Prepared for



#### **Georgia Power Company**

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# 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT WANSLEY ASH POND 1 (AP-1)

Prepared by



engineers | scientists | innovators

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Project Number GW7327

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#### **CERTIFICATION STATEMENT**

This 2021 Annual Groundwater Monitoring and Corrective Action Report, 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 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.



Adria L. Reimer Georgia Professional Geologist No. 2004 <u>January 31, 2022</u>

Date

#### **SUMMARY**

This summary of the 2021 Annual Groundwater Monitoring and Corrective Action Report provides the status of groundwater monitoring and corrective action program for the reporting period of January through December 2021 (referred to herein as the 2021 reporting period) at Georgia Power Company's (Georgia Power's) Plant Wansley Ash Pond 1 (AP-1) (the Site). This summary was prepared by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6<sup>1</sup> of the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) (40 Code of Federal Regulations [CFR] 257 Subpart D).

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. AP-1 is a 343-acre surface impoundment located northwest of the plant, which was designed to receive and store CCR materials. AP-1 began receiving process water containing fly ash and bottom ash in 1976.



Plant Wansley and the Site

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

Groundwater at the Site is monitored using a comprehensive well network that meets 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 2021 reporting period, the Site remained in assessment monitoring.

During the 2021 reporting period, Geosyntec conducted three groundwater sampling events in February, March and August 2021. Groundwater samples collected during the 2021 reporting period were submitted to Eurofins TestAmerica, Inc. for analysis. Per the federal CCR Rule, groundwater data from the semiannual assessment monitoring events conducted in March and August 2021 were evaluated in accordance with the certified

<sup>&</sup>lt;sup>1</sup> 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



statistical methods. The evaluations identified statistically significant values of select Appendix III<sup>2</sup> and Appendix IV<sup>3</sup> constituents in excess of state and federal groundwater protection standards in select monitoring wells, as summarized in the table below for the 2021 reporting period.

Appendix III Constituent	March 2021	August 2021				
Boron	WGWC-8, WGWC-9, WGWC-16	WGWC-8, WGWC-9, WGWC-16				
Calcium	WGWC-8	WGWC-8				
Chloride	WGWC-8, WGWC-16	WGWC-8, WGWC-16				
Fluoride	WGWC-9, WGWC-15, WGWC-19	WGWC-9, WGWC-15, WGWC-19				
Sulfate	WGWC-8, WGWC-9, WGWC-16	WGWC-8, WGWC-9, WGWC-16				
Total Dissolved Solids	WGWC-8	WGWC-8, WGWC-16				
Appendix IV Constituent <sup>4</sup>	March 2021	August 2021				
Lithium	State only: WGWC-8, WGWC-9 Federal and State: WGWC-19	State only: WGWC-8, WGWC-9 Federal and State: WGWC-19				

An Alternate Source Demonstration (ASD)<sup>5</sup> was submitted that presents multiple lines of evidence that the lithium groundwater concentrations detected at WGWC-8, WGWC-9, and WGWC-19 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.

Based on review of the Appendix III and Appendix IV statistical results completed for the groundwater monitoring and corrective action program for the 2021 reporting period, the Site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to Georgia Power's CCR Rule Compliance website and provided to GA EPD semiannually.

<sup>&</sup>lt;sup>2</sup> Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS)

 $<sup>^3</sup>$  Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228

<sup>&</sup>lt;sup>4</sup> A state statistically significant level (SSL)-related constituent is determined by comparing the confidence intervals developed to either the constituent's maximum contaminant level (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 Regional Screening Level, if no MCL is available, or the calculated background interwell prediction limit.

<sup>&</sup>lt;sup>5</sup> An ASD was submitted in January 2019 (ACC, 2019b). An Addendum to the ASD was submitted in November 2020 (Geosyntec, 2020) and revised in February 2021 (Geosyntec, 2021b).



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



#### LIST OF ACRONYMS AND ABBREVIATIONS

ACC Atlantic Coast Consulting, Inc.

AP-1 Ash Pond 1

ASD Alternate Source Demonstration

CCR coal combustion residuals
CFR Code of Federal Regulations

cm/sec centimeters per second DO dissolved oxygen

ERM Environmental Resources Management

Eurofins Eurofins TestAmerica, Inc. ft bgs feet below ground surface

ft/day feet per day ft/ft feet per foot

GA EPD Georgia Environmental Protection Division

Georgia Power Georgia Power Company
Geosyntec Geosyntec Consultants, Inc.
GSC Groundwater Stats Consulting
GWPS Groundwater Protection Standard
HAR Hydrogeologic Assessment Report

i horizontal hydraulic gradient
 Kh horizontal hydraulic conductivity
 MCL Maximum Contaminant Level

mg/L milligram per liter  $n_e$  effective porosity

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 SSI statistically significant increase SSL statistically significant level

s.u. standard unit

TDS total dissolved solids

Unified Guidance Statistical Analysis of Groundwater Data at RCRA Facilities Unified

Guidance

USEPA United States Environmental Protection Agency

#### 1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residual Rule (federal CCR Rule) [40 Code of Federal Regulations (CFR) Part 257, Subpart D] and the Georgia Environmental Protection Division (GA EPD) Rules for Solid Waste Management 391-3-4-.10, Geosyntec Consultants, Inc. (Geosyntec) has prepared this 2021 Annual Groundwater Monitoring and Corrective Action Report to document groundwater monitoring activities conducted at Georgia Power Company (Georgia Power) Plant Wansley (Site) Ash Pond 1 (AP-1) for the reporting period of January through December 2021 (referred to herein as the 2021 reporting period).

Groundwater monitoring and reporting for the CCR unit is performed in accordance with the monitoring requirements of § 257.90 through 257.95 of the federal CCR Rule, and GA EPD Rules for Solid Waste Management 391-3-4-.10(6). To specify groundwater monitoring requirements, GA EPD rule 391-3-4-.10(6)(a) incorporates by reference the federal CCR Rule. For ease of reference, the federal CCR Rule is cited within this report in lieu of citing both sets of regulations.

#### 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. A CCR permit application to comply with GA EPD Rules was submitted to GA EPD in November 2018 and is currently under review.

#### 1.2 Regional Geology and 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 in support of the closure permit application.

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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 upper 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 graphitic schist, muscovite schist, biotite schist, schist with interlayered mafic units, amphibolite/hornblende gneiss, granitic gneiss, and feldspathic quartzite 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. The uppermost aquifer at AP-1 occurs primarily in PWR and fractured bedrock. 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. Because of the steep topography at the Site and variable lithologic framework, the depth to the water table is variable, ranging from approximately 1 to 50 feet below ground surface (ft bgs). The regional groundwater flow direction is expected to be to the southeast; however, in topographically high areas south of AP-1, shallower water table

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elevations are noted within the saprolite and PWR, and hydraulic gradients indicate localized flow northward (or inward) toward the pond.

Groundwater in the saprolite and PWR is hydraulically connected to the bedrock via fractures and deeply weathered areas of the rock. Recharge is by precipitation infiltrating through the saprolite to the bedrock. Based on observations of soil types and horizontal conductivity values, the movement of groundwater in the saprolite is very slow and likely acts as flow through a low-permeability porous media. Groundwater flow in the PWR and the transition zone between the PWR and the fractured bedrock is expected to be greater than in the overlying saprolite and the underlying fractured bedrock. Groundwater flow in the bedrock is restricted entirely to flow through fractures. Visual observations and geophysical logging during field investigations indicate a trend of decreasing fracture aperture 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 consists of a sufficient number of wells installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer to represent 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 compliance well network was expanded during the 2021 reporting period to incorporate six piezometers (PZ-22, PZ-23S, PZ-24, PZ-25S, PZ-26S, and PZ-27S) installed in 2020. These piezometers were reclassified as compliance wells WGWC-20 through WGWC-25, respectively. These wells supplement the monitoring network near the southeast corner of AP-1 (WGWC-20 through WGWC-22), south of AP-1 (WGWC-23), and near the southwest end of AP-1 (WGWC-24 and WGWC-25). Incorporation of these locations into the compliance monitoring well network was based on site-specific hydrogeologic conditions, groundwater flow direction, well location and depth, as well as review of analytical results of groundwater samples collected in February and March 2021 discussed in Sections 2.2 and 2.3.

Piezometers and characterization wells 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 locations of the compliance monitoring wells, piezometers,



and characterization wells 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 the 2021 reporting period and discusses any changes in status of the monitoring program. Groundwater sampling was performed in accordance with § 257.93.

#### 2.1 Monitoring Well Installation and Maintenance

No additional monitoring wells were installed during the 2021 reporting period. As discussed in Section 1.3, six piezometers installed in 2020 were reclassified as compliance wells WGWC-20 through WGWC-25.

Monitoring wells, piezometers, and characterization wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In March 2021 and August 2021, wells and piezometers were inspected, necessary corrective actions were identified and subsequently completed, as documented in the *Well Maintenance and Repair Documentation Memorandum* provided in **Appendix A**. This documentation will serve as the required five year well inspection and was performed under the direction of a professional geologist or engineer registered in the State of Georgia.

#### 2.2 Assessment Monitoring

Georgia Power initiated an assessment monitoring program for groundwater at AP-1 in January 2018. Statistical analyses of the 2018 assessment monitoring data identified an SSL of lithium in compliance monitoring wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19 in excess of the federal and state groundwater protection standards (GWPS).

During the 2021 reporting period, compliance monitoring wells WGWA-1 through WGWC-19 were sampled in February, March, and August 2021 in support of the assessment monitoring program. Samples collected during the annual Appendix IV sampling event in February 2021 were analyzed only for Appendix IV constituents, whereas samples collected during the semiannual assessment monitoring events in March and August 2021 were analyzed for the complete list of Appendix III constituents and the Appendix IV constituents detected during the February 2021 event.

At the request of GA EPD, groundwater samples were collected in March and April 2021 from piezometers PZ-22, PZ-23S, PZ-24, PZ-25S, PZ-26S, and PZ-27S and analyzed for

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Appendix III constituents and the Appendix IV constituent lithium. As noted previously in Section 1.3, these piezometers were reclassified as compliance monitoring wells WGWC-20 through WGWC-25. Groundwater samples collected during the August 2021 sampling event from compliance monitoring wells WGWC-20 through WGWC-25 were analyzed for the complete list of Appendix III and Appendix IV constituents.

The number of groundwater samples collected for analysis and the dates the samples were collected at AP-1 during the 2021 reporting period in support of the assessment monitoring program are summarized in **Table 2**. The analytical and statistical results of the events conducted during the 2021 reporting period are discussed in Sections 3 and 4, respectively.

#### 2.3 Additional Groundwater Sampling

At the request of GA EPD, groundwater samples were collected in March and April 2021 from piezometers PZ-23D, PZ-26D, PZ-27D, PZ-28, and PZ-29D for laboratory analysis of Appendix III constituents to provide additional data to characterize groundwater quality south and southeast of AP-1. During the March 2021 groundwater sampling event, supplemental groundwater samples were collected from the compliance monitoring well network and from piezometers installed in 2020 for laboratory analysis for major cations (calcium, magnesium, potassium, and sodium) and anions (chloride, sulfate, and bicarbonate alkalinity), as well as iron, manganese, and sulfide. Major cation and anion data collected in March 2021 were used to construct a Piper diagram to evaluate the geochemical composition of the groundwater. The resulting Piper diagram is presented in **Appendix B**, and laboratory reports associated with the additional groundwater sampling completed in March and April 2021 are presented in **Appendix C**.

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#### 3.0 SAMPLING METHODOLOGY AND 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 assessment monitoring program conducted at AP-1 during the 2021 reporting period.

#### 3.1 Groundwater Level Measurement

A synoptic round of depth-to-groundwater-level measurements were recorded from the AP-1 wells and piezometers during the three 2021 site-wide assessment monitoring events and used to calculate the corresponding groundwater elevations, which are presented in **Table 3**. The February, March, and August 2021 elevations reported are generally representative of the groundwater elevations reported for prior monitoring events.

The groundwater elevation data were used to prepare potentiometric surface maps for the February, March, and August 2021 events, which are presented on **Figures 3**, **4**, and **5**, respectively. Groundwater in the AP-1 area flows under the influence of topography and generally flows inward towards AP-1 with a minor component of flow to the southeast from AP-1.

#### 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 August 2021 events. Hydraulic gradients were calculated along the flow path south of AP-1 between PZ-01 and WGWC-17 and between PZ-10 and WGWC-19 along the flow path east of AP-1. The supporting calculations are presented in **Table 4**; the locations of the flow paths used in the calculations and associated potentiometric contour lines are shown on **Figures 3**, **4**, and **5**. The calculated average hydraulic gradient along the southern and eastern flow paths for the 2021 reporting period are 0.086 feet per foot (ft/ft) and 0.090 ft/ft, respectively.

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

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



where:

V = Groundwater flow velocity  $\left(\frac{feet}{day}\right)$   $K_h =$  Horizontal hydraulic conductivity  $\left(\frac{feet}{day}\right)$  i = Horizontal hydraulic gradient  $\left(\frac{feet}{foot}\right) = \frac{h_1 - h_2}{L}$   $h_1$  and  $h_2 =$  Groundwater elevation at location 1 and 2 L = Distance between location 1 and 2  $n_e =$  Effective porosity

The average horizontal hydraulic conductivity (K<sub>h</sub>) for AP-1 of 2.4 x 10<sup>-4</sup> 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 is used to represent average conditions at AP-1, derived based on review of literature (Driscoll, 1986; Freeze and Cherry, 1979), observed site lithology, and professional judgement. With these variables defined, and accounting for the averaged hydraulic gradient discussed above for the three 2021 events, the average calculated flow velocity for the 2021 reporting period was approximately 0.23 ft/day (PZ-01 to WGWC-17) and 0.24 ft/day (PZ-10 to WGWC-19), for an average groundwater flow velocity in the vicinity of AP-1 of 0.24 ft/day.

#### 3.3 Groundwater Sampling Procedures

Groundwater samples were collected 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 based on the groundwater level). Non-dedicated bladder pump and peristaltic pump samples were collected using new disposable polyethylene tubing; all non-dedicated tubing was disposed of following the sampling event. All non-disposable equipment was decontaminated before use and between well locations.

An in-situ water quality field meter (SmarTroll, Aqua TROLL, or similar) was used to monitor and record field water quality parameters [i.e., pH, conductivity, dissolved oxygen (DO), temperature, and oxidation reduction potential (ORP)] during well purging

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

- pH  $\pm$  0.1 standard units (s.u.)
- Conductivity ± 5 %
- $\pm$  0.2 milligrams per liter (mg/L) or  $\pm$  10% (whichever is greater) for DO > 0.5 mg/L. No criterion applies if DO < 0.5 mg/L, record only.
- Turbidity measured less than 5 nephelometric turbidity units (NTU) or measured between 5 and 10 NTU following three hours of purging.

Following purging, and once stabilization was achieved, unfiltered samples were collected into appropriately preserved laboratory-supplied sample containers. Sample bottles were placed in ice-packed coolers and submitted to Eurofins TestAmerica, Inc. (Eurofins) in Pittsburgh, Pennsylvania following chain-of-custody protocol. The field sampling and equipment calibration forms generated during the 2021 reporting period are provided in **Appendix C**.

#### 3.4 Laboratory Analyses

Laboratory analyses were performed by Eurofins, which is accredited by the National Environmental Laboratory Accreditation Program (NELAP). Eurofins maintains a NELAP certification for the Appendix III and Appendix IV constituents analyzed for this project. Analytical methods used for groundwater sample analysis are listed in the analytical laboratory reports included in **Appendix C**.

The groundwater analytical results from the three 2021 assessment monitoring events and two supplementary sampling events are summarized in **Table 5**. The Eurofins laboratory reports associated with the results presented in **Table 5** are provided in **Appendix C**.

#### 3.5 Quality Assurance and Quality Control Summary

Quality assurance/quality control (QA/QC) samples were collected during the groundwater monitoring events at the minimum rate of one set of QA/QC samples per 10 groundwater samples. One set of QA/QC samples included the following: field duplicate, equipment blank (where non-dedicated sampling equipment was used), and field blank

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samples. QA/QC samples were collected in appropriately preserved laboratory-supplied sample containers and submitted under the same chain of custody as the primary samples for analysis of the same constituents by Eurofins.

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 necessary, 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 reports are provided in **Appendix C** with the laboratory reports.

#### 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 GWPS for the Appendix IV constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the 2021 reporting period. The data were analyzed by Groundwater Stats Consulting (GSC); the reports generated from the analyses are provided in **Appendix D**.

#### 4.1 <u>Statistical Methods</u>

Groundwater data from the 2021 assessment monitoring events were statistically analyzed in accordance with the Professional Engineer-certified (PE-certified) Statistical Analysis Method Certification (October 2017, revised January 2020) (ERM, 2017; Atlantic Coast Consulting, Inc. [ACC], 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 assess if Appendix III constituents have returned to background levels. Appendix IV constituents were evaluated to assess 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 reports provided in **Appendix D** and summarized in Sections 4.1.1 and 4.1.2. The GWPS were finalized pursuant to § 257.95(d)(2) and are 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 PLs pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the background limit for each constituent to assess whether there are statistically significant increases (SSIs). An "initial exceedance" occurs when an Appendix III constituent reported in the groundwater of a downgradient compliance monitoring well exceeds the constituent's associated PL.

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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.

#### 4.1.2 Appendix IV Statistical Methods

To statistically compare groundwater data to GWPS, confidence intervals are constructed for each of the detected Appendix IV constituents in each downgradient compliance monitoring well with a data set consisting of a minimum of four samples. In accordance with Section 21.1.1 of the Unified Guidance (USEPA, 2009), four independent data are the minimum population size recommended to construct confidence intervals required to assess statistically significant levels (SSLs) of Appendix IV constituents. Due to nonroutine sampling, some Appendix IV constituents at a well location have differing number of analytical data points. Additionally, at the time of this report, the data set for WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25 is limited to less than four independent analyses for the Appendix IV constituents; and therefore, those constituents are not subject to the statistical analyses.

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, an 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.

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(3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

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

- (1) The federally established MCL.
- (2) Where an MCL has not been established, the background concentration.
- (3) Background levels for constituents where the background level is higher than the MCL.

Following the above federal and state rule requirements, GWPS have been established for statistical comparison of Appendix IV constituents and are presented in **Table 6**.

#### 4.2 <u>Statistical Analyses Results</u>

Based on review of the Appendix III statistical analysis discussion presented in **Appendix D**, groundwater conditions have not returned to background levels and assessment monitoring should continue. Based on the statistical analyses of Appendix IV constituents, the following constituent(s) exceeded the state or federal GWPS for the 2021 reporting period:

#### 4.2.1 March 2021 Semiannual Event

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 2021 SSLs for lithium was placed in the Operating Record on July 30, 2021, pursuant to § 257.95(g).

#### 4.2.2 August 2021 Semiannual Event

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 SSLs of lithium was placed in the Operating Record on January 31, 2022, pursuant to § 257.95(g).

#### 4.2.3 Summary of Statistical Analyses

The SSLs of lithium identified for the 2021 reporting period are consistent with previous reporting periods. As noted in Section 5.0, an ASD and an ASD Addendum have been submitted to GA EPD (ACC, 2019b; Geosyntec, 2021b), which provide lines of evidence to demonstrate that the lithium in groundwater at these wells is naturally-derived from the subsurface rock formations.



#### 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 compliance monitoring wells WGWC-8, WGWC-9, WGWC-10<sup>6</sup>, and WGWC-19 during the 2018 reporting year. In accordance with § 257.95(g)(3), Georgia Power prepared an 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 at wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19 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, 2020) and was provided in the 2020 Annual Groundwater Monitoring and Corrective Action Report (Geosyntec, 2021a). A revised ASD Addendum was submitted to GA EPD under separate cover in February 2021 (Geosyntec, 2021b) and is provided in **Appendix E**. The ASD Addendum presents supplemental data collected since submittal of the ASD, which provide additional lines of evidence to demonstrate that the lithium SSLs identified at AP-1 are associated with naturally occurring lithium within rock formations at the Site.

<sup>&</sup>lt;sup>6</sup> As presented in the ASD Addendum (Geosyntec, 2021b), 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.



#### 6.0 MONITORING PROGRAM STATUS

Based on the statistical analyses results, SSIs of Appendix III constituents were identified for the March and August 2021 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 AND FUTURE ACTIONS

This 2021 Annual Groundwater Monitoring and Corrective Action Report for Plant Wansley AP-1 was prepared to fulfill the requirements of the federal CCR Rule and GA EPD Rules for Solid Waste Management 391-3-4-.10. Statistical analyses of the groundwater monitoring data for AP-1 for the 2021 reporting period identified SSLs of lithium in WGWC-8, WGWC-9, and WGWC-19. The 2018 ASD and 2021 ASD Addendum present multiple lines of evidence that illustrate that lithium SSLs in groundwater at these wells are associated with naturally occurring lithium within rock formations at the Site and are not originating from AP-1.

Georgia Power will continue to monitor the groundwater in the vicinity of AP-1 in accordance with the current assessment monitoring program. The next routine semiannual assessment monitoring event is scheduled for March 2022. The March 2022 semiannual assessment monitoring event will be a combined event to meet the requirements of § 257.95(b) and § 257.95 (d)(1) and will include sampling and analysis of all Appendix III and IV constituents.

#### 8.0 REFERENCES

- ACC, 2019a. 2018 Annual Groundwater Monitoring and Corrective Action Report Plant Wansley Ash Pond 1 (AP-1). January 2019.
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# **TABLES**

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

Well ID	Hydraulic Location / Purpose	Installation Date	Northing (1)	Easting (1)	Ground Surface Elevation (2,3) (ft)	Top of Casing Elevation (2) (ft)	Top of Screen Elevation <sup>(2)</sup> (ft)	Bottom of Screen Elevation (2) (ft)	Well Depth (ft BTOC) (4)	Screen Interval Length (ft)
ompliance Monitoring					_			_		
WGWA-1	Upgradient	10/21/2015	1250656.10	2035580.71	780.37	782.93	663.37	653.37	129.56	10
WGWA-2	Upgradient	10/16/2015	1251556.40	2035590.11	755.77	758.23	665.77	655.77	102.46	10
WGWA-3	Upgradient	12/15/2014	1240848.21	2022350.10	826.63	828.91	820.23	810.23	18.68	10
WGWA-4	Upgradient	01/13/2015	1240879.58	2022339.66	831.33	834.34	780.43	760.43	74.31	20
WGWA-5	Upgradient	12/23/2014	1241997.94	2022368.85	899.28	902.15	888.88	878.88	23.66	10
WGWA-6	Upgradient	01/13/2015	1241932.02	2022360.58	894.62	897.13	822.62	792.62	104.91	30
WGWA-7	Upgradient	12/22/2014	1243338.63	2023843.81	894.49	897.33	867.69	857.69	40.04	10
WGWA-18	Upgradient	12/16/2014	1244592.56	2025580.71	875.47	878.02	848.47	838.47	39.95	10
WGWC-8	Downgradient	10/29/2015	1242929.40	2029644.58	777.70	780.08	730.70	720.70	59.38	10
WGWC-9	Downgradient	12/4/2014	1242801.12	2029115.75	809.33	812.03	760.93	750.93	61.50	10
WGWC-10	Downgradient	10/27/2015	1240971.96	2026725.61	809.61	812.38	673.61	663.61	148.77	10
WGWC-11	Downgradient	12/8/2014	1240860.18	2025773.39	821.44	823.96	783.14	773.14	51.22	10
WGWC-12	Downgradient	10/22/2015	1240827.68	2025755.99	820.57	823.04	756.57	746.57	76.47	10
WGWC-13	Downgradient	11/4/2015	1240610.93	2024585.91	807.32	809.78	734.32	714.32	95.46	20
WGWC-14A	Downgradient	01/31/2017	1240604.54	2024599.63	808.20	810.94	778.20	768.20	42.74	10
WGWC-15	Downgradient	11/11/2015	1240483.16	2023912.92	802.03	804.69	758.53	748.53	56.16	10
WGWC-16	Downgradient	11/11/2015	1240480.46	2023903.77	801.72	804.21	779.72	769.72	34.50	10
WGWC-17	Downgradient	11/06/2015	1240052.06	2022623.82	813.36	816.00	730.36	720.36	95.94	10
WGWC-19	Downgradient	10/28/2015	1241851.51	2028949.19	780.60	783.42	698.60	688.60	94.82	10
WGWC-20	Downgradient	09/29/2020	1243350.76	2029769.43	804.88	807.95	775.18	765.18	43.17	10
WGWC-21	Downgradient	10/02/2020	1242139.33	2028512.65	831.79	834.41	773.11	763.11	71.70	10
WGWC-22	Downgradient	10/18/2020	1241695.25	2028116.05	807.00	810.37	776.92	766.92	43.85	10
WGWC-23	Downgradient	10/04/2020	1240769.79	2027414.58	820.50	823.80	780.40	770.40	53.80	10
WGWC-24	Downgradient	10/17/2020	1239916.68	2024139.82	802.22	804.80	774.43	764.43	40.77	10
WGWC-25	Downgradient	10/28/2020	1240184.18	2023616.69	805.98	808.98	779.51	769.51	39.87	10
iezometer										
PZ-01	Piezometer	12/12/2014	1240249.86	2022319.93	853.91	856.72	817.81	807.81	49.31	10
PZ-04	Piezometer	12/22/2014	1242592.03	2023595.91	886.13	889.01	878.93	868.93	20.48	10
PZ-06	Piezometer	12/17/2014	1244382.89	2024661.39	912.30	915.15	898.60	888.60	26.95	10
PZ-08	Piezometer	12/15/2014	1245514.59	2026807.30	864.65	867.29	836.85	826.85	40.84	10
PZ-10	Piezometer	12/05/2014	1242058.41	2028554.29	829.26	832.02	810.46	800.46	31.96	10
PZ-11	Piezometer	12/05/2014	1240578.87	2026933.09	820.21	823.09	799.71	789.71	33.78	10
PZ-12	Piezometer	12/08/2014	1240837.96	2026731.01	816.17	818.74	779.37	769.37	49.78	10
PZ-15	Piezometer	12/10/2014	1240457.61	2025105.38	824.59	826.86	795.79	785.79	41.46	10
PZ-16	Piezometer	12/11/2014	1239419.77	2023662.22	798.05	800.70	785.05	775.05	26.15	10
PZ-17	Piezometer	12/11/2014	1239270.02	2023086.50	828.54	831.01	789.84	779.84	51.57	10
PZ-18	Piezometer	12/11/2014	1239569.52	2022299.20	812.10	814.51	788.20	778.20	36.71	10
PZ-20	Piezometer	01/31/2017	1243496.86	2030132.73	784.45	787.30	759.45	749.45	37.85	10
PZ-23D	Piezometer	10/02/2020	1242139.53	2028520.87	831.89	834.32	749.92	739.92	94.80	10
PZ-26D	Piezometer	10/12/2020	1239919.45	2024146.35	802.31	804.93	735.23	725.23	80.10	10
PZ-27D	Piezometer	10/15/2020	1240190.93	2023620.36	806.22	809.28	737.96	727.96	81.72	10
PZ-28	Piezometer	10/29/2020	1240066.02	2022624.73	813.57	816.18	753.68	743.68	72.90	10
PZ-29S	Piezometer	10/31/2020	1244317.13	2028839.68	805.80	805.30	770.28	760.28	45.42	10
PZ-29D	Piezometer	11/01/2020	1244304.90	2028853.29	805.77	805.24	688.69	678.69	126.95	10
haracterization Monitor		-		I	1	T	I	1		
WAMW-1	Characterization	09/16/2018	1241843.66	2028944.63	780.05	782.66	668.40	658.40	124.60	10
WAMW-2	Characterization	09/14/2018	1241547.56	2028806.27	768.39	770.82	694.19	684.19	86.92	10

Notes:

ft = feet

ft BTOC = feet below top of casing

<sup>(1)</sup> Coordinates in North American Datum (NAD) 1983, State Plane, Georgia-West, feet. Survey of WGWA-1 through WGWC-8 through WGWC-19, WAMW-1 and WAMW-2, and PZ-01 through PZ-20 was completed by GEL Solutions and certified June 16, 2020. Survey of WGWC-25, and PZ-23D through PZ-29D was completed by GEL Solutions and certified on November 17, 2020.

<sup>(2)</sup> Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey of WGWA-1 through WGWA-18, WGWC-8 through WGWC-19, WAMW-1 and WAMW-2, and PZ-01 through PZ-20 was completed by GEL Solutions and certified June 16, 2020. Survey of WGWC-20 through WGWC-25, and PZ-23D through PZ-29D was completed by GEL Solutions and certified on November 17, 2020.

<sup>(3)</sup> Ground surface elevation defined at the survey nail installed within the well pad.

<sup>(4)</sup> Total well depth accounts for sump if data provided on construction logs.

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

Well ID	Hydraulic Location	February 2 - 4, 2021	March 8 - 11, 2021	March 10 - 12, 2021	April 7 - 8, 2021	August 24 - 26, 2021	Status of Monitoring Well
	Purpose of Sampling Event:	Appendix IV Annual	Supplemental	Assessment	Supplemental	Assessment	
Compliance Monitoring Well							
WGWA-1	Upgradient	X	1	X		X	Assessment
WGWA-2	Upgradient	X	1	X		X	Assessment
WGWA-3	Upgradient	X	-	X		X	Assessment
WGWA-4	Upgradient	X		X		X	Assessment
WGWA-5	Upgradient	X		X		X	Assessment
WGWA-6	Upgradient	X		X		X	Assessment
WGWA-7	Upgradient	X	-	X		X	Assessment
WGWA-18	Upgradient	X		X		X	Assessment
WGWC-8	Downgradient	X		X		X	Assessment
WGWC-9	Downgradient	X		X		X	Assessment
WGWC-10	Downgradient	X		X		X	Assessment
WGWC-11	Downgradient	X		X		X	Assessment
WGWC-12	Downgradient	X	-	X		X	Assessment
WGWC-13	Downgradient	X		X		X	Assessment
WGWC-14A	Downgradient	X		X		X	Assessment
WGWC-15	Downgradient	X		X		X	Assessment
WGWC-16	Downgradient	X		X		X	Assessment
WGWC-17	Downgradient	X		X		X	Assessment
WGWC-19	Downgradient	X		X		X	Assessment
WGWC-20 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>
WGWC-21 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>
WGWC-22 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>
WGWC-23 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>
WGWC-24 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>
WGWC-25 <sup>(1)</sup>	Downgradient		X		X	X	Assessment <sup>(2)</sup>

1 of 1

#### Notes:

<sup>-- =</sup> Not applicable

<sup>(1)</sup> Well installed in 2020 and incorporated into the groundwater monitoring program in 2021. WGWC-20 through WGWC-25 were formerly identified as PZ-22, PZ-23S, PZ-24, PZ-25S, PZ-26S, and PZ-27S, respectively.

<sup>(2)</sup> Groundwater samples collected in March and April 2021 were analyzed for Appendix III constituents and lithium. Groundwater samples collected in August 2021 were analyzed for Appendix III constituents and Appendix IV constituents.

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

Well ID	Top of Casing Elevation (1)	February	y 1, 2021	March	8, 2021	August 2	23, 2021
wen 1D	(ft)	Depth to Water (ft BTOC)	Groundwater Elevation <sup>(1)</sup> (ft)	Depth to Water (ft BTOC)	Groundwater Elevation <sup>(1)</sup> (ft)	Depth to Water (ft BTOC)	Groundwater Elevation <sup>(1)</sup> (ft)
ompliance Monitoring W	ell						
WGWA-1	782.93	25.01	757.92	24.03	758.90	28.35	754.58
WGWA-2	758.23	8.24	749.99	8.79	749.44	11.50	746.73
WGWA-3	828.91	3.10	825.81	2.89	826.02	3.75	825.16
WGWA-4	834.34	5.05	829.29	4.64	829.70	5.98	828.36
WGWA-5	902.15	14.97	887.18	14.22	887.93	17.78	884.37
WGWA-6	897.13	16.18	880.95	15.35	881.78	17.72	879.41
WGWA-7	897.33	27.30	870.03	25.33	872.00	28.00	869.33
WGWA-18	878.02	22.18	855.84	20.38	857.64	21.50	856.52
WGWC-8	780.08	3.24	776.84	4.16	775.92	6.82	773.26
WGWC-9	812.03	19.78	792.25	19.52	792.51	20.19	791.84
WGWC-10	812.38	15.53	796.85	14.72	797.66	16.35	796.03
WGWC-11	823.96	22.03	801.93	20.13	803.83	23.81	800.15
WGWC-12	823.04	21.55	801.49	19.90	803.14	23.54	799.50
WGWC-13	809.78	19.82	789.96	19.30	790.48	22.65	787.13
WGWC-14A	810.94	19.82	791.12	18.37	792.57	22.64	788.30
WGWC-15	804.69	20.09	784.60	20.08	784.61	19.98	784.71
WGWC-16	804.21	19.25	784.96	19.04	785.17	19.35	784.86
WGWC-17	816.00	30.09	785.91	29.98	786.02	29.85	786.15
WGWC-19	783.42	19.34	764.08	18.93	764.49	20.71	762.71
WGWC-20	807.95	25.97	781.98	25.86	782.09	31.33	776.62
WGWC-21	834.41	49.10	785.31	48.95	785.46	50.01	784.40
WGWC-22	810.37	16.41	793.96	15.91	794.46	18.11	792.26
WGWC-23	823.80	29.76	794.04	28.88	794.92	30.72	793.08
WGWC-24	804.80	12.52	792.28	12.36	792.44	15.48	789.32
WGWC-25	808.98	17.11	791.87	16.88	792.10	18.05	790.93
iezometer		l l					
PZ-01	856.72	38.82	817.90	38.47	818.25	38.34	818.38
PZ-04	889.01	11.94	877.07	16.59	872.42	16.53	872.48
PZ-06	915.15	23.86	891.29	19.79	895.36	23.12	892.03
PZ-08	867.29	30.85	836.44	30.80	836.49	30.61	836.68
PZ-10	832.02	27.26	804.76	27.95	804.07	29.20	802.82
PZ-11	823.09	21.29	801.80	20.30	802.79	22.83	800.26
PZ-12	818.74	25.05	793.69	23.98	794.76	26.55	792.19
PZ-15	826.86	27.24	799.62	25.15	801.71	28.05	798.81
PZ-16	800.70	10.80	789.90	11.21	789.49	12.61	788.09
PZ-17	831.01	36.76	794.25	36.23	794.78	37.13	793.88
PZ-18	814.51	16.41	798.10	15.60	798.91	18.20	796.31
PZ-20	787.30	14.09	773.21	12.82	774.48	16.34	770.96
PZ-23D	834.32	49.09	785.23	48.91	785.41	50.09	784.23
PZ-26D	804.93	13.81	791.12	14.00	790.93	16.10	788.83
PZ-27D	809.28	19.74	789.54	19.92	789.36	19.90	789.38
PZ-28	816.18	29.26	786.92	29.09	787.09	29.22	786.96
PZ-29S	805.30	20.20	785.10	20.21	785.09	20.74	784.56
PZ-29D	805.24	21.36	783.88	20.96	784.28	26.82	778.42
haracterization Monitorin		· ·	****	· ·			* * *
WAMW-1	782.66	20.07	762.59	19.55	763.11	21.12	761.54
WAMW-2	770.82	12.86	757.96	12.56	758.26	14.02	756.80

Notes:

ft = feet

ft BTOC = feet below top of casing

<sup>(1)</sup> Elevations referenced to the North American Vertical Datum of 1988 (NAVD88). Survey of WGWA-1 through WGWA-18, WGWC-8 through WGWC-19, WAMW-1 and WAMW-2, and PZ-01 through PZ-20 was completed by GEL Solutions and certified June 16, 2020. Survey of WGWC-20 through WGWC-25, and PZ-23D through PZ-29D was completed by GEL Solutions and certified on November 17, 2020.

Table 4

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

	February 1, 2021				March 8, 2021				August 23, 2021			
Flow Path Direction	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	L (ft)	i (ft/ft)	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	L (ft)	i (ft/ft)	h <sub>1</sub> (ft)	h <sub>2</sub> (ft)	L (ft)	i (ft/ft)
PZ-01 to WGWC-17	817.90	785.91	373	0.086	818.25	786.02	373	0.086	818.38	786.15	373	0.086
PZ-10 to WGWC-19	804.76	764.08	446	0.091	804.07	764.49	446	0.089	802.82	762.71	446	0.090

	Average for 2021				
Flow Path Direction	K <sub>h</sub> (ft/day)	n <sub>e</sub>	i (ft/ft)	V (ft/day) <sup>(1)</sup>	V (ft/day) <sup>(2)</sup>
PZ-01 to WGWC-17	0.67	0.25	0.086	0.23	0.24
PZ-10 to WGWC-19	0.67	0.25	0.090	0.24	0.24

Notes:

ft = feet

ft/day = feet per day

ft/ft = feet per foot

 $h_1, h_2$  = groundwater elevation at location 1 and location 2

L = distance between location 1 and 2

 $i = h_1 - h_2 / L = horizontal hydraulic gradient$ 

 $K_h$  = horizontal hydraulic conductivity

 $n_e$  = effective porosity

V = groundwater flow velocity

(1) Groundwater flow velocity equation:  $V = [K_h * i] / n_e$ 

(2) Average groundwater flow velocity for unit.

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

	Well ID:	WGWA-1	WGWA-1	WGWA-1	WGWA-2	WGWA-2	WGWA-2	WGWA-3	WGWA-3	WGWA-3	WGWA-4	WGWA-4	WGWA-4
	Sample Date:	2/2/2021	3/11/2021	8/24/2021	2/2/2021	3/10/2021	8/23/2021	2/2/2021	3/10/2021	8/25/2021	2/2/2021	3/10/2021	8/24/2021
	Constituent (1,2)												
	Boron		< 0.39	< 0.039		0.039 J	< 0.039		< 0.39	< 0.039		< 0.039	< 0.039
	Calcium		1.3	1.2		11	13		1.9	1.7		16	15
dix I	Chloride		4.5	5.1		2.6	3.3		1.8	1.9		1.2	1.5
	Fluoride	0.028 J	< 0.026	0.062 J	0.065 J	0.045 J	0.097 J	0.035 J	< 0.026	0.077 J	0.15	0.12	0.17
Appe	pH <sup>(3)</sup>	5.36	5.26	5.21	6.10	6.11	6.18	5.78	5.49	5.52	6.61	7.19	7.22
⋖	Sulfate		< 0.76	< 0.76		0.90 J	1.3		0.91 J	0.79 J		8.1	7.9
	TDS		24	32		100	110		20	21		100	110
	Antimony	0.00062 J	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
	Arsenic	< 0.00031	< 0.00031	< 0.00031	< 0.00031	0.00063 J	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031	0.00036 J	< 0.00031
	Barium	0.050	0.046	0.049	0.025	0.024	0.023	0.015	0.014	0.014	0.0060 J	0.0057 J	0.0055 J
	Beryllium	< 0.00018	0.00029 J	< 0.00018	< 0.00018	0.00065 J	< 0.00018	< 0.00018	0.00019 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018
	Cadmium	< 0.00022			< 0.00022			< 0.00022			< 0.00022		
2	Chromium	< 0.0015	< 0.00015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
dix J	Cobalt	0.00082	0.00081 J	0.0016 J	0.00069 J	0.00073 J	0.00049 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
∥ ŭ	Fluoride	0.028 J	< 0.026	0.062 J	0.065 J	0.045 J	0.097 J	0.035 J	< 0.026	0.077 J	0.15 J	0.12	0.17
	Lead	0.00015 J	< 0.00013	< 0.00013	0.00015 J	0.00019 J	0.00023 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
⋖	Lithium	< 0.0034	0.0039 J	< 0.0034	0.0065	0.0075	0.0066	< 0.0034	< 0.0034	< 0.0034	0.0039 J	0.0049 J	0.0036 J
	Mercury	< 0.00013			< 0.00013			< 0.00013			< 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	< 0.00016
	Comb. Radium 226/228	0.243 U	0.046 U	0.598	0.202 U	0.378 U	0.632	0.182 U	-0.177 U	-0.121 U	1.05	1.47	1.61
	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	0.00045 J	< 0.00015	0.00040 J	0.00073 J	< 0.00015	< 0.00015	0.00028 J	< 0.00015	< 0.00015	0.00017 J	< 0.00015

#### Notes:

-- = Parameter was not analyzed

TDS = total dissolved solids

- J = Indicates the parameter was estimated and detected between the method detection limit (MDL) and the reporting limit (RL)
- < = Indicates the parameter was not detected above the analytical MDL
- U = Indicates the parameter was not detected above the analytical minimum detectable concentration (MDC) (Specific to combined radium 226/228)
- (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 and Method 7470A, anions were analyzed by EPA Method 300.0, TDS was analyzed by SM 2540C, 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) Wells installed in 2020 and incorporated into the compliance groundwater monitoring program in 2021. WGWC-20 through WGWC-25 were formerly identified as PZ-22, PZ-23S, PZ-24, PZ-25S, PZ-26S, and PZ-27S, respectively.

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:	2/3/2021	3/10/2021	8/24/2021	2/3/2021	3/11/2021	8/24/2021	2/2/2021	3/10/2021	8/24/2021	2/2/2021	3/10/2021	8/25/2021
	Constituent (1,2)												
	Boron		< 0.039	< 0.039		< 0.039	< 0.039		< 0.039	< 0.039		< 0.039	0.10
Ħ	Calcium		1.3	47		26	26		0.89	1.7		7.7	16
	Chloride		1.8	2.1		1.5	1.8		1.9	1.9		1.9	2.3
Appendix	Fluoride	< 0.026	< 0.026	0.073 J	0.088 J	0.092 J	0.16	< 0.026	< 0.026	0.054 J	0.071 J	0.046 J	0.13
) dd	pH <sup>(3)</sup>	5.30	5.22	6.80	7.76	7.93	7.88	5.84	4.96	5.53	6.48	5.80	6.74
■ ◆	Sulfate		< 0.76	2.8		8.4	8.9		< 0.76	< 0.76		7.1	8.2
	TDS		19	150		110	120		20	24		72 H	92
	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 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	< 0.00031	< 0.00031	< 0.00031
	Barium	0.015	0.016	0.028	0.0079 J	0.0077 J	0.0074 J	0.012	0.011	0.012	0.017	0.016	0.015
	Beryllium	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
	Cadmium	< 0.00022			< 0.00022			< 0.00022			< 0.00022		
2	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	0.0015 J	0.0011 J	0.00079 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	0.00017 J	0.0018 J	0.0015 J	0.00084 J
pua	Fluoride	< 0.026	< 0.026	0.073 J	0.088 J	0.092 J	0.16	< 0.026	< 0.026	0.054 J	0.071 J	0.046 J	0.13
Appendix	Lead	0.00019 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013
⋖	Lithium	< 0.0034	< 0.0034	< 0.0034	0.0047 J	0.0050	0.0041 J	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034
	Mercury	< 0.00013			< 0.00013			< 0.00013			< 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
	<b>Comb. Radium 226/228</b>	-0.314	0.144 U	0.226 U	9.99	9.20	9.78	0.167 U	0.224 U	0.465 U	0.354 U	0.218 U	0.645
	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	0.00042 J	< 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-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:	2/3/2021	3/11/2021	8/26/2021	2/4/2021	3/12/2021	8/26/2021	2/4/2021	3/11/2021	8/26/2021	2/3/2021	3/12/2021	8/25/2021
	Constituent (1,2)												
	Boron		2.4	2.4		0.64	0.56		< 0.039	< 0.039		< 0.039	< 0.039
	Calcium		83	85		11	9.3		7.9	7.6		1.6	1.5
	Chloride		110	110		3.4	3.1		1.7	1.6		3.6	3.5
endix	Fluoride	0.15	0.16	0.21	0.91	0.98	1.0	0.12	0.15	0.16	0.027 J	0.044 J	0.056 J
Apper	pH <sup>(3)</sup>	5.08	5.35	5.36	6.22	5.88	5.84	6.21	6.56	6.31	5.21	5.46	5.66
▼	Sulfate		220	220		62	52		2.8	1.8		2.0	1.1
	TDS		530	550		130	170		52	60		27	32
	Antimony	< 0.00038	< 0.00038	< 0.00038	0.00041 J	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
	Arsenic	0.0013	0.00090 J	0.0013	< 0.00031	< 0.00031	< 0.00031	< 0.00031	0.00031 J	< 0.00031	< 0.00031	< 0.00031	< 0.00031
	Barium	< 0.0016	< 0.0016	< 0.0016	0.0016 J	< 0.0016	< 0.0016	0.035	0.033	0.032	0.039	0.045	0.040
	Beryllium	0.0025	0.0022 J	0.0020 J	0.00039 J	0.00034 J	0.00038 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
	Cadmium	< 0.00022			< 0.00022			< 0.00022			< 0.00022		
<b>N</b>	Chromium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	0.0018 J	0.0023	0.0024	< 0.0015	0.0017 J	< 0.0015
	Cobalt	0.00014 J	0.00043 J	0.00050 J	< 0.00013	< 0.00013	< 0.00013	0.00059 J	0.00058 J	0.00044 J	0.00072 J	0.0022 J	0.00045 J
endix	Fluoride	0.15 J	0.16	0.21	0.91	0.98	1.0	0.12 J	0.15	0.16	0.027 J	0.044 J	0.056 J
Аррег	Lead	0.00013 J	< 0.00013	0.00014 J	< 0.00013	< 0.00013	< 0.00013	0.00019 J	0.00032 J	0.00026 J	< 0.00013	0.00038 J	0.00023 J
A	Lithium	0.014	0.013	0.013	0.035	0.034	0.030	0.0049 J	0.0051	0.0044 J	< 0.0034	< 0.0034	< 0.034
	Mercury	< 0.00013			< 0.00013	-		< 0.00013	-		< 0.00013		
	Molybdenum	< 0.00061	< 0.00061	< 0.00061	0.0030 J	0.0030 J	0.0028 J	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061	< 0.00061
	<b>Comb. Radium 226/228</b>	2.00	2.38	2.87	0.353 U	0.831	0.681	0.0332 U	0.420 U	0.321 U	0.718	0.0729 U	0.401
	Selenium	0.0036 J	0.0038 J	0.0037 J	0.0030 J	0.0034 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	0.00016 J	< 0.00015	< 0.00015

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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:	2/3/2021	3/12/2021	8/25/2021	2/4/2021	3/11/2021	8/25/2021	2/4/2021	3/11/2021	8/25/2021	2/4/2021	3/12/2021	8/26/2021
	Constituent (1,2)												
	Boron		< 0.039	< 0.039		< 0.039	0.063 J		< 0.039	0.043 J		< 0.039	< 0.039
	Calcium		15	14		4.0	4.0		0.79	0.70		31	31
Appendix I	Chloride		3.5	3.7		1.2	1.2		2.6	2.8		1.6	1.4
	Fluoride	0.082 J	0.096 J	0.14	0.16	0.18	0.20	0.033 J	0.040 J	0.071 J	0.69	0.88	0.77
dd	pH <sup>(3)</sup>	6.15	6.66	6.69	6.34	5.95	6.27	5.76	5.10	5.39	7.77	7.72	7.58
▼	Sulfate		14	13		2.9	1.8		1.7	< 0.76		19	16
	TDS		78	110		63	53		24	30		130	150
	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038
	Arsenic	< 0.00031	< 0.00031	< 0.00031	0.00038 J	0.00035 J	< 0.00031	< 0.00031	< 0.00031	< 0.00031	0.00069 J	0.00084 J	0.0012
	Barium	0.015	0.017	0.016	0.047	0.049	0.046	0.029	0.032	0.030	0.028	0.028	0.029
	Beryllium	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	0.00026 J	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018
	Cadmium	< 0.00022			< 0.00022			< 0.00022			< 0.00022		
≥	Chromium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	0.0019 J	0.0017 J	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015
	Cobalt	0.00017 J	0.00042 J	0.00050 J	< 0.00013	< 0.00013	< 0.00013	0.0041	0.0037	0.0029	0.00015 J	< 0.00013	< 0.00013
endix	Fluoride	0.082 J	0.096 J	0.14	0.16 J	0.18	0.20	0.033 J	0.040 J	0.071 J	0.69	0.88	0.77
Аррег	Lead	< 0.00013	< 0.00013	< 0.00013	0.00038 J	0.00075 J	0.00025 J	0.00013 J	0.00031 J	0.00041 J	0.00030 J	< 0.00013	< 0.00013
▼	Lithium	0.0075	0.0089	0.0061	< 0.0034	0.0037 J	< 0.034	< 0.0034	0.0035 J	< 0.0034	0.0086	0.0096	0.0059
	Mercury	< 0.00013			< 0.00013			< 0.00013	-		< 0.00013	1	
	Molybdenum	< 0.00061	0.00062 J	< 0.00061	0.0012 J	0.0013 J	0.00092 J	< 0.00061	< 0.00061	< 0.00061	0.0022 J	0.0019 J	0.0029 J
	Comb. Radium 226/228	0.322 U	0.633	0.443 U	0.139 U	0.473	0.913	0.564	0.764	0.705	0.488 U	0.591	0.678
	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	0.00021 J	0.00019 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	WGWC-20 (4)	WGWC-20 (4)	WGWC-20 (4)
	Sample Date:	2/4/2021	3/11/2021	8/25/2021	2/4/2021	3/11/2021	8/25/2021	2/3/2021	3/11/2021	8/26/2021	3/8/2021	4/8/2021	8/26/2021
	Constituent (1,2)												
	Boron		1.1	0.89		< 0.039	< 0.039		< 0.039	< 0.039	1.3	0.98	2.1
	Calcium		32	27		5.7	6.0	-	15	10	90	88	120
ndix	Chloride		49	45		1.3	1.6	-	2.9	3.3	70	57	130
	Fluoride	0.052 J	0.061 J	0.099 J	0.064 J	0.050 J	0.093 J	0.30	0.31	0.38	1.8	1.7	2.0
Apper	pH <sup>(3)</sup>	5.42	5.21	5.25	6.31	5.96	6.09	6.75	7.12	6.66	5.54	5.60	5.37
A	Sulfate		64	63		3.9	3.3		4.0	3.5	240	240	290
	TDS		190	220		75	84		100	94	590	540	720
	Antimony	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038	< 0.00038			< 0.00038
	Arsenic	< 0.00031	< 0.00031	< 0.00031	0.00035 J	< 0.00031	< 0.00031	< 0.00031	< 0.00031	< 0.00031			0.00031 J
	Barium	0.039	0.037	0.035	0.012	0.011	0.011	< 0.0016	< 0.0016	< 0.0016			< 0.0016
	Beryllium	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018	< 0.00018			0.0081
	Cadmium	< 0.00022			< 0.00022			< 0.00022					< 0.00022
IX	Chromium	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015			< 0.0015
	Cobalt	0.00026 J	0.00013 J	< 0.00013	0.00042 J	0.00035 J	0.00042 J	0.00025 J	0.00022 J	0.00022 J			0.00046 J
endix	Fluoride	0.052 J	0.061 J	0.099 J	0.064 J	0.050 J	0.093 J	0.30	0.31	0.38			2.0
Appe	Lead	0.00013 J	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013	< 0.00013			< 0.00013
A	Lithium	0.0051	0.0050	0.0046 J	0.0047 J	0.0049 J	0.0048 J	0.060	0.051	0.057	0.11	0.11	0.11
	Mercury	< 0.00013			< 0.00013			< 0.00013	-				0.00033
	Molybdenum	< 0.00061	< 0.00061	< 0.00061	0.0025 J	0.0022 J	0.0022 J	0.0013 J	0.0012 J	0.0011 J			0.00079 J
	<b>Comb. Radium 226/228</b>	0.727	0.942	0.518	0.438 U	0.247 U	0.565	0.684	0.286 U	0.796			1.6
	Selenium	0.0023 J	0.0023 J	0.0019 J	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015	< 0.0015			0.0016 J
	Thallium	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	< 0.00015	0.00018 J	< 0.00015	< 0.00015			< 0.00015

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

	Well ID:	WGWC-21 (4)	WGWC-21 (4)	WGWC-21 (4)	WGWC-22 (4)	WGWC-22 (4)	WGWC-22 (4)	WGWC-23 (4)	WGWC-23 (4)	WGWC-23 <sup>(4)</sup>	WGWC-24 (4)	WGWC-24 (4)	WGWC-24 (4)
	Sample Date:	3/9/2021	4/7/2021	8/26/2021	3/9/2021	4/8/2021	8/26/2021	3/9/2021	4/7/2021	8/26/2021	3/9/2021	4/8/2021	8/26/2021
	Constituent (1,2)												
	Boron	0.19	0.13	0.087	0.33	0.21	0.36	0.073 J	< 0.039	0.052 J	1.8	1.9	2.1
Ħ	Calcium	66	67	51	15	14	24	3.2	2.7	4.6	65	71	69
X I	Chloride	58	50	47	2.9	2.4	4.2	3.5	3.7	3.3	110	110	100
Appendix	Fluoride	1.7	1.5	2.0	1.1	1.4	0.51	0.092 J	0.093 J	0.081 J	1.0	1.1	1.2
)dd	pH <sup>(3)</sup>	7.29	7.05	6.88	5.56	6.01	5.40	5.81	5.57	5.80	4.29	4.43	4.33
<b>₽</b>	Sulfate	230	190	190	80	60	100	14	5.1	7.5	140	160	170
	TDS	610	520	480	200	170	240	79	66	88	370	510	420
	Antimony			0.00076 J			< 0.00038			< 0.00038			< 0.00038
	Arsenic			0.00057 J		-	< 0.00031			< 0.00031			0.0033
	Barium			0.0086 J			0.031			0.0078 J			0.042
	Beryllium			< 0.00018			0.00053 J			0.00089 J			0.014
	Cadmium			< 0.00022		1	< 0.00022		-	< 0.00022			0.00061 J
2	Chromium			< 0.0015			< 0.0015			< 0.0015			< 0.0015
ix I	Cobalt			0.00042 J			0.00038 J			0.00017 J			0.13
Appendix	Fluoride			2.0		-	0.51			0.081 J			1.2
)dd	Lead			< 0.00013			0.00022 J			< 0.00013			0.0012
- ▼	Lithium	0.022	0.031	0.032	0.011	0.0081	0.011	< 0.0034	< 0.0034	< 0.0034	0.0084	0.0077	0.0076
	Mercury			0.00020			0.00018 J			0.00022			0.00026
	Molybdenum			0.044		-	< 0.00061			< 0.00061			< 0.00061
	Comb. Radium 226/228			1.17			3.54			0.703			1.63
	Selenium			< 0.0015			0.0049 J			0.0020 J			< 0.0015
	Thallium			< 0.00015			< 0.00015			< 0.00015			0.00072J

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

	Well ID:	WGWC-25 <sup>(4)</sup>	WGWC-25 <sup>(4)</sup>	WGWC-25 (4)	PZ-23D	PZ-23D	PZ-26D	PZ-26D	PZ-27D	PZ-27D	PZ-28	PZ-28	PZ-29D	PZ-29D
	Sample Date:	3/8/2021	4/8/2021	8/26/2021	3/9/2021	4/8/2021	3/9/2021	4/7/2021	3/8/2021	4/7/2021	3/9/2021	4/8/2021	3/11/2021	4/8/2021
	Constituent (1,2)													
	Boron	0.48	0.43	0.70	0.62	0.59	0.22	0.15	0.23	0.18	0.044 J	< 0.039	< 0.039	< 0.039
	Calcium	14	16	16	50	59	17	18	33	26	3.6	4.1	41	35
dix I	Chloride	74	77	79	36	39	20	20	150	100	1.8	3.6	7.2	4.5
pue	Fluoride	< 0.026	0.028 J	0.047 J	2.3	2.2	0.26	0.22	0.38	0.20	< 0.026	< 0.026	0.049 J	0.056 J
dd	pH <sup>(3)</sup>	5.36	5.39	5.30	6.85	6.94	6.19	6.46	7.44	7.38	5.65	5.70	6.41	6.34
<b>₩</b>	Sulfate	4.7	5.8	13	100	98	46	48	160	92	1.1	1.7	11	6.4
	TDS	220	180	200	300	300	180	410	700	480	53	62	210	180
	Antimony			< 0.00038										
	Arsenic			< 0.00031										
	Barium			0.41										
	Beryllium			0.00028 J										
	Cadmium			< 0.00022										
>	Chromium			< 0.0015										
dix I	Cobalt			0.0050										
= end	Fluoride			0.047 J										
dd	Lead			< 0.00013										
┫	Lithium	0.0046 J	0.0044 J	0.0044 J										
	Mercury			0.0019										
	Molybdenum			< 0.00061										
	<b>Comb. Radium 226/228</b>			1.12										
	Selenium			< 0.0015										
	Thallium			< 0.00015										

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

Constituent	Units	Background <sup>(1)</sup>	Federal GWPS <sup>(2)</sup>	State GWPS <sup>(3)</sup>
Antimony	mg/L	0.0022	0.006	0.006
Arsenic	mg/L	0.0014	0.01	0.01
Barium	mg/L	0.062	2	2
Beryllium	mg/L	0.0025	0.004	0.004
Cadmium	mg/L	0.0025	0.005	0.005
Chromium	mg/L	0.0049	0.1	0.1
Cobalt	mg/L	0.013	0.013	0.013
Fluoride	mg/L	0.284	4	4
Lead	mg/L	0.001	0.015	0.001
Lithium	mg/L	0.009	0.04	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:

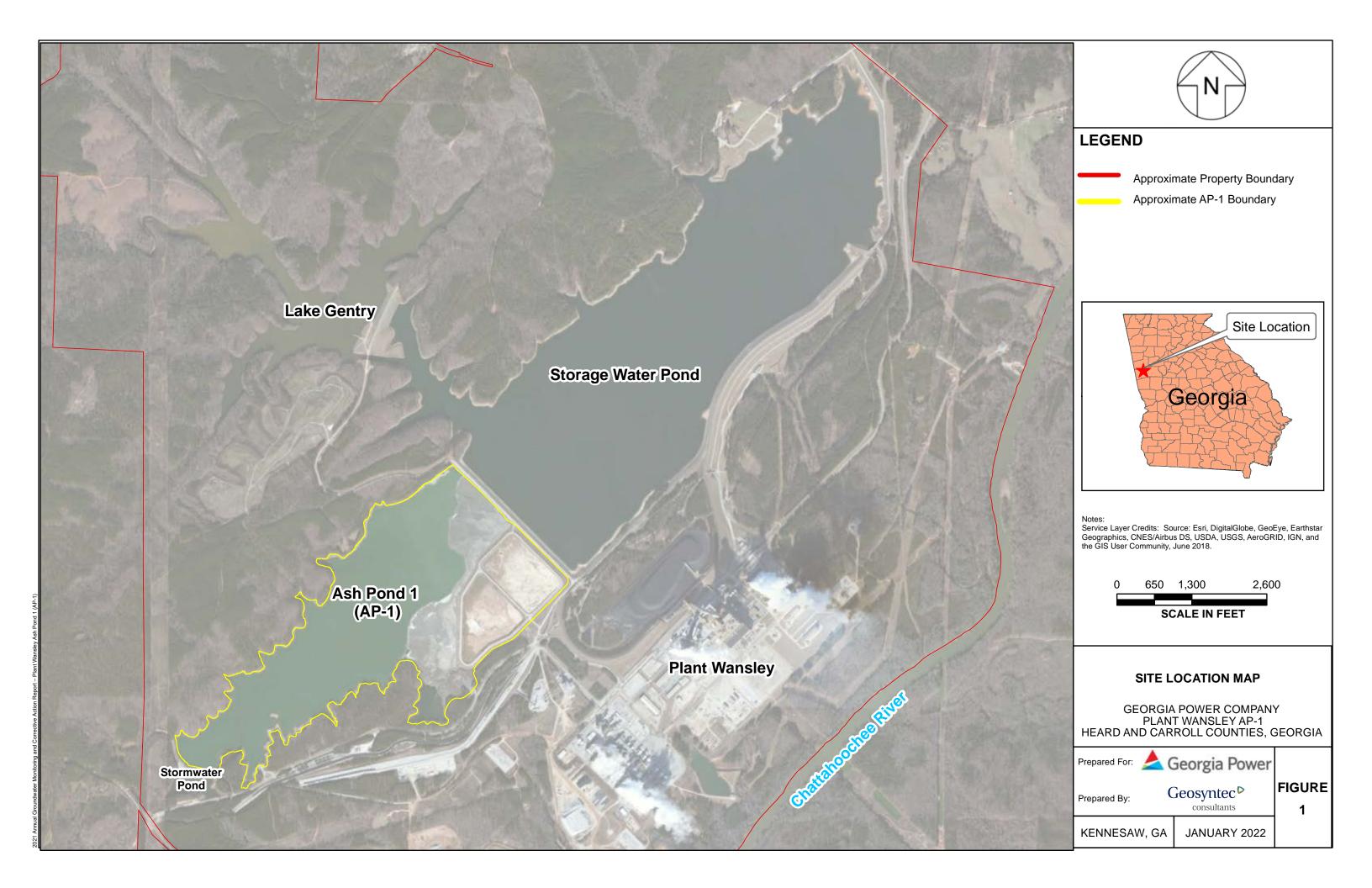
mg/L = milligrams per liter

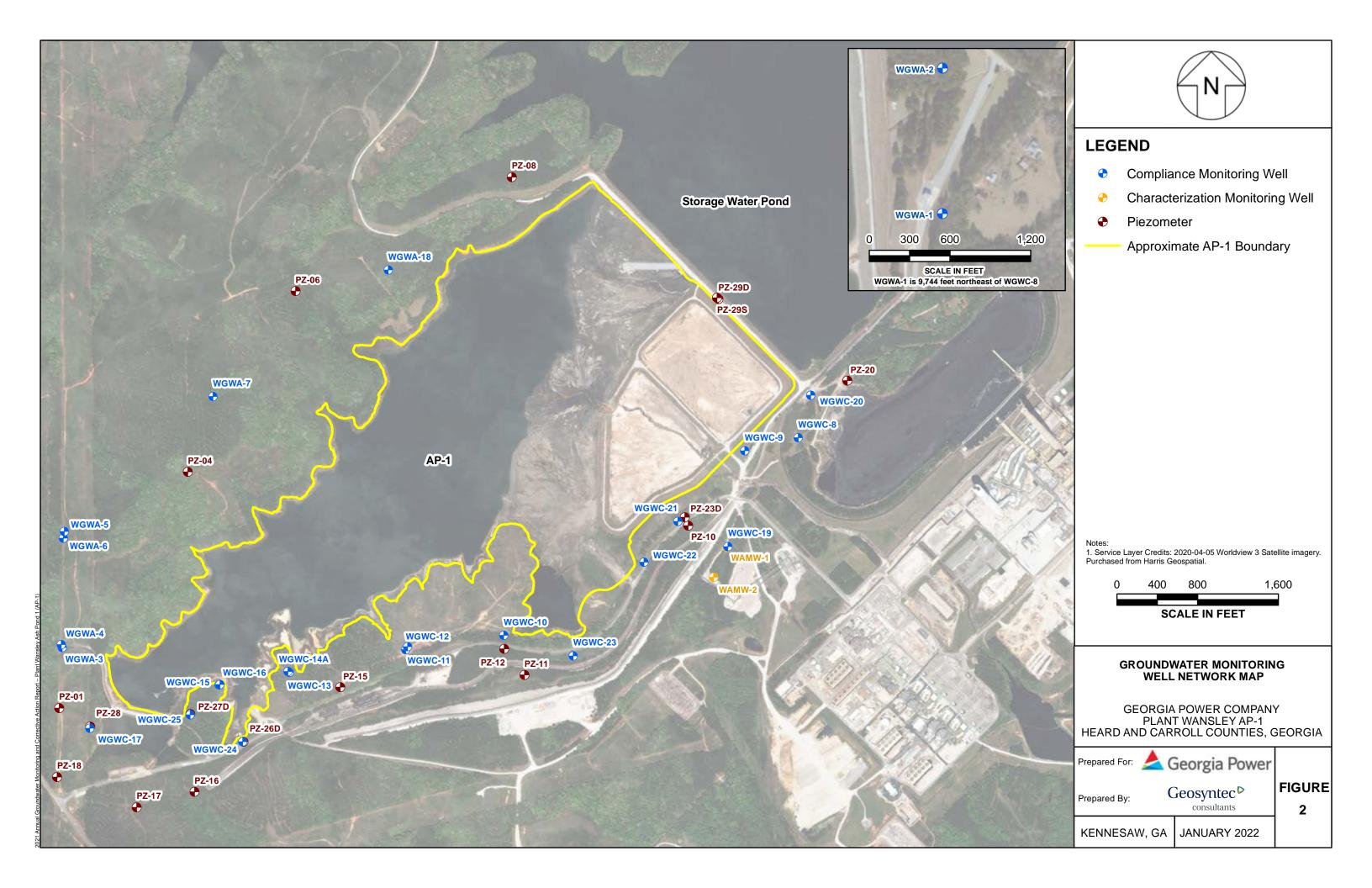
pCi/L = picocuries per liter

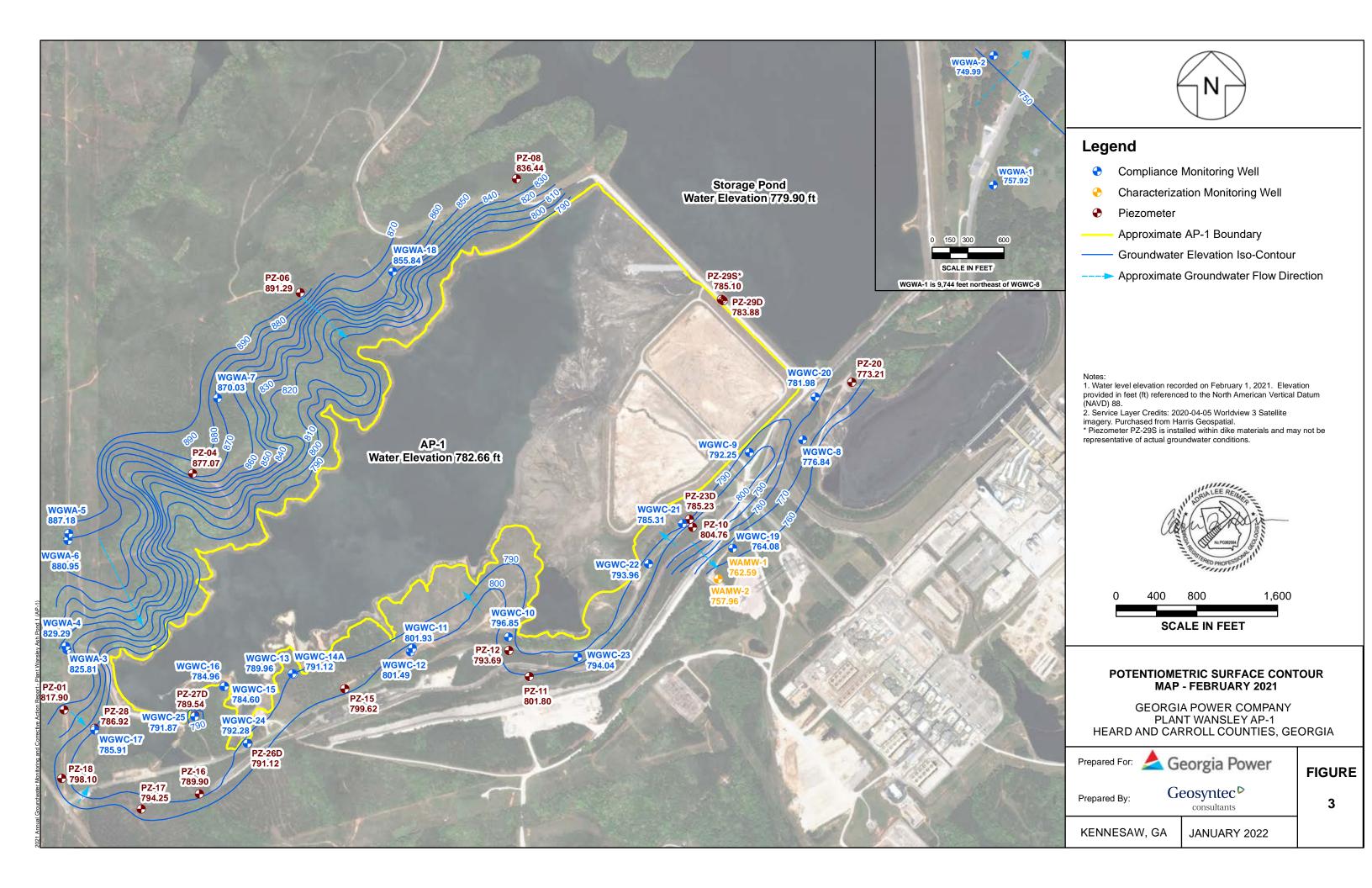
Statistical analyses were performed per semiannual assessment monitoring event conducted during the reporting period. Background limits and groundwater protection standards (GWPS) are applicable to the March 2021 and August 2021 events.

