180-109917-7	PB-8 135-145	Step 4	Solid	Metal Hydroxide	
MB 140-43496/14-B	Method Blank	Step 4	Solid	Metal Hydroxide	
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	Metal Hydroxide	
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	Metal Hydroxide	

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Client: Southern Company Job ID: 180-109917-1

Client: Southern Company Project/Site: Plant Wansley GW7327

Metals

Prep Batch: 43539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 4	Solid	3010A	43496
180-109917-2	PB-3 47-52	Step 4	Solid	3010A	43496
180-109917-3	PB-4 49-59	Step 4	Solid	3010A	43496
180-109917-4	PB-4 64-68	Step 4	Solid	3010A	43496
180-109917-5	PB-4 73-80	Step 4	Solid	3010A	43496
180-109917-6	PB-7 144-154	Step 4	Solid	3010A	43496
180-109917-7	PB-8 135-145	Step 4	Solid	3010A	43496
MB 140-43496/14-B	Method Blank	Step 4	Solid	3010A	43496
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	3010A	43496
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	3010A	43496

SEP Batch: 43540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Ba
180-109917-1	PB-3 57-61	Step 5	Solid	Organic-Bound
180-109917-2	PB-3 47-52	Step 5	Solid	Organic-Bound
180-109917-3	PB-4 49-59	Step 5	Solid	Organic-Bound
180-109917-4	PB-4 64-68	Step 5	Solid	Organic-Bound
180-109917-5	PB-4 73-80	Step 5	Solid	Organic-Bound
180-109917-6	PB-7 144-154	Step 5	Solid	Organic-Bound
180-109917-7	PB-8 135-145	Step 5	Solid	Organic-Bound
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	Organic-Bound
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	Organic-Bound
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	Organic-Bound

Prep Batch: 43604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 5	Solid	3010A	43540
180-109917-2	PB-3 47-52	Step 5	Solid	3010A	43540
180-109917-3	PB-4 49-59	Step 5	Solid	3010A	43540
180-109917-4	PB-4 64-68	Step 5	Solid	3010A	43540
180-109917-5	PB-4 73-80	Step 5	Solid	3010A	43540
180-109917-6	PB-7 144-154	Step 5	Solid	3010A	43540
180-109917-7	PB-8 135-145	Step 5	Solid	3010A	43540
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	3010A	43540
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	3010A	43540
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	3010A	43540

SEP Batch: 43605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 6	Solid	Acid/Sulfide	
180-109917-2	PB-3 47-52	Step 6	Solid	Acid/Sulfide	
180-109917-3	PB-4 49-59	Step 6	Solid	Acid/Sulfide	
180-109917-4	PB-4 64-68	Step 6	Solid	Acid/Sulfide	
180-109917-5	PB-4 73-80	Step 6	Solid	Acid/Sulfide	
180-109917-6	PB-7 144-154	Step 6	Solid	Acid/Sulfide	
180-109917-7	PB-8 135-145	Step 6	Solid	Acid/Sulfide	
MB 140-43605/14-A	Method Blank	Step 6	Solid	Acid/Sulfide	
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	Acid/Sulfide	
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	Acid/Sulfide	

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Client: Southern Company Job ID: 180-109917-1

Client: Southern Company Project/Site: Plant Wansley GW7327

Metals

Prep Batch: 43637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 7	Solid	Residual	
180-109917-2	PB-3 47-52	Step 7	Solid	Residual	
180-109917-3	PB-4 49-59	Step 7	Solid	Residual	
180-109917-4	PB-4 64-68	Step 7	Solid	Residual	
180-109917-5	PB-4 73-80	Step 7	Solid	Residual	
180-109917-6	PB-7 144-154	Step 7	Solid	Residual	
180-109917-7	PB-8 135-145	Step 7	Solid	Residual	
MB 140-43637/14-A	Method Blank	Step 7	Solid	Residual	
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	Residual	
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	Residual	

Analysis Batch: 43944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 1	Solid	6010B SEP	43133
180-109917-1	PB-3 57-61	Step 2	Solid	6010B SEP	43460
180-109917-1	PB-3 57-61	Step 3	Solid	6010B SEP	43495
180-109917-2	PB-3 47-52	Step 1	Solid	6010B SEP	43133
180-109917-2	PB-3 47-52	Step 2	Solid	6010B SEP	43460
180-109917-2	PB-3 47-52	Step 3	Solid	6010B SEP	43495
180-109917-3	PB-4 49-59	Step 1	Solid	6010B SEP	43133
180-109917-3	PB-4 49-59	Step 2	Solid	6010B SEP	43460
180-109917-3	PB-4 49-59	Step 3	Solid	6010B SEP	43495
180-109917-4	PB-4 64-68	Step 1	Solid	6010B SEP	43133
180-109917-4	PB-4 64-68	Step 2	Solid	6010B SEP	43460
180-109917-4	PB-4 64-68	Step 3	Solid	6010B SEP	43495
180-109917-5	PB-4 73-80	Step 1	Solid	6010B SEP	43133
180-109917-5	PB-4 73-80	Step 2	Solid	6010B SEP	43460
180-109917-5	PB-4 73-80	Step 3	Solid	6010B SEP	43495
180-109917-6	PB-7 144-154	Step 1	Solid	6010B SEP	43133
180-109917-6	PB-7 144-154	Step 2	Solid	6010B SEP	43460
180-109917-6	PB-7 144-154	Step 3	Solid	6010B SEP	43495
180-109917-7	PB-8 135-145	Step 1	Solid	6010B SEP	43133
180-109917-7	PB-8 135-145	Step 2	Solid	6010B SEP	43460
180-109917-7	PB-8 135-145	Step 3	Solid	6010B SEP	43495
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	6010B SEP	43133
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	6010B SEP	43460
MB 140-43465/14-B	Method Blank	Step 3	Solid	6010B SEP	43495
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	6010B SEP	43133
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	6010B SEP	43460
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	6010B SEP	43495
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	6010B SEP	43133
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	6010B SEP	43460
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	6010B SEP	43495

Analysis Batch: 43997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 4	Solid	6010B SEP	43539
180-109917-1	PB-3 57-61	Step 5	Solid	6010B SEP	43604
180-109917-1	PB-3 57-61	Step 6	Solid	6010B SEP	43605
180-109917-2	PB-3 47-52	Step 4	Solid	6010B SEP	43539
180-109917-2	PB-3 47-52	Step 5	Solid	6010B SEP	43604

Eurofins TestAmerica, Pittsburgh

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Client: Southern Company

Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Metals (Continued)

Analysis Batch: 43997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-2	PB-3 47-52	Step 6	Solid	6010B SEP	43605
180-109917-3	PB-4 49-59	Step 4	Solid	6010B SEP	43539
180-109917-3	PB-4 49-59	Step 5	Solid	6010B SEP	43604
180-109917-3	PB-4 49-59	Step 6	Solid	6010B SEP	43605
180-109917-4	PB-4 64-68	Step 4	Solid	6010B SEP	43539
180-109917-4	PB-4 64-68	Step 5	Solid	6010B SEP	43604
180-109917-4	PB-4 64-68	Step 6	Solid	6010B SEP	43605
180-109917-5	PB-4 73-80	Step 4	Solid	6010B SEP	43539
180-109917-5	PB-4 73-80	Step 5	Solid	6010B SEP	43604
180-109917-5	PB-4 73-80	Step 6	Solid	6010B SEP	43605
180-109917-6	PB-7 144-154	Step 4	Solid	6010B SEP	43539
180-109917-6	PB-7 144-154	Step 5	Solid	6010B SEP	43604
180-109917-6	PB-7 144-154	Step 6	Solid	6010B SEP	43605
180-109917-7	PB-8 135-145	Step 4	Solid	6010B SEP	43539
180-109917-7	PB-8 135-145	Step 5	Solid	6010B SEP	43604
180-109917-7	PB-8 135-145	Step 6	Solid	6010B SEP	43605
MB 140-43496/14-B	Method Blank	Step 4	Solid	6010B SEP	43539
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	6010B SEP	43604
MB 140-43605/14-A	Method Blank	Step 6	Solid	6010B SEP	43605
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	6010B SEP	43539
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	6010B SEP	43604
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	6010B SEP	43605
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	6010B SEP	43539
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	6010B SEP	43604
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	6010B SEP	43605

Analysis Batch: 44042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Step 7	Solid	6010B SEP	43637
180-109917-1	PB-3 57-61	Total/NA	Solid	6010B	43059
180-109917-2	PB-3 47-52	Step 7	Solid	6010B SEP	43637
180-109917-2	PB-3 47-52	Total/NA	Solid	6010B	43059
180-109917-3	PB-4 49-59	Step 7	Solid	6010B SEP	43637
180-109917-3	PB-4 49-59	Total/NA	Solid	6010B	43059
180-109917-4	PB-4 64-68	Step 7	Solid	6010B SEP	43637
180-109917-4	PB-4 64-68	Total/NA	Solid	6010B	43059
180-109917-5	PB-4 73-80	Step 7	Solid	6010B SEP	43637
180-109917-5	PB-4 73-80	Total/NA	Solid	6010B	43059
180-109917-6	PB-7 144-154	Step 7	Solid	6010B SEP	43637
180-109917-6	PB-7 144-154	Total/NA	Solid	6010B	43059
180-109917-7	PB-8 135-145	Step 7	Solid	6010B SEP	43637
180-109917-7	PB-8 135-145	Total/NA	Solid	6010B	43059
MB 140-43059/14-A	Method Blank	Total/NA	Solid	6010B	43059
MB 140-43637/14-A	Method Blank	Step 7	Solid	6010B SEP	43637
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	6010B	43059
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	6010B SEP	43637
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	6010B	43059
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	6010B SEP	43637

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-109917-1

Client: Southern Company Project/Site: Plant Wansley GW7327

Metals

Analysis Batch: 44105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109917-1	PB-3 57-61	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-2	PB-3 47-52	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-3	PB-4 49-59	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-4	PB-4 64-68	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-5	PB-4 73-80	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-6	PB-7 144-154	Sum of Steps 1-7	Solid	6010B SEP	
180-109917-7	PB-8 135-145	Sum of Steps 1-7	Solid	6010B SEP	

North Canton, OH 44720-6900

4101 Shuffel Street NW

Environment Testing 🔆 eurofins

P - Na204S Q - Na2SO3 H - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone Applicable to all samples on COC - perform particle size reduction as needed to ensure special Instructions/Note: homogeneous sample is analyzed Z - other (specify) V - MCAA W - pH 4-5 O - AsNaO2 Preservation Codes: G - Amchlor H - Ascorbic Acid A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH COC No: S ---180-109917 Chain of Custody Carrier Tracking No(s) **Analysis Requested** E-Mail: shali.brown@testamericainc.com × × × × \times × 6020 Lithium × × × × × × × × Particle Size Reduction Lab PM: Brown, Shali Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) Preservation Code: A=Air) S S S S S S S (C=comp, G=grab) Sample Type G G O G G G O 3 day RUSH Sample Time 12:10 12:15 15:15 11:05 11:00 12:20 12:45 TAT Requested (days): Due Date Requested: NLT 7/22/2020 Sample Date Phone: 678-718-4760 Sampler: Taylor Payne 7/14/20 7/14/20 7/14/20 7/14/20 7/14/20 7/14/20 7/14/20 roject #: SSOW#: NO #: Address: 1255 Roberts Blvd NW, Suite 200 areimer@geosyntec.com Client Information Phone (330) 497-9396 Sample Identification Plant Wansley AP1 Client Contact: Adria Reimer 678-202-9564 PB-7 144-154 PB-8 135-145 128-3 47-52 **98**9 PB-4 64-68 City: Kennesaw -3 57-61 **0 8**-4 49-59 PB-4 73-80 Geosyntec State, Zip: GA 30144 oject Name: GW7327 company: :hone:

Los O'S Months Archive For 999 Special Instructions/QC Requirements: see special note above Date/Time: Method of Shipment Disposal By Lab Cooler Temperature(s) °C and Other Remarks: Market by Return To Client Company Company 240 Time: Radiological Date: Unknown 02-02-8 Poison B Skin Irritant Deliverable Requested: ((I))II, IV, Other (specify) Custody Seal No.: CX⊐ Non-Hazard ☐ Flammable ☐ Paraguished by:

1/17 Gustody Seals Intact:

7 A Paraguished by:

7 A Paraguished by:

7 A Paraguished by: Empty Kit Relinquished by: A Yes A No Relinquished by:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Possible Hazard Identification

Martin, Aaron

From:

Brown, Shali

Sent:

Thursday, August 20, 2020 3:59 PM

To:

Martin, Aaron

Subject:

240-133223-1 and 240-133409-1 need these samples sent to Pittsburg please and

thank you

Attachments:

COC 240-133409 (202007151152).pdf; COC 240-133223 (202007101623).pdf

240-133223-1 and 240-133409-1 need these samples sent to Pittsburg They should already be crushed (PSR was for whole sample). Relinquish using the orginal COC's if possible. If not, I have included a copy of COC for each job.

133223 one sample plastic bag and soil jar C229

133409 seven samples plastic bag all in C238

If not too much trouble.... Can you eyeball about how much sample you have of each one?

Thank You!! Shali

Please note our adjusted schedule for Labor Day >>

COMMUNICATIONS ALERT: Change of email addresses for all Eurofins TestAmerica staff effective July 9, 2020

Please update my email address Shali.Brown@eurofinset.com in your email directory!