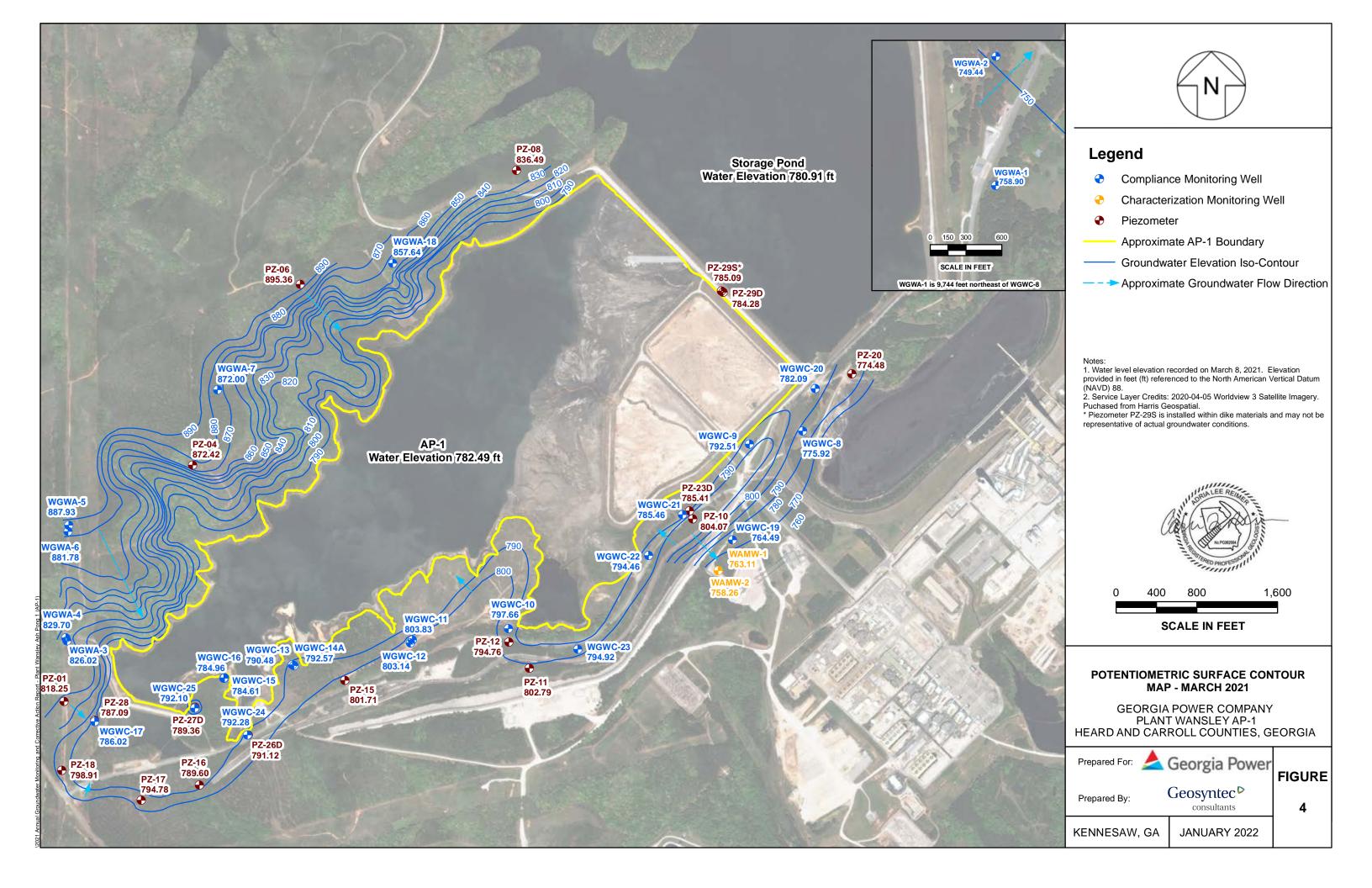
- (1) The background limits were used when determining the GWPS under 40 CFR \$257.95(h) and Georgia Environmental Protection Division (GA EPD) Rule 391-3-4-.10(6)(a).
- (2) Under 40 CFR §257.95(h)(1-3) the GWPS is: (i) the maximum contaminant level (MCL) established under § 141.62 and § 141.66 of this title; (ii) where an MCL has not been established a rule-specific GWPS is used; or (iii) background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.
- (3) Under the existing GA EPD rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background concentrations for constituents were the background level is higher than the MCL.

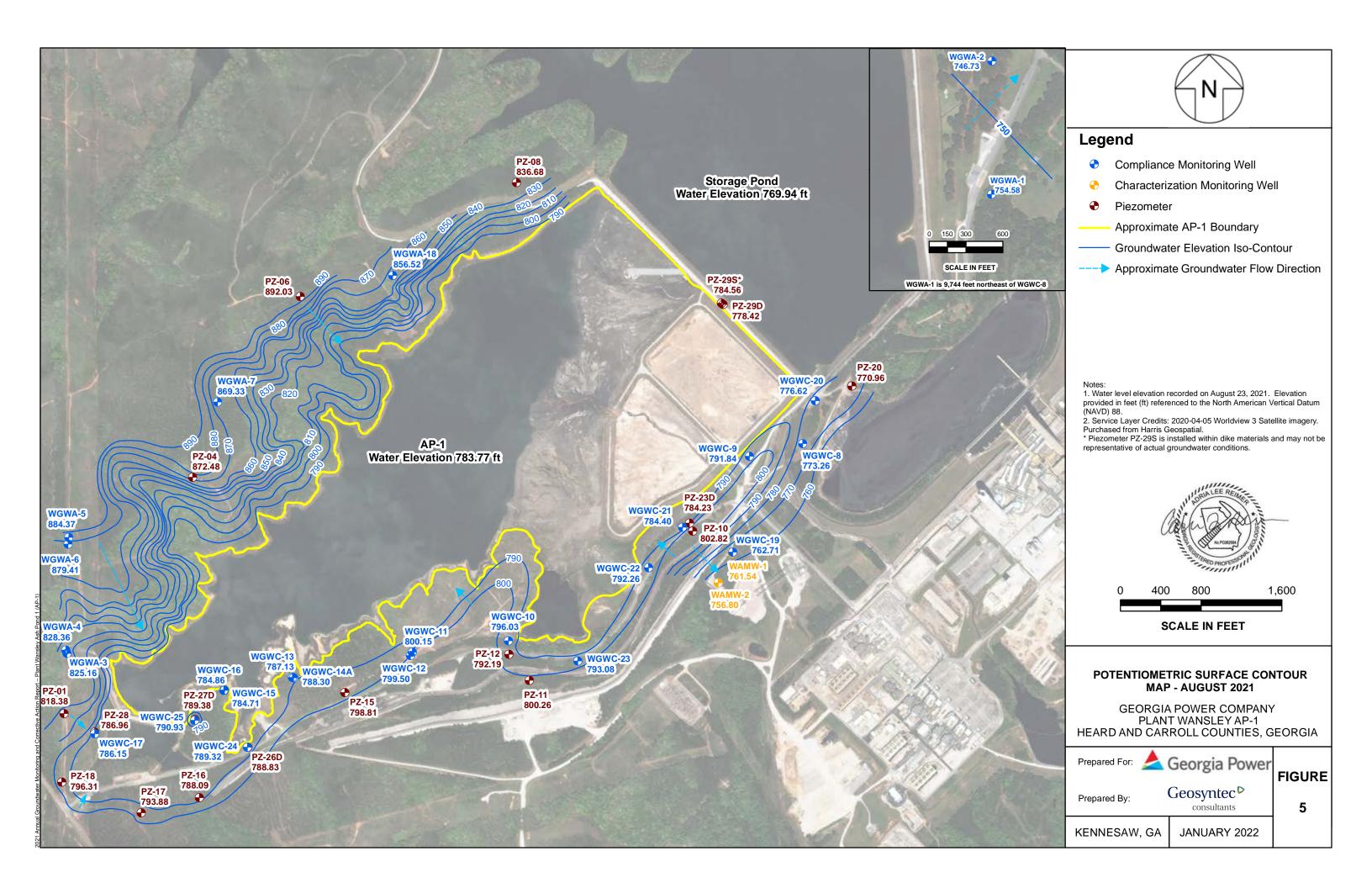
# **FIGURES**











# APPENDIX A

Well Maintenance and Repair Documentation Memorandum



1150 Northmeadow Parkway Suite 100 Roswell GA 30076 (770) 594-5998 www.atlcc.net

#### **MEMORANDUM**

Date: November 16, 2021

To: Kristen Jurinko – Southern Company Services

From: Atlantic Coast Consulting

Subject: Plant Wansley Ash Pond - Well Maintenance and Repair Documentation

Georgia Power Company

Atlantic Coast Consulting (ACC) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Wansley during the 2021 Annual Groundwater Monitoring reporting period. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GAEPD) guidance on routine visual inspections of groundwater monitoring wells. Documentation of well inspections are provided as an attachment to this memorandum.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Plant Wansley /Ash Pond	3-8-2021	PZ-11	Well label added
Plant Wansley /Ash Pond	3-8-2021	PZ-17	Well label added
Plant Wansley /Ash Pond	3-8-2021	PZ-24	Added weep hole
Plant Wansley /Ash Pond	3-8-2021	PZ-27S/D	Added weep hole
Plant Wansley /Ash Pond	3-8-2021	PZ-29 S/D	Added vent hole and well label

# **ATTACHMENT**

Well Inspection Forms

February and March 2021



1-	<u>Location</u>	/Identification	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
	а	Is the well visible and accessible?	Yes	Yes	Yes	Yes							
	b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes							
	С	Does the well require protection from traffic?	No	No	No	No							
	d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes							



2 - Prote	ctive Outer Casing	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
а	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes							
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes							
С	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes							
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes							
е	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes							



3 - <u>S</u>	urface l	<u>Pad</u>	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
	а	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes							
	b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes							
	С	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes							
	d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes							
	е	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes							



4 - Internal	Well Casing	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
а	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes							
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers)?	Yes	Yes	Yes	Yes							
С	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes							
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes							
е	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes							
f	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?	No	No	No	No							



Date: 2/1/2021

#### 5 - Sampling (Groundwater Monitoring Wells Only):

	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
Does the well recharge adequately when purged?	Yes	Yes	Yes	Yes							
If dedicated sampling equipment is installed, is it in good condition?		Yes	Yes	Yes	N/A	Yes	N/A	Yes	Yes	N/A	Yes
Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	No	No							

Note: N/A - Not Applicable

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

	WGWA-1	WGWA-2	WGWA-3	WGWA-4	WGWA-5	WGWA-6	WGWA-7	WGWA-18	WGWC-8	WGWC-9	WGWC-10
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes							

7 - Corrective actions completed and Notes:



1-	Location	/Identification	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
	а	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	С	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No
	d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



2 - <u>Pr</u>	otectiv	e Outer Casing	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
	а	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	С	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	е	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



3 -	Surface	<u>Pad</u>	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
	а	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
-	b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	С	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	e	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



4 - Internal	Well Casing	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
а	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	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?	No	No	No	No	No	No	No	No	No	No	No



Date: 2/1/2021

5 - Sampling (Groundwater Monitoring Wells Only):

		WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
а	Does the well recharge adequately when purged?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?		Yes	Yes	N/A	Yes	Yes	Yes	Yes	N/A	N/A	N/A
С	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	No	No	No	No	No	No	No	No	N/A	N/A	N/A

Note: N/A - Not Applicable

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

	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	PZ-1	PZ-4	PZ-6
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:



1 - <u>I</u>	Location	/Identification	PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
	a	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	С	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No
	d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



2 - Protect	ive Outer Casing	PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
а	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



3 - Surface	<u>Pad</u>	PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
а	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



4 - Internal	Well Casing	PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
а	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	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?	No	No	No	No	No	No	No	No	No	No	No



Date: 2/1/2021

5 - Sampling (Groundwater Monitoring Wells Only):

		PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
а	Does the well recharge adequately when purged?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
С	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: N/A - Not Applicable

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

	PZ-8	PZ-10	PZ-11	PZ-12	PZ-15	PZ-16	PZ-17	PZ-18	PZ-20	PZ-22	PZ-23D
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

1) PZ-11: Label added.



Staff: O. Fuquea, H. Auld

1 - Location,	/Identification	PZ-23S	PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
а	Is the well visible and accessible?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the well properly identified with the correct well ID?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the well require protection from traffic?	No	No	No	No	No	No	No	No	No	No	No	No
d	Is the drainage around the well acceptable? (No standing water, nor is well located in obvious drainage flow path)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



Staff: O. Fuquea, H. Auld

2 - Protectiv	ve Outer Casing	PZ-23S	PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
а	Is the protective casing free from apparent damage?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of degradation or deterioration?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the casing have a functioning weep hole?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the annular space between casings filled with pea gravel or sand?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the well locked, and is the lock in good working condition?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



Staff: O. Fuquea, H. Auld

3 - Surfac	3 - Surface Pad		PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
а	Is the well pad in good condition? (Not cracked or broken)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Does the well pad provide adequate surface seal and stability to the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Is the well pad in complete contact with the protective casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal burrows, and does not move when stepped on)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the pad surface clean? (Not covered by soil or debris)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes



Staff: O. Fuquea, H. Auld

4 - Internal V	Well Casing	PZ-23S	PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
а	Does the well cap prevent entry of foreign material into the well?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
b	Is the casing free of kinks or bends, or any obstruction from foreign objects (such as bailers) ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
С	Does the well have a venting hole near the top of casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
d	Is the survey point clearly marked on the inner casing?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
е	Is the depth of the well consistent with the original well log?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
f	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?	No	No	No	No	No	No	No	No	No	No	No	No



Staff: O. Fuquea, H. Auld

Date: 2/1/2021

5 - Sampling (Groundwater Monitoring Wells Only):

		PZ-23S	PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
а	Does the well recharge adequately when purged?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b	If dedicated sampling equipment is installed, is it in good condition?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
С	Does the well require redevelopment due to slow recharge or turbidity > 10 NTUs?	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: N/A - Not Applicable

 $\ensuremath{\text{6}}$  - Based on your professional judgment, is the well construction / location appropriate to:

	PZ-23S	PZ-24	PZ-25S	PZ-26D	PZ-26S	PZ-27D	PZ-27S	PZ-28	PZ-29D	PZ-29S	WAMW-1	WAMW-2
1) achieve the objectives of the facility Groundwater Monitoring Program, and 2) comply with the applicable regulatory requirements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

7 - Corrective actions completed and Notes:

1) PZ-29D: Label and vent hole added.

2) PZ-29S: Label and vent hole added.

# Well Inspection Form - Well Inspection Criteria

Date: 3-8-0-1 Staff: P.W - TG - HA

## Location/Identification

- a to the well visible and accessible?
- b Is the well properly identified with the correct well ID?
- Does the well require protection from traffic?  $\mathbf{c}$
- is the dramage around the well acceptable? (No standing water, nor is well located in obvious d.

drainage flow path).

## 2 - Protective Outer Casing

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

#### Surface Pad.

- a Is the well pad in good condition? (Not cracked or broken)
- Does the well pad provide adequate surface seal and stability to the well? b
- c Is the well pad in complete contact with the protective casing?
- is the well pad in complete contact with the ground surface? (Not undermined by crosion, animal ď

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 easing free of kinks or bends, or any obstruction from foreign objects?
- Does the PVC easing move easily when touched or can it be taken apart by hand due to lack of Ċ

grout or use of slip couplings in construction?

### Based on your professional judgment, is the well construction / location appropriate to;

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

# Well Inspection Form - Well Condition Log Initials: (2, 0)

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
PZ 1	V			
PZ-4	/			"11
PZ 6		•		,
PZ·8	/	· · · ·		
PZ-10	/	"		-
PZ-11		<u> </u>		
PZ-12	/	-		\ '
PZ-15		****		,
PZ-16				
PZ-17				
PZ-18				
PZ-20				
WAMW-1				
WAMW-2				
WGWA-1				
WGWA-2				
WGWA-3				
WGWA-4				
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:

L ... e:

	Good Condition		Corrective Action	Corrective Action Still
Well iD	All Criteria Met	Deficiencies	Taken	Needed
WGW∆-6		—		
WGWA-7	✓			
WGWA-18	/			
WGWC-8	✓			
WGWC-9	/	****		<u> </u>
WGWC-10	/			
WGWC-11	<b>√</b>	-		
WGWC-12	/			
WGWC-13	1	·		
WGWC-14A	/	_		
WGWC 15	/	-,		
WGWC-16		<u></u>		
WGWC-17	/	<del></del>		_
WGWC-19	_ /			
PZ-295		√ ·	V	
P7-29D		✓	/	_
P2-24		/	<b>✓</b>	
P2-275		/		<u> </u>
P2-2.70				

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

Dec at 6.4 a.s.	Deficiency Noted: No Yallet
PZ-11,BB, DD	Action Taken: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Deficiency Noted: No Cap
L82-3	Action Taken: (up a) ded
	Deficiency Noted: No yest hove / No habit
PZ245/D	Action Taken: Vent note (label ade)
	Deficiency Noted: Jabri Fales
P2-17	Action Taken: added label
	Deficiency Noted: No Weep hate
PZ-24, PZ275/D	Action Taken: (Jeep hale addy)
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:
	Deficiency Noted:
	Action Taken:

Well ID	Corrective Action Still Needed
	Deficiency Noted:

		<u>Summary</u>
Initials:	<u> </u>	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: RW-TG-AA

Signature: | w --

Date: 3.8-2.1



1150 Northmeadow Parkway Suite 100 Roswell GA 30076 (770) 594-5998 www.atlcc.net

#### **MEMORANDUM**

Date: August 16, 2021

To: Kristen Jurinko – Southern Company Services

From: Atlantic Coast Consulting

Subject: Plant Wansley Ash Pond - Well Maintenance and Repair Documentation

Georgia Power Company

Atlantic Coast Consulting (ACC) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Wansley during the 2021 Annual Groundwater Monitoring reporting period. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GAEPD) guidance on routine visual inspections of groundwater monitoring wells. Documentation of well inspections are provided as an attachment to this memorandum.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Plant Wansley /Ash Pond	8/16/2021	WGWC-21	Missing well label. Installed well label.
Plant Wansley /Ash Pond	8/16/2021	WGWC-22	Missing well label. Installed well label.
Plant Wansley /Ash Pond	8/16/2021	WGWC-23	Missing well label. Installed well label.
Plant Wansley /Ash Pond	8/16/2021	WGWC-24	Missing well label. Installed well label.
Plant Wansley /Ash Pond	8/16/2021	WGWC-25	Missing well label. Installed well label.

# **ATTACHMENT**

Well Inspection Forms



### Well Inspection Form - Well Inspection Criteria

#### 1 - Location/Identification

- is the well visible and accessible? a
- Is the well properly identified with the correct well ID?
- C Does the well regulre protection from traffic?
- Is the drainage around the well acceptable? (No standing water, nor is well located in obvious d

drainage flow path)

#### 2 - Protective Outer Casing

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

#### 3 - Surface Pad

- Is the well pad in good condition? (Not cracked or broken). a
- b Does the well pad provide adequate surface seal and stability to the well?
- is the well pad in complete contact with the protective casing? C
- Is the well pad in complete contact with the ground surface? (Not undermined by erosion, animal d

burrows, and does not move when stopped on).

Is the pad surface clean? (Not covered by soil or debns). 62

#### Internal Well Casing

- Does the well cap prevent entry of foreign material into the well? a
- ħ. is the easing free of kinks or bends, or any obstruction from foreign objects?
- Does the PVC casing move easily when louched or can it be taken apart by hand due to lack of c

grout or use of slip couplings in construction?

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

- ä 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: 8/16/21

Initials: Pull 75.00

	Good Condition	<u> </u>	Corrective Action	Corrective Action Still
Well in	All Criteria Met	Deficiencies	Taken	Needed
WGWA-1			<u> </u>	
WGWA-2				
WGW∆-3				
WGW∆-4				
WGW∧-5	<b>/</b>			
WGW∆-6				
WGWA-7				
WGW∧-1Ħ				
WGWC-8				
WGWC-9			711	
WGWC-10	Ĭ,			ALIE.
WGWC-11	/	**		
WGWC 12				
WGWC 13		•		<u> </u>
WGWC 14A	<b>√</b> .			
WGWC·15				
WGWC-16		<u> </u>		
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.

Facility Name: Plant Wansley AP

# Well Inspection Form - Well Condition Log

Date: 8/16/21

Initials: Rw 75-06

Well ID	Good Condition All Criteria Met	Deficiencies	Corrective Action	Corrective Action Still
WGWC-20	All Criteria iviet	Denciencies	Taken	Needed
W(3VV(20	<u> </u>		<u> </u>	, 1,1
WGWC-21		✓	✓	
WGWC-22		$\checkmark$	<u> </u>	·
WGWC-23		<b>√</b>		_
WGWÇ-24		<u>√</u>	V	
WGWC-25				
PZ-1	/ -	<u> </u>	-	
PZ-4			***************************************	
PZ-6				
PZ-8			<u> </u>	
PZ 10	/			
PZ-11			-	
PZ 12		'		
PZ-15		<del></del>		
PZ-16	/	<u>,</u>		
PZ-17		··		
PZ-18		•		- /v-
PZ-20	/	, <u></u>		
PZ-23D		11174		

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.

Note: PZ 16 mon overgrown

# Well Inspection Form - Well Condition Log

Date: 8/16/21

Initials: 12 01

	Good Condition		Corrective Action	Corrective Action Still
Well ID	All Criteria Met	Deficiencies	Taken	Needed
PZ-260				
PZ-27D				
PZ-28	/		-	
PZ-29D				
PZ-29S	/			
WAMW-1				
WAMW-2		707	1	
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				· <del>-</del>
			<u></u>	

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.

# APPENDIX B

Piper Trilinear Plot





**DATE:** August 4, 2021

**TO:** Kristen Jurinko, P.G., Southern Company Services, Inc.

Ben Hodges, P.G., Georgia Power Company Lauren Petty, P.G., Georgia Power Company

**FROM:** Adria Reimer, P.G., Geosyntec Consultants, Inc.

Herwig Goldemund, Ph.D., Geosyntec Consultants, Inc.

**SUBJECT:** Piper Trilinear Plot

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

#### INTRODUCTION

Results from groundwater samples collected in March 2021 from compliance monitoring wells located upgradient of Plant Wansley Ash Pond 1 (AP-1) (i.e., WGWA-1 through WGWA-7, and WGWA-18) and downgradient of AP-1 (i.e., WGWC-8 through WGWC-17, and WGWC-19 through WGWC-25), as well as piezometers PZ-23D, PZ-26D, PZ-27D, PZ-28, and PZ-29D, were used to conduct a geochemical analysis of groundwater. Collected groundwater samples were analyzed for the major cations (i.e., calcium, magnesium, sodium, and potassium) and anions (i.e., chloride, sulfate, and bicarbonate). Prior to proceeding with this geochemical evaluation, a charge balance of the major ions was conducted for each sample. A charge balance is mathematically expressed as the percent difference between cation and anion concentrations. The charge balance, which gives an indication of the analytical data quality, should generally be within ±10 percent. All samples used in this analysis were within this criterion, with the exception of samples collected from WGWC-14A and WGWC-23 (former PZ-25S). Therefore, these two samples were not included in this analysis.

#### PIPER TRILINEAR PLOT CONSTRUCTION

The major ions were used to construct a Piper diagram, which is a common tool for assessing geochemical similarities and differences between aqueous samples. Laboratory data, which are normally reported in milligrams per liter (mg/L), are converted to milliequivalents per liter (meq/L) when plotted on a Piper diagram.

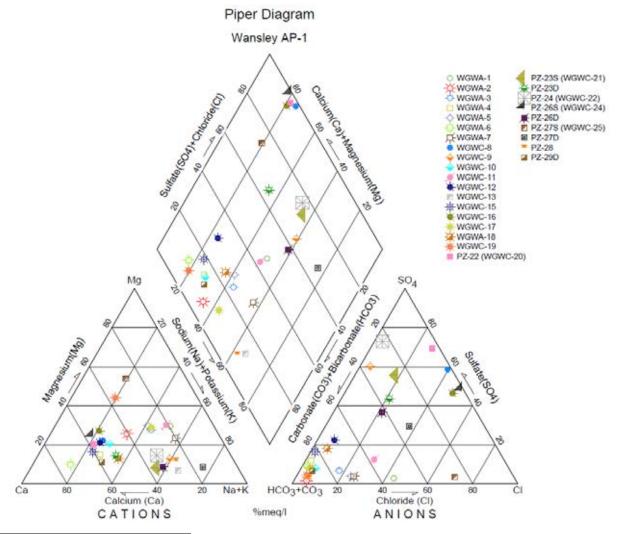
Piper diagrams are trilinear diagrams that plot the relative contributions of major ions to the overall geochemical makeup of a liquid sample. The diagram has three components. The large diamond-shaped component displays the combined cation and anion composition of major solutes. The two



smaller triangular components display the cation components and the anion components, separately and in greater detail. The sample data are plotted as a percentage of the total milliequivalents on the diagram with each component reaching 100 percent at its respective corner of the diagram. If the results from discrete samples plot relatively close to each other, their respective chemical compositions are similar, and they might have a similar (or the same) source of solutes. One can also see mixing of different waters if the samples fall along straight lines between various water types (e.g., mixing of calcium/magnesium carbonate water, such as limestone or dolomite with calcium sulfate water, such as gypsum).

#### GROUNDWATER GEOCHEMCIAL EVALUATION

The resulting Piper diagram for groundwater data collected in March 2021 is presented below<sup>1</sup>.



 $<sup>^{1}</sup>$  Data for WGWC-14A and PZ-25S (reclassified as WGWC-23) are not shown as the charge balance for each is not within  $\pm 10$  percent based on results of groundwater samples collected in March 2021.

.



As can be seen on this Piper plot, with a few exceptions further discussed below, the data generally show highly variable geochemical conditions across the Site, including within the background wells. As described in the *Hydrogeologic Assessment Report Revision 01* (HAR Rev. 01) prepared for AP-1 by Geosyntec (2019), due to the steep topography at the Site and the variable lithologic framework, the depth to the water table is variable, ranging from approximately 1 to 50 feet below ground surface (ft bgs). The uppermost aquifer at AP-1 occurs primarily in partially weathered rock (PWR) and fractured bedrock. In localized areas south of AP-1 shallower groundwater elevations are noted within saprolite. Further, there are several bedrock geologic units present at AP-1, with units north and northwest of AP-1 differing from those southeast and south of the ash pond. Correspondingly, the depths of compliance well and piezometer screens, as well as the materials within the screen interval (e.g., saprolite, PWR, bedrock unit) vary spatially across the Site.

Therefore, the wide range of geochemical conditions depicted on the diagram is consistent with the variability of the geologic units in which these wells and piezometers are screened. A small grouping of four wells (i.e., WGWC-8, WGWC-16, WGWC-20 [former PZ-22], and WGWC-24 [former PZ-26S] plot close to each other within the calcium-sulfate portion of the diamond-shape Piper diagram. Other downgradient wells and piezometers plot within the range of background wells, highlighting the natural variability in groundwater conditions at AP-1.

# APPENDIX C

# Analytical Laboratory Results and Field Sampling Forms

Appendix C1: Laboratory Analytical Data Packages and Data Validation Reports

Appendix C2: Field Sampling Forms

Appendix C1: Laboratory Analytical Date Packages



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 180-116807-1

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: 4/5/2021 7:12:21 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

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#### **Case Narrative**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

Job ID: 180-116807-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-116807-1

#### Comments

040521 Revised Report to correct Fluoride RL from 0.2 to 0.1mg/L; this report replaces the report previously issued on

The samples were received on 2/4/2021 9:30 AM and 2/6/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.2° C, 2.1° C, 2.5° C, 2.6° C, 2.8° C and 3.1° C.

#### **Receipt Exceptions**

The container labels for the two plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWC-12 (180-116916-7). The container labels list a sample collection date of 2/2/21, while the COC lists 2/3/21. The date on the COC was used.

The container label for one out of two of the plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWC-17 (180-116916-11). The container labels list a sample collection date of 3/2/21 while the COC lists 2/4/21. The date on the COC was used.

#### GC Semi VOA

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

#### Metals

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

#### Field Service / Mobile Lab

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

# **Definitions/Glossary**

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

#### **Qualifiers**

	<b>11</b>	$^{\prime\prime}$
-	<b>/ I</b> I .	/16 .
	LU	

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
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

Δ

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# **Accreditation/Certification Summary**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

## 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	06-27-21
California	State	2891	02-21-21
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	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	03-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
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	01-31-22
Wisconsin	State	998027800	08-31-21

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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

# **Sample Summary**

Client: Southern Company

180-116916-17

WGWC-14A

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-116807-1	Dup-1	Water	02/02/21 00:00	02/04/21 09:30	
180-116807-2	EB-1	Water	02/02/21 14:45	02/04/21 09:30	
180-116807-3	WGWA-1	Water	02/02/21 11:15	02/04/21 09:30	
180-116807-4	WGWA-2	Water	02/02/21 12:20	02/04/21 09:30	
180-116807-5	WGWA-18	Water	02/02/21 14:50	02/04/21 09:30	
180-116807-6	WGWA-3	Water	02/02/21 11:45	02/04/21 09:30	
180-116807-7	WGWA-4	Water	02/02/21 12:50	02/04/21 09:30	
180-116807-8	WGWA-7	Water	02/02/21 14:10	02/04/21 09:30	
180-116916-1	Dup-2	Water	02/04/21 00:00	02/06/21 10:00	
180-116916-2	FB-2	Water	02/04/21 13:20	02/06/21 10:00	
180-116916-3	WGWA-6	Water	02/03/21 10:30	02/06/21 10:00	
180-116916-4	WGWA-5	Water	02/03/21 13:25	02/06/21 10:00	
180-116916-5	WGWC-19	Water	02/03/21 14:30	02/06/21 10:00	
180-116916-6	WGWC-11	Water	02/03/21 14:35	02/06/21 10:00	
180-116916-7	WGWC-12	Water	02/03/21 13:25	02/06/21 10:00	
180-116916-8	WGWC-8	Water	02/03/21 15:45	02/06/21 10:00	
180-116916-9	WGWC-15	Water	02/04/21 11:05	02/06/21 10:00	
180-116916-10	WGWC-16	Water	02/04/21 12:30	02/06/21 10:00	
180-116916-11	WGWC-17	Water	02/04/21 13:45	02/06/21 10:00	
180-116916-12	FB-1	Water	02/04/21 14:15	02/06/21 10:00	
180-116916-13	EB-2	Water	02/04/21 14:30	02/06/21 10:00	
180-116916-14	WGWC-9	Water	02/04/21 14:12	02/06/21 10:00	
180-116916-15	WGWC-10	Water	02/04/21 15:50	02/06/21 10:00	
180-116916-16	WGWC-13	Water	02/04/21 11:15	02/06/21 10:00	

Water

02/04/21 12:40 02/06/21 10:00

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Job ID: 180-116807-1

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# **Method Summary**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

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

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

#### **Laboratory References:**

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

Job ID: 180-116807-1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-1** 

Date Collected: 02/02/21 00:00 Date Received: 02/04/21 09:30 Lab Sample ID: 180-116807-1

**Matrix: Water** 

Job ID: 180-116807-1

Batch Batch Dil Initial Batch Final Prepared Method **Factor** or Analyzed **Prep Type** Type Run **Amount** Amount Number **Analyst** Lab Total/NA Analysis 300.0 345752 02/06/21 15:03 SAT TAL PIT Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 346412 02/12/21 11:15 KEM TAL PIT Total Recoverable Analysis EPA 6020B 1 346771 02/13/21 12:12 RSK TAL PIT Instrument ID: A Total/NA Prep 7470A 25 mL 25 mL 345897 02/09/21 06:53 RJR TAL PIT Total/NA Analysis EPA 7470A 346160 02/10/21 11:48 KHM TAL PIT 1 Instrument ID: HGY

Client Sample ID: EB-1 Lab Sample ID: 180-116807-2

Date Collected: 02/02/21 14:45 Matrix: Water

Date Received: 02/04/21 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	300.0 nt ID: INTEGRION		1			345752	02/06/21 16:05	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			346771	02/13/21 12:16	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGY		1			346160	02/10/21 11:52	KHM	TAL PIT

Client Sample ID: WGWA-1

Date Collected: 02/02/21 11:15

Lab Sample ID: 180-116807-3

Matrix: Water

Date Received: 02/04/21 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	300.0 t ID: INTEGRION		1			345752	02/06/21 16:26	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			346771	02/13/21 12:19	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGY		1			346160	02/10/21 11:53	KHM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			346556	02/02/21 11:15	FDS	TAL PIT

Client Sample ID: WGWA-2

Date Collected: 02/02/21 12:20

Lab Sample ID: 180-116807-4

Matrix: Water

Date Received: 02/04/21 09:30

Prep Type Total/NA	Batch Type Analysis	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number 345752	Prepared or Analyzed 02/06/21 13:39	Analyst	Lab TAL PIT
IOIai/INA	Allalysis	300.0		į.			343732	02/00/21 13.39	SAI	IALFII
	Instrumer	t ID: INTEGRIO	N							

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Lab Sample ID: 180-116807-4

Matrix: Water

Job ID: 180-116807-1

Date Collected: 02/02/21 12:20 Date Received: 02/04/21 09:30

**Client Sample ID: WGWA-2** 

	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	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			346771	02/13/21 12:38	RSK	TAL PIT
	Instrumer	nt ID: A								
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			346160	02/10/21 11:54	KHM	TAL PIT
	Instrumer	nt ID: HGY								
Total/NA	Analysis	Field Sampling		1			346556	02/02/21 12:20	FDS	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: WGWA-18 Lab Sample ID: 180-116807-5

Date Collected: 02/02/21 14:50 Matrix: Water

Date Received: 02/04/21 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	300.0 t ID: INTEGRION		1			345752	02/06/21 14:00	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			346771	02/13/21 12:59	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGY		1			346160	02/10/21 11:55	KHM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			346556	02/02/21 14:50	FDS	TAL PIT

Client Sample ID: WGWA-3

Date Collected: 02/02/21 11:45

Lab Sample ID: 180-116807-6

Matrix: Water

Date Received: 02/04/21 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	300.0 t ID: INTEGRION		1			345752	02/06/21 14:42	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			346771	02/13/21 13:03	RSK	TAL PIT
	Instrumen	t ID: A								
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGY		1			346160	02/10/21 11:56	KHM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			346556	02/02/21 11:45	FDS	TAL PIT

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** 

Date Collected: 02/02/21 12:50
Date Received: 02/04/21 09:30

Lab Sample ID: 180-116807-7

Lab Sample ID: 180-116807-8

Lab Sample ID: 180-116916-1

**Matrix: Water** 

**Matrix: Water** 

**Matrix: Water** 

Job ID: 180-116807-1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0 at ID: INTEGRION		1		7	345752	02/06/21 14:21	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: A		1			346771	02/13/21 13:07	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGY		1			346160	02/10/21 11:57	KHM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			346556	02/02/21 12:50	FDS	TAL PIT

Client Sample ID: WGWA-7

Date Collected: 02/02/21 14:10

Date Received: 02/04/21 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			345752	02/06/21 12:36	SAT	TAL PIT
	Instrumer	nt ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346412	02/12/21 11:15	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			346771	02/13/21 13:10	RSK	TAL PIT
	Instrumer	nt ID: A								
Total/NA	Prep	7470A			25 mL	25 mL	345897	02/09/21 06:53	RJR	TAL PIT
Total/NA	Analysis	EPA 7470A		1			346160	02/10/21 11:58	KHM	TAL PIT
	Instrumer	nt ID: HGY								
Total/NA	Analysis	Field Sampling		1			346556	02/02/21 14:10	FDS	TAL PIT
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: Dup-2
Date Collected: 02/04/21 00:00

Date Received: 02/06/21 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	300.0		1			346367	02/12/21 23:09	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: DORY		1			347044	02/18/21 12:24	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:37	KHM	TAL PIT
	Instrumen	t ID: HGZ								

**Client Sample ID: FB-2** 

Date Collected: 02/04/21 13:20 Date Received: 02/06/21 10:00

Lab Sample ID: 180-116916-2

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			346231	02/11/21 16:57	SAT	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 12:27	RSK	TAL PIT
	Instrumen	it ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:38	KHM	TAL PIT
	Instrumen	nt ID: HGZ								

**Client Sample ID: WGWA-6** 

Date Collected: 02/03/21 10:30

Date Received: 02/06/21 10:00

Lab Sample ID: 180-116916-3

**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	300.0		1			346367	02/13/21 02:17	EPS	TAL PIT
	Instrumer	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 12:38	RSK	TAL PIT
	Instrumer	nt ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:39	KHM	TAL PIT
	Instrumer	nt ID: HGZ								
Total/NA	Analysis	Field Sampling		1			346556	02/03/21 10:30	FDS	TAL PIT
	Instrumer	nt ID: NOEQUIP								

**Client Sample ID: WGWA-5** 

Date Collected: 02/03/21 13:25

Date Received: 02/06/21 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	300.0		1			346367	02/12/21 22:28	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 12:56	RSK	TAL PIT
	Instrumen	t ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:40	KHM	TAL PIT
	Instrumen	t ID: HGZ								
Total/NA	Analysis	Field Sampling		1			346556	02/03/21 13:25	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Lab Sample ID: 180-116916-4

**Matrix: Water** 

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Date Collected: 02/03/21 14:30

Lab Sample ID: 180-116916-5

Lab Sample ID: 180-116916-6

**Matrix: Water** 

**Matrix: Water** 

Date Received: 02/06/21 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 Instrumer	300.0 at ID: INTEGRION		1			346367	02/13/21 01:56	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: DORY		1			347044	02/18/21 13:00	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A at ID: HGZ		1			347002	02/18/21 11:41	KHM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			346556	02/03/21 14:30	FDS	TAL PIT

**Client Sample ID: WGWC-11** 

Date Collected: 02/03/21 14:35

Date Received: 02/06/21 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	300.0		1			346231	02/11/21 20:13	SAT	TAL PIT
	Instrumer	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 13:04	RSK	TAL PIT
	Instrumer	t ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:42	KHM	TAL PIT
	Instrumer	t ID: HGZ								
Total/NA	Analysis	Field Sampling		1			346556	02/03/21 14:35	FDS	TAL PIT
	Instrumer	t ID: NOEQUIP								

**Client Sample ID: WGWC-12** 

Date Collected: 02/03/21 13:25

Date Received: 02/06/21 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	300.0 t ID: INTEGRION		1	7 III OUIII	- Tillouit	346367	02/13/21 02:38		TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: DORY		1			347044	02/18/21 13:07	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			347002	02/18/21 11:43	KHM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			346556	02/03/21 13:25	FDS	TAL PIT

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Lab Sample ID: 180-116916-7

**Matrix: Water** 

Job ID: 180-116807-1 Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** 

Date Collected: 02/03/21 15:45 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-8 **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 Instrumer	300.0 at ID: INTEGRION		1			346367	02/12/21 21:46	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: DORY		1			347044	02/18/21 13:18	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A at ID: HGZ		1			347002	02/18/21 11:44	KHM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			346556	02/03/21 15:45	FDS	TAL PIT

Lab Sample ID: 180-116916-9 **Client Sample ID: WGWC-15 Matrix: Water** 

Date Collected: 02/04/21 11:05 Date Received: 02/06/21 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	300.0		1			346367	02/13/21 01:14	EPS	TAL PIT
	Instrumer	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: DORY		1			347044	02/18/21 13:22	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGZ		1			347002	02/18/21 11:45	KHM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			346556	02/04/21 11:05	FDS	TAL PIT

**Client Sample ID: WGWC-16** Lab Sample ID: 180-116916-10 Date Collected: 02/04/21 12:30

Date Received: 02/06/21 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	300.0 t ID: INTEGRION		1			346367	02/12/21 22:48		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis	3005A EPA 6020B		1	50 mL	50 mL	346791 347044	02/17/21 07:39 02/18/21 13:25		TAL PIT
Total/NA Total/NA	Prep Analysis	7470A EPA 7470A t ID: HGZ		1	25 mL	25 mL	346077 347002	02/10/21 07:00 02/18/21 11:48		TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			346556	02/04/21 12:30	FDS	TAL PIT

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**Matrix: Water** 

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-17

Date Collected: 02/04/21 13:45 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-11

**Matrix: Water** 

Job ID: 180-116807-1

Batch Batch Dil Initial Batch Final Prepared Method **Factor** or Analyzed **Prep Type** Type Run **Amount** Amount Number **Analyst** Lab Total/NA Analysis 300.0 346231 02/11/21 19:57 SAT TAL PIT Instrument ID: CHICS2100B Total Recoverable Prep 3005A 50 mL 50 mL 346791 02/17/21 07:39 RJR TAL PIT Total Recoverable Analysis EPA 6020B 1 347044 02/18/21 13:29 RSK **TAL PIT** Instrument ID: DORY Total/NA Prep 7470A 25 mL 25 mL 346077 02/10/21 07:00 KHM TAL PIT Total/NA Analysis **EPA 7470A** 347002 02/18/21 11:49 KHM TAL PIT 1 Instrument ID: HGZ Total/NA Analysis Field Sampling 346556 02/04/21 13:45 FDS TAL PIT Instrument ID: NOEQUIP

Client Sample ID: FB-1

Date Collected: 02/04/21 14:15

Date Received: 02/06/21 10:00

Lab Sample ID: 180-116916-12

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1			346231	02/11/21 17:13	SAT	TAL PIT
	Instrumer	nt ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 13:33	RSK	TAL PIT
	Instrumer	nt ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:50	KHM	TAL PIT
	Instrumer	nt ID: HGZ								

Client Sample ID: EB-2

Date Collected: 02/04/21 14:30

Date Received: 02/06/21 10:00

Lab Sample ID: 180-116916-13

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	300.0		1			346231	02/11/21 17:30	SAT	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: DORY		1			347044	02/18/21 13:36	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346077	02/10/21 07:00	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			347002	02/18/21 11:51	KHM	TAL PIT
	Instrumen	it ID: HGZ								

Client Sample ID: WGWC-9

Date Collected: 02/04/21 14:12

Date Received: 02/06/21 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	300.0		1			346367	02/13/21 01:35	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-116916-14

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**Matrix: Water** 

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-9

Date Collected: 02/04/21 14:12 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-14

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 13:40	RSK	TAL PIT
	Instrumen	t ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346076	02/10/21 06:58	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			346421	02/12/21 10:53	KHM	TAL PIT
	Instrumen	t ID: HGZ								
Total/NA	Analysis	Field Sampling		1			346556	02/04/21 14:12	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: WGWC-10 Lab Sample

Date Collected: 02/04/21 15:50

Date Received: 02/06/21 10:00

**Lab Sample ID: 180-116916-15** 

Lab Sample ID: 180-116916-16

Matrix: Water

**Matrix: Water** 

Prep Type Total/NA	Type Analysis	Batch Method 300.0 at ID: CHICS2100B	Run	Factor 1	Initial Amount	Final Amount	Batch Number 346231	<b>Prepared or Analyzed</b> 02/11/21 19:40	Analyst SAT	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis	3005A EPA 6020B at ID: DORY		1	50 mL	50 mL	346791 347044	02/17/21 07:39 02/18/21 13:44		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	7470A EPA 7470A nt ID: HGZ		1	25 mL	25 mL	346076 346421	02/10/21 06:58 02/12/21 10:56		TAL PIT TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			346556	02/04/21 15:50	FDS	TAL PIT

**Client Sample ID: WGWC-13** 

Date Collected: 02/04/21 11:15

Date Received: 02/06/21 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	300.0		1			346367	02/13/21 00:12	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			347044	02/18/21 13:47	RSK	TAL PIT
	Instrumen	t ID: DORY								
Total/NA	Prep	7470A			25 mL	25 mL	346076	02/10/21 06:58	KHM	TAL PIT
Total/NA	Analysis	EPA 7470A		1			346421	02/12/21 10:56	KHM	TAL PIT
	Instrumen	t ID: HGZ								
Total/NA	Analysis	Field Sampling		1			346556	02/04/21 11:15	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

### **Lab Chronicle**

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-14A

Lab Sample ID: 180-116916-17 Date Collected: 02/04/21 12:40

**Matrix: Water** 

Date Received: 02/06/21 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	300.0 at ID: CHICS2100B		1	1 mL	1.0 mL	346231	02/11/21 18:51	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	346791	02/17/21 07:39	RJR	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: DORY		1			347044	02/18/21 13:58	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	346076	02/10/21 06:58	KHM	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			346421	02/12/21 10:57	KHM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			346556	02/04/21 12:40	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

KEM = Kimberly Mahoney

KHM = Kyle Mucroski

RJR = Ron Rosenbaum

Batch Type: Analysis

EPS = Evan Scheuer

FDS = Sampler Field

KHM = Kyle Mucroski

RSK = Robert Kurtz

SAT = Stephen Tallam

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Mercury

**Client Sample ID: Dup-1** Lab Sample ID: 180-116807-1

Date Collected: 02/02/21 00:00 **Matrix: Water** Date Received: 02/04/21 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.035	J	0.10	0.026	mg/L			02/06/21 15:03	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 12:12	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 12:12	1
Barium	0.014		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 12:12	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 12:12	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 12:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 12:12	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 12:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 12:12	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 12:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 12:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 12:12	1
Thallium	0.00028	J	0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 12:12	1
Method: EPA 7470A	- Morcury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

0.20

<0.13

0.13 ug/L

02/09/21 06:53 02/10/21 11:48

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: EB-1** Lab Sample ID: 180-116807-2

Date Collected: 02/02/21 14:45 **Matrix: Water** 

Date	Received:	02/04/21	09:30	
_				

	Method: 300.0 - Anions, Ion Chror	natography							
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
L	Fluoride	<0.026	0.10	0.026	mg/L			02/06/21 16:05	1

Fluoride	<0.026	0.10	0.026	mg/L			02/06/21 16:05	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recoverable						
Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038	0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 12:16	1
Arsenic	< 0.00031	0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 12:16	1
Barium	<0.0016	0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 12:16	1
Beryllium	<0.00018	0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 12:16	1
Cadmium	<0.00022	0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 12:16	1
Chromium	<0.0015	0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 12:16	1
Cobalt	<0.00013	0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 12:16	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 12:16	1
Lithium	< 0.0034	0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 12:16	1
Molybdenum	<0.00061	0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 12:16	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 12:16	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 12:16	1

Method: EPA 7470A	- Mercury (CVAA)						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13	0.20	0 13 ug/l		02/09/21 06:53	02/10/21 11:52	

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** Lab Sample ID: 180-116807-3

**Matrix: Water** 

Date Collected: 02/02/21 11:15 Date Received: 02/04/21 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.028	J	0.10	0.026	mg/L			02/06/21 16:26	1
Method: EPA 6020B -	· Metals (ICP/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00062	J	0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 12:19	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 12:19	1
Barium	0.050		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 12:19	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 12:19	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 12:19	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 12:19	1
Cobalt	0.00082	J	0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 12:19	1
Lead	0.00015	J	0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 12:19	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 12:19	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 12:19	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 12:19	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 12:19	1
- Method: EPA 7470A -	Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:53	1
Method: Field Sampl	ing - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.36				SU			02/02/21 11:15	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-2 Lab Sample ID: 180-116807-4

Matrix: Water

Date Collected: 02/02/21 12:20 Date Received: 02/04/21 09:30

Analyte	ons, Ion Chromatogra Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.065	J	0.10	0.026	mg/L			02/06/21 13:39	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 12:38	
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 12:38	•
Barium	0.025		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 12:38	•
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 12:38	
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 12:38	•
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 12:38	•
Cobalt	0.00069	J	0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 12:38	
Lead	0.00015	J	0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 12:38	•
Lithium	0.0065		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 12:38	•
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 12:38	
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 12:38	•
Thallium	0.00040	J	0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 12:38	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:54	
Method: Field Samp	ling - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
pH	6.10				SU			02/02/21 12:20	1

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Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-18 Lab Sample ID: 180-116807-5

Matrix: Water

Date Collected: 02/02/21 14:50 Date Received: 02/04/21 09:30

Analyte	ons, Ion Chromatogra Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.071	J	0.10	0.026	mg/L			02/06/21 14:00	
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 12:59	
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 12:59	•
Barium	0.017		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 12:59	•
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 12:59	
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 12:59	•
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 12:59	•
Cobalt	0.0018	J	0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 12:59	
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 12:59	•
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 12:59	•
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 12:59	
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 12:59	
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 12:59	•
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:55	
Method: Field Samp	ling - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.48				SU		<u> </u>	02/02/21 14:50	

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Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** Lab Sample ID: 180-116807-6 Date Collected: 02/02/21 11:45

**Matrix: Water** 

Date Received: 02/04/21 09:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.035	J	0.10	0.026	mg/L			02/06/21 14:42	1
Method: EPA 6020B -	· Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 13:03	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 13:03	1
Barium	0.015		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 13:03	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 13:03	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 13:03	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 13:03	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 13:03	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 13:03	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 13:03	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 13:03	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 13:03	1
Thallium -	<0.00015		0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 13:03	1
- Method: EPA 7470A -	Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:56	1
Method: Field Sampli	ing - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.78				SU			02/02/21 11:45	1

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Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-116807-7 **Client Sample ID: WGWA-4** Date Collected: 02/02/21 12:50

**Matrix: Water** 

Date Received: 02/04/21 09:30

Method: 300.0 - Anio Analyte	· · · · · · · · · · · · · · · · · · ·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.15		0.10	0.026	mg/L			02/06/21 14:21	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 13:07	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 13:07	1
Barium	0.0060	J	0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 13:07	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 13:07	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 13:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 13:07	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 13:07	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 13:07	1
Lithium	0.0039	J	0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 13:07	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 13:07	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 13:07	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 13:07	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:57	1
Method: Field Sampl									
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
pH	6.61				SU			02/02/21 12:50	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** Lab Sample ID: 180-116807-8

Date Collected: 02/02/21 14:10 **Matrix: Water** 

SU

Date Received: 02/04/21 09:30

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/06/21 12:36	1
Method: EPA 6020B -	· Metals (ICP/MS) - To	otal Recove	erable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 13:10	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 13:10	1
Barium	0.012		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 13:10	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 13:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 13:10	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 13:10	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 13:10	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 13:10	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 13:10	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 13:10	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 13:10	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 13:10	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/09/21 06:53	02/10/21 11:58	1
Method: Field Sampli	ing - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

5.84

02/02/21 14:10

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-116916-1

Date Collected: 02/04/21 00:00 **Matrix: Water** 

Date Received: 02/06/21 10:00

Mercury

Fluoride  Method: EPA 6020B - Metals Analyte Antimony Arsenic Barium Beryllium	Result 0.00052 0.00083 0.029	Qualifier J	0.10  rable RL 0.0020 0.0010	0.026  MDL 0.00038 0.00031	mg/L  Unit mg/L	<u>D</u>	Prepared 02/17/21 07:39	02/12/21 23:09  Analyzed 02/18/21 12:24	Dil Fac
Analyte Antimony Arsenic Barium Beryllium	Result 0.00052 0.00083 0.029	Qualifier J	0.0020	0.00038	mg/L	<u>D</u>			Dil Fac
Antimony Arsenic Barium Beryllium	0.00052 0.00083 0.029	J	0.0020	0.00038	mg/L	<u>D</u>			Dil Fac
Arsenic Barium Beryllium	0.00083 0.029				U		02/17/21 07:39	02/18/21 12:24	1
<b>Barium</b> Beryllium	0.029	J	0.0010	0.00031					
Beryllium				0.00001	mg/L		02/17/21 07:39	02/18/21 12:24	1
•			0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 12:24	1
	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 12:24	1
Cadmium	< 0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 12:24	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 12:24	1
Cobalt	0.00018	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 12:24	1
Lead	0.00043	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 12:24	1
Lithium	0.0088		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 12:24	1
Molybdenum	0.0024	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 12:24	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 12:24	1
Thallium	0.00030	J	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 12:24	1

0.20

<0.13

0.13 ug/L

02/10/21 07:00 02/18/21 11:37

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2 Lab Sample ID: 180-116916-2

Matrix: Water

Date Collected: 02/04/21 13:20 Date Received: 02/06/21 10:00

Analyte

Mercury

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/11/21 16:57	1
Method: EPA 6020B	- Metals (ICP/MS) - To	tal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 12:27	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 12:27	1
Barium	<0.0016		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 12:27	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 12:27	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 12:27	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 12:27	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 12:27	1
_ead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 12:27	1
_ithium	< 0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 12:27	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 12:27	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 12:27	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 12:27	1

RL

0.20

MDL Unit

0.13 ug/L

Prepared

Analyzed

02/10/21 07:00 02/18/21 11:38

Result Qualifier

<0.13

4

6

7

9

10

12

13

Dil Fac

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** Lab Sample ID: 180-116916-3 Date Collected: 02/03/21 10:30

**Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	ons, Ion Chromatogra Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.088	J	0.10	0.026	mg/L			02/13/21 02:17	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 12:38	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 12:38	1
Barium	0.0079	J	0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 12:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 12:38	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 12:38	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 12:38	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 12:38	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 12:38	1
Lithium	0.0047	J	0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 12:38	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 12:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 12:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 12:38	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:39	1
Method: Field Samp	ling - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.76				SU			02/03/21 10:30	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** Lab Sample ID: 180-116916-4

Date Collected: 02/03/21 13:25 **Matrix: Water** 

SU

Date Received: 02/06/21 10:00

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/12/21 22:28	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 12:56	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 12:56	1
Barium	0.015		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 12:56	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 12:56	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 12:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 12:56	1
Cobalt	0.0015	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 12:56	1
Lead	0.00019	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 12:56	1
Lithium	<0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 12:56	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 12:56	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 12:56	1
Thallium	0.00042	J	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 12:56	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:40	1

5.30

4/5/2021 (Rev. 1)

02/03/21 13:25

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Result Qualifier

6.75

Lab Sample ID: 180-116916-5 Date Collected: 02/03/21 14:30 **Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.30		0.10	0.026	mg/L			02/13/21 01:56	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:00	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:00	1
Barium	<0.0016		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:00	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:00	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:00	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:00	1
Cobalt	0.00025	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:00	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:00	1
Lithium	0.060		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:00	1
Molybdenum	0.0013	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:00	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:00	1
Thallium	0.00018	J	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:00	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:41	1

RL

MDL Unit

SU

Prepared

Analyzed

02/03/21 14:30

4/5/2021 (Rev. 1)

Job ID: 180-116807-1

Dil Fac

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** Lab Sample ID: 180-116916-6

Job ID: 180-116807-1

Date Collected: 02/03/21 14:35 Date Received: 02/06/21 10:00 **Matrix: Water** 

Method: 300.0 - Anio Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.027	J	0.10	0.026	mg/L			02/11/21 20:13	
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:04	
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:04	•
Barium	0.039		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:04	•
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:04	
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:04	
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:04	•
Cobalt	0.00072	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:04	
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:04	•
Lithium	<0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:04	
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:04	
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:04	
Thallium	0.00016	J	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:04	•
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:42	
Method: Field Sampl	ing - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
pH	5.21				SU			02/03/21 14:35	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-12** Lab Sample ID: 180-116916-7

**Matrix: Water** 

Date Collected: 02/03/21 13:25 Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.082	J	0.10	0.026	mg/L			02/13/21 02:38	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:07	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:07	1
Barium	0.015		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:07	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:07	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:07	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:07	1
Cobalt	0.00017	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:07	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:07	1
Lithium	0.0075		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:07	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:07	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:07	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:07	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:43	1
•	oling - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
pH	6.15				SU			02/03/21 13:25	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** Lab Sample ID: 180-116916-8 Date Collected: 02/03/21 15:45

**Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.15		0.10	0.026	mg/L			02/12/21 21:46	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:18	1
Arsenic	0.0013		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:18	1
Barium	<0.0016		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:18	1
Beryllium	0.0025		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:18	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:18	1
Cobalt	0.00014	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:18	1
Lead	0.00013	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:18	1
Lithium	0.014		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:18	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:18	1
Selenium	0.0036	J	0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:18	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:44	1
Method: Field Samp	ling - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.08				SU			02/03/21 15:45	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** Lab Sample ID: 180-116916-9 Date Collected: 02/04/21 11:05

**Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.69		0.10	0.026	mg/L			02/13/21 01:14	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:22	1
Arsenic	0.00069	J	0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:22	1
Barium	0.028		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:22	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:22	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:22	1
Cobalt	0.00015	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:22	1
Lead	0.00030	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:22	1
Lithium	0.0086		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:22	1
Molybdenum	0.0022	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:22	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:45	1
Method: Field Sampli									
Analyte		Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
pH	7.77				SU			02/04/21 11:05	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** Lab Sample ID: 180-116916-10

Date Collected: 02/04/21 12:30 **Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.052	J	0.10	0.026	mg/L			02/12/21 22:48	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:25	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:25	1
Barium	0.039		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:25	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:25	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:25	1
Cobalt	0.00026	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:25	1
Lead	0.00013	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:25	1
Lithium	0.0051		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:25	1
Selenium	0.0023	J	0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:25	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:48	1
Method: Field Sampl	ling - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.42				SU			02/04/21 12:30	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

Method: Field Sampling - Field Sampling

Analyte

рН

Result Qualifier

6.31

Client Sample ID: WGWC-17 Lab Sample ID: 180-116916-11

Date Collected: 02/04/21 13:45 Matrix: Water

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.064	J	0.10	0.026	mg/L			02/11/21 19:57	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:29	1
Arsenic	0.00035	J	0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:29	1
Barium	0.012		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:29	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:29	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:29	1
Cobalt	0.00042	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:29	1
Lithium	0.0047	J	0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:29	1
Molybdenum	0.0025	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:29	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:29	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:49	1

RL

MDL Unit

SU

Prepared

Analyzed

02/04/21 13:45

Dil Fac

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: FB-1** Lab Sample ID: 180-116916-12

Date Collected: 02/04/21 14:15 **Matrix: Water** Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.028	J	0.10	0.026	mg/L			02/11/21 17:13	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:33	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:33	1
Barium	<0.0016		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:33	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:33	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:33	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:33	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:33	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:33	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:33	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:33	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:33	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:33	1

Method: EPA 7470A - Mercury (CVAA)											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:50	1		

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: EB-2** Lab Sample ID: 180-116916-13

Date Collected: 02/04/21 14:30 **Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			02/11/21 17:30	1
Method: EPA 6020B -	Metals (ICP/MS) - To	tal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:36	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:36	1
Barium	<0.0016		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:36	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:36	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:36	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:36	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:36	1
Lead	<0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:36	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:36	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:36	1

Method: EPA 7470A - Mercury	(CVAA)	
	D 1/ 0 1/6	 

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 07:00	02/18/21 11:51	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** Lab Sample ID: 180-116916-14 Date Collected: 02/04/21 14:12

**Matrix: Water** 

Job ID: 180-116807-1

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.91		0.10	0.026	mg/L			02/13/21 01:35	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00041	J	0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:40	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:40	1
Barium	0.0016	J	0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:40	1
Beryllium	0.00039	J	0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:40	1
Cadmium	< 0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:40	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:40	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:40	1
Lead	< 0.00013		0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:40	1
Lithium	0.035		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:40	1
Molybdenum	0.0030	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:40	1
Selenium	0.0030	J	0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:40	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:40	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 06:58	02/12/21 10:53	1
Method: Field Samplir	ng - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.22				SU			02/04/21 14:12	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Lab Sample ID: 180-116916-15 **Matrix: Water** 

Date Collected: 02/04/21 15:50
Date Received: 02/06/21 10:00

Method: 300.0 - Anio Analyte	· · · · · · · · · · · · · · · · · · ·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.12		0.10	0.026	mg/L			02/11/21 19:40	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:44	
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:44	•
Barium	0.035		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:44	•
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:44	•
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:44	
Chromium	0.0018	J	0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:44	•
Cobalt	0.00059	J	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:44	· · · · · · · · ·
Lead	0.00019	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:44	•
Lithium	0.0049	J	0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:44	
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:44	,
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:44	
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:44	1
Method: EPA 7470A	- Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 06:58	02/12/21 10:56	
Method: Field Sampl	ling - Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.21				SU			02/04/21 15:50	1

Client: Southern Company Job ID: 180-116807-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** Lab Sample ID: 180-116916-16 Date Collected: 02/04/21 11:15

**Matrix: Water** 

Date Received: 02/06/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.16		0.10	0.026	mg/L			02/13/21 00:12	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:47	1
Arsenic	0.00038	J	0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:47	1
Barium	0.047		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:47	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:47	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:47	1
Lead	0.00038	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:47	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:47	1
Molybdenum	0.0012	J	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:47	1
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		02/10/21 06:58	02/12/21 10:56	1
Method: Field Sampli	ing - Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.34				SU			02/04/21 11:15	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Date Collected: 02/04/21 12:40 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-17

**Matrix: Water** 

Job ID: 180-116807-1

Method: 300.0 - Anions, lo	n Chromatogra	phy							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.033	J	0.10	0.026	mg/L			02/11/21 18:51	1

1 1001100	0.000	•							· ·
Method: EPA 6020B - I	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 13:58	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 13:58	1
Barium	0.029		0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 13:58	1
Beryllium	0.00026	J	0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 13:58	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 13:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 13:58	1
Cobalt	0.0041		0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 13:58	1
Lead	0.00013	J	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 13:58	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 13:58	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 13:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 13:58	1
Thallium	0.00021	J	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 13:58	1

Method: EPA 7470A - Mercury (CVAA)											
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Mercury	<0.13		0.20	0.13	ug/L		02/10/21 06:58	02/12/21 10:57	1	

Method: Fleid Sampling - Fleid	a Sampling								
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.76				SU			02/04/21 12:40	1

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

**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

Client Sample ID: Method Blank

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 180-345752/6

**Matrix: Water** 

Analysis Batch: 345752

MB MB

Result Qualifier RL **MDL** Unit Dil Fac Analyte D Prepared Analyzed 0.10 Fluoride < 0.026 0.026 mg/L 02/06/21 11:55

Lab Sample ID: LCS 180-345752/5

**Matrix: Water** 

**Analysis Batch: 345752** 

Spike LCS LCS %Rec. Added Result Qualifier Unit D %Rec Limits Analyte 2.50 90 - 110 Fluoride 274 mg/L 110

Lab Sample ID: 180-116807-8 MS

**Matrix: Water** 

**Analysis Batch: 345752** 

Spike MS MS %Rec. Sample Sample Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec Fluoride <0.026 2.50 2.65 106 90 - 110 mg/L

Lab Sample ID: 180-116807-8 MSD

**Matrix: Water** 

**Analysis Batch: 345752** 

Spike MSD MSD **RPD** %Rec. Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit <0.026 Fluoride 2.50 2.68 mg/L 107 90 - 110

Lab Sample ID: MB 180-346231/48

**Matrix: Water** 

Analysis Batch: 346231

MR MR Analyte RL **MDL** Unit Result Qualifier Prepared Analyzed Dil Fac Fluoride 0.10 0.026 mg/L 02/11/21 18:35 <0.026

Lab Sample ID: MB 180-346231/6

**Matrix: Water** 

**Analysis Batch: 346231** 

MB MB

**MDL** Unit Analyte Result Qualifier RL Dil Fac Prepared Analyzed 0.10 0.026 mg/L Fluoride < 0.026 02/11/21 07:29

Lab Sample ID: LCS 180-346231/49

**Matrix: Water** 

**Analysis Batch: 346231** 

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit %Rec Fluoride 2.50 2.54 mg/L 101 90 - 110

Lab Sample ID: LCS 180-346231/5

**Matrix: Water** 

**Analysis Batch: 346231** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits Fluoride 90 - 110 2.50 2.48 mg/L 99

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**Client Sample ID: Lab Control Sample** 

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Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

**Prep Type: Total/NA** 

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: WGWC-13

Client Sample ID: WGWC-13

Client Sample ID: WGWC-14A

Client Sample ID: WGWC-14A

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 180-116916-17 MS

**Matrix: Water** 

Analysis Batch: 346231

Sample Sample Spike MS MS %Rec. Result Qualifier Result Qualifier Added %Rec Limits Analyte Unit 2.50 Fluoride 0.033 J 2.59 mg/L 102 90 - 110

Lab Sample ID: 180-116916-17 MSD

**Matrix: Water** 

**Analysis Batch: 346231** 

Sample Sample Spike MSD MSD %Rec. **RPD** Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 2.50 105 90 - 110 Fluoride 0.033 .1 2.65 mg/L