Shali Brown

Project Manager

Eurofins TestAmerica 500 Wilson Pike Circle Suite 100 Brentwood, TN 37027 **USA**

Phone: 615-301-5031

E-mail: shali.brown@eurofinset.com

www.EurofinsUS.com | www.TestAmericainc.com | Facebook | LinkedIn

TESTAMERICA PITTSBURGH ORIGIN ID: PHDA (330) 312-0176 EUROFINS TESTAMERICA CANTON 4101 SHUFFEL STREET NW NORTH CANTON, OH 447206900 UNITED STATES US 301 ALPHA DRIVE

SHIP DATE: 20AUG20 ACTWGT: 59.50 LB CAD: 0562057/CAFE3313

BILL RECIPIENT

TO ENVIRONMENTAL SAMPLE RECEIPT

PITTSBURGH PA 15238 RIDC PARK

DEPT: AL HAIDET

PRIORITY OVERNIGHT FRI - 21 AUG 10:30

65 AGCA

15238 8 PIT PA-US



180-109917 Waybill

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

Irofins Environment Testing America

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301 Alpha Drive RIDC Park	7	hain	hain of Custody Becord	AV D	Š	7					Ē		Ī		Ξ	Irorins	Environment Testing
Pittsburgh, PA 15238	,	3	04310	2		3											America
Phone: 412-963-7058 Fax: 412-963-2468								180	-109	917 C	180-109917 Chain of Custody	CC	stody			1	
Client Information (Sub Contract Lab)	Sampler			Lab PM: Brown	Lab PM: Brown, Shali					-)	180-410782.1	
Client Contact Shipping/Receiving	Phone:			E-Mail: Shali.	E-Mail: Shali.Brown@Eurofinset.com	Eurofi	nset.co	ا ا		100 C	State of Origin: Georgia	Origin:			a. D.	Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.				•	Accreditations Required (See note):	ons Req	uired (Se	e note):		1					3 -	Job #:	
Address: 5815 Middlebrook Pike,	Due Date Requested: 10/13/2020	ü						Anal	VS.is	Regi	Analysis Reguested	۱,			-	Preservation Codes	des:
	TAT Requested (days	ys):			17.5°	-		-	(u			,			4 m (A - HCL B - NaOH	M - Hexane N - None
State, Zp: TN, 37921				ngs i wedi.	#87 / 11 - (5 / 4) - (5 / 4)			-	M bns e							C - Zn Acetate D - Nitric Acid E - NaHSO4	0 - Asna02 P - Na204S Q - Na2SO3
91-3000(Tel) 865-584-4315(Fax)	PO #:				eagas (Toas a e										п о т	F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrata
Email:	,MO#:			11 79.	(0)					lsto						I - Ice J - DI Water	U - Acetone V - MCAA
Project Name: Plant Wansley GW7327	Project #: 18019922			I	ot N				-	T (GON						K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#:		į	lams:	ap (x					Prep (I						Other:	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample N Type (C=comp, o= G=qrab) BT=T	Matrix (w-water, s-solid, o-wastefoli, BI-Tissue, A-Air)	Fleld Filtered MSM mioties 138/93_80108	9010B SEP/SEP	8010B_SEP/SEP	2010B_SEP/SEP	9010B_SEP_Cal	JoT_938/80108	2010B_SEP/SEP	Molsture/ Percer			redmuM isto	S. S	Special Instructions Note:
	$\backslash\!\!\!/$	\mathbb{N}	1.0	178	×	200	1.000	97.0	1000		1955	500			×		ist condistrate.
PB-3 57-61 (180-109917-1)	7/14/20	11:05 Eastern		Solid	×	×	×	×	×	×	×	×			\downarrow_{Σ}		
PB-3 47-52 (180-109917-2)	7/14/20	11:00 Eastern		Solid	×	×	×	×	×	×	×	×			-		
PB-4 49-59 (180-109917-3)	7/14/20	12:10 Eastern		Solid	×	×	×	×	×	×	×	×			<u> </u>		
PB-4 64-68 (180-109917-4)	7/14/20	12:15 Eastern		Solid	×	×	×	×	×	×	×	×			Υ.		
PB-4 73-80 (180-109917-5)	7/14/20	12:20 Eastern		Solid	×	×	×	×	×	×	×	×		<u> </u>	*		
PB-7 144-154 (180-109917-6)	7/14/20	12:45 Eastern		Solid	×	×	×	×	×	×	×	×			√-		
PB-8 135-145 (180-109917-7)	7/14/20	15:15 Eastern		Solid	×	×	×	×	×	×	×	×			4-		
														:			
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not cum maintain accreditation in the State of Origin listed above for analysis/lests/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	places the ownership eing analyzed, the sai	of method, ar nples must be	nalyte & accreditation shipped back to the	on compliance te Eurofins Te	upon out	subcon laborat	tract lab	oratories her instr	. This (sample will be	shipmer	t is for	varded i	under cha	ain-of-cur	stody. If the laboraterus should be br	method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently les 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
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TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

	Possible Hazard Identification		Š	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	ed if samples are retained longer t	han 1 month)	ŀ
	Unconfirmed			Return To Client Disposal By Lab	By Lab Archive For	Months	
	Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	S	Requir			1
	Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:		ı
1	Relinquished by Matthe Look	Pate/Time: 1700	Company P.H	Received by:	Date Times 2/2, 095 Conserv	Company D	
1/1	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Сотрапу	l
0/20	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
20	Custody Seals Intact. Custody Seal No.: Δ Yes Δ No			Cooler Temperature(s) °C and Other Remarks:			ľ
				10111213	6 7 8 9	Ver: 01/16/2019	2

Log In Number:

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Review Items	Yes	Ž.	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?				□ Containers, Broken	
2. Were ambient air containers received intact?				☐ Checked in lab	1 ' -
3. The coolers/containers custody seal if present, is it intact?	\		• • • • • • • • • • • • • • • • • • •	□ Yes □ NA	12 H H 1889 5100 7619
4. Is the cooler temperature within limits? (> freezing				☐ Cooler Out of Temp, Client	1110/00
temp. of water to 6 °C, VQST: 10°C)	\			Contacted, Proceed/Cancel	
Thermometer ID: JC [5]	_	**************************************		☐ Cooler Out of Temp, Same Day	
Correction factor: 0.0	-			Receipt	
5. Were all of the sample containers received intact?		*****		☐ Containers, Broken	
6. Were samples received in appropriate containers?	. \			☐ Containers, Improper; Client	
	_			Contacted; Proceed/Cancel	
7. Do sample container labels match COC?	\			□ COC & Samples Do Not Match	
(Ds, Dates, Times)	_		anava ire	☐ COC Incorrect/Incomplete	
				☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/				
	/			☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	_			☐ COC; No Date/Time; Client	
				Contacted	Labeling Verified by:
10. Was the sampler identified on the COC?			/	☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/	- produce	.	□ COC Incorrect/Incomplete	pH test strip lot number:
12. Are tests/parameters listed for each sample?	/		***	☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			□ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	\			☐ COC Incorrect/Incomplete	Box 16A: pH Box 18A: Residual Preservation Chlorine
15. Were samples received within holding time?	\			☐ Holding Time - Receipt	
16. Were samples received with correct chemical				□ pH Adjusted, pH Included	Lot Number:
preservative (excluding Encore)?				(See box 16A)	Exp Date:
			\	☐ Incorrect Preservative	Analyst:
17. Were VOA samples received without headspace?				☐ Headspace (VOA only)	Date:
18. Did you check for residual chlorine, if necessary?				☐ Residual Chlorine	Aline:
Chlorine test strip lot number:	-		\		
19. For 1613B water samples is pH<9?	WWW.			☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?	Pangon kana			□ Project missing info	
Project #: PM Instructions:					
1.0				2110	THE PROPERTY OF THE PROPERTY O
Sample Receiving Associate:			Date:	4/12/40	QA026R32.doc, 062719

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Client: Southern Company Job Number: 180-109917-1

Login Number: 109917 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Say, Thomas C

orcator. Gay, ritolinas G		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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 America

ANALYTICAL REPORT

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

Laboratory Job ID: 180-109919-1

Client Project/Site: Plant Wansley GW7327

For:

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

Attn: Kristen N Jurinko

Authorized for release by: 11/10/2020 6:23:48 AM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

Review your project results through Total Access

Have a Question?



Visit us at:

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

Client: Southern Company Project/Site: Plant Wansley GW7327 Laboratory Job ID: 180-109919-1

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Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

Job ID: 180-109919-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Job Narrative 180-109919-1

Comments

No additional comments.

Receipt

The sample was received on 8/21/2020 9:45 AM; the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.9° C.

Metals

7 Step Sequential Extraction Procedure

These soil samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0008, "7 Step Sequential Extraction Procedure". SW-846 Method 6010B as incorporated in Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0007 was used to perform the final instrument analyses.

An aliquot of each sample was sequentially extracted using the steps listed below:

- Step 1 Exchangeable Fraction: A 5 gram alignot of sample was extracted with 25 mL of 1M magnesium sulfate (MgSO4), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in ma/kg on a dry weight basis.
- Step 2 Carbonate Fraction: The sample residue from step 1 was extracted with 25 mL of 1M sodium acetate/acetic acid (NaOAc/HOAc) at pH 5, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 3 Non-crystalline Materials Fraction: The sample residue from step 2 was extracted with 25 mL of 0.2M ammonium oxalate (pH 3), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 4 Metal Hydroxide Fraction: The sample residue from step 3 was extracted with 25 mL of 1M hydroxylamine hydrochloride solution in 25% v/v acetic acid, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 5 Organic-bound Fraction: The sample residue from step 4 was extracted three times with 25 mL of 5% sodium hypochlorite (NaClO) at pH 9.5, centrifuged and filtered. The resulting leachates were combined and 5 mL were digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 6 Acid/Sulfide Fraction: The sample residue from step 5 was extracted with 25 mL of a 3:1:2 v/v solution of HCl-HNO3-H2O, centrifuged and filtered. 5 mL of the resulting leachate was diluted to 50 mL with reagent water and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 7 Residual Fraction: A 1.0 g aliquot of the sample residue from step 6 was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Results are reported in mg/kg on a dry weight basis.

In addition, a 1.0 g aliquot of the original sample was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Total metal results are reported in mg/kg on a dry weight basis.

Results were calculated using the following equation: Result, $\mu g/g$ or mg/Kg, dry weight = $(C \times V \times V1 \times D) / (W \times S \times V2)$

Where:

C = Concentration from instrument readout, μg/mL

= Final volume of digestate, mL

D = Instrument dilution factor

V1 = Total volume of leachate, mL

V2 = Volume of leachate digested, mL

W = Wet weight of sample, g

= Percent solids/100

A method blank, laboratory control sample and laboratory control sample duplicate were prepared and analyzed with each SEP step in

Eurofins TestAmerica, Pittsburgh 11/10/2020

Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

Job ID: 180-109919-1 (Continued)

Laboratory: Eurofins TestAmerica, Pittsburgh (Continued)

order to provide information about both the presence of elements of interest in the extraction solutions, and the recovery of elements of interest from the extraction solutions. Results outside of laboratory QC limits do not reflect out of control performance, but rather the effect of the extraction solution upon the analyte.

A laboratory sample duplicate was prepared and analyzed with each batch of samples in order to provide information regarding the reproducibility of the procedure.

SEP Report Notes:

The final report lists the results for each step, the result for the total digestion of the sample, and a sum of the results of steps 1 through 7 by element.

The digestates for steps 1, 2 and 5 were analyzed at a dilution due to instrument problems caused by the high solids content of the digestates. The reporting limits were adjusted accordingly.

Method 6010B: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: WGWC-8-47-57 (180-109919-1).

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

General Chemistry

% Moisture: The samples were analyzed for percent moisture using SOP number KNOX-WC-0012 (based on Modified MCAWW 160.3 and SM2540B and on the percent moisture determinations described in methods 3540C and 3550B).