Lab Sample ID: MB 180-346367/6

**Matrix: Water** 

**Analysis Batch: 346367** 

MB MB

RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac Fluoride <0.026 0.10 0.026 mg/L 02/12/21 08:02

Lab Sample ID: LCS 180-346367/5

**Matrix: Water** 

**Analysis Batch: 346367** 

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

Lab Sample ID: 180-116916-16 MS

**Matrix: Water** 

Analysis Batch: 346367

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Fluoride 2.50 98 90 - 110 0.16 2.60 mg/L

Lab Sample ID: 180-116916-16 MSD

**Matrix: Water** 

**Analysis Batch: 346367** 

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Limits RPD Limit Analyte Result Qualifier Unit D %Rec 2.50 Fluoride 0.16 2.55 mg/L 95 90 - 110 20

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

Lab Sample ID: MB 180-346412/1-A Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Recoverable Analysis Batch: 346771 Prep Batch: 346412** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		02/12/21 11:15	02/13/21 11:40	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		02/12/21 11:15	02/13/21 11:40	1
Barium	< 0.0016		0.010	0.0016	mg/L		02/12/21 11:15	02/13/21 11:40	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		02/12/21 11:15	02/13/21 11:40	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		02/12/21 11:15	02/13/21 11:40	1
Chromium	<0.0015		0.0020	0.0015	mg/L		02/12/21 11:15	02/13/21 11:40	1

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Project/Site: CCR - Plant Wansley Ash Pond

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

MB MB

Lab Sample ID: MB 180-346412/1-A

**Matrix: Water** 

**Analysis Batch: 346771** 

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

**Prep Batch: 346412** 

Job ID: 180-116807-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00013	0.0025	0.00013	mg/L		02/12/21 11:15	02/13/21 11:40	1
Lead	<0.00013	0.0010	0.00013	mg/L		02/12/21 11:15	02/13/21 11:40	1
Lithium	<0.0034	0.0050	0.0034	mg/L		02/12/21 11:15	02/13/21 11:40	1
Molybdenum	<0.00061	0.015	0.00061	mg/L		02/12/21 11:15	02/13/21 11:40	1
Selenium	<0.0015	0.0050	0.0015	mg/L		02/12/21 11:15	02/13/21 11:40	1
Thallium	<0.00015	0.0010	0.00015	mg/L		02/12/21 11:15	02/13/21 11:40	1

Lab Sample ID: LCS 180-346412/2-A

**Matrix: Water** 

Analysis Batch: 346771

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

**Prep Batch: 346412** 

%Rec. Spike LCS LCS **Analyte** Added Result Qualifier Unit D %Rec Limits Antimony 0.250 0.235 mg/L 94 80 - 120 Arsenic 1.00 0.950 95 80 - 120 mg/L Barium 1.00 0.990 mg/L 99 80 - 120 Beryllium 0.500 0.521 104 80 - 120 mg/L Cadmium 0.500 0.492 mg/L 98 80 - 120 Chromium 0.500 0.502 100 mg/L 80 - 120Cobalt 0.500 0.478 mg/L 96 80 - 120 Lead 0.500 0.489 mg/L 98 80 - 120 0.500 0.483 97 Lithium mg/L 80 - 120 Molybdenum 0.500 0.495 99 80 - 120 mg/L 0.976 98 80 - 120 Selenium 1.00 mg/L Thallium 1.00 101 80 - 120 1.01 mg/L

Lab Sample ID: 180-116807-3 MS

**Matrix: Water** 

**Analysis Batch: 346771** 

**Client Sample ID: WGWA-1 Prep Type: Total Recoverable** 

**Prep Batch: 346412** 

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Antimony 0.00062 0.250 0.239 mg/L 95 75 - 125 Arsenic < 0.00031 1.00 0.956 mg/L 96 75 - 125 Barium 0.050 1.00 1.05 mg/L 100 75 - 125 Beryllium 0.500 0.527 105 75 - 125 <0.00018 mg/L Cadmium 0.500 0.501 < 0.00022 mg/L 100 75 - 125 Chromium 0.500 0.500 100 75 - 125 < 0.0015 mg/L Cobalt 0.00082 J 0.500 0.485 mg/L 97 75 - 125 Lead 0.500 0.496 99 75 - 125 0.00015 J mg/L Lithium < 0.0034 0.500 0.489 mg/L 98 75 - 125 Molybdenum < 0.00061 0.500 0.499 mg/L 100 75 - 125 Selenium < 0.0015 1.00 0.981 mg/L 98 75 - 125 Thallium < 0.00015 1.00 1.03 mg/L 103 75 - 125

Lab Sample ID: 180-116807-3 MSD

**Matrix: Water** 

**Client Sample ID: WGWA-1 Prep Type: Total Recoverable** D it

Analysis Batch: 346771									Prep Ba	itch: 34	46412
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.00062	J	0.250	0.238		mg/L		95	75 - 125	0	20

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Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-116807-3 MSD

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

**Matrix: Water** 

**Analysis Batch: 346771** 

**Client Sample ID: WGWA-1 Prep Type: Total Recoverable** 

**Prep Batch: 346412** 

Job ID: 180-116807-1

-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	<0.00031		1.00	0.955		mg/L		96	75 - 125	0	20
Barium	0.050		1.00	1.06		mg/L		101	75 - 125	1	20
Beryllium	<0.00018		0.500	0.529		mg/L		106	75 - 125	1	20
Cadmium	<0.00022		0.500	0.501		mg/L		100	75 - 125	0	20
Chromium	<0.0015		0.500	0.500		mg/L		100	75 - 125	0	20
Cobalt	0.00082	J	0.500	0.481		mg/L		96	75 - 125	1	20
Lead	0.00015	J	0.500	0.493		mg/L		99	75 - 125	1	20
Lithium	< 0.0034		0.500	0.488		mg/L		98	75 - 125	0	20
Molybdenum	<0.00061		0.500	0.496		mg/L		99	75 - 125	0	20
Selenium	<0.0015		1.00	0.974		mg/L		97	75 - 125	1	20
Thallium	<0.00015		1.00	1.03		mg/L		103	75 - 125	0	20

Lab Sample ID: MB 180-346791/1-A

**Matrix: Water** 

Analysis Batch: 347044

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

**Prep Batch: 346791** 

	MB MB							
Analyte Res	ult Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony <0.000	)38	0.0020	0.00038	mg/L		02/17/21 07:39	02/18/21 12:17	1
Arsenic <0.000	)31	0.0010	0.00031	mg/L		02/17/21 07:39	02/18/21 12:17	1
Barium <0.00	)16	0.010	0.0016	mg/L		02/17/21 07:39	02/18/21 12:17	1
Beryllium <0.000	)18	0.0025	0.00018	mg/L		02/17/21 07:39	02/18/21 12:17	1
Cadmium <0.000	)22	0.0025	0.00022	mg/L		02/17/21 07:39	02/18/21 12:17	1
Chromium <0.00	)15	0.0020	0.0015	mg/L		02/17/21 07:39	02/18/21 12:17	1
Cobalt <0.000	)13	0.0025	0.00013	mg/L		02/17/21 07:39	02/18/21 12:17	1
Lead <0.000	)13	0.0010	0.00013	mg/L		02/17/21 07:39	02/18/21 12:17	1
Lithium <0.00	)34	0.0050	0.0034	mg/L		02/17/21 07:39	02/18/21 12:17	1
Molybdenum <0.000	061	0.015	0.00061	mg/L		02/17/21 07:39	02/18/21 12:17	1
Selenium <0.00	)15	0.0050	0.0015	mg/L		02/17/21 07:39	02/18/21 12:17	1
Thallium <0.000	)15	0.0010	0.00015	mg/L		02/17/21 07:39	02/18/21 12:17	1

Lab Sample ID: LCS 180-346791/2-A

**Matrix: Water** 

Analysis Batch: 347044

**Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 346791** 

Analysis Batch: 347044	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.245		mg/L		98	80 - 120
Arsenic	1.00	0.989		mg/L		99	80 - 120
Barium	1.00	1.05		mg/L		105	80 - 120
Beryllium	0.500	0.494		mg/L		99	80 - 120
Cadmium	0.500	0.519		mg/L		104	80 - 120
Chromium	0.500	0.508		mg/L		102	80 - 120
Cobalt	0.500	0.501		mg/L		100	80 - 120
Lead	0.500	0.508		mg/L		102	80 - 120
Lithium	0.500	0.498		mg/L		100	80 - 120
Molybdenum	0.500	0.515		mg/L		103	80 - 120
Selenium	1.00	1.04		mg/L		104	80 - 120
Thallium	1.00	1.06		mg/L		106	80 - 120

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

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

Lab Sample ID: 180-116916-3 MS

**Matrix: Water** 

Analysis Batch: 347044

**Client Sample ID: WGWA-6 Prep Type: Total Recoverable** 

**Prep Batch: 346791** 

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	<0.00038		0.250	0.245		mg/L		98	75 - 125	
Arsenic	<0.00031		1.00	0.964		mg/L		96	75 - 125	
Barium	0.0079	J	1.00	1.04		mg/L		104	75 - 125	
Beryllium	<0.00018		0.500	0.489		mg/L		98	75 - 125	
Cadmium	<0.00022		0.500	0.519		mg/L		104	75 - 125	
Chromium	<0.0015		0.500	0.501		mg/L		100	75 - 125	
Cobalt	<0.00013		0.500	0.484		mg/L		97	75 - 125	
Lead	<0.00013		0.500	0.499		mg/L		100	75 - 125	
Lithium	0.0047	J	0.500	0.492		mg/L		97	75 - 125	
Molybdenum	<0.00061		0.500	0.504		mg/L		101	75 - 125	
Selenium	<0.0015		1.00	1.03		mg/L		103	75 - 125	
Thallium	<0.00015		1.00	1.03		mg/L		103	75 - 125	

Lab Sample ID: 180-116916-3 MSD

**Matrix: Water** 

**Client Sample ID: WGWA-6 Prep Type: Total Recoverable** 

Analysis Batch: 347044									Prep Ba	atcn: 34	16/91
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.00038		0.250	0.242		mg/L		97	75 - 125	1	20
Arsenic	< 0.00031		1.00	0.957		mg/L		96	75 - 125	1	20
Barium	0.0079	J	1.00	1.03		mg/L		103	75 - 125	1	20
Beryllium	<0.00018		0.500	0.472		mg/L		94	75 - 125	4	20
Cadmium	<0.00022		0.500	0.512		mg/L		102	75 - 125	1	20
Chromium	<0.0015		0.500	0.501		mg/L		100	75 - 125	0	20
Cobalt	<0.00013		0.500	0.482		mg/L		96	75 - 125	0	20
Lead	< 0.00013		0.500	0.494		mg/L		99	75 - 125	1	20
Lithium	0.0047	J	0.500	0.480		mg/L		95	75 - 125	2	20
Molybdenum	<0.00061		0.500	0.500		mg/L		100	75 - 125	1	20
Selenium	<0.0015		1.00	1.01		mg/L		101	75 - 125	2	20
Thallium	<0.00015		1.00	1.02		mg/L		102	75 - 125	1	20

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

Lab Sample ID: MB 180-345897/1-A

**Matrix: Water** 

**Analysis Batch: 346160** 

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

**Client Sample ID: Lab Control Sample** 

**Prep Batch: 345897** 

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 02/09/21 06:53 02/10/21 11:43 Mercury <0.13 0.20 0.13 ug/L

Lab Sample ID: LCS 180-345897/2-A

**Matrix: Water** 

**Analysis Batch: 346160** 

Prep Type: Total/NA **Prep Batch: 345897** Spike LCS LCS %Rec.

Added Limits Analyte Result Qualifier Unit %Rec Mercury 2.50 2.57 103 80 - 120 ug/L

MB MB

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-116807-1

**Prep Batch: 346076** 

Prep Type: Total/NA

**Prep Batch: 346077** 

Client Sample ID: Method Blank

80 - 120

100

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

Lab Sample ID: 180-116807-1 MS Client Sample ID: Dup-1 **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 346160 Prep Batch: 345897** 

Sample Sample Spike MS MS %Rec. Result Qualifier Result Qualifier Added %Rec Limits Analyte Unit D Mercury 1.00 < 0.13 1.01 ug/L 101 75 - 125

Lab Sample ID: 180-116807-1 MSD Client Sample ID: Dup-1 **Matrix: Water** Prep Type: Total/NA **Analysis Batch: 346160 Prep Batch: 345897** Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Analyte < 0.13 1.00 75 - 125 Mercury 1.02 ug/L 102 n

Lab Sample ID: MB 180-346076/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 346421** MB MB

RL **MDL** Unit Analyte Result Qualifier Prepared Analyzed Dil Fac Mercury <0.13 0.20 0.13 ug/L 02/10/21 06:58 02/12/21 10:38

Lab Sample ID: LCS 180-346076/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 346421 Prep Batch: 346076** Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit %Rec Limits

2.50 2.55 80 - 120 Mercury ug/L 102

Lab Sample ID: MB 180-346077/1-A **Matrix: Water** 

Analysis Batch: 347002

Mercury

MR MR Analyte RL **MDL** Unit Result Qualifier Prepared Analyzed Dil Fac <0.13 0.20 0.13 ug/L 02/10/21 07:00 02/18/21 11:31 Mercury

Lab Sample ID: LCS 180-346077/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA **Matrix: Water** 

**Analysis Batch: 347002 Prep Batch: 346077** Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec

2.50

ug/L

2.50

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Project/Site: CCR - Plant Wansley Ash Pond

### HPLC/IC

### Analysis Batch: 345752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total/NA	Water	300.0	
180-116807-2	EB-1	Total/NA	Water	300.0	
180-116807-3	WGWA-1	Total/NA	Water	300.0	
180-116807-4	WGWA-2	Total/NA	Water	300.0	
180-116807-5	WGWA-18	Total/NA	Water	300.0	
180-116807-6	WGWA-3	Total/NA	Water	300.0	
180-116807-7	WGWA-4	Total/NA	Water	300.0	
180-116807-8	WGWA-7	Total/NA	Water	300.0	
MB 180-345752/6	Method Blank	Total/NA	Water	300.0	
LCS 180-345752/5	Lab Control Sample	Total/NA	Water	300.0	
180-116807-8 MS	WGWA-7	Total/NA	Water	300.0	
180-116807-8 MSD	WGWA-7	Total/NA	Water	300.0	

### **Analysis Batch: 346231**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-2	FB-2	Total/NA	Water	300.0	
180-116916-6	WGWC-11	Total/NA	Water	300.0	
180-116916-11	WGWC-17	Total/NA	Water	300.0	
180-116916-12	FB-1	Total/NA	Water	300.0	
180-116916-13	EB-2	Total/NA	Water	300.0	
180-116916-15	WGWC-10	Total/NA	Water	300.0	
180-116916-17	WGWC-14A	Total/NA	Water	300.0	
MB 180-346231/48	Method Blank	Total/NA	Water	300.0	
MB 180-346231/6	Method Blank	Total/NA	Water	300.0	
LCS 180-346231/49	Lab Control Sample	Total/NA	Water	300.0	
LCS 180-346231/5	Lab Control Sample	Total/NA	Water	300.0	
180-116916-17 MS	WGWC-14A	Total/NA	Water	300.0	
180-116916-17 MSD	WGWC-14A	Total/NA	Water	300.0	

### Analysis Batch: 346367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total/NA	Water	300.0	
180-116916-3	WGWA-6	Total/NA	Water	300.0	
180-116916-4	WGWA-5	Total/NA	Water	300.0	
180-116916-5	WGWC-19	Total/NA	Water	300.0	
180-116916-7	WGWC-12	Total/NA	Water	300.0	
180-116916-8	WGWC-8	Total/NA	Water	300.0	
180-116916-9	WGWC-15	Total/NA	Water	300.0	
180-116916-10	WGWC-16	Total/NA	Water	300.0	
180-116916-14	WGWC-9	Total/NA	Water	300.0	
180-116916-16	WGWC-13	Total/NA	Water	300.0	
MB 180-346367/6	Method Blank	Total/NA	Water	300.0	
LCS 180-346367/5	Lab Control Sample	Total/NA	Water	300.0	
180-116916-16 MS	WGWC-13	Total/NA	Water	300.0	
180-116916-16 MSD	WGWC-13	Total/NA	Water	300.0	

### Metals

### **Prep Batch: 345897**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total/NA	Water	7470A	

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Job ID: 180-116807-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Metals (Continued)** 

### Prep Batch: 345897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-2	EB-1	Total/NA	Water	7470A	
180-116807-3	WGWA-1	Total/NA	Water	7470A	
180-116807-4	WGWA-2	Total/NA	Water	7470A	
180-116807-5	WGWA-18	Total/NA	Water	7470A	
180-116807-6	WGWA-3	Total/NA	Water	7470A	
180-116807-7	WGWA-4	Total/NA	Water	7470A	
180-116807-8	WGWA-7	Total/NA	Water	7470A	
MB 180-345897/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-345897/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-116807-1 MS	Dup-1	Total/NA	Water	7470A	
180-116807-1 MSD	Dup-1	Total/NA	Water	7470A	

### **Prep Batch: 346076**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-14	WGWC-9	Total/NA	Water	7470A	_
180-116916-15	WGWC-10	Total/NA	Water	7470A	
180-116916-16	WGWC-13	Total/NA	Water	7470A	
180-116916-17	WGWC-14A	Total/NA	Water	7470A	
MB 180-346076/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-346076/2-A	Lab Control Sample	Total/NA	Water	7470A	

### **Prep Batch: 346077**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total/NA	Water	7470A	
180-116916-2	FB-2	Total/NA	Water	7470A	
180-116916-3	WGWA-6	Total/NA	Water	7470A	
180-116916-4	WGWA-5	Total/NA	Water	7470A	
180-116916-5	WGWC-19	Total/NA	Water	7470A	
180-116916-6	WGWC-11	Total/NA	Water	7470A	
180-116916-7	WGWC-12	Total/NA	Water	7470A	
180-116916-8	WGWC-8	Total/NA	Water	7470A	
180-116916-9	WGWC-15	Total/NA	Water	7470A	
180-116916-10	WGWC-16	Total/NA	Water	7470A	
180-116916-11	WGWC-17	Total/NA	Water	7470A	
180-116916-12	FB-1	Total/NA	Water	7470A	
180-116916-13	EB-2	Total/NA	Water	7470A	
MB 180-346077/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-346077/2-A	Lab Control Sample	Total/NA	Water	7470A	

### **Analysis Batch: 346160**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total/NA	Water	EPA 7470A	345897
180-116807-2	EB-1	Total/NA	Water	EPA 7470A	345897
180-116807-3	WGWA-1	Total/NA	Water	EPA 7470A	345897
180-116807-4	WGWA-2	Total/NA	Water	EPA 7470A	345897
180-116807-5	WGWA-18	Total/NA	Water	EPA 7470A	345897
180-116807-6	WGWA-3	Total/NA	Water	EPA 7470A	345897
180-116807-7	WGWA-4	Total/NA	Water	EPA 7470A	345897
180-116807-8	WGWA-7	Total/NA	Water	EPA 7470A	345897
MB 180-345897/1-A	Method Blank	Total/NA	Water	EPA 7470A	345897
LCS 180-345897/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	345897

Eurofins TestAmerica, Pittsburgh

Job ID: 180-116807-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Metals (Continued)** 

### **Analysis Batch: 346160 (Continued)**

١	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	180-116807-1 MS	Dup-1	Total/NA	Water	EPA 7470A	345897
	180-116807-1 MSD	Dup-1	Total/NA	Water	EPA 7470A	345897

### **Prep Batch: 346412**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total Recoverable	Water	3005A	_
180-116807-2	EB-1	Total Recoverable	Water	3005A	
180-116807-3	WGWA-1	Total Recoverable	Water	3005A	
180-116807-4	WGWA-2	Total Recoverable	Water	3005A	
180-116807-5	WGWA-18	Total Recoverable	Water	3005A	
180-116807-6	WGWA-3	Total Recoverable	Water	3005A	
180-116807-7	WGWA-4	Total Recoverable	Water	3005A	
180-116807-8	WGWA-7	Total Recoverable	Water	3005A	
MB 180-346412/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-346412/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-116807-3 MS	WGWA-1	Total Recoverable	Water	3005A	
180-116807-3 MSD	WGWA-1	Total Recoverable	Water	3005A	

### **Analysis Batch: 346421**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-14	WGWC-9	Total/NA	Water	EPA 7470A	346076
180-116916-15	WGWC-10	Total/NA	Water	EPA 7470A	346076
180-116916-16	WGWC-13	Total/NA	Water	EPA 7470A	346076
180-116916-17	WGWC-14A	Total/NA	Water	EPA 7470A	346076
MB 180-346076/1-A	Method Blank	Total/NA	Water	EPA 7470A	346076
LCS 180-346076/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	346076

### Analysis Batch: 346771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total Recoverable	Water	EPA 6020B	346412
180-116807-2	EB-1	Total Recoverable	Water	EPA 6020B	346412
180-116807-3	WGWA-1	Total Recoverable	Water	EPA 6020B	346412
180-116807-4	WGWA-2	Total Recoverable	Water	EPA 6020B	346412
180-116807-5	WGWA-18	Total Recoverable	Water	EPA 6020B	346412
180-116807-6	WGWA-3	Total Recoverable	Water	EPA 6020B	346412
180-116807-7	WGWA-4	Total Recoverable	Water	EPA 6020B	346412
180-116807-8	WGWA-7	Total Recoverable	Water	EPA 6020B	346412
MB 180-346412/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346412
LCS 180-346412/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346412
180-116807-3 MS	WGWA-1	Total Recoverable	Water	EPA 6020B	346412
180-116807-3 MSD	WGWA-1	Total Recoverable	Water	EPA 6020B	346412

### **Prep Batch: 346791**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total Recoverable	Water	3005A	
180-116916-2	FB-2	Total Recoverable	Water	3005A	
180-116916-3	WGWA-6	Total Recoverable	Water	3005A	
180-116916-4	WGWA-5	Total Recoverable	Water	3005A	
180-116916-5	WGWC-19	Total Recoverable	Water	3005A	
180-116916-6	WGWC-11	Total Recoverable	Water	3005A	
180-116916-7	WGWC-12	Total Recoverable	Water	3005A	

Eurofins TestAmerica, Pittsburgh

Job ID: 180-116807-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Metals (Continued)** 

### Prep Batch: 346791 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-8	WGWC-8	Total Recoverable	Water	3005A	
180-116916-9	WGWC-15	Total Recoverable	Water	3005A	
180-116916-10	WGWC-16	Total Recoverable	Water	3005A	
180-116916-11	WGWC-17	Total Recoverable	Water	3005A	
180-116916-12	FB-1	Total Recoverable	Water	3005A	
180-116916-13	EB-2	Total Recoverable	Water	3005A	
180-116916-14	WGWC-9	Total Recoverable	Water	3005A	
180-116916-15	WGWC-10	Total Recoverable	Water	3005A	
180-116916-16	WGWC-13	Total Recoverable	Water	3005A	
180-116916-17	WGWC-14A	Total Recoverable	Water	3005A	
MB 180-346791/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-346791/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-116916-3 MS	WGWA-6	Total Recoverable	Water	3005A	
180-116916-3 MSD	WGWA-6	Total Recoverable	Water	3005A	

### **Analysis Batch: 347002**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total/NA	Water	EPA 7470A	346077
180-116916-2	FB-2	Total/NA	Water	EPA 7470A	346077
180-116916-3	WGWA-6	Total/NA	Water	EPA 7470A	346077
180-116916-4	WGWA-5	Total/NA	Water	EPA 7470A	346077
180-116916-5	WGWC-19	Total/NA	Water	EPA 7470A	346077
180-116916-6	WGWC-11	Total/NA	Water	EPA 7470A	346077
180-116916-7	WGWC-12	Total/NA	Water	EPA 7470A	346077
180-116916-8	WGWC-8	Total/NA	Water	EPA 7470A	346077
180-116916-9	WGWC-15	Total/NA	Water	EPA 7470A	346077
180-116916-10	WGWC-16	Total/NA	Water	EPA 7470A	346077
180-116916-11	WGWC-17	Total/NA	Water	EPA 7470A	346077
180-116916-12	FB-1	Total/NA	Water	EPA 7470A	346077
180-116916-13	EB-2	Total/NA	Water	EPA 7470A	346077
MB 180-346077/1-A	Method Blank	Total/NA	Water	EPA 7470A	346077
LCS 180-346077/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	346077

### Analysis Batch: 347044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total Recoverable	Water	EPA 6020B	346791
180-116916-2	FB-2	Total Recoverable	Water	EPA 6020B	346791
180-116916-3	WGWA-6	Total Recoverable	Water	EPA 6020B	346791
180-116916-4	WGWA-5	Total Recoverable	Water	EPA 6020B	346791
180-116916-5	WGWC-19	Total Recoverable	Water	EPA 6020B	346791
180-116916-6	WGWC-11	Total Recoverable	Water	EPA 6020B	346791
180-116916-7	WGWC-12	Total Recoverable	Water	EPA 6020B	346791
180-116916-8	WGWC-8	Total Recoverable	Water	EPA 6020B	346791
180-116916-9	WGWC-15	Total Recoverable	Water	EPA 6020B	346791
180-116916-10	WGWC-16	Total Recoverable	Water	EPA 6020B	346791
180-116916-11	WGWC-17	Total Recoverable	Water	EPA 6020B	346791
180-116916-12	FB-1	Total Recoverable	Water	EPA 6020B	346791
180-116916-13	EB-2	Total Recoverable	Water	EPA 6020B	346791
180-116916-14	WGWC-9	Total Recoverable	Water	EPA 6020B	346791
180-116916-15	WGWC-10	Total Recoverable	Water	EPA 6020B	346791
180-116916-16	WGWC-13	Total Recoverable	Water	EPA 6020B	346791

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-116807-1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

## **Metals (Continued)**

### **Analysis Batch: 347044 (Continued)**

<b>Lab Sample ID</b> 180-116916-17	Client Sample ID WGWC-14A	Prep Type  Total Recoverable	Matrix Water	Method EPA 6020B	Prep Batch 346791
MB 180-346791/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	346791
LCS 180-346791/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	346791
180-116916-3 MS	WGWA-6	Total Recoverable	Water	EPA 6020B	346791
180-116916-3 MSD	WGWA-6	Total Recoverable	Water	EPA 6020B	346791

### Field Service / Mobile Lab

### **Analysis Batch: 346556**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-3	WGWA-1	Total/NA	Water	Field Sampling	
180-116807-4	WGWA-2	Total/NA	Water	Field Sampling	
180-116807-5	WGWA-18	Total/NA	Water	Field Sampling	
180-116807-6	WGWA-3	Total/NA	Water	Field Sampling	
180-116807-7	WGWA-4	Total/NA	Water	Field Sampling	
180-116807-8	WGWA-7	Total/NA	Water	Field Sampling	
180-116916-3	WGWA-6	Total/NA	Water	Field Sampling	
180-116916-4	WGWA-5	Total/NA	Water	Field Sampling	
180-116916-5	WGWC-19	Total/NA	Water	Field Sampling	
180-116916-6	WGWC-11	Total/NA	Water	Field Sampling	
180-116916-7	WGWC-12	Total/NA	Water	Field Sampling	
180-116916-8	WGWC-8	Total/NA	Water	Field Sampling	
180-116916-9	WGWC-15	Total/NA	Water	Field Sampling	
180-116916-10	WGWC-16	Total/NA	Water	Field Sampling	
180-116916-11	WGWC-17	Total/NA	Water	Field Sampling	
180-116916-14	WGWC-9	Total/NA	Water	Field Sampling	
180-116916-15	WGWC-10	Total/NA	Water	Field Sampling	
180-116916-16	WGWC-13	Total/NA	Water	Field Sampling	
180-116916-17	WGWC-14A	Total/NA	Water	Field Sampling	

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Job ID: 180-116807-1

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# Eurofins TestAmerica, Pittsburgh

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

**Chain of Custody Record** 

Client Information	Sampler	11 "	1017	Lab PM: Brown	iled	Tracking No(s);	COC No:
Client Contact:	Phone:	1:		E-Mail:		ALC TO DAY	Dage
SCS Contacts	3-0-6	394-599	26,	shali.br	shali.brown@eurofinset.com		- age. / G.f.
Company: GA Power					Ana	Analysis Requested	Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	3d:					Preservation Codes:
City: Atlanta	TAT Requested (days):	ıys):			'əS'ov		- Aexane
State, Zip: GA, 30308					N,BH,il		sNaO2 a2O4S a2SO3
Phone: 404-506-7116(Tel)	PO#: SCS10382606			(6		180-116807	a2S2O3 2SO4
Email: SCS Contacts	:# OM			ON 10	Cd,Cr,	Control Chain of Custody	
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922			səд) ə	,98,68		K-EDTA W-
Site:	SSOW#:			Sampl	l,2A,d2 (0.00	of conf	Other:
				Matrix (W=water,	M/2M/mm (5) elsjeM V 36 Aq∃) eb 36 Aq∃) eb 36 Aq∃) eb	o Jadmuk	Vumber o
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab) BT	O=waste/oll, O=Tissue, A=Air	App. I/	/ IstoT	Special Instructions/Note: Full
	$\bigvee$	X	Preservation Code:	on Code:	X		mon date
7 JUP-1	12-2-21	1	ŋ	Water N	/ / / M	7	4 pH= NA
EB-1	12-2-2	1445	ŋ	Water	\ \ \ \		₩=Hd
NOWA - (	2-2-21	1115	g	Water N	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		1 PH= 5 2/0
WGWA-Z	12.2.2	1220	g	Water N			PH= (0,10)
WGWA-18	12-2-21	1450	g	Water N	V / V		8 h, 0) =Hd
WGWA-3	2.2.21	1145	Ð	Water $_{\mathcal{N}}$	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7	pH=
WGWA - 4	12-2-1	0521	g	Water N			U PH= (0. (0)
NGWA-7	12-2-21	1410	ŋ	Water $_{\mathcal{N}}$	11/		1 PH= 5.84
			ŋ	Water			=Hd
			Ŋ	Water			=Hd
			g	Water			=Hd
Possible Hazard Identification  Non-Hazard Telammable Skin Irritant Telammable Skin Irritant	Poison B Ouknown		Radiological		Sample Disposal ( A fe	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Archive For Month	ined longer than 1 month) thive For
					Special Instructions/QC Requirements	Requirements:	
Empty Kit Relinquished by:		Date;		<u>ii</u>	Time:	Method of Shipment:	
Relinquished by	Date/Time: 2/	3/21/2	13:34	Company Ace	Received by:	Z/3/2/	13534 Company
Kelindushed by Relicuished by	Date/Time:	16,0	2	Company	Received by:	Ully Water Daterme: 1	1-31 Commy A.P. 11
0			5	Company	Received by:	Date/Time:	7:30 Company
Custody Seals Intact:   Custody Seal No.:  A Yes A No					Cooler Temperature(s) °C and Other Remarks:	and Other Remarks:	1

# Chain of Custody Record

sting	Γ	T	T				_		drate			AT		Y		+	7	"	Z	Z		Γ			Г	Τ	T		377/1/		Γ
& eurofins Environment Testing America	COC No:	Page:			Cod	A - HCL M - Hexane B - NaOH N - None	C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S	203	) odecahyo	Chain of Cushala	Custody	o Jadmuber o	App 4 Scan Event	hH=	Thd h	22 L =Hd 17		4 pH= 6.75	12 S =HI 1	ال pH= (م. الا	id PH=5.08	4 PH= 7.77	4 pH= 5 42	4 PH=6,31	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	Archive For Months	ant:	To 7, Company	2-6	ime: / Company	
> *\&	Carrier Tracking No(s):		<u> </u>	Analysis Requested						180-116946															( A fee may be assessed if sample:	Special Instructions/QC Requirements:	Method of Shipment:	Total C	Delly with Dalertime	Date/Time	Cooler Temperature(s) °C and Other Remarks:
n of Custody Record	Lab PM:	E-Mail:	snail. Drown(@eurofinset.co	10000	(П,	əsʻoy	М,ęн,і Т	,dq,o0	Od,Cr,O	) 10; se , 98, 68	6 <b>Y)</b> (US 3,2A,dS	Matrix (Wawater, Walkered 5) A Filtered 5 (Wawater, Commonweals (5) Sesold, Tride (EPA 30) Tride (EPA 30) Tride (EPA 30)	Field App	Water M// //	Water M V	Water N / /	1	Water N V	Water NN///	water MN / / /	Water WW / / /	Water N V / /	Water N N / / /	Water N N / / /	Sample Disposal	Special Instruction	Time:	J	1	Company Received by:	Cooler Temperatu
Chain of Cust	11 A.J. D	865-		i	- car	ays):						Sample Type (C=comp	G=grab) Preserva	0	1320 6	9 0801	1325 6	1430 G	1435 G	0 5251	1545 G	1/05 G		1345 G	wn Radiological	ı	Date:	(0.20 6	(6:w		
0	Sampler:	378		Due Date Beauchter	one Date Nednest	TAT Requested (days):		PO#: SCS10382606	:#OM	Project #: 18019922	:#XOSS		Sample Date	12-1-2	12-11-2	2-3-21	2-3-21	7-3-21	2-3-21	1-3-21	12-5-2	12-4-21	2-4-21	12-4-2	☐ Poison B			Date/Time:	Sh Date/Time:		
301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	Client Information	Client Contact: SCS Contacts	Company:	GA Power Address:	241 Ralph McGill Blvd SE	City. Atlanta	State, Zlp. GA, 30308	Phone: 404-506-7116(Tel)	Email: SCS Contacts	Project Name: CCR - Plant Wansley Ash Pond	Site:		Sample Identification	000-2	FIECDOFENSI FB-2	WGWA-G	WGWA-S	MGWC-19	WGWC-11	WGWC-12	8-2M2M	S1-2M9M	91-7M9M	WCWC-17	Possible Hazard Identification  Non-Hazard — Flammable Skin Irritant	Deliverable Requested: I, II, III, IV, Other (specify)	Empty Kit Relinquished by:/	Reinquished by:	Kelinguished by: Relinguished by:	$\nabla$	Custody Seals Intact:   Custody Seal No.:

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

Chain of Custody Record

2 to 2

Environment Testing

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ATNAJTA - PPS Full N - None
O - AsNaO2
P - Na2O45
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecatydrate
U - Acetone V - MCAA W - pH 4-5 Z - other (specify) App 4 Scan Event Special Instructions/Note: Months Preservation Codes: 70 A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - NanSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid 4 PH= 6.22 4 PH= 6.3 I - Ice J - DI Water K - EDTA L - EDA 00 2 4 pH= 6. Ś Archive For ;# qor 0 Page: # 분 #Hd Total Number of containers 13 Date/Time: Method of Shipment: **Analysis Requested** Special Instructions/QC Requirements E-Mail: shali.brown@eurofinset.com Radium 226 & 228 (SW-846 9315/9320) Received by: Fluoride (EPA 300.0) Pp. IV Metals (Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Hg,Mo,Se,TI) Lab PM: Brown, Shali N 2 Time: (W=water, S=solid, O=waste/oil, Preservation Code: Water Matrix Water Radiological (C=comp, G=grab) Sample Type 770) 594-5998 AUG G G G G G G ഗ G G G G 2019 I 1430 (550 5/1/ 1240 Sample 21/11 5111 Time Sampler. Date: K Unknown TAT Requested (days): Due Date Requested: PO #: SCS10382606 Sample Date 12-h-Z 12-4-6 12-4-2 2-4-2 12-11-21 12-4-21 Project #: 18019922 Date/Time: # OM Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) ☐ Non-Hazard ☐ Flammable WGWC-IHA Possible Hazard Identification Project Name: CCR - Plant Wansley Ash Pond 81-JM9M WGWC-10 0 Empty Kit Relinquished by: Address: 241 Ralph McGill Blvd SE Client Information Sample Identification N/6W/C 404-506-7116(Tel) FB-1 Client Contact: SCS Contacts SCS Contacts elinquished by: State, Zip: GA, 30308 Company: GA Power City: Atlanta

Ver: 01/16/2019

Cooler Temperature(s) °C and Other Remarks:

4/5/2021 (Rev. 1)

Cystody Seal No.:

Custody Seals Intact:

∆ Yes ∆ No

Part # 159469-434 RTT2 EXP 11/21 .

9371 02.04

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ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 03FEB21 ACTWGT: 59.85 LB CAD: 859116/CAFE3406

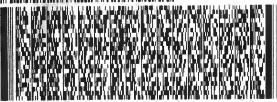
BILL RECIPIENT

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

(412) 963 - 7058 REF: ACC - WANSLEY

1 of 2

TRK# 1516 9327 9371





THU - 04 FEB 4:30P STANDARD OVERNIGHT

> 15238 PIT

Initials

Uncorrectea temp Thermometer ID

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

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ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR GEORGINS TESTING AMERICA ATL SC GRIS REGENCY PARKWAY NW

BILL RECIPIENT

NORCROSS, GA 30071 UNITED STATES US

10 SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH

PITTSBURGH PA 15238 301 ALPHA DR. RIDC PARK

EF: ACC - WANSLEY

2 of 2

15238 PA-US PIT

Uncorrected temp Thermometer ID

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

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XO AGCA

PA - US

Thermometer ID Uncorrected temp

art # 159469-434 RIT2 EXP

eurofins 🚓

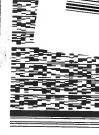
**Environment Testing** 

**TestAmerica** 

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

Initials

> PRIORITY OVERNIGHT SATURDAY 12:00P





<sup>180-116916</sup> Waybill



PITTSBURGH PA 15238

RIDC PARK 301 ALPHA DR. SAMPLE RECIEVING

CROSS, GA 30071 TED STATES US

IN ID:LIYA (678) 966-9991 GE TAYLOR FINS TESTING AMERICA ATL REGENCY PARKWAY NW

SC

SHIP DATE: 05FEB21 ACTWGT: 66.70 LB CAD: 859116/CAFE3406

BILL RECIPIENT

(678) 966-9991

EUROFINS TESTAMERICA PITTSBURGH

ORIGIN ID:LIYA (678) 966-9991 EUROFINS TESTING AMERICA ATL & SUITE 900.

6215 REGENCY PARKWHY SUITE 900 NORCROSS, GA 30071 UNITED STATES US

BILL RECIPIENT

EUROFINS TESTAMERICA PITTSBURGH O SAMPLE RECIEVING 301 ALPHA DR.

PITTSBURGH PA 15238 REF. ACCC - WANSLEY

RIDC PARK



SATURDAY 12:00P PRIORITY OVERNIGHT

AGCA TRK# 1516 9328 0033 ## MASTER ##

15238

PA-US Uncorrected temp Thermometer ID

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

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**Environment Testing** 

**TestAmerica** 

SC 6215 REGENCY PARKWAY SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 05FEB21 ACTWGT: 66.70 LB CAD: 859116/CAFE3406

BIL RECIPIENT

BILL RECIPIENT

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

STESTAMERICA PITTSBURGH

301 ALPHA DR. RIDC PARK

SAMPL

SATURDAY 12:00P PRIORITY OVERNIGHT

PRIORITY OVERNIGHT SATURDAY 12:00

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

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Mironment Testing

PITTSBURGH PA 15238

Client: Southern Company Job Number: 180-116807-1

Login Number: 116807 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Grouton, Hutoon, Bobbio		
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	

Job Number: 180-116807-1

Login Number: 116916 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.	False	
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: 180-116807-2

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: 3/8/2021 6:58:06 AM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

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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: 180-116807-2

Laboratory: Eurofins TestAmerica, Pittsburgh

**Narrative** 

Job Narrative 180-116807-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/4/2021 9:30 AM and 2/6/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.2° C, 2.1° C, 2.5° C, 2.6° C, 2.8° C and 3.1° C.

### **Receipt Exceptions**

The container labels for the two plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWC-12 (180-116916-7). The container labels list a sample collection date of 2/2/21, while the COC lists 2/3/21. The date on the COC was used.

The container label for one out of two of the plastic liters for the following sample did not match the information listed on the Chain-of-Custody (COC): WGWC-17 (180-116916-11). The container labels list a sample collection date of 3/2/21 while the COC lists 2/4/21. The date on the COC was used.

#### **RAD**

Methods 903.0, 9315: Radium-226 prep batch 160-498078:

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 (180-116807-1), EB-1 (180-116807-2), WGWA-1 (180-116807-3), WGWA-2 (180-116807-4), WGWA-18 (180-116807-5), WGWA-3 (180-116807-6), WGWA-4 (180-116807-7), WGWA-7 (180-116807-8), (LCS 160-498078/1-A), (MB 160-498078/22-A) and (160-41173-M-1-A)

#### Methods 903.0, 9315: Radium-226 batch 498288

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 (180-116916-1), FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWA-5 (180-116916-4), WGWC-19 (180-116916-5), WGWC-11 (180-116916-6), WGWC-12 (180-116916-7), WGWC-8 (180-116916-8), WGWC-15 (180-116916-19), WGWC-16 (180-116916-10), WGWC-17 (180-116916-11), FB-1 (180-116916-12), EB-2 (180-116916-13), WGWC-9 (180-116916-14), WGWC-10 (180-116916-15), WGWC-13 (180-116916-16), WGWC-14A (180-116916-17), (LCS 160-498288/1-A), (LCSD 160-498288/2-A) and (MB 160-498288/23-A)

Methods 904.0, 9320: 904/9320 Prep Batch: 160-498366

The LCS recovered at (132%) for Ra228. The limits in our LIMS system at 75-125 reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of (61-138) per method requirements. Although there is a qualifier, the LCS passes. No further action is required (LCSD 160-498366/2-A)

Methods 904.0, 9320: 904/9320 Prep Batch 160-498366

The Ra228 laboratory control sample(LCS) recovery (168%) associated with the following sample(s) is outside the upper QC limit of (61-138) indicating a potential positive bias for that analyte. This analyte was not observed above the RL in the associated samples; therefore the sample data is not adversely affected by this excursion. The data have been reported with this narrative. (LCS 160-498366/1-A)

Methods 904.0, 9320: 904/9320 Prep batch 498366

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

Job ID: 180-116807-2

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### **Case Narrative**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

### Job ID: 180-116807-2 (Continued)

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

applied as the Activity Reference Date. Dup-2 (180-116916-1), WGWC-19 (180-116916-5), WGWC-11 (180-116916-6), WGWC-12 (180-116916-7), WGWC-17 (180-116916-11), FB-1 (180-116916-12), EB-2 (180-116916-13), WGWC-10 (180-116916-15), WGWC-13 (180-116916-16), WGWC-14A (180-116916-17), (LCS 160-498366/1-A), (LCSD 160-498366/2-A) and (MB 160-498366/23-A)

#### Methods 904.0, 9320: Ra228 Prep Batch 160-498080

The Ra288 laboratory control sample (LCS) recovery (154%) associated with the following sample(s) is outside the upper QC limit of (61-138) 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. (LCS 160-498080/1-A)

### Methods 904.0, 9320: 9320/904 prep batch 498080

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 (180-116807-1), EB-1 (180-116807-2), WGWA-1 (180-116807-3), WGWA-2 (180-116807-4), WGWA-18 (180-116807-5), WGWA-3 (180-116807-6), WGWA-4 (180-116807-7), WGWA-7 (180-116807-8), (LCS 160-498080/1-A), (MB 160-498080/22-A), (160-41173-M-1-C) and (160-41173-J-1-B MS)

#### Method 9320: Radium-228 batch 160-499478

The laboratory control sample (LCS) associated with the following samples in Radium-226 batch 160-499478 recovered at 135% for radium-228: FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWA-5 (180-116916-4), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10), WGWC-9 (180-116916-14), (LCS 160-499478/1-A), (LCSD 160-499478/2-A) and (MB 160-499478/10-A). The limits in our LIMS system, at 75-125%, reflect the requirements of a regulatory agency that represents a large amount of our work. However, the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 61-138%, per method requirements. Although there is a qualifier, the LCS passes. No further action is required.

#### Method 9320: Radium-228 batch 499478

Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWA-5 (180-116916-4), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10) and WGWC-9 (180-116916-14)

### Method PrecSep\_0: Radium 228 Prep Batch 160-498080:

The following samples were prepared at a reduced aliquot: WGWA-1 (180-116807-3), WGWA-3 (180-116807-6), WGWA-4 (180-116807-7) and WGWA-7 (180-116807-8). Samples 160-41173-1, -1MS, -1MSD, -2, -3, and -4 contained yellow discoloration and a cloudy appearance. Samples 180-116807-3, 500-194559-11, and 500-194630-17 contained noticeable sediment levels. Samples 180-116807-6, -7, -8, -12, and -16 reduced to insure sufficient volume remains if needed for analysis.

#### Method PrecSep 0: Radium 228 Prep Batch 160-498366:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-2 (180-116916-1), FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWC-19 (180-116916-5), WGWC-11 (180-116916-6), WGWC-12 (180-116916-7), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10), FB-1 (180-116916-12), EB-2 (180-116916-13), WGWC-9 (180-116916-14), WGWC-10 (180-116916-15), WGWC-13 (180-116916-16) and WGWC-14A (180-116916-17). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

#### Method PrecSep 0: Radium 228 Prep Batch 160-498366:

The following samples were prepared at a reduced aliquot: WGWA-5 (180-116916-4) and WGWC-17 (180-116916-11). Samples 660-107806-1 and 660-107807-1 were reduced to insure sufficient volume remains if needed for analysis.

Sample 180-116916-4 contained a light brown discoloration. Sample 180-116916-11 contained a noticeable sediment level. Sample 310-20012-1 contained a yellow discoloration. A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

#### Method PrecSep 0: Radium 228 Prep Batch 160-498080:

During the in growth process, the following samples needed to be filtered due to sediment present in the sample. This being an indicator of matrix interference.

Job ID: 180-116807-2

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### **Case Narrative**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

### Job ID: 180-116807-2 (Continued)

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

Method PrecSep 0: Radium 228 Prep Batch 160-498366:

During the in growth process, the following samples needed to be filtered due to sediment present in the sample. This being an indicator of matrix interference. WGWA-5 (180-116916-4), WGWC-11 (180-116916-6), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10), WGWC-10 (180-116916-15) and WGWC-13 (180-116916-16).

Method PrecSep 0: Radium 228 Prep Batch 160-499478:

Insufficient sample volume was available to perform a sample duplicate for the following samples: FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWA-5 (180-116916-4), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10) and WGWC-9 (180-116916-14). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep 0: Radium 228 Prep Batch 160-499478:

The following sample(s) were prepared at a reduced aliquot due to re-analysis of the sample(s): FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWA-5 (180-116916-4), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10) and WGWC-9 (180-116916-14).

Method PrecSep-21: Radium 226 Prep Batch 160-498078:

The following samples were prepared at a reduced aliquot: WGWA-1 (180-116807-3), WGWA-3 (180-116807-6), WGWA-4 (180-116807-7) and WGWA-7 (180-116807-8). Samples 160-41173-1, -1MS, -1MSD, -2, -3, and -4 contained yellow discoloration and a cloudy appearance. Samples 180-116807-3, 500-194559-11, and 500-194630-17 contained noticeable sediment levels.

Samples 180-116807-6, -7, -8, -12, and -16 reduced to insure sufficient volume remains if needed for analysis.

Method PrecSep-21: Radium 226 Prep Batch 160-498288:

Insufficient sample volume was available to perform a sample duplicate for the following samples: Dup-2 (180-116916-1), FB-2 (180-116916-2), WGWA-6 (180-116916-3), WGWC-19 (180-116916-5), WGWC-11 (180-116916-6), WGWC-12 (180-116916-7), WGWC-8 (180-116916-8), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10), FB-1 (180-116916-12), EB-2 (180-116916-13), WGWC-9 (180-116916-14), WGWC-10 (180-116916-15), WGWC-13 (180-116916-16) and WGWC-14A (180-116916-17). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-498288:

The following samples were prepared at a reduced aliquot: WGWA-5 (180-116916-4) and WGWC-17 (180-116916-11). Samples 660-107806-1 and 660-107807-1 were reduced to insure sufficient volume remains if needed for analysis.

Sample 180-116916-4 contained a light brown discoloration. Sample 180-116916-11 contained a noticeable sediment level. Sample 310-20012-1 contained a yellow discoloration. A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Radium 226 Prep Batch 160-498078:

During the in growth process, the following samples needed to be filtered due to sediment present in the sample. This being an indicator of matrix interference.

Method PrecSep-21: Radium 226 Prep Batch 160-498288:

During the in growth process, the following samples needed to be filtered due to sediment present in the sample. This being an indicator of matrix interference. WGWA-5 (180-116916-4), WGWC-11 (180-116916-6), WGWC-15 (180-116916-9), WGWC-16 (180-116916-10), WGWC-10 (180-116916-15) and WGWC-13 (180-116916-16).

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: 180-116807-2

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### **Definitions/Glossary**

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

### **Qualifiers**

R	a	d
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 Qualifier
 Qualifier Description

 \*
 LCS or LCSD is outside acceptance limits.

U Result is less than the sample detection limit.

### **Glossary**

Abbreviation	These commonly	used abbreviations may	or may not be	present in this report.

Example 2 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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## **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	<b>Identification Number</b>	<b>Expiration Date</b>	
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	12-08-21	
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	
Illinois	NELAP	004553	11-30-21	
lowa	State	373	12-01-22	
Kansas	NELAP	E-10236	10-31-21	
Kentucky (DW)	State	KY90125	01-01-22	
Louisiana	NELAP	04080	06-30-21	
Louisiana (DW)	State	LA011	12-31-21	
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	03-01-22	
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	

Job ID: 180-116807-2

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### **Sample Summary**

Client: Southern Company

180-116916-16

180-116916-17

WGWC-13

WGWC-14A

Project/Site: CCR - Plant Wansley Ash Pond

Matrix Collected Lab Sample ID Client Sample ID Received Asset ID 180-116807-1 Water 02/02/21 00:00 02/04/21 09:30 Dup-1 180-116807-2 EB-1 Water 02/02/21 14:45 02/04/21 09:30 180-116807-3 WGWA-1 Water 02/02/21 11:15 02/04/21 09:30 180-116807-4 WGWA-2 Water 02/02/21 12:20 02/04/21 09:30 180-116807-5 WGWA-18 Water 02/02/21 14:50 02/04/21 09:30 WGWA-3 Water 02/02/21 11:45 02/04/21 09:30 180-116807-6 180-116807-7 WGWA-4 Water 02/02/21 12:50 02/04/21 09:30 WGWA-7 180-116807-8 Water 02/02/21 14:10 02/04/21 09:30 180-116916-1 Dup-2 Water 02/04/21 00:00 02/06/21 10:00 FB-2 180-116916-2 Water 02/04/21 13:20 02/06/21 10:00 180-116916-3 WGWA-6 Water 02/03/21 10:30 02/06/21 10:00 180-116916-4 WGWA-5 Water 02/03/21 13:25 02/06/21 10:00 180-116916-5 WGWC-19 Water 02/03/21 14:30 02/06/21 10:00 WGWC-11 Water 02/03/21 14:35 02/06/21 10:00 180-116916-6 180-116916-7 WGWC-12 Water 02/03/21 13:25 02/06/21 10:00 WGWC-8 180-116916-8 Water 02/03/21 15:45 02/06/21 10:00 180-116916-9 WGWC-15 Water 02/04/21 11:05 02/06/21 10:00 180-116916-10 WGWC-16 Water 02/04/21 12:30 02/06/21 10:00 180-116916-11 WGWC-17 Water 02/04/21 13:45 02/06/21 10:00 180-116916-12 FB-1 Water 02/04/21 14:15 02/06/21 10:00 Water 180-116916-13 FB-2 02/04/21 14:30 02/06/21 10:00 180-116916-14 WGWC-9 Water 02/04/21 14:12 02/06/21 10:00 WGWC-10 Water 02/04/21 15:50 02/06/21 10:00 180-116916-15

Water

Water

02/04/21 11:15 02/06/21 10:00

02/04/21 12:40 02/06/21 10:00

Job ID: 180-116807-2

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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: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-116807-1

Date Collected: 02/02/21 00:00 Date Received: 02/04/21 09:30

**Matrix: Water** 

Job ID: 180-116807-2

	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			1000.77 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis Instrumen	9315 t ID: GFPCBLUE		1			500594	03/03/21 18:21	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.77 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCPURPLE		1			498746	02/12/21 08:57	FLC	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 It ID: NOEQUIP		1			500924	03/05/21 17:18	СММ	TAL SL

Lab Sample ID: 180-116807-2 Client Sample ID: EB-1

Date Collected: 02/02/21 14:45 **Matrix: Water** 

Date Received: 02/04/21 09:30

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			1000.43 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			500594	03/03/21 18:21	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.43 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			498746	02/12/21 08:57	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			500924	03/05/21 17:18	СММ	TAL SL

**Client Sample ID: WGWA-1** Lab Sample ID: 180-116807-3 Date Collected: 02/02/21 11:15

Date Received: 02/04/21 09:30

Batch Batch Dil Initial Final **Batch** Prepared **Prep Type** Туре Method **Factor** Amount Amount Number or Analyzed Run Analyst Lab Total/NA PrecSep-21 749.54 mL 498078 02/08/21 13:30 KMP TAL SL Prep 1.0 g Total/NA 9315 500594 03/03/21 18:21 ANW TAL SL Analysis Instrument ID: GFPCBLUE PrecSep\_0 Total/NA 749.54 mL 02/08/21 14:04 KMP TAL SL Prep 1.0 g 498080 Total/NA Analysis 9320 498746 02/12/21 08:58 FLC TAL SL Instrument ID: GFPCPURPLE Total/NA Analysis Ra226 Ra228 500924 03/05/21 17:18 CMM TAL SL Instrument ID: NOEQUIP

**Client Sample ID: WGWA-2** Lab Sample ID: 180-116807-4 Date Collected: 02/02/21 12:20 **Matrix: Water** 

Date Received: 02/04/21 09:30

	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			999.43 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis	9315		1			500594	03/03/21 18:21	ANW	TAL SL
	Instrumen	t ID: GFPCBLUE								

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**Matrix: Water** 

### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-2 Lab Sample ID: 180-116807-4

Date Collected: 02/02/21 12:20
Date Received: 02/04/21 09:30

Matrix: Water

Job ID: 180-116807-2

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method **Factor Amount** Number or Analyzed Type Run **Amount** Analyst Lab PrecSep 0 Total/NA 999.43 mL 498080 02/08/21 14:04 KMP TAL SL Prep 1.0 g Total/NA 498746 TAL SL 9320 02/12/21 08:58 FLC Analysis 1 Instrument ID: GFPCPURPLE Total/NA Analysis Ra226\_Ra228 1 500924 03/05/21 17:18 CMM TAL SL Instrument ID: NOEQUIP

Client Sample ID: WGWA-18 Lab Sample ID: 180-116807-5

Date Collected: 02/02/21 14:50 Matrix: Water Date Received: 02/04/21 09:30

	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			999.76 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			500594	03/03/21 18:21	ANW	TAL SL
Total/NA	Prep	PrecSep_0			999.76 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			498746	02/12/21 08:58	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			500924	03/05/21 17:18	СММ	TAL SL

Client Sample ID: WGWA-3 Lab Sample ID: 180-116807-6

Date Collected: 02/02/21 11:45

Date Received: 02/04/21 09:30

Matrix: Water

Batch	Batch	itch Batch	Dil	Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			750.82 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			500594	03/03/21 18:21	ANW	TAL SL
Total/NA	Prep	PrecSep_0			750.82 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			498746	02/12/21 08:58	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			500924	03/05/21 17:18	СММ	TAL SL

Client Sample ID: WGWA-4 Lab Sample ID: 180-116807-7

Date Collected: 02/02/21 12:50 Matrix: Water
Date Received: 02/04/21 09:30

	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			750.14 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis	9315		1			500594	03/03/21 18:21	ANW	TAL SL
	Instrumer	t ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			750.14 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis	9320		1			498746	02/12/21 08:58	FLC	TAL SL
	Instrumer	t ID: GFPCPURPLE	Ē							

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### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-4 Lab Sample ID: 180-116807-7

Date Collected: 02/02/21 12:50 Date Received: 02/04/21 09:30

**Matrix: Water** 

Job ID: 180-116807-2

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 500924 03/05/21 17:18 CMM TAL SL

**Client Sample ID: WGWA-7** Lab Sample ID: 180-116807-8 Date Collected: 02/02/21 14:10 **Matrix: Water** 

Date Received: 02/04/21 09:30

	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			749.62 mL	1.0 g	498078	02/08/21 13:30	KMP	TAL SL
Total/NA	Analysis	9315		1			500594	03/03/21 18:21	ANW	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			749.62 mL	1.0 g	498080	02/08/21 14:04	KMP	TAL SL
Total/NA	Analysis	9320		1			498746	02/12/21 08:59	FLC	TAL SL
	Instrumer	nt ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			500924	03/05/21 17:18	CMM	TAL SL
	Instrumer	nt ID: NOEQUIP								

Lab Sample ID: 180-116916-1 **Client Sample ID: Dup-2** Date Collected: 02/04/21 00:00 **Matrix: Water** 

Date Received: 02/06/21 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			999.93 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumen	9315 t ID: GFPCRED		1			500880	03/04/21 15:00	ANW	TAL SL
Total/NA	Prep	PrecSep_0			999.93 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCPURPLE		1			498986	02/17/21 08:48	FLC	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

**Client Sample ID: FB-2** Lab Sample ID: 180-116916-2 Date Collected: 02/04/21 13:20 **Matrix: Water** 

Date Received: 02/06/21 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			1000.16 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			500880	03/04/21 15:00	ANW	TAL SL
Total/NA	Prep	PrecSep_0			750.01 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE		1			500441	03/02/21 08:54	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

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Job ID: 180-116807-2

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

**Client Sample ID: WGWA-6** 

Date Collected: 02/03/21 10:30 Date Received: 02/06/21 10:00

Lab Sample ID: 180-116916-3

**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			1000.04 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:00	ANW	TAL SL
Total/NA	Prep	PrecSep_0			750.64 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			500441	03/02/21 08:54	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

**Client Sample ID: WGWA-5** Lab Sample ID: 180-116916-4

Date Collected: 02/03/21 13:25 **Matrix: Water** 

Date Received: 02/06/21 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			750.49 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:01	ANW	TAL SL
Total/NA	Prep	PrecSep_0			749.99 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			500441	03/02/21 08:54	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL

Lab Sample ID: 180-116916-5 **Client Sample ID: WGWC-19** Date Collected: 02/03/21 14:30 **Matrix: Water** 

Date Received: 02/06/21 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			1000.46 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:01	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.46 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			498986	02/17/21 08:49	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL

**Client Sample ID: WGWC-11** Lab Sample ID: 180-116916-6

Date Collected: 02/03/21 14:35 Date Received: 02/06/21 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			999.72 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis	9315		1			500880	03/04/21 15:01	ANW	TAL SL
	Instrumen	t ID: GFPCRED								

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**Matrix: Water** 

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-11 Lab Sample ID: 180-116916-6

Date Collected: 02/03/21 14:35 Date Received: 02/06/21 10:00

**Matrix: Water** 

Job ID: 180-116807-2

	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			999.72 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE	<u> </u>	1			498986	02/17/21 08:49	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

Lab Sample ID: 180-116916-7 Client Sample ID: WGWC-12

Date Collected: 02/03/21 13:25 Date Received: 02/06/21 10:00

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			1000.33 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:03	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.33 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			498986	02/17/21 08:49	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

Client Sample ID: WGWC-8 Lab Sample ID: 180-116916-8

Date Collected: 02/03/21 15:45 Date Received: 02/06/21 10:00

Batch Batch Dil Initial Final Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor Amount** Amount Number Analyst Lab Total/NA PrecSep-21 1000.41 mL 498288 02/10/21 10:22 KMP TAL SL Prep 1.0 g Total/NA Analysis 9315 500880 03/04/21 15:03 ANW TAL SL 1 Instrument ID: GFPCRED Total/NA Prep PrecSep 0 750.34 mL 1.0 g 499478 02/22/21 15:37 JEC TAL SL Total/NA 500441 TAL SL Analysis 9320 1 03/02/21 08:55 ANW Instrument ID: GFPCPURPLE Total/NA Analysis Ra226\_Ra228 500928 03/05/21 22:06 SCB TAL SL Instrument ID: NOEQUIP

**Client Sample ID: WGWC-15** Lab Sample ID: 180-116916-9

Date Collected: 02/04/21 11:05 Date Received: 02/06/21 10:00

**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			999.78 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis	9315		1			500880	03/04/21 15:03	ANW	TAL SL
	Instrumer	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			750.43 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis	9320		1			500441	03/02/21 08:55	ANW	TAL SL
	Instrumer	t ID: GFPCPURPLE								

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Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** Lab Sample ID: 180-116916-9

Date Collected: 02/04/21 11:05

**Matrix: Water** 

Job ID: 180-116807-2

Date Received: 02/06/21 10:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL

Lab Sample ID: 180-116916-10

**Matrix: Water** 

**Client Sample ID: WGWC-16** Date Collected: 02/04/21 12:30 Date Received: 02/06/21 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			999.76 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis	9315		1			500880	03/04/21 15:04	ANW	TAL SL
	Instrumen	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			750.02 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis	9320		1			500441	03/02/21 08:55	ANW	TAL SL
	Instrumen	t ID: GFPCPURPLE								
Total/NA	Analysis	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL
	Instrumen	t ID: NOEQUIP								

Lab Sample ID: 180-116916-11 **Client Sample ID: WGWC-17** 

Date Collected: 02/04/21 13:45 Date Received: 02/06/21 10:00

**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			749.62 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrument	9315 ID: GFPCRED		1			500880	03/04/21 15:04	ANW	TAL SL
Total/NA	Prep	PrecSep_0			749.62 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrument	9320 t ID: GFPCPURPLE		1			498986	02/17/21 08:50	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL

Client Sample ID: FB-1 Lab Sample ID: 180-116916-12

Date Collected: 02/04/21 14:15 Date Received: 02/06/21 10:00

Prep Type Total/NA Total/NA	Batch Type Prep Analysis Instrumen	Batch Method PrecSep-21 9315 t ID: GFPCRED	Run	Dil Factor	Initial Amount 999.34 mL	Final Amount 1.0 g	Batch Number 498288 500880	Prepared or Analyzed 02/10/21 10:22 03/04/21 15:04	Analyst KMP ANW	Lab TAL SL TAL SL
Total/NA Total/NA	Prep Analysis	PrecSep_0 9320		1	999.34 mL	1.0 g	498366 498986	02/10/21 11:03 02/17/21 08:50	KMP FLC	TAL SL TAL SL
Total/NA	Analysis	t ID: GFPCPURPLE  Ra226_Ra228 t ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

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Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-116916-13

**Matrix: Water** 

Job ID: 180-116807-2

Date Collected: 02/04/21 14:30 Date Received: 02/06/21 10:00

Client Sample ID: EB-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			1000.44 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis	9315		1			500880	03/04/21 15:04	ANW	TAL SL
	Instrumer	t ID: GFPCRED								
Total/NA	Prep	PrecSep_0			1000.44 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis	9320		1			498986	02/17/21 08:50	FLC	TAL SL
	Instrumer	t ID: GFPCPURPL	E							
Total/NA	Analysis	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL
	Instrumer	t ID: NOEQUIP								

Lab Sample ID: 180-116916-14 Client Sample ID: WGWC-9

Date Collected: 02/04/21 14:12 **Matrix: Water** 

Date Received: 02/06/21 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			1000.16 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:04	ANW	TAL SL
Total/NA	Prep	PrecSep_0			750.09 mL	1.0 g	499478	02/22/21 15:37	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			500441	03/02/21 08:55	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			500928	03/05/21 22:06	SCB	TAL SL

Client Sample ID: WGWC-10 Lab Sample ID: 180-116916-15 Date Collected: 02/04/21 15:50

Date Received: 02/06/21 10:00

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method **Factor** Amount **Amount** Number or Analyzed Run Analyst Lab Total/NA PrecSep-21 498288 02/10/21 10:22 KMP TAL SL Prep 999.78 mL 1.0 g Total/NA 9315 500880 03/04/21 15:06 ANW TAL SL Analysis Instrument ID: GFPCRED Total/NA 999.78 mL 02/10/21 11:03 KMP TAL SL Prep PrecSep\_0 1.0 g 498366 Total/NA Analysis 9320 1 498986 02/17/21 08:50 FLC TAL SL Instrument ID: GFPCPURPLE Total/NA Analysis Ra226 Ra228 03/05/21 22:06 SCB TAL SL 500928 Instrument ID: NOEQUIP

Client Sample ID: WGWC-13 Lab Sample ID: 180-116916-16

Date Collected: 02/04/21 11:15

Date Received: 02/06/21 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			999.85 mL	1.0 g	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCRED		1			500880	03/04/21 15:06	ANW	TAL SL

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**Matrix: Water** 

**Matrix: Water** 

### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** Lab Sample ID: 180-116916-16

Date Collected: 02/04/21 11:15 Date Received: 02/06/21 10:00

**Matrix: Water** 

**Matrix: Water** 

Job ID: 180-116807-2

	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			999.85 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCPURPLE	Ē	1			498986	02/17/21 08:50	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			500928	03/05/21 22:06	SCB	TAL SL

Client Sample ID: WGWC-14A Lab Sample ID: 180-116916-17

Date Collected: 02/04/21 12:40

Date Received: 02/06/21 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	498288	02/10/21 10:22	KMP	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			500880	03/04/21 15:06	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.27 mL	1.0 g	498366	02/10/21 11:03	KMP	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			498987	02/17/21 08:52	FLC	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			500928	03/05/21 22:06	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

JEC = Julia Crossen

KMP = Karen Phillips

Batch Type: Analysis

ANW = Aamber Woods

CMM = Chelsea Mazariegos

FLC = Fernando Cruz

SCB = Sarah Bernsen

Eurofins TestAmerica, Pittsburgh

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-116807-1

Date Collected: 02/02/21 00:00 Matrix: Water Date Received: 02/04/21 09:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0469	U	0.0537	0.0539	1.00	0.0863	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					02/08/21 13:30	03/03/21 18:21	1

Method: 9320 -	Radium-228 (	(GFPC)								
Avabas	D It	O seller s	Count Uncert.	Total Uncert.	ъ.		119	Dominio	Austraad	DU E.
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0314	U *	0.224	0.224	1.00	0.409	pCi/L	02/08/21 14:04	02/12/21 08:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					02/08/21 14:04	02/12/21 08:57	1
Y Carrier	87.9		40 - 110					02/08/21 14:04	02/12/21 08:57	1