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

Definitions/Glossary

Client: Southern Company Job ID: 180-109919-1

Project/Site: Plant Wansley GW7327

Qualifiers

Metals

Qualifier **Qualifier Description**

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 CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

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)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

11/10/2020

Page 5 of 24

Accreditation/Certification Summary

Client: Southern Company Job ID: 180-109919-1

Project/Site: Plant Wansley GW7327

Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	Identification Number	Expiration Date	
	AFCEE	N/A		
ANAB	Dept. of Defense ELAP	L2311	02-13-22	
ANAB	Dept. of Energy	L2311.01	02-13-22	
ANAB	ISO/IEC 17025	L2311	02-13-22	
ANAB	ISO/IEC 17025	L2311	02-14-22	
Arkansas DEQ	State	88-0688	06-17-21	
California	State	2423	06-30-21	
Colorado	State	TN00009	02-28-21	
Connecticut	State	PH-0223	09-30-21	
Florida	NELAP	E87177	07-01-21	
Georgia (DW)	State	906	12-11-22	
Hawaii	State	NA	12-11-21	
Kansas	NELAP	E-10349	11-01-20 *	
Kentucky (DW)	State	90101	01-01-21	
Louisiana	NELAP	LA110001	12-31-12 *	
Louisiana	NELAP	83979	06-30-21	
Louisiana (DW)	State	LA019	12-31-20	
Maryland	State	277	03-31-21	
Michigan	State	9933	12-11-22	
Nevada	State	TN00009	07-31-21	
New Hampshire	NELAP	299919	01-17-21	
New Jersey	NELAP	TN001	07-01-21	
New York	NELAP	10781	03-31-21	
North Carolina (DW)	State	21705	07-31-21	
North Carolina (WW/SW)	State	64	12-31-20	
Ohio VAP	State	CL0059	06-02-23	
Oklahoma	State	9415	08-31-21	
Oregon	NELAP	TNI0189	01-02-21	
Pennsylvania	NELAP	68-00576	12-31-20	
Tennessee	State	02014	12-11-22	
Texas	NELAP	T104704380-18-12	08-31-21	
US Fish & Wildlife	US Federal Programs	058448	07-31-21	
USDA	US Federal Programs	P330-19-00236	08-20-22	
Utah	NELAP	TN00009	07-31-21	
Virginia	NELAP	460176	09-14-21	
Washington	State	C593	01-19-21	
West Virginia (DW)	State	9955C	01-01-21	
West Virginia DEP	State	345	05-01-21	
Wisconsin	State	998044300	08-31-21	

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins TestAmerica, Pittsburgh

Sample Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Asset ID

 180-109919-1
 WGWC-8-47-57
 Solid
 07/09/20 09:45
 08/21/20 09:45
 ID

Job ID: 180-109919-1

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Method Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Method **Method Description** Protocol Laboratory 6010B TAL KNX SEP Metals (ICP) - Total SW846 6010B SEP SEP Metals (ICP) SW846 TAL KNX 3010A SW846 TAL KNX Preparation, Total Metals Acid/Sulfide Sequential Extraction Procedure, Acid/Sulfide Fraction TAL-KNOX TAL KNX Carbonate Sequential Extraction Procedure, Carbonate Fraction TAL-KNOX TAL KNX Exchangeable Sequential Extraction Procedure, Exchangeable Fraction TAL-KNOX TAL KNX Metal Hydroxide Sequential Extraction Procedure, Metal Hydroxide Fraction TAL-KNOX TAL KNX Non-Crystalline Sequential Extraction Procedure, Non-crystalline Materials TAL-KNOX TAL KNX Organic-Bound Sequential Extraction Procedure, Organic Bound Fraction TAL-KNOX TAL KNX Residual Sequential Extraction Procedure, Residual Fraction TAL-KNOX TAL KNX Total Preparation, Total Material TAL-KNOX TAL KNX

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. TAL-KNOX = TestAmerica Laboratories, Knoxville, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Job ID: 180-109919-1

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Lab Chronicle

Client: Southern Company Job ID: 180-109919-1

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-8-47-57

Lab Sample ID: 180-109919-1 Date Collected: 07/09/20 09:45

Matrix: Solid

Date Received: 08/21/20 09:45

Batch Batch Dil Initial Final Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor Amount Amount** Number Analyst Sum of Steps 1-7 Analysis 6010B SEP 44104 11/02/20 10:20 DKW TAL KNX

Instrument ID: NOEQUIP

Lab Sample ID: 180-109919-1 Client Sample ID: WGWC-8-47-57

Date Collected: 07/09/20 09:45 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 98.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Total			1.000 g	50 mL	43059	09/28/20 08:00		TAL KNX
Total/NA	Analysis	6010B nt ID: DUO		5	ŭ		44042	10/29/20 16:28	KNC	TAL KNX
Step 1	SEP	Exchangeable			5.000 g	25 mL	43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			5 mL	50 mL	43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis Instrumer	6010B SEP nt ID: DUO		4			43944	10/27/20 12:07	KNC	TAL KNX
Step 2	SEP	Carbonate			5.000 g	25 mL	43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			5 mL	50 mL	43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis Instrumer	6010B SEP nt ID: DUO		3			43944	10/27/20 13:48	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			5.000 g	25 mL	43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			5 mL	50 mL	43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis Instrumer	6010B SEP nt ID: DUO		1			43944	10/27/20 15:34	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			5.000 g	25 mL	43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			5 mL	50 mL	43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis Instrumer	6010B SEP nt ID: DUO		1			43997	10/28/20 11:54	KNC	TAL KNX
Step 5	SEP	Organic-Bound			5.000 g	75 mL	43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			5 mL	50 mL	43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis Instrumer	6010B SEP nt ID: DUO		5			43997	10/28/20 13:41	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis Instrumer	6010B SEP nt ID: DUO		1	-		43997	10/28/20 15:27	KNC	TAL KNX
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis Instrumer	6010B SEP nt ID: DUO		1	-		44042	10/29/20 12:07	KNC	TAL KNX

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Eurofins TestAmerica, Pittsburgh

Lab Chronicle

Client: Southern Company

Job ID: 180-109919-1 Project/Site: Plant Wansley GW7327

Analyst References:

Lab: TAL KNX

Batch Type: SEP

KNC = Kerry Collins

Batch Type: Prep

KNC = Kerry Collins

Batch Type: Analysis

DKW = Donna Wilburn

KNC = Kerry Collins

Client Sample Results

Client: Southern Company Job ID: 180-109919-1

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-8-47-57 Lab Sample ID: 180-109919-1

Date Collected: 07/09/20 09:45

Date Received: 08/21/20 09:45

Matrix: Solid
Percent Solids: 98.7

Lithium	Prepared Analyzed 29/20 08:00 10/27/20 12:07	Dil Fac
Lithium <0.61	_ '	
Method: 6010B SEP - SEP Metals (ICP) - Step 2 Analyte Result volume Qualifier RL volume MDL volume Unit volume D volume Provided (ICP) Method: 6010B SEP - SEP Metals (ICP) - Step 3 Analyte Result volume Result volume RL volume MDL volume Unit volume D volume Provided (ICP) Method: 6010B SEP - SEP Metals (ICP) - Step 4 Analyte Result volume RL volume MDL volume D volume Provided (ICP)	29/20 08:00 10/27/20 12:07	1
Analyte Result Qualifier RL MDL Unit D Proceedings of the content		7
Lithium < 0.46 7.6 0.46 mg/Kg ☆ 10/13 Method: 6010B SEP - SEP Metals (ICP) - Step 3 Analyte Result Qualifier RL MDL Unit D Properties		
Method: 6010B SEP - SEP Metals (ICP) - Step 3 Analyte Result Qualifier RL MDL Unit D Properties (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Properties (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Properties (ICP) - Step 4	Prepared Analyzed	Dil Fac
Analyte Result Qualifier RL MDL Unit D Properties (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Properties (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Properties (ICP) - ICP Properties (IC	13/20 08:00 10/27/20 13:48	3
Lithium <0.15 2.5 0.15 mg/Kg 10/14 Method: 6010B SEP - SEP Metals (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Pr		
Method: 6010B SEP - SEP Metals (ICP) - Step 4 Analyte Result Qualifier RL MDL Unit D Pr	Prepared Analyzed	Dil Fac
Analyte Result Qualifier RL MDL Unit D Pr	14/20 08:00 10/27/20 15:34	1
Lithium 1.2 J 2.5 0.15 mg/Kg	Prepared Analyzed	Dil Fac
	15/20 08:00 10/28/20 11:54	1
Method: 6010B SEP - SEP Metals (ICP) - Step 5		
· , ,	Prepared Analyzed	Dil Fac
Lithium <2.2 38 2.2 mg/Kg 🌣 10/19	19/20 08:00 10/28/20 13:41	5
Method: 6010B SEP - SEP Metals (ICP) - Step 6		
Analyte Result Qualifier RL MDL Unit D Pr	Prepared Analyzed	Dil Fac
Lithium 1.1 J 2.5 0.15 mg/Kg ☆ 10/19	19/20 08:00 10/28/20 15:27	1
Method: 6010B SEP - SEP Metals (ICP) - Step 7		
Analyte Result Qualifier RL MDL Unit D Pr	Prepared Analyzed	Dil Fac
Lithium 10 2.5 0.15 mg/Kg ☆ 10/20	20/20 08:00 10/29/20 12:07	1
Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7		
Analyte Result Qualifier RL MDL Unit D Pr	Prepared Analyzed	Dil Fac
Lithium 12 2.5 0.15 mg/Kg	11/02/20 10:20	1
Method: 6010B - SEP Metals (ICP) - Total		
Analyte Result Qualifier RL MDL Unit D Pr		
Lithium 17 13 0.76 mg/Kg	Prepared Analyzed	Dil Fac

11/10/2020

5

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Prep Type: Total/NA

Prep Type: Step 1

Prep Batch: 43133

Prep Type: Step 1

Prep Batch: 43133

Prep Type: Step 1

Client Sample ID: Lab Control Sample

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

Method: 6010B - SEP Metals (ICP) - Total

Lab Sample ID: MB 140-43059/14-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 44042

Prep Batch: 43059 MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared Lithium 2.5 0.15 mg/Kg 09/28/20 08:00 10/29/20 10:56 < 0.15

Lab Sample ID: LCS 140-43059/15-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 43059

Analysis Batch: 44042

Spike LCS LCS %Rec.

Added Result Qualifier Unit D %Rec Limits Analyte 5.00 75 - 125 Lithium 5.17 mg/Kg 103

Lab Sample ID: LCSD 140-43059/16-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 44042** Prep Batch: 43059

Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Limits RPD Limit Analyte Unit %Rec Lithium 5.00 5.03 75 - 125 30 mg/Kg

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4 **Client Sample ID: Method Blank**

Matrix: Solid

Analysis Batch: 43944

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac

Lithium <0.60 10 0.60 mg/Kg 09/29/20 08:00 10/27/20 11:39

Lab Sample ID: LCS 140-43060/15-B ^5

Matrix: Solid

Analysis Batch: 43944

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits

Lithium 5.00 5.09 J mg/Kg 102 75 - 125

Lab Sample ID: LCSD 140-43060/16-B ^5 Client Sample ID: Lab Control Sample Dup

Matrix: Solid Analysis Batch: 43944

Prep Batch: 43133 LCSD LCSD Spike **RPD** %Rec. Added Result Qualifier RPD Limit Analyte Unit %Rec Limits

Lithium 5.00 4.61 J 92 75 - 125 10 mg/Kg

Lab Sample ID: MB 140-43447/14-B ^3 **Client Sample ID: Method Blank**

Matrix: Solid Prep Type: Step 2 **Analysis Batch: 43944** Prep Batch: 43460

MR MR Analyte Result Qualifier RL MDL Unit **Prepared** Analyzed Dil Fac

Lithium <0.45 7.5 10/13/20 08:00 10/27/20 13:09 0.45 mg/Kg

2

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Client: Southern Company

Lithium

Lithium

Project/Site: Plant Wansley GW7327

Lab Sample ID: MB 140-43465/14-B

Job ID: 180-109919-1

Method: 6010B SEP - SEP Metals (ICP) (Continued)

<0.15

Lab Sample ID: LCS 140-43447/15-B ^5				Clie	nt Sa	mple ID	: Lab Control Sample
Matrix: Solid							Prep Type: Step 2
Analysis Batch: 43944							Prep Batch: 43460
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits

4.57 J

0.15 mg/Kg

mg/Kg

91

75 - 125

Client Sample ID: Method Blank

10/14/20 08:00 10/27/20 14:51

5.00

Lab Sample ID: LCSD 140-43447/16-B ^5 Matrix: Solid			(Client Sai	mple	ID: Lat	Control Prep	Sample Type: S	•
Analysis Batch: 43944							Prep E	Batch: 4	43460
	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lithium	5.00	4.38	J	mg/Kg		88	75 - 125	4	30

Matrix: Solid

Analysis Batch: 43944

MB MB

Analyte

Result Qualifier

RL MDL Unit

D Prepared

Analyzed Dil Fac

2.5

Lab Sample ID: LCS 140-43465/15-B **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Step 3 Analysis Batch: 43944** Prep Batch: 43495 Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Lithium 5.00 5.29 75 - 125 mg/Kg 106

Lab Sample ID: LCSD 140-43465/16-B Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Step 3 **Analysis Batch: 43944** Prep Batch: 43495 LCSD LCSD Spike %Rec. **RPD** Analyte Added Result Qualifier Limits Unit %Rec Limit Lithium 5.00 5.17 103 75 - 125 mg/Kg

Lab Sample ID: MB 140-43496/14-B

Matrix: Solid

Analysis Batch: 43997

Client Sample ID: Method Blank
Prep Type: Step 4
Prep Batch: 43539

Lab Sample ID: LCS 140-43496/15-B Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Step 4 Analysis Batch: 43997** Prep Batch: 43539 Spike LCS LCS %Rec. Added Analyte Result Qualifier Limits Unit D %Rec 5.00 Lithium 5.32 mg/Kg 106 75 - 125

Lab Sample ID: LCSD 140-43496/16-B Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Step 4 **Analysis Batch: 43997** Prep Batch: 43539 Spike LCSD LCSD %Rec. **RPD** Analyte Added **RPD** Result Qualifier Unit %Rec Limits Limit Lithium 5.00 104 75 - 125 5.20 mg/Kg

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

Matrix: Solid

Analysis Batch: 43997

MB MB

MB MB

<0.15

Result Qualifier

Result Qualifier RL **MDL** Unit Analyzed Analyte Prepared 38 <u>10/19/20 08:00</u> <u>10/28/20 13:02</u> Lithium <2.2 2.2 mg/Kg

Spike

Added

15.0

Spike

Added

15.0

Spike

Added

5.00

Spike

Added

5 00

RL

2.5

LCS LCS

16.4 J

LCSD LCSD

17.4 J

Result Qualifier

MDL Unit

LCS LCS

LCSD LCSD

5.03

Result Qualifier

4.96

Result Qualifier

0.15 mg/Kg

Result Qualifier

Unit

Unit

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

Lab Sample ID: LCS 140-43540/15-B ^5

Matrix: Solid

Analysis Batch: 43997

Analyte

Lithium

Lab Sample ID: LCSD 140-43540/16-B ^5 **Matrix: Solid**

Analysis Batch: 43997

Analyte

Lab Sample ID: MB 140-43605/14-A

Lithium

Lithium

Analyte

Lithium

Matrix: Solid

Analysis Batch: 43997

Analyte

Lithium

Lab Sample ID: LCS 140-43605/15-A

Matrix: Solid Analysis Batch: 43997

Analyte

Lab Sample ID: LCSD 140-43605/16-A

Matrix: Solid Analysis Batch: 43997

Lithium

Lab Sample ID: MB 140-43637/14-A

Matrix: Solid

Analysis Batch: 44042

Analyte Lithium

Lab Sample ID: LCS 140-43637/15-A

Matrix: Solid

Analysis Batch: 44042

Analyte

Spike Added 5.00

MB MB Result Qualifier

< 0.15

RL

2.5

5.04

LCS LCS

Result Qualifier

MDL Unit

0.15 mg/Kg

Unit mg/Kg

%Rec 101

Prepared

Limits 75 - 125

<u>10/20/20 08:00</u> <u>10/29/20 10:42</u>

Client Sample ID: Lab Control Sample

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-109919-1

Prep Type: Step 5

Prep Batch: 43604

Prep Type: Step 5 Prep Batch: 43604

Prep Type: Step 5

Prep Batch: 43604

RPD

Prep Type: Step 6

Prep Batch: 43605

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

D %Rec

109

%Rec

Prepared

%Rec

D %Rec

101

99

Client Sample ID: Lab Control Sample Dup

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

Client Sample ID: Method Blank

Analyzed

Dil Fac

Dil Fac

RPD

Limit

Client Sample ID: Lab Control Sample Prep Type: Step 6

Prep Batch: 43605 %Rec.

Limits

75 - 125

10/19/20 08:00 10/28/20 14:45

Client Sample ID: Lab Control Sample Dup Prep Type: Step 6

Prep Batch: 43605

%Rec. **RPD** Limits **RPD** Limit

75 - 125

Client Sample ID: Method Blank

Prep Type: Step 7

Prep Batch: 43637

Dil Fac Analyzed

Prep Batch: 43637 %Rec.

QC Sample Results

Client: Southern Company Job ID: 180-109919-1

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: LCSD 140-43637/16-A

Matrix: Solid

Analysis Batch: 44042

Spike

Client Sample ID: Lab Control Sample Dup

Prep Type: Step 7

Prep Batch: 43637

RPD

RRC.

RPD

 Analyte
 Added
 Result Description
 Unit Description
 Description
 WRec Description
 Limits RPD Description
 RPD Description

 Lithium
 5.00
 5.05
 mg/Kg
 101
 75 - 125
 0
 30

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QC Association Summary

Client: Southern Company Project/Site: Plant Wansley GW7327

Metals

Pre	n B	atcl	h: 4	30	59

Lab Sample ID 180-109919-1	Client Sample ID WGWC-8-47-57	Prep Type Total/NA	Matrix Solid	Method Total	Prep Batch
MB 140-43059/14-A	Method Blank	Total/NA	Solid	Total	
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	Total	
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	Total	

SEP Batch: 43060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 1	Solid	Exchangeable	
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	Exchangeable	
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	Exchangeable	
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	Exchangeable	

Prep Batch: 43133

Lab Sample ID 180-109919-1	Client Sample ID WGWC-8-47-57	Prep Type Step 1	Matrix Solid	Method 3010A	Prep Batch 43060
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	3010A	43060
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	3010A	43060
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	3010A	43060

SEP Batch: 43447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 2	Solid	Carbonate	
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	Carbonate	
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	Carbonate	
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	Carbonate	

Prep Batch: 43460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 2	Solid	3010A	43447
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	3010A	43447
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	3010A	43447
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	3010A	43447

SEP Batch: 43465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep	Batch
180-109919-1	WGWC-8-47-57	Step 3	Solid	Non-Crystalline	
MB 140-43465/14-B	Method Blank	Step 3	Solid	Non-Crystalline	
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	Non-Crystalline	
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	Non-Crystalline	

Prep Batch: 43495

Lab Sample ID 180-109919-1	Client Sample ID WGWC-8-47-57	Prep Type Step 3	Matrix Solid	Method 3010A	Prep Batch 43465
MB 140-43465/14-B	Method Blank	Step 3	Solid	3010A	43465
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	3010A	43465
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	3010A	43465

SEP Batch: 43496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 4	Solid	Metal Hydroxide	
MB 140-43496/14-B	Method Blank	Step 4	Solid	Metal Hydroxide	

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-109919-1

11/10/2020

QC Association Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Metals (Continued)

SEP Batch: 43496 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	Metal Hydroxide	
Į	LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	Metal Hydroxide	

Prep Batch: 43539

	Lab Sample ID 180-109919-1	Client Sample ID WGWC-8-47-57	Prep Type Step 4	Matrix Solid	Method 3010A	Prep Batch 43496
	MB 140-43496/14-B	Method Blank	Step 4	Solid	3010A	43496
	LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	3010A	43496
İ	LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	3010A	43496

SEP Batch: 43540

Lab Sample ID 180-109919-1	Client Sample ID WGWC-8-47-57	Prep Type Step 5	Matrix Solid	Method Organic-Bound	Prep Batch
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	Organic-Bound	
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	Organic-Bound	
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	Organic-Bound	

Prep Batch: 43604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 5	Solid	3010A	43540
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	3010A	43540
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	3010A	43540
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	3010A	43540

SEP Batch: 43605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 6	Solid	Acid/Sulfide	
MB 140-43605/14-A	Method Blank	Step 6	Solid	Acid/Sulfide	
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	Acid/Sulfide	
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	Acid/Sulfide	

Prep Batch: 43637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 7	Solid	Residual	
MB 140-43637/14-A	Method Blank	Step 7	Solid	Residual	
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	Residual	
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	Residual	

Analysis Batch: 43944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 1	Solid	6010B SEP	43133
180-109919-1	WGWC-8-47-57	Step 2	Solid	6010B SEP	43460
180-109919-1	WGWC-8-47-57	Step 3	Solid	6010B SEP	43495
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	6010B SEP	43133
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	6010B SEP	43460
MB 140-43465/14-B	Method Blank	Step 3	Solid	6010B SEP	43495
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	6010B SEP	43133
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	6010B SEP	43460
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	6010B SEP	43495
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	6010B SEP	43133
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	6010B SEP	43460

Eurofins TestAmerica, Pittsburgh

11/10/2020

Job ID: 180-109919-1

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QC Association Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

Metals (Continued)

Analysis Batch: 43944 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	6010B SEP	43495

Analysis Batch: 43997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 4	Solid	6010B SEP	43539
180-109919-1	WGWC-8-47-57	Step 5	Solid	6010B SEP	43604
180-109919-1	WGWC-8-47-57	Step 6	Solid	6010B SEP	43605
MB 140-43496/14-B	Method Blank	Step 4	Solid	6010B SEP	43539
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	6010B SEP	43604
MB 140-43605/14-A	Method Blank	Step 6	Solid	6010B SEP	43605
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	6010B SEP	43539
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	6010B SEP	43604
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	6010B SEP	43605
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	6010B SEP	43539
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	6010B SEP	43604
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	6010B SEP	43605

Analysis Batch: 44042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Step 7	Solid	6010B SEP	43637
180-109919-1	WGWC-8-47-57	Total/NA	Solid	6010B	43059
MB 140-43059/14-A	Method Blank	Total/NA	Solid	6010B	43059
MB 140-43637/14-A	Method Blank	Step 7	Solid	6010B SEP	43637
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	6010B	43059
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	6010B SEP	43637
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	6010B	43059
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	6010B SEP	43637

Analysis Batch: 44104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	Sum of Steps 1-7	Solid	6010B SEP	

Eurofins TestAmerica, Pittsburgh

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11/10/2020

Chain of Custody Record

Eurofins TestAmerica, Canton4101 Shuffel §

North Canton, OH 44720-6900 Phone (330) 497-9396

4101 Shuffel Street NW

Environment Testing

N - None
O - ANNAO2
P - Na2O4S
Q - Na2O4S
Q - Na2S03
R - Na2S23
S - H2SO4
I - TSP Dodecghydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify) Applicable to all samples on COC - perform particle size reduction as needed to ensure homogeneous sample is analyzed Special Instructions/Note: Ver: 01/16/2019 Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab [X]

Archive For 2 Mon Preservation Codes C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid 1600 I - Ice J - Di Water age: 180-109919 Chain of Custody Total Number of containers Date/Time. Special Instructions/QC Requirements: see special note above Date/Time Method of Shipment 1.11.9765 尼灰 Analysis Requested cooler Temperature(s) °C and Other Remarks shali.brown@testamericainc.com Received by: article Size Reduction Lab PM: Brown, Shali Confidency WITEL 340 ETA Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) E-Mail: BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, Preservation Code: Matrix C'N (C=comp, G=grab) Radiological Sample Type 17:10 3 day RUSH SARWIN Sh: 60 Sample Time Mertine 0-70 Date/Time 75 % Due Date Requested: NLT 7/17/2020 TAT Requested (days): Unknown 16/40/a/ar Phone: 205-657-5949 Sample Date Sampler. 7/ Project #: 18019922 SSOW#: WO # Poison B Skin Irritant Deliverable Requested: I,(II)II, IV, Other (specify) Custody Seal No. Flammable 1255 Roberts Blvd NW, Suite 200 Possible Hazard Identification Shawn Empty Kit Relinquished by: Custody Seals Intact: areimer@geosyntec.com Client Information Sample Identification [X] Non-Hazard Plant Wansley elinquished by: 678-202-9564 Adria Reimer State, Zip: GA 30144 Geosyntec Kennesaw oject Name GW7327 mail

From:

Brown, Shali

Sent:

Thursday, August 20, 2020 3:59 PM

To:

Martin, Aaron

Subject:

240-133223-1 and 240-133409-1 need these samples sent to Pittsburg please and

thank you

Attachments:

Martin, Aaron

COC 240-133409 (202007151152).pdf; COC 240-133223 (202007101623).pdf

240-133223-1 and 240-133409-1 need these samples sent to Pittsburg
They should already be crushed (PSR was for whole sample).

Palia puid by a principle COC(if provide a principle of COC for a principle of

Relinquish using the orginal COC's if possible. If not, I have included a copy of COC for each job.

133223 one sample plastic bag and soil jar C229

133409 seven samples plastic bag all in C238

If not too much trouble.... Can you eyeball about how much sample you have of each one?

Thank You!!

Shali

Please note our adjusted schedule for Labor Day >>

COMMUNICATIONS ALERT: Change of email addresses for all Eurofins TestAmerica staff effective July 9, 2020

Please update my email address Shali.Brown@eurofinset.com in your email directory!