Method: Ra226_Ra2	28 - Con	bined Ra	dium-226 a	nd Radium	<b>1-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0155	U	0.230	0.230	5.00	0.409	pCi/L		03/05/21 17:18	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-1 Lab Sample ID: 180-116807-2

Date Collected: 02/02/21 14:45

Date Received: 02/04/21 09:30

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	-0.0339	U	0.0306	0.0308	1.00	0.0921	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					02/08/21 13:30	03/03/21 18:21	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	0.100	U *	0.269	0.269	1.00	0.464	pCi/L	02/08/21 14:04	02/12/21 08:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					02/08/21 14:04	02/12/21 08:57	1
Y Carrier	87.9		40 - 110					02/08/21 14:04	02/12/21 08:57	1

Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0665	U	0.271	0.271	5.00	0.464	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** 

Lab Sample ID: 180-116807-3 Date Collected: 02/02/21 11:15

**Matrix: Water** 

Date Received: 02/04/21 09:30

Method: 9315 - Rad	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0169	U	0.0906	0.0906	1.00	0.173	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					02/08/21 13:30	03/03/21 18:21	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	0.226	U *	0.370	0.370	1.00	0.624	pCi/L	02/08/21 14:04	02/12/21 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					02/08/21 14:04	02/12/21 08:58	1
Y Carrier	84.5		40 - 110					02/08/21 14:04	02/12/21 08:58	1

Method: Ra226_Ra2	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	0.243	U	0.381	0.381	5.00	0.624	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-2** 

Lab Sample ID: 180-116807-4

**Matrix: Water** 

Date Collected: 02/02/21 12:20 Date Received: 02/04/21 09:30

adium-226 (	GFPC)								
	,	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.00770	U	0.0485	0.0485	1.00	0.0970	pCi/L	02/08/21 13:30	03/03/21 18:21	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
78.4		40 - 110					02/08/21 13:30	03/03/21 18:21	1
	Result	Result Qualifier  0.00770 U  WYield Qualifier  78.4	Count Uncert.	Count Uncert. Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   O.00770   U   O.0485   O	Count   Total   Uncert.   Uncert.	Count   Total   Uncert.   Uncert.	Count Uncert. Uncert. Uncert.   Variety   V	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   Count   Uncert.   Prepared   Analyzed   Analyzed   Analyzed   Analyzed   Unit   Unit

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.194	U *	0.266	0.267	1.00	0.444	pCi/L	02/08/21 14:04	02/12/21 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.4		40 - 110					02/08/21 14:04	02/12/21 08:58	1
Y Carrier	86.7		40 - 110					02/08/21 14:04	02/12/21 08:58	1

Method: Ra226_Ra2	228 - Con	bined 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	0.202	U	0.270	0.271	5.00	0.444	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-18** 

Lab Sample ID: 180-116807-5

**Matrix: Water** 

Date Collected: 02/02/21 14:50 Date Received: 02/04/21 09:30

Method: 9315 - Rad	lium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0378	U	0.0687	0.0688	1.00	0.121	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					02/08/21 13:30	03/03/21 18:21	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.316	U *	0.259	0.261	1.00	0.412	pCi/L	02/08/21 14:04	02/12/21 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					02/08/21 14:04	02/12/21 08:58	1
Y Carrier	92.7		40 - 110					02/08/21 14:04	02/12/21 08:58	1

_ Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.354	U	0.268	0.270	5.00	0.412	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** 

Lab Sample ID: 180-116807-6

**Matrix: Water** 

Date Collected: 02/02/21 11:45 Date Received: 02/04/21 09:30

Method: 9315 - Ra	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0212	U	0.0768	0.0768	1.00	0.145	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					02/08/21 13:30	03/03/21 18:21	1

Method: 9320 - I	·		Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U *	0.370	0.370	1.00	0.633	pCi/L	02/08/21 14:04	02/12/21 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					02/08/21 14:04	02/12/21 08:58	1
Y Carrier	84.9		40 - 110					02/08/21 14:04	02/12/21 08:58	1

Method: Ra226_Ra2	28 - Con	bined 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	0.182	U	0.378	0.378	5.00	0.633	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** 

Date Collected: 02/02/21 12:50 Date Received: 02/04/21 09:30 Lab Sample ID: 180-116807-7

**Matrix: Water** 

` '	0							
	Count Uncert.	Total Uncert.						
t Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
5	0.159	0.166	1.00	0.147	pCi/L	02/08/21 13:30	03/03/21 18:21	1
d Qualifier	Limits					Prepared	Analyzed	Dil Fac
7	40 - 110					02/08/21 13:30	03/03/21 18:21	1
l	Qualifier  Gualifier  Qualifier  Qualifier	dd Qualifier (2σ+/-) 0.159  dd Qualifier Limits	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	valid of the control of the	$ \frac{\text{olt Qualifier}}{15}                                  $	Out of the control of the c	Ilt Qualifier         (2σ+/-)         (2σ+/-)         RL 1.00         MDC Unit Distriction         Prepared O2/08/21 13:30           Id Qualifier         Limits         Prepared	Analyzed           Qualifier         (2σ+/-)         (2σ+/-)         RL         MDC         Unit         Prepared         Analyzed           0.159         0.159         0.166         1.00         0.147         pCi/L         02/08/21 13:30         03/03/21 18:21           Id         Qualifier         Limits         Prepared         Analyzed

Method: 9320 -	10000	(3.1.0)	Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.526	U *	0.383	0.386	1.00	0.602	pCi/L	02/08/21 14:04	02/12/21 08:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.7		40 - 110					02/08/21 14:04	02/12/21 08:58	1
Y Carrier	94.2		40 - 110					02/08/21 14:04	02/12/21 08:58	1

Method: Ra226_Ra	228 - Con	ibined Rad	dium-226 a	nd Radium	า-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.05		0.415	0.420	5.00	0.602	pCi/L		03/05/21 17:18	1

3/8/2021

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** 

Lab Sample ID: 180-116807-8

Date Collected: 02/02/21 14:10 **Matrix: Water** Date Received: 02/04/21 09:30

	Radium-226 (	(GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0658	U	0.0912	0.0914	1.00	0.154	pCi/L	02/08/21 13:30	03/03/21 18:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		40 - 110					02/08/21 13:30	03/03/21 18:21	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	0.101	U *	0.281	0.281	1.00	0.492	pCi/L	02/08/21 14:04	02/12/21 08:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.2		40 - 110					02/08/21 14:04	02/12/21 08:59	1
Y Carrier	90.5		40 - 110					02/08/21 14:04	02/12/21 08:59	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.167	U	0.295	0.295	5.00	0.492	pCi/L		03/05/21 17:18	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-116916-1

Date Collected: 02/04/21 00:00 **Matrix: Water** Date Received: 02/06/21 10:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0814		0.0585	0.0590	1.00	0.0777	pCi/L	02/10/21 10:22	03/04/21 15:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		40 - 110					02/10/21 10:22	03/04/21 15:00	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	0.771	*	0.302	0.310	1.00	0.424	pCi/L	02/10/21 11:03	02/17/21 08:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		40 - 110					02/10/21 11:03	02/17/21 08:48	1
Y Carrier	87.1		40 - 110					02/10/21 11:03	02/17/21 08:48	1

Method: Ra226_Ra	228 - 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	0.852		0.308	0.316	5.00	0.424	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: FB-2** Lab Sample ID: 180-116916-2

Date Collected: 02/04/21 13:20 **Matrix: Water** Date Received: 02/06/21 10:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0267	U	0.0530	0.0530	1.00	0.0955	pCi/L	02/10/21 10:22	03/04/21 15:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					02/10/21 10:22	03/04/21 15:00	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	-0.151	U *	0.326	0.327	1.00	0.609	pCi/L	02/22/21 15:37	03/02/21 08:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					02/22/21 15:37	03/02/21 08:54	1
Y Carrier	84.1		40 - 110					02/22/21 15:37	03/02/21 08:54	1

_ Method: Ra226_Ra2	28 - Con	bined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.125	U	0.330	0.331	5.00	0.609	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** 

Lab Sample ID: 180-116916-3

**Matrix: Water** 

Date Collected: 02/03/21 10:30 Date Received: 02/06/21 10:00

Method: 9315 - Ra	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.36		0.302	0.428	1.00	0.111	pCi/L	02/10/21 10:22	03/04/21 15:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					02/10/21 10:22	03/04/21 15:00	1

Method: 9320 - F	Radium-228 (	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.63	*	0.763	0.977	1.00	0.641	pCi/L	02/22/21 15:37	03/02/21 08:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.9		40 - 110					02/22/21 15:37	03/02/21 08:54	1
Y Carrier	84.1		40 - 110					02/22/21 15:37	03/02/21 08:54	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	9.99		0.821	1.07	5.00	0.641	pCi/L		03/05/21 22:06	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** 

Lab Sample ID: 180-116916-4

**Matrix: Water** 

Date Collected: 02/03/21 13:25 Date Received: 02/06/21 10:00

Method: 9315 - R	adium-226 (	GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0438	U	0.0687	0.0688	1.00	0.119	pCi/L	02/10/21 10:22	03/04/21 15:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110					02/10/21 10:22	03/04/21 15:01	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	-0.358	U	0.286	0.288	1.00	0.592	pCi/L	02/22/21 15:37	03/02/21 08:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					02/22/21 15:37	03/02/21 08:54	1
Y Carrier	77.8		40 - 110					02/22/21 15:37	03/02/21 08:54	1

Method: Ra226_Ra2	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	-0.314	U	0.294	0.296	5.00	0.592	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Lab Sample ID: 180-116916-5 Date Collected: 02/03/21 14:30

**Matrix: Water** 

Date Received: 02/06/21 10:00

Met	thod: 9315 - Ra	adium-226 (	GFPC)								
			•	Count Uncert.	Total Uncert.						
Ana	lyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Rad	ium-226	0.0453	U	0.0565	0.0567	1.00	0.0934	pCi/L	02/10/21 10:22	03/04/21 15:01	1
Carı	rier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba (	Carrier	87.7		40 - 110					02/10/21 10:22	03/04/21 15:01	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	0.639	*	0.276	0.282	1.00	0.392	pCi/L	02/10/21 11:03	02/17/21 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					02/10/21 11:03	02/17/21 08:49	1
Y Carrier	88.2		40 - 110					02/10/21 11:03	02/17/21 08:49	1

Method: Ra226_Ra	228 - 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	0.684		0.282	0.288	5.00	0.392	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** 

Date Collected: 02/03/21 14:35 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-6

**Matrix: Water** 

(GFPC)								
	Count Uncert.	Total Uncert.						
Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
U	0.0755	0.0760	1.00	0.111	pCi/L	02/10/21 10:22	03/04/21 15:01	1
Qualifier	Limits					Prepared	Analyzed	Dil Fac
;	40 - 110					02/10/21 10:22	03/04/21 15:01	1
8	Qualifier U  Qualifier Qualifier	$\begin{array}{c c} \textbf{It} & \textbf{Qualifier} & \textbf{(2}\sigma\text{+/-)} \\ \hline \textbf{0} & 0.0755 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \frac{\text{It}}{8} \frac{\text{Qualifier}}{\text{U}} = \frac{(2\sigma + l - l)}{0.0755} = \frac{(2\sigma + l - l)}{0.0760} = \frac{\text{RL}}{1.00} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Qualifier   (2σ+/-)   (2σ+/-)   RL   MDC   Unit   Prepared   Analyzed   02/10/21 10:22   03/04/21 15:01

Method: 9320 - F	Radium-228 (	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.620	*	0.284	0.290	1.00	0.414	pCi/L	02/10/21 11:03	02/17/21 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					02/10/21 11:03	02/17/21 08:49	1
Y Carrier	87.9		40 - 110					02/10/21 11:03	02/17/21 08:49	1

Method: Ra226_Ra	228 - Combined 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	0.718	0.294	0.300	5.00	0.414	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-12** 

Lab Sample ID: 180-116916-7

**Matrix: Water** 

Date Collected: 02/03/21 13:25 Date Received: 02/06/21 10:00

Method: 9315 - R	adium-226 (	GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.193		0.0876	0.0893	1.00	0.0934	pCi/L	02/10/21 10:22	03/04/21 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					02/10/21 10:22	03/04/21 15:03	1

Method: 9320 - F	Radium-228 (	(GFPC)								
			Count	Total						
A L . d .	D 14	0	Uncert.	Uncert.	D.	MDO	1114	B	A I I	D'I E
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.129	U *	0.215	0.215	1.00	0.364	pCi/L	02/10/21 11:03	02/17/21 08:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					02/10/21 11:03	02/17/21 08:49	1
Y Carrier	88.2		40 - 110					02/10/21 11:03	02/17/21 08:49	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	n- <b>22</b> 8					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.322	U	0.232	0.233	5.00	0.364	pCi/L		03/05/21 22:06	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** 

Date Collected: 02/03/21 15:45 Date Received: 02/06/21 10:00 Lab Sample ID: 180-116916-8

**Matrix: Water** 

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.578		0.130	0.140	1.00	0.0843	pCi/L	02/10/21 10:22	03/04/21 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		40 - 110					02/10/21 10:22	03/04/21 15:03	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+/-)	NL	IVIDC	OIIIL	Frepareu	Allalyzeu	DII Fac
Radium-228	1.42	*	0.449	0.468	1.00	0.586	pCi/L	02/22/21 15:37	03/02/21 08:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					02/22/21 15:37	03/02/21 08:55	1
Y Carrier	83.7		40 - 110					02/22/21 15:37	03/02/21 08:55	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	2.00		0.467	0.488	5.00	0.586	pCi/L		03/05/21 22:06	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** 

Lab Sample ID: 180-116916-9 Date Collected: 02/04/21 11:05

**Matrix: Water** 

Date Received: 02/06/21 10:00

	dium-226 (	GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0421	U	0.0541	0.0543	1.00	0.0900	pCi/L	02/10/21 10:22	03/04/21 15:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		40 - 110					02/10/21 10:22	03/04/21 15:03	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	0.446	U *	0.371	0.373	1.00	0.592	pCi/L	02/22/21 15:37	03/02/21 08:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.5		40 - 110					02/22/21 15:37	03/02/21 08:55	1
Y Carrier	85.2		40 - 110					02/22/21 15:37	03/02/21 08:55	1

Method: Ra226_Ra2	228 - Con	bined 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	0.488	U	0.375	0.377	5.00	0.592	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** 

Lab Sample ID: 180-116916-10 Date Collected: 02/04/21 12:30

**Matrix: Water** 

Date Received: 02/06/21 10:00

Method: 9315 - R	Radium-226 (	GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.115		0.0638	0.0646	1.00	0.0741	pCi/L	02/10/21 10:22	03/04/21 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					02/10/21 10:22	03/04/21 15:04	1
=										

Method: 9320 - F	Radium-228 (	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.612	*	0.375	0.380	1.00	0.572	pCi/L	02/22/21 15:37	03/02/21 08:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.1		40 - 110					02/22/21 15:37	03/02/21 08:55	1
Y Carrier	81.5		40 - 110					02/22/21 15:37	03/02/21 08:55	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.727		0.380	0.385	5.00	0.572	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-17** 

Lab Sample ID: 180-116916-11

**Matrix: Water** 

Date Collected: 02/04/21 13:45 Date Received: 02/06/21 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	0.0755	U	0.0686	0.0690	1.00	0.100	pCi/L	02/10/21 10:22	03/04/21 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					02/10/21 10:22	03/04/21 15:04	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	0.363	U *	0.310	0.312	1.00	0.492	pCi/L	02/10/21 11:03	02/17/21 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					02/10/21 11:03	02/17/21 08:50	1
Y Carrier	86.0		40 - 110					02/10/21 11:03	02/17/21 08:50	1

Method: Ra226_Ra2	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	0.438	U	0.317	0.320	5.00	0.492	pCi/L		03/05/21 22:06	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-1 Lab Sample ID: 180-116916-12

. Matrix: Water

Date Collected: 02/04/21 14:15 Date Received: 02/06/21 10:00

Method: 9315 - Rad	lium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0342	U	0.0447	0.0449	1.00	0.0744	pCi/L	02/10/21 10:22	03/04/21 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					02/10/21 10:22	03/04/21 15:04	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	0.0779	U *	0.229	0.229	1.00	0.397	pCi/L	02/10/21 11:03	02/17/21 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					02/10/21 11:03	02/17/21 08:50	1
Y Carrier	85.6		40 - 110					02/10/21 11:03	02/17/21 08:50	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.112	U	0.233	0.233	5.00	0.397	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2 Lab Sample ID: 180-116916-13

Date Collected: 02/04/21 14:30 Matrix: Water Date Received: 02/06/21 10:00

Method: 9315 -	Radium-226	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00763	U	0.0434	0.0434	1.00	0.0880	pCi/L	02/10/21 10:22	03/04/21 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					02/10/21 10:22	03/04/21 15:04	1

Method: 9320 -	Radium-228 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00244	U *	0.261	0.261	1.00	0.466	pCi/L	02/10/21 11:03	02/17/21 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					02/10/21 11:03	02/17/21 08:50	1
Y Carrier	84.9		40 - 110					02/10/21 11:03	02/17/21 08:50	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	0.00518	U	0.265	0.265	5.00	0.466	pCi/L		03/05/21 22:06	1

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Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** 

Lab Sample ID: 180-116916-14 Date Collected: 02/04/21 14:12

**Matrix: Water** 

Date Received: 02/06/21 10:00

Method: 9315 - Ra	dium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0495	U	0.0531	0.0533	1.00	0.0838	pCi/L	02/10/21 10:22	03/04/21 15:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.4		40 - 110					02/10/21 10:22	03/04/21 15:04	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	0.303	U *	0.320	0.321	1.00	0.522	pCi/L	02/22/21 15:37	03/02/21 08:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					02/22/21 15:37	03/02/21 08:55	1
Y Carrier	84.5		40 - 110					02/22/21 15:37	03/02/21 08:55	1

Method: Ra226_Ra2	228 - Com	ibined 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	0.353	U	0.324	0.325	5.00	0.522	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Lab Sample ID: 180-116916-15

Date Collected: 02/04/21 15:50 **Matrix: Water** Date Received: 02/06/21 10:00

Method: 9315 - I	Radium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0799	U	0.0607	0.0612	1.00	0.0856	pCi/L	02/10/21 10:22	03/04/21 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		40 - 110					02/10/21 10:22	03/04/21 15:06	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	-0.0467	U *	0.177	0.177	1.00	0.334	pCi/L	02/10/21 11:03	02/17/21 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.1		40 - 110					02/10/21 11:03	02/17/21 08:50	1
Y Carrier	86.0		40 - 110					02/10/21 11:03	02/17/21 08:50	1

Method: Ra226_Ra2	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	0.0332	U	0.187	0.187	5.00	0.334	pCi/L		03/05/21 22:06	1

3/8/2021

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** 

Lab Sample ID: 180-116916-16 Date Collected: 02/04/21 11:15

**Matrix: Water** 

Date Received: 02/06/21 10:00

adium-226 (	(GFPC)	0	Tatal						
Pocult	Qualifier	Uncert.	Uncert.	DI	MDC	Unit	Propared	Analyzod	Dil Fac
Result	Qualifier	(20+/-)	(20+/-)	KL	MIDC	UIIIL	Frepareu	Analyzeu	DII Fac
0.120		0.0721	0.0729	1.00	0.0942	pCi/L	02/10/21 10:22	03/04/21 15:06	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
91.3		40 - 110					02/10/21 10:22	03/04/21 15:06	1
	Result 0.120 %Yield	%Yield Qualifier	Count Uncert.     Result   Qualifier   (2σ+/-)     0.120   0.0721     %Yield   Qualifier   Limits	Count Uncert. Uncert. Uncert.	Count Uncert. Uncert.   Count Uncert.   Cou	Count   Total   Uncert.   Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   O.120   O.0721   O.0729   O.0729   O.0942   PCi/L	Count Uncert. Uncert. Uncert.   Variety   V	Count Uncert. Uncert. Uncert.   Variety   V

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0196	U *	0.178	0.178	1.00	0.322	pCi/L	02/10/21 11:03	02/17/21 08:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		40 - 110					02/10/21 11:03	02/17/21 08:50	1
Y Carrier	87.1		40 - 110					02/10/21 11:03	02/17/21 08:50	1

Method: Ra226_Ra2	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	0.139	U	0.192	0.192	5.00	0.322	pCi/L		03/05/21 22:06	1

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

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

Date Collected: 02/04/21 12:40

Lab Sample ID: 180-116916-17 Matrix: Water

Date Received: 02/06/21 10:00

Method: 9315 - R	adium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.366		0.107	0.112	1.00	0.0922	pCi/L	02/10/21 10:22	03/04/21 15:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					02/10/21 10:22	03/04/21 15:06	1

Method: 9320 -	Kaululli-220 (	(GIFC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.198	U *	0.223	0.224	1.00	0.366	pCi/L	02/10/21 11:03	02/17/21 08:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					02/10/21 11:03	02/17/21 08:52	1
Y Carrier	84.1		40 - 110					02/10/21 11:03	02/17/21 08:52	1

Method: Ra226_Ra	228 - Com	bined Rad	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	0.564		0.247	0.250	5.00	0.366	pCi/L		03/05/21 22:06	1

10

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-498078/22-A

Lab Sample ID: LCS 160-498078/1-A

**Matrix: Water** 

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 500900** 

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-116807-2

**Prep Batch: 498078** 

MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 -0.007267 U 0.0634 0.0634 1.00 0.135 pCi/L 02/08/21 13:30 03/05/21 07:02

Total

Count

MB

Carrier %Yield Qualifier Limits Ba Carrier 79.0 40 - 110 Prepared Analyzed Dil Fac

02/08/21 13:30 03/05/21 07:02

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 498078

Total LCS LCS %Rec. **Spike** Uncert. Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 15.1 15.63 1.60 1.00 0.127 pCi/L 103 75 - 125

LCS LCS

**Analysis Batch: 500900** 

**Analysis Batch: 500594** 

Carrier %Yield Qualifier Limits Ba Carrier 80.8 40 - 110

Lab Sample ID: MB 160-498288/23-A

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 498288

Count Total Uncert. MB MB Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ **MDC** Unit Prepared Dil Fac RL Analyzed Radium-226 Ū 0.0480 0.0480 02/10/21 10:22 03/05/21 07:01 0.01064 1.00 0.0939 pCi/L

MR MR Dil Fac Carrier %Yield Qualifier Limits Prepared Analyzed 02/10/21 10:22 03/05/21 07:01 Ba Carrier 85.6 40 - 110

Lab Sample ID: LCS 160-498288/1-A

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 500880** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 498288

Total Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 11.3 11.58 1.18 1.00 0.0816 pCi/L 102 75 - 125

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 88.9 40 - 110

Lab Sample ID: LCSD 160-498288/2-A

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

Prep Type: Total/NA

**Prep Batch: 498288** 

**Analysis Batch: 500880** 

Total

Spike LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits RER Limit Radium-226 11.3 10.32 1.06 1.00 0.0831 pCi/L 75 - 125 0.56

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCSD 160-498288/2-A

**Matrix: Water** 

**Analysis Batch: 500880** 

LCSD LCSD

%Yield Qualifier Carrier Limits Ba Carrier 90 1 40 - 110 **Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

Job ID: 180-116807-2

Prep Batch: 498288

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-498080/22-A

**Analysis Batch: 498749** 

**Matrix: Water** 

Lab Sample ID: LCS 160-498080/1-A

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 498080** 

Count Total Uncert. MB MB Uncert. Analyte RL **MDC** Unit Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ Prepared Analyzed Dil Fac Radium-228 0.343 0.649 pCi/L 02/08/21 14:04 02/12/21 09:01 -0.2234 0.342 1.00

> MΒ MΒ

Carrier %Yield Qualifier Limits Ba Carrier 40 - 110 79.0 40 - 110 Y Carrier 88.6

02/08/21 14:04 02/12/21 09:01

02/08/21 14:04 02/12/21 09:01

Prepared

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Analyzed

**Prep Batch: 498080** 

Total

Spike LCS LCS Uncert. %Rec. Added Analyte Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits Radium-228 9.91 15.22 1.76 1.00 0.627 pCi/L 154 75 - 125

LCS LCS Carrier **%Yield Qualifier** Limits Ba Carrier 80.8 40 - 110 Y Carrier 86.7 40 - 110

Lab Sample ID: MB 160-498366/23-A

**Matrix: Water** 

**Matrix: Water** 

Analysis Batch: 498746

**Analysis Batch: 498987** 

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 498366** 

Count Total MB MB Uncert. Uncert. **MDC** Unit Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL Prepared Analyzed Dil Fac Radium-228 0.03713 U 0.254 0.254 1.00 0.448 pCi/L 02/10/21 11:03 02/17/21 08:53

> %Yield Qualifier Limits 40 - 110 85.6 40 - 110 84.1

MR MR

> Prepared Analyzed Dil Fac 02/10/21 11:03 02/17/21 08:53 02/10/21 11:03 02/17/21 08:53

Lab Sample ID: LCS 160-498366/1-A

**Matrix: Water** 

Carrier

Ba Carrier

Y Carrier

Analyte

Radium-228

**Analysis Batch: 498986** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 498366** 

LCS LCS Spike

Total Uncert.

%Rec. Added Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits 7.42 12.48 1.40 1.00 0.427 pCi/L 168 75 - 125

Eurofins TestAmerica, Pittsburgh

Dil Fac

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCS 160-498366/1-A

**Matrix: Water** 

Analysis Batch: 498986

LCS LCS

Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.9		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: LCSD 160-498366/2-A

**Matrix: Water** 

Analysis Batch: 498986

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

**Client Sample ID: Lab Control Sample** 

Prep Batch: 498366

Job ID: 180-116807-2

Prep Type: Total/NA Prep Batch: 498366

Total **Spike** LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit 75 - 125 Radium-228 7.42 9.792 1.00 0.414 pCi/L 132 1.06 1.14

LCSD LCSD

Carrier	%Yield	Qualifier	Limits
Ba Carrier	90.1		40 - 110
Y Carrier	86.0		40 - 110

Lab Sample ID: MB 160-499478/10-A

**Matrix: Water** 

**Analysis Batch: 500441** 

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 499478

Count Total MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ **MDC** Unit RL Prepared Analyzed Dil Fac Radium-228 0.1595 Ū 0.321 0.321 1.00 0.549 pCi/L 02/22/21 15:37 03/02/21 08:55

MB MB

Carrier	%Yield C	Qualifier Limits	Prepared Analyzed	Dil Fac
Ba Carrier	88.6	40 - 110	02/22/21 15:37 03/02/21 08:55	1
Y Carrier	83. <i>4</i>	40 - 110	02/22/21 15:37 03/02/21 08:55	1

Lab Sample ID: LCS 160-499478/1-A

**Matrix: Water** 

**Analysis Batch: 500441** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 499478

Total Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits Radium-228 9.85 13.28 1.56 1.00 0.584 pCi/L 135 75 - 125

 LCS
 LCS

 Carrier
 % Yield
 Qualifier
 Limits

 Ba Carrier
 86.5
 40 - 110

 Y Carrier
 83.7
 40 - 110

Lab Sample ID: LCSD 160-499478/2-A

**Matrix: Water** 

Analysis Batch: 500441

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

**Prep Batch: 499478** 

Total Spike LCSD LCSD Uncert. %Rec. **RER** Added RL Limits Analyte Result Qual  $(2\sigma + / -)$ **MDC** Unit %Rec Limit RER 75 - 125 Radium-228 9.85 11.75 1.45 1.00 0.632 pCi/L 119 0.51

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# **QC Sample Results**

Client: Southern Company Job ID: 180-116807-2

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: LCSD 160-499478/2-A

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

Matrix: Water

Analysis Batch: 500441

LCSD LCSD

Carrier	%Yield	Qualifier	Limits
Ba Carrier	81.4		40 - 110
Y Carrier	82.2		40 - 110

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

Prep Type: Total/NA **Prep Batch: 499478** 

# **QC Association Summary**

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

**Prep Batch: 498078** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total/NA	Water	PrecSep-21	
180-116807-2	EB-1	Total/NA	Water	PrecSep-21	
180-116807-3	WGWA-1	Total/NA	Water	PrecSep-21	
180-116807-4	WGWA-2	Total/NA	Water	PrecSep-21	
180-116807-5	WGWA-18	Total/NA	Water	PrecSep-21	
180-116807-6	WGWA-3	Total/NA	Water	PrecSep-21	
180-116807-7	WGWA-4	Total/NA	Water	PrecSep-21	
180-116807-8	WGWA-7	Total/NA	Water	PrecSep-21	
MB 160-498078/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-498078/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

**Prep Batch: 498080** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116807-1	Dup-1	Total/NA	Water	PrecSep_0	
180-116807-2	EB-1	Total/NA	Water	PrecSep_0	
180-116807-3	WGWA-1	Total/NA	Water	PrecSep_0	
180-116807-4	WGWA-2	Total/NA	Water	PrecSep_0	
180-116807-5	WGWA-18	Total/NA	Water	PrecSep_0	
180-116807-6	WGWA-3	Total/NA	Water	PrecSep_0	
180-116807-7	WGWA-4	Total/NA	Water	PrecSep_0	
180-116807-8	WGWA-7	Total/NA	Water	PrecSep_0	
MB 160-498080/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-498080/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

**Prep Batch: 498288** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-116916-1	Dup-2	Total/NA	Water	PrecSep-21	
180-116916-2	FB-2	Total/NA	Water	PrecSep-21	
180-116916-3	WGWA-6	Total/NA	Water	PrecSep-21	
180-116916-4	WGWA-5	Total/NA	Water	PrecSep-21	
180-116916-5	WGWC-19	Total/NA	Water	PrecSep-21	
180-116916-6	WGWC-11	Total/NA	Water	PrecSep-21	
180-116916-7	WGWC-12	Total/NA	Water	PrecSep-21	
180-116916-8	WGWC-8	Total/NA	Water	PrecSep-21	
180-116916-9	WGWC-15	Total/NA	Water	PrecSep-21	
180-116916-10	WGWC-16	Total/NA	Water	PrecSep-21	
180-116916-11	WGWC-17	Total/NA	Water	PrecSep-21	
180-116916-12	FB-1	Total/NA	Water	PrecSep-21	
180-116916-13	EB-2	Total/NA	Water	PrecSep-21	
180-116916-14	WGWC-9	Total/NA	Water	PrecSep-21	
180-116916-15	WGWC-10	Total/NA	Water	PrecSep-21	
180-116916-16	WGWC-13	Total/NA	Water	PrecSep-21	
180-116916-17	WGWC-14A	Total/NA	Water	PrecSep-21	
MB 160-498288/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-498288/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-498288/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

**Prep Batch: 498366** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-1	Dup-2	Total/NA	Water	PrecSep_0	
180-116916-5	WGWC-19	Total/NA	Water	PrecSep_0	

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Job ID: 180-116807-2

# **QC Association Summary**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Rad (Continued)

### Prep Batch: 498366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-6	WGWC-11	Total/NA	Water	PrecSep_0	
180-116916-7	WGWC-12	Total/NA	Water	PrecSep_0	
180-116916-11	WGWC-17	Total/NA	Water	PrecSep_0	
180-116916-12	FB-1	Total/NA	Water	PrecSep_0	
180-116916-13	EB-2	Total/NA	Water	PrecSep_0	
180-116916-15	WGWC-10	Total/NA	Water	PrecSep_0	
180-116916-16	WGWC-13	Total/NA	Water	PrecSep_0	
180-116916-17	WGWC-14A	Total/NA	Water	PrecSep_0	
MB 160-498366/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-498366/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-498366/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

### **Prep Batch: 499478**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-116916-2	FB-2	Total/NA	Water	PrecSep_0	
180-116916-3	WGWA-6	Total/NA	Water	PrecSep_0	
180-116916-4	WGWA-5	Total/NA	Water	PrecSep_0	
180-116916-8	WGWC-8	Total/NA	Water	PrecSep_0	
180-116916-9	WGWC-15	Total/NA	Water	PrecSep_0	
180-116916-10	WGWC-16	Total/NA	Water	PrecSep_0	
180-116916-14	WGWC-9	Total/NA	Water	PrecSep_0	
MB 160-499478/10-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-499478/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-499478/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Job ID: 180-116807-2

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**Chain of Custody Record** 

💸 eurofins Environment Testing

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

Client Information	Sampler,	11 "	1º1 0	Lab PM:	:i			Carrier Tracking No(s);	COC No:	
Client Contact:	Phone:			E-Mail:	0.00			A 50 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
SCS Contacts	770-	594-599	364	shali.t	rown@e	shali.brown@eurofinset.com	<u>mo</u>		rage:	0 f
Company: GA Power							Analysis Requested	equested	Job #:	
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	ted:			(1)			; 	Preservation Codes	Codes:
City: Atlanta	TAT Requested (days):	lays):			r,98,0M					'-lexane one
State, Zip: GA, 30308					Li,Hg,N					sNaO2 32O4S a2SO3
Phone: 404-506-7116(Tel)	PO#: SCS10382606				776	50)		80-116807 0		a2S203 2S04
Email: SCS Contacts	:: MO #:				- (O)	E6/918		Control Chain of Custody	Custody	SP Dodecahydrate cetone
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922			1	(၂၃ <b>(</b> ၇) <b>(၂</b>	6 9†8-			K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:			Jumos	X)/as				of conf	
Sample Identification	Sample Date	Sample	Sample N Type (V	Matrix (W=water, S=solid, O=waste/oll, edd	orrommensing (	Looride (EPA 3			Number o	Special Instructions/Note: Full
		X	7 00	. 100	X					App 4 Scan Event
DUP-1	12-2-21	1	9		2				4/v =Hd 7	
EB-1	12-2-2	1445	0	Water	~ /3				AV =Hd	
NGWA - (	12-2-21	1115	0	Water /	> ×				4 PH= 5 2	(0
WGWA-Z	12.2.2	1220	۸ 9	Water	/ N N				pH= (0.1	
WGWA-18	12-2-21	OSHI	0	Water	1				5,0) =Hd  1	48
W6WA-3	12.2.2	1145	<i>y</i>	Water	1	/			1 pH= 5.7	2 00
WGWA - 4	12-2-21	0521	o O	Water	/ // ~	/			U PH= (0.(0	_
Noing - 7	12-2-2	1410	o O	Water	7 2				L) PH= 5.8	7
			<i>ა</i>	Water					=Hd	
			ر 9	Water					=Hd	
			o O	Water					=Hd	
ant	Unknown		Radiological		Sample	Dispos	I ( A fee may be	assessed if samples Disposal By Lab	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Month	n 1 month) Months
, Ⅲ, Ⅳ,					Specia	Instruction	Special Instructions/QC Requirements:	ients:		
Empty Kit Relinquished by:		Date;	/		Time:			Method of Shipment:	ų	
Relinquished by W	Date/Time: 2/	12/21 descrip	13:34 com	Company	8. V	Received by:	14	Z/3/2/Date/Time	13534	Company
Relinquistred by:	Date/Time:	0,9/	S Cool	Marauso	Rec	Received by:	Sellen	Water DateRine	18-4-21	Commy A.P. II
0	/ pate/Time:	,	Com	Company	Rec	Received by:	2	Date/Time	ne: 0 . 2 .	Company
Custody Seals Intact: Custody Seal No.:					Ö	ler Tempera	Cooler Temperature(s) °C and Other Remarks:	Remarks:		
										Ver: 01/16/2019

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

Chain of Custody Record

2 to 2

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Environment Testing

Full N - None
O - AsNaO2
P - Na2O45
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecatydrate
U - Acetone V - MCAA W - pH 4-5 Z - other (specify) App 4 Scan Event Special Instructions/Note: Months Preservation Codes: 70 A - HCL
B - NaOH
C - Zn Acetate
C - Nitric Acid
E - NahSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid 4 PH= 6.22 4 PH= 6.3 I - Ice J - DI Water K - EDTA L - EDA 00 2 4 pH= 6. S Archive For ;# qor 0 Page: 뿝 뷴 #Hd Total Number of containers 13 Date/Time: Method of Shipment: **Analysis Requested** Cooler Temperature(s) °C and Other Remarks: Special Instructions/QC Requirements E-Mail: shali.brown@eurofinset.com Radium 226 & 228 (SW-846 9315/9320) Received by: Fluoride (EPA 300.0) Pp. IV Metals (Sb,As,Ba,Be,Cd,Cr,Co,Pb,Li,Hg,Mo,Se,TI) Lab PM: Brown, Shali N 3 Time: (W=water, S=solid, O=waste/oil, Preservation Code: Water Matrix Water Radiological (C=comp, G=grab) Sample Type 770) 594-5998 AULA G G G G G G G G G G G 2019 H 5/1/ 1430 (550 1240 Sample 21/11 5111 Time Sampler. Date: K Unknown TAT Requested (days): Due Date Requested: PO #: SCS10382606 Sample Date 12-h-7 12-4-6 12-4-2 2-4-2 12-11-21 12-4-21 Project #: 18019922 Date/Time: # OM Phone: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Cystody Seal No.: ☐ Non-Hazard ☐ Flammable WGWC-IHA Possible Hazard Identification Project Name: CCR - Plant Wansley Ash Pond 81-JM9M WGWC-10 0 Empty Kit Relinquished by: Address: 241 Ralph McGill Blvd SE Custody Seals Intact: Client Information Sample Identification N/6W/C ∆ Yes ∆ No 404-506-7116(Tel) FB-1 Client Contact: SCS Contacts SCS Contacts delinquished by: Relinquished by State, Zip: GA, 30308 Company: GA Power City: Atlanta

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ATNAJTA - PPS

3/8/2021

Ver: 01/16/2019

Part # 159469-434 RTT2 EXP 11/21 .

9371 02.04

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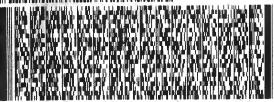
FΖ

SHIP DATE: 03FEB21 ACTWGT: 59.85 LB CAD: 859116/CAFE3406

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US 10 SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

(412) 963 - 7058 REF: ACC - WANSLEY



1 of 2 TRK# 1516 9327 9371

THU - 04 FEB 4:30P STANDARD OVERNIGHT

15238 PIT

Uncorrectea temp Thermometer ID Initials PT-WI-SR-001 effective 11/8/18



# 159469-434 RIT2 EXP

esting

💸 eurofin

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR GEORGINS TESTING AMERICA ATL SC GEIS REGENCY PARKWAY NW

10 SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH

NORCROSS, GA 30071 UNITED STATES US

301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238

EF: ACC - WANSLEY

2 of 2

15238 PA-US PIT

Uncorrected temp Thermometer ID

PT-WI-SR-001 effective 11/8/18 님

PRIORITY OVERNIGHT SATURDAY 12:00P

EUROFINS TESTAMERICA PITTSBURGH

301 ALPHA DR.

RIDC PARK

O SAMPLE RECIEVING

PITTSBURGH PA 15238

REF. ACCC - WANSLEY

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 EUROFINS TESTING AMERICA ATL & SUITE 900.

6215 REGENCY PARKWHY SUITE 900 NORCROSS, GA 30071 UNITED STATES US

<sup>180-116916</sup> Waybill

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

SHIP DATE: 05FEB21 ACTWGT: 66.70 LB CAD: 859116/CAFE3406 BILL RECIPIENT

CROSS, GA 30071 TED STATES US

IN ID:LIYA (678) 966-9991 GE TAYLOR FINS TESTING AMERICA ATL REGENCY PARKWAY NW

SC

(678) 966-9991

SATURDAY 12:00P PRIORITY OVERNIGHT

15238

AGCA

TRK# 1516 9328 0033 ## MASTER ##

PA-US

Thermometer ID

Q H

Uncorrected temp

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

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**Environment Testing TestAmerica** 

art # 159469-434 RIT2 EXP

PA - US

XO AGCA

Thermometer ID Uncorrected temp

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

Initials

Page 54 of 60 •

3/8/2021

eurofins :-



**TestAmerica** 

SC 6215 REGENCY PARKWAY SUITE 900 NORCROSS, GA 30071 UNITED STATES US

BILL RECIPIENT SAMPLE RECIEVING

**EUROFINS TESTAMERICA PITTSBURGH** 

301 ALPHA DR.

PITTSBURGH PA 15238 RIDC PARK

SATURDAY 12:00P PRIORITY OVERNIGHT

Thermometer ID

5

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

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Mironment Testing Ai nerica

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SHIP DATE: 05FEB21 ACTWGT: 66.70 LB CAD: 859116/CAFE3406

SAMPL

BIL RECIPIENT

STESTAMERICA PITTSBURGH 301 ALPHA DR. RIDC PARK

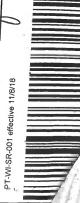
PITTSBURGH PA 15238

SATURDAY 12:00P PRIORITY OVERNIGHT

Uncorrected temp Thermometer ID

0201

Initials SF



Page 55 of 60

Control March   Control Lab	Client Information (Sub Contract Lab)   Prove   Prov	Phone: 412-963-7058 Fax: 412-963-2468											
Company   Comp	Simple   Company   Compa	(Sub Contract Lab)	npler:			Lab PM: Brown, \$	hali		Carr	ier Tracking No(s):		COC No:	
14-204-01-01-01-01-01-01-01-01-01-01-01-01-01-	Part Color		one.	:		E-Mail: Shali.Bro	wn@Eu	rofinset		e of Origin:		Page:	
Trail Horn,	17.15   17.1	bany: America Laboratories, Inc.				Acc	editations	Required (	iote):			Job #:	}
Name   14   150   151   150	2007   2007		B Date Requested 10/2021			-			Analysis Regues	sted		Preservation Co	18
Rice   314-236-975/Few)   Order   Secretary   Order	14-2396-8556(Te)   314-298-8757(Fex)   NO #		F Requested (day	;;			te					A - HCL B - NaOH C - Zn Acetate D - Nitro Acid	
1   1   1   1   1   1   1   1   1   1	No. 25	)6(Tel) 314-298-8757(Fax)	#				arget Li	rget Lis				F - MeOH G - Amchlor	
Control Name   Cont	Solve   Eastern   Forest   Eastern   Forest   Eastern   Forest   Eastern		:#0			Of No		eT brel				H - Ascorbic Acid I - Ice J - DI Water	
Sample   Care   Care   Sample   Care	Sample   Identification - Client ID (Lab ID)   Sample   Pate   Client ID (Lab ID)   Sample   Matrix   Client ID (Lab ID)   Sample   S		ject #: 019922			se <sub>A</sub> ) e		Stand			nenis	K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Sample   Heartification - Client ID (Lab ID)   Sample   Date   Tree   Graph   Instructions   Processor   Tree   Graph   Instructions   Tree   Tr	Sample Identification - Client ID (Lab ID)   Sample Date   Time   Gargabi   Type   Sample   Matrix   Gargabi   Caccomic   Sample   Caccomic		OW#.			oldmač					tnoo to	Other:	
Peed-Point   Pee	12/2/21   Eastern   Order   14/45   Water   X   X   X   X		400								otal Number		
Part   (180 + (16807 ±)   2021   Eastern   Water   X   X   X   X   X   X   X   X   X	up-1 (180-116807-1)         2/2/21         Eastern         Water         X × X ×         X		Ambie Dake	1		5	_	-			1	Special	Instructions/Not
14-45   14-4	14:45	-1 (180-116807-1)	2/2/21	Eastern	-	Nater	×	-			2		
	CGWA-2 (180-116807-3)   21/2/21   11.15   Water   X   X   X   X   X   X   X   X   X	(180-116807-2)	2/2/21	14:45 Fastern		Nater	×	+			2		
12221   E326m   Water   X X X X	12:20	WA-1 (180-116807-3)	2/2/21	11:15 Eastern		Nater	×	-			2		
145.50   1	14:50	NA-2 (180-116807-4)		12:20 Eastern		Nater	×	-			2		
CGWA-7 (180-116807-6)	COWA-3 (180-116807-6)	WA-18 (180-116807-5)		14:50 Eastern		Nater	×	-			2		
COMA-7 (180-116807-3)   21/2121   12/50   14/50   Water   X X X X   X   X   X   X   X   X   X	/GWA-4 (180-116807-7)  //GWA-7 (180-116807-7)  //GWA-7 (180-116807-7)  //GWA-7 (180-116807-8)  //GWA-7	NA-3 (180-116807-6)		11:45 Eastern		Nater	×	-			2		
COMA-7 (180-116807-8)   14:10   Water   X   X   X   X   X   X   X   X   X	14:10   Water   180-116807-8	NA-4 (180-116807-7)		12:50 Eastern	_	Nater	×	┼			2		
the Since laboratory accreditations are subject to change. Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratory accreditations are subject to change. Eurofins TestAmerica alternotic must be shipped back to the Eurofins TestAmerica alternotic must be shipped back to the Eurofins TestAmerica alternotic must be shipped back to the Eurofins TestAmerica alternotic many sets and analyzed, the samples are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica attention in the State of Origin listed above for analysis/lestSimilarity being analyzed, the samples accreditation status should be brought to Eurofins State of Origin listed above for analysis/lestSimilarity being analyzed. The signed Chain of Custody attesting to said compliance to Eurofins TestAmerica attention in the State of Origin listed above for analysis/lestSimilarity being and the State of Origin listed above for analysis/lestSimilarity being and the State of Origin listed above for analysis/lestSimilarity being and the State of Origin listed by:    Date Time:   Date Time:   Date Time:   Time:   Time:   Time:   Time:   Date Time:   Originary   Received by:   Company   Contract   Company   Contract   Company   Contract   Company   Contract   C	the Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This simple alternation immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.  Sample Disposal (A fee may noonlined to confine the property of the may not confirmed to confirm the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.  Sample Disposal (A fee may noonlined to confirmed the may not confirmed to confirmed the may not confirmed to company.  Inner:    Date:   Company   Comp	NA-7 (180-116807-8)		14:10 Eastern		Nater	×	-			7		
Ossible Hazard Identification       Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)         nondification       Primary Deliverable Rank: 2       Special Instructions/QC Requirements:       Special Instructions/QC Requirements:         mpty Kit Relinquished by:       Date:       Time:       Infine:       Date:       Company         minquished by:       Campany       Received by:       Received by:       Received by:       Campany         counting indiquished by:       Date:Time:       Company       Received by:       Date:Time:       Date:Time:         Custody Seals Intact:       Custody Seals Intact:       Custody Seals Intact:       Cooler Temperature(s) °C and Other Remarks:       Date:Time:       Company	ossible Hazard Identification  nconfirmed  nconfirmed  modification  nconfirmed  leliverable Rank: 2  Sample Disposal (A fee may Deliverable Rank: 2  Special Instructions/QC Requirement of the structions of the struction of the structions of the struction of the	Since laboratory accreditations are subject to change, Eurofins TestAmerica plac ain accreditation in the State of Origin listed above for analysis/fests/matrix being merica attention immediately. If all requested accreditations are current to date, in	es the ownership analyzed, the sam	of method, analyte ples must be shipp thain of Custody al	& accreditation ped back to the tresting to sain	on compliance u e Eurofins Test d complicance to	Jon out su America tal	ocontract is soratory or estAmeric	aboratories. This sample shi other instructions will be pro-	oment is forwarded unde	er chain-of-	-custody. If the labo	oratory does not currer brought to Eurofins
Primary Deliverable Rank: 2 Special Instructions/QC Requirements:    Date:	Primary Deliverable Rank: 2  Date:  D	sible Hazard Identification nofirmed					Sample	Disposa	I ( A fee may be asses	sed if samples ar	e retaine	ed longer than	1 month)
Inquished by:       Date:       Time:       Time:       Method of Shipment:         Individual by:       Date/Time:       Image: Time:	Inquished by:    Time:   Time:		mary Deliverab	le Rank: 2			pecial I	struction	ns/QC Requirements:	sal by Lab	Arch	ive For	Months
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	Custody Seal No.:				1		Cooler	Temperat	ure(s) °C and Other Remarks				

Client: Southern Company

Job Number: 180-116807-2

Login Number: 116807

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	

Client: Southern Company Job Number: 180-116807-2

Login Number: 116807

List Source: Eurofins TestAmerica, St. Louis List Number: 2 List Creation: 02/06/21 11:50 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: 180-116807-2

Login Number: 116916 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.	False	
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: 180-116807-2

Login Number: 116916

List Source: Eurofins TestAmerica, St. Louis List Number: 2 List Creation: 02/09/21 01:29 PM

Creator: Worthington, Sierra M

oreator. Worthington, Sierra W		
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: 180-118172-1

Client Project/Site: Plant Wansley Ash Pond PZ

Revision: 2

### For:

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

Attn: Kristen N Jurinko



Authorized for release by: 5/4/2021 5:59:30 PM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.com

·····LINKS ······

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**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

Client: Southern Company Project/Site: Plant Wansley Ash Pond PZ Laboratory Job ID: 180-118172-1

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### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-118172-1

### Comments

050421 Revised rerpot to add Lithium to the following samples at client request: 180-118172-1 (PZ-22), 180-118172-2 (PZ-23S), 180-118172-3 (PZ-24), 180-118172-4 (PZ-27S). This report replaces the report previously issued on 031921.

031921 Revised report to change metals units from ug/L to mg/L. This report replaces the report previously issued on 031821.

### Receipt

The samples were received on 3/10/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7° C.

### GC Semi VOA

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

No analytical or quality issues were noted, other than those described 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.

Job ID: 180-118172-1

# **Definitions/Glossary**

Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

### **Qualifiers**

п	_	_	•	

Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**Metals** 

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**General Chemistry** 

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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10

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12

1,

# **Accreditation/Certification Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

# 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	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-04-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	03-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
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	01-31-22
Wisconsin	State	998027800	08-31-21

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# **Sample Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

_ab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
80-118172-1	PZ-22	Water	03/08/21 15:25	03/10/21 09:00	
80-118172-2	PZ-23S	Water	03/09/21 12:30	03/10/21 09:00	
180-118172-3	PZ-24	Water	03/09/21 10:50	03/10/21 09:00	
80-118172-4	PZ-27S	Water	03/08/21 14:00	03/10/21 09:00	
80-118172-5	PZ-27D	Water	03/08/21 13:00	03/10/21 09:00	
80-118172-6	FB-1	Water	03/09/21 12:50	03/10/21 09:00	
80-118172-7	Dup-1	Water	03/08/21 00:00	03/10/21 09:00	
180-118172-8	EB-1	Water	03/09/21 11:00	03/10/21 09:00	

Job ID: 180-118172-1

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# **Method Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

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 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL PIT

### **Protocol References:**

EPA = US Environmental Protection Agency

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

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

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

### **Laboratory References:**

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

## **Lab Chronicle**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-22 Lab Sample ID: 180-118172-1

Date Collected: 03/08/21 15:25 Date Received: 03/10/21 09:00

**Matrix: Water** 

Job ID: 180-118172-1

Prep Type	Batch	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch	Prepared		
	Type						Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 t ID: INTEGRION		1			349204	03/12/21 16:38	EPS	TAL PIT
Total/NA	Analysis Instrument	EPA 300.0 R2.1 t ID: INTEGRION		5			349204	03/12/21 16:56	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B t ID: A		1			349307	03/12/21 11:52	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 t ID: NOEQUIP		1			349236	03/11/21 16:16	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349487	03/15/21 20:25	GRB	TAL PIT
Total/NA	Analysis Instrument	SM2320 B t ID: PCTITRATOR		1			349535	03/13/21 14:45	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling		1			349443	03/08/21 15:25	FDS	TAL PIT

Lab Sample ID: 180-118172-2 **Client Sample ID: PZ-23S** Date Collected: 03/09/21 12:30

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: INTEGRION		1			349204	03/12/21 16:02	EPS	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: INTEGRION		5			349204	03/12/21 16:20	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			349307	03/12/21 12:25	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349236	03/11/21 16:19	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349489	03/15/21 20:29	GRB	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			349535	03/13/21 15:14	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349443	03/09/21 12:30	FDS	TAL PIT

Client: Southern Company Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-24

Date Collected: 03/09/21 10:50 Date Received: 03/10/21 09:00

Lab Sample ID: 180-118172-3

**Matrix: Water** 

Job ID: 180-118172-1

	Batch	Batch	Run	Dil	Initial Amount	Final	Batch	Prepared	Analyst	
Prep Type	Type	Method		Factor		Amount	Number	or Analyzed		Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: INTEGRION		1			349204	03/12/21 17:50	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: A		1			349307	03/12/21 12:29	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349236	03/11/21 16:21	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349489	03/15/21 20:29	GRB	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			349535	03/13/21 15:32	REI	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			349443	03/09/21 10:50	FDS	TAL PIT

**Client Sample ID: PZ-27S** 

Date Collected: 03/08/21 14:00

Date Received: 03/10/21 09:00

Lab Sample ID: 180-118172-4

**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 Instrument	EPA 300.0 R2.1 ID: INTEGRION		1			349204	03/12/21 19:01	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: A		1			349307	03/12/21 12:32	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349236	03/11/21 16:23	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349487	03/15/21 20:25	GRB	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			349535	03/13/21 15:40	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349443	03/08/21 14:00	FDS	TAL PIT

**Client Sample ID: PZ-27D** 

Date Collected: 03/08/21 13:00

Date Received: 03/10/21 09:00

Lab Sample I	D: 180-118172-5
	Matrice Water

**Matrix: Water** 

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			349307	03/12/21 12:36	RSK	TAL PIT
	Instrumer	it ID: A								

Eurofins TestAmerica, Pittsburgh

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-27D** 

Date Collected: 03/08/21 13:00 Date Received: 03/10/21 09:00 Lab Sample ID: 180-118172-5

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	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349236	03/11/21 16:26	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	100 mL	100 mL	349481	03/15/21 15:56	NAF	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			349535	03/13/21 15:50	REI	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling nt ID: NOEQUIP		1			349443	03/08/21 13:00	FDS	TAL PIT

Client Sample ID: FB-1

Date Collected: 03/09/21 12:50 Date Received: 03/10/21 09:00 Lab Sample ID: 180-118172-6

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 EPA 300.0 R2.1 349204 03/12/21 19:55 EPS TAL PIT Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 349140 03/11/21 15:11 TJO TAL PIT EPA 6020B Total Recoverable Analysis 349307 03/12/21 12:39 RSK TAL PIT 1 Instrument ID: A Total/NA Prep 9030B 50 mL 50 mL 349117 03/11/21 14:00 CMR TAL PIT Total/NA Analysis EPA 9034 349236 03/11/21 16:28 CMR TAL PIT 1 Instrument ID: NOEQUIP Total/NA TAL PIT Analysis SM 2540C 100 mL 100 mL 349489 03/15/21 20:29 GRB 1 Instrument ID: NOEQUIP Total/NA Analysis SM2320 B 349535 03/13/21 15:59 REI TAL PIT Instrument ID: PCTITRATOR

Client Sample ID: Dup-1

Date Collected: 03/08/21 00:00 Date Received: 03/10/21 09:00 Lab Sample ID: 180-118172-7
Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: INTEGRION		1			349204	03/12/21 18:43	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: A		1			349307	03/12/21 12:43	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349236	03/11/21 16:30	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349487	03/15/21 20:25	GRB	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			349535	03/13/21 16:08	REI	TAL PIT

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### **Lab Chronicle**

Client: Southern Company

Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: EB-1 Lab Sample ID: 180-118172-8

Matrix: Water

Date Collected: 03/09/21 11:00 Date Received: 03/10/21 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: INTEGRION		1			349204	03/12/21 20:13	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349140	03/11/21 15:11	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			349307	03/12/21 12:58	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349117	03/11/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349236	03/11/21 16:33	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349487	03/15/21 20:25	GRB	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			349535	03/13/21 14:36	REI	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

CMR = Carl Reagle

TJO = Tyler Oliver

Batch Type: Analysis

CMR = Carl Reagle

EPS = Evan Scheuer

FDS = Sampler Field

GRB = Gabriel Berghe

NAF = Nicholas Frankos

REI = Rachel Innocenzi

RSK = Robert Kurtz

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Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-22 Lab Sample ID: 180-118172-1

Date Collected: 03/08/21 15:25 **Matrix: Water** 

Date Received: 03/10/21 09:00

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70		1.0	0.71	mg/L			03/12/21 16:38	1
Fluoride	1.8		0.10	0.026	mg/L			03/12/21 16:38	1
Sulfate	240		5.0	3.8	mg/L			03/12/21 16:56	5
Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.3		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 11:52	1
Calcium	90		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 11:52	1
Iron	0.061		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 11:52	1
Magnesium	19		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 11:52	1
Manganese	0.14		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 11:52	1
Potassium	4.5		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 11:52	1
Sodium	36		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 11:52	1
Lithium	0.11		0.0050	0.0034	mg/L		03/11/21 15:11	03/12/21 11:52	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:16	1
<b>Total Dissolved Solids</b>	590		10	10	mg/L			03/15/21 20:25	1
Total Alkalinity as CaCO3 to pH 4.5	12		5.0	5.0	mg/L			03/13/21 14:45	1
Bicarbonate Alkalinity as CaCO3	12		5.0	5.0	mg/L			03/13/21 14:45	1
	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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03/08/21 15:25

Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-23S Lab Sample ID: 180-118172-2

Date Collected: 03/09/21 12:30 Matrix: Water

Date Received: 03/10/21 09:00

Method: EPA 300.0 R2.1	- Anions, Ion Ch	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		1.0	0.71	mg/L			03/12/21 16:02	1
Fluoride	1.7		0.10	0.026	mg/L			03/12/21 16:02	1
Sulfate	230		5.0	3.8	mg/L			03/12/21 16:20	5
- Method: EPA 6020B - M	etals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.19		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:25	1
Calcium	66		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:25	1
Iron	0.86		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:25	1
Magnesium	9.3		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:25	1
Manganese	1.9		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:25	1
Potassium	3.6		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:25	1
Sodium	120		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:25	1
Lithium	0.022		0.0050	0.0034	mg/L		03/11/21 15:11	03/12/21 12:25	1

General	Chemistry
Analyte	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:19	1
Total Dissolved Solids	610		10	10	mg/L			03/15/21 20:29	1
Total Alkalinity as CaCO3 to pH 4.5	110		5.0	5.0	mg/L			03/13/21 15:14	1
Bicarbonate Alkalinity as CaCO3	110		5.0	5.0	mg/L			03/13/21 15:14	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.29				SU			03/09/21 12:30	1

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Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-24 Lab Sample ID: 180-118172-3 Date Collected: 03/09/21 10:50

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Anions	s, Ion Chi	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.9		1.0	0.71	mg/L			03/12/21 17:50	1
Fluoride	1.1	F1	0.10	0.026	mg/L			03/12/21 17:50	1
Sulfate	80	F1	1.0	0.76	mg/L			03/12/21 17:50	1
Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.33		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:29	1
Calcium	15		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:29	1
Iron	0.21		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:29	1
Magnesium	4.0		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:29	1
Manganese	0.45		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:29	1
Potassium	4.4		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:29	1
Sodium	25		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:29	1
Lithium	0.011		0.0050	0.0034	mg/L		03/11/21 15:11	03/12/21 12:29	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	2.1	J	3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:21	1
<b>Total Dissolved Solids</b>	200		10	10	mg/L			03/15/21 20:29	1
Total Alkalinity as CaCO3 to pH 4.5	27		5.0	5.0	mg/L			03/13/21 15:32	1
Bicarbonate Alkalinity as CaCO3	27		5.0	5.0	mg/L			03/13/21 15:32	1
Method: Field Sampling - Field S	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.56				SU			03/09/21 10:50	1

Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-27S** Lab Sample ID: 180-118172-4 Date Collected: 03/08/21 14:00

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74		1.0	0.71	mg/L			03/12/21 19:01	1
Fluoride	< 0.026		0.10	0.026	mg/L			03/12/21 19:01	1
Sulfate	4.7		1.0	0.76	mg/L			03/12/21 19:01	1
- Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.48		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:32	1
Calcium	14		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:32	1
Iron	0.35		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:32	1
Magnesium	17		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:32	1
Manganese	0.32		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:32	1
Potassium	3.7		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:32	1
Sodium	9.3		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:32	1
Lithium	0.0046	J	0.0050	0.0034	mg/L		03/11/21 15:11	03/12/21 12:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:23	1
Total Dissolved Solids	220		10	10	mg/L			03/15/21 20:25	1
Total Alkalinity as CaCO3 to pH 4.5	39		5.0	5.0	mg/L			03/13/21 15:40	1
Bicarbonate Alkalinity as CaCO3	39		5.0	5.0	mg/L			03/13/21 15:40	1
- Method: Field Sampling - Field S	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.36				SU			03/08/21 14:00	1

Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-27D** Lab Sample ID: 180-118172-5

Date Collected: 03/08/21 13:00 **Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		1.0	0.71	mg/L			03/12/21 15:27	1
Fluoride	0.38		0.10	0.026	mg/L			03/12/21 15:27	1
Sulfate	160		1.0	0.76	mg/L			03/12/21 15:27	1
Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.23		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:36	1
Calcium	33		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:36	1
Iron	0.62		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:36	1
Magnesium	11		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:36	1
Manganese	2.0		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:36	1
Potassium	46		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:36	1
Sodium	160		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:36	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:26	1
<b>Total Dissolved Solids</b>	700		10	10	mg/L			03/15/21 15:56	1
Total Alkalinity as CaCO3 to pH 4.5	190		5.0	5.0	mg/L			03/13/21 15:50	1
Bicarbonate Alkalinity as CaCO3	190		5.0	5.0	mg/L			03/13/21 15:50	1
Method: Field Sampling - Field S	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
H	7.44				SU			03/08/21 13:00	1

Client: Southern Company

Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: FB-1 Lab Sample ID: 180-118172-6

Date Collected: 03/09/21 12:50 Matrix: Water Date Received: 03/10/21 09:00

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography											
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	<0.71	1.0	0.71	mg/L			03/12/21 19:55	1			
Fluoride	<0.026	0.10	0.026	mg/L			03/12/21 19:55	1			
Sulfate	<0.76	1.0	0.76	mg/L			03/12/21 19:55	1			

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.075	J	0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:39	1
Calcium	<0.13		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:39	1
Iron	<0.020		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:39	1
Magnesium	<0.083		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:39	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:39	1
Potassium	<0.16		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:39	1
Sodium	<0.35		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:39	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:28	1
Total Dissolved Solids	<10		10	10	mg/L			03/15/21 20:29	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			03/13/21 15:59	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			03/13/21 15:59	1

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5/4/2021 (Rev. 2)

Client: Southern Company Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: Dup-1** Lab Sample ID: 180-118172-7 Date Collected: 03/08/21 00:00

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71		1.0	0.71	mg/L			03/12/21 18:43	1
Fluoride	0.038	J	0.10	0.026	mg/L			03/12/21 18:43	1
Sulfate	4.8		1.0	0.76	mg/L			03/12/21 18:43	1
Method: EPA 6020B - I	Metals (ICP/MS) - To	tal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.49		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:43	1
Calcium	15		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:43	1
Iron	0.25		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:43	1
Magnesium	17		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:43	1
Manganese	0.33		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:43	1
Potassium	3.8		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:43	1
Sodium	9.3		0.50	0.05	mg/L		03/11/21 15:11	03/12/21 12:43	

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:30	1
Total Dissolved Solids	200		10	10	mg/L			03/15/21 20:25	1
Total Alkalinity as CaCO3 to pH 4.5	38		5.0	5.0	mg/L			03/13/21 16:08	1
Bicarbonate Alkalinity as CaCO3	38		5.0	5.0	mg/L			03/13/21 16:08	1

Client: Southern Company

Job ID: 180-118172-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: EB-1 Lab Sample ID: 180-118172-8

Matrix: Water

Date Collected: 03/09/21 11:00 Date Received: 03/10/21 09:00

Method:	EPA 300.0 R2.1 - Anions, Ion Ch	romatography						
Analyte	Result	Qualifier R	L MDL	. Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.	0 0.71	mg/L			03/12/21 20:13	1
Fluoride	<0.026	0.1	0.026	mg/L			03/12/21 20:13	1
Sulfate	<0.76	1.	0 0.76	mg/L			03/12/21 20:13	1

Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.043	J	0.080	0.039	mg/L		03/11/21 15:11	03/12/21 12:58	
Calcium	<0.13		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 12:58	
Iron	<0.020		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 12:58	
Magnesium	<0.083		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 12:58	
Manganese	<0.00087		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 12:58	
Potassium	<0.16		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 12:58	•
Sodium	<0.35		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 12:58	

General Chemistry								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1	3.0	2.1	mg/L		03/11/21 14:00	03/11/21 16:33	1
Total Dissolved Solids	<10	10	10	mg/L			03/15/21 20:25	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0	5.0	5.0	mg/L			03/13/21 14:36	1
Bicarbonate Alkalinity as CaCO3	<5.0	5.0	5.0	mg/L			03/13/21 14:36	1

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Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

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

Lab Sample ID: MB 180-349204/6

**Matrix: Water** 

Analysis Batch: 349204

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac D Chloride < 0.71 1.0 0.71 mg/L 03/12/21 10:18 Fluoride < 0.026 0.10 0.026 mg/L 03/12/21 10:18 Sulfate < 0.76 1.0 0.76 mg/L 03/12/21 10:18

Lab Sample ID: LCS 180-349204/5

**Matrix: Water** 

Analysis Batch: 349204

**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 52.2 mg/L 104 90 - 110 Fluoride 2.50 2.51 mg/L 100 90 - 110 Sulfate 50.0 mg/L 90 - 110 51.3 103

Lab Sample ID: 180-118172-3 MS

**Matrix: Water** 

Analysis Batch: 349204

Client Sample ID: PZ-24 **Prep Type: Total/NA** 

**Client Sample ID: PZ-24** 

Prep Type: Total/NA

Allalysis Datell. 043204										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2.9		50.0	55.2		mg/L		105	90 - 110	
Fluoride	1.1	F1	2.50	3.45		mg/L		94	90 - 110	
Sulfate	80	F1	50.0	128		mg/L		95	90 - 110	

Lab Sample ID: 180-118172-3 MSD

**Matrix: Water** 

Analysis Batch: 349204

/ manyone Datem C 1020 !	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2.9		50.0	52.8		mg/L		100	90 - 110	5	20
Fluoride	1.1	F1	2.50	3.31	F1	mg/L		88	90 - 110	4	20
Sulfate	80	F1	50.0	122	F1	mg/L		84	90 - 110	5	20

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

Lab Sample ID: MB 180-349140/1-A

**Matrix: Water** 

**Analysis Batch: 349307** 

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 349140** 

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.039		0.080	0.039	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.13		0.50	0.13	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.020		0.050	0.020	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.083		0.50	0.083	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.00087		0.0050	0.00087	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.16		0.50	0.16	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.35		0.50	0.35	mg/L		03/11/21 15:11	03/12/21 09:09	1
<0.0034		0.0050	0.0034	mg/L		03/11/21 15:11	03/12/21 09:09	1
	Result <0.039 <0.13 <0.020 <0.083 <0.00087 <0.16 <0.35	Result Qualifier  <0.039 <0.13 <0.020 <0.083 <0.00087 <0.16 <0.35	Result         Qualifier         RL           <0.039	Result         Qualifier         RL         MDL           <0.039	Result         Qualifier         RL         MDL         Unit           <0.039	Result         Qualifier         RL         MDL         Unit         D           <0.039	Result         Qualifier         RL         MDL mit         Unit         D         Prepared           <0.039	Result         Qualifier         RL         MDL mg/L         Unit pmg/L         D may prepared pmg/L         Analyzed 03/11/21 15:11         Analyzed 03/12/21 09:09           <0.039