Shali Brown

Project Manager

Eurofins TestAmerica 500 Wilson Pike Circle Suite 100 Brentwood,TN 37027 USA

Phone: 615-301-5031

E-mail: shali.brown@eurofinset.com

www.EurofinsUS.com | www.TestAmericainc.com | Facebook | LinkedIn

ORIGIN ID:PHDA (330) 312-0176

EUROFINS TESTAMERICA CANTON 4101 SHUFFEL STREET NW NORTH CANTON, OH 447206900 UNITED STATES US

SHIP DATE: 20AUG20 ACTWGT: 59.50 LB CAD: 0562057/CAFE3313

BILL RECIPIENT

TO ENVIRONMENTAL SAMPLE RECEIPT

TESTAMERICA PITTSBURGH 301 ALPHA DRIVE

PITTSBURGH PA 15238 (412) 963-7058

RIDC PARK

JEPT: AL HAIDET

FRI - 21 AUG 10:30

PRIORITY OVERNIGHT

15238

PA-US PIT

Uncorrected temp | | | | | Thermometer ID 65 AGCA

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

180-109919 Waybill

Special Instructions/QC Requirements:

Primary Deliverable Rank: 2

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

Empty Kit Relinquished by:

Company

Cooler Temperature(s) °C and Other Remarks:

Received by:

Date/Time:

Custody Seal No.:

Custody Seals Intact: △ Yes △ No

Company Company

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

Faiolilla reachinairea, rimanaigh											=				į	
301 Alpha Drive RIDC Park	S	ain of	Chain of Custody Record	V Rec	ord					=		Ē			SHITS	Environment Testing
Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468					 			180	1099	■ 40	i of	80-109919 Chain of Custody				America
	Sampler:			Lab PM:			l									
Client Information (Sub Contract Lab)				Brown, Shali	hali									1100-410782.1	782.1	
Client Contact: Shipping/Receiving	Phone:			E-Mail: Shali.Brown@Eurofinset.com	wn@E	Irofinse	t.com			State of Origin: Georgia	Origin:			Page: Page 1 of 1	0f 1	
Company: TestAmerica Laboratories. Inc.				Acci	Accreditations Required (See note)	Require	d (See n	c);						Job #:	0.00	
Address:	Due Date Requested:												•	Preserva	Preservation Codes:	
5815 Middlebrook Pike, ,	10/13/2020						₹	Analysis Requested	s Rec	nest	ਲ੍ਹ			3		1
City: Knoxville	TAT Requested (days):			300	MA.			100	/					B - NaOH C - Zn Acetate	tate	M - nexane N - None O - AsNaO2
State, Zip: TN, 37921				1745				7 640 0		-				D - Nitric Acid E - NaHSO4		P - Na2O4S Q - Na2SO3
Phone: 865-291-3000(Tel) 865-584-4315(Fax)	PO#.			> (0), də						a			G - Amchlor H - Assorbic Acid		K - Na2S2O3 S - H2SO4 T - TSP Dodecabudrate
Email:	WO#) seb					U - Acetone V - MCAA
Project Name: Plant Wansley GW7327	Project #: 18019922													rainer K-EDTA L-EDA		W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#.													of con Other:		
Samula Idantification . Client ID (1 ah ID)	Sample Date	Sample (C:	Sample Matrix Type Smolid, C=comp, constabled, G=creb)	leld Filtered	otob_sep/sep	010B SEP/SEP	010B_SEP/SEP	010B_SEP.Cal	010B/SEP_Tot	010B_SEP/SEP	010B_SEP/SEP			otal Number	<u>.</u>	s de la constanta de la consta
		tar.	- I (T)	X	1	2000 2000	100	1030	185.0 #10.0	100	120	(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)				i degionismote.
WGWC-8-47-57 (180-109919-1)	7/9/20 0%	09:45 Fastern	S	Solid	×	×	×	×	×	×	×					
						_										
		-			_		ļ		-	<u> </u>	_			-3/5		
															-	
						-										
						-					_			53		
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation out subcontract laboratory accreditation in the State of Origin listed above for analysis/tests/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 attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.	a places the ownership of m being analyzed, the samples date, return the signed Chair	ethod, analyte s must be ship n of Custody a	& accreditation of the Eack to the Eack to said or ittesting to said or	compliance up Eurofins Test/ omplicance to	oon out su merica la Eurofins	ıbcontrac iboratory ТеstАте	t laborat or other erica.	ories. Thinstructic	is sampl ns will b	e shipm s provide	ent is fo ed. Any	warded t	ınder chai to accredî	i-of-custody. If ation status sh	the laborato	ry does not currently ght to Eurofins
Possible Hazard Identification		:		<u>,</u>	ample	Dispos	sal (A	fee ma	y be a	sesse	difs	səjduri	are reta	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	r than 1 m	onth)
Unconfirmed					, T	Return To Client	Clien			Disposal By Lab	I By La	. <i>q</i>		Archive For		Months
Deliverable Requested: I. II. IV. Other (specify)	Primary Deliverable	ble Rank: 2		Ĭ	Special Instructions/OC Requirements	nstruct	ions/O(Regu	remen	S						

linquished by:

QA026R32.doc, 062719

11/10/2020

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Loc: 180 109919

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	\			□ Containers, Broken	
2. Were ambient air containers received intact?			/	☐ Checked in lab) '
3. The coolers/containers custody seal if present, is it intact?				□ Yes □ NA	4 5 5 603 7619 + 1 4 1969 5 103 7619
4. Is the cooler temperature within limits? (> freezing				☐ Cooler Out of Temp, Client	\$2/_/// /S
temp. of water to 6 °C, VQST: 10°C)	\			Contacted, Proceed/Cancel	
Thermometer ID: J(b)	_			☐ Cooler Out of Temp, Same Day	
Correction factor:				Receipt	
5. Were all of the sample containers received intact?				☐ Containers, Broken	
6. Were samples received in appropriate containers?				☐ Containers, Improper; Client	
	/			Contacted; Proceed/Cancel	
7. Do sample container labels match COC?	\			☐ COC & Samples Do Not Match	
(Ds, Dates, Times)	_				
				☐ COC Not Received	
8. Were all of the samples listed on the COC received?	\				
	/ /			☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	_			☐ COC; No Date/Time; Client	
	\			Contacted	Labeling Verified by:
10. Was the sampler identified on the COC?				☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?				☐ COC Incorrect/Incomplete	pH test strip lot number:
12. Are tests/parameters listed for each sample?	/			□ COC No tests on COC	
13. Is the matrix of the samples noted?				☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)				☐ COC Incorrect/Incomplete	H Box
15 Ware commles reasisted within halding time?	`			Tolding Time	Dracer of ires.
15. Were complete received with correct chamical				Transming time - wedelpt	I of Number
neservative (excluding Fucore)?				pri Aujusteu, pri inciuueu (See how 16A)	Exp Date:
proof varive (exchange proof)			\	Coccos 103)	Analyst:
17. Were VOA samples received without headspace?				☐ Headspace (VOA only)	Date:
18. Did you check for residual chlorine, if necessary?				☐ Residual Chlorine	Time:
(e.g. 1613B, 1668)			`		
Chlorine test strip lot number:			\setminus		
19. For 1613B water samples is pH<9?				☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?				☐ Project missing info	
Project #: PM Instructions:					

Sample Receiving Associate:

Client: Southern Company

Job Number: 180-109919-1

Login Number: 109919

List Number: 1

Creator: Say, Thomas C

List Source: Eurofins TestAmerica, Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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	

Eurofins TestAmerica, Pittsburgh



Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton 4101 Shuffel Street NW North Canton, OH 44720 Tel: (330)497-9396

Laboratory Job ID: 240-136127-2

Client Project/Site: Plant Wansley GW7327

For:

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

Attn: Kristen N Jurinko

Authorized for release by: 11/10/2020 6:22:12 AM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

Review your project results through

Have a Question?



Visit us at:

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.

Client: Southern Company Project/Site: Plant Wansley GW7327 Laboratory Job ID: 240-136127-2

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Definitions/Glossary

Client: Southern Company Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Qualifiers

M	eta	Is

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
CFU Colony Forming Unit
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)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
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)

TNTC Too Numerous To Count

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Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Laboratory: Eurofins TestAmerica, Canton

Job Narrative 240-136127-2

Comments

No additional comments.

Receipt

The samples were received on 9/4/2020 11:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° C.

Metals

7 Step Sequential Extraction Procedure

These soil samples were prepared and analyzed using Eurofins TestAmerica Knoxville standard operating procedure KNOX-MT-0008, "7 Step Sequential Extraction Procedure". SW-846 Method 6010B as incorporated in Eurofins TestAmerica Knoxyille standard operating procedure KNOX-MT-0007 was used to perform the final instrument analyses.

An aliquot of each sample was sequentially extracted using the steps listed below:

- Step 1 Exchangeable Fraction: A 5 gram alignot of sample was extracted with 25 mL of 1M magnesium sulfate (MgSO4), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in ma/kg on a dry weight basis.
- Step 2 Carbonate Fraction: The sample residue from step 1 was extracted with 25 mL of 1M sodium acetate/acetic acid (NaOAc/HOAc) at pH 5, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 3 Non-crystalline Materials Fraction: The sample residue from step 2 was extracted with 25 mL of 0.2M ammonium oxalate (pH 3), centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 4 Metal Hydroxide Fraction: The sample residue from step 3 was extracted with 25 mL of 1M hydroxylamine hydrochloride solution in 25% v/v acetic acid, centrifuged and filtered. 5 mL of the resulting leachate was digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 5 Organic-bound Fraction: The sample residue from step 4 was extracted three times with 25 mL of 5% sodium hypochlorite (NaClO) at pH 9.5, centrifuged and filtered. The resulting leachates were combined and 5 mL were digested using method 3010A and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 6 Acid/Sulfide Fraction: The sample residue from step 5 was extracted with 25 mL of a 3:1:2 v/v solution of HCl-HNO3-H2O, centrifuged and filtered. 5 mL of the resulting leachate was diluted to 50 mL with reagent water and analyzed by method 6010B. Results are reported in mg/kg on a dry weight basis.
- Step 7 Residual Fraction: A 1.0 g aliquot of the sample residue from step 6 was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Results are reported in mg/kg on a dry weight basis.

In addition, a 1.0 g aliquot of the original sample was digested using HF, HNO3, HCl and H3BO3. The digestate was analyzed by ICP using method 6010B. Total metal results are reported in mg/kg on a dry weight basis.

Results were calculated using the following equation: Result, $\mu g/g$ or mg/Kg, dry weight = $(C \times V \times V1 \times D) / (W \times S \times V2)$

Where:

C = Concentration from instrument readout, μg/mL

= Final volume of digestate, mL

D = Instrument dilution factor

V1 = Total volume of leachate, mL

V2 = Volume of leachate digested, mL

W = Wet weight of sample, g

= Percent solids/100

A method blank, laboratory control sample and laboratory control sample duplicate were prepared and analyzed with each SEP step in

Job ID: 240-136127-2

Case Narrative

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Job ID: 240-136127-2 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

order to provide information about both the presence of elements of interest in the extraction solutions, and the recovery of elements of interest from the extraction solutions. Results outside of laboratory QC limits do not reflect out of control performance, but rather the effect of the extraction solution upon the analyte.

A laboratory sample duplicate was prepared and analyzed with each batch of samples in order to provide information regarding the reproducibility of the procedure.

SEP Report Notes:

The final report lists the results for each step, the result for the total digestion of the sample, and a sum of the results of steps 1 through 7 by element.

The digestates for steps 1, 2 and 5 were analyzed at a dilution due to instrument problems caused by the high solids content of the digestates. The reporting limits were adjusted accordingly.

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

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Method Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Method	Method Description	Protocol	Laboratory
6010B	SEP Metals (ICP) - Total	SW846	TAL KNX
6010B SEP	SEP Metals (ICP)	SW846	TAL KNX
3010A	Preparation, Total Metals	SW846	TAL KNX
Acid/Sulfide	Sequential Extraction Procedure, Acid/Sulfide Fraction	TAL-KNOX	TAL KNX
Carbonate	Sequential Extraction Procedure, Carbonate Fraction	TAL-KNOX	TAL KNX
Exchangeable	Sequential Extraction Procedure, Exchangeable Fraction	TAL-KNOX	TAL KNX
Metal Hydroxide	Sequential Extraction Procedure, Metal Hydroxide Fraction	TAL-KNOX	TAL KNX
Non-Crystalline	Sequential Extraction Procedure, Non-crystalline Materials	TAL-KNOX	TAL KNX
Organic-Bound	Sequential Extraction Procedure, Organic Bound Fraction	TAL-KNOX	TAL KNX
Residual	Sequential Extraction Procedure, Residual Fraction	TAL-KNOX	TAL KNX
Total	Preparation, Total Material	TAL-KNOX	TAL KNX

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. TAL-KNOX = TestAmerica Laboratories, Knoxville, Facility Standard Operating Procedure.

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

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Sample Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Asset ID

 240-136127-1
 WGWC-19 87-88
 Solid
 09/03/20 13:00
 09/04/20 11:00

 240-136127-2
 WGWC-19 89-90
 Solid
 09/03/20 13:05
 09/04/20 11:00

Job ID: 240-136127-2

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Detection Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Lab Sample ID: 240-136127-1

Job ID: 240-136127-2

Client	Sample	ID:	WGWC-19 87-88	

Client Sample ID: WGWC-19 89-90

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.52 J	2.6	0.15	mg/Kg		₩	6010B SEP	Step 3
Lithium	11	2.6	0.15	mg/Kg	1	₽	6010B SEP	Step 4
Lithium	5.7 J	39	2.3	mg/Kg	5	₩	6010B SEP	Step 5
Lithium	55	2.6	0.15	mg/Kg	1	₩	6010B SEP	Step 6
Lithium	26	2.6	0.15	mg/Kg	1	₩	6010B SEP	Step 7
Lithium	98	2.5	0.15	mg/Kg	1		6010B SEP	Sum of
								Steps 1-7
Lithium	86	2.6	0.15	mg/Kg	1	₩	6010B	Total/NA

Lab Sample ID: 240-136127-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.52	J	2.6	0.16	mg/Kg	1	₩	6010B SEP	Step 3
Lithium	12		2.6	0.16	mg/Kg	1	₩	6010B SEP	Step 4
Lithium	5.1	J	39	2.3	mg/Kg	5	₽	6010B SEP	Step 5
Lithium	45		2.6	0.16	mg/Kg	1	₩	6010B SEP	Step 6
Lithium	20		2.6	0.16	mg/Kg	1	₩	6010B SEP	Step 7
Lithium	83		2.5	0.15	mg/Kg	1		6010B SEP	Sum of Steps 1-7
Lithium	70		2.6	0.16	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