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Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

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

Lab Sample ID: LCS 180-349140/2-A

**Matrix: Water** 

Analysis Batch: 349307

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

**Prep Batch: 349140** 

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1.25	1.15		mg/L		92	80 - 120	
Calcium	25.0	26.5		mg/L		106	80 - 120	
Iron	5.00	5.21		mg/L		104	80 - 120	
Magnesium	25.0	24.8		mg/L		99	80 - 120	
Manganese	0.500	0.511		mg/L		102	80 - 120	
Potassium	25.0	25.5		mg/L		102	80 - 120	
Sodium	25.0	25.8		mg/L		103	80 - 120	
Lithium	0.500	0.489		mg/L		98	80 - 120	

Lab Sample ID: 180-118172-1 MS

**Matrix: Water** 

Analysis Batch: 349307

**Client Sample ID: PZ-22 Prep Type: Total Recoverable** 

**Prep Batch: 349140** 

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	1.3		1.25	2.33		mg/L		85	75 - 125	
Calcium	90		25.0	120		mg/L		120	75 - 125	
Iron	0.061		5.00	5.34		mg/L		106	75 - 125	
Magnesium	19		25.0	44.8		mg/L		101	75 - 125	
Manganese	0.14		0.500	0.667		mg/L		105	75 - 125	
Potassium	4.5		25.0	30.4		mg/L		103	75 - 125	
Sodium	36		25.0	60.7		mg/L		99	75 - 125	
Lithium	0.11		0.500	0.590		mg/L		96	75 - 125	

Lab Sample ID: 180-118172-1 MSD

**Matrix: Water** 

Analysis Batch: 349307

**Client Sample ID: PZ-22 Prep Type: Total Recoverable** 

**Prep Batch: 349140** 

%Rec

	Campie	Campic	Opike	IVIOD	IVIOD				/ortec.		ולו ט
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	1.3		1.25	2.30		mg/L		83	75 - 125	1	20
Calcium	90		25.0	114		mg/L		97	75 - 125	5	20
Iron	0.061		5.00	5.26		mg/L		104	75 - 125	1	20
Magnesium	19		25.0	42.4		mg/L		92	75 - 125	5	20
Manganese	0.14		0.500	0.646		mg/L		100	75 - 125	3	20
Potassium	4.5		25.0	29.1		mg/L		98	75 - 125	4	20
Sodium	36		25.0	58.9		mg/L		92	75 - 125	3	20
Lithium	0.11		0.500	0.578		mg/L		93	75 - 125	2	20

MSD MSD

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### Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Sample Sample

Lab Sample ID: MB 180-349117/1-A

**Matrix: Water** 

Sulfide

Analysis Batch: 349236

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

**Prep Batch: 349117** 

MB MB **Analyte** 

<2.1

Result Qualifier

RL MDL Unit 3.0 2.1 mg/L

Prepared

03/11/21 14:00 03/11/21 15:44

Analyzed Dil Fac

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

### Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 180-349117/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Water** 

Analysis Batch: 349236

Prep Type: Total/NA **Prep Batch: 349117** Spike LCS LCS %Rec. Limits

85 - 115

Added Result Qualifier %Rec Analyte Unit D Sulfide 12.5 11.0 mg/L 88

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

Lab Sample ID: MB 180-349481/2 Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349481

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared 10 Total Dissolved Solids 10 mg/L 03/15/21 15:56 <10

Lab Sample ID: LCS 180-349481/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349481** 

LCS LCS %Rec. Spike Added Result Qualifier Limits Analyte Unit %Rec **Total Dissolved Solids** 457 422 mg/L 92 80 - 120

MB MB

Lab Sample ID: MB 180-349487/2 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349487** 

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Dissolved Solids <del><</del>10 10 10 mg/L 03/15/21 20:25

Lab Sample ID: LCS 180-349487/1 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349487** 

LCS LCS Spike %Rec. Analyte Added Result Qualifier Unit Limits Total Dissolved Solids 457 458 mg/L 100 80 - 120

Lab Sample ID: MB 180-349489/2 Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349489

MR MR **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac 10 10 mg/L **Total Dissolved Solids** <10 03/15/21 20:29

**Client Sample ID: Lab Control Sample** Lab Sample ID: LCS 180-349489/1 Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 349489** 

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 457 440 mg/L 96 80 - 120

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### **QC Sample Results**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118172-1

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

Lab Sample ID: 180-118172-2 DU **Client Sample ID: PZ-23S** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349489

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit D RPD Limit Total Dissolved Solids 610 610 mg/L 0.5 10

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-349535/6 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 349535** 

	MR MR						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0	5.0	5.0 mg/L			03/13/21 13:40	1
Bicarbonate Alkalinity as CaCO3	<5.0	5.0	5.0 mg/L			03/13/21 13:40	1

Lab Sample ID: LCS 180-349535/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349535** 

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits 250 90 - 110 Total Alkalinity as CaCO3 to pH 229 mg/L 92 4.5

Lab Sample ID: 180-118172-2 DU Client Sample ID: PZ-23S Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 349535** 

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Alkalinity as CaCO3 to pH 4.5	110		118		mg/L		 3	20
Bicarbonate Alkalinity as CaCO3	110		118		mg/L		3	20

Job ID: 180-118172-1 Project/Site: Plant Wansley Ash Pond PZ

### HPLC/IC

### Analysis Batch: 349204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Pre	Batch
180-118172-1	PZ-22	Total/NA	Water	EPA 300.0 R2.1	
180-118172-1	PZ-22	Total/NA	Water	EPA 300.0 R2.1	
180-118172-2	PZ-23S	Total/NA	Water	EPA 300.0 R2.1	
180-118172-2	PZ-23S	Total/NA	Water	EPA 300.0 R2.1	
180-118172-3	PZ-24	Total/NA	Water	EPA 300.0 R2.1	
180-118172-4	PZ-27S	Total/NA	Water	EPA 300.0 R2.1	
180-118172-5	PZ-27D	Total/NA	Water	EPA 300.0 R2.1	
180-118172-6	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-118172-7	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-118172-8	EB-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-349204/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-349204/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-118172-3 MS	PZ-24	Total/NA	Water	EPA 300.0 R2.1	
180-118172-3 MSD	PZ-24	Total/NA	Water	EPA 300.0 R2.1	

### Metals

### **Prep Batch: 349140**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total Recoverable	Water	3005A	
180-118172-2	PZ-23S	Total Recoverable	Water	3005A	
180-118172-3	PZ-24	Total Recoverable	Water	3005A	
180-118172-4	PZ-27S	Total Recoverable	Water	3005A	
180-118172-5	PZ-27D	Total Recoverable	Water	3005A	
180-118172-6	FB-1	Total Recoverable	Water	3005A	
180-118172-7	Dup-1	Total Recoverable	Water	3005A	
180-118172-8	EB-1	Total Recoverable	Water	3005A	
MB 180-349140/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-349140/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-118172-1 MS	PZ-22	Total Recoverable	Water	3005A	
180-118172-1 MSD	PZ-22	Total Recoverable	Water	3005A	

### **Analysis Batch: 349307**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total Recoverable	Water	EPA 6020B	349140
180-118172-2	PZ-23S	Total Recoverable	Water	EPA 6020B	349140
180-118172-3	PZ-24	Total Recoverable	Water	EPA 6020B	349140
180-118172-4	PZ-27S	Total Recoverable	Water	EPA 6020B	349140
180-118172-5	PZ-27D	Total Recoverable	Water	EPA 6020B	349140
180-118172-6	FB-1	Total Recoverable	Water	EPA 6020B	349140
180-118172-7	Dup-1	Total Recoverable	Water	EPA 6020B	349140
180-118172-8	EB-1	Total Recoverable	Water	EPA 6020B	349140
MB 180-349140/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	349140
LCS 180-349140/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	349140
180-118172-1 MS	PZ-22	Total Recoverable	Water	EPA 6020B	349140
180-118172-1 MSD	PZ-22	Total Recoverable	Water	EPA 6020B	349140

### **General Chemistry**

### **Prep Batch: 349117**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total/NA	Water	9030B	

Eurofins TestAmerica, Pittsburgh

# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Canaral Chamistry (Cantinued)

# **General Chemistry (Continued)**

### Prep Batch: 349117 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-2	PZ-23S	Total/NA	Water	9030B	
180-118172-3	PZ-24	Total/NA	Water	9030B	
180-118172-4	PZ-27S	Total/NA	Water	9030B	
180-118172-5	PZ-27D	Total/NA	Water	9030B	
180-118172-6	FB-1	Total/NA	Water	9030B	
180-118172-7	Dup-1	Total/NA	Water	9030B	
180-118172-8	EB-1	Total/NA	Water	9030B	
MB 180-349117/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349117/2-A	Lab Control Sample	Total/NA	Water	9030B	

### **Analysis Batch: 349236**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total/NA	Water	EPA 9034	349117
180-118172-2	PZ-23S	Total/NA	Water	EPA 9034	349117
180-118172-3	PZ-24	Total/NA	Water	EPA 9034	349117
180-118172-4	PZ-27S	Total/NA	Water	EPA 9034	349117
180-118172-5	PZ-27D	Total/NA	Water	EPA 9034	349117
180-118172-6	FB-1	Total/NA	Water	EPA 9034	349117
180-118172-7	Dup-1	Total/NA	Water	EPA 9034	349117
180-118172-8	EB-1	Total/NA	Water	EPA 9034	349117
MB 180-349117/1-A	Method Blank	Total/NA	Water	EPA 9034	349117
LCS 180-349117/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349117

### **Analysis Batch: 349481**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-5	PZ-27D	Total/NA	Water	SM 2540C	
MB 180-349481/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349481/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### Analysis Batch: 349487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total/NA	Water	SM 2540C	
180-118172-4	PZ-27S	Total/NA	Water	SM 2540C	
180-118172-7	Dup-1	Total/NA	Water	SM 2540C	
180-118172-8	EB-1	Total/NA	Water	SM 2540C	
MB 180-349487/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349487/1	Lab Control Sample	Total/NA	Water	SM 2540C	

### **Analysis Batch: 349489**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-2	PZ-23S	Total/NA	Water	SM 2540C	
180-118172-3	PZ-24	Total/NA	Water	SM 2540C	
180-118172-6	FB-1	Total/NA	Water	SM 2540C	
MB 180-349489/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349489/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-118172-2 DU	PZ-23S	Total/NA	Water	SM 2540C	

### **Analysis Batch: 349535**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-1	PZ-22	Total/NA	Water	SM2320 B	
180-118172-2	PZ-23S	Total/NA	Water	SM2320 B	

Eurofins TestAmerica, Pittsburgh

Page 25 of 29

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Job ID: 180-118172-1

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# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

## **General Chemistry (Continued)**

### **Analysis Batch: 349535 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118172-3	PZ-24	Total/NA	Water	SM2320 B	
180-118172-4	PZ-27S	Total/NA	Water	SM2320 B	
180-118172-5	PZ-27D	Total/NA	Water	SM2320 B	
180-118172-6	FB-1	Total/NA	Water	SM2320 B	
180-118172-7	Dup-1	Total/NA	Water	SM2320 B	
180-118172-8	EB-1	Total/NA	Water	SM2320 B	
MB 180-349535/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-349535/5	Lab Control Sample	Total/NA	Water	SM2320 B	
180-118172-2 DU	PZ-23S	Total/NA	Water	SM2320 B	

### Field Service / Mobile Lab

### **Analysis Batch: 349443**

Lab Sample ID 180-118172-1	Client Sample ID	Prep Type Total/NA	Matrix Water	Method Prep B	3atch
180-118172-2	PZ-23S	Total/NA	Water	Field Sampling	
180-118172-3	PZ-24	Total/NA	Water	Field Sampling	
180-118172-4	PZ-27S	Total/NA	Water	Field Sampling	
180-118172-5	PZ-27D	Total/NA	Water	Field Sampling	

Job ID: 180-118172-1

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Collect Internation	301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	O	Chain o	f Cust	ain of Custody Record	ecord			🔆 eurofins	Environment Testing America
Find SE    Part SE	Client Information	Sampler:	/H. A.1)		Lab PA Brown	Shali		Carrier Tracking No(s):	COC No:	
Electron   Control   Con	Client Contact: SCS Contacts	Phone 70	1	0	E-Mail:	orown@ei	urofinset com		-	
Columbia   Columbia	Company: GA Power			,			Analysis	Requested	-	
Control   Cont	Address: 241 Ralph McGill Blvd SE	Due Date Reques	ed:	:		An . die	$\vdash$		Preservation Co.	des:
Companies   Comp	City: Atlanta	TAT Requested (d	l			1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nity, Irc Ilfide		A - HCL B - NaOH	M - Hexane N - None
Scott   Scot	State, Zip: GA, 30308		3-day TA	F.			Alkalin Su		D - Nitric Acid	O-AsnaOz
Sample Date   Time   Company   Time   Water   M   M   M   M   M   M   M   M   M	Phone: 404-506-7116(Tel)	PO#: SCS10382606				(0	IstoT ,			~
1000cct a   1000	Email: SCS Contacts	#OM					alinity,			cahydrate
Sample Date   Time   Sample   Greener   Time   Garget)   Inchesses   Sample   Greener   Time   Garget)   Inchesses   Time   Ti	Project Name: CCR - Plant Wansley Ash Pond PZ	Project #: 18019922					ate Alk	=		(vjic
Sample Date   Triple   Water   Water	Site:	SSOW#:				y) as	arbona	N	Tain of Custody	
Sample Date   Sample   Company   C					T	em <b>/sm</b> imo	lons - Bic		Number o	
S-8-21   LSS   S   Water   W   V   V   V   V   V   V   V   V   V	Sample Identification	Sample Date	A		<u> </u>	Perio	ioįsM			structions/Note:
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3-9-1   1950   G   Water   W   V   V   V   V   V   V   V   V   V	PZ-23S	3-6-21	1230	O	Water	5	2		7' ± =Hd	
3 - 3 - 1   4 \text{Li}	12-3	3-9-21	050	ŋ			/		뷤	
3-9-1   30   6   Water   W   V   V   V   V   V   V   V   V   V	12-275	3-8-7	1400	O			//		T=Hq	
3-9-21   1350   G   Water   W   W   W   W   W   W   W   W   W	N	3-8-1	1300	O			1		Hd Hd	
3-9-21   (250   G   Water   M   V   V   V   W   V   V   Water   M   W   V   V   Water   W   W   V   V   Water   Water   W   W   V   V   Water   Wate	PZ-24D	3-421	13,20	9		1 10			=Ha	
3-8-21	1-8-1	3-9-21	(250	9		200	\ \ \		뷥	
3 4 2	1-00	3-8-21		თ		_	>			
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ant Poison B Water   G Water   Sample Disposal ( A fee may be assessed if samples are retained longer than 1 m   Pater   Patern To Client Poison By Lab Archive For      Patern				G	Water				=Hd	
Sample Disposal (A fee may be assessed if samples are retained longer than 1 mm				ŋ	Water				=Hd	
Date:   Date:   Time:   Time:   Time:   Method of Shipment:   Company   Received by   Cooler Temperature(s) °C and Other Remarks:   Cooler Temperature(s) °C a	ant		Ш	liological supplied to the sup		Sample	Disposal (A fee ma eturn To Client	v be assessed if samples a	are retained longer than	( month)
Date:   Time:   Method of Shipment:   Time:   Method of Shipment:   Sydyz (						Special	Instructions/QC Requ	irements:		SUPLINE
A No   Conpany   Received by   Cooler Temperature(s) °C and Other Remarks:   Cooper   Cooler Temperature(s) °C and Other Remarks:   Cooper Tem	Empty Kit Relinquished by:		Date:		П			Method of Shipment:		
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Custody Seal No.:	W W	7	11911	3 3	ompany mpany	Rec Rec	sived by:	water	1895	Company
				1					Ġ.	Company .
						8	er Temperature(s) 'C and (	Other Remarks:		



Job Number: 180-118172-1

Login Number: 118172 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	



# **Environment Testing America**

# **ANALYTICAL REPORT**

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

Laboratory Job ID: 180-118348-1

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: 4/21/2021 5:42:53 PM

Shali Brown, Project Manager II (615)301-5031 Shali.Brown@Eurofinset.com

·····LINKS ······

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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: 180-118348-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-118348-1

#### Comments

042121 Revised report to correct Thallium result for the following sample based on re-analysis: WGWC-10 (180-118398-2). This report replaces the report previously issued on 041221.

#### Receipt

The samples were received on 3/12/2021 8:30 AM and 3/13/2021 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 9 coolers at receipt time were 2.5° C, 2.5° C, 2.5° C, 2.6° C, 2.8° C, 2.9° C, 3.2° C, 3.2° C and 3.6° 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) associated with batch 180-350467 recovered above the upper control limit for selenium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: WGWA-2 (180-118348-2), WGWA-3 (180-118348-3), WGWA-4 (180-118348-4), WGWA-5 (180-118348-5), WGWA-6 (180-118348-6), WGWA-7 (180-118348-7), WGWA-18 (180-118348-8), Dup-1 (180-118348-10), WGWC-17 (180-118348-12), EB-1 (180-118348-13), EB-2 (180-118348-14) and FB-1 (180-118348-15).

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**

Method SM 2320B: The following samples were analyzed outside of analytical holding time due to mechanical issues: WGWA-1 (180-118348-1), WGWA-2 (180-118348-2), WGWA-3 (180-118348-3), WGWA-4 (180-118348-4), WGWA-5 (180-118348-5), WGWA-6 (180-118348-6), WGWA-7 (180-118348-7), WGWA-18 (180-118348-8), WGWC-8 (180-118348-9), Dup-1 (180-118348-10), WGWC-16 (180-118348-11), WGWC-17 (180-118348-12), EB-1 (180-118348-13), EB-2 (180-118348-14), WGWC-10 (180-118398-2), WGWC-13 (180-118398-4), WGWC-14A (180-118398-5), WGWC-19 (180-118398-7), Dup-2 (180-118398-8), WGWC-15 (180-118398-1), WGWC-11 (180-118398-3), WGWC-9 (180-118398-6), FB-2 (180-118398-9), WGWC-12 (180-118398-10) and FB-1 (180-118348-15).

Method SM 2540C: The following samples were analyzed outside of analytical holding time due to analyst error: WGWA-18 (180-118348-8) and Dup-1 (180-118348-10).

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

Job ID: 180-118348-1

### **Definitions/Glossary**

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

#### **Qualifiers**

HDI (*/IC		

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

^+ Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**General Chemistry** 

H Sample was prepped or analyzed beyond the specified holding time

**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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# **Accreditation/Certification Summary**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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### 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	<b>Expiration Date</b>
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	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-11-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-22
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	01-31-22
Wisconsin	State	998027800	08-31-21

Job ID: 180-118348-1

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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

### **Sample Summary**

Client: Southern Company

180-118398-9

180-118398-10

FB-2

WGWC-12

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-118348-1	WGWA-1	Water	03/11/21 09:35	03/12/21 08:30	
180-118348-2	WGWA-2	Water	03/10/21 08:55	03/12/21 08:30	
180-118348-3	WGWA-3	Water	03/10/21 10:54	03/12/21 08:30	
180-118348-4	WGWA-4	Water	03/10/21 12:17	03/12/21 08:30	
180-118348-5	WGWA-5	Water	03/10/21 17:05	03/12/21 08:30	
180-118348-6	WGWA-6	Water	03/11/21 10:58	03/12/21 08:30	
180-118348-7	WGWA-7	Water	03/10/21 13:45	03/12/21 08:30	
180-118348-8	WGWA-18	Water	03/10/21 15:42	03/12/21 08:30	
180-118348-9	WGWC-8	Water	03/11/21 12:12	03/12/21 08:30	
180-118348-10	Dup-1	Water	03/10/21 00:00	03/12/21 08:30	
180-118348-11	WGWC-16	Water	03/11/21 13:47	03/12/21 08:30	
180-118348-12	WGWC-17	Water	03/11/21 12:10	03/12/21 08:30	
180-118348-13	EB-1	Water	03/11/21 11:00	03/12/21 08:30	
180-118348-14	EB-2	Water	03/11/21 13:55	03/12/21 08:30	
180-118348-15	FB-1	Water	03/11/21 10:30	03/12/21 08:30	
180-118398-1	WGWC-15	Water	03/12/21 11:57	03/13/21 09:00	
180-118398-2	WGWC-10	Water	03/11/21 16:25	03/13/21 09:00	
180-118398-3	WGWC-11	Water	03/12/21 11:54	03/13/21 09:00	
180-118398-4	WGWC-13	Water	03/11/21 13:53	03/13/21 09:00	
180-118398-5	WGWC-14A	Water	03/11/21 15:16	03/13/21 09:00	
180-118398-6	WGWC-9	Water	03/12/21 10:07	03/13/21 09:00	
180-118398-7	WGWC-19	Water	03/11/21 14:55	03/13/21 09:00	
180-118398-8	Dup-2	Water	03/11/21 00:00	03/13/21 09:00	

Water

Water

03/12/21 12:05 03/13/21 09:00

03/12/21 10:59 03/13/21 09:00

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Job ID: 180-118348-1

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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 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	TAL PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
SM2320 B	Alkalinity, Total	SM18	TAL PIT
Field Sampling	Field Sampling	EPA	TAL PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL PIT

#### **Protocol References:**

EPA = US Environmental Protection Agency

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

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

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

4/21/2021 (Rev. 1)

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** Lab Sample ID: 180-118348-1 **Matrix: Water** 

Date Collected: 03/11/21 09:35 Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 01:22	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			350467	03/23/21 11:28	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 at ID: NOEQUIP		1			349549	03/15/21 13:10	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349927	03/18/21 18:31	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B at ID: PCTITRATOR		1			350921	03/26/21 03:09	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			349457	03/11/21 09:35	FDS	TAL PIT

**Client Sample ID: WGWA-2** Lab Sample ID: 180-118348-2 Date Collected: 03/10/21 08:55 **Matrix: Water** 

Date Received: 03/12/21 08:30

	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: INTEGRION		1			350116	03/21/21 03:27	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			350467	03/23/21 11:47	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349549	03/15/21 13:18	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349759	03/17/21 19:05	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/25/21 19:38	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/10/21 08:55	FDS	TAL PIT

Lab Sample ID: 180-118348-3 **Client Sample ID: WGWA-3** Date Collected: 03/10/21 10:54 **Matrix: Water** 

Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 03:45	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			350467	03/23/21 11:50	RJR	TAL PIT

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Job ID: 180-118348-1

### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** Lab Sample ID: 180-118348-3

Date Collected: 03/10/21 10:54 Date Received: 03/12/21 08:30

**Matrix: Water** 

Job ID: 180-118348-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349549	03/15/21 13:21	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349759	03/17/21 19:05	KMM	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			350921	03/25/21 19:47	REI	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			349457	03/10/21 10:54	FDS	TAL PIT

Lab Sample ID: 180-118348-4 **Client Sample ID: WGWA-4** Date Collected: 03/10/21 12:17 **Matrix: Water** 

Date Received: 03/12/21 08:30

Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 04:03	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			350467	03/23/21 11:53	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349549	03/15/21 13:24	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349759	03/17/21 19:05	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/25/21 19:55	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/10/21 12:17	FDS	TAL PIT

**Client Sample ID: WGWA-5** Lab Sample ID: 180-118348-5 Date Collected: 03/10/21 17:05 **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	EPA 300.0 R2.1		1			350116	03/21/21 04:21	SAT	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			350467	03/23/21 11:55	RJR	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9034		1			349549	03/15/21 13:26	CMR	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	349759	03/17/21 19:05	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								

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Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** 

Date Collected: 03/10/21 17:05 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-5

**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	SM2320 B		1			350921	03/25/21 20:05	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349457	03/10/21 17:05	FDS	TAL PIT

**Client Sample ID: WGWA-6** Lab Sample ID: 180-118348-6

Date Collected: 03/11/21 10:58 **Matrix: Water** Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 04:39	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			350467	03/23/21 11:58	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 at ID: NOEQUIP		1			349549	03/15/21 13:29	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349927	03/18/21 18:31	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B at ID: PCTITRATOR		1			350921	03/26/21 03:18	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			349457	03/11/21 10:58	FDS	TAL PIT

Lab Sample ID: 180-118348-7 **Client Sample ID: WGWA-7** 

Date Collected: 03/10/21 13:45 Date Received: 03/12/21 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 Instrument	EPA 300.0 R2.1 ID: INTEGRION		1			350116	03/21/21 06:26	SAT	TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrument	3005A EPA 6020B ID: NEMO		1	50 mL	50 mL	350102 350467	03/20/21 21:24 03/23/21 12:01		TAL PIT
Total/NA Total/NA	Prep Analysis Instrument	9030B EPA 9034 ID: NOEQUIP		1	50 mL	50 mL	349361 349549	03/15/21 09:45 03/15/21 13:37		TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349759	03/17/21 19:05	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			350921	03/25/21 20:14	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349457	03/10/21 13:45	FDS	TAL PIT

**Matrix: Water** 

### Lab Chronicle

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-18** Lab Sample ID: 180-118348-8

Date Collected: 03/10/21 15:42 Date Received: 03/12/21 08:30

**Matrix: Water** 

Job ID: 180-118348-1

Prep Type Total/NA	Batch Type Analysis Instrumen	Batch Method EPA 300.0 R2.1 t ID: INTEGRION	Run	Dil Factor	Initial Amount	Final Amount	Batch Number 350116	Prepared or Analyzed 03/21/21 06:44	Analyst SAT	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	350102 350467	03/20/21 21:24 03/23/21 12:04		TAL PIT TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	9030B EPA 9034 t ID: NOEQUIP		1	50 mL	50 mL	349361 349549	03/15/21 09:45 03/15/21 13:40	•	TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	350091	03/19/21 19:08	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/25/21 20:43	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/10/21 15:42	FDS	TAL PIT

Client Sample ID: WGWC-8 Lab Sample ID: 180-118348-9

Date Collected: 03/11/21 12:12 **Matrix: Water** Date Received: 03/12/21 08:30

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount **Amount** Number or Analyzed Type Run **Factor** Analyst Lab Total/NA EPA 300.0 R2.1 350116 03/21/21 02:51 SAT TAL PIT Instrument ID: INTEGRION 350116 TAL PIT Total/NA Analysis EPA 300.0 R2.1 5 03/21/21 03:09 SAT Instrument ID: INTEGRION Total Recoverable 3005A 50 mL 50 mL 350102 Prep 03/20/21 21:24 TJO **TAL PIT** Total Recoverable Analysis **EPA 6020B** 1 350467 03/23/21 12:21 RJR TAL PIT Instrument ID: NEMO Total Recoverable 3005A 50 mL 50 mL 350102 03/20/21 21:24 TJO **TAL PIT** Prep Total Recoverable Analysis **EPA 6020B** 1 350601 03/24/21 11:38 RJR TAL PIT Instrument ID: NEMO Total/NA 9030B 50 mL TAL PIT Prep 50 mL 349361 03/15/21 09:45 CMR Total/NA Analysis EPA 9034 1 349549 03/15/21 13:43 CMR TAL PIT Instrument ID: NOEQUIP Total/NA Analysis SM 2540C 100 mL 100 mL 349927 03/18/21 18:31 KMM TAL PIT Instrument ID: NOEQUIP Total/NA SM2320 B 350921 03/26/21 03:28 REI TAL PIT Analysis 1 Instrument ID: PCTITRATOR Total/NA Analysis Field Sampling 349457 03/11/21 12:12 FDS TAL PIT Instrument ID: NOEQUIP

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-1** Lab Sample ID: 180-118348-10

Date Collected: 03/10/21 00:00 Date Received: 03/12/21 08:30

**Matrix: Water** 

Job ID: 180-118348-1

	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: INTEGRION		1			350116	03/21/21 04:57	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			350467	03/23/21 12:29	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349549	03/15/21 13:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349921	03/18/21 17:41	KMM	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			350921	03/25/21 21:01	REI	TAL PIT

**Client Sample ID: WGWC-16** Lab Sample ID: 180-118348-11 **Matrix: Water** 

Date Collected: 03/11/21 13:47

Date Received: 03/12/21 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 t ID: INTEGRION	- <del>Kull</del>	1	Amount	Amount	350116	03/21/21 07:02		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	350102 350467	03/20/21 21:24 03/23/21 12:32		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	350102 350601	03/20/21 21:24 03/24/21 11:43		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	9030B EPA 9034 t ID: NOEQUIP		1	50 mL	50 mL	349361 349549	03/15/21 09:45 03/15/21 13:48		TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349927	03/18/21 18:31	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/26/21 03:37	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/11/21 13:47	FDS	TAL PIT

**Client Sample ID: WGWC-17** Lab Sample ID: 180-118348-12

Date Collected: 03/11/21 12:10 Date Received: 03/12/21 08:30

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method or Analyzed Type Run **Factor Amount** Amount Number Analyst Total/NA Analysis EPA 300.0 R2.1 350116 03/21/21 07:19 SAT TAL PIT Instrument ID: INTEGRION

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**Matrix: Water** 

Froject/oile. CON - Flant Wansley Ash Fond

Lab Sample ID: 180-118348-12

**Matrix: Water** 

Job ID: 180-118348-1

Date Collected: 03/11/21 12:10 Date Received: 03/12/21 08:30

**Client Sample ID: WGWC-17** 

	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	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			350467	03/23/21 12:34	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349549	03/15/21 13:51	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349927	03/18/21 18:31	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/26/21 03:46	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/11/21 12:10	FDS	TAL PIT

Client Sample ID: EB-1 Lab Sample ID: 180-118348-13

Date Collected: 03/11/21 11:00 Matrix: Water

Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 07:37	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			350467	03/23/21 12:12	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 at ID: NOEQUIP		1			349549	03/15/21 13:53	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349921	03/18/21 17:41	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B		1			350921	03/26/21 04:13	REI	TAL PIT

Client Sample ID: EB-2

Date Collected: 03/11/21 13:55

Lab Sample ID: 180-118348-14

Matrix: Water

Date Received: 03/12/21 08:30

	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: INTEGRION		1			350116	03/21/21 07:55	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			350467	03/23/21 12:15	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349549	03/15/21 13:56	CMR	TAL PIT

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### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-118348-14 **Client Sample ID: EB-2** 

Date Collected: 03/11/21 13:55 Date Received: 03/12/21 08:30

**Matrix: Water** 

Job ID: 180-118348-1

	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	349921	03/18/21 17:41	KMM	TAL PIT
Total/NA	Analysis	SM2320 B		1			350921	03/26/21 04:29	REI	TAL PIT
	Instrument	ID: PCTITRATOR								

Lab Sample ID: 180-118348-15 **Client Sample ID: FB-1** 

Date Collected: 03/11/21 10:30 **Matrix: Water** 

Date Received: 03/12/21 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: INTEGRION		1			350116	03/21/21 08:13	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350102	03/20/21 21:24	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			350467	03/23/21 12:18	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349361	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349549	03/15/21 13:59	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349921	03/18/21 17:41	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			350993	03/26/21 17:39	REI	TAL PIT

Lab Sample ID: 180-118398-1 **Client Sample ID: WGWC-15** 

Date Collected: 03/12/21 11:57 **Matrix: Water** Date Received: 03/13/21 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 Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			350369	03/23/21 11:40	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35		TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			351150	03/29/21 18:41	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349551	03/15/21 15:01	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	350089	03/19/21 19:01	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			351516	03/30/21 18:05	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349457	03/12/21 11:57	FDS	TAL PIT

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Date Collected: 03/11/21 16:25

Lab Sample ID: 180-118398-2

**Matrix: Water** 

Date Received: 03/13/21 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 t ID: CHICS2100B		1			350369	03/23/21 12:29	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352257	04/07/21 13:55	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: DORY		1			352526	04/08/21 09:13	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			351150	03/29/21 18:44	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349551	03/15/21 15:04	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349926	03/18/21 18:22	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/26/21 08:26	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/11/21 16:25	FDS	TAL PIT

**Client Sample ID: WGWC-11** 

Date Collected: 03/12/21 11:54 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-3 **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 Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			350369	03/23/21 12:45	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			351150	03/29/21 18:47	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349551	03/15/21 15:06	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	350089	03/19/21 19:01	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			351516	03/30/21 18:14	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349457	03/12/21 11:54	FDS	TAL PIT

**Client Sample ID: WGWC-13** 

Date Collected: 03/11/21 13:53

Date Received: 03/13/21 09:00

Prep Type Total/NA	Batch Type Analysis	Batch Method EPA 300.0 R2.1	Run	Dil Factor	Initial Amount	Final Amount	Batch Number 350369	Prepared or Analyzed 03/23/21 13:01	Analyst SAT	Lab TAL PIT
	Instrumen	t ID: CHICS2100B								

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Lab Sample ID: 180-118398-4

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**Matrix: Water** 

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** Lab Sample ID: 180-118398-4

Date Collected: 03/11/21 13:53 **Matrix: Water** 

Date Received: 03/13/21 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	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			351150	03/29/21 18:50	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349551	03/15/21 15:09	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349926	03/18/21 18:22	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			350921	03/26/21 08:34	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/11/21 13:53	FDS	TAL PIT

Lab Sample ID: 180-118398-5 **Client Sample ID: WGWC-14A** 

Date Collected: 03/11/21 15:16 **Matrix: Water** 

Date Received: 03/13/21 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: CHICS2100B	- <del></del>	1			350369	03/23/21 13:18		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B nt ID: NEMO		1	50 mL	50 mL	350579 351150	03/24/21 11:35 03/29/21 18:52		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	9030B EPA 9034 nt ID: NOEQUIP		1	50 mL	50 mL	349362 349551	03/15/21 09:45 03/15/21 15:12		TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349926	03/18/21 18:22	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B at ID: PCTITRATOR		1			350921	03/26/21 08:44	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			349457	03/11/21 15:16	FDS	TAL PIT

**Client Sample ID: WGWC-9** Lab Sample ID: 180-118398-6

Date Collected: 03/12/21 10:07 Date Received: 03/13/21 09:00

	Batch	Batch		Dil Factor	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run		Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 300.0 R2.1 at ID: CHICS2100B		1			350369	03/23/21 13:34	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			351150	03/29/21 18:55	RJR	TAL PIT
	Instrumer	t ID: NEMO								

Eurofins TestAmerica, Pittsburgh

Job ID: 180-118348-1

**Matrix: Water** 

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

**Client Sample ID: WGWC-9** 

Date Collected: 03/12/21 10:07 Date Received: 03/13/21 09:00

Lab Sample ID: 180-118398-6

**Matrix: Water** 

Job ID: 180-118348-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349551	03/15/21 15:15	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	350089	03/19/21 19:01	KMM	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			351516	03/30/21 18:23	REI	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			349457	03/12/21 10:07	FDS	TAL PIT

**Client Sample ID: WGWC-19** 

Date Collected: 03/11/21 14:55

Date Received: 03/13/21 09:00

Lab Sample ID: 180-118398-7 **Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 300.0 R2.1 ID: CHICS2100B		1			350369	03/23/21 14:23	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			351150	03/29/21 18:58	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349551	03/15/21 15:18	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349926	03/18/21 18:22	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			350921	03/26/21 08:53	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349457	03/11/21 14:55	FDS	TAL PIT

**Client Sample ID: Dup-2** 

Date Collected: 03/11/21 00:00

Date Received: 03/13/21 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			350369	03/23/21 14:39	SAT	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			351150	03/29/21 19:06	RJR	TAL PIT
	Instrumen	it ID: NEMO								
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9034		1			349551	03/15/21 15:21	CMR	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis Instrumen	SM 2540C		1	100 mL	100 mL	349926	03/18/21 18:22	KMM	TAL PIT

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Lab Sample ID: 180-118398-8 **Matrix: Water** 

#### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-118398-8

Date Collected: 03/11/21 00:00 Date Received: 03/13/21 09:00

**Matrix: Water** 

Job ID: 180-118348-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM2320 B		1			350921	03/26/21 09:02	REI	TAL PIT

**Client Sample ID: FB-2** Lab Sample ID: 180-118398-9 Date Collected: 03/12/21 12:05 **Matrix: Water** 

Date Received: 03/13/21 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			350369	03/23/21 14:56	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			351150	03/29/21 19:09	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349716	03/17/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349871	03/17/21 15:47	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	350089	03/19/21 19:01	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B		1			351516	03/30/21 18:31	REI	TAL PIT

Client Sample ID: WGWC-12 Lab Sample ID: 180-118398-10 Date Collected: 03/12/21 10:59 **Matrix: Water** 

Date Received: 03/13/21 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 t ID: CHICS2100B		1			350369	03/23/21 15:12	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	350579	03/24/21 11:35	TJO	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			351150	03/29/21 19:12	RJR	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349716	03/17/21 14:00	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349871	03/17/21 15:56	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	350089	03/19/21 19:01	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			351516	03/30/21 18:40	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349457	03/12/21 10:59	FDS	TAL PIT

**Laboratory References:** 

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

Eurofins TestAmerica, Pittsburgh

#### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

#### **Analyst References:**

Lab: TAL PIT

Batch Type: Prep

CMR = Carl Reagle

KEM = Kimberly Mahoney

TJO = Tyler Oliver

Batch Type: Analysis

CMR = Carl Reagle

FDS = Sampler Field

KMM = Kendric Moore

REI = Rachel Innocenzi

RJR = Ron Rosenbaum

RSK = Robert Kurtz

SAT = Stephen Tallam

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** 

Date Collected: 03/11/21 09:35 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118348-1

**Matrix: Water** 

Method: EPA	300.0 R2.1 - Anions, Ion Chi	romatography							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		1.0	0.71	mg/L			03/21/21 01:22	1
Fluoride	<0.026		0.10	0.026	mg/L			03/21/21 01:22	1
Sulfate	<0.76		1.0	0.76	mg/L			03/21/21 01:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:28	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:28	1
Barium	0.046		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:28	1
Beryllium	0.00029	J	0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:28	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:28	1
Calcium	1.3		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:28	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:28	1
Cobalt	0.00081	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:28	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:28	1
Lithium	0.0039	J	0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:28	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:28	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:28	1
Thallium	0.00045	J	0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:28	1
Sodium	3.3		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:28	1
Potassium	1.1		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:28	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:28	1
Magnesium	1.2		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:28	1
Manganese	0.011		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:28	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:10	1
Total Dissolved Solids	24		10	10	mg/L			03/18/21 18:31	1
Total Alkalinity as CaCO3 to pH 4.5	7.8	Н	5.0	5.0	mg/L			03/26/21 03:09	1
Bicarbonate Alkalinity as CaCO3	7.8	Н	5.0	5.0	mg/L			03/26/21 03:09	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.26				SU			03/11/21 09:35	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-2** 

Date Collected: 03/10/21 08:55 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-2

**Matrix: Water** 

Method: EPA 300.0 R2.1 -	<b>Anions, Ion Chr</b>	omatograp	ohy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.71	mg/L			03/21/21 03:27	1
Fluoride	0.045	J	0.10	0.026	mg/L			03/21/21 03:27	1
Sulfate	0.90	J	1.0	0.76	mg/L			03/21/21 03:27	1
_									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:47	1
Arsenic	0.00063	J	0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:47	1
Barium	0.024		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:47	1
Beryllium	0.00065	J	0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:47	1
Boron	0.039	J	0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:47	1
Calcium	11		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:47	1
Cobalt	0.00073	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:47	1
Lead	0.00019	J	0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:47	1
Lithium	0.0075		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:47	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:47	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:47	1
Thallium	0.00073	J	0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:47	1
Sodium	9.2		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:47	1
Potassium	2.3		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:47	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:47	1
Magnesium	4.2		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:47	1
Manganese	0.032		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:47	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:18	1
Total Dissolved Solids	100		10	10	mg/L			03/17/21 19:05	1
Total Alkalinity as CaCO3 to pH 4.5	61	Н	5.0	5.0	mg/L			03/25/21 19:38	1
Bicarbonate Alkalinity as CaCO3	61	Н	5.0	5.0	mg/L			03/25/21 19:38	1

Method: Field Sampling - Field Sampling											
	Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
	рН	6.11				SU		_		03/10/21 08:55	1

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** 

Lab Sample ID: 180-118348-3 Date Collected: 03/10/21 10:54

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.71	mg/L			03/21/21 03:45	1
Fluoride	< 0.026		0.10	0.026	mg/L			03/21/21 03:45	1
Sulfate	0.91	J	1.0	0.76	mg/L			03/21/21 03:45	1
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:50	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:50	1
Barium	0.014		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:50	1
Beryllium	0.00019	J	0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:50	1
Boron	< 0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:50	1
Calcium	1.9		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:50	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:50	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:50	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:50	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:50	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:50	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:50	1
Thallium	0.00028	J	0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:50	1
Sodium	2.6		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:50	1
Potassium	1.2		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:50	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:50	1
Magnesium	1.1		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:50	1
Manganese	0.00099	J	0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:50	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:21	1
<b>Total Dissolved Solids</b>	20		10	10	mg/L			03/17/21 19:05	1
Total Alkalinity as CaCO3 to pH 4.5	11	Н	5.0	5.0	mg/L			03/25/21 19:47	1
Bicarbonate Alkalinity as CaCO3	11	Н	5.0	5.0	mg/L			03/25/21 19:47	1
Method: Field Sampling - Field S	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.49				SU			03/10/21 10:54	1

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** 

Lab Sample ID: 180-118348-4 Date Collected: 03/10/21 12:17

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.71	mg/L			03/21/21 04:03	1
Fluoride	0.12		0.10	0.026	mg/L			03/21/21 04:03	1
Sulfate	8.1		1.0	0.76	mg/L			03/21/21 04:03	1
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:53	1
Arsenic	0.00036	J	0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:53	1
Barium	0.0057	J	0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:53	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:53	1
Boron	< 0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:53	1
Calcium	16		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:53	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:53	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:53	1
Lithium	0.0049	J	0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:53	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:53	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:53	1
Thallium	0.00017	J	0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:53	1
Sodium	7.2		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:53	1
Potassium	2.5		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:53	1
Iron	1.2		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:53	1
Magnesium	2.5		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:53	1
Manganese	0.16		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:53	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:24	1
Total Dissolved Solids	100		10	10	mg/L			03/17/21 19:05	1
Total Alkalinity as CaCO3 to pH 4.5	61	Н	5.0	5.0	mg/L			03/25/21 19:55	1
Bicarbonate Alkalinity as CaCO3	61	Н	5.0	5.0	mg/L			03/25/21 19:55	1
Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.19				SU			03/10/21 12:17	1

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Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** 

Date Collected: 03/10/21 17:05 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-5

**Matrix: Water** 

Method: EPA 300.0 R2.	1 - Anions, Ion Chro	omatograph	y						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.71	mg/L			03/21/21 04:21	1
Fluoride	<0.026		0.10	0.026	mg/L			03/21/21 04:21	1
Sulfate	<0.76		1.0	0.76	mg/L			03/21/21 04:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:55	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:55	1
Barium	0.016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:55	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:55	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:55	1
Calcium	1.3		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:55	1
Cobalt	0.0011	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:55	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:55	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:55	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:55	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:55	1
Sodium	1.5		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:55	1
Potassium	1.0		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:55	1
Iron	0.26		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:55	1
Magnesium	0.80		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:55	1
Manganese	0.0071		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:55	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:26	1
Total Dissolved Solids	19		10	10	mg/L			03/17/21 19:05	1
Total Alkalinity as CaCO3 to pH 4.5	7.6	Н	5.0	5.0	mg/L			03/25/21 20:05	1
Bicarbonate Alkalinity as CaCO3	7.6	Н	5.0	5.0	mg/L			03/25/21 20:05	1

Method: Field Sampling - Field Sampling											
	Analyte	Result	Qualifier	RL	MDL	Unit	D		Prepared	Analyzed	Dil Fac
	рН	5.22				SU				03/10/21 17:05	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** 

Date Collected: 03/11/21 10:58
Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-6

**Matrix: Water** 

Job ID: 180-118348-1

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	0.71	mg/L			03/21/21 04:39	1
Fluoride	0.092	J	0.10	0.026	mg/L			03/21/21 04:39	1
Sulfate	8.4		1.0	0.76	mg/L			03/21/21 04:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:58	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:58	1
Barium	0.0077	J	0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:58	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:58	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:58	1
Calcium	26		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:58	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:58	1
Lithium	0.0050		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:58	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:58	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:58	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:58	1
Sodium	5.2		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:58	1
Potassium	2.8		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:58	1
Iron	0.25		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:58	1
Magnesium	2.1		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:58	1
Manganese	0.13		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:58	1

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:29	1
110		10	10	mg/L			03/18/21 18:31	1
86	Н	5.0	5.0	mg/L			03/26/21 03:18	1
86	Н	5.0	5.0	mg/L			03/26/21 03:18	1
	<2.1 110 86		<2.1 3.0 110 10 86 H 5.0	<2.1	<2.1	<2.1	<2.1	<2.1

Method: Field Sampling - Field Sampling											
	Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
	рН	7.93				SU		_		03/11/21 10:58	1

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Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** 

Lab Sample ID: 180-118348-7 Date Collected: 03/10/21 13:45

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			03/21/21 06:26	1
Fluoride	< 0.026		0.10	0.026	mg/L			03/21/21 06:26	1
Sulfate	<0.76		1.0	0.76	mg/L			03/21/21 06:26	1
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:01	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:01	1
Barium	0.011		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:01	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:01	1
Boron	< 0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:01	1
Calcium	0.89		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:01	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:01	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:01	1
Lead	< 0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:01	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:01	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:01	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:01	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:01	1
Sodium	2.4		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:01	1
Potassium	0.74		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:01	1
Iron	<0.020		0.050	0.020			03/20/21 21:24	03/23/21 12:01	1
Magnesium	0.62		0.50	0.083	-		03/20/21 21:24	03/23/21 12:01	1
Manganese	0.0022	J	0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:01	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:37	1
Total Dissolved Solids	20		10	10	mg/L			03/17/21 19:05	1
Total Alkalinity as CaCO3 to pH 4.5	7.5	н	5.0	5.0	mg/L			03/25/21 20:14	1
Bicarbonate Alkalinity as CaCO3	7.5	Н	5.0	5.0	mg/L			03/25/21 20:14	
Method: Field Sampling - Field									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
pH	4.96				SU			03/10/21 13:45	

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-18** 

Date Collected: 03/10/21 15:42 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-8

**Matrix: Water** 

Method: EPA 300.0 R2.1 - A	nions, Ion Chr	omatograpl	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			03/21/21 06:44	1
Fluoride	0.046	J	0.10	0.026	mg/L			03/21/21 06:44	1
Sulfate	7.1		1.0	0.76	mg/L			03/21/21 06:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:04	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:04	1
Barium	0.016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:04	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:04	1
Boron	< 0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:04	1
Calcium	7.7		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:04	1
Cobalt	0.0015	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:04	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:04	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:04	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:04	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:04	1
Sodium	4.7		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:04	1
Potassium	2.8		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:04	1
Iron	0.28		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:04	1
Magnesium	1.2		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:04	1
Manganese	0.17		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:04	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:40	1
Total Dissolved Solids	72	н	10	10	mg/L			03/19/21 19:08	1
Total Alkalinity as CaCO3 to pH 4.5	31	Н	5.0	5.0	mg/L			03/25/21 20:43	1
Bicarbonate Alkalinity as CaCO3	31	Н	5.0	5.0	mg/L			03/25/21 20:43	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.80				SU			03/10/21 15:42	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** 

Lab Sample ID: 180-118348-9 Date Collected: 03/11/21 12:12

**Matrix: Water** Date Received: 03/12/21 08:30

Analyte	•	romatograp Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		1.0	0.71	mg/L			03/21/21 02:51	
Fluoride	0.16		0.10	0.026	-			03/21/21 02:51	1
Sulfate	220		5.0	3.8	mg/L			03/21/21 03:09	5
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:21	-
Arsenic	0.00090	J	0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:21	•
Barium	<0.0016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:21	•
Beryllium	0.0022	J	0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:21	
Boron	2.4		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:21	1
Calcium	83		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:21	•
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:21	
Cobalt	0.00043	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:21	•
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:21	
Lithium	0.013		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:21	
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:21	•
Selenium	0.0038	J	0.0050	0.0015	mg/L		03/20/21 21:24	03/24/21 11:38	
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:21	
Sodium	40		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:21	
Potassium	8.3		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:21	
Iron	0.041	J	0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:21	
Magnesium	21		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:21	
Manganese	0.015		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:21	,
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:43	
Total Dissolved Solids	530		10	10	mg/L			03/18/21 18:31	
Total Alkalinity as CaCO3 to pH 4.5	6.8	H	5.0	5.0	mg/L			03/26/21 03:28	
Bicarbonate Alkalinity as CaCO3	6.8	Н	5.0	5.0	mg/L			03/26/21 03:28	
Method: Field Sampling - Field									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.35				SU			03/11/21 12:12	

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-1** 

Date Collected: 03/10/21 00:00 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118348-10

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Anic	ons, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.71	mg/L			03/21/21 04:57	1
Fluoride	<0.026		0.10	0.026	mg/L			03/21/21 04:57	1
Sulfate	0.88	J	1.0	0.76	mg/L			03/21/21 04:57	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:29	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:29	1
Barium	0.013		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:29	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:29	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:29	1
Calcium	1.8		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:29	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:29	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:29	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:29	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:29	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:29	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:29	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:29	1
Sodium	2.7		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:29	1
Potassium	1.2		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:29	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:29	1
Magnesium	1.1		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:29	1
Manganese	0.0012	J	0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:29	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:45	1
Total Dissolved Solids	29	H	10	10	mg/L			03/18/21 17:41	1
Total Alkalinity as CaCO3 to pH 4.5	11	H	5.0	5.0	mg/L			03/25/21 21:01	1
Bicarbonate Alkalinity as CaCO3	11	Н	5.0	5.0	mg/L			03/25/21 21:01	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** 

Date Collected: 03/11/21 13:47 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118348-11

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Ai	nions, Ion Chr	omatograpl	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		1.0	0.71	mg/L			03/21/21 07:02	1
Fluoride	0.061	J	0.10	0.026	mg/L			03/21/21 07:02	1
Sulfate	64		1.0	0.76	mg/L			03/21/21 07:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:32	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:32	1
Barium	0.037		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:32	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:32	1
Boron	1.1		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:32	1
Calcium	32		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:32	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:32	1
Cobalt	0.00013	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:32	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:32	1
Lithium	0.0050		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:32	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:32	1
Selenium	0.0023	J	0.0050	0.0015	mg/L		03/20/21 21:24	03/24/21 11:43	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:32	1
Sodium	13		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:32	1
Potassium	2.7		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:32	1
Iron	0.093		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:32	1
Magnesium	10		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:32	1
Manganese	0.045		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:32	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:48	1
Total Dissolved Solids	190		10	10	mg/L			03/18/21 18:31	1
Total Alkalinity as CaCO3 to pH 4.5	8.3	Н	5.0	5.0	mg/L			03/26/21 03:37	1
Bicarbonate Alkalinity as CaCO3	8.3	Н	5.0	5.0	mg/L			03/26/21 03:37	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.21				SU			03/11/21 13:47	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-17** 

Date Collected: 03/11/21 12:10 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118348-12

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography											
Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	1.3		1.0	0.71	mg/L			03/21/21 07:19	1		
Fluoride	0.050 J	C	).10	0.026	mg/L			03/21/21 07:19	1		
Sulfate	3.9		1.0	0.76	mg/L			03/21/21 07:19	1		
<del>_</del>											

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:34	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:34	1
Barium	0.011		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:34	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:34	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:34	1
Calcium	5.7		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:34	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:34	1
Cobalt	0.00035	J	0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:34	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:34	1
Lithium	0.0049	J	0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:34	1
Molybdenum	0.0022	J	0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:34	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:34	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:34	1
Sodium	9.1		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:34	1
Potassium	1.5		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:34	1
Iron	0.38		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:34	1
Magnesium	3.5		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:34	1
Manganese	0.014		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:34	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0		mg/L	— <u> </u>		03/15/21 13:51	1
Total Dissolved Solids	75		10	10	mg/L			03/18/21 18:31	1
Total Alkalinity as CaCO3 to pH 4.5	44	Н	5.0	5.0	mg/L			03/26/21 03:46	1
Bicarbonate Alkalinity as CaCO3	44	Н	5.0	5.0	mg/L			03/26/21 03:46	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.96				SU			03/11/21 12:10	1

Client: Southern Company

Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-1 Lab Sample ID: 180-118348-13

Matrix: Water

Date Collected: 03/11/21 11:00 Date Received: 03/12/21 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<0.71	1.0	0.71	mg/L			03/21/21 07:37	1	
Fluoride	<0.026	0.10	0.026	mg/L			03/21/21 07:37	1	
Sulfate	<0.76	1.0	0.76	mg/L			03/21/21 07:37	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:12	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:12	1
Barium	<0.0016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:12	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:12	1
Boron	< 0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:12	1
Calcium	<0.13		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:12	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:12	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:12	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:12	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:12	1
Sodium	< 0.35		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:12	1
Potassium	<0.16		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:12	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:12	1
Magnesium	<0.083		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:12	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:12	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:53	1
Total Dissolved Solids	<10		10	10	mg/L			03/18/21 17:41	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0	Н	5.0	5.0	mg/L			03/26/21 04:13	1
Bicarbonate Alkalinity as CaCO3	<5.0	Н	5.0	5.0	ma/l			03/26/21 04:13	1

Eurofins TestAmerica, Pittsburgh

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: EB-2** Lab Sample ID: 180-118348-14 Date Collected: 03/11/21 13:55

**Matrix: Water** 

Date Received: 03/12/21 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Analyte	Result Qualif	ier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<0.71	1.0	0.71	mg/L			03/21/21 07:55	1	
Fluoride	<0.026	0.10	0.026	mg/L			03/21/21 07:55	1	
Sulfate	<0.76	1.0	0.76	mg/L			03/21/21 07:55	1	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:15	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:15	1
Barium	<0.0016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:15	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:15	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:15	1
Calcium	<0.13		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:15	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:15	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:15	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:15	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:15	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:15	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:15	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:15	1
Sodium	<0.35		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:15	1
Potassium	<0.16		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:15	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:15	1
Magnesium	<0.083		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:15	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:15	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:56	1
Total Dissolved Solids	<10		10	10	mg/L			03/18/21 17:41	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0	Н	5.0	5.0	mg/L			03/26/21 04:29	1
Bicarbonate Alkalinity as CaCO3	<5.0	Н	5.0	5.0	mg/L			03/26/21 04:29	1

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: FB-1** Lab Sample ID: 180-118348-15 Date Collected: 03/11/21 10:30

**Matrix: Water** 

Date Received: 03/12/21 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<0.71	1.0	0.71	mg/L			03/21/21 08:13	1		
Fluoride	<0.026	0.10	0.026	mg/L			03/21/21 08:13	1		
Sulfate	<0.76	1.0	0.76	mg/L			03/21/21 08:13	1		

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 12:18	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 12:18	1
Barium	<0.0016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 12:18	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 12:18	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 12:18	1
Calcium	<0.13		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 12:18	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 12:18	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 12:18	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 12:18	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 12:18	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 12:18	1
Selenium	<0.0015	^+	0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 12:18	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 12:18	1
Sodium	<0.35		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 12:18	1
Potassium	<0.16		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 12:18	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 12:18	1
Magnesium	<0.083		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 12:18	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 12:18	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 13:59	1
Total Dissolved Solids	<10		10	10	mg/L			03/18/21 17:41	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0	Н	5.0	5.0	mg/L			03/26/21 17:39	1
Bicarbonate Alkalinity as CaCO3	<5.0	н	5.0	5.0	ma/l			03/26/21 17:39	1

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** 

Lab Sample ID: 180-118398-1 Date Collected: 03/12/21 11:57

**Matrix: Water** 

Date Received: 03/13/21 09:00

Analyte	Result Qualific	er RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6	1.0	0.71	mg/L			03/23/21 11:40	1
Fluoride	0.88	0.10	0.026	mg/L			03/23/21 11:40	1
Sulfate	19	1.0	0.76	mg/L			03/23/21 11:40	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:41	1
Arsenic	0.00084	J	0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:41	1
Barium	0.028		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:41	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:41	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:41	1
Calcium	31		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:41	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:41	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:41	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:41	1
Lithium	0.0096		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:41	1
Molybdenum	0.0019	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:41	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:41	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:41	1
Sodium	13		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:41	1
Potassium	1.4		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:41	1
Iron	0.032	J	0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:41	1
Magnesium	5.1		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:41	1
Manganese	0.013		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:41	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:01	1
Total Dissolved Solids	130		10	10	mg/L			03/19/21 19:01	1
Total Alkalinity as CaCO3 to pH 4.5	99	Н	5.0	5.0	mg/L			03/30/21 18:05	1
Bicarbonate Alkalinity as CaCO3	99	Н	5.0	5.0	mg/L			03/30/21 18:05	1

Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.72				SU			03/12/21 11:57	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Date Collected: 03/11/21 16:25 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-2

**Matrix: Water** 

Method: EPA 300.0 R2.1 - A	Anions, Ion Chr	omatograpl	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7		1.0	0.71	mg/L			03/23/21 12:29	1
Fluoride	0.15		0.10	0.026	mg/L			03/23/21 12:29	1
Sulfate	2.8		1.0	0.76	mg/L			03/23/21 12:29	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		04/07/21 13:55	04/08/21 09:13	1
Arsenic	0.00031	J	0.0010	0.00031	mg/L		04/07/21 13:55	04/08/21 09:13	1
Barium	0.033		0.010	0.0016	mg/L		04/07/21 13:55	04/08/21 09:13	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/07/21 13:55	04/08/21 09:13	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:44	1
Calcium	7.9		0.50	0.13	mg/L		04/07/21 13:55	04/08/21 09:13	1
Chromium	0.0023		0.0020	0.0015	mg/L		04/07/21 13:55	04/08/21 09:13	1
Cobalt	0.00058	J	0.0025	0.00013	mg/L		04/07/21 13:55	04/08/21 09:13	1
Lead	0.00032	J	0.0010	0.00013	mg/L		04/07/21 13:55	04/08/21 09:13	1
Lithium	0.0051		0.0050	0.0034	mg/L		04/07/21 13:55	04/08/21 09:13	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		04/07/21 13:55	04/08/21 09:13	1
Selenium	<0.0015		0.0050	0.0015	mg/L		04/07/21 13:55	04/08/21 09:13	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:44	1
Sodium	3.4		0.50	0.35	mg/L		04/07/21 13:55	04/08/21 09:13	1
Potassium	1.9		0.50	0.16	mg/L		04/07/21 13:55	04/08/21 09:13	1
Iron	<0.020		0.050	0.020	mg/L		04/07/21 13:55	04/08/21 09:13	1
Magnesium	1.9		0.50	0.083	mg/L		04/07/21 13:55	04/08/21 09:13	1
Manganese	0.055		0.0050	0.00087	mg/L		04/07/21 13:55	04/08/21 09:13	1

General Chemistry Analyte	Posult	Qualifier	RL	MDI	Unit	n	Prepared	Analvzed	Dil Fac
		Qualifier _							Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:04	1
Total Dissolved Solids	52		10	10	mg/L			03/18/21 18:22	1
Total Alkalinity as CaCO3 to pH 4.5	32	H	5.0	5.0	mg/L			03/26/21 08:26	1
Bicarbonate Alkalinity as CaCO3	32	Н	5.0	5.0	mg/L			03/26/21 08:26	1

Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	6.56				SU			03/11/21 16:25	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** 

Date Collected: 03/12/21 11:54 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-3

**Matrix: Water** 

Method: EPA 300.0 R2.1 -	Anions, Ion Chr	omatograpl	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		1.0	0.71	mg/L			03/23/21 12:45	1
Fluoride	0.044	J	0.10	0.026	mg/L			03/23/21 12:45	1
Sulfate	2.0		1.0	0.76	mg/L			03/23/21 12:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:47	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:47	1
Barium	0.045		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:47	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:47	1
Calcium	1.6		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:47	1
Chromium	0.0017	J	0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:47	1
Cobalt	0.0022	J	0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:47	1
Lead	0.00038	J	0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:47	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:47	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:47	1
Sodium	3.6		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:47	1
Potassium	1.2		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:47	1
Iron	0.55		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:47	1
Magnesium	1.4		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:47	1
Manganese	0.10		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:47	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:06	1
Total Dissolved Solids	27		10	10	mg/L			03/19/21 19:01	1
Total Alkalinity as CaCO3 to pH 4.5	9.7	H	5.0	5.0	mg/L			03/30/21 18:14	1
Bicarbonate Alkalinity as CaCO3	9.7	Н	5.0	5.0	mg/L			03/30/21 18:14	1

Method: Field Sampling - Field	l Sampling									
Analyte	Result	Qualifier	RL	MDL	Unit	D	)	Prepared	Analyzed	Dil Fac
pH	5.46				SU		_		03/12/21 11:54	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** 

Date Collected: 03/11/21 13:53 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-4

**Matrix: Water** 

Job ID: 180-118348-1

Method: EPA 300.0 R2.1 -	Anions, Ion Chi	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.71	mg/L			03/23/21 13:01	1
Fluoride	0.18		0.10	0.026	mg/L			03/23/21 13:01	1
Sulfate	2.9		1.0	0.76	mg/L			03/23/21 13:01	1
_									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:50	1
Arsenic	0.00035	J	0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:50	1
Barium	0.049		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:50	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:50	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:50	1
Calcium	4.0		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:50	1
Chromium	0.0019	J	0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:50	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:50	1
Lead	0.00075	J	0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:50	1
Lithium	0.0037	J	0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:50	1
Molybdenum	0.0013	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:50	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:50	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:50	1
Sodium	10		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:50	1
Potassium	1.8		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:50	1
Iron	0.22		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:50	1
Magnesium	0.59		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:50	1
Manganese	0.0074		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:50	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:09	1
Total Dissolved Solids	63		10	10	mg/L			03/18/21 18:22	1
Total Alkalinity as CaCO3 to pH 4.5	33	Н	5.0	5.0	mg/L			03/26/21 08:34	1
Bicarbonate Alkalinity as CaCO3	33	Н	5.0	5.0	mg/L			03/26/21 08:34	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	5.95				SU			03/11/21 13:53	1

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12

Client: Southern Company

**Total Dissolved Solids** 

Analyte

рН

Total Alkalinity as CaCO3 to pH 4.5

Method: Field Sampling - Field Sampling

**Bicarbonate Alkalinity as CaCO3** 

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWC-14A

Date Collected: 03/11/21 15:16 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-5

Matrix: Water

Job ID: 180-118348-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.6		1.0	0.71	mg/L			03/23/21 13:18	1
Fluoride	0.040	J	0.10	0.026	mg/L			03/23/21 13:18	1
Sulfate	1.7		1.0	0.76	mg/L			03/23/21 13:18	1
Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:52	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:52	1
Barium	0.032		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:52	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:52	1
Boron	< 0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:52	1
Calcium	0.79		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:52	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:52	1
Cobalt	0.0037		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:52	1
Lead	0.00031	J	0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:52	1
Lithium	0.0035	J	0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:52	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:52	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:52	1
Thallium	0.00019	J	0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:52	1
Sodium	5.5		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:52	1
Potassium	1.8		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:52	1
Iron	0.037	J	0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:52	1
Magnesium	0.79		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:52	1
Manganese	0.092		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:52	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:12	1

10

5.0

5.0

RL

10 mg/L

5.0 mg/L

5.0 mg/L

**MDL** Unit

SU

24

5.10

32 H

32 H

Result Qualifier

03/18/21 18:22

03/26/21 08:44

03/26/21 08:44

Analyzed

03/11/21 15:16

Dil Fac

Prepared

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** 

Lab Sample ID: 180-118398-6 Date Collected: 03/12/21 10:07

**Matrix: Water** 

Job ID: 180-118348-1

Date Received: 03/13/21 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		1.0	0.71	mg/L			03/23/21 13:34	1
Fluoride	0.98		0.10	0.026	mg/L			03/23/21 13:34	1
Sulfate	62		1.0	0.76	mg/L			03/23/21 13:34	1
Method: EPA 6020B - N	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:55	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:55	1
Barium	<0.0016		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:55	1
Beryllium	0.00034	J	0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:55	1
Boron	0.64		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:55	1
Calcium	11		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:55	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:55	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:55	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:55	1
Lithium	0.034		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:55	1
Molybdenum	0.0030	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:55	1
Selenium	0.0034	J	0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:55	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:55	1
Sodium	26		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:55	1
Potassium	1.3		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:55	1
Iron	<0.020		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:55	1
Magnesium	3.1		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:55	1
Manganese	0.0069		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:55	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:15	1
Total Dissolved Solids	130		10	10	mg/L			03/19/21 19:01	1
Total Alkalinity as CaCO3 to pH 4.5	38	H	5.0	5.0	mg/L			03/30/21 18:23	1
Bicarbonate Alkalinity as CaCO3	38	Н	5.0	5.0	mg/L			03/30/21 18:23	1

Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.88				SU			03/12/21 10:07	1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Date Collected: 03/11/21 14:55 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-7

**Matrix: Water** 

Method: EPA 300.0 R2.1	- Anions, Ion Chromatogr	aphy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.9	1.0	0.71	mg/L			03/23/21 14:23	1
Fluoride	0.31	0.10	0.026	mg/L			03/23/21 14:23	1
Sulfate	4.0	1.0	0.76	mg/L			03/23/21 14:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:58	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:58	1
Barium	<0.0016		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:58	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:58	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:58	1
Calcium	15		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:58	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:58	1
Cobalt	0.00022	J	0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:58	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:58	1
Lithium	0.051		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:58	1
Molybdenum	0.0012	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:58	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:58	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:58	1
Sodium	8.4		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:58	1
Potassium	1.4		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:58	1
Iron	0.053		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:58	1
Magnesium	11		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:58	1
Manganese	0.020		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:58	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:18	1
Total Dissolved Solids	100		10	10	mg/L			03/18/21 18:22	1
Total Alkalinity as CaCO3 to pH 4.5	88	Н	5.0	5.0	mg/L			03/26/21 08:53	1
Bicarbonate Alkalinity as CaCO3	88	Н	5.0	5.0	mg/L			03/26/21 08:53	1

Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
рН	7.12				SU			03/11/21 14:55	1

Client: Southern Company Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-118398-8