11/10/2020

Eurofins TestAmerica, Canton

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Client Sample Results

Client: Southern Company

Project/Site: Plant Wansley GW7327

Date Collected: 09/03/20 13:00 East Sample 15: 240-166-127-1

Date Received: 09/04/20 11:00 Percent Solids: 97.1

ate Received. 03/04/20	11.00							ercent oond	3. 37.1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 1							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.62		10	0.62	mg/Kg	*	09/29/20 08:00	10/27/20 13:00	4
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.46		7.7	0.46	mg/Kg	*	10/13/20 08:00	10/27/20 14:41	3
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 3							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.52	J	2.6	0.15	mg/Kg	₽	10/14/20 08:00	10/27/20 16:13	1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	11		2.6	0.15	mg/Kg	-	10/15/20 08:00	10/28/20 12:52	1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 5							
Analyte	· ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	5.7	J	39	2.3	mg/Kg	-	10/19/20 08:00	10/28/20 14:35	
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	55		2.6	0.15	mg/Kg	-	10/19/20 08:00	10/28/20 16:07	1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	26		2.6	0.15	mg/Kg	*	10/20/20 08:00	10/29/20 12:57	1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Sum of Step	s 1-7						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	98		2.5	0.15	mg/Kg			11/02/20 10:26	1
Method: 6010B - SEP M	etals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

11/10/2020

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Job ID: 240-136127-2

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Client Sample Results

Client: Southern Company Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-19 89-90 Lab Sample ID: 240-136127-2

Date Collected: 09/03/20 13:05 **Matrix: Solid**

Date Received: 09/04/20 11:00						Percent Solids: 96.3			
Method: 6010B SEP - SEF	P Metals (ICP) - Step 1								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	<0.62	10	0.62	mg/Kg		09/29/20 08:00	10/27/20 13:04		
Method: 6010B SEP - SEF	P Metals (ICP) - Step 2								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	<0.47	7.8	0.47	mg/Kg	*	10/13/20 08:00	10/27/20 14:46	3	
Method: 6010B SEP - SEF	P Metals (ICP) - Step 3								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	0.52 J	2.6	0.16	mg/Kg	*	10/14/20 08:00	10/27/20 16:27	1	
Method: 6010B SEP - SEF	P Metals (ICP) - Step 4								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	12	2.6	0.16	mg/Kg	₽	10/15/20 08:00	10/28/20 12:57	1	
Method: 6010B SEP - SEF	P Metals (ICP) - Step 5								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	5.1 J	39	2.3	mg/Kg	*	10/19/20 08:00	10/28/20 14:40		
Method: 6010B SEP - SEF	P Metals (ICP) - Step 6								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	45	2.6	0.16	mg/Kg	₩	10/19/20 08:00	10/28/20 16:26	1	
Method: 6010B SEP - SEF	P Metals (ICP) - Step 7								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	20	2.6	0.16	mg/Kg	☼	10/20/20 08:00	10/29/20 13:02	1	
Method: 6010B SEP - SEF	P Metals (ICP) - Sum of Steps	1-7							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium	83	2.5	0.15	mg/Kg			11/02/20 10:26	1	
Method: 6010B - SEP Met	als (ICP) - Total								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Lithium		2.6	0.16	mg/Kg		09/28/20 08:00	10/29/20 14:53		

11/10/2020

RL

2.5

Spike

Added

5.00

Spike

Added

5.00

Spike

Added

5.00

Spike

Added

5.00

RL

10

MDL Unit

LCS LCS

LCSD LCSD

5.03

Result Qualifier

MDL Unit

LCS LCS

LCSD LCSD

4.61 J

Result Qualifier

5.09 J

Result Qualifier

0.60 mg/Kg

5.17

Result Qualifier

0.15 mg/Kg

Unit

Unit

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Prep Type: Total/NA

Prep Batch: 43059

Prep Type: Total/NA Prep Batch: 43059

Prep Type: Total/NA

Prep Batch: 43059

RPD

Prep Type: Step 1

Prep Batch: 43133

Client Sample ID: Method Blank

09/28/20 08:00 10/29/20 10:56

Client Sample ID: Lab Control Sample

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

Client Sample ID: Method Blank

09/29/20 08:00 10/27/20 11:39

Analyzed

Prepared

D %Rec

103

%Rec

Prepared

%Rec

%Rec

92

102

Client Sample ID: Lab Control Sample Dup

Analyzed

Method: 6010B - SEP Metals (ICP) - Total

Lab Sample ID: MB 140-43059/14-A

Matrix: Solid

Analysis Batch: 44042

Lithium

MB MB

Result Qualifier Analyte

< 0.15

MB MB

<0.60

Result Qualifier

Lab Sample ID: LCS 140-43059/15-A **Matrix: Solid**

Analysis Batch: 44042

Analyte Lithium

Lab Sample ID: LCSD 140-43059/16-A **Matrix: Solid**

Analysis Batch: 44042

Analyte

Lithium

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4

Matrix: Solid

Analysis Batch: 43944

Analyte

Lithium

Lab Sample ID: LCS 140-43060/15-B ^5 Matrix: Solid

Analysis Batch: 43944

Analyte

Lithium

Lithium

Lab Sample ID: LCSD 140-43060/16-B ^5

Matrix: Solid

Analysis Batch: 43944

Analyte

Lab Sample ID: MB 140-43447/14-B ^3

Matrix: Solid

Analysis Batch: 43944

MR MR

Analyte Lithium < 0.45

Result Qualifier RL 7.5

MDL Unit 0.45 mg/Kg

Prepared 10/13/20 08:00 10/27/20 13:09

Client Sample ID: Method Blank

Analyzed Dil Fac

Prep Type: Step 2

Prep Batch: 43460

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Dil Fac

RPD

Limit

Dil Fac

30

Client Sample ID: Lab Control Sample Prep Type: Step 1

Prep Batch: 43133 %Rec. Limits

75 - 125

Client Sample ID: Lab Control Sample Dup Prep Type: Step 1

Prep Batch: 43133 **RPD** %Rec. Limits

RPD Limit 75 - 125 10

Job ID: 240-136127-2

Prep Batch: 43495

Prep Batch: 43495

Prep Batch: 43539

Client: Southern Company

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP) (Continued)

Lab Sample ID: LCS 140-43447/15-B ^5 Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Step 2 **Analysis Batch: 43944** Prep Batch: 43460 LCS LCS Spike %Rec.

Added Result Qualifier Limits Analyte Unit %Rec 5.00 Lithium 4.57 J mg/Kg 91 75 - 125

Lab Sample ID: LCSD 140-43447/16-B ^5 Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Step 2 **Analysis Batch: 43944** Prep Batch: 43460 Spike LCSD LCSD %Rec. **RPD** Added Result Qualifier Unit D %Rec Limits RPD Limit Analyte 5.00 4.38 J 75 - 125 Lithium mg/Kg 88 4

Lab Sample ID: MB 140-43465/14-B Client Sample ID: Method Blank **Matrix: Solid Prep Type: Step 3**

Analysis Batch: 43944

MB MB

Result Qualifier RL **MDL** Unit Analyte Prepared Analyzed Dil Fac Lithium <0.15 2.5 0.15 mg/Kg 10/14/20 08:00 10/27/20 14:51

Lab Sample ID: LCS 140-43465/15-B **Client Sample ID: Lab Control Sample Prep Type: Step 3**

Matrix: Solid

Analysis Batch: 43944

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Lithium 5 00 5.29 mg/Kg 106 75 - 125

Lab Sample ID: LCSD 140-43465/16-B Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Step 3 Analysis Batch: 43944** Prep Batch: 43495

LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Limits RPD Unit %Rec Limit Lithium 5.00 5.17 103 75 - 125 mg/Kg

Lab Sample ID: MB 140-43496/14-B Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Step 4

Matrix: Solid

Lithium

Analysis Batch: 43997

MB MB Result Qualifier RL **MDL** Unit Analyte **Prepared** Analyzed Dil Fac <0.15 2.5 10/15/20 08:00 10/28/20 11:26 Lithium 0.15 mg/Kg

Lab Sample ID: LCS 140-43496/15-B Client Sample ID: Lab Control Sample

Prep Type: Step 4 Prep Batch: 43539 **Analysis Batch: 43997** Spike LCS LCS %Rec.

Added Analyte Result Qualifier Limits Unit D %Rec 5.00 Lithium 5 32 mg/Kg 106 75 - 125

Lab Sample ID: LCSD 140-43496/16-B Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Step 4 **Analysis Batch: 43997** Prep Batch: 43539 Spike LCSD LCSD %Rec. **RPD** RPD Added Limits Analyte Result Qualifier Unit %Rec Limit

5.20

mg/Kg

5.00

Eurofins TestAmerica, Canton

75 - 125

104

RL

38

Spike

Added

15.0

Spike

Added

MB MB

MB MB Result Qualifier

Result Qualifier

15.0

Spike

Added

5.00

Spike

Added

5 00

RL

2.5

MDL Unit

LCS LCS

16.4 J

LCSD LCSD

17.4 J

Result Qualifier

MDL Unit

LCS LCS

LCSD LCSD

5.03

Result Qualifier

4.96

Result Qualifier

0.15 mg/Kg

Result Qualifier

2.2 mg/Kg

Unit

Unit

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

mg/Kg

Client: Southern Company

Project/Site: Plant Wansley GW7327

Client Sample ID: Method Blank

<u>10/19/20 08:00</u> <u>10/28/20 13:02</u>

Client Sample ID: Lab Control Sample

%Rec.

Limits

75 - 125

%Rec.

Limits

75 - 125

Client Sample ID: Method Blank

10/19/20 08:00 10/28/20 14:45

Client Sample ID: Lab Control Sample

%Rec.

Limits

75 - 125

Analyzed

Prepared

D %Rec

109

%Rec

Prepared

%Rec

D %Rec

Prepared

101

99

Client Sample ID: Lab Control Sample Dup

Analyzed

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

Matrix: Solid

Analysis Batch: 43997

MB MB Result Qualifier Analyte

Lithium <2.2 Lab Sample ID: LCS 140-43540/15-B ^5

Matrix: Solid

Analysis Batch: 43997

Analyte

Lab Sample ID: LCSD 140-43540/16-B ^5 **Matrix: Solid**

Analysis Batch: 43997

Analyte

Lab Sample ID: MB 140-43605/14-A

Lithium

Lithium

Matrix: Solid Analysis Batch: 43997

Analyte

Lithium < 0.15

Lab Sample ID: LCS 140-43605/15-A **Matrix: Solid**

Analysis Batch: 43997

Analyte

Lithium

Lab Sample ID: LCSD 140-43605/16-A **Matrix: Solid**

Analysis Batch: 43997

Lithium

Lab Sample ID: MB 140-43637/14-A

Matrix: Solid

Analyte

Analyte

Analysis Batch: 44042

Lithium < 0.15

Lab Sample ID: LCS 140-43637/15-A **Matrix: Solid**

Analysis Batch: 44042

Analyte

Lithium

Added 5.00

Spike

5.04

RL

2.5

Result Qualifier

LCS LCS

MDL Unit

0.15 mg/Kg

Unit

mg/Kg

%Rec 101

75 - 125

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Job ID: 240-136127-2

Prep Type: Step 5

Prep Batch: 43604

Prep Type: Step 5 Prep Batch: 43604

Prep Type: Step 5

Prep Batch: 43604

RPD

Prep Type: Step 6

Prep Batch: 43605

Prep Type: Step 6

Prep Batch: 43605

Dil Fac

RPD

Limit

Dil Fac

Client Sample ID: Lab Control Sample Dup Prep Type: Step 6

> Prep Batch: 43605 %Rec. **RPD**

> Limits **RPD** Limit

> 75 - 125

Client Sample ID: Method Blank **Prep Type: Step 7**

Prep Batch: 43637

Dil Fac Analyzed

10/20/20 08:00 10/29/20 10:42

Client Sample ID: Lab Control Sample Prep Type: Step 7

Prep Batch: 43637

%Rec.

Limits

11/10/2020

QC Sample Results

Client: Southern Company Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: LCSD 140-43637/16-A

Matrix: Solid

Analysis Batch: 44042

Spike

Client Sample ID: Lab Control Sample Dup
Prep Type: Step 7
Prep Batch: 43637
RPD

 Analyte
 Added
 Result Description
 Qualifier Description
 Unit Description
 Description
 Result Republication
 Limits RPD Limit Description
 RPD Limit Description

 Lithium
 5.00
 5.05
 mg/Kg
 101
 75 - 125
 0
 30

3

4

5

9

10

12

1:

QC Association Summary

Client: Southern Company Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Metals

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	rev	Da	ш	. 40	บอร

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Total/NA	Solid	Total	
240-136127-2	WGWC-19 89-90	Total/NA	Solid	Total	
MB 140-43059/14-A	Method Blank	Total/NA	Solid	Total	
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	Total	
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	Total	

SEP Batch: 43060

Lab Sample ID 240-136127-1	Client Sample ID WGWC-19 87-88	Prep Type Step 1	Matrix Solid	Method I	Prep Batch
240-136127-2	WGWC-19 89-90	Step 1	Solid	Exchangeable	
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	Exchangeable	
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	Exchangeable	
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	Exchangeable	

Prep Batch: 43133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 1	Solid	3010A	43060
240-136127-2	WGWC-19 89-90	Step 1	Solid	3010A	43060
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	3010A	43060
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	3010A	43060
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	3010A	43060

SEP Batch: 43447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 2	Solid	Carbonate	
240-136127-2	WGWC-19 89-90	Step 2	Solid	Carbonate	
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	Carbonate	
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	Carbonate	
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	Carbonate	

Prep Batch: 43460

Lab Sample ID 240-136127-1	Client Sample ID WGWC-19 87-88	Prep Type Step 2	Matrix Solid	Method 3010A	Prep Batch 43447
240-136127-2	WGWC-19 89-90	Step 2	Solid	3010A	43447
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	3010A	43447
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	3010A	43447
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	3010A	43447

SEP Batch: 43465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Ba
240-136127-1	WGWC-19 87-88	Step 3	Solid	Non-Crystalline
240-136127-2	WGWC-19 89-90	Step 3	Solid	Non-Crystalline
MB 140-43465/14-B	Method Blank	Step 3	Solid	Non-Crystalline
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	Non-Crystalline
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	Non-Crystalline

Prep Batch: 43495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 3	Solid	3010A	43465
240-136127-2	WGWC-19 89-90	Step 3	Solid	3010A	43465
MB 140-43465/14-B	Method Blank	Step 3	Solid	3010A	43465

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QC Association Summary

Client: Southern Company

Project/Site: Plant Wansley GW7327

Metals (Continued)

Pren	Batch:	43495	(Continued)
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	3010A	43465
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	3010A	43465

SEP Batch: 43496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Ba	atch
240-136127-1	WGWC-19 87-88	Step 4	Solid	Metal Hydroxide	
240-136127-2	WGWC-19 89-90	Step 4	Solid	Metal Hydroxide	
MB 140-43496/14-B	Method Blank	Step 4	Solid	Metal Hydroxide	
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	Metal Hydroxide	
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	Metal Hydroxide	

Prep Batch: 43539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 4	Solid	3010A	43496
240-136127-2	WGWC-19 89-90	Step 4	Solid	3010A	43496
MB 140-43496/14-B	Method Blank	Step 4	Solid	3010A	43496
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	3010A	43496
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	3010A	43496

SEP Batch: 43540

Lab Sample ID 240-136127-1	Client Sample ID WGWC-19 87-88	Prep Type Step 5	Matrix Solid	Method Organic-Bound	Prep Batch
240-136127-2	WGWC-19 89-90	Step 5	Solid	Organic-Bound	
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	Organic-Bound	
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	Organic-Bound	
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	Organic-Bound	

Prep Batch: 43604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 5	Solid	3010A	43540
240-136127-2	WGWC-19 89-90	Step 5	Solid	3010A	43540
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	3010A	43540
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	3010A	43540
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	3010A	43540

SEP Batch: 43605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 6	Solid	Acid/Sulfide	
240-136127-2	WGWC-19 89-90	Step 6	Solid	Acid/Sulfide	
MB 140-43605/14-A	Method Blank	Step 6	Solid	Acid/Sulfide	
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	Acid/Sulfide	
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	Acid/Sulfide	

Prep Batch: 43637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 7	Solid	Residual	
240-136127-2	WGWC-19 89-90	Step 7	Solid	Residual	
MB 140-43637/14-A	Method Blank	Step 7	Solid	Residual	
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	Residual	
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	Residual	

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Job ID: 240-136127-2

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QC Association Summary

Client: Southern Company Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Metals

Analysis Batch: 43944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 1	Solid	6010B SEP	43133
240-136127-1	WGWC-19 87-88	Step 2	Solid	6010B SEP	43460
240-136127-1	WGWC-19 87-88	Step 3	Solid	6010B SEP	43495
240-136127-2	WGWC-19 89-90	Step 1	Solid	6010B SEP	43133
240-136127-2	WGWC-19 89-90	Step 2	Solid	6010B SEP	43460
240-136127-2	WGWC-19 89-90	Step 3	Solid	6010B SEP	43495
MB 140-43060/14-B ^4	Method Blank	Step 1	Solid	6010B SEP	43133
MB 140-43447/14-B ^3	Method Blank	Step 2	Solid	6010B SEP	43460
MB 140-43465/14-B	Method Blank	Step 3	Solid	6010B SEP	43495
LCS 140-43060/15-B ^5	Lab Control Sample	Step 1	Solid	6010B SEP	43133
LCS 140-43447/15-B ^5	Lab Control Sample	Step 2	Solid	6010B SEP	43460
LCS 140-43465/15-B	Lab Control Sample	Step 3	Solid	6010B SEP	43495
LCSD 140-43060/16-B ^5	Lab Control Sample Dup	Step 1	Solid	6010B SEP	43133
LCSD 140-43447/16-B ^5	Lab Control Sample Dup	Step 2	Solid	6010B SEP	43460
LCSD 140-43465/16-B	Lab Control Sample Dup	Step 3	Solid	6010B SEP	43495

Analysis Batch: 43997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 4	Solid	6010B SEP	43539
240-136127-1	WGWC-19 87-88	Step 5	Solid	6010B SEP	43604
240-136127-1	WGWC-19 87-88	Step 6	Solid	6010B SEP	43605
240-136127-2	WGWC-19 89-90	Step 4	Solid	6010B SEP	43539
240-136127-2	WGWC-19 89-90	Step 5	Solid	6010B SEP	43604
240-136127-2	WGWC-19 89-90	Step 6	Solid	6010B SEP	43605
MB 140-43496/14-B	Method Blank	Step 4	Solid	6010B SEP	43539
MB 140-43540/14-B ^5	Method Blank	Step 5	Solid	6010B SEP	43604
MB 140-43605/14-A	Method Blank	Step 6	Solid	6010B SEP	43605
LCS 140-43496/15-B	Lab Control Sample	Step 4	Solid	6010B SEP	43539
LCS 140-43540/15-B ^5	Lab Control Sample	Step 5	Solid	6010B SEP	43604
LCS 140-43605/15-A	Lab Control Sample	Step 6	Solid	6010B SEP	43605
LCSD 140-43496/16-B	Lab Control Sample Dup	Step 4	Solid	6010B SEP	43539
LCSD 140-43540/16-B ^5	Lab Control Sample Dup	Step 5	Solid	6010B SEP	43604
LCSD 140-43605/16-A	Lab Control Sample Dup	Step 6	Solid	6010B SEP	43605

Analysis Batch: 44042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 7	Solid	6010B SEP	43637
240-136127-1	WGWC-19 87-88	Total/NA	Solid	6010B	43059
240-136127-2	WGWC-19 89-90	Step 7	Solid	6010B SEP	43637
240-136127-2	WGWC-19 89-90	Total/NA	Solid	6010B	43059
MB 140-43059/14-A	Method Blank	Total/NA	Solid	6010B	43059
MB 140-43637/14-A	Method Blank	Step 7	Solid	6010B SEP	43637
LCS 140-43059/15-A	Lab Control Sample	Total/NA	Solid	6010B	43059
LCS 140-43637/15-A	Lab Control Sample	Step 7	Solid	6010B SEP	43637
LCSD 140-43059/16-A	Lab Control Sample Dup	Total/NA	Solid	6010B	43059
LCSD 140-43637/16-A	Lab Control Sample Dup	Step 7	Solid	6010B SEP	43637

Analysis Batch: 44106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Sum of Steps 1-7	Solid	6010B SEP	
240-136127-2	WGWC-19 89-90	Sum of Steps 1-7	Solid	6010B SEP	

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Client: Southern Company

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-19 87-88

Date Collected: 09/03/20 13:00 Date Received: 09/04/20 11:00

Lab Sample ID: 240-136127-1

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1	44106	11/02/20 10:26	DKW	TAL KNX

Client Sample ID: WGWC-19 87-88

Date Collected: 09/03/20 13:00 Date Received: 09/04/20 11:00

Lab Sample ID: 240-136127-1 **Matrix: Solid**

Percent Solids: 97.1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		1	44042	10/29/20 14:47	KNC	TAL KNX
Step 1	SEP	Exchangeable			43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis	6010B SEP		4	43944	10/27/20 13:00	KNC	TAL KNX
Step 2	SEP	Carbonate			43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis	6010B SEP		3	43944	10/27/20 14:41	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis	6010B SEP		1	43944	10/27/20 16:13	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis	6010B SEP		1	43997	10/28/20 12:52	KNC	TAL KNX
Step 5	SEP	Organic-Bound			43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis	6010B SEP		5	43997	10/28/20 14:35	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis	6010B SEP		1	43997	10/28/20 16:07	KNC	TAL KNX
Step 7	Prep	Residual			43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis	6010B SEP		1	44042	10/29/20 12:57	KNC	TAL KNX

Clie

Date

Date Received: 09/04/20 11:00

ient Sample ID: WGWC-19 89-90	Lab Sample ID: 240-136127-2
te Collected: 09/03/20 13:05	Matrix: Solid

Batch Batch Dilution Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab TAL KNX Sum of Steps 1-7 Analysis 6010B SEP 44106 11/02/20 10:26 DKW

Client Sample ID: WGWC-19 89-90

Date Collected: 09/03/20 13:05

Date Received: 09/04/20 11:00

Lab Sample ID: 240-136127-2 **Matrix: Solid**

Percent Solids: 96.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	Total			43059	09/28/20 08:00	KNC	TAL KNX
Total/NA	Analysis	6010B		1	44042	10/29/20 14:53	KNC	TAL KNX
Step 1	SEP	Exchangeable			43060	09/28/20 08:00	KNC	TAL KNX
Step 1	Prep	3010A			43133	09/29/20 08:00	KNC	TAL KNX
Step 1	Analysis	6010B SEP		4	43944	10/27/20 13:04	KNC	TAL KNX

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Lab Chronicle

Client: Southern Company Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-19 89-90

Lab Sample ID: 240-136127-2 Date Collected: 09/03/20 13:05 **Matrix: Solid** Date Received: 09/04/20 11:00

Percent Solids: 96.3

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Step 2	SEP	Carbonate			43447	10/12/20 10:01	KNC	TAL KNX
Step 2	Prep	3010A			43460	10/13/20 08:00	KNC	TAL KNX
Step 2	Analysis	6010B SEP		3	43944	10/27/20 14:46	KNC	TAL KNX
Step 3	SEP	Non-Crystalline			43465	10/13/20 08:00	KNC	TAL KNX
Step 3	Prep	3010A			43495	10/14/20 08:00	KNC	TAL KNX
Step 3	Analysis	6010B SEP		1	43944	10/27/20 16:27	KNC	TAL KNX
Step 4	SEP	Metal Hydroxide			43496	10/14/20 08:00	KNC	TAL KNX
Step 4	Prep	3010A			43539	10/15/20 08:00	KNC	TAL KNX
Step 4	Analysis	6010B SEP		1	43997	10/28/20 12:57	KNC	TAL KNX
Step 5	SEP	Organic-Bound			43540	10/15/20 08:00	KNC	TAL KNX
Step 5	Prep	3010A			43604	10/19/20 08:00	KNC	TAL KNX
Step 5	Analysis	6010B SEP		5	43997	10/28/20 14:40	KNC	TAL KNX
Step 6	SEP	Acid/Sulfide			43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis	6010B SEP		1	43997	10/28/20 16:26	KNC	TAL KNX
Step 7	Prep	Residual			43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis	6010B SEP		1	44042	10/29/20 13:02	KNC	TAL KNX

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: Southern Company

Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	Identification Number	Expiration Date
	AFCEE	N/A	
ANAB	Dept. of Defense ELAP	L2311	02-13-22
ANAB	Dept. of Energy	L2311.01	02-13-22
ANAB	ISO/IEC 17025	L2311	02-13-22
ANAB	ISO/IEC 17025	L2311	02-14-22
Arkansas DEQ	State	88-0688	06-17-21
California	State	2423	06-30-21
Colorado	State	TN00009	02-28-21
Connecticut	State	PH-0223	09-30-21
Florida	NELAP	E87177	07-01-21
Georgia (DW)	State	906	12-11-22
Hawaii	State	NA	12-11-21
Kansas	NELAP	E-10349	11-01-20 *
Kentucky (DW)	State	90101	01-01-21
Louisiana	NELAP	LA110001	12-31-12 *
Louisiana	NELAP	83979	06-30-21
Louisiana (DW)	State	LA019	12-31-20
Maryland	State	277	03-31-21
Michigan	State	9933	12-11-22
Nevada	State	TN00009	07-31-21
New Hampshire	NELAP	299919	01-17-21
New Jersey	NELAP	TN001	07-01-21
New York	NELAP	10781	03-31-21
North Carolina (DW)	State	21705	07-31-21
North Carolina (WW/SW)	State	64	12-31-20
Ohio VAP	State	CL0059	06-02-23
Oklahoma	State	9415	08-31-21
Oregon	NELAP	TNI0189	01-02-21
Pennsylvania	NELAP	68-00576	12-31-20
Tennessee	State	02014	12-11-22
Texas	NELAP	T104704380-18-12	08-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-19-00236	08-20-22
Utah	NELAP	TN00009	07-31-21
Virginia	NELAP	460176	09-14-21
Washington	State	C593	01-19-21
West Virginia (DW)	State	9955C	01-01-21
West Virginia DEP	State	345	05-01-21
Wisconsin	State	998044300	08-31-21

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins TestAmerica, Canton

N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Ma2SO3
S - H2SO4
T - TSP Dodecahydrate Environment Testing perform particle size reduction as needed to ensure homogeneous sample is analyzed Special Instructions/Note: U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Months Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