Date Collected: 03/11/21 00:00 **Matrix: Water** Date Received: 03/13/21 09:00

Method: EPA 300.0 R2.1 - A	nions, Ion Chro	matograph	y						
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		1.0	0.71	mg/L			03/23/21 14:39	1
Fluoride	0.31		0.10	0.026	mg/L			03/23/21 14:39	1
Sulfate	4.4		1.0	0.76	mg/L			03/23/21 14:39	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 19:06	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 19:06	1
Barium	<0.0016		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 19:06	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 19:06	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 19:06	1
Calcium	16		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 19:06	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 19:06	1
Cobalt	0.00021	J	0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 19:06	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 19:06	1
Lithium	0.052		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 19:06	1
Molybdenum	0.0013	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 19:06	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 19:06	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 19:06	1
Sodium	8.3		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 19:06	1
Potassium	1.4		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 19:06	1
Iron	0.098		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 19:06	1
Magnesium	11		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 19:06	1
Manganese	0.020		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 19:06	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 15:21	1
Total Dissolved Solids	100		10	10	mg/L			03/18/21 18:22	1
Total Alkalinity as CaCO3 to pH 4.5	90	H	5.0	5.0	mg/L			03/26/21 09:02	1
Bicarbonate Alkalinity as CaCO3	90	Н	5.0	5.0	mg/L			03/26/21 09:02	1

Client: Southern Company

Job ID: 180-118348-1

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2 Lab Sample ID: 180-118398-9

Date Collected: 03/12/21 12:05

Date Received: 03/13/21 09:00

Matrix: Water

Method: EPA 300.0 R2.1 - A	nions, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			03/23/21 14:56	1
Fluoride	< 0.026		0.10	0.026	mg/L			03/23/21 14:56	1
Sulfate	<0.76		1.0	0.76	mg/L			03/23/21 14:56	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 19:09	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 19:09	1
Barium	<0.0016		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 19:09	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 19:09	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 19:09	1
Calcium	<0.13		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 19:09	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 19:09	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 19:09	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 19:09	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 19:09	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 19:09	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 19:09	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 19:09	1
Sodium	<0.35		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 19:09	1
Potassium	<0.16		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 19:09	1
Iron	<0.020		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 19:09	1
Magnesium	<0.083		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 19:09	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 19:09	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/17/21 14:00	03/17/21 15:47	1
Total Dissolved Solids	<10		10	10	mg/L			03/19/21 19:01	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0	Н	5.0	5.0	mg/L			03/30/21 18:31	1
Bicarbonate Alkalinity as CaCO3	<5.0	Н	5.0	5.0	mg/L			03/30/21 18:31	1

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6

8

10

12

1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-12** 

Lab Sample ID: 180-118398-10 Date Collected: 03/12/21 10:59

**Matrix: Water** 

Job ID: 180-118348-1

Date Received: 03/13/21 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			03/23/21 15:12	1
Fluoride	0.096	J	0.10	0.026	mg/L			03/23/21 15:12	1
Sulfate	14		1.0	0.76	mg/L			03/23/21 15:12	1
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 19:12	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 19:12	1
Barium	0.017		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 19:12	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 19:12	1
Boron	< 0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 19:12	1
Calcium	15		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 19:12	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 19:12	1
Cobalt	0.00042	J	0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 19:12	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 19:12	1
Lithium	0.0089		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 19:12	1
Molybdenum	0.00062	J	0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 19:12	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 19:12	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 19:12	1
Sodium	6.3		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 19:12	1
Potassium	2.2		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 19:12	1
Iron	1.8		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 19:12	1
Magnesium	3.5		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 19:12	1
Manganese	0.015		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 19:12	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/17/21 14:00	03/17/21 15:56	1
Total Dissolved Solids	78		10	10	mg/L			03/19/21 19:01	1
Total Alkalinity as CaCO3 to pH 4.5	46	Н	5.0	5.0	mg/L			03/30/21 18:40	1
Bicarbonate Alkalinity as CaCO3	46	Н	5.0	5.0	mg/L			03/30/21 18:40	1
Method: Field Sampling - Field S	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.66				SU			03/12/21 10:59	1

Job ID: 180-118348-1

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

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

Lab Sample ID: MB 180-350116/55

**Matrix: Water** 

Analyte

Chloride

Fluoride

Sulfate

Analysis Batch: 350116

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

03/20/21 23:52

**Prep Type: Total/NA** 

**Prep Type: Total/NA** 

**Client Sample ID: WGWA-1** 

**Client Sample ID: WGWA-1** 

**Client Sample ID: Dup-1** 

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

MB MB Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1.0 0.71 mg/L < 0.71 03/20/21 23:52 <0.026 0.10 0.026 mg/L 03/20/21 23:52

0.76 mg/L

Lab Sample ID: MB 180-350116/6

**Matrix: Water** 

Analysis Batch: 350116

< 0.76

		MB	MB							
1	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
(	Chloride	<0.71		1.0	0.71	mg/L			03/20/21 08:54	1
	Fluoride	<0.026		0.10	0.026	mg/L			03/20/21 08:54	1
Ŀ	Sulfate	<0.76		1.0	0.76	mg/L			03/20/21 08:54	1

1.0

Lab Sample ID: LCS 180-350116/54

**Matrix: Water** 

Analysis Batch: 350116

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	50.0	52.5		mg/L		105	90 - 110	
Fluoride	2.50	2.51		mg/L		100	90 - 110	
Sulfate	50.0	52.2		mg/L		104	90 - 110	

Lab Sample ID: 180-118348-1 MS

**Matrix: Water** 

**Analysis Batch: 350116** 

	Sample Sample	Spike	MS	MS				%Rec.	
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	4.5	50.0	54.8		mg/L		101	90 - 110	
Fluoride	<0.026	2.50	2.45		mg/L		98	90 - 110	
Sulfate	<0.76	50.0	50.0		mg/L		100	90 - 110	

Lab Sample ID: 180-118348-1 MSD

**Matrix: Water** 

**Analysis Batch: 350116** 

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	4.5		50.0	55.1		mg/L		101	90 - 110	1	20
Fluoride	<0.026		2.50	2.47		mg/L		99	90 - 110	1	20
Sulfate	< 0.76		50.0	50.3		mg/L		101	90 - 110	1	20

Lab Sample ID: 180-118348-10 MS

**Matrix: Water** 

Analysis Batch: 350116

Third Duton Coo in										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1.7		50.0	52.4		mg/L		101	90 - 110	 
Fluoride	<0.026		2.50	2.45		mg/L		98	90 - 110	
Sulfate	0.88	J	50.0	51.0		mg/L		100	90 - 110	

Eurofins TestAmerica, Pittsburgh

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-118348-10 MSD

**Matrix: Water** 

Analysis Batch: 350116

Client Sample ID: Dup-1 Prep Type: Total/NA

Job ID: 180-118348-1

RPD Sample Sample Spike MSD MSD %Rec. Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Analyte D Chloride 1.7 50.0 52.3 mg/L 101 90 - 110 0 20 Fluoride <0.026 2.50 2.44 mg/L 97 90 - 110 20 Sulfate 0.88 J 50.0 50.9 100 90 - 110 mg/L n 20

Lab Sample ID: MB 180-350369/6

**Matrix: Water** 

**Analysis Batch: 350369** 

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

MB MB

**MDL** Unit Analyte Result Qualifier RL D Dil Fac Prepared Analyzed 0.71 mg/L Chloride < 0.71 1.0 03/23/21 10:53 0.10 Fluoride < 0.026 0.026 mg/L 03/23/21 10:53 03/23/21 10:53 Sulfate < 0.76 1.0 0.76 mg/L

Lab Sample ID: LCS 180-350369/5

**Matrix: Water** 

Analysis Batch: 350369

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

Spike LCS LCS %Rec. Added Result Qualifier Analyte Unit D %Rec Limits Chloride 50.0 51.0 mg/L 102 90 - 110 Fluoride 2.50 2.63 mg/L 105 90 - 110 50.0 Sulfate 51.0 mg/L 102 90 - 110

Lab Sample ID: 180-118398-1 MS

**Matrix: Water** 

**Analysis Batch: 350369** 

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

Spike MS MS %Rec. Sample Sample Result Qualifier Added Analyte Result Qualifier D %Rec Limits Unit Chloride 1.6 50.0 53.9 105 90 - 110 mg/L Fluoride 0.88 2.50 3.33 mg/L 98 90 - 110 Sulfate 19 50.0 68.6 mg/L 100 90 - 110

Lab Sample ID: 180-118398-1 MSD

**Matrix: Water** 

**Analysis Batch: 350369** 

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

Spike MSD MSD %Rec. **RPD** Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 1.6 50.0 51.9 mg/L 101 90 - 110 20 Fluoride 0.88 2.50 3.26 mg/L 95 90 - 110 2 20 Sulfate 50.0 67.2 97 19 mg/L 90 - 110 2 20

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

Lab Sample ID: MB 180-350102/1-A

**Matrix: Water** 

**Analysis Batch: 350467** 

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

Prep Batch: 350102

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/20/21 21:24	03/23/21 11:22	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		03/20/21 21:24	03/23/21 11:22	1
Barium	<0.0016		0.010	0.0016	mg/L		03/20/21 21:24	03/23/21 11:22	1

Eurofins TestAmerica, Pittsburgh

Job ID: 180-118348-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

MB MB

Lab Sample ID: MB 180-350102/1-A

**Matrix: Water** 

Analysis Batch: 350467

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

**Prep Batch: 350102** 

A 1. 4 .	D 14	0	ъ.		1114	_	D	A I	D'' E
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/20/21 21:24	03/23/21 11:22	1
Boron	<0.039		0.080	0.039	mg/L		03/20/21 21:24	03/23/21 11:22	1
Calcium	<0.13		0.50	0.13	mg/L		03/20/21 21:24	03/23/21 11:22	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/20/21 21:24	03/23/21 11:22	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/20/21 21:24	03/23/21 11:22	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/20/21 21:24	03/23/21 11:22	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/20/21 21:24	03/23/21 11:22	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		03/20/21 21:24	03/23/21 11:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/20/21 21:24	03/23/21 11:22	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/20/21 21:24	03/23/21 11:22	1
Sodium	<0.35		0.50	0.35	mg/L		03/20/21 21:24	03/23/21 11:22	1
Potassium	<0.16		0.50	0.16	mg/L		03/20/21 21:24	03/23/21 11:22	1
Iron	<0.020		0.050	0.020	mg/L		03/20/21 21:24	03/23/21 11:22	1
Magnesium	<0.083		0.50	0.083	mg/L		03/20/21 21:24	03/23/21 11:22	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/20/21 21:24	03/23/21 11:22	1

Lab Sample ID: LCS 180-350102/2-A

**Matrix: Water** 

Analysis Batch: 350467

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

**Prep Batch: 350102** 

<b>,</b>	Spike	LCS	LCS				%Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.239		mg/L		95	80 - 120
Arsenic	1.00	0.937		mg/L		94	80 - 120
Barium	1.00	0.994		mg/L		99	80 - 120
Beryllium	0.500	0.499		mg/L		100	80 - 120
Boron	1.25	1.24		mg/L		99	80 - 120
Calcium	25.0	26.1		mg/L		104	80 - 120
Chromium	0.500	0.489		mg/L		98	80 - 120
Cobalt	0.500	0.466		mg/L		93	80 - 120
Lead	0.500	0.487		mg/L		97	80 - 120
Lithium	0.500	0.499		mg/L		100	80 - 120
Molybdenum	0.500	0.498		mg/L		100	80 - 120
Selenium	1.00	1.07		mg/L		107	80 - 120
Thallium	1.00	0.946		mg/L		95	80 - 120
Sodium	25.0	26.7		mg/L		107	80 - 120
Potassium	25.0	22.6		mg/L		91	80 - 120
Iron	5.00	5.20		mg/L		104	80 - 120
Magnesium	25.0	25.7		mg/L		103	80 - 120
Manganese	0.500	0.474		mg/L		95	80 - 120

Lab Sample ID: 180-118348-1 MS

**Matrix: Water** 

**Analysis Batch: 350467** 

**Client Sample ID: WGWA-1 Prep Type: Total Recoverable** 

**Prep Batch: 350102** 

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	<0.00038		0.250	0.239		mg/L		96	75 - 125	
Arsenic	<0.00031		1.00	0.944		mg/L		94	75 - 125	
Barium	0.046		1.00	1.05		mg/L		100	75 - 125	
Beryllium	0.00029	J	0.500	0.491		mg/L		98	75 - 125	

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-118348-1 MS

**Matrix: Water** 

Analysis Batch: 350467

Client Sample ID: WGWA-1 Prep Type: Total Recoverable Prep Batch: 350102

Job ID: 180-118348-1

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	<0.039		1.25	1.26		mg/L		101	75 - 125	
Calcium	1.3		25.0	27.3		mg/L		104	75 - 125	
Chromium	<0.0015		0.500	0.489		mg/L		98	75 - 125	
Cobalt	0.00081	J	0.500	0.470		mg/L		94	75 - 125	
Lead	<0.00013		0.500	0.484		mg/L		97	75 - 125	
Lithium	0.0039	J	0.500	0.497		mg/L		99	75 - 125	
Molybdenum	<0.00061		0.500	0.497		mg/L		99	75 - 125	
Selenium	<0.0015		1.00	1.09		mg/L		109	75 - 125	
Thallium	0.00045	J	1.00	0.951		mg/L		95	75 - 125	
Sodium	3.3		25.0	29.6		mg/L		105	75 - 125	
Potassium	1.1		25.0	23.7		mg/L		90	75 - 125	
Iron	<0.020		5.00	5.12		mg/L		102	75 - 125	
Magnesium	1.2		25.0	26.8		mg/L		103	75 - 125	
Manganese	0.011		0.500	0.490		mg/L		96	75 - 125	

Lab Sample ID: 180-118348-1 MSD

**Matrix: Water** 

Analysis Batch: 350467

Client Sample ID: WGWA-1
Prep Type: Total Recoverable

Prep Batch: 350102

Analysis Batch: 350467									Prep Ba	itch: 3	50102
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.00038		0.250	0.235		mg/L		94	75 - 125	2	20
Arsenic	< 0.00031		1.00	0.928		mg/L		93	75 - 125	2	20
Barium	0.046		1.00	1.04		mg/L		99	75 - 125	2	20
Beryllium	0.00029	J	0.500	0.491		mg/L		98	75 - 125	0	20
Boron	< 0.039		1.25	1.24		mg/L		100	75 - 125	1	20
Calcium	1.3		25.0	27.0		mg/L		103	75 - 125	1	20
Chromium	<0.0015		0.500	0.488		mg/L		98	75 - 125	0	20
Cobalt	0.00081	J	0.500	0.461		mg/L		92	75 - 125	2	20
Lead	< 0.00013		0.500	0.489		mg/L		98	75 - 125	1	20
Lithium	0.0039	J	0.500	0.494		mg/L		98	75 - 125	1	20
Molybdenum	< 0.00061		0.500	0.491		mg/L		98	75 - 125	1	20
Selenium	<0.0015		1.00	1.08	^+	mg/L		108	75 - 125	1	20
Thallium	0.00045	J	1.00	0.954		mg/L		95	75 - 125	0	20
Sodium	3.3		25.0	29.9		mg/L		106	75 - 125	1	20
Potassium	1.1		25.0	23.5		mg/L		90	75 - 125	1	20
Iron	<0.020		5.00	5.10		mg/L		102	75 - 125	0	20
Magnesium	1.2		25.0	26.3		mg/L		101	75 - 125	2	20
Manganese	0.011		0.500	0.484		mg/L		95	75 - 125	1	20

Lab Sample ID: MB 180-350579/1-A

**Matrix: Water** 

**Analysis Batch: 351150** 

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 350579

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		03/24/21 11:35	03/29/21 18:05	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		03/24/21 11:35	03/29/21 18:05	1
Barium	<0.0016		0.010	0.0016	mg/L		03/24/21 11:35	03/29/21 18:05	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		03/24/21 11:35	03/29/21 18:05	1
Boron	<0.039		0.080	0.039	mg/L		03/24/21 11:35	03/29/21 18:05	1

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Client: Southern Company

Job ID: 180-118348-1 Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-350579/1-A

**Matrix: Water** 

**Analysis Batch: 351150** 

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 350579** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.50	0.13	mg/L		03/24/21 11:35	03/29/21 18:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		03/24/21 11:35	03/29/21 18:05	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		03/24/21 11:35	03/29/21 18:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		03/24/21 11:35	03/29/21 18:05	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/24/21 11:35	03/29/21 18:05	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		03/24/21 11:35	03/29/21 18:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		03/24/21 11:35	03/29/21 18:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L		03/24/21 11:35	03/29/21 18:05	1
Sodium	<0.35		0.50	0.35	mg/L		03/24/21 11:35	03/29/21 18:05	1
Potassium	<0.16		0.50	0.16	mg/L		03/24/21 11:35	03/29/21 18:05	1
Iron	<0.020		0.050	0.020	mg/L		03/24/21 11:35	03/29/21 18:05	1
Magnesium	<0.083		0.50	0.083	mg/L		03/24/21 11:35	03/29/21 18:05	1
Manganese	<0.00087		0.0050	0.00087	mg/L		03/24/21 11:35	03/29/21 18:05	1

Lab Sample ID: LCS 180-350579/2-A

**Matrix: Water** 

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

Analysis Batch: 351150							<b>Prep Batch: 350579</b>
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.252		mg/L		101	80 - 120
Arsenic	1.00	1.03		mg/L		103	80 - 120
Barium	1.00	1.07		mg/L		107	80 - 120
Beryllium	0.500	0.528		mg/L		106	80 - 120
Boron	1.25	1.23		mg/L		98	80 - 120
Calcium	25.0	27.3		mg/L		109	80 - 120
Chromium	0.500	0.538		mg/L		108	80 - 120
Cobalt	0.500	0.529		mg/L		106	80 - 120
Lead	0.500	0.556		mg/L		111	80 - 120
Lithium	0.500	0.528		mg/L		106	80 - 120
Molybdenum	0.500	0.564		mg/L		113	80 - 120
Selenium	1.00	1.15		mg/L		115	80 - 120
Thallium	1.00	1.12		mg/L		112	80 - 120
Sodium	25.0	28.7		mg/L		115	80 - 120
Potassium	25.0	24.6		mg/L		98	80 - 120
Iron	5.00	4.73		mg/L		95	80 - 120
Magnesium	25.0	27.1		mg/L		109	80 - 120
Manganese	0.500	0.524		mg/L		105	80 - 120

Lab Sample ID: MB 180-352257/1-A

**Matrix: Water** 

**Analysis Batch: 352526** 

**Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 352257** 

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		04/07/21 13:55	04/08/21 08:53	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		04/07/21 13:55	04/08/21 08:53	1
Barium	<0.0016		0.010	0.0016	mg/L		04/07/21 13:55	04/08/21 08:53	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		04/07/21 13:55	04/08/21 08:53	1
Calcium	<0.13		0.50	0.13	mg/L		04/07/21 13:55	04/08/21 08:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		04/07/21 13:55	04/08/21 08:53	1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-352257/1-A

**Matrix: Water** 

**Analysis Batch: 352526** 

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

**Prep Batch: 352257** 

Job ID: 180-118348-1

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00013		0.0025	0.00013	mg/L		04/07/21 13:55	04/08/21 08:53	1
Lead	<0.00013		0.0010	0.00013	mg/L		04/07/21 13:55	04/08/21 08:53	1
Lithium	<0.0034		0.0050	0.0034	mg/L		04/07/21 13:55	04/08/21 08:53	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		04/07/21 13:55	04/08/21 08:53	1
Selenium	<0.0015		0.0050	0.0015	mg/L		04/07/21 13:55	04/08/21 08:53	1
Thallium	<0.00015		0.0010	0.00015	mg/L		04/07/21 13:55	04/08/21 08:53	1
Sodium	<0.35		0.50	0.35	mg/L		04/07/21 13:55	04/08/21 08:53	1
Potassium	<0.16		0.50	0.16	mg/L		04/07/21 13:55	04/08/21 08:53	1
Iron	<0.020		0.050	0.020	mg/L		04/07/21 13:55	04/08/21 08:53	1
Magnesium	<0.083		0.50	0.083	mg/L		04/07/21 13:55	04/08/21 08:53	1
Manganese	<0.00087		0.0050	0.00087	ma/L		04/07/21 13:55	04/08/21 08:53	1

Lab Sample ID: LCS 180-352257/2-A

**Matrix: Water** 

**Analysis Batch: 352526** 

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

**Prep Batch: 352257** 

Analysis Batch: 002020	Spike	LCS	LCS				%Rec.
Analyte	Added		Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.229		mg/L		91	80 - 120
Arsenic	1.00	0.958		mg/L		96	80 - 120
Barium	1.00	0.973		mg/L		97	80 - 120
Beryllium	0.500	0.511		mg/L		102	80 - 120
Calcium	25.0	28.4		mg/L		114	80 - 120
Chromium	0.500	0.495		mg/L		99	80 - 120
Cobalt	0.500	0.490		mg/L		98	80 - 120
Lead	0.500	0.492		mg/L		98	80 - 120
Lithium	0.500	0.496		mg/L		99	80 - 120
Molybdenum	0.500	0.498		mg/L		100	80 - 120
Selenium	1.00	0.994		mg/L		99	80 - 120
Thallium	1.00	1.06		mg/L		106	80 - 120
Sodium	25.0	24.8		mg/L		99	80 - 120
Potassium	25.0	24.6		mg/L		98	80 - 120
Iron	5.00	5.09		mg/L		102	80 - 120
Magnesium	25.0	25.2		mg/L		101	80 - 120
Manganese	0.500	0.492		mg/L		98	80 - 120

Lab Sample ID: LCSD 180-352257/3-A

**Matrix: Water** 

Analysis Batch: 352526

**Client Sample ID: Lab Control Sample Dup Prep Type: Total Recoverable** 

**Prep Batch: 352257** 

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	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	0.250	0.232		mg/L		93	80 - 120	2	20
Arsenic	1.00	0.988		mg/L		99	80 - 120	3	20
Barium	1.00	0.984		mg/L		98	80 - 120	1	20
Beryllium	0.500	0.506		mg/L		101	80 - 120	1	20
Calcium	25.0	29.4		mg/L		118	80 - 120	4	20
Chromium	0.500	0.498		mg/L		100	80 - 120	1	20
Cobalt	0.500	0.503		mg/L		101	80 - 120	3	20
Lead	0.500	0.497		mg/L		99	80 - 120	1	20
Lithium	0.500	0.496		mg/L		99	80 - 120	0	20

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Job ID: 180-118348-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: LCSD 180-352257/3-A

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

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

**Prep Type: Total Recoverable Matrix: Water** 

**Analysis Batch: 352526** Prep Batch: 352257

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Molybdenum	0.500	0.512		mg/L		102	80 - 120	3	20
Selenium	1.00	0.998		mg/L		100	80 - 120	0	20
Thallium	1.00	1.06		mg/L		106	80 - 120	0	20
Sodium	25.0	25.5		mg/L		102	80 - 120	3	20
Potassium	25.0	24.9		mg/L		99	80 - 120	1	20
Iron	5.00	5.07		mg/L		101	80 - 120	0	20
Magnesium	25.0	25.7		mg/L		103	80 - 120	2	20
Manganese	0.500	0.498		mg/L		100	80 - 120	1	20

#### Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-349361/1-A **Client Sample ID: Method Blank Prep Type: Total/NA** 

**Matrix: Water Analysis Batch: 349549** 

**Prep Batch: 349361** MB MB

Result Qualifier Analyte RL MDL Unit Analyzed Dil Fac Prepared 2.1 mg/L Sulfide 3.0 03/15/21 09:45 03/15/21 13:05 <2.1

Lab Sample ID: LCS 180-349361/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 349361 Analysis Batch: 349549** Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits 85 - 115 Sulfide 12.7 11.2 mg/L 88

Lab Sample ID: 180-118348-1 MS **Client Sample ID: WGWA-1 Matrix: Water** Prep Type: Total/NA **Analysis Batch: 349549 Prep Batch: 349361** 

Sample Sample Spike MS MS %Rec. **Analyte** Result Qualifier Added Result Qualifier Unit %Rec Limits Sulfide 12.7 10.5 mg/L 83

Lab Sample ID: 180-118348-1 MSD Client Sample ID: WGWA-1 **Matrix: Water** Prep Type: Total/NA Analysis Batch: 349549 **Prep Batch: 349361** Spike MSD MSD RPD Sample Sample %Rec. Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits **RPD** Limit

Sulfide 12.7 10.2 <2.1 mg/L 75 - 125 Lab Sample ID: MB 180-349362/1-A **Client Sample ID: Method Blank** 

**Matrix: Water** Prep Type: Total/NA **Analysis Batch: 349551 Prep Batch: 349362** 

MB MB Analyte Result Qualifier RL MDL Unit **Prepared** Analyzed 2.1 mg/L Sulfide <2 1 3.0 03/15/21 09:45 03/15/21 14:20

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75 - 125

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-1

#### Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 180-349362/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 349362** Analysis Batch: 349551

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec 12.7 Sulfide 12.1 mg/L 95 85 - 115

Lab Sample ID: MB 180-349716/1-A Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349871** 

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Analyte 3.0 2.1 mg/L 03/17/21 14:00 03/17/21 15:41 Sulfide <2.1

Lab Sample ID: LCS 180-349716/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Analysis Batch: 349871 Prep Batch: 349716** Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec Sulfide 12.8 11.3 88 85 - 115 mg/L

Lab Sample ID: 180-118398-9 MS Client Sample ID: FB-2 **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349871** 

Spike MS MS %Rec. Sample Sample

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Sulfide 12.8 75 - 125 <2.1 11.3 mg/L

Lab Sample ID: 180-118398-9 MSD

**Matrix: Water** 

Analysis Batch: 349871 **Prep Batch: 349716** MSD MSD Sample Sample Spike %Rec. **RPD** Analyte Result Qualifier Added Limits Result Qualifier Unit %Rec Limit Sulfide <2.1 12.8 10.7 83 75 - 125 mg/L 6 20

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

Lab Sample ID: MB 180-349759/2 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 349759

MR MR **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac 10 mg/L 10 **Total Dissolved Solids** <10 03/17/21 19:05

Lab Sample ID: LCS 180-349759/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 349759** 

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 457 436 mg/L 95 80 - 120

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**Prep Batch: 349716** 

**Prep Batch: 349716** 

Client Sample ID: FB-2

Prep Type: Total/NA

10

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-1

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

Lab Sample ID: MB 180-349921/2

**Matrix: Water** 

Analysis Batch: 349921

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared Total Dissolved Solids 10 03/18/21 17:41 <10 10 mg/L

Lab Sample ID: LCS 180-349921/1

**Matrix: Water** 

**Analysis Batch: 349921** 

Spike LCS LCS Added Result Qualifier Unit D %Rec Limits 457 80 - 120 Total Dissolved Solids 446 mg/L 98

Lab Sample ID: MB 180-349926/2

**Matrix: Water** 

Analysis Batch: 349926

MB MB

Result Qualifier RL **MDL** Unit Analyte Prepared Analyzed Dil Fac Total Dissolved Solids <del><</del>10 10 10 mg/L 03/18/21 18:22

Lab Sample ID: LCS 180-349926/1

**Matrix: Water** 

**Analysis Batch: 349926** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Total Dissolved Solids 457 80 - 120 412 mg/L

Lab Sample ID: 180-118398-5 DU

**Matrix: Water** 

Analysis Batch: 349926

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit Total Dissolved Solids 24 22.0 mg/L

Lab Sample ID: MB 180-349927/2

**Matrix: Water** 

**Analysis Batch: 349927** 

MB MB

**MDL** Unit Analyte Result Qualifier RL Dil Fac Prepared Analyzed 10 10 mg/L 03/18/21 18:31 **Total Dissolved Solids** <10

Lab Sample ID: LCS 180-349927/1

**Matrix: Water** 

**Analysis Batch: 349927** 

Spike LCS LCS Added Result Qualifier Limits Unit D %Rec Total Dissolved Solids 430 457 mg/L 94 80 - 120

Lab Sample ID: MB 180-350089/2

**Matrix: Water** 

**Analysis Batch: 350089** 

MB MB

RL MDL Unit Analyte Result Qualifier Prepared Analyzed Dil Fac **Total Dissolved Solids** 10 03/19/21 19:01 <10 10 mg/L

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**Client Sample ID: Method Blank** 

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Client Sample ID: Method Blank

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

%Rec.

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

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Client Sample ID: WGWC-14A Prep Type: Total/NA

**Prep Type: Total/NA** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Type: Total/NA

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Job ID: 180-118348-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

**Prep Type: Total/NA** 

Prep Type: Total/NA

**Prep Type: Total/NA** 

Client Sample ID: WGWA-18

**Client Sample ID: Method Blank** 

**Client Sample ID: Method Blank** 

**Client Sample ID: Method Blank** 

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCS 180-350089/1

**Matrix: Water** 

**Analysis Batch: 350089** 

Spike LCS LCS %Rec. Added Result Qualifier %Rec Limits Analyte Unit D **Total Dissolved Solids** 457 472 mg/L 103 80 - 120

Lab Sample ID: MB 180-350091/2

**Matrix: Water** 

**Analysis Batch: 350091** 

MB MB

Result Qualifier RL **MDL** Unit Dil Fac Prepared Analyzed 10 10 mg/L 03/19/21 19:08 **Total Dissolved Solids** <10

Lab Sample ID: LCS 180-350091/1

**Matrix: Water** 

**Analysis Batch: 350091** 

Spike LCS LCS %Rec. Added Limits Analyte Result Qualifier Unit %Rec Total Dissolved Solids 457 444 97 80 - 120 mg/L

Lab Sample ID: 180-118348-8 DU

**Matrix: Water** 

**Analysis Batch: 350091** 

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Limit 73.0 Total Dissolved Solids 72 H mg/L 10

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-350921/100

**Matrix: Water** 

**Analysis Batch: 350921** 

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Alkalinity as CaCO3 to pH 4.5 <5.0 5.0 5.0 ma/L 03/25/21 19:12 03/25/21 19:12 Bicarbonate Alkalinity as CaCO3 <5.0 5.0 5.0 mg/L

Lab Sample ID: MB 180-350921/148

**Matrix: Water** 

**Analysis Batch: 350921** 

MB MB RL **MDL** Unit Dil Fac Analyte Result Qualifier Prepared Analyzed Total Alkalinity as CaCO3 to pH 4.5 < 5.0 5.0 5.0 mg/L 03/26/21 02:42 Bicarbonate Alkalinity as CaCO3 < 5.0 5.0 5.0 mg/L 03/26/21 02:42

Lab Sample ID: MB 180-350921/171

**Matrix: Water** 

Analysis Batch: 350921

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Alkalinity as CaCO3 to pH 4.5 <5.0 5.0 5.0 mg/L 03/26/21 06:16 Bicarbonate Alkalinity as CaCO3 <5.0 5.0 mg/L 03/26/21 06:16 5.0

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Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample** 

#### Method: SM2320 B - Alkalinity, Total (Continued)

Lab Sample ID: LCS 180-350921/147 **Client Sample ID: Lab Control Sample** 

**Matrix: Water** 

Analysis Batch: 350921

Spike LCS LCS %Rec. Result Qualifier Added Limits Analyte Unit %Rec Total Alkalinity as CaCO3 to pH 250 230 mg/L 92 90 - 110

4.5

Lab Sample ID: LCS 180-350921/170

**Matrix: Water** 

Analysis Batch: 350921

Spike LCS LCS %Rec. **Analyte** Added Result Qualifier Unit D %Rec Limits Total Alkalinity as CaCO3 to pH 250 227 mg/L 90 - 110

4.5

Lab Sample ID: LCS 180-350921/99

**Matrix: Water** 

Analysis Batch: 350921

Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit %Rec Limits Total Alkalinity as CaCO3 to pH 250 226 mg/L 91 90 - 110

Lab Sample ID: LLCS 180-350921/169

**Matrix: Water** 

Analysis Batch: 350921

LLCS LLCS Spike %Rec Added Result Qualifier Unit %Rec Limits Total Alkalinity as CaCO3 to pH 20.0 21.6 108 90 - 110 mg/L

4.5

Lab Sample ID: LLCS 180-350921/98

**Matrix: Water** 

**Analysis Batch: 350921** 

Spike LLCS LLCS %Rec. Added Result Qualifier Unit D %Rec Limits Analyte 20.0 20.2 90 - 110 Total Alkalinity as CaCO3 to pH mg/L 101

Lab Sample ID: 180-118348-8 DU

**Matrix: Water** 

**Analysis Batch: 350921** 

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit **RPD** Limit Total Alkalinity as CaCO3 to pH 31 H 30.5 mg/L 20 Bicarbonate Alkalinity as CaCO3 30.5 31 H mg/L 20

Lab Sample ID: 180-118348-13 DU

**Matrix: Water** 

Analysis Batch: 350921								
	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Alkalinity as CaCO3 to pH 4.5	<5.0	Н	<5.0		mg/L		NC	20
Bicarbonate Alkalinity as CaCO3	<5.0	Н	<5.0		mg/L		NC	20

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

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

Client Sample ID: EB-1 Prep Type: Total/NA

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-1

#### Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-350993/87

Lab Sample ID: LCS 180-350993/86

**Matrix: Water** 

**Analysis Batch: 350993** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac **Prepared** Total Alkalinity as CaCO3 to pH 4.5 5.0 <5.0 5.0 mg/L 03/26/21 17:31 Bicarbonate Alkalinity as CaCO3 <5.0 5.0 5.0 mg/L 03/26/21 17:31

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Client Sample ID: FB-1** 

Prep Type: Total/NA

Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 350993

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Alkalinity as CaCO3 to pH	250	225		mg/L		90	90 - 110	

4.5

Lab Sample ID: LLCS 180-350993/85 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 350993** 

	Spike	LLCS	LLCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Alkalinity as CaCO3 to pH	20.0	20.7		mg/L		103	90 - 110	
4.5								

Lab Sample ID: 180-118348-15 DU

**Matrix: Water** 

Analysis Batch: 350993

	Sample	Sample	DU	DU					RPD	
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit	
Total Alkalinity as CaCO3 to pH	<5.0	H	 <5.0		mg/L		 	NC	20	
4.5										
Bicarbonate Alkalinity as CaCO3	<5.0	Н	<5.0		mg/L			NC	20	

Lab Sample ID: MB 180-351516/6

**Matrix: Water** 

Analysis Batch: 351516

Client Samp	le ID: Method Blank	
	Prep Type: Total/NA	

**Client Sample ID: Lab Control Sample** 

	IND IND						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0	5.0	5.0 mg/L			03/30/21 15:56	1
Bicarbonate Alkalinity as CaCO3	<5.0	5.0	5.0 mg/L			03/30/21 15:56	1

Lab Sample ID: LCS 180-351516/5

**Matrix: Water** 

**Analysis Batch: 351516** 

	Cmilea	1.00	1.00				0/ Dag
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Total Alkalinity as CaCO3 to pH	250	229		mg/L		91	90 - 110
1 4 5							

4.5

Lab Sample ID: LLCS 180-351516/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 351516

	Spike	LLCS	LLCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Alkalinity as CaCO3 to pH	20.0	21.2		mg/L		106	90 - 110	

4.5

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

#### HPLC/IC

#### Analysis Batch: 350116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-2	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-118348-3	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-118348-4	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
180-118348-5	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-118348-6	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
180-118348-7	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
180-118348-8	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-118348-9	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-118348-9	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-118348-10	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-11	WGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-118348-12	WGWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-118348-13	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-14	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-118348-15	FB-1	Total/NA	Water	EPA 300.0 R2.1	
MB 180-350116/55	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-350116/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-350116/54	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-118348-1 MS	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-1 MSD	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-10 MS	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-118348-10 MSD	Dup-1	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 350369**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-118398-2	WGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-118398-3	WGWC-11	Total/NA	Water	EPA 300.0 R2.1	
180-118398-4	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-118398-5	WGWC-14A	Total/NA	Water	EPA 300.0 R2.1	
180-118398-6	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-118398-7	WGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-118398-8	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-118398-9	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-118398-10	WGWC-12	Total/NA	Water	EPA 300.0 R2.1	
MB 180-350369/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
.CS 180-350369/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-118398-1 MS	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-118398-1 MSD	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	

#### Metals

#### **Prep Batch: 350102**

<b>Lab Sample ID</b> 180-118348-1	Client Sample ID WGWA-1	Prep Type Total Recoverable	Matrix Water	Method 3005A	Prep Batch
180-118348-2	WGWA-2	Total Recoverable	Water	3005A	
180-118348-3	WGWA-3	Total Recoverable	Water	3005A	
180-118348-4	WGWA-4	Total Recoverable	Water	3005A	
180-118348-5	WGWA-5	Total Recoverable	Water	3005A	
180-118348-6	WGWA-6	Total Recoverable	Water	3005A	

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Job ID: 180-118348-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Metals (Continued)** 

#### Prep Batch: 350102 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-7	WGWA-7	Total Recoverable	Water	3005A	
180-118348-8	WGWA-18	Total Recoverable	Water	3005A	
180-118348-9	WGWC-8	Total Recoverable	Water	3005A	
180-118348-10	Dup-1	Total Recoverable	Water	3005A	
180-118348-11	WGWC-16	Total Recoverable	Water	3005A	
180-118348-12	WGWC-17	Total Recoverable	Water	3005A	
180-118348-13	EB-1	Total Recoverable	Water	3005A	
180-118348-14	EB-2	Total Recoverable	Water	3005A	
180-118348-15	FB-1	Total Recoverable	Water	3005A	
MB 180-350102/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-350102/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-118348-1 MS	WGWA-1	Total Recoverable	Water	3005A	
180-118348-1 MSD	WGWA-1	Total Recoverable	Water	3005A	

#### Analysis Batch: 350467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total Recoverable	Water	EPA 6020B	350102
180-118348-2	WGWA-2	Total Recoverable	Water	EPA 6020B	350102
180-118348-3	WGWA-3	Total Recoverable	Water	EPA 6020B	350102
180-118348-4	WGWA-4	Total Recoverable	Water	EPA 6020B	350102
180-118348-5	WGWA-5	Total Recoverable	Water	EPA 6020B	350102
180-118348-6	WGWA-6	Total Recoverable	Water	EPA 6020B	350102
180-118348-7	WGWA-7	Total Recoverable	Water	EPA 6020B	350102
180-118348-8	WGWA-18	Total Recoverable	Water	EPA 6020B	350102
180-118348-9	WGWC-8	Total Recoverable	Water	EPA 6020B	350102
180-118348-10	Dup-1	Total Recoverable	Water	EPA 6020B	350102
180-118348-11	WGWC-16	Total Recoverable	Water	EPA 6020B	350102
180-118348-12	WGWC-17	Total Recoverable	Water	EPA 6020B	350102
180-118348-13	EB-1	Total Recoverable	Water	EPA 6020B	350102
180-118348-14	EB-2	Total Recoverable	Water	EPA 6020B	350102
180-118348-15	FB-1	Total Recoverable	Water	EPA 6020B	350102
MB 180-350102/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	350102
LCS 180-350102/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	350102
180-118348-1 MS	WGWA-1	Total Recoverable	Water	EPA 6020B	350102
180-118348-1 MSD	WGWA-1	Total Recoverable	Water	EPA 6020B	350102

#### **Prep Batch: 350579**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total Recoverable	Water	3005A	
180-118398-2	WGWC-10	Total Recoverable	Water	3005A	
180-118398-3	WGWC-11	Total Recoverable	Water	3005A	
180-118398-4	WGWC-13	Total Recoverable	Water	3005A	
180-118398-5	WGWC-14A	Total Recoverable	Water	3005A	
180-118398-6	WGWC-9	Total Recoverable	Water	3005A	
180-118398-7	WGWC-19	Total Recoverable	Water	3005A	
180-118398-8	Dup-2	Total Recoverable	Water	3005A	
180-118398-9	FB-2	Total Recoverable	Water	3005A	
180-118398-10	WGWC-12	Total Recoverable	Water	3005A	
MB 180-350579/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-350579/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

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Job ID: 180-118348-1

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

#### **Metals**

#### Analysis Batch: 350601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-9	WGWC-8	Total Recoverable	Water	EPA 6020B	350102
180-118348-11	WGWC-16	Total Recoverable	Water	EPA 6020B	350102

#### **Analysis Batch: 351150**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total Recoverable	Water	EPA 6020B	350579
180-118398-2	WGWC-10	Total Recoverable	Water	EPA 6020B	350579
180-118398-3	WGWC-11	Total Recoverable	Water	EPA 6020B	350579
180-118398-4	WGWC-13	Total Recoverable	Water	EPA 6020B	350579
180-118398-5	WGWC-14A	Total Recoverable	Water	EPA 6020B	350579
180-118398-6	WGWC-9	Total Recoverable	Water	EPA 6020B	350579
180-118398-7	WGWC-19	Total Recoverable	Water	EPA 6020B	350579
180-118398-8	Dup-2	Total Recoverable	Water	EPA 6020B	350579
180-118398-9	FB-2	Total Recoverable	Water	EPA 6020B	350579
180-118398-10	WGWC-12	Total Recoverable	Water	EPA 6020B	350579
MB 180-350579/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	350579
LCS 180-350579/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	350579

#### Prep Batch: 352257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-2	WGWC-10	Total Recoverable	Water	3005A	
MB 180-352257/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-352257/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 180-352257/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

#### **Analysis Batch: 352526**

Lab Sample ID 180-118398-2	Client Sample ID WGWC-10	Prep Type  Total Recoverable	Matrix Water	Method EPA 6020B	<b>Prep Batch</b> 352257
MB 180-352257/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	352257
LCS 180-352257/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	352257
LCSD 180-352257/3-A	Lab Control Sample Dup	Total Recoverable	Water	EPA 6020B	352257

#### **General Chemistry**

#### **Prep Batch: 349361**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	9030B	
180-118348-2	WGWA-2	Total/NA	Water	9030B	
180-118348-3	WGWA-3	Total/NA	Water	9030B	
180-118348-4	WGWA-4	Total/NA	Water	9030B	
180-118348-5	WGWA-5	Total/NA	Water	9030B	
180-118348-6	WGWA-6	Total/NA	Water	9030B	
180-118348-7	WGWA-7	Total/NA	Water	9030B	
180-118348-8	WGWA-18	Total/NA	Water	9030B	
180-118348-9	WGWC-8	Total/NA	Water	9030B	
180-118348-10	Dup-1	Total/NA	Water	9030B	
180-118348-11	WGWC-16	Total/NA	Water	9030B	
180-118348-12	WGWC-17	Total/NA	Water	9030B	
180-118348-13	EB-1	Total/NA	Water	9030B	
180-118348-14	EB-2	Total/NA	Water	9030B	
180-118348-15	FB-1	Total/NA	Water	9030B	

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Job ID: 180-118348-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**General Chemistry (Continued)** 

#### Prep Batch: 349361 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-349361/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349361/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-118348-1 MS	WGWA-1	Total/NA	Water	9030B	
180-118348-1 MSD	WGWA-1	Total/NA	Water	9030B	

#### **Prep Batch: 349362**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	9030B	
180-118398-2	WGWC-10	Total/NA	Water	9030B	
180-118398-3	WGWC-11	Total/NA	Water	9030B	
180-118398-4	WGWC-13	Total/NA	Water	9030B	
180-118398-5	WGWC-14A	Total/NA	Water	9030B	
180-118398-6	WGWC-9	Total/NA	Water	9030B	
180-118398-7	WGWC-19	Total/NA	Water	9030B	
180-118398-8	Dup-2	Total/NA	Water	9030B	
MB 180-349362/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349362/2-A	Lab Control Sample	Total/NA	Water	9030B	

#### **Analysis Batch: 349549**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	EPA 9034	349361
180-118348-2	WGWA-2	Total/NA	Water	EPA 9034	349361
180-118348-3	WGWA-3	Total/NA	Water	EPA 9034	349361
180-118348-4	WGWA-4	Total/NA	Water	EPA 9034	349361
180-118348-5	WGWA-5	Total/NA	Water	EPA 9034	349361
180-118348-6	WGWA-6	Total/NA	Water	EPA 9034	349361
180-118348-7	WGWA-7	Total/NA	Water	EPA 9034	349361
180-118348-8	WGWA-18	Total/NA	Water	EPA 9034	349361
180-118348-9	WGWC-8	Total/NA	Water	EPA 9034	349361
180-118348-10	Dup-1	Total/NA	Water	EPA 9034	349361
180-118348-11	WGWC-16	Total/NA	Water	EPA 9034	349361
180-118348-12	WGWC-17	Total/NA	Water	EPA 9034	349361
180-118348-13	EB-1	Total/NA	Water	EPA 9034	349361
180-118348-14	EB-2	Total/NA	Water	EPA 9034	349361
180-118348-15	FB-1	Total/NA	Water	EPA 9034	349361
MB 180-349361/1-A	Method Blank	Total/NA	Water	EPA 9034	349361
LCS 180-349361/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349361
180-118348-1 MS	WGWA-1	Total/NA	Water	EPA 9034	349361
180-118348-1 MSD	WGWA-1	Total/NA	Water	EPA 9034	349361

#### Analysis Batch: 349551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	EPA 9034	349362
180-118398-2	WGWC-10	Total/NA	Water	EPA 9034	349362
180-118398-3	WGWC-11	Total/NA	Water	EPA 9034	349362
180-118398-4	WGWC-13	Total/NA	Water	EPA 9034	349362
180-118398-5	WGWC-14A	Total/NA	Water	EPA 9034	349362
180-118398-6	WGWC-9	Total/NA	Water	EPA 9034	349362
180-118398-7	WGWC-19	Total/NA	Water	EPA 9034	349362
180-118398-8	Dup-2	Total/NA	Water	EPA 9034	349362
MB 180-349362/1-A	Method Blank	Total/NA	Water	EPA 9034	349362

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

#### **General Chemistry (Continued)**

#### **Analysis Batch: 349551 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-349362/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349362

#### **Prep Batch: 349716**

Lab Sample ID 180-118398-9	Client Sample ID FB-2	Prep Type Total/NA	Matrix Water	Method 9030B	Prep Batch
180-118398-10	WGWC-12	Total/NA	Water	9030B	
MB 180-349716/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349716/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-118398-9 MS	FB-2	Total/NA	Water	9030B	
180-118398-9 MSD	FB-2	Total/NA	Water	9030B	

#### **Analysis Batch: 349759**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-2	WGWA-2	Total/NA	Water	SM 2540C	_
180-118348-3	WGWA-3	Total/NA	Water	SM 2540C	
180-118348-4	WGWA-4	Total/NA	Water	SM 2540C	
180-118348-5	WGWA-5	Total/NA	Water	SM 2540C	
180-118348-7	WGWA-7	Total/NA	Water	SM 2540C	
MB 180-349759/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349759/1	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 349871**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-9	FB-2	Total/NA	Water	EPA 9034	349716
180-118398-10	WGWC-12	Total/NA	Water	EPA 9034	349716
MB 180-349716/1-A	Method Blank	Total/NA	Water	EPA 9034	349716
LCS 180-349716/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349716
180-118398-9 MS	FB-2	Total/NA	Water	EPA 9034	349716
180-118398-9 MSD	FB-2	Total/NA	Water	EPA 9034	349716

#### **Analysis Batch: 349921**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-10	Dup-1	Total/NA	Water	SM 2540C	
180-118348-13	EB-1	Total/NA	Water	SM 2540C	
180-118348-14	EB-2	Total/NA	Water	SM 2540C	
180-118348-15	FB-1	Total/NA	Water	SM 2540C	
MB 180-349921/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349921/1	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 349926**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-2	WGWC-10	Total/NA	Water	SM 2540C	
180-118398-4	WGWC-13	Total/NA	Water	SM 2540C	
180-118398-5	WGWC-14A	Total/NA	Water	SM 2540C	
180-118398-7	WGWC-19	Total/NA	Water	SM 2540C	
180-118398-8	Dup-2	Total/NA	Water	SM 2540C	
MB 180-349926/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349926/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-118398-5 DU	WGWC-14A	Total/NA	Water	SM 2540C	

Eurofins TestAmerica, Pittsburgh

Job ID: 180-118348-1

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-1

#### **General Chemistry**

#### Analysis Batch: 349927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	SM 2540C	
180-118348-6	WGWA-6	Total/NA	Water	SM 2540C	
180-118348-9	WGWC-8	Total/NA	Water	SM 2540C	
180-118348-11	WGWC-16	Total/NA	Water	SM 2540C	
180-118348-12	WGWC-17	Total/NA	Water	SM 2540C	
MB 180-349927/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349927/1	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 350089**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	SM 2540C	
180-118398-3	WGWC-11	Total/NA	Water	SM 2540C	
180-118398-6	WGWC-9	Total/NA	Water	SM 2540C	
180-118398-9	FB-2	Total/NA	Water	SM 2540C	
180-118398-10	WGWC-12	Total/NA	Water	SM 2540C	
MB 180-350089/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-350089/1	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 350091**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-8	WGWA-18	Total/NA	Water	SM 2540C	
MB 180-350091/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-350091/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-118348-8 DU	WGWA-18	Total/NA	Water	SM 2540C	

#### Analysis Batch: 350921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	SM2320 B	
180-118348-2	WGWA-2	Total/NA	Water	SM2320 B	
180-118348-3	WGWA-3	Total/NA	Water	SM2320 B	
180-118348-4	WGWA-4	Total/NA	Water	SM2320 B	
180-118348-5	WGWA-5	Total/NA	Water	SM2320 B	
180-118348-6	WGWA-6	Total/NA	Water	SM2320 B	
180-118348-7	WGWA-7	Total/NA	Water	SM2320 B	
180-118348-8	WGWA-18	Total/NA	Water	SM2320 B	
180-118348-9	WGWC-8	Total/NA	Water	SM2320 B	
180-118348-10	Dup-1	Total/NA	Water	SM2320 B	
180-118348-11	WGWC-16	Total/NA	Water	SM2320 B	
180-118348-12	WGWC-17	Total/NA	Water	SM2320 B	
180-118348-13	EB-1	Total/NA	Water	SM2320 B	
180-118348-14	EB-2	Total/NA	Water	SM2320 B	
180-118398-2	WGWC-10	Total/NA	Water	SM2320 B	
180-118398-4	WGWC-13	Total/NA	Water	SM2320 B	
180-118398-5	WGWC-14A	Total/NA	Water	SM2320 B	
180-118398-7	WGWC-19	Total/NA	Water	SM2320 B	
180-118398-8	Dup-2	Total/NA	Water	SM2320 B	
MB 180-350921/100	Method Blank	Total/NA	Water	SM2320 B	
MB 180-350921/148	Method Blank	Total/NA	Water	SM2320 B	
MB 180-350921/171	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-350921/147	Lab Control Sample	Total/NA	Water	SM2320 B	
LCS 180-350921/170	Lab Control Sample	Total/NA	Water	SM2320 B	

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Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

#### **General Chemistry (Continued)**

#### **Analysis Batch: 350921 (Continued)**

Lab Sample ID LCS 180-350921/99	Client Sample ID Lab Control Sample	Prep Type Total/NA	Matrix Water	Method SM2320 B	Prep Batch
LLCS 180-350921/169	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-350921/98	Lab Control Sample	Total/NA	Water	SM2320 B	
180-118348-8 DU	WGWA-18	Total/NA	Water	SM2320 B	
180-118348-13 DU	EB-1	Total/NA	Water	SM2320 B	

#### **Analysis Batch: 350993**

Lab Sample ID 180-118348-15	Client Sample ID FB-1	Prep Type Total/NA	Matrix Water	Method SM2320 B	Prep Batch
MB 180-350993/87	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-350993/86	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-350993/85	Lab Control Sample	Total/NA	Water	SM2320 B	
180-118348-15 DU	FB-1	Total/NA	Water	SM2320 B	

#### **Analysis Batch: 351516**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	SM2320 B	_
180-118398-3	WGWC-11	Total/NA	Water	SM2320 B	
180-118398-6	WGWC-9	Total/NA	Water	SM2320 B	
180-118398-9	FB-2	Total/NA	Water	SM2320 B	
180-118398-10	WGWC-12	Total/NA	Water	SM2320 B	
MB 180-351516/6	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-351516/5	Lab Control Sample	Total/NA	Water	SM2320 B	
LLCS 180-351516/4	Lab Control Sample	Total/NA	Water	SM2320 B	

#### Field Service / Mobile Lab

#### Analysis Batch: 349457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	Field Sampling	
180-118348-2	WGWA-2	Total/NA	Water	Field Sampling	
180-118348-3	WGWA-3	Total/NA	Water	Field Sampling	
180-118348-4	WGWA-4	Total/NA	Water	Field Sampling	
180-118348-5	WGWA-5	Total/NA	Water	Field Sampling	
180-118348-6	WGWA-6	Total/NA	Water	Field Sampling	
180-118348-7	WGWA-7	Total/NA	Water	Field Sampling	
180-118348-8	WGWA-18	Total/NA	Water	Field Sampling	
180-118348-9	WGWC-8	Total/NA	Water	Field Sampling	
180-118348-11	WGWC-16	Total/NA	Water	Field Sampling	
180-118348-12	WGWC-17	Total/NA	Water	Field Sampling	
180-118398-1	WGWC-15	Total/NA	Water	Field Sampling	
180-118398-2	WGWC-10	Total/NA	Water	Field Sampling	
180-118398-3	WGWC-11	Total/NA	Water	Field Sampling	
180-118398-4	WGWC-13	Total/NA	Water	Field Sampling	
180-118398-5	WGWC-14A	Total/NA	Water	Field Sampling	
180-118398-6	WGWC-9	Total/NA	Water	Field Sampling	
180-118398-7	WGWC-19	Total/NA	Water	Field Sampling	
180-118398-10	WGWC-12	Total/NA	Water	Field Sampling	

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-118348-1

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# **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 America

Client Information	78	H.AJJ/	T. 60612	Lab PM: Brown,	Lab PM: Brown, Shali			Carrier Tracking No(s):	s):	.0
Client Contact: SCS Contacts	0	-465-	2998	E-Mail Shali.	brown@	E-Mail: shali.brown@eurofinset.com	et.com		Page:	2 51
Company: GA Power							nalvsis	Reguested	;# qor	
Address: 241 Raiph McGill Blvd SE	Due Date Requested:	eq:				Ë		_	Presen	Preservation Codes:
City: Atlanta	TAT Requested (days):	ays):				oal vii				
State, Zip: GA, 30308						Gileall				
Phone: 404-506-7116(Tel)	PO#: SCS10382606				(0		ibo2 ,r 7470):	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
Email: SCS Contacts	WO#				THE RESERVED		nuissa 7/0207 17,92	-	Chain of C	į
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922						toq ,98 Aqa) a ,0M,id,		tainer L-EDA L-EDA	TA W - pH 4-5  A Z - other (specify)
Site:	SSOW#:				A) as	A43)	nganes Metal Co,Pb		offer.	
Sample Identification	Sample Date	Sample	Sample Type (C=comp,		: beld Filtered MSM: mrone:	.pp III Metals (E :I, F, SO & TDS lajor lons - Bid	lagnesium, Ma lefected App IV B,As,Ba,Be,Cr, adium 226 & 2		otal Number o	Special Instructions/Note:
	$\bigvee$		<i>∞</i> ⊢	2	X	0	S a			App III and App IV Event
WEWA-1	3-11-21	0935	9		∑.	>	>		16. 5. Hq	75
WGW4-2	3-10-21	0855	Ŋ	Water	7	>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			11'
WGWA-3	3-10-21	1654	ŋ	Water	N		/		PH= 5,49	ЬМ
WGWA-4	3-10-21	1217	9	Water	N N	>	\ \ \			61.2
WGWA-S	3-10-21	1705	g	Water	NN	/	\ \ \		6 pH= 5	5.22
WGWA-6	3-(1-2)	1058	ŋ	Water	N N	>	/ /		6 pH= 743	1,43
WG-WH-7	3-10-21	1345	G	Water	N N	/	/ /		95'h =Hd 9	35
WGWA-18	3-10-21	1543	9	Water	S. S.	>	/			.80
WGWC-8	3-11-21	1212	9	Water	\ \ \	2	/			35
Dup-1	3-10-21		ŋ	Water	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	>	\ \ \		=Hd	
			ŋ	Water					=Hd	
Possible Hazard Identification  Non-Hazard — Flammable — Skin Irritant — Poison B	on B KUnknown	Ш	Radiological		Samp	le Dispe	sal ( A fee may b	eassessed if sampl	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	yer than 1 month)
					Speci	al Instruc	Special Instructions/QC Requirements	nents:	DIDA	MORITIS
inquished by:		Date:			Time:			Method of Shipment:	ment:	
A OF	Date/Time: 3-11-2/	160	45 6	Company	, R	Received by:		3/18	J Z /	Mediuos 1579
Kelingarished by: 3 / 0 /	Date/Time:	me.Cl	\	Company	ž Į	Received by:	May (	we water Date	Date/Time:	2 Company 4.2.t
- 1	Date/Time:			Company	Ž.	Received by:		Date	Date/Tir <del>fle.</del>	Company
Custody Seals Mact: Custody Seal No.: △ Yes △ No					ŏ	ooler Temp	Cooler Temperature(s) °C and Other Remarks:	r Remarks:		
										Ver: 01/16/2019

**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 America

Client Information	Sampler:	H. 400/	7.606le	Lab PM: Brown, Shali	Shali		Carrier Tracking No(s):	(s):	COC No:	
Client Contact: SCS Contacts	0	1 41	5998	E-Mail: Shali.bro	E-Mail: shali brown@eurofinset.com	finset.com			Page: 7	2
Company: GA Power						Analysis Requested	equested		Job #:	
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	ij.			1200	H			Preservation Codes	des:
City: Atlanta	TAT Requested (days):	ys):							A - HCL B - NaOH	M - Hexane N - None
State, Zip: GA, 30308	1								D - Nitric Acid E - NaHSO4	Q - Na2O4S Q - Na2SO3
Phone: 404-506-7116(Tel)	PO#: SCS10382606			(0	(30)	Total , n Sodi :(0747			F - MeOH G - Amchlor	R - Na2S203 S - H2SO4
Email: SCS Contacts	,# OM			N 10 8		alinity assiun 6020/ TT,9S		3.		i - i SP Douecanydrate U - Acetone V - MCAA
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922			<del>.</del> ЭД) ә		ate Alk se, Pot AGE) s AGE), Li,Moi,	-		K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#;			Sampl	(B) ,E	carbon nganes Metal 'Co,Pb		u03 j0	Other:	
Sample Identification	Sample Date	Sample	Sample Type (C=comp, oG=crap)	Matrix (W=water, iliter S=solid, O=waste/oil, o=waste/oil, o=waste/oil, o=o	Wickerm Mickels (I	71, F, SO & TDS Major lons - Bii Magnesium, Ma Defected App IV Sedium 226 & 2		sodmild leso	Special Number	Special Instructions/Note:
	X	17	1 02		/	5 1				App iii aila App IV Event
1-7M~MC-16	3-11-21	1347	ပ	Water 🗸	\ \ \	/			1, PH=5.21	
WG-WC-17	3-(1-7)	0)21	O	Water N	\ \ \ \	/ / /		1,70	3 pH= 5.96	
- 27 - 27	3-11-21	001	9	Water 闪	>	/ /			=Hd C	
下6-3	3-11-21	(355)	ŋ	Water $\rho$	> >	\ \ \ \ \ \ \ \			pH=	
T8-1	3-11-21	1030	9	Water N	\ \ \	\ \ \ \			-Hd	
			g	Water					=Hd	
			ŋ	Water					=Hd	
			9	Water					=Hd	
			9	Water				SONIA	=Hd	
			9	Water					=Hd	
			ŋ	Water					=Hd	
ant	Poison B X Unknown	Ш	] Radiological		Sample D	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Nont	e assessed if sam	ples are reta	ined longer than thive For	1 month) Months
Deliverable Requested: I, II, III, IV, Other (specify)					Special In	Special Instructions/QC Requirements:	ments:			
Empty Kit Relinquished by:		Date:			Time:		Method of Shipment:	ipment:		
	Date/Time: $3-(1-2)$	1645	Con	Company	Received by	No No.	3////S	Date/Time:	72	Company
Reinquished by:	Date/Time: /	17:0	Co Co	Company C	Received	3 Dalue	Wolfmo	Date/Time <sup>c</sup>	2-2	Company
	Date/Time:		Con	Company	Received by	) And bed	<u>D</u>	Date/Fime:	4.21	Company
Custody Seals Inter€: Custody Seal No.:  △ Yes △ No					Cooler	Cooler Temperature(s) °C and Other Remarks:	r Remarks:		2/10	
1)										Ver: 01/16/2019

Ver: 01/16/2019

Cooler Temperature(s) °C and Other Remarks:

eceived by: Received by

6000

Date/Time

0

Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

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

**Environment Testing** 

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+11nce=1007 ydrate Special Instructions/Note: App III and App IV Event M - Hexane N - None Months Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Month Preservation Codes 24 9 5.76 88 5.95 5.0 9 DH= 6.56 4 A - HCL B - NaOH # 記 い よ 180-118398 Chain of Custody 9 뮖 #Hd H 9 Total Number of conf lethod of Shipment Sarrier Tracking No(s) Analysis Requested Special Instructions/QC Requirements Radium 226 & 228 (SW-846 9315/9320) Lab PM:
Brown, Shali
E-Mail:
Shali brown@eurofinset.com TT,98,0M,Li,dq,0D,r,D,88,88,dd Magnesium, Manganese, Potassium, Sodium, Sulfide Detected App IV Metals (EPA 6020/7470): Major lons - Bicarbonate Alkalinity, Total Alkalinity, Iron, CI, F, SO & TDS (EPA 300 & SM 2540C) App III Metals (B, Ca) <u>></u> 2 Perform MS/MSD (Yes or No) Time: Field Filtered Sample (Yes or No) 7 Water Water Water Preservation Code Water Water Water Water Water Water Water Water Radiological (C=comp, Sample G=grab) 8065-04-CE Type ග G Ŋ ග G ഗ G G G ග G 1530 625 1353 Sample 15/6 187 12 1059 Time I 8 45 120 Date: Unknown TAT Requested (days): Due Date Requested: 100 PO#: SCS10382606 WO#: 12-21-8 Sample Date 3-11-21 12-21-8 3-11-2 3-11-21 12-21-8 3-12-21 3-11-21 12-21-5 3-11-21 Project #: 18019922 SSOW#: Poison B E E Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Jew C NOW Project Name: CCR - Plant Wansley Ash Pond Empty Kit Relinquished by: Address: 241 Ralph McGill Blvd SE アシーショ Client Information Sample Identification 11-2ML 2 1 404-506-7116(Tel) -7MJ - M SCS Contacts SCS Contacts elinquished by: MGWC 00 - 0 lient Contact: State, Zip: GA, 30308 Company: GA Power City: Atlanta 3

Custody Seal No.