EX Jarchive For 2 Mon Special Instructions/QC Requirements: see special note above seurofins : C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ametilor H - Ascorbic Acid 1/00 I - Ice J - DI Water K - EDTA L - EDA COC No Total Number of containers Date/Time: Method of Shipment: Carrier Tracking No(s 240-136127 Chain of Custody Analysis Requested Cooler Temperature(s) C and Other Remarks. Chain of Custody Record $\lambda \alpha/3.5$ shali.brown@testamericainc.com Sequential Extraction - Lithium 13 Received by Lab PM: Brown, Shali (ON TO BOY) GRMSM E-Mail. Preservation Code: (Wawater, Sepolid, Oewasteroll, BTeTissue, A=Air) Company Type (C=comp, G=grab) Radiological Sample 5 3 day RUSH 1.4 Sample 305 9.3.201300 Unknown Date: TAT Requested (days): Due Date Requested: Phone: 205-657-5949 Sample Date Project #: 18019922 Will Burke WO #: Poison B curonns restamenta, cambineto anunei 06, 81-88 Skin Irritant CX] Non-Hazard Flammable Skin Irrita Deliverable Requested: I(DNII, IV, Other (specify) Custody Seal No.: N77WC-19 1255 Roberts Blvd NW, Suite 200 Possible Hazard Identification 1600 North Canton, OH 44720-6900 Empty Kit Relinquished by: 4101 Shuffel Street NW Client Information Sample Identification Phone (330) 497-9396 Custody Seals Intact: A Yes A No Plant Wansley 678-202-9564 linquished by: elinquished by: Adria Reimer dinquished by: State, Zip: GA 30144 Geosyntec Kennesaw GW7327

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11/10/2020

Eurofins TestAmerica Canton Sample Receipt Form/Narrative	Login#: 136127
Canton Facility	Logii # . (30121
Client GCOSYteC Site Name	Cooler unpacked by:
Cooler Received on 9-4-20 Opened on 9-4-20	mathanal
FedEx: 1st Grd Exp) UPS FAS Clipper Client Drop Off TestAmerica Courier	Other
Receipt After-hours: Drop-off Date/Time Storage Location	Other
TestAmerica Cooler # Foam Box Client Cooler Box Other	
Packing material used: Bubble Wrap, Foam Plastic Bag None Other	
COOLANT: Wet Ice Blue Ice Dry Ice Water None	
1. Cooler temperature upon receipt	
IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. °C Corrected Cooler IR GUN #IR-11 (CF +0.9 °C) Observed Cooler Temp. °C Corrected Cooler	
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity \ Xe	s) No
-Were the seals on the outside of the cooler(s) signed & dated?	
	s No
	s) No NA
3. Shippers' packing slip attached to the cooler(s)?	
 4. Did custody papers accompany the sample(s)? 5. Were the custody papers relinquished & signed in the appropriate place? 	lests that are not
	checked for ph by
	No Receiving:
	No VOAs
The state of the s	No Oil and Grease
	No TOC
11. Are these work share samples?	s No
If yes, Questions 12-16 have been checked at the originating laboratory.	
12. Were all preserved sample(s) at the correct pH upon receipt?	
	s No
	s No NA)
	s No
16. Was a LL Hg or Me Hg trip blank present?Ye	s INC
Contacted PM Date by via Verbal \	Voice Mail Other
Concerning	
	,
17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by:
18. SAMPLE CONDITION	
Sample(s) were received after the recommended hold	ing time had expired.
	d in a broken container.
Sample(s) were received with bubble >6 mm	The state of the s
19. SAMPLE PRESERVATION	
Sample(s) were fu Time preserved: Preservative(s) added/Lot number(s):	rther preserved in the laboratory.
reservative(s) added/Lot number(s):	
VOA Sample Preservation - Date/Time VOAs Frozen:	

WI-NC-099

Date/Time:

Cooler Temperature(s) °C and Other Remarks:

Received by:

Date/Time:

Custody Seal No.:

Custody Seals Intact: △ Yes △ No

Company Company

Chain of Custody Record

Eurofins TestAmerica, Canton

4101 Shuffel Street NW

North Canton, OH 44720 Phone: 330-497-9396 Fax: 330-497-0772

Environment Testing America

	Sampler:	Lab PM:					Carri	Carrier Tracking No(s):	No(s):		COC No:	
Client Information (Sub Contract Lab)		Brown, Shali	ali					ļ			240-124993.1	
Client Contact: Shipping/Receiving	Phone:	E-Mail: Shali.Brown@Eurofinset.com	n@Euro	finset.cc	Ę		State	State of Origin: Georgia			Page: Page 1 of 1	
Company: TestAmerica I aboratories Inc		Accrec	Accreditations Required (See note):	quired (S	e note):						Job #: 240_136127_2	
, on the state of	Contraction Contraction in										2-171001-0-7	
Address: 5815 Middlebrook Pike, ,	Due Date Requested: 9/22/2020				Analysis	sis Re	Requested	ted			Preservation Codes:	odes:
City: Knoxville	TAT Requested (days):		2002004			(uW					B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zjo: TN, 37921			· CANDED SO			pus 94	-				D - Nitric Acid E - NaHSO4	P - Na204S Q - Na2SO3
Phone: 865-291-3000(Tel) 865-584-4315(Fax)	PO#:	(0		g dəş		l sA) si	C dete	9 (F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S203 S - H2S04 T - TSP Dodecabydrate
Email:	WO#:		s (dol	NOD)				jejč (O		S		
Project Name: CCR - Plant Wansley	Project #: 18019922		N) †OS	A) etele				ow) p		ieineir	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#:		BM_1¶	xO_£9				loA_8q		100 10	Other:	
Sample identification - Client ID (Lab ID)	Sample Date Time G=crab)	Matrix 60 % (W-water, 111 E S=5016, 00 % O=10 C S=10 6010B_SEP/SE	8010B_SEP/SE	9010B_SEP/SE	6010B_SEP_Ca	010B_SEP/SE	2010B_SEP/SE		Total Number		Special Instructions/Note:	
	Preserva	X)	\$500 8800	200 St.	900 SA	,		X		
WGWC-19 87-88 (240-136127-1)	9/3/20 13:00 Eastern	Solid	×	×	×	×	×	×		<u>.</u>		
WGWC-19 89-90 (240-136127-2)	9/3/20 13:05 Eastern	Solid	×	×	×	×	×	×		5		
											- September 1	
NO CUSTONY SEALS												
ABGENYED AT ET 0.6/CT 0.6'C												
00. 4-10-2)						L1						:
LODGE FRIX# 9HR75012510 PD												
							40-13	240-136127 Chain of Custody	ain of (ustody		
Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. The series of Origin listed above for analysis/hests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreatration asserted accreatrations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.	ca places the ownership of method, analyte & accre teing analyzed, the samples must be shipped back of alse, return the signed Chain of Custody attesting t	ditation compliance L to the Eurofins Test said complicance to	pon out su America la Eurofins	tbcontract boratory o TestAmer	laborato r other in ca.	ies. 11113 structions	will be	orovided. A	λην chang	es to accre	Official States with	iboratory does not currently be brought to Eurofins
Possible Hazard Identification Unconfirmed		es	mple Di	l e Disposal (A f Return To Client	A fee ent	nay be	asses Dispos	assessed if sar Disposal By Lab	mples	are retain	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Mont	1 month) Months
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	ග්	Special Instructions/QC Requirements:	tructions	/QC Re	quirem	ents:					
Empty Kit Relinquished by:	Date:	Time:						Method of Shipment:	Shipment		!	
Relinquished by: C. Benth	-20 1620	Cómpány 240	Received by:	Sa's	AND E				Pate/Time: 9-10-30		0.30	Company FTA KUX
Relinquished by:	Date/Time: Cc	Company	Received by:	l by:\	•	,			Date/Time	÷		Company

elinquished by:

Log In Number:

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

1. Are the stuping containers intact? 1. Containers, Breken 2. Were ambient air containers received intact? 1. Cleaced in lab 3. The coolers devokative received intact? 1. Cleaced in lab 4. In the cooler devokative received intact? 1. Containers, Improper; Client 6. Were sample step or containers received intact? 1. Containers, Improper; Client 6. Were sample containers received intact? 1. Containers, Improper; Client 6. Were sample containers received intact? 1. Containers, Improper; Client 6. Were sample containers received intact? 1. Containers, Improper; Client 6. Were sample received in appropriate containers 1. Containers, Improper; Client 6. Were sample received in the COC? 1. Containers, Improper; Client 1. Do sample container table in match to COC? 1. CoC Sample Received, Not on COC 1. Do sample received on the COC? 1. Sample modes; Intensified on the COC? 1. Do sample received with correct direction noted? 1. CoC No leaver (Lent and project name/# identified?) 1. CoC No leaver (Lent and project name/# identified?) 1. CoC No leaver (Lent and project name/# identified?) 1. CoC No leaver (Lent and project name/# identified?) 1. CoC No leaver (Lent and project name/# identified?) 1. CoC No leaver (Lent and project name/# identified?) 1. CoC	Review Items	Yes	NA NA	If No, what was the problem?	Comments/Actions Taken	en
supplest air containers received innex? Cooler Vot off Temp, Client	1. Are the shipping containers intact?	\	_	☐ Containers, Broken		
cooler temperature within limits? (> freezing Contacted, Proceed/Cancel Contacted, Cancel Ca	2. Were ambient air containers received intact?		\	☐ Checked in lab		
Cooler Out of Temp, Client	3. The coolers/containers custody seal if present, is it intact?			□ Yes □ NA		
Cooler Out of Temp, Same Day Receipt	4. Is the cooler temperature within limits? (> freezing temp. of water to 6° C, VOST: 10° C)			☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel		
Containers, Broken	Thermometer ID: 50.08 Correction factor: 0.0			☐ Cooler Out of Temp, Same Day Receint		
Containers, Improper; Client	5. Were all of the sample containers received intact?	\ \ \		□ Containers, Broken		
COC & Samples Do Not Match COC Incorrect/Incomplete COC Incorrec	6. Were samples received in appropriate containers?	\		☐ Containers, Improper; Client Contacted: Proceed/Cancel		
COC Incorrect/Incomplete	7. Do sample container labels match COC?			☐ COC & Samples Do Not Match		
COC, Not Received	(IDs, Dates, Times)			☐ COC Incorrect/Incomplete		
Sample on COC, Not Received Contacted	8 Were all of the samples listed on the COC received?					
COC; No Date/Time; Client Contacted Contacted Contacted Contacted Contacted Contacted Contacted Contacted CoC Incorrect/Incomplete DH test strip lot number: COC Incorrect/Incomplete DH test strip lot number: COC Incorrect/Incomplete Preservation COC Incorrect/Incomplete Preservation COC Incorrect/Incomplete Preservation DH Adjusted, pH Included Cot Number: Cot Dee box 16A) Cot Date: Cot						
Contacted Contacted	9. Is the date/time of sample collection noted?			☐ COC; No Date/Time; Client		
COC Incorrect/Incomplete DH test strip lot number: COC Incorrect/Incomplete DH test strip lot number: COC Incorrect/Incomplete Box 16A: pH COC Incorrect/Incomplete Box 16A: pH COC Incorrect/Incomplete Box 16A: pH DH Adjusted, pH Included Exp Date: Coc Incorrect Preservative Date: Coc Incor				Contacted		ate:
COC Incorrect/Incomplete DH test strip lot number: COC No tests on COC	10. Was the sampler identified on the COC?		\	☐ Sampler Not Listed on COC		
COC Incorrect/Incomplete Box 16A: pH	11. Is the client and project name/# identified?	\		□ COC Incorrect/Incomplete	pH test strip lot number:	
COC Incorrect/Incomplete Box 16A: pH	12. Are tests/parameters listed for each sample?	//				
COC Incorrect/Incomplete Box 16A: pH	13. Is the matrix of the samples noted?	//				
Company Comp	14. Was COC relinquished? (Signed/Dated/Timed)			☐ COC Incorrect/Incomplete	PH fion	Box 18A: Residual Chlorine
DH Adjusted, pH Included Lot Number: (See box 16A) Exp Date:	15. Were samples received within holding time?			☐ Holding Time - Receipt		-
(See box 16A) Exp Date: ut headspace? Incorrect Preservative Analyst: the cessary? Residual Chlorine	16. Were samples received with correct chemical			☐ pH Adjusted, pH Included	Lot Number:	
ut headspace? Ut headspace? Ut headspace (VOA only) Date: Residual Chlorine Time: If no, notify lab to adjust Project missing info Instructions:	preservative (excluding Encore)?		`	(See box 16A)	Exp Date:Analyst:	
if necessary? Ime: Residual Chlorine Inne:	17. Were VOA samples received without headspace?		_	☐ Headspace (VOA only)	Date:	
y info. Provided? If no, notify lab to adjust If no, notify lab to adjust Instructions: Date: 4-10-2	18. Did you check for residual chlorine, if necessary?			☐ Residual Chlorine	Lime:	
y info. Provided?	(e.g. 1615B, 1668) Chlorine test strip lot number:					
V info. Provided?	19. For 1613B water samples is pH<9?		/	☐ If no, notify lab to adjust		
PM Instructions: Compared Date: G-10.2 Date: G-10.2	20. For rad samples was sample activity info. Provided?			☐ Project missing info		
Prophilaman Date: 9-10-2)			i			
Prespail and Date: 9-10-2)						
-	hanny	\$	Date:	4-10-20	QA026R32.doc	c, 062719