Custody Seals Intage:

△ Yes △ No

Wgt: 58.40 LBS

SPECIAL: HANDLING: 0.00 TOTAL: 0.00 0.00 0.00

Part # 159469-484 RIT2 EXP 11/21

SVCS: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6580



**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 SUITE 900 NORCRESS, GA 30071 UNITED STATES US

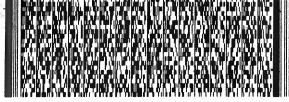
SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058

**REF: PLT WANSLEY ACCC** 



FedEx Express

3 of 6 MPS# 1516 9328 6580 3

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

Uncorrected temp Thermometer ID

PA-US

Initials



0.00

SVCS: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6605

**eurofins** 

**Environment Testing** 

**TestAmerica** 

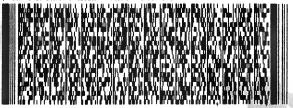
SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK **PITTSBURGH PA 15238** 

(412) 963 - 7068

REF: PLT WANSLEY ACCC



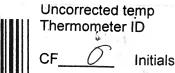
edEx Express

5 of 6 MPS# 1516 9328 6605

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

15238 PIT PA-US



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DV:

Ref: PLT wANSLEY ACCC Date: 11Mar21 Wgt: 58.40 LBS Dep:

SHIPPING: SPECIAL: HANDLING: 0.00 TOTAL:

0.00 0.00 0.00

Part # 159469-434 RIT2 EXP 11/21

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6579

eurofins

**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058 REF: PLT WANSLEY ACCC



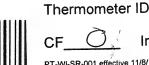
FedEx Express

2 of 6 MPS# 1516 9328 6579 1516 9328 6568

FRI - 12 MAR 4:30P STANDARD OVERNIGHT 0201

Uncorrected temp

15238



Initials

Ref: PLT wANSLEY ACCC Date: 11Mar21 Wgt: 58.40 LBS

SPECIAL: HANDLING: 0.00 TOTAL:

0.00 0.00 0.00

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6616

eurofins 🔆

**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058

**REF: PLT WANSLEY ACCC** 



**FedEx** Express

6 of 6 MPS# 1516 9328 6616 Mstr# 1516 9328 6568

FRI - 12 MAR 4:30P STANDARD OVERNIGHT 0201

Uncorrected temp Thermometer ID

15238 PIT PA-US





Initials

• Page 70 of 76

4/21/2021 (Rev. 1)

# Do Not Lift Using This Tag

Ref: PLT wansley ACCC Date: 11Mar21 Dep: Work: 59 40 7 Wgt: 58.40 LBS

SPECIAL: HANDLING: O.OO TOTAL:

0.00 0.00 0.00

DV:

Sycs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6590



**Environment Testing TestAmerica** 

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

(412) 963 - 7058

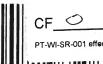
REF: PLT WANSLEY ACCC

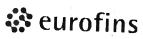
FedEx Express

4 of 6 MPS# 1516 9328 6590

STANDARD OVERNIGHT 0201

Uncorrected temp Thermometer ID





**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

REF: PLT WANSLEY ACCC



FedEx Express

1 of 6 TRK# 0201 1516 9328 6568 ## MASTER ##

STANDARD OVERNIGHT

15238

Uncorrected temp Thermometer ID

Initials

Page 72 of 76

4/21/2021 (Rev. 1)

# PA-US

PRIORITY OVERNIGH

SATURDAY 12:00

FedEx Saturday Delivery

**UO Not Lift Using This Tag** 

eurofins \*\*

**Environment Testing** 

**TestAmerica** 

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409

SC

(678) 966-9991

INS TESTING AMERICA ATL

NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409 RECIPIENT BILL SC (678) 966-9991 ATL ROFINS TESTING AMERICA IS REGENCY PARKUAY NW TE 900

**EUROFINS TESTAMERICA PITTSBURGH** SAMPLE RECIEVING SUITE 900 NORCROSS, GA 30071 UNITED STATES US

PITTSBURGH PA 15238 301 ALPHA DR. RIDC PARK

edEx

15238 P ## MASTER ##

Pári # 159469-434 RIT2 EXP 11/21

**Environment Testing** 

eurofins

Do Not Lift L & S

**TestAmerica** 

BILL RECIPIENT

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

PITTSBURGH PA 15238 412) 963-7058

SATURDAY 12:00P

2 of 3

PRIORITY OVERNIGHT 0201 Uncorrected temp Thermometer ID 1516 9328 6980

Mstr#

ပ Initials

SF

A-US

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

# Do Not Lift Using This Tag



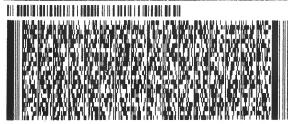
Envi Testa

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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



**FedEx** 



3 of 3 MPS# 1516 9328 6991 Mstr# 1516 9328 6970

SATURDAY 12:00P PRIORITY OVERNIGHT

Uncorrected temp Thermometer ID

15238

Initials

0201



Page 74 of 76

Job Number: 180-118348-1

Login Number: 118348

List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Answer	Comment
N/A	
True	
N/A	
	N/A True True True True True True True True

Job Number: 180-118348-1

Login Number: 118398

List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Question	Anguar	Commont
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	



### **Environment Testing America**

#### **ANALYTICAL REPORT**

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

Laboratory Job ID: 180-118348-2

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: 4/14/2021 6:26:38 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

## **Table of Contents**

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#### **Case Narrative**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-2

Job ID: 180-118348-2

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Rad needs ACC EDD

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#### **Definitions/Glossary**

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

#### Qualifiers

Rad

Qualifier **Qualifier Description** 

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

Percent Recovery %R **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** 

#### **Accreditation/Certification Summary**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Job ID: 180-118348-2

#### 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	<b>Expiration Date</b>
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	12-08-21
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
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Louisiana	NELAP	04080	06-30-21
Louisiana (DW)	State	LA011	12-31-21
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	04-01-22
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	03-01-22
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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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

#### **Sample Summary**

Client: Southern Company

180-118398-10

WGWC-12

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-118348-1	WGWA-1	Water	03/11/21 09:35	03/12/21 08:30	
180-118348-2	WGWA-2	Water	03/10/21 08:55	03/12/21 08:30	
180-118348-3	WGWA-3	Water	03/10/21 10:54	03/12/21 08:30	
180-118348-4	WGWA-4	Water	03/10/21 12:17	03/12/21 08:30	
180-118348-5	WGWA-5	Water	03/10/21 17:05	03/12/21 08:30	
180-118348-6	WGWA-6	Water	03/11/21 10:58	03/12/21 08:30	
180-118348-7	WGWA-7	Water	03/10/21 13:45	03/12/21 08:30	
180-118348-8	WGWA-18	Water	03/10/21 15:42	03/12/21 08:30	
180-118348-9	WGWC-8	Water	03/11/21 12:12	03/12/21 08:30	
180-118348-10	Dup-1	Water	03/10/21 00:00	03/12/21 08:30	
180-118348-11	WGWC-16	Water	03/11/21 13:47	03/12/21 08:30	
180-118348-12	WGWC-17	Water	03/11/21 12:10	03/12/21 08:30	
180-118348-13	EB-1	Water	03/11/21 11:00	03/12/21 08:30	
180-118348-14	EB-2	Water	03/11/21 13:55	03/12/21 08:30	
180-118348-15	FB-1	Water	03/11/21 10:30	03/12/21 08:30	
180-118398-1	WGWC-15	Water	03/12/21 11:57	03/13/21 09:00	
180-118398-2	WGWC-10	Water	03/11/21 16:25	03/13/21 09:00	
180-118398-3	WGWC-11	Water	03/12/21 11:54	03/13/21 09:00	
180-118398-4	WGWC-13	Water	03/11/21 13:53	03/13/21 09:00	
180-118398-5	WGWC-14A	Water	03/11/21 15:16	03/13/21 09:00	
180-118398-6	WGWC-9	Water	03/12/21 10:07	03/13/21 09:00	
180-118398-7	WGWC-19	Water	03/11/21 14:55	03/13/21 09:00	
180-118398-8	Dup-2	Water	03/11/21 00:00	03/13/21 09:00	
180-118398-9	FB-2	Water	03/12/21 12:05	03/13/21 09:00	

Water

03/12/21 10:59 03/13/21 09:00

Job ID: 180-118348-2

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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: 180-118348-2

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Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-118348-1 **Client Sample ID: WGWA-1** 

Date Collected: 03/11/21 09:35 Date Received: 03/12/21 08:30 **Matrix: Water** 

Job ID: 180-118348-2

	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			1000.76 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCBLUE		1			505214	04/09/21 17:13	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.76 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANG	E	1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: WGWA-2** Lab Sample ID: 180-118348-2

Date Collected: 03/10/21 08:55 **Matrix: Water** 

Date Received: 03/12/21 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			1000.60 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 17:14	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.60 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE		1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: WGWA-3** Lab Sample ID: 180-118348-3 Date Collected: 03/10/21 10:54

Date Received: 03/12/21 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			1000.70 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 17:14	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.70 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE		1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: WGWA-4** Lab Sample ID: 180-118348-4 **Matrix: Water** 

Date Collected: 03/10/21 12:17 Date Received: 03/12/21 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			1000.33 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis	9315		1			505214	04/09/21 17:14	AK	TAL SL
	Instrumen	t ID: GFPCBLUE								

Eurofins TestAmerica, Pittsburgh

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**Matrix: Water** 

4/14/2021

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: WGWA-4 Lab Sample ID: 180-118348-4

Date Collected: 03/10/21 12:17 Date Received: 03/12/21 08:30 Matrix: Water

Job ID: 180-118348-2

	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			1000.33 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANG	E	1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

Client Sample ID: WGWA-5

Date Collected: 03/10/21 17:05

Lab Sample ID: 180-118348-5

Matrix: Water

Date Collected: 03/10/21 17:05 Date Received: 03/12/21 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			1000.31 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCBLUE		1			505214	04/09/21 17:14	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.31 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	<u> </u>	1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

Client Sample ID: WGWA-6

Date Collected: 03/11/21 10:58

Lab Sample ID: 180-118348-6

Matrix: Water

Date Received: 03/12/21 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			1000.15 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:20	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.15 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			503373	03/26/21 12:37	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

Client Sample ID: WGWA-7 Lab Sample ID: 180-118348-7

Date Collected: 03/10/21 13:45 Date Received: 03/12/21 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			1000.34 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis	9315		1			505214	04/09/21 13:20	AK	TAL SL
	Instrumer	t ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.34 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis	9320		1			503373	03/26/21 12:38	ANW	TAL SL
	Instrumer	t ID: GFPCORANG	E							

Eurofins TestAmerica, Pittsburgh

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**Matrix: Water** 

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** 

Lab Sample ID: 180-118348-7 Date Collected: 03/10/21 13:45

**Matrix: Water** 

Job ID: 180-118348-2

Date Received: 03/12/21 08:30

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 505487 04/13/21 21:33 SCB TAL SL

**Client Sample ID: WGWA-18** 

Lab Sample ID: 180-118348-8 Date Collected: 03/10/21 15:42 **Matrix: Water** 

Date Received: 03/12/21 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			1000.62 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:17	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGI	≣	1			503373	03/26/21 12:38	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: WGWC-8** 

Lab Sample ID: 180-118348-9 Date Collected: 03/11/21 12:12 **Matrix: Water** 

Date Received: 03/12/21 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			1000.28 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumen	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:18	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.28 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumen	9320 nt ID: GFPCORANGE	Ē	1			503373	03/26/21 12:39	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: Dup-1** 

Lab Sample ID: 180-118348-10 Date Collected: 03/10/21 00:00 **Matrix: Water** 

Date Received: 03/12/21 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			1000.45 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:21	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.45 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			503373	03/26/21 12:39	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

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Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** 

Date Collected: 03/11/21 13:47 Date Received: 03/12/21 08:30

Client: Southern Company

Lab Sample ID: 180-118348-11

**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			1000.43 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCBLUE		1			505214	04/09/21 13:18	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.43 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANG	E	1			503373	03/26/21 12:39	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: WGWC-17** Lab Sample ID: 180-118348-12

Date Collected: 03/11/21 12:10 **Matrix: Water** 

Date Received: 03/12/21 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			1000.03 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumen	9315 t ID: GFPCBLUE		1			505214	04/09/21 13:18	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.03 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCORANGE		1			503373	03/26/21 12:39	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: EB-1** Lab Sample ID: 180-118348-13 Date Collected: 03/11/21 11:00

Date Received: 03/12/21 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			1000.75 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:19	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.75 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANGE	Ē	1			503373	03/26/21 12:39	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			505487	04/13/21 21:33	SCB	TAL SL

**Client Sample ID: EB-2** Lab Sample ID: 180-118348-14

Date Collected: 03/11/21 13:55 Date Received: 03/12/21 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			1000.10 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis	9315 t ID: GFPCBLUE		1			505214	04/09/21 13:19	AK	TAL SL

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**Matrix: Water** 

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**Matrix: Water** 

Project/Site: CCR - Plant Wansley Ash Pond

Lab Sample ID: 180-118348-14 Client Sample ID: EB-2

Date Collected: 03/11/21 13:55 Date Received: 03/12/21 08:30

**Matrix: Water** 

Job ID: 180-118348-2

	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			1000.10 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCORANG	BE .	1			503373	03/26/21 12:40	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505487	04/13/21 21:33	SCB	TAL SL

Lab Sample ID: 180-118348-15 Client Sample ID: FB-1 **Matrix: Water** 

Date Collected: 03/11/21 10:30 Date Received: 03/12/21 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			1000.19 mL	1.0 g	502473	03/18/21 16:07	JEC	TAL SL
Total/NA	Analysis Instrumen	9315 nt ID: GFPCBLUE		1			505214	04/09/21 13:19	AK	TAL SL
Total/NA	Prep	PrecSep_0			1000.19 mL	1.0 g	502475	03/18/21 16:38	JEC	TAL SL
Total/NA	Analysis Instrumen	9320 nt ID: GFPCORANGE	Ē	1			503373	03/26/21 12:40	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228		1			505487	04/13/21 21:33	SCB	TAL SL

Lab Sample ID: 180-118398-1 **Client Sample ID: WGWC-15 Matrix: Water** 

Date Collected: 03/12/21 11:57 Date Received: 03/13/21 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			1000.49 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505467	04/13/21 08:36	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.49 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:18	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

**Client Sample ID: WGWC-10** Lab Sample ID: 180-118398-2

Date Collected: 03/11/21 16:25 Date Received: 03/13/21 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	9315		1			505467	04/13/21 08:37	ANW	TAL SL
	Instrumen	t ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.22 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis	9320		1			503689	03/30/21 14:18	ANW	TAL SL
	Instrumen	t ID: GFPCBLUE								

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**Matrix: Water** 

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** Lab Sample ID: 180-118398-2

Date Collected: 03/11/21 16:25 Date Received: 03/13/21 09:00

**Matrix: Water** 

Job ID: 180-118348-2

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Factor Number or Analyzed Type Run **Amount Amount** Analyst Total/NA Analysis Ra226 Ra228 505625 04/14/21 15:15 SCB TAL SL

Client Sample ID: WGWC-11

Date Collected: 03/12/21 11:54 Date Received: 03/13/21 09:00

Lab Sample ID: 180-118398-3

**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			1000.66 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis	9315		1			505467	04/13/21 08:37	ANW	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1000.66 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis	9320		1			503689	03/30/21 14:19	ANW	TAL SL
	Instrumer	t ID: GFPCBLUE								
Total/NA	Analysis	Ra226_Ra228		1			505625	04/14/21 15:15	SCB	TAL SL
	Instrumer	nt ID: NOEQUIP								

**Client Sample ID: WGWC-13** 

Date Collected: 03/11/21 13:53

Date Received: 03/13/21 09:00

Lab Sample ID: 180-118398-4

**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			1000.16 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505467	04/13/21 08:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.16 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:19	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

Client Sample ID: WGWC-14A

Date Collected: 03/11/21 15:16

Date Received: 03/13/21 09:00

Lab Sample ID:	180-118398-5
	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			1000.41 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505467	04/13/21 08:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.41 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:19	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

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Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** 

Client: Southern Company

Date Collected: 03/12/21 10:07 Date Received: 03/13/21 09:00

Lab Sample ID: 180-118398-6

**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			1000.53 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCPURPLE	<u> </u>	1			505458	04/13/21 13:59	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.53 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:19	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

**Client Sample ID: WGWC-19** Lab Sample ID: 180-118398-7

Date Collected: 03/11/21 14:55 **Matrix: Water** 

Date Received: 03/13/21 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			1000.81 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCPURPLE		1			505458	04/13/21 13:59	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.81 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:19	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			505625	04/14/21 15:15	SCB	TAL SL

**Client Sample ID: Dup-2** Lab Sample ID: 180-118398-8 Date Collected: 03/11/21 00:00 **Matrix: Water** 

Date Received: 03/13/21 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			1000.66 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			505467	04/13/21 08:37	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.66 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			503689	03/30/21 14:20	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

**Client Sample ID: FB-2** Lab Sample ID: 180-118398-9

Date Collected: 03/12/21 12:05 **Matrix: Water** 

Date Received: 03/13/21 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			999.43 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis	9315		1			505467	04/13/21 08:38	ANW	TAL SL
	Instrumer	t ID: GFPCBLUE								

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#### **Lab Chronicle**

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: FB-2** Lab Sample ID: 180-118398-9

Date Collected: 03/12/21 12:05 **Matrix: Water** Date Received: 03/13/21 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			999.43 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCBLUE		1			503689	03/30/21 14:20	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			505625	04/14/21 15:15	SCB	TAL SL

Lab Sample ID: 180-118398-10 Client Sample ID: WGWC-12

Date Collected: 03/12/21 10:59 **Matrix: Water** Date Received: 03/13/21 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			1001.04 mL	1.0 g	502505	03/19/21 09:03	RBR	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCBLUE		1			505467	04/13/21 08:38	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1001.04 mL	1.0 g	502508	03/19/21 09:39	RBR	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCBLUE		1			503689	03/30/21 14:20	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1			505625	04/14/21 15:15	SCB	TAL SL

#### **Laboratory References:**

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

Instrument ID: NOEQUIP

#### **Analyst References:**

Lab: TAL SL

Batch Type: Prep

JEC = Julia Crossen

RBR = Rachael Ratcliff

Batch Type: Analysis

AK = Amanda Kraus

ANW = Aamber Woods

SCB = Sarah Bernsen

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Job ID: 180-118348-2

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** 

Lab Sample ID: 180-118348-1

**Matrix: Water** 

Date Collected: 03/11/21 09:35 Date Received: 03/12/21 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	0.0714	U	0.0632	0.0635	1.00	0.0938	pCi/L	03/18/21 16:07	04/09/21 17:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					03/18/21 16:07	04/09/21 17:13	1

Method: 9320 -	Radium-228 (	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0254	U	0.236	0.236	1.00	0.431	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	84.5		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra2	28 - Con	bined Ra	dium-226 a	nd Radium	<b>-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0460	U	0.244	0.244	2.00	0.431	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-2** 

Lab Sample ID: 180-118348-2 Date Collected: 03/10/21 08:55

**Matrix: Water** Date Received: 03/12/21 08:30

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0177	U	0.0623	0.0624	1.00	0.131	pCi/L	03/18/21 16:07	04/09/21 17:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					03/18/21 16:07	04/09/21 17:14	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	0.396	U	0.269	0.272	1.00	0.417	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	83.0		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra2	228 - Con	ibined Ra	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.378	U	0.276	0.279	2.00	0.417	pCi/L	_	04/13/21 21:33	1

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Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** 

Lab Sample ID: 180-118348-3

**Matrix: Water** 

Date Collected: 03/10/21 10:54 Date Received: 03/12/21 08:30

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	0.0385	0.0385	1.00	0.0956	pCi/L	03/18/21 16:07	04/09/21 17:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/18/21 16:07	04/09/21 17:14	1

	- "		Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.154	U	0.196	0.197	1.00	0.385	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	90.5		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.177	U	0.200	0.201	2.00	0.385	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** 

Date Collected: 03/10/21 12:17 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118348-4 **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	0.638		0.148	0.159	1.00	0.105	pCi/L	03/18/21 16:07	04/09/21 17:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/18/21 16:07	04/09/21 17:14	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	0.830		0.290	0.300	1.00	0.386	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	89.3		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra	228 - Con	ibined 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	1.47		0.326	0.340	2.00	0.386	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** 

Lab Sample ID: 180-118348-5 Date Collected: 03/10/21 17:05

**Matrix: Water** 

Date Received: 03/12/21 08:30

Method: 9315 - Rad	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0574	U	0.0602	0.0605	1.00	0.0951	pCi/L	03/18/21 16:07	04/09/21 17:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/18/21 16:07	04/09/21 17:14	1

Method: 9320 -	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0862	U	0.213	0.213	1.00	0.370	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	84.5		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra2	228 - Con	ibined 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	0.144	U	0.221	0.221	2.00	0.370	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** 

Lab Sample ID: 180-118348-6

**Matrix: Water** 

Date Collected: 03/11/21 10:58 Date Received: 03/12/21 08:30

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.65		0.323	0.461	1.00	0.106	pCi/L	03/18/21 16:07	04/09/21 13:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		40 - 110					03/18/21 16:07	04/09/21 13:20	1

Method: 9320 - F	(aulum-226 (	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.54		0.557	0.755	1.00	0.398	pCi/L	03/18/21 16:38	03/26/21 12:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.6		40 - 110					03/18/21 16:38	03/26/21 12:37	1
Y Carrier	85.2		40 - 110					03/18/21 16:38	03/26/21 12:37	1

Method: Ra226_Ra	228 - Con	nbined Rad	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	9.20		0.644	0.885	2.00	0.398	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** 

Lab Sample ID: 180-118348-7 Date Collected: 03/10/21 13:45 **Matrix: Water** 

Date Received: 03/12/21 08:30

Method: 9315 - R	Radium-226 (	GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.131		0.0882	0.0889	1.00	0.124	pCi/L	03/18/21 16:07	04/09/21 13:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/18/21 16:07	04/09/21 13:20	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	0.0935	U	0.228	0.229	1.00	0.395	pCi/L	03/18/21 16:38	03/26/21 12:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/18/21 16:38	03/26/21 12:38	1
Y Carrier	85.2		40 - 110					03/18/21 16:38	03/26/21 12:38	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.224	U	0.244	0.246	2.00	0.395	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWA-18** 

Date Collected: 03/10/21 15:42 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118348-8

**Matrix: Water** 

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.130		0.0781	0.0790	1.00	0.102	pCi/L	03/18/21 16:07	04/09/21 13:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					03/18/21 16:07	04/09/21 13:17	1

Method: 9320 - I	Radium-228 (	(GFPC)								
Analyte	Posult	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Analyte	Result	Qualifier	(20+/-)	(20+/-)		MIDC	UIIIL	Frepareu	Allalyzeu	DII Fac
Radium-228	0.0884	U	0.221	0.222	1.00	0.385	pCi/L	03/18/21 16:38	03/26/21 12:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					03/18/21 16:38	03/26/21 12:38	1
Y Carrier	83.4		40 - 110					03/18/21 16:38	03/26/21 12:38	1

Method: Ra226_Ra2	28 - Con	ibined Rac	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 + 228	0.218	U	0.234	0.236	2.00	0.385	pCi/L		04/13/21 21:33	1

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Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** 

Lab Sample ID: 180-118348-9

**Matrix: Water** 

Date Collected: 03/11/21 12:12 Date Received: 03/12/21 08:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.451		0.125	0.132	1.00	0.108	pCi/L	03/18/21 16:07	04/09/21 13:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					03/18/21 16:07	04/09/21 13:18	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.93		0.377	0.417	1.00	0.401	pCi/L	03/18/21 16:38	03/26/21 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					03/18/21 16:38	03/26/21 12:39	1
Y Carrier	85.6		40 - 110					03/18/21 16:38	03/26/21 12:39	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.38		0.397	0.437	2.00	0.401	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-118348-10

Matrix: Water

Date Collected: 03/10/21 00:00 Date Received: 03/12/21 08:30

Method: 9315 - R	adium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Amalusta	Danult	0			DI	MDC	11!4	Duamanad	A a l a d	Dil Faa
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0287	U	0.0650	0.0651	1.00	0.117	pCi/L	03/18/21 16:07	04/09/21 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					03/18/21 16:07	04/09/21 13:21	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0376	U	0.167	0.167	1.00	0.299	pCi/L	03/18/21 16:38	03/26/21 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					03/18/21 16:38	03/26/21 12:39	1
Y Carrier	89.3		40 - 110					03/18/21 16:38	03/26/21 12:39	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	0.0662	U	0.179	0.179	2.00	0.299	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** 

Lab Sample ID: 180-118348-11 Date Collected: 03/11/21 13:47

**Matrix: Water** 

Date Received: 03/12/21 08:30

adium-226 (	GFPC)								
	•	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.191		0.0820	0.0838	1.00	0.0863	pCi/L	03/18/21 16:07	04/09/21 13:18	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
90.9		40 - 110					03/18/21 16:07	04/09/21 13:18	1
	Result 0.191	%Yield Qualifier	Count Uncert.     Result   Qualifier   (2σ+/-)     0.191   0.0820     %Yield   Qualifier   Limits	Count Uncert. Uncert. Uncert.	Count Uncert. Uncert. Uncert.	Count   Total   Uncert.   Uncert.	Count   Total   Uncert.   Uncert.	Count Uncert. Uncert. Uncert.   Variety   V	Count Uncert. Uncert. Uncert.   Variety   V

Method: 9320 - F	Radium-228 (	GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.751		0.261	0.270	1.00	0.336	pCi/L	03/18/21 16:38	03/26/21 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/18/21 16:38	03/26/21 12:39	1
Y Carrier	83.4		40 - 110					03/18/21 16:38	03/26/21 12:39	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	0.942		0.274	0.283	2.00	0.336	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-17** 

Lab Sample ID: 180-118348-12

Date Collected: 03/11/21 12:10 **Matrix: Water** Date Received: 03/12/21 08:30

Method: 9315 - I	Radium-226 (	GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0722	U	0.0655	0.0658	1.00	0.0990	pCi/L	03/18/21 16:07	04/09/21 13:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					03/18/21 16:07	04/09/21 13:18	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	0.175	U	0.274	0.274	1.00	0.461	pCi/L	03/18/21 16:38	03/26/21 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					03/18/21 16:38	03/26/21 12:39	1
Y Carrier	84.9		40 - 110					03/18/21 16:38	03/26/21 12:39	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	0.247	U	0.282	0.282	2.00	0.461	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-1 Lab Sample ID: 180-118348-13

Date Collected: 03/11/21 11:00 Matrix: Water Date Received: 03/12/21 08:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0492	U	0.0772	0.0774	1.00	0.133	pCi/L	03/18/21 16:07	04/09/21 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					03/18/21 16:07	04/09/21 13:19	1

Method: 9320 - Ra	adium-228 (	GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0371	U	0.223	0.223	1.00	0.410	pCi/L	03/18/21 16:38	03/26/21 12:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.8		40 - 110					03/18/21 16:38	03/26/21 12:39	1
Y Carrier	82.6		40 - 110					03/18/21 16:38	03/26/21 12:39	1

Method: Ra226_Ra2	28 - Con	nbined Ra	dium-226 a	nd Radium	<b>-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0121	U	0.236	0.236	2.00	0.410	pCi/L		04/13/21 21:33	1

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Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: EB-2 Lab Sample ID: 180-118348-14

Date Collected: 03/11/21 13:55

Date Received: 03/12/21 08:30

Matrix: Water

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0236	U	0.0406	0.0406	1.00	0.101	pCi/L	03/18/21 16:07	04/09/21 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/18/21 16:07	04/09/21 13:19	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	-0.395		0.228	0.231	1.00	0.482			03/26/21 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/18/21 16:38	03/26/21 12:40	1
Y Carrier	83.7		40 - 110					03/18/21 16:38	03/26/21 12:40	1

_ Method: Ra226_Ra2	28 - Con	bined Ra	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.418	U	0.232	0.235	2.00	0.482	pCi/L		04/13/21 21:33	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: FB-1** 

Lab Sample ID: 180-118348-15 Date Collected: 03/11/21 10:30

**Matrix: Water** 

Method: 9315 - Radium-226	(GFPC)

Date Received: 03/12/21 08:30

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0248	U	0.0561	0.0561	1.00	0.103	pCi/L	03/18/21 16:07	04/09/21 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/18/21 16:07	04/09/21 13:19	1

Method: 9320 - Ra	adium-228 (	GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0673	U	0.212	0.212	1.00	0.398	pCi/L	03/18/21 16:38	03/26/21 12:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/18/21 16:38	03/26/21 12:40	1
Y Carrier	83.7		40 - 110					03/18/21 16:38	03/26/21 12:40	1

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

Welliou. Nazzo_Na	220 - 6011	ibilieu Ke	iuiuiii-220 a	iiu Nauiui	11-220					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226	-0.0426	U	0.219	0.219	2.00	0.398	pCi/L		04/13/21 21:33	1

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Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** 

Lab Sample ID: 180-118398-1 Date Collected: 03/12/21 11:57

**Matrix: Water** 

Date Received: 03/13/21 09:00

Method: 9315 - R	Radium-226 (	GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.225		0.0940	0.0962	1.00	0.0998	pCi/L	03/19/21 09:03	04/13/21 08:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/19/21 09:03	04/13/21 08:36	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	0.366	U	0.322	0.324	1.00	0.516	pCi/L	03/19/21 09:39	03/30/21 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/19/21 09:39	03/30/21 14:18	1
Y Carrier	82.2		40 - 110					03/19/21 09:39	03/30/21 14:18	1

Method: Ra226_Ra	228 - Con	ibined 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	0.591		0.335	0.338	2.00	0.516	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Lab Sample ID: 180-118398-2 Date Collected: 03/11/21 16:25

**Matrix: Water** 

Date Received: 03/13/21 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	0.0839	U	0.0687	0.0691	1.00	0.101	pCi/L	03/19/21 09:03	04/13/21 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/19/21 09:03	04/13/21 08:37	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	0.336	U	0.273	0.274	1.00	0.431	pCi/L	03/19/21 09:39	03/30/21 14:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					03/19/21 09:39	03/30/21 14:18	1
Y Carrier	84.1		40 - 110					03/19/21 09:39	03/30/21 14:18	1

Method: Ra226_Ra2	228 - Con	bined Ra	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	0.420	U	0.282	0.283	2.00	0.431	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** 

Date Collected: 03/12/21 11:54 Date Received: 03/13/21 09:00 Lab Sample ID: 180-118398-3

**Matrix: Water** 

adium-226 (	GFPC)								
	•	Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.0289	U	0.0618	0.0619	1.00	0.112	pCi/L	03/19/21 09:03	04/13/21 08:37	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
85.3		40 - 110					03/19/21 09:03	04/13/21 08:37	1
	Result	Result Qualifier 0.0289 U  WYield Qualifier 85.3	Count Uncert.	Count Uncert. Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   O.0289   U   O.0618   O.0619   O.	Count   Total   Uncert.   Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   O.0289   U   O.0618   O.0619   O.0112   PCi/L	Count Uncert. Uncert. Uncert.   Count Uncer	Count Uncert. Uncert. Uncert.   Variety   V

Method: 9320 -	Kaululli-220 (	GFFG)	Count Uncert.	Total Uncert.						
		_								
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0440	U	0.234	0.234	1.00	0.416	pCi/L	03/19/21 09:39	03/30/21 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.3		40 - 110					03/19/21 09:39	03/30/21 14:19	1
Y Carrier	85.6		40 - 110					03/19/21 09:39	03/30/21 14:19	1

Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	n- <b>22</b> 8					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0729	U	0.242	0.242	2.00	0.416	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** 

Lab Sample ID: 180-118398-4 Date Collected: 03/11/21 13:53

**Matrix: Water** 

Date Received: 03/13/21 09:00

Method: 9315 - R	adium-226 (	GFPC)								
		•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.181		0.0851	0.0867	1.00	0.0989	pCi/L	03/19/21 09:03	04/13/21 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					03/19/21 09:03	04/13/21 08:37	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	0.292	U	0.232	0.233	1.00	0.363	pCi/L	03/19/21 09:39	03/30/21 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.1		40 - 110					03/19/21 09:39	03/30/21 14:19	1
Y Carrier	84.5		40 - 110					03/19/21 09:39	03/30/21 14:19	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	0.473		0.247	0.249	2.00	0.363	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-118398-5 Date Collected: 03/11/21 15:16

**Matrix: Water** 

Method:	9315 -	Radium	-226	(GFPC)

Date Received: 03/13/21 09:00

Method: 9315 - Ra	iaium-226 (	GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.225		0.0970	0.0991	1.00	0.110	pCi/L	03/19/21 09:03	04/13/21 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					03/19/21 09:03	04/13/21 08:37	1

Method: 9320 - Radium-228	(GFPC)
mother cold italian 220	( ,

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.539		0.322	0.325	1.00	0.489	pCi/L	03/19/21 09:39	03/30/21 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					03/19/21 09:39	03/30/21 14:19	1
Y Carrier	83.4		40 - 110					03/19/21 09:39	03/30/21 14:19	1

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

motriou: rtuzzo_rtu		ibilioa ita	alain zzo a	iid itaaiaii					
			Count	Total					
			Uncert.	Uncert.					
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC Unit	it Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.764		0.336	0.340	2.00	0.489 pCi/	i/L	04/14/21 15:15	1

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Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** 

Lab Sample ID: 180-118398-6 Date Collected: 03/12/21 10:07

**Matrix: Water** 

Date Received: 03/13/21 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	0.105		0.0697	0.0703	1.00	0.0950	pCi/L	03/19/21 09:03	04/13/21 13:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/19/21 09:03	04/13/21 13:59	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	0.726		0.302	0.309	1.00	0.422	pCi/L	03/19/21 09:39	03/30/21 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/19/21 09:39	03/30/21 14:19	1
Y Carrier	84.9		40 - 110					03/19/21 09:39	03/30/21 14:19	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.831		0.310	0.317	2.00	0.422	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Lab Sample ID: 180-118398-7 Date Collected: 03/11/21 14:55

**Matrix: Water** 

Date Received: 03/13/21 09:00

Method: 9315 - R	adium-226 (	GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0113	U	0.0642	0.0642	1.00	0.123	pCi/L	03/19/21 09:03	04/13/21 13:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					03/19/21 09:03	04/13/21 13:59	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	0.275	U	0.261	0.262	1.00	0.420	pCi/L	03/19/21 09:39	03/30/21 14:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					03/19/21 09:39	03/30/21 14:19	1
Y Carrier	83.0		40 - 110					03/19/21 09:39	03/30/21 14:19	1

Method: Ra226_Ra2	228 - Com	ibined 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	0.286	U	0.269	0.270	2.00	0.420	pCi/L		04/14/21 15:15	1

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: Dup-2 Lab Sample ID: 180-118398-8

Date Collected: 03/11/21 00:00 Matrix: Water Date Received: 03/13/21 09:00

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00677	U	0.0475	0.0475	1.00	0.104	pCi/L	03/19/21 09:03	04/13/21 08:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/19/21 09:03	04/13/21 08:37	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	0.461		0.297	0.300	1.00	0.452	pCi/L	03/19/21 09:39	03/30/21 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.0		40 - 110					03/19/21 09:39	03/30/21 14:20	1
Y Carrier	84.5		40 - 110					03/19/21 09:39	03/30/21 14:20	1

Method: Ra226_Ra	228 - Con	nbined Rad	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	0.454		0.301	0.304	2.00	0.452	pCi/L		04/14/21 15:15	1

1:

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

Client Sample ID: FB-2 Lab Sample ID: 180-118398-9

. Matrix: Water

Date Collected: 03/12/21 12:05 Date Received: 03/13/21 09:00

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0202	U	0.0497	0.0497	1.00	0.0930	pCi/L	03/19/21 09:03	04/13/21 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					03/19/21 09:03	04/13/21 08:38	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	0.201	U	0.280	0.281	1.00	0.468	pCi/L	03/19/21 09:39	03/30/21 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					03/19/21 09:39	03/30/21 14:20	1
Y Carrier	85.6		40 - 110					03/19/21 09:39	03/30/21 14:20	1

Method: Ra226_Ra2	228 - Con	ibined 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	0.221	U	0.284	0.285	2.00	0.468	pCi/L		04/14/21 15:15	1

4/14/2021

Client: Southern Company Job ID: 180-118348-2

Project/Site: CCR - Plant Wansley Ash Pond

**Client Sample ID: WGWC-12** 

Lab Sample ID: 180-118398-10 Date Collected: 03/12/21 10:59

**Matrix: Water** 

Date Received: 03/13/21 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	0.119	U	0.0916	0.0923	1.00	0.136	pCi/L	03/19/21 09:03	04/13/21 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					03/19/21 09:03	04/13/21 08:38	1

Method: 9320 - I	Radium-228 (	(GFPC)								
Analyte	Posult	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	(20+/-)	(20+/-)	KL _	MIDC	Ullit	Frepareu	Allalyzeu	DII Fac
Radium-228	0.513	U	0.345	0.348	1.00	0.539	pCi/L	03/19/21 09:39	03/30/21 14:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.4		40 - 110					03/19/21 09:39	03/30/21 14:20	1
Y Carrier	87.5		40 - 110					03/19/21 09:39	03/30/21 14:20	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.633		0.357	0.360	2.00	0.539	pCi/L		04/14/21 15:15	1

10

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-502473/22-A

**Matrix: Water** 

**Matrix: Water** 

Analysis Batch: 505214

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-118348-2

Prep Batch: 502473

MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 -0.04078 U 0.0319 0.0321 1.00 0.0984 pCi/L 03/18/21 16:09 04/09/21 13:20

Total

MB MB

Qualifier Carrier %Yield Limits Prepared Analyzed Dil Fac Ba Carrier 82.6 40 - 110 03/18/21 16:09 04/09/21 13:20

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 502473

Analysis Batch: 505214 Total

Count

Spike LCS LCS %Rec. Uncert. Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 11.3 11.14 1.15 1.00 0.0989 pCi/L 98 75 - 125

LCS LCS

Lab Sample ID: LCS 160-502473/1-A

Carrier %Yield Qualifier Limits Ba Carrier 88.5 40 - 110

Lab Sample ID: 180-118348-12 DU Client Sample ID: WGWC-17

**Matrix: Water** 

Analysis Batch: 505214

Prep Type: Total/NA Prep Batch: 502473

Total

Sample Sample DU DU Uncert. **RER** Analyte Result Qual Result Qual  $(2\sigma + / -)$ RL **MDC** Unit RER Limit Radium-226 0.0722 U 0.01275 U 0.0466 1.00 0.0913 pCi/L 0.53

DU DU

Carrier %Yield Qualifier Limits Ba Carrier 84.7 40 - 110

Lab Sample ID: MB 160-502505/23-A Client Sample ID: Method Blank

**Matrix: Water** 

**Analysis Batch: 505467** 

Prep Type: Total/NA

**Prep Batch: 502505** 

Count Total MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac 03/19/21 09:03 04/13/21 08:39 Radium-226 -0.01676 U 0.0674 0.0674 1.00 0.141 pCi/L

> MΒ MB

Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac Ba Carrier 78.8 40 - 110 03/19/21 09:03 04/13/21 08:39

Lab Sample ID: LCS 160-502505/1-A

**Matrix: Water** 

**Analysis Batch: 505458** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 502505

Total **Spike** LCS LCS Uncert. %Rec. Analyte Added Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits Radium-226 11.3 11.28 1.00 0.149 pCi/L 75 - 125

Eurofins TestAmerica, Pittsburgh

Total

Uncert.

 $(2\sigma + / -)$ 

1.14

RL

1.00

Total

Uncert.

 $(2\sigma + / -)$ 

0.945

RL

**MDC** Unit

0.416 pCi/L

1.00

**MDC** Unit

0.114 pCi/L

LCSD LCSD

Result Qual

11.04

Count

Uncert.

 $(2\sigma + / -)$ 

0.266

LCS LCS

Result Qual

7.614

Total

Uncert.

 $(2\sigma + / -)$ 

0.268

**Spike** 

Added

11.3

Job ID: 180-118348-2

Prep Type: Total/NA

**Prep Batch: 502505** 

Prep Type: Total/NA

**Prep Batch: 502505** 

RER

0.10

Prep Type: Total/NA

Prep Batch: 502475

Prep Type: Total/NA Prep Batch: 502475

Analyzed

Analyzed

%Rec.

Limits

Client Sample ID: Method Blank

75 - 125

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Lab Control Sample Dup

%Rec

Prepared

Prepared

%Rec

104

03/18/21 16:38 03/26/21 12:41

03/18/21 16:38 03/26/21 12:41

03/18/21 16:38 03/26/21 12:41

Client Sample ID: Lab Control Sample

%Rec.

Limits

75 - 125

Client Sample ID: WGWC-17

97

Client: Southern Company

Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: LCS 160-502505/1-A

**Matrix: Water** 

**Analysis Batch: 505458** 

LCS LCS

Carrier **%Yield Qualifier** Limits Ba Carrier 68 5 40 - 110

Lab Sample ID: LCSD 160-502505/2-A

**Matrix: Water** 

Analyte

Radium-226

**Analysis Batch: 505458** 

LCSD LCSD

Carrier %Yield Qualifier Limits Ba Carrier 78.8 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-502475/22-A

**Matrix: Water** 

Analyte

Radium-228

**Analysis Batch: 503373** 

MB MB

MΒ ΜB Carrier %Yield Qualifier Limits

0.3596

Result Qualifier

Ba Carrier 82.6 40 - 110 Y Carrier 84.9 40 - 110

Lab Sample ID: LCS 160-502475/1-A

**Matrix: Water** 

Analyte

**Analysis Batch: 503373** 

Radium-228 7.33 LCS LCS

%Yield Qualifier Carrier I imits Ba Carrier 88.5 40 - 110 Y Carrier 84.5 40 - 110

Lab Sample ID: 180-118348-12 DU

**Matrix: Water** 

**Analysis Batch: 503373** 

DU DU Sample Sample Uncert.

**Spike** 

Added

Result Qual Analyte 0.175 U Radium-228

Result Qual  $(2\sigma + / -)$ 0.07724 U 0.220

Total

RL1.00

RL

1.00

**MDC** Unit 0.385 pCi/L

MDC Unit

0.403 pCi/L

Prep Type: Total/NA Prep Batch: 502475

0.20

RER

Eurofins TestAmerica, Pittsburgh

**RER** 

Limit

10

**RER** 

Limit

Dil Fac

Client: Southern Company Job ID: 180-118348-2 Project/Site: CCR - Plant Wansley Ash Pond

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

Lab Sample ID: 180-118348-12 DU **Client Sample ID: WGWC-17** 

Limits

**Matrix: Water** 

**Analysis Batch: 503373** 

DU DU

Carrier	%Yield	Qualifier	Limits
Ba Carrier	84.7		40 - 110
Y Carrier	82.6		40 - 110

Lab Sample ID: MB 160-502508/23-A **Client Sample ID: Method Blank** 

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 503689** 

Carrier

Analysis Batch: 503704

Prep Type: Total/NA

Prep Batch: 502508

Prep Type: Total/NA

Prep Batch: 502475

Total Count MB MB Uncert. Uncert. (2σ+/-) Analyte Result Qualifier  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.1766 U 0.276 0.277 1.00 0.466 pCi/L 03/19/21 09:39 03/30/21 14:22

MB MB %Yield Qualifier

Ba Carrier 78.8 40 - 110 40 - 110 Y Carrier 88.2

**Client Sample ID: Lab Control Sample** 

03/19/21 09:39 03/30/21 14:22

03/19/21 09:39 03/30/21 14:22

Prepared

Prep Type: Total/NA

Analyzed

Prep Batch: 502508

Dil Fac

Total LCS LCS %Rec. Spike Uncert. Analyte Added Result Qual  $(2\sigma + / -)$ RL %Rec Limits **MDC** Unit Radium-228 7.32 8.475 1.12 1.00 0.557 pCi/L 75 - 125 116

LCS LCS

Lab Sample ID: LCS 160-502508/1-A

Carrier	%Yield	Qualifier	Limits
Ba Carrier	68.5		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: LCSD 160-502508/2-A

**Matrix: Water** 

**Analysis Batch: 503689** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA **Prep Batch: 502508** 

**Spike** LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits RER Limit Radium-228 7.32 8.940 1.12 1.00 0.472 pCi/L 122 0.21

Total

LCSD LCSD %Yield Qualifier Carrier Limits 78.8 Ba Carrier 40 - 110 83.0 40 - 110 Y Carrier

Eurofins TestAmerica, Pittsburgh

# **QC Association Summary**

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

#### **Prep Batch: 502473**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	PrecSep-21	
180-118348-2	WGWA-2	Total/NA	Water	PrecSep-21	
180-118348-3	WGWA-3	Total/NA	Water	PrecSep-21	
180-118348-4	WGWA-4	Total/NA	Water	PrecSep-21	
180-118348-5	WGWA-5	Total/NA	Water	PrecSep-21	
180-118348-6	WGWA-6	Total/NA	Water	PrecSep-21	
180-118348-7	WGWA-7	Total/NA	Water	PrecSep-21	
180-118348-8	WGWA-18	Total/NA	Water	PrecSep-21	
180-118348-9	WGWC-8	Total/NA	Water	PrecSep-21	
180-118348-10	Dup-1	Total/NA	Water	PrecSep-21	
180-118348-11	WGWC-16	Total/NA	Water	PrecSep-21	
180-118348-12	WGWC-17	Total/NA	Water	PrecSep-21	
180-118348-13	EB-1	Total/NA	Water	PrecSep-21	
180-118348-14	EB-2	Total/NA	Water	PrecSep-21	
180-118348-15	FB-1	Total/NA	Water	PrecSep-21	
MB 160-502473/22-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-502473/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
180-118348-12 DU	WGWC-17	Total/NA	Water	PrecSep-21	

#### **Prep Batch: 502475**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118348-1	WGWA-1	Total/NA	Water	PrecSep_0	
180-118348-2	WGWA-2	Total/NA	Water	PrecSep_0	
180-118348-3	WGWA-3	Total/NA	Water	PrecSep_0	
180-118348-4	WGWA-4	Total/NA	Water	PrecSep_0	
180-118348-5	WGWA-5	Total/NA	Water	PrecSep_0	
180-118348-6	WGWA-6	Total/NA	Water	PrecSep_0	
180-118348-7	WGWA-7	Total/NA	Water	PrecSep_0	
180-118348-8	WGWA-18	Total/NA	Water	PrecSep_0	
180-118348-9	WGWC-8	Total/NA	Water	PrecSep_0	
180-118348-10	Dup-1	Total/NA	Water	PrecSep_0	
180-118348-11	WGWC-16	Total/NA	Water	PrecSep_0	
180-118348-12	WGWC-17	Total/NA	Water	PrecSep_0	
180-118348-13	EB-1	Total/NA	Water	PrecSep_0	
180-118348-14	EB-2	Total/NA	Water	PrecSep_0	
180-118348-15	FB-1	Total/NA	Water	PrecSep_0	
MB 160-502475/22-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-502475/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
180-118348-12 DU	WGWC-17	Total/NA	Water	PrecSep 0	

#### **Prep Batch: 502505**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	PrecSep-21	
180-118398-2	WGWC-10	Total/NA	Water	PrecSep-21	
180-118398-3	WGWC-11	Total/NA	Water	PrecSep-21	
180-118398-4	WGWC-13	Total/NA	Water	PrecSep-21	
180-118398-5	WGWC-14A	Total/NA	Water	PrecSep-21	
180-118398-6	WGWC-9	Total/NA	Water	PrecSep-21	
180-118398-7	WGWC-19	Total/NA	Water	PrecSep-21	
180-118398-8	Dup-2	Total/NA	Water	PrecSep-21	
180-118398-9	FB-2	Total/NA	Water	PrecSep-21	

Page 44 of 62

Job ID: 180-118348-2

# **QC Association Summary**

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

Rad (Continued)

#### Prep Batch: 502505 (Continued)

<b>Lab Sample ID</b> 180-118398-10	Client Sample ID WGWC-12	Prep Type Total/NA	Matrix Water	Method PrecSep-21	Prep Batch
MB 160-502505/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-502505/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-502505/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

#### Prep Batch: 502508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118398-1	WGWC-15	Total/NA	Water	PrecSep_0	
180-118398-2	WGWC-10	Total/NA	Water	PrecSep_0	
180-118398-3	WGWC-11	Total/NA	Water	PrecSep_0	
180-118398-4	WGWC-13	Total/NA	Water	PrecSep_0	
180-118398-5	WGWC-14A	Total/NA	Water	PrecSep_0	
180-118398-6	WGWC-9	Total/NA	Water	PrecSep_0	
180-118398-7	WGWC-19	Total/NA	Water	PrecSep_0	
180-118398-8	Dup-2	Total/NA	Water	PrecSep_0	
180-118398-9	FB-2	Total/NA	Water	PrecSep_0	
180-118398-10	WGWC-12	Total/NA	Water	PrecSep_0	
MB 160-502508/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-502508/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-502508/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Job ID: 180-118348-2

# **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 America

Client Information		/ H. Aid /	T. Goble	Lab PM: Brown	/ا ۱, Shali			Carrier Tracking No(s):	COC No:	
Culent contact: SCS Contacts	Phone: 770	-594-	5998	E-Mail shali.	orown@e	E-Mail: shali.brown@eurofinset.com	۶		Page: 1 of 7	
Company: GA Power							Analysis Requested	lested	Job #:	T
Address: 241 Ralph McGill Blvd SE	Due Date Requested:	:pa				ʻu		  -  -  -	Preservation Codes:	
City: Atlanta	TAT Requested (days):	ays):								
State, Zip: GA, 30308										
Phone: 404-506-7116(Tel)	PO#: SCS10382606				7 (0	Total , Total ,		180-118340		
Email: SCS Contacts	,#OM				and the same	yjinity assiun	IT,92		Custody	ydrate
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				ACTION DESCRIPTION	ate Alk se, Pot	,cM,iJ,		W-pH4-5  L-EDA Z-other (specify)	
Site:	SSOW#:				A) as	arbon:	Co,Pb,		Other:	
Sample Identification	Sample Date	Sample	Sample Type (C=comp,		: beld Filtered MSM: mohe 3) slasall III qq	:I, F, SO & TDS Najor lons - Bid Ragnesium, Ma Vetected App IV	.5,88,88,84,6 2 & 3 & 2 & 2	_	Mulan Special Instructions/Note:	
	$\bigvee$	$\bigvee$	57 ⊢		X	N N	s		App III and App IV Event	
WGWA-1	3-11-21	35,60	Ø	Water	\ \?	/	/		16.2 Hq	
WGW4-2	3-10-21	0855	ဟ	Water	7	>	>		Ha	
WCWA-3	3-10-21	1654	ŋ	Water	N	` `>	>		bh= 5,49	
WGWA-4	3-10-21	1317	O	Water	NN	^ /	\ \		6 PH= 7-19	
WGWA-5	3-10-21	1705	O	Water	N N /	/ /	\ \		L 5.22	
WGWA-6	3-(1-2)	1058	U	Water	NNV	\ \ \	>		PH= 793	
WGWA-7	3-10-21	1345	g	Water	NN	\ \ \	\ \ \		7517 =Hd 9	
WGWA-18	3-10-21	1542	ŋ	Water	N N	\ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		J PH= 5,80	T
WGWC-8	3-11-21	1212	g	Water	> N	2	>		6 PH=5,35	
Dup-1	3-10-21		ß	Water	NN	\ \ \	>		=Hd	
			g	Water					=Hd	
ant $\square$	Poison B Hunknown	_	Radiological		Sample	Disposal	A fee may be as	sessed if samples are re	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	Τ
i, III, IV, Other (specify)					Special	Instructions	Special Instructions/QC Requirements:	S:	Months	
Empty Kit Relinquished by:		Date:			Time:			Method of Shipment:		Τ
Relinquished by:	Date/Time: 3-11-7(	160	45 60	Company	Rec	Received by:	~	2/ Caterting	Company (	
Kelingarished by: 7	Date/Time: ///2_/	merch)	\	Company	Rec	Received by:	Mount	Ulety Date/Time;	THE COORDINATE	1
r	<b>ℓ /</b> Date/Time:		S	Company	Rec	Received by:		Date/Tir <del>fie.</del>	S S Company	د
Custody Seals l⊓tact: Custody Seal No.: △ Yes △ No					Coo	er Temperatu	Cooler Temperature(s) °C and Other Remarks:	narks:		
									Ver: 01/16/2019	

Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468	)	onain of custody Record	r cust	ody Ke	cord				Environment lesting America
Client Information	<b> </b> \	H. 4.1.) /-	GOLIE	Lab PM: Brown	Shali		Carrier Tracking No(s):	COC No:	
Client Contact: SCS Contacts	Phone: 770	1 .	5998	E-Mail:	E-Mail: shali brown@eurofinset.com	set com		Page: 7	2 1
Company: GA Power						Analysis	Analysis Requested	) 30p #:	
Address: 241 Ralph McGill Blvd SE	Due Date Request	ted:		Distant.	12.00	$\vdash$		Preservation Codes	
City: Atlanta	TAT Requested (days):	ıys):				ity, lro lfide		A - HCL B - NaOH	
State, Zip: GA, 30308						Alkalin um, Su		C - Zn Acetate D - Nitric Acid E - NaHSO4	U - AsNaO2 P - Na2O4S Q - Na2SO3
Phone: 404-506-7116(Tel)	PO#: SCS10382606				7 · 7 · 1 · 7 · 1 · 1 · 1 · 1 · 1 · 1 ·	ibo2 ,r		F - MeOH G - Amchlor	
Email: SCS Contacts	MO#.				(ON	nuises 7,0208 1T,98			
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922			30,7,6	JO Se	e, Pot 5 (EPA Li,Mo,		tainer K-EDTA L-EDA	W - pH 4-5 Z - other (specify)
Site:	SSOW#:			lumes	sp (Y	Metal Metal		oo toon Other:	
		0		Matrix (W=water, S=solid, O=waste/oil, dd	rtorm MS/M p III Metals (E F, SO & TDS	Jor lons - Bic gnesium, Ma tected App IV tes Ba,Be,Ct, dium 226 & 2		o Yedmuhler o	Special Instructions/Note:
Sample Identification	Sample Date	Time	G=grab)   BT=TISSUE, A=A Preservation Code	-	₽4 ×	PW SP			App III and App IV Event
WEWC-12	3-11-21	1347	O	Water	/2/2/	/		1 pH= 7 31	
WGUC-1	3-(1-2)	0)(7)	O	Water N	_	/ /		207=Hq &	
E8-1	12-11-21	8	ŋ	Water	2	>		불	
臣6-2	3-11-21	(355	ŋ	Water	1 20	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		= Hd	
T8-1	3-11-21	1030	O	Water N	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \		=Hd	
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			ŋ	Water				=Hd	
			Ŋ	Water				=Hd	
ant	Poison B X Unknown		Radiological		Sample Dis	sposal (A fee ma n To Client	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client Disposal By Lab Mont	ire retained longer thai	n 1 month) Months
I, III, IV, Other (specify)					Special Inst	Special Instructions/QC Requirements:	irements:		
Empty Kit Relinquished by:		Date:			Time:		Method of Shipment:		
Keimquished by C	) 2-11-21	1645	<u> </u>	Company	Received by	), i	3////2/ Date/Time	16:5%	Company
Kelinquished by Relinquished by	Date/Time:	17:00	2	Company	Received by Received by	Dan	w War Date/Time Z	12-31	Company
Custody Seals Infact: Custody Seal No.:	_				Cooler Te	Cooler Temperature(s) °C and Other Remarks:	Other Remarks:	8,3	
J									Ver: 01/16/2019

Ver: 01/16/2019

Cooler Temperature(s) °C and Other Remarks:

eceived by: Received by

7 

12-21-8

elinquished by:

6000 1530

Date/Time

0

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

SCS Contacts

Company: GA Power

lient Contact:

I

**Environment Testing** 

💸 eurofins

ydrate

M - Hexane N - None

9

Sarrier Tracking No(s)

Special Instructions/Note: Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Month Preservation Codes 2 £ . £ 5.76 5.0 5.95 DH= 6.56 A - HCL B - NaOH # 記 い よ 180-118398 Chain of Custody 9 뮖 =Hd H 9 Total Number of conf Analysis Requested Special Instructions/QC Requirements Radium 226 & 228 (SW-846 9315/9320) Lab PM:
Brown, Shali
E-Mail:
Shali brown@eurofinset.com TT,98,0M,Li,dq,0D,r,D,88,88,dd Major lons - Bicarbonate Alkalinity, Total Alkalinity, Iron, Magnesium, Manganese, Potassium, Sodium, Sulfide Defected App IV Metals (EPA 602017470): CI, F, SO & TDS (EPA 300 & SM 2540C) App III Metals (B, Ca) <u>></u>  $\geq$ Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) Water Water Water Preservation Code Water Water Water Water Water Water Water Water Radiological Sample (C=comp, G=grab) 8065-04-CE Type ග G Ŋ G G ഗ G G G ග G 625 1353 Sample 15/6 187 1205 12 1059 Time 8 45 Unknown TAT Requested (days): Due Date Requested: 10/ XOC PO#: SCS10382606 WO#: Sample Date 3-11-21 12-21-8 3-11-21 3-11-21 12-21-8 3-12-21 3-11-21 12-21-5 3-11-21 Project #: 18019922 SSOW#: Poison B E (F) Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) NOWC-1 Jew C Possible Hazard Identification Project Name: CCR - Plant Wansley Ash Pond Empty Kit Relinquished by: Address: 241 Ralph McGill Blvd SE マアノ・ファイ

App III and App IV Event

+11nce=1007

88

Months

lethod of Shipment

Time:

Date:

9

11-2ML

1

- M

3

NGWC-19

L- 901

2

MGWC

Sample Identification

404-506-7116(Tel)

State, Zip: GA, 30308

City: Atlanta

SCS Contacts

Custody Seals Intage:

△ Yes △ No

Custody Seal No.

Wgt: 58.40 LBS

SPECIAL: HANDLING: 0.00 TOTAL: 0.00 0.00

Part # 159469-484 RIT2 EXP 11/21

SVCS: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6580

**eurofins** 

**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 SUITE 900 NORCRESS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058

**REF: PLT WANSLEY ACCC** 



3 of 6 MPS# 1516 9328 6580 3

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

Uncorrected temp Thermometer ID

PA-US



0.00

SVCS: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6605

**eurofins** 

**Environment Testing TestAmerica** 

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK **PITTSBURGH PA 15238** 

(412) 963 - 7068

REF: PLT WANSLEY ACCC



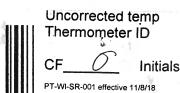
5 of 6 MPS# 1516 9328 6605

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

15238 PIT PA-US

**FedEx** Express





. Page 50 of 62

Wgt: 58.40 LBS

Ref: PLT wANSLEY ACCC Date: 11Mar21

Dep:

SHIPPING: SPECIAL:

HANDLING: 0.00 TOTAL:

0.00 0.00 0.00

Part # 159469-434 RIT2 EXP 11/21

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6579

DV:

eurofins

**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058 REF: PLT WANSLEY ACCC



FedEx Express

15238

2 of 6 MPS# 1516 9328 6579

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

1516 9328 6568

0201

Uncorrected temp Thermometer ID



Initials

Ref: PLT wANSLEY ACCC Date: 11Mar21 Dep: Wgt: 58.40 LBS

1.40 LBS SPECIAL:
HANDLING:
0.00 TOTAL:

0.00 0.00 0.00 0.00

54.

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6616

**eurofins** 

**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058

REF: PLT WANSLEY ACCC

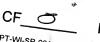




MPS# 1516 9328 6616 Mstr# 1516 9328 6568 FRI - 12 MAR 4:30P STANDARD OVERNIGHT

Uncorrected temp Thermometer ID

15238 PA-US PIT



19



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

### Do Not Lift Using This Tag

Ref: PLT wansLEY ACCC Date: 11Mar21 Dep: Work: 59 40 7 Wgt: 58.40 LBS

SPECIAL: HANDLING: O.OO TOTAL:

0.00 0.00 0.00

Sycs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6590

DV:



**Environment Testing TestAmerica** 

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991
GEORGE TAYLOR
EUROFINS TESTING AMERICA ATL SC
6215 REGENCY PARKWAY NW
SUITE 900
NORCROSS, GA 30071
UNITED STATES US SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

(412) 963 - 7058

REF: PLT WANSLEY ACCC



4 of 6 MPS# 1516 9328 6590 STANDARD OVERNIGHT

0201

Uncorrected temp Thermometer ID







### Do Not Lift Using This Tag



**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

REF: PLT WANSLEY ACCC



FedEx Express

1 of 6 TRK# 0201 1516 9328 6568 ## MASTER ##

STANDARD OVERNIGHT

Uncorrected temp

15238

Thermometer ID

Initials

Page 54 of 62

PRIORITY OVERNIGH

SATURDAY 12:00

## **UO Not Lift Using This Tag** FedEx Saturday Delivery

### eurofins \*\*

**Environment Testing TestAmerica** 

(678) 966-9991 ATL JROFINS TESTING AMERICA 115 REGENCY PARKWAY NW 117E 900

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409 **EUROFINS TESTAMERICA PITTSBURGH** RECIPIENT BILL SC SAMPLE RECIEVING 301 ALPHA DR. SUITE 900 NORCROSS, GA 30071 UNITED STATES US

PITTSBURGH PA 15238

RIDC PARK

edEx

15238 

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Pári # 159469-434 RIT2 EXP 11/21

Do Not Lift L & S

**Environment Testing** 

eurofins ::

**TestAmerica** 

BILL RECIPIENT CALL HALDR CALL SEGENCY PARKWAY NW SOO

NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409

SC

**EUROFINS TESTAMERICA PITTSBURGH** SAMPLE RECIEVING 301 ALPHA DR.

RIDC PARK

PITTSBURGH PA 15238 412) 963-7058

SATURDAY 12:00P PRIORITY OVERNIGHT 0201 Uncorrected temp Thermometer ID 1516 9328 6980 2 of 3 S

Mstr#

Initials

A-US

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

### Do Not Lift Using This Tag



Env<sup>i</sup> Testa E.639

5:00 0313

"2 EXP 11/21

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 12MAR21 ACTWGT: 60.05 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

412) 963 - 7058

REF: ACC



FedEx Express



3 of 3 MPS# 1516 9328 6991

0263 | 10 10 5020 055 Mstr# 1516 9328 6970

0201

XO AGCA
Uncorrected temp

15238

PA-US PI

SATURDAY 12:00P

PRIORITY OVERNIGHT

CF\_\_\_\_\_\_\_\_

Initials

-SR-001 effective 11/8/19

Thermometer ID

4

Page 56 of 62

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8

10

11

# eurofins Environment Testing America 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, Shali	ihali			Carrier Tracking No(s	(s)	COC No: 180-428867.1	
Client Contact: Shipping/Receiving	Phone			E-Mail: Shali Brown@Eurofinset.com	wn@E	Irofinse		State of Origin:		Page:	
Company:				Accr	editations	Required	iote):	ocolgia		Lage 1 of 2	
Address: Address: Inc.										180-118348-2	
nounces. 13715 Rider Trail North.	Due Date Requested 4/15/2021	÷					Analysis Requested	uested		Preservation Codes	Ιĕ
City.  Earth City	TAT Requested (days):	ıys):								A - HCL B - NaOH	M - Hexane N - None
State, Zip.: MO, 63045	T					pue g				C - Zn Acetate D - Nitric Acid E - NaHSO4	
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO#:		,	(0						F - MeOH G - Amchior	R - Na2S2O3 S - H2SO4
Email:	:#OM				_						
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922										W - pH 4-5 Z - other (specify)
Site: Wansley CCR	SSOW#:									of cont	
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample I Type (C=comp, oG=comp)	Matrix (W=water, S=solid, O=waster)	Perform MS/M 320_Ra228/Pre	315_Ra226/Pre 3226Ra228_GF	8SS-muibes			otal Mumber o	
	\ \	X	-1 (5)	×	-	4_					Special instructions/Note:
WGWA-1 (180-118348-1)	3/11/21	09:35 Fastern		Water	×	×				2	
WGWA-2 (180-118348-2)	3/10/21	08:55 Eastern		Water	×	×				2	
WGWA-3 (180-118348-3)	3/10/21	10:54 Eastern		Water	×	×				2	
WGWA-4 (180-118348-4)	3/10/21	12:17 Eastern		Water	×	×				2	
WGWA-5 (180-118348-5)	3/10/21	17:05 Eastern		Water	×	×				2	
WGWA-6 (180-118348-6)	3/11/21	10:58 Eastern		Water	×	×				2	
WGWA-7 (180-118348-7)	3/10/21	13:45 Eastern		Water	×	×				2	
WGWA-18 (180-118348-8)	3/10/21	15:42 Eastern		Water	×	×				2	
WGWC-8 (180-118348-9)	3/11/21	12:12 Eastern		Water	×	×				2	
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/tests/maintx being analyzed, the samples must be shipped back to the Eurofins TestAmerica altention in the State of Origin listed above for analysis/tests/maintx 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.	erica places the ownership rix being analyzed, the sa to date, return the signed	of method, and mples must be Chain of Custo	alyte & accreditation shipped back to the dy attesting to said	on compliance up the Eurofins Test to complicance to	on out su merica ta Eurofins	boratory (TestAme)	t laboratories. This sample or other instructions will be rica.	shipment is forward provided. Any char	ded under chain	-of-custody. If the labo	ratory does not currently prought to Eurofins
Possible Hazard Identification				0,	ample	Dispos	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	sessed if samp	les are reta	ined longer than	f month)
Deliverable Requested: I. II, III, IV, Other (specify)	Primary Deliverable Rank:	ble Rank: 2		0)	pecial I	Return 10 Client al Instructions/QC	Requirement	Disposal By Lab ents:	] A	Archive For	Months
Empty Kit Relinquished by:		Date:		Time:	i			Method of Shipment	ment		
Relinquished by:	Date/Time: / (0/2	1777 1	Com	Company CT	Recei	Received by:	FEDEX		Date/Time:		Company
Relinquished by: FED EX	Date/Time:		Company	pany		Received by:	Chollh.	\\ \frac{9}{2}\cdot\(\frac{1}2\cdot\(\frac{1}{2}\cdot\(\frac{1}2\cdot\(\fr	Date/Time:	2000	Company
	Date/Time:		Сотрапу	pany	Recei	Received by:		Dat	Date/Time:	2	Company
Custody Seals Intact: Custody Seal No.:					Coole	. Tempera	Cooler Temperature(s) °C and Other Remarks:	arks:			
						П					Ver: 11/01/2020
							-				

Ver: 11/01/2020

## 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 O - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate vote: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyze & accreditation compliance upon out subcontract laboratores. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently 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: Z - other (specify) U - Acetone V - MCAA M - Hexane W - pH 4-5 Preservation Codes A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - Machlor
G - Amethor
H - Ascorbic Acid 180-118348-2 180-428867. Page: Page 2 of 2 I - Ice J - DI Water K - EDTA L - EDA Total Number of containers 2 4 2 2 2 Carrier Tracking No(s) State of Origin Georgia **Analysis Requested** Accreditations Required (See note) Shali.Brown@Eurofinset.com × × × × × × Ra226Ra228\_GFPC/ Combined Radium-226 and 9315\_Ra226/PrecSep\_21 Radium 226 × × × × × × × × × × × × 320\_Ra228/PrecSep\_0 Radium 228 Lab PM: Brown, Shali Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) E-Mail: BT=Tissue, A=Air Preservation Code: (W=water, S=solid, O=waste/oil, Matrix Water Water Water Water Water Water Type (C=comp, Sample G=grab) Eastern 12:10 Eastern 11:00 Eastern 13:55 Eastern 10:30 Eastern Time astern (AT Requested (days): Due Date Requested: 4/15/2021 Sample Date 3/11/21 3/10/21 3/11/21 3/11/21 3/11/21 3/11/21 Project #: 18019922 SOW#: hone: %O^ Client Information (Sub Contract Lab) Sample Identification - Client ID (Lab ID) 314-298-8566(Tel) 314-298-8757(Fax) CCR - Plant Wansley Ash Pond TestAmerica Laboratories, Inc. WGWC-16 (180-118348-11) WGWC-17 (180-118348-12) 13715 Rider Trail North, Dup-1 (180-118348-10) EB-1 (180-118348-13) EB-2 (180-118348-14) FB-1 (180-118348-15) Shipping/Receiving Wansley CCR State, Zip: MO, 63045 Earth City

COMPANY Months Company Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Moni 2060 Date/Time: Date/Time: Method of Shipment Cooler Temperature(s) °C and Other Remarks. Received by.
Stute Wall for the Received by. Special Instructions/QC Requirements: FED EX Received by: Time: Company Primary Deliverable Rank: 2 Date: Date/Time Date/Time Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. ED EX Possible Hazard Identification Empty Kit Relinquished by: Custody Seals Intact: △ Yes △ No elinquished by: elinquished by: **Jnconfirmed** nquished by:

Login Number: 118348 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Grouton, Hutoon, Bobbio		
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	

4/14/2021

Login Number: 118348

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis

List Creation: 03/17/21 11:11 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.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Number: 118398 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	

Login Number: 118398

List Number: 2

Creator: Worthington, Sierra M

List Source: Eurofins TestAmerica, St. Louis List Creation: 03/17/21 11:11 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.	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	
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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, Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-118350-1

Client Project/Site: Plant Wansley Ash Pond PZ

Revision: 1

### For:

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

Attn: Kristen N Jurinko

Helman

Authorized for release by: 5/4/2021 5:59:51 PM

Shali Brown, Project Manager II (615)301-5031 Shali Brown @ Eurofinset.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: Plant Wansley Ash Pond PZ Laboratory Job ID: 180-118350-1

### **Table of Contents**

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### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative 180-118350-1

### Comments

050421 Revised rerpot to add Lithium to the following samples at client request: 180-118350-2 (PZ-25S), 180-118350-3 (PZ-26S). This report replaces the report previously issued on 032221.

### Receipt

The samples were received on 3/12/2021 8:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.5° C, 2.5° C, 2.5° C, 2.8° C, 2.9° C and 3.2° C.

### GC Semi VOA

Method 300.0: The method blank for analytical batch 180-349310 contained Sulfate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

### Metals

Method 6020B: The continuing calibration verification (CCV) associated with batch 349781 recovered above the upper control limit for boron. The samples associated with this CCV were non-detects 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.

### Field Service / Mobile Lab

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

### **General Chemistry**

Method SM 2540C: The following samples were analyzed outside of analytical holding time due to analyst error. PZ-23D (180-118350-1), PZ-25S (180-118350-2), PZ-26S (180-118350-3), PZ-26D (180-118350-4), PZ-28 (180-118350-5), EB-2 (180-118350-6), Dup-2 (180-118350-7) and FB-2 (180-118350-8).

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

Job ID: 180-118350-1

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### **Definitions/Glossary**

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

### Qualifiers

Qualifier **Qualifier Description** Compound was found in the blank and sample.

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** 

Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not 4

applicable.

В 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.

**General Chemistry** 

Qualifier **Qualifier Description** 

Sample was prepped or analyzed beyond the specified holding time

**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

Decision Level Concentration (Radiochemistry) DLC

**EDL** Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) 100 Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCI 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) Toxicity Equivalent Quotient (Dioxin) **TEQ** 

**TNTC** Too Numerous To Count

Eurofins TestAmerica, Pittsburgh

### **Accreditation/Certification Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

### 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	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-04-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	03-31-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
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	01-31-22
Wisconsin	State	998027800	08-31-21

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### **Sample Summary**

Client: Southern Company Project/Site: Plant Wansley Ash Pond PZ

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asse
180-118350-1	PZ-23D	Water	03/09/21 14:50	03/12/21 08:30	
180-118350-2	PZ-25S	Water	03/09/21 16:42	03/12/21 08:30	
180-118350-3	PZ-26S	Water	03/09/21 14:34	03/12/21 08:30	
180-118350-4	PZ-26D	Water	03/09/21 13:38	03/12/21 08:30	
180-118350-5	PZ-28	Water	03/09/21 15:33	03/12/21 08:30	
180-118350-6	EB-2	Water	03/09/21 17:25	03/12/21 08:30	
180-118350-7	Dup-2	Water	03/09/21 00:00	03/12/21 08:30	
180-118350-8	FB-2	Water	03/09/21 14:20	03/12/21 08:30	
180-118350-9	PZ-29D	Water	03/11/21 12:25	03/12/21 08:30	

Job ID: 180-118350-1

### **Method Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Method **Method Description** Protocol Laboratory TAL PIT EPA 300.0 R2.1 Anions, Ion Chromatography EPA **EPA 6020B** Metals (ICP/MS) SW846 **TAL PIT** Sulfide, Acid soluble and Insoluble (Titrimetric) EPA 9034 SW846 TAL PIT SM 2540C Solids, Total Dissolved (TDS) SM TAL PIT SM2320 B Alkalinity, Total SM18 TAL PIT Field Sampling EPA Field Sampling TAL PIT 3005A Preparation, Total Recoverable or Dissolved Metals SW846 TAL PIT 9030B Sulfide, Distillation (Acid Soluble and Insoluble) SW846 **TAL PIT** 

### **Protocol References:**

EPA = US Environmental Protection Agency

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

SM18 = "Standard Methods For The Examination Of Water And Wastewater", 18th Edition, 1992.

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: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-23D** 

Date Collected: 03/09/21 14:50 Date Received: 03/12/21 08:30 Lab Sample ID: 180-118350-1

**Matrix: Water** 

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 349310 03/13/21 12:39 SAT TAL PIT Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 349566 03/16/21 11:51 KEM TAL PIT Total Recoverable Analysis EPA 6020B 1 349781 03/17/21 13:14 RSK TAL PIT Instrument ID: A Total/NA Prep 9030B 50 mL 50 mL 349361 03/15/21 09:45 CMR TAL PIT Total/NA Analysis EPA 9034 349549 03/15/21 14:01 CMR TAL PIT 1 Instrument ID: NOEQUIP Total/NA Analysis SM 2540C 100 mL 100 mL 349924 03/18/21 18:17 KMM TAL PIT Instrument ID: NOEQUIP Total/NA Analysis SM2320 B 349682 03/17/21 02:31 REI TAL PIT Instrument ID: PCTITRATOR Total/NA Analysis Field Sampling 349443 03/09/21 14:50 FDS TAL PIT Instrument ID: NOEQUIP

**Client Sample ID: PZ-25S** 

Date Collected: 03/09/21 16:42

Date Received: 03/12/21 08:30

Lab Sample ID: 180-118350-2

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: INTEGRION		1			349310	03/13/21 11:45	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: A		1			349781	03/17/21 13:32	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349551	03/15/21 14:26	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			349682	03/17/21 02:59	REI	TAL PIT
Total/NA	Analysis Instrument	Field Sampling ID: NOEQUIP		1			349443	03/09/21 16:42	FDS	TAL PIT

Client Sample ID: PZ-26S

Date Collected: 03/09/21 14:34

Date Received: 03/12/21 08:30

Lab Sample ID: 180-118350-3

**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: INTEGRION		1			349310	03/13/21 11:10	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B		1			349781	03/17/21 13:35	RSK	TAL PIT

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### **Lab Chronicle**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-26S** 

Date Collected: 03/09/21 14:34 Date Received: 03/12/21 08:30

Lab Sample ID: 180-118350-3

**Matrix: Water** 

Job ID: 180-118350-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 at ID: NOEQUIP		1			349551	03/15/21 14:35	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B at ID: PCTITRATOR		1			349682	03/17/21 03:16	REI	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			349443	03/09/21 14:34	FDS	TAL PIT

Lab Sample ID: 180-118350-4 **Client Sample ID: PZ-26D** Date Collected: 03/09/21 13:38 **Matrix: Water** 

Date Received: 03/12/21 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: INTEGRION		1			349310	03/13/21 10:16	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			349781	03/17/21 13:39	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 at ID: NOEQUIP		1			349551	03/15/21 14:38	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B at ID: PCTITRATOR		1			349682	03/17/21 03:25	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			349443	03/09/21 13:38	FDS	TAL PIT

**Client Sample ID: PZ-28** Lab Sample ID: 180-118350-5 Date Collected: 03/09/21 15:33 **Matrix: Water** 

Date Received: 03/12/21 08:30

	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			349310	03/13/21 13:32	SAT	TAL PIT
	Instrument	ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			349781	03/17/21 13:50	RSK	TAL PIT
	Instrument	tID: A								
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis	EPA 9034		1			349551	03/15/21 14:40	CMR	TAL PIT
	Instrument	ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
	Instrument	ID: NOEQUIP								

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-28 Lab Sample ID: 180-118350-5

Date Collected: 03/09/21 15:33 Date Received: 03/12/21 08:30

**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	SM2320 B		1			349682	03/17/21 03:34	REI	TAL PIT
Total/NA	Analysis	Field Sampling		1			349443	03/09/21 15:33	FDS	TAL PIT
	Instrument I	D: NOEQUIP								

**Client Sample ID: EB-2** Lab Sample ID: 180-118350-6

Date Collected: 03/09/21 17:25 **Matrix: Water** 

Date Received: 03/12/21 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: INTEGRION		1			349310	03/13/21 09:40	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			349781	03/17/21 13:53	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumen	EPA 9034 t ID: NOEQUIP		1			349551	03/15/21 14:43	CMR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B		1			349682	03/17/21 03:43	REI	TAL PIT

**Client Sample ID: Dup-2** Lab Sample ID: 180-118350-7

Date Collected: 03/09/21 00:00

Date Received: 03/12/21 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: INTEGRION		1			349310	03/13/21 13:15	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: A		1			349781	03/17/21 13:57	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrument	EPA 9034 ID: NOEQUIP		1			349551	03/15/21 14:46	CMR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrument	SM2320 B ID: PCTITRATOR		1			349682	03/17/21 03:52	REI	TAL PIT

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**Matrix: Water** 

### **Lab Chronicle**

Client: Southern Company

Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: FB-2 Lab Sample ID: 180-118350-8

Date Collected: 03/09/21 14:20 Matrix: Water Date Received: 03/12/21 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 nt ID: INTEGRION		1			349310	03/13/21 09:58	SAT	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	349566	03/16/21 11:51	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: A		1			349781	03/17/21 14:01	RSK	TAL PIT
Total/NA	Prep	9030B			50 mL	50 mL	349362	03/15/21 09:45	CMR	TAL PIT
Total/NA	Analysis Instrumer	EPA 9034 nt ID: NOEQUIP		1			349551	03/15/21 14:55	CMR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C nt ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrumer	SM2320 B		1			349682	03/17/21 04:01	REI	TAL PIT

Client Sample ID: PZ-29D Lab Sample ID: 180-118350-9

Date Collected: 03/11/21 12:25 Matrix: Water

Date Received: 03/12/21 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 Instrumen	EPA 300.0 R2.1 t ID: INTEGRION		1			349310	03/13/21 12:57	SAT	TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B t ID: A		1	50 mL	50 mL	349566 349781	03/16/21 11:51 03/17/21 14:04		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumen	9030B EPA 9034 t ID: NOEQUIP		1	50 mL	50 mL	349362 349551	03/15/21 09:45 03/15/21 14:58		TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	349924	03/18/21 18:17	KMM	TAL PIT
Total/NA	Analysis Instrumen	SM2320 B t ID: PCTITRATOR		1			349682	03/17/21 04:10	REI	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			349443	03/11/21 12:25	FDS	TAL PIT

### **Laboratory References:**

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

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### **Lab Chronicle**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

### **Analyst References:**

Lab: TAL PIT

Batch Type: Prep

CMR = Carl Reagle

KEM = Kimberly Mahoney

Batch Type: Analysis

CMR = Carl Reagle

FDS = Sampler Field

KMM = Kendric Moore

REI = Rachel Innocenzi

RSK = Robert Kurtz

SAT = Stephen Tallam

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-23D Lab Sample ID: 180-118350-1 Date Collected: 03/09/21 14:50

**Matrix: Water** 

Date Received: 03/12/21 08:30

Method: EPA 300.0 R2.1 - Anions Analyte	•	romatograp Qualifier	o <mark>hy</mark> RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36	<u> </u>	1.0		mg/L	=	Ториго	03/13/21 12:39	1
Sulfate	100	D	1.0		mg/L			03/13/21 12:39	. 1
Fluoride	2.3		0.10	0.026	J			03/13/21 12:39	1
: Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.62		0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:14	1
Calcium	50		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:14	1
Iron	1.4		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:14	1
Magnesium	8.5		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:14	1
Manganese	2.4	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:14	1
Potassium	6.5		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:14	1
Sodium	35		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:14	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:01	1
Total Dissolved Solids	300	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	84		5.0	5.0	mg/L			03/17/21 02:31	1
Bicarbonate Alkalinity as CaCO3	84		5.0	5.0	mg/L			03/17/21 02:31	1
Method: Field Sampling - Field S	ampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.85				SU			03/09/21 14:50	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-25S** Lab Sample ID: 180-118350-2 Date Collected: 03/09/21 16:42

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			03/13/21 11:45	1
Sulfate	14	В	1.0	0.76	mg/L			03/13/21 11:45	1
Fluoride	0.092	J	0.10	0.026	mg/L			03/13/21 11:45	1
Method: EPA 6020B - Metals (IC	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.073	J	0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:32	1
Calcium	3.2		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:32	1
Iron	0.18		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:32	1
Magnesium	0.49	J	0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:32	1
Manganese	0.063	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:32	1
Potassium	2.4		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:32	1
Sodium	17		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:32	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/16/21 11:51	03/17/21 13:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:26	1
<b>Total Dissolved Solids</b>	79	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	45		5.0	5.0	mg/L			03/17/21 02:59	1
Bicarbonate Alkalinity as CaCO3	45		5.0	5.0	mg/L			03/17/21 02:59	1
- Method: Field Sampling - Field S	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.81				SU			03/09/21 16:42	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-26S** Lab Sample ID: 180-118350-3 Date Collected: 03/09/21 14:34

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		1.0	0.71	mg/L			03/13/21 11:10	1
Sulfate	140	В	1.0	0.76	mg/L			03/13/21 11:10	1
Fluoride	1.0		0.10	0.026	mg/L			03/13/21 11:10	1
Method: EPA 6020B - Metals (IC	CP/MS) - To	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.8		0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:35	1
Calcium	65		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:35	1
Iron	<0.020		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:35	1
Magnesium	17		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:35	1
Manganese	4.7	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:35	1
Potassium	13		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:35	1
Sodium	18		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:35	1
Lithium	0.0084		0.0050	0.0034	mg/L		03/16/21 11:51	03/17/21 13:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:35	1
Total Dissolved Solids	370	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			03/17/21 03:16	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			03/17/21 03:16	1
Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.29				SU			03/09/21 14:34	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-26D Lab Sample ID: 180-118350-4 Date Collected: 03/09/21 13:38

**Matrix: Water** 

03/09/21 13:38

Date Received: 03/12/21 08:30

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		1.0	0.71	mg/L			03/13/21 10:16	1
Sulfate	46	В	1.0	0.76	mg/L			03/13/21 10:16	1
Fluoride	0.26		0.10	0.026	mg/L			03/13/21 10:16	1
Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.22		0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:39	1
Calcium	17		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:39	1
Iron	0.76		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:39	1
Magnesium	2.7		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:39	1
Manganese	0.23	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:39	1
Potassium	2.3		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:39	1
Sodium	33		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:38	1
Total Dissolved Solids	180	н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	55		5.0	5.0	mg/L			03/17/21 03:25	1
Bicarbonate Alkalinity as CaCO3	55		5.0	5.0	mg/L			03/17/21 03:25	1
Method: Field Sampling - Field S	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-28 Lab Sample ID: 180-118350-5 Date Collected: 03/09/21 15:33

**Matrix: Water** 

Date Received: 03/12/21 08:30

Analyte		romatograp Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.71	mg/L			03/13/21 13:32	1
Sulfate	1.1	В	1.0	0.76	mg/L			03/13/21 13:32	1
Fluoride	<0.026		0.10	0.026	mg/L			03/13/21 13:32	1
Method: EPA 6020B - Metals (ICI	P/MS) - To	otal Recove	erable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.044	J	0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:50	1
Calcium	3.6		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:50	1
Iron	<0.020		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:50	1
Magnesium	1.0		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:50	1
Manganese	0.010	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:50	1
Potassium	1.6		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:50	1
Sodium	9.1		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:50	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:40	1
<b>Total Dissolved Solids</b>	53	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	39		5.0	5.0	mg/L			03/17/21 03:34	1
Bicarbonate Alkalinity as CaCO3	39		5.0	5.0	mg/L			03/17/21 03:34	1
Method: Field Sampling - Field S	Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.65				SU			03/09/21 15:33	

5/4/2021 (Rev. 1)

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: EB-2** Lab Sample ID: 180-118350-6 Date Collected: 03/09/21 17:25

**Matrix: Water** 

Date Received: 03/12/21 08:30

N	Method: EPA 300.0 R2.1 - Anions, Ion Chromatography									
Α	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C	Chloride	<0.71		1.0	0.71	mg/L			03/13/21 09:40	1
S	Sulfate	<0.76		1.0	0.76	mg/L			03/13/21 09:40	1
F	luoride	<0.026		0.10	0.026	mg/L			03/13/21 09:40	1

Analyte	Metals (ICP/MS) - To Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		03/16/21 11:51	03/17/21 13:53	1
Calcium	<0.13		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 13:53	1
Iron	<0.020		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 13:53	1
Magnesium	<0.083		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 13:53	1
Manganese	0.0014	JB	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 13:53	1
Potassium	<0.16		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 13:53	1
Sodium	<0.35		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 13:53	1

General Chemistry									
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:43	1
Total Dissolved Solids	<10 H	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			03/17/21 03:43	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			03/17/21 03:43	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: Dup-2** Lab Sample ID: 180-118350-7 Date Collected: 03/09/21 00:00

**Matrix: Water** 

03/16/21 11:51 03/17/21 13:57

03/16/21 11:51 03/17/21 13:57

03/16/21 11:51 03/17/21 13:57

03/16/21 11:51 03/17/21 13:57

Date Received: 03/12/21 08:30

Magnesium

Manganese

**Potassium** 

**Sodium** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		1.0	0.71	mg/L			03/13/21 13:15	1
Sulfate	47	В	1.0	0.76	mg/L			03/13/21 13:15	1
Fluoride	0.25		0.10	0.026	mg/L			03/13/21 13:15	1
Method: EPA 6020B	- Metals (ICP/MS) - To	otai Recovei	rabie						
	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Boron	•			MDL 0.039		D	Prepared 03/16/21 11:51	Analyzed 03/17/21 13:57	Dil Fac
Analyte	Result		RL	0.039		<u>D</u>			Dil Fac 1 1

0.50

0.50

0.50

0.0050

0.083 mg/L

0.16 mg/L

0.35 mg/L

0.00087 mg/L

2.8

2.4

**32** 

0.23 B

General Chemistry									
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	4.9		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:46	1
Total Dissolved Solids	170 I	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	54		5.0	5.0	mg/L			03/17/21 03:52	1
Bicarbonate Alkalinity as CaCO3	54		5.0	5.0	ma/L			03/17/21 03:52	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: FB-2** Lab Sample ID: 180-118350-8 Date Collected: 03/09/21 14:20

**Matrix: Water** 

Date Received: 03/12/21 08:30

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<0.71		1.0	0.71	mg/L			03/13/21 09:58	1		
Sulfate	<0.76		1.0	0.76	mg/L			03/13/21 09:58	1		
Fluoride	<0.026		0.10	0.026	mg/L			03/13/21 09:58	1		

Method: EPA 6020B - Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.041	J	0.080	0.039	mg/L		03/16/21 11:51	03/17/21 14:01	1
Calcium	<0.13		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 14:01	1
Iron	<0.020		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 14:01	1
Magnesium	<0.083		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 14:01	1
Manganese	0.00094	JB	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 14:01	1
Potassium	<0.16		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 14:01	1
Sodium	<0.35		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 14:01	1

General Chemistry									
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:55	1
Total Dissolved Solids	<10	Н	10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	<5.0		5.0	5.0	mg/L			03/17/21 04:01	1
Bicarbonate Alkalinity as CaCO3	<5.0		5.0	5.0	mg/L			03/17/21 04:01	1

Client: Southern Company Job ID: 180-118350-1

Project/Site: Plant Wansley Ash Pond PZ

Method: Field Sampling - Field Sampling

Analyte

рН

Result Qualifier

6.41

Client Sample ID: PZ-29D Lab Sample ID: 180-118350-9

**Matrix: Water** 

Prepared

Analyzed

03/11/21 12:25

Date Collected: 03/11/21 12:25 Date Received: 03/12/21 08:30

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		1.0	0.71	mg/L			03/13/21 12:57	1
Sulfate	11	В	1.0	0.76	mg/L			03/13/21 12:57	1
Fluoride	0.049	J	0.10	0.026	mg/L			03/13/21 12:57	1
Method: EPA 6020B - Metals (ICF	P/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		03/16/21 11:51	03/17/21 14:04	1
Calcium	41		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 14:04	1
Iron	23		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 14:04	1
Magnesium	4.6		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 14:04	1
Manganese	1.3	В	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 14:04	1
Potassium	10		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 14:04	1
Sodium	18		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 14:04	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<2.1		3.0	2.1	mg/L		03/15/21 09:45	03/15/21 14:58	1
Total Dissolved Solids	210		10	10	mg/L			03/18/21 18:17	1
Total Alkalinity as CaCO3 to pH 4.5	160		5.0	5.0	mg/L			03/17/21 04:10	1
Bicarbonate Alkalinity as CaCO3	160		5.0	5.0	mg/L			03/17/21 04:10	1

RL

MDL Unit

SU

Dil Fac

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

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

Sample Sample

Result Qualifier

Lab Sample ID: MB 180-349310/6

**Matrix: Water** 

Analysis Batch: 349310

Client Sample ID: Method Blank

Job ID: 180-118350-1

Prep Type: Total/NA

MB MB Analyte Result Qualifier RL **MDL** Unit Dil Fac D **Prepared** Analyzed Chloride < 0.71 1.0 0.71 mg/L 03/13/21 08:08 Sulfate 0.948 J 1.0 0.76 mg/L 03/13/21 08:08 Fluoride < 0.026 0.10 0.026 mg/L 03/13/21 08:08

Lab Sample ID: LCS 180-349310/5

**Matrix: Water** 

**Analysis Batch: 349310** 

**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 53.3 mg/L 107 90 - 110 50.0 Sulfate 53.2 mg/L 106 90 - 110 Fluoride 2.50 2.54 mg/L 102 90 - 110

Lab Sample ID: 180-118350-4 MS

**Matrix: Water** 

Analyte

**Analysis Batch: 349310** 

Client Sample ID: PZ-26D **Prep Type: Total/NA** 

Client Sample ID: PZ-26D

**Prep Type: Total/NA** 

%Rec.

Limits

D %Rec

Chloride 20 50.0 71.7 mg/L 104 90 - 110 Sulfate 46 B 50.0 95.3 mg/L 99 90 - 110 2.50 Fluoride 0.26 2.70 mg/L 98 90 - 110

MS MS

Result Qualifier

Unit

Spike

Added

Lab Sample ID: 180-118350-4 MSD

**Matrix: Water** 

Analysis Batch: 349310	0	0	0	MOD	MOD				0/ 🗖		DDD
Analysia	•	Sample Qualifier	Spike Added	_	MSD Qualifier	l lmi4	_	%Rec	%Rec.	RPD	RPD Limit
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	KPD	Limit
Chloride	20		50.0	71.4		mg/L		103	90 - 110	0	20
Sulfate	46	В	50.0	96.4		mg/L		101	90 - 110	1	20
Fluoride	0.26		2.50	2.71		mg/L		98	90 - 110	0	20

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

Lab Sample ID: MB 180-349566/1-A

**Matrix: Water** 

**Analysis Batch: 349781** 

**Client Sample ID: Method Blank Prep Type: Total Recoverable** Prep Batch: 349566

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039	^+	0.080	0.039	mg/L		03/16/21 11:51	03/17/21 12:48	1
Calcium	<0.13		0.50	0.13	mg/L		03/16/21 11:51	03/17/21 12:48	1
Iron	<0.020		0.050	0.020	mg/L		03/16/21 11:51	03/17/21 12:48	1
Magnesium	<0.083		0.50	0.083	mg/L		03/16/21 11:51	03/17/21 12:48	1
Manganese	0.00148	J	0.0050	0.00087	mg/L		03/16/21 11:51	03/17/21 12:48	1
Potassium	<0.16		0.50	0.16	mg/L		03/16/21 11:51	03/17/21 12:48	1
Sodium	<0.35		0.50	0.35	mg/L		03/16/21 11:51	03/17/21 12:48	1
Lithium	<0.0034		0.0050	0.0034	mg/L		03/16/21 11:51	03/17/21 12:48	1

Eurofins TestAmerica, Pittsburgh

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

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

Lab Sample ID: LCS 180-349566/2-A

**Matrix: Water** 

Analysis Batch: 349781

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

**Prep Batch: 349566** 

Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
1.25	1.19		mg/L		95	80 - 120	
25.0	27.0		mg/L		108	80 - 120	
5.00	5.19		mg/L		104	80 - 120	
25.0	25.3		mg/L		101	80 - 120	
0.500	0.517		mg/L		103	80 - 120	
25.0	24.7		mg/L		99	80 - 120	
25.0	25.6		mg/L		102	80 - 120	
0.500	0.500		mg/L		100	80 - 120	
	Added 1.25 25.0 5.00 25.0 0.500 25.0 25.0 25.0	Added         Result           1.25         1.19           25.0         27.0           5.00         5.19           25.0         25.3           0.500         0.517           25.0         24.7           25.0         25.6	Added         Result         Qualifier           1.25         1.19           25.0         27.0           5.00         5.19           25.0         25.3           0.500         0.517           25.0         24.7           25.0         25.6	Added         Result         Qualifier         Unit           1.25         1.19         mg/L           25.0         27.0         mg/L           5.00         5.19         mg/L           25.0         25.3         mg/L           0.500         0.517         mg/L           25.0         24.7         mg/L           25.0         25.6         mg/L	Added         Result         Qualifier         Unit         D           1.25         1.19         mg/L         mg/L           25.0         27.0         mg/L         mg/L           5.00         5.19         mg/L         mg/L           25.0         25.3         mg/L         mg/L           25.0         0.517         mg/L         mg/L           25.0         24.7         mg/L         mg/L           25.0         25.6         mg/L	Added         Result         Qualifier         Unit         D         %Rec           1.25         1.19         mg/L         95           25.0         27.0         mg/L         108           5.00         5.19         mg/L         104           25.0         25.3         mg/L         101           0.500         0.517         mg/L         103           25.0         24.7         mg/L         99           25.0         25.6         mg/L         102	Added         Result         Qualifier         Unit         D         %Rec         Limits           1.25         1.19         mg/L         95         80 - 120           25.0         27.0         mg/L         108         80 - 120           5.00         5.19         mg/L         104         80 - 120           25.0         25.3         mg/L         101         80 - 120           0.500         0.517         mg/L         103         80 - 120           25.0         24.7         mg/L         99         80 - 120           25.0         25.6         mg/L         102         80 - 120

Lab Sample ID: 180-118350-1 MS

**Matrix: Water** 

**Analysis Batch: 349781** 

Client Sample ID: PZ-23D **Prep Type: Total Recoverable** 

**Prep Batch: 349566** 

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier D %Rec Limits Analyte Unit Boron 0.62 1.25 1.76 91 75 - 125 mg/L 25.0 Calcium 50 76.6 mg/L 106 75 - 1251.4 5.00 6.59 mg/L 103 75 - 125 Iron 8.5 25.0 33.3 99 75 - 125 Magnesium mg/L Manganese 2.4 0.500 2.90 4 99 75 - 125 mg/L 30.7 Potassium 25.0 97 6.5 mg/L 75 - 125 Sodium 35 25.0 59.6 mg/L 99 75 - 125 Lithium 0.048 0.500 0.532 75 - 125 mg/L 97

Lab Sample ID: 180-118350-1 MSD

**Matrix: Water** 

**Analysis Batch: 349781** 

Client Sample ID: PZ-23D **Prep Type: Total Recoverable** 

Prep Batch: 349566

Spike MSD MSD %Rec. **RPD** Sample Sample Limit Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD 0.62 97 20 Boron 1.25 1.83 75 - 125 mg/L Calcium 50 25.0 77.3 108 75 - 125 20 mg/L 5.00 20 Iron 1.4 6 61 mg/L 103 75 - 125 O Magnesium 8.5 25.0 33.6 mg/L 100 75 - 125 20 Manganese 2.4 B 0.500 2.92 4 mg/L 102 75 - 125 n 20 Potassium 6.5 25.0 30.6 mg/L 97 75 - 125 O 20 Sodium 35 25.0 60.5 mg/L 103 75 - 125 2 20 0.500 Lithium 0.048 0.543 mg/L 99 75 - 125 2 20

## Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

MD MD

Lab Sample ID: MB 180-349361/1-A

**Matrix: Water** 

Analysis Batch: 349549

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

**Prep Batch: 349361** 

Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Sulfide	<2.1	3.0	2.1 mg/L	03/15/21 09:45	03/15/21 13:05	1

Eurofins TestAmerica, Pittsburgh

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 180-349361/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Water** 

Prep Type: Total/NA **Prep Batch: 349361** Analysis Batch: 349549 Spike LCS LCS %Rec.

Added Result Qualifier Limits Analyte Unit D %Rec 12.7 Sulfide 11.2 mg/L 88 85 - 115

Lab Sample ID: MB 180-349362/1-A Client Sample ID: Method Blank

**Matrix: Water** 

**Analysis Batch: 349551** MB MB

Prep Type: Total/NA

mg/L

**Prep Batch: 349362** 

**Prep Type: Total/NA** 

Client Sample ID: PZ-25S

85 - 115

Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Analyte 3.0 2.1 mg/L 03/15/21 09:45 03/15/21 14:20 Sulfide <21

Lab Sample ID: LCS 180-349362/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349551** 

**Prep Batch: 349362** 

12.1

Spike LCS LCS %Rec. Added Result Qualifier Limits Analyte Unit D %Rec

12.7

Lab Sample ID: 180-118350-2 MS Client Sample ID: PZ-25S

**Matrix: Water** 

Sulfide

**Analysis Batch: 349551** 

**Prep Batch: 349362** Spike MS MS %Rec. Sample Sample

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Sulfide 12.7 10.6 75 - 125 <2.1 mg/L

Lab Sample ID: 180-118350-2 MSD

**Matrix: Water** 

Prep Type: Total/NA Analysis Batch: 349551 **Prep Batch: 349362** MSD MSD Sample Sample Spike %Rec. **RPD** Analyte Result Qualifier Added Limits Result Qualifier Unit %Rec Limit Sulfide <2.1 12.7 11.0 87 75 - 125 mg/L 20

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

Lab Sample ID: MB 180-349924/2 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349924

MR MR **MDL** Unit Analyte Result Qualifier RL Prepared Analyzed Dil Fac 10 mg/L 10 03/18/21 18:17 **Total Dissolved Solids** <10

Lab Sample ID: LCS 180-349924/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 349924** 

LCS LCS Spike %Rec. Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 457 422 mg/L 92 80 - 120

Eurofins TestAmerica, Pittsburgh

5/4/2021 (Rev. 1)

Project/Site: Plant Wansley Ash Pond PZ

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

Lab Sample ID: 180-118350-7 DU **Client Sample ID: Dup-2** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349924

DU DU RPD Sample Sample Analyte **Result Qualifier** Result Qualifier Unit D RPD Limit Total Dissolved Solids 170 H 182 mg/L 10

Method: SM2320 B - Alkalinity, Total

Lab Sample ID: MB 180-349682/54 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 349682

	MR MR						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	<5.0	5.0	5.0 mg/L			03/17/21 01:27	1
Bicarbonate Alkalinity as CaCO3	<5.0	5.0	5.0 mg/L			03/17/21 01:27	1

**Client Sample ID: Lab Control Sample** Lab Sample ID: LCS 180-349682/53 **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349682** 

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits 250 Total Alkalinity as CaCO3 to pH 230 mg/L 92 90 - 110 4.5

Lab Sample ID: 180-118350-2 DU Client Sample ID: PZ-25S **Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 349682** 

	Sample	Sample	DU	DU				RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D	RPD	Limit
Total Alkalinity as CaCO3 to pH	45		39.4		mg/L		 14	20
4.5 Bicarbonate Alkalinity as CaCO3	45		39.4		mg/L		14	20

Job ID: 180-118350-1

# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

## HPLC/IC

## Analysis Batch: 349310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total/NA	Water	EPA 300.0 R2.1	
180-118350-2	PZ-25S	Total/NA	Water	EPA 300.0 R2.1	
180-118350-3	PZ-26S	Total/NA	Water	EPA 300.0 R2.1	
180-118350-4	PZ-26D	Total/NA	Water	EPA 300.0 R2.1	
180-118350-5	PZ-28	Total/NA	Water	EPA 300.0 R2.1	
180-118350-6	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-118350-7	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-118350-8	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-118350-9	PZ-29D	Total/NA	Water	EPA 300.0 R2.1	
MB 180-349310/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-349310/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-118350-4 MS	PZ-26D	Total/NA	Water	EPA 300.0 R2.1	
180-118350-4 MSD	PZ-26D	Total/NA	Water	EPA 300.0 R2.1	

## Metals

## **Prep Batch: 349566**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total Recoverable	Water	3005A	<del>_</del>
180-118350-2	PZ-25S	Total Recoverable	Water	3005A	
180-118350-3	PZ-26S	Total Recoverable	Water	3005A	
180-118350-4	PZ-26D	Total Recoverable	Water	3005A	
180-118350-5	PZ-28	Total Recoverable	Water	3005A	
180-118350-6	EB-2	Total Recoverable	Water	3005A	
180-118350-7	Dup-2	Total Recoverable	Water	3005A	
180-118350-8	FB-2	Total Recoverable	Water	3005A	
180-118350-9	PZ-29D	Total Recoverable	Water	3005A	
MB 180-349566/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-349566/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-118350-1 MS	PZ-23D	Total Recoverable	Water	3005A	
180-118350-1 MSD	PZ-23D	Total Recoverable	Water	3005A	

## **Analysis Batch: 349781**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total Recoverable	Water	EPA 6020B	349566
180-118350-2	PZ-25S	Total Recoverable	Water	EPA 6020B	349566
180-118350-3	PZ-26S	Total Recoverable	Water	EPA 6020B	349566
180-118350-4	PZ-26D	Total Recoverable	Water	EPA 6020B	349566
180-118350-5	PZ-28	Total Recoverable	Water	EPA 6020B	349566
180-118350-6	EB-2	Total Recoverable	Water	EPA 6020B	349566
180-118350-7	Dup-2	Total Recoverable	Water	EPA 6020B	349566
180-118350-8	FB-2	Total Recoverable	Water	EPA 6020B	349566
180-118350-9	PZ-29D	Total Recoverable	Water	EPA 6020B	349566
MB 180-349566/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	349566
LCS 180-349566/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	349566
180-118350-1 MS	PZ-23D	Total Recoverable	Water	EPA 6020B	349566
180-118350-1 MSD	PZ-23D	Total Recoverable	Water	EPA 6020B	349566

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Job ID: 180-118350-1

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# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

## **General Chemistry**

## **Prep Batch: 349361**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total/NA	Water	9030B	
MB 180-349361/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349361/2-A	Lab Control Sample	Total/NA	Water	9030B	

## **Prep Batch: 349362**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-2	PZ-25S	Total/NA	Water	9030B	
180-118350-3	PZ-26S	Total/NA	Water	9030B	
180-118350-4	PZ-26D	Total/NA	Water	9030B	
180-118350-5	PZ-28	Total/NA	Water	9030B	
180-118350-6	EB-2	Total/NA	Water	9030B	
180-118350-7	Dup-2	Total/NA	Water	9030B	
180-118350-8	FB-2	Total/NA	Water	9030B	
180-118350-9	PZ-29D	Total/NA	Water	9030B	
MB 180-349362/1-A	Method Blank	Total/NA	Water	9030B	
LCS 180-349362/2-A	Lab Control Sample	Total/NA	Water	9030B	
180-118350-2 MS	PZ-25S	Total/NA	Water	9030B	
180-118350-2 MSD	PZ-25S	Total/NA	Water	9030B	

## Analysis Batch: 349549

Lab Sample ID 180-118350-1	Client Sample ID PZ-23D	Prep Type Total/NA	Matrix Water	Method EPA 9034	Prep Batch 349361
MB 180-349361/1-A	Method Blank	Total/NA	Water	EPA 9034	349361
LCS 180-349361/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349361

### **Analysis Batch: 349551**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-2	PZ-25S	Total/NA	Water	EPA 9034	349362
180-118350-3	PZ-26S	Total/NA	Water	EPA 9034	349362
180-118350-4	PZ-26D	Total/NA	Water	EPA 9034	349362
180-118350-5	PZ-28	Total/NA	Water	EPA 9034	349362
180-118350-6	EB-2	Total/NA	Water	EPA 9034	349362
180-118350-7	Dup-2	Total/NA	Water	EPA 9034	349362
180-118350-8	FB-2	Total/NA	Water	EPA 9034	349362
180-118350-9	PZ-29D	Total/NA	Water	EPA 9034	349362
MB 180-349362/1-A	Method Blank	Total/NA	Water	EPA 9034	349362
LCS 180-349362/2-A	Lab Control Sample	Total/NA	Water	EPA 9034	349362
180-118350-2 MS	PZ-25S	Total/NA	Water	EPA 9034	349362
180-118350-2 MSD	PZ-25S	Total/NA	Water	EPA 9034	349362

## **Analysis Batch: 349682**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total/NA	Water	SM2320 B	
180-118350-2	PZ-25S	Total/NA	Water	SM2320 B	
180-118350-3	PZ-26S	Total/NA	Water	SM2320 B	
180-118350-4	PZ-26D	Total/NA	Water	SM2320 B	
180-118350-5	PZ-28	Total/NA	Water	SM2320 B	
180-118350-6	EB-2	Total/NA	Water	SM2320 B	
180-118350-7	Dup-2	Total/NA	Water	SM2320 B	
180-118350-8	FB-2	Total/NA	Water	SM2320 B	
180-118350-9	PZ-29D	Total/NA	Water	SM2320 B	

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# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-118350-1

# **General Chemistry (Continued)**

## **Analysis Batch: 349682 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-349682/54	Method Blank	Total/NA	Water	SM2320 B	
LCS 180-349682/53	Lab Control Sample	Total/NA	Water	SM2320 B	
180-118350-2 DU	PZ-25S	Total/NA	Water	SM2320 B	

## **Analysis Batch: 349924**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total/NA	Water	SM 2540C	
180-118350-2	PZ-25S	Total/NA	Water	SM 2540C	
180-118350-3	PZ-26S	Total/NA	Water	SM 2540C	
180-118350-4	PZ-26D	Total/NA	Water	SM 2540C	
180-118350-5	PZ-28	Total/NA	Water	SM 2540C	
180-118350-6	EB-2	Total/NA	Water	SM 2540C	
180-118350-7	Dup-2	Total/NA	Water	SM 2540C	
180-118350-8	FB-2	Total/NA	Water	SM 2540C	
180-118350-9	PZ-29D	Total/NA	Water	SM 2540C	
MB 180-349924/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-349924/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-118350-7 DU	Dup-2	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

## **Analysis Batch: 349443**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-118350-1	PZ-23D	Total/NA	Water	Field Sampling	
180-118350-2	PZ-25S	Total/NA	Water	Field Sampling	
180-118350-3	PZ-26S	Total/NA	Water	Field Sampling	
180-118350-4	PZ-26D	Total/NA	Water	Field Sampling	
180-118350-5	PZ-28	Total/NA	Water	Field Sampling	
180-118350-9	PZ-29D	Total/NA	Water	Field Sampling	

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**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 America

Client Information	7	H. Aud/T Goble		Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: SCS Contacts	Phone 720-598-	5994		E-Mail: Shali.brown@eurofinset.com		Page:
Company: GA Power				Analysis	sis Requested	Job #:
Address: 241 Ralph McGill Blvd SE	Due Date Requested:			-		Preservation Codes:
City: Atlanta	TAT Requested (days):	RUSH				
State, Zip. GA, 30308	P	3-day TAT				C - ∠n Acetate 0 - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2<
Phone: 404-506-7116(Tel)	PO#: SCS10382606			(CO)		
Email: SCS Contacts	, MO #:			NO)		
Project Name: CCR - Plant Wansley Ash Pond PZ	Project #: 18019922			300 & 9		
Site:	SSOW#:			<b>SD (Y</b> B, Ca)   (EPA	100 m	1 8350 Chain of Custody
	- 0,			eld Filtered op III Metals (I F, SO & TDS ajor lons - Bis agnesium, Ma		tal Numi
Sample identification	Sample Date Time	7	S=grab)   BT=Tissue, A=Air)   i	CI WE		Special Instructions/Note:
PZ-23D	3-9-21 1450	9 (	Water	NNVVV		4 pH=6,85
P2-25S	39-21 164	9	Water	1 / N N	7	1 pH= 5.81
P2-265	3-9-21 1434	J 6	Water	N N N		pc, H = Hq V
PZ-260	3-9-21 1338	S G	Water	V V V		PH= 6.19
85-20	34-21 153	3 G	Water	/ / / NN		4 PH= 5,65
EB-1	3-9-21 17-35	5 G	Water //	NNV	7	=Hd
Dup	3-4-21	O	Water	N / / / N	7	+ bH=
	3-9-21 1430	.0 G	Water	N N / /		=Hd
PZ-29D	3-11-2) 1225	5 6	Water	NNVVV		17.9 =Hd 17
		ŋ	Water			pH=
		ß	Water			=Hd
Possible Hazard Identification 	The spanning in the spanning i	Radiological		Sample Disposal ( A fee I	nples are r	ined longer than 1 month)
ested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:	osai By Lab	Archive For Months
Empty Kit Relinquished by:	Date:			Time:	Method of Shipment:	
	Date/Time:	5 (64)	Company	Received by:	2/ Date/Time:	11 Company
Relinquisped by:		7:00	Company	Received by:	Lu U Materime: 2	Company Company
Oko pausinberrasi	Date/Time:		Company	Received by:	Date/Time:	2 dompany
Custody Seals Intact: Custody Seal No.:  △ Yes △ No				Cooler Temperature(s) °C and Other Remarks:	nd Other Remarks:	
						Ver: 01/16/2019

**eurofins** 

Dep:

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**Environment Testing TestAmerica** 

SHIPPING:

SPECIAL :

0.00 TOTAL:

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCRES, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

Wgt: 58.40 LBS

TRCK: 1516 9328 6580

DV:

SVCs: STANDARD OVERNIGHT Master 1516 9328 6568

FedEx Express

0.00

Part # 159469-484 RIT2 EXP 11/21

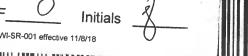
3 of 6 MPS# 1516 9328 6580

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

15238 PIT PA-US

Uncorrected temp Thermometer ID





Part # 159469-434 RIT2 EXP 112

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6605

🔅 eurofins

**Environment Testing TestAmerica** 

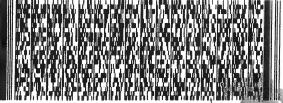
ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

(412) 963 - 7058



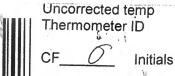
FedEx Express

5 of 6 MPS# 1516 9328 6605

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

15238 PIT PA-US



°C



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

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5/4/2021 (Rev. 1)

Ref: PLT wansLEY ACCC Date: 11Mar21 Wgt: 58.40 LBS

SHIPPING: SPECIAL: HANDLING: 0.00 TOTAL:

0.00 0.00 0.00 0.00

Sycs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6579

eurofins :

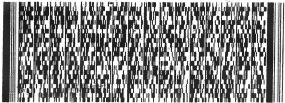
**Environment Testing TestAmerica** 

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US TO SAMPLE RECIEVING **EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. **RIDC PARK** PHTSBURGH PA 15238

REF: PLT WANSLEY ACCC





2 of 6 1516 9328 6579 Mstr# 1516 9328 6568

STANDARD OVERNIGHT

0201

Uncorrected temp Thermometer ID

15238



Initials

HANDLING: 0.00 TOTAL:

0.00

Sycs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6616

Ref: PLT wansLEY ACCC Date: 11Mar 21

Wgt: 58.40 LBS

Dep:



# **Environment Testing TestAmerica**

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL 6215 REGENCY PARKWAY NW SUITE 900 NDRCROSS, GA 30071 UNITED SYATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

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

REF: PLT WANSLEY ACCC



**FedEx** 

6 of 6 MPS# 1516 9328 6616 STANDARD OVERNIGHT

0201

Uncorrected temp Thermometer ID

15238 PIT PA-US



Initials



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5/4/2021 (Rev. 1)

# Do Not Lift Using This Tag

Wgt: 58.40 LBS

SPECIAL: HANDLING: O.OO. TOTAL:

0.00 0.00 0.00 0.00

Svcs: STANDARD OVERNIGHT Master 1516 9328 6568 TRCK: 1516 9328 6590

eurofins

**Environment Testing TestAmerica** 

Part # 159469-434 RIT2 EXP 11/21

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900' NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

**EUROFINS TESTAMERICA PITTSBURGH** 301 ALPHA DR. PITTSBURGH PA 15238

REF PLT WANSLEY ACCC



4 of 6 MPS# 1516 9328 6590

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

0201

Uncorrected temp

15238

Thermometer ID

Initials

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**Environment Testing TestAmerica** 

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL SC 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 11MAR21 ACTWGT: 58.40 LB CAD: 859116/CAFE3409

BILL RECIPIENT

TO SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH 301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238

REF: PLT WANSLEY ACCC



FedEx

1 of 6 TRK# 0201 1516 9328 6568

FRI - 12 MAR 4:30P STANDARD OVERNIGHT

Thermometer ID

15238

Initials

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Client: Southern Company

Job Number: 180-118350-1

Login Number: 118350 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

Ougation	Anower	Commont
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	
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 <a href="mailto:smm">&lt;6mm</a> (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, Pittsburgh 301 Alpha Drive **RIDC Park** Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-119811-1

Client Project/Site: Plant Wansley Ash Pond PZ

Revision: 1

#### For:

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

Attn: Kristen N Jurinko



Authorized for release by: 5/4/2021 6:00:10 PM

Shali Brown, Project Manager II (615)301-5031 Shali.Brown@Eurofinset.com

·····LINKS ······

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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

Client: Southern Company Project/Site: Plant Wansley Ash Pond PZ Laboratory Job ID: 180-119811-1

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#### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-119811-1

Laboratory: Eurofins TestAmerica, Pittsburgh

**Narrative** 

Job Narrative 180-119811-1

#### Comments

050421 Revised rerpot to add Lithim to the following samples at client request: 180-119811-1 (PZ-22), 180-119811-2 (PZ-23S), 180-119811-3 (PZ-24), 180-119811-4 (PZ-25S), 180-119811-5 (PZ-26S), 180-119811-17 (PZ-27S). This report replaces the report previously issued on 041821.

#### Receipt

The samples were received on 4/10/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.2° C and 3.6° C.

#### GC Semi VOA

Method 300.0: The matrix spike and matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 180-352846 were low outside control limits for Fluoride: (180-119811-B-3 MS) and (180-119811-B-3 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

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

#### Metals

No analytical or quality issues were noted, other than those described 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.

Job ID: 180-119811-1

## **Definitions/Glossary**

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

#### **Qualifiers**

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Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**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
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: Plant Wansley Ash Pond PZ

Job ID: 180-119811-1

## 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	06-27-21
California	State	2891	04-30-21
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-21
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-22
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-22
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	01-31-22
Wisconsin	State	998027800	08-31-21

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# **Sample Summary**

Client: Southern Company

180-119811-17

Project/Site: Plant Wansley Ash Pond PZ

PZ-27S

**Client Sample ID** Matrix Collected Received Lab Sample ID Asset ID 04/08/21 14:00 04/10/21 10:00 180-119811-1 PZ-22 Water 180-119811-2 PZ-23S Water 04/07/21 12:54 04/10/21 10:00 180-119811-3 PZ-24 Water 04/08/21 12:30 04/10/21 10:00 180-119811-4 PZ-25S Water 04/07/21 11:20 04/10/21 10:00 180-119811-5 PZ-26S Water 04/07/21 14:28 04/10/21 10:00 PZ-26D Water 04/07/21 15:37 04/10/21 10:00 180-119811-6 180-119811-7 PZ-28 Water 04/08/21 10:57 04/10/21 10:00 180-119811-8 EB-2 Water 04/07/21 12:20 04/10/21 10:00 180-119811-9 FB-2 Water 04/08/21 13:40 04/10/21 10:00 04/07/21 00:00 04/10/21 10:00 180-119811-10 Dup-2 Water 180-119811-11 Dup-1 Water 04/08/21 00:00 04/10/21 10:00 180-119811-12 FB-1 Water 04/07/21 15:10 04/10/21 10:00 180-119811-13 EB-1 Water 04/07/21 15:40 04/10/21 10:00 180-119811-14 PZ-27D Water 04/07/21 15:29 04/10/21 10:00 04/08/21 11:55 04/10/21 10:00 180-119811-15 PZ-23D Water 180-119811-16 PZ-29D Water 04/08/21 13:15 04/10/21 10:00

Water

04/08/21 14:31 04/10/21 10:00

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Job ID: 180-119811-1

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# **Method Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	TAL PIT
EPA 6020B	Metals (ICP/MS)	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	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: 180-119811-1

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Client Sample ID: PZ-22 Lab Sample ID: 180-119811-1 Date Collected: 04/08/21 14:00

**Matrix: Water** 

Date Received: 04/10/21 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 at ID: INTEGRION		1			352846	04/13/21 15:23	EPS	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: INTEGRION		5			352846	04/13/21 15:41	EPS	TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumen	3005A EPA 6020B at ID: NEMO		1	50 mL	50 mL	352766 353260	04/12/21 12:45 04/15/21 14:03		TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			352774	04/08/21 14:00	FDS	TAL PIT

**Client Sample ID: PZ-23S** Lab Sample ID: 180-119811-2

Date Collected: 04/07/21 12:54 **Matrix: Water** 

Date Received: 04/10/21 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			352846	04/13/21 17:46	EPS	TAL PIT
	Instrumer	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			353260	04/15/21 14:21	RJR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling		1			352774	04/07/21 12:54	FDS	TAL PIT

Client Sample ID: PZ-24 Lab Sample ID: 180-119811-3

Date Collected: 04/08/21 12:30

Date Received: 04/10/21 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			352846	04/13/21 09:34	EPS	TAL PIT
	Instrument	ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			353260	04/15/21 14:24	RJR	TAL PIT
	Instrument	ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
	Instrument	ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			352774	04/08/21 12:30	FDS	TAL PIT
	Instrument	ID: NOEQUIP								

**Matrix: Water** 

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-25S

Date Collected: 04/07/21 11:20 Date Received: 04/10/21 10:00 Lab Sample ID: 180-119811-4

**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: INTEGRION		1			352846	04/13/21 16:53	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			353260	04/15/21 14:26	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			352774	04/07/21 11:20	FDS	TAL PIT

Client Sample ID: PZ-26S

Date Collected: 04/07/21 14:28

Date Received: 04/10/21 10:00

Lab Sample ID: 180-119811-5

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: INTEGRION		1			352846	04/13/21 18:22	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			353260	04/15/21 14:29	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			352774	04/07/21 14:28	FDS	TAL PIT

Client Sample ID: PZ-26D

Date Collected: 04/07/21 15:37

Date Received: 04/10/21 10:00

Lab	Sample	ID: 180-119811-6	
	_	Matrix: Water	

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type Amount Amount** Number or Analyzed Analyst Type Run **Factor** Total/NA Analysis EPA 300.0 R2.1 352846 04/14/21 02:22 EPS TAL PIT Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 352766 04/12/21 12:45 KEM TAL PIT Total Recoverable 353260 04/15/21 14:32 RJR TAL PIT Analysis **EPA 6020B** 1 Instrument ID: NEMO Total/NA Analysis SM 2540C 353099 04/14/21 18:42 KMM TAL PIT 1 100 mL 100 mL Instrument ID: NOEQUIP Total/NA Analysis Field Sampling 352774 04/07/21 15:37 FDS TAL PIT Instrument ID: NOEQUIP

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-28

Date Collected: 04/08/21 10:57 Date Received: 04/10/21 10:00 Lab Sample ID: 180-119811-7

**Matrix: Water** 

**Matrix: Water** 

Job ID: 180-119811-1

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 352846 04/13/21 22:48 EPS TAL PIT Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 352766 04/12/21 12:45 KEM TAL PIT Total Recoverable Analysis **EPA 6020B** 1 353260 04/15/21 14:35 RJR **TAL PIT** Instrument ID: NEMO Total/NA Analysis SM 2540C 1 100 mL 100 mL 353099 04/14/21 18:42 KMM TAL PIT Instrument ID: NOEQUIP Total/NA Analysis Field Sampling 352774 04/08/21 10:57 FDS **TAL PIT** Instrument ID: NOEQUIP

Client Sample ID: EB-2 Lab Sample ID: 180-119811-8

Date Collected: 04/07/21 12:20

Date Received: 04/10/21 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 at ID: INTEGRION		1			352846	04/13/21 14:30	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			353260	04/15/21 14:37	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT

Client Sample ID: FB-2

Date Collected: 04/08/21 13:40

Lab Sample ID: 180-119811-9

Matrix: Water

Date Received: 04/10/21 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			352846	04/13/21 14:47	EPS	TAL PIT
	Instrumer	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			353260	04/15/21 14:45	RJR	TAL PIT
	Instrumer	it ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
	Instrumer	t ID: NOEQUIP								

Client Sample ID: Dup-2 Lab Sample ID: 180-119811-10

Date Collected: 04/07/21 00:00 Date Received: 04/10/21 10:00

Prep Type Total/NA	Batch Type Analysis	Batch Method EPA 300.0 R2.1	Run	Factor 1	Initial Amount	Final Amount	Batch Number 352846	<b>Prepared or Analyzed</b> 04/13/21 18:58	Analyst EPS	Lab TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			353260	04/15/21 14:48	RJR	TAL PIT

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180-119811-10 Matrix: Water

Project/Site: Plant Wansley Ash Pond PZ

Batch

Type

Prep

Analysis

Analysis

Analysis

Batch

Instrument ID: INTEGRION

Instrument ID: NEMO

Instrument ID: NOEQUIP

Instrument ID: NOEQUIP

3005A

**EPA 6020B** 

SM 2540C

Method

EPA 300.0 R2.1

Client Sample ID: Dup-2

Lab Sample ID: 180-119811-10 Date Collected: 04/07/21 00:00

**Matrix: Water** 

Date Received: 04/10/21 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	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT

Dil

1

Factor

**Client Sample ID: Dup-1** 

**Prep Type** 

Total Recoverable

Total Recoverable

Total/NA

Total/NA

Lab Sample ID: 180-119811-11 Date Collected: 04/08/21 00:00 **Matrix: Water** 

Initial

Amount

50 mL

100 mL

Final

Amount

50 mL

100 mL

Batch

Number

352846

352766

353260

353099

Date Received: 04/10/21 10:00

Run

Prepared			8
or Analyzed	Analyst	Lab	
04/13/21 11:04	EPS	TAL PIT	(
04/12/21 12:45	KEM	TAL PIT	
04/15/21 14:51	RJR	TAL PIT	
04/14/21 18:42	KMM	TAL PIT	

Client Sample ID: FB-1

Lab Sample ID: 180-119811-12

Date Collected: 04/07/21 15:10 **Matrix: Water** Date Received: 04/10/21 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			352846	04/13/21 15:05	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			353260	04/15/21 14:54	RJR	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: EB-1 Lab Sample ID: 180-119811-13

Date Collected: 04/07/21 15:40 **Matrix: Water** Date Received: 04/10/21 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			352846	04/13/21 16:35	EPS	TAL PIT
	Instrumer	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			353260	04/15/21 14:56	RJR	TAL PIT
	Instrumer	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT

Lab Sample ID: 180-119811-14

**Matrix: Water** 

**Client Sample ID: PZ-27D** Date Collected: 04/07/21 15:29 Date Received: 04/10/21 10:00

Prep Type Total/NA	Batch Type Analysis	Batch  Method  EPA 300.0 R2.1  t ID: INTEGRION	Run	Factor 1	Initial Amount	Final Amount	Batch Number 352846	Prepared or Analyzed 04/13/21 10:28	Analyst EPS	Lab TAL PIT
Total Recoverable Total Recoverable	Prep Analysis	3005A EPA 6020B t ID: NEMO		1	50 mL	50 mL	352766 353260	04/12/21 12:45 04/15/21 14:59		TAL PIT TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			352774	04/07/21 15:29	FDS	TAL PIT

**Client Sample ID: PZ-23D** Date Collected: 04/08/21 11:55 Date Received: 04/10/21 10:00

Lab Sample ID: 180-119811-15

**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: INTEGRION		1			352846	04/13/21 11:22	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B ID: NEMO		1			353260	04/15/21 15:02	RJR	TAL PIT
Total/NA	Analysis Instrument	SM 2540C ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis	Field Sampling ID: NOEQUIP		1			352774	04/08/21 11:55	FDS	TAL PIT

Client Sample ID: PZ-29D Date Collected: 04/08/21 13:15 Date Received: 04/10/21 10:00

Lab Sample ID: 180-119811-16

**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	EPA 300.0 R2.1		1			352846	04/13/21 11:40	EPS	TAL PIT
	Instrumen	t ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			353260	04/15/21 15:04	RJR	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			352774	04/08/21 13:15	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

## **Lab Chronicle**

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-27S Lab Sample ID: 180-119811-17

Date Collected: 04/08/21 14:31

Date Received: 04/10/21 10:00

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 t ID: INTEGRION		1			352846	04/14/21 00:53	EPS	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	352766	04/12/21 12:45	KEM	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			353260	04/15/21 15:07	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	353099	04/14/21 18:42	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			352774	04/08/21 14:31	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

KEM = Kimberly Mahoney

Batch Type: Analysis

EPS = Evan Scheuer

FDS = Sampler Field

KMM = Kendric Moore

RJR = Ron Rosenbaum

Eurofins TestAmerica, Pittsburgh

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Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-22 Lab Sample ID: 180-119811-1

Date Collected: 04/08/21 14:00

**Matrix: Water** Date Received: 04/10/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		1.0	0.71	mg/L			04/13/21 15:23	
Fluoride	1.7		0.10	0.026	mg/L			04/13/21 15:23	
Sulfate	240		5.0	3.8	mg/L			04/13/21 15:41	
Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Boron	0.98		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:03	
Calcium	88		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:03	
Lithium	0.11		0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 14:03	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total Dissolved Solids	540		10	10	mg/L			04/14/21 18:42	
Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
pH	5.60				SU			04/08/21 14:00	

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-23S** Lab Sample ID: 180-119811-2 Date Collected: 04/07/21 12:54

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		1.0	0.71	mg/L			04/13/21 17:46	1
Fluoride	1.6		0.10	0.026	mg/L			04/13/21 17:46	1
Sulfate	190		1.0	0.76	mg/L			04/13/21 17:46	1
Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.13		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:21	1
Calcium	67		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:21	1
Lithium	0.031		0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 14:21	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	520		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.05				SU			04/07/21 12:54	-

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-24 Lab Sample ID: 180-119811-3 Date Collected: 04/08/21 12:30

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4	<u> </u>	1.0		mg/L	=	Tropurcu	04/13/21 09:34	1
Fluoride	1.4	E4	0.10	0.026	•			04/13/21 09:34	1
Sulfate	60		1.0		mg/L			04/13/21 09:34	1
_ Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.21		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:24	1
Calcium	14		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:24	1
Lithium	0.0081		0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 14:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10	10	mg/L			04/14/21 18:42	1
- Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.01				SU			04/08/21 12:30	

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-25S** Lab Sample ID: 180-119811-4 Date Collected: 04/07/21 11:20

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.71	mg/L			04/13/21 16:53	1
Fluoride	0.093	J	0.10	0.026	mg/L			04/13/21 16:53	1
Sulfate	5.1		1.0	0.76	mg/L			04/13/21 16:53	1
Method: EPA 6020B - Metal	ls (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:26	1
Calcium	2.7		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:26	1
Lithium	<0.0034		0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 14:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	66		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	ield Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.57				SU			04/07/21 11:20	1

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-26S** Lab Sample ID: 180-119811-5

Date Collected: 04/07/21 14:28 **Matrix: Water** Date Received: 04/10/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		1.0	0.71	mg/L			04/13/21 18:22	1
Fluoride	1.1		0.10	0.026	mg/L			04/13/21 18:22	1
Sulfate	160		1.0	0.76	mg/L			04/13/21 18:22	1
Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1.9		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:29	
Calcium	71		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:29	1
Lithium	0.0077		0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 14:29	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	510		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.43				SU			04/07/21 14:28	

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-26D Lab Sample ID: 180-119811-6

Date Collected: 04/07/21 15:37

Date Received: 04/10/21 10:00

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		1.0	0.71	mg/L			04/14/21 02:22	1
Fluoride	0.22		0.10	0.026	mg/L			04/14/21 02:22	1
Sulfate	48		1.0	0.76	mg/L			04/14/21 02:22	1
Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.15		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:32	1
Calcium	18		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:32	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	410		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.46				SU			04/07/21 15:37	1

10

11

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-28** Lab Sample ID: 180-119811-7

Date Collected: 04/08/21 10:57 **Matrix: Water** 

Method: EPA 300.0 R2.1 - A	inions, Ion Chi	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		1.0	0.71	mg/L			04/13/21 22:48	1
Fluoride	<0.026		0.10	0.026	mg/L			04/13/21 22:48	1
Sulfate	1.7		1.0	0.76	mg/L			04/13/21 22:48	1
- Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:35	1
Calcium	4.1		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	62		10	10	mg/L			04/14/21 18:42	1
- Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.70				SU			04/08/21 10:57	1

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Total Dissolved Solids

**Client Sample ID: EB-2** Lab Sample ID: 180-119811-8

Date Collected: 04/07/21 12:20 **Matrix: Water** Date Received: 04/10/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/13/21 14:30	1
Fluoride	<0.026		0.10	0.026	mg/L			04/13/21 14:30	1
Sulfate	<0.76		1.0	0.76	mg/L			04/13/21 14:30	1
	•					_			
	•	tal Recover	rable RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•			MDL 0.039		D			Dil Fac
Method: EPA 6020B - Met Analyte Boron Calcium	Result		RL	0.039		<u>D</u>	04/12/21 12:45		Dil Fac
Analyte Boron	<b>Result</b> <0.039		RL 0.080	0.039	mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:37	Dil Fac

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<10

10 mg/L

04/14/21 18:42

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Lab Sample ID: 180-119811-9 **Client Sample ID: FB-2** 

Date Collected: 04/08/21 13:40 Date Received: 04/10/21 10:00

ab	Jampie	ID.	100-113011-3
			Matrix: Water

Analyte	Result Q	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.0	0.71	mg/L			04/13/21 14:47	1
Fluoride	<0.026	0.10	0.026	mg/L			04/13/21 14:47	1
Sulfate	< 0.76	1.0	0.76	mg/L			04/13/21 14:47	1
Method: EPA 6020B - Meta Analyte	Is (ICP/MS) - Tota Result Q		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result Q	Qualifier RL			<u>D</u>			Dil Fac
	•		0.039		<u>D</u>	04/12/21 12:45	04/15/21 14:45	Dil Fac
Analyte Boron Calcium	Result   C    <0.039	Qualifier RL 0.080	0.039	mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:45	Dil Fac 1
Analyte Boron	Result   C    <0.039	Qualifier RL 0.080 0.50	0.039	mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:45	Dil Fac

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Lab Sample ID: 180-110811-10 **Client Sample ID: Dup-2** 

Date Collected: 04/07/21 00:00 Date Received: 04/10/21 10:00

Lab	Sample	: טו פּ	100-1	190	11-10	
			N/I-	triv.	Mator	

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Chloride 120 1.0 0.71 mg/L 04/13/21 18:58 0.10 04/13/21 18:58 **Fluoride** 0.026 mg/L 1.1 04/13/21 18:58 **Sulfate** 170 1.0 0.76 mg/L

Method: EPA 6020B - Me	tals (ICP/MS) - Total Recove	erable						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	2.1	0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:48	1
Calcium	80	0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:48	1

Calcium	00		0.50	0.13	IIIg/L	,	J4/12/21 12.45	04/13/21 14.46	'	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	470		10	10	ma/l			04/14/21 18:42		

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: Dup-1** Lab Sample ID: 180-119811-11 **Matrix: Water** 

Date Collected: 04/08/21 00:00 Date Received: 04/10/21 10:00

Method: EPA 300.0 R2	2.1 - Anions, Ion Chromatogr	aphy						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40	1.0	0.71	mg/L			04/13/21 11:04	1
Fluoride	2.2	0.10	0.026	mg/L			04/13/21 11:04	1
Sulfate	100	1.0	0.76	mg/L			04/13/21 11:04	1

Method: EPA 6020B - Meta	als (ICP/MS) - Total Recove	erable						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.60	0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:51	1
Calcium	57	0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:51	1

l	- Calcium	31		0.50	0.13	IIIg/L		04/12/21	12.43	04/13/21 14.31	
	General Chemistry Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepa	red	Analyzed	Dil Fac
	Total Dissolved Solids	290		10	10	mg/L				04/14/21 18:42	1

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: FB-1

Date Collected: 04/07/21 15:10

Lab Sample ID: 180-119811-12

Matrix: Water

Date Collected: 04/07/21 15:10
Date Received: 04/10/21 10:00

Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.0	0.71	mg/L			04/13/21 15:05	1
Fluoride	<0.026	0.10	0.026	mg/L			04/13/21 15:05	1
Sulfate	< 0.76	1.0	0.76	mg/L			04/13/21 15:05	1
Method: EPA 6020B - Meta Analyte	Is (ICP/MS) - Tota Result Qu		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result Qu	ualifier RL			<u>D</u>	Prepared 04/12/21 12:45		Dil Fac
	•		0.039		<u>D</u>	04/12/21 12:45		Dil Fac
Analyte Boron Calcium	Result   Qu   <0.039	Qualifier RL 0.080	0.039	mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:54	Dil Fac 1 1
Analyte Boron	Result   Qu   <0.039	0.080 0.50	0.039	mg/L mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:54	Dil Fac

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Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: EB-1 Lab Sample ID: 180-119811-13

Date Collected: 04/07/21 15:40 Matrix: Water

Date Received: 04/10/21 10:00

Total Dissolved Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			04/13/21 16:35	1
Fluoride	<0.026		0.10	0.026	mg/L			04/13/21 16:35	1
Sulfate	<0.76		1.0	0.76	mg/L			04/13/21 16:35	1
Method: EPA 6020B - Met	•			MDI	Unit	n	Propared	Analyzod	Dil Fac
Analyte	Result	otal Recover	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
	•			<b>MDL</b> 0.039		<u>D</u>		Analyzed 04/15/21 14:56	Dil Fac
Analyte	Result		RL	0.039		<u>D</u>	04/12/21 12:45		Dil Fac
Analyte Boron	Result   <0.039		RL 0.080	0.039	mg/L	<u>D</u>	04/12/21 12:45	04/15/21 14:56	Dil Fac

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10 mg/L

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04/14/21 18:42

12

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-27D Lab Sample ID: 180-119811-14

Date Collected: 04/07/21 15:29 Matrix: Water

Date Received: 04/10/21 10:00

Method: EPA 300.0 R2.1 - A	nions, Ion Chi	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		1.0	0.71	mg/L			04/13/21 10:28	1
Fluoride	0.20		0.10	0.026	mg/L			04/13/21 10:28	1
Sulfate	92		1.0	0.76	mg/L			04/13/21 10:28	1
- Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.18		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 14:59	1
Calcium	26		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 14:59	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	480		10	10	mg/L			04/14/21 18:42	1
- Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.38				SU			04/07/21 15:29	1

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Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

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Client Sample ID: PZ-23D Lab Sample ID: 180-119811-15

Date Collected: 04/08/21 11:55 Matrix: Water

Date Received: 04/10/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39		1.0	0.71	mg/L			04/13/21 11:22	1
Fluoride	2.2		0.10	0.026	mg/L			04/13/21 11:22	1
Sulfate	98		1.0	0.76	mg/L			04/13/21 11:22	1
Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recover	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.59		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 15:02	1
Calcium	59		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 15:02	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	300		10	10	mg/L			04/14/21 18:42	1

SU

6.94

04/08/21 11:55

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

Client Sample ID: PZ-29D Lab Sample ID: 180-119811-16

Date Collected: 04/08/21 13:15 Matrix: Water

Date Received: 04/10/21 10:00

A In -4 -	•	romatograp	•	MDI	1114	_	B	A I	D11 E
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.5		1.0	0.71	mg/L			04/13/21 11:40	1
Fluoride	0.056	J	0.10	0.026	mg/L			04/13/21 11:40	1
Sulfate	6.4		1.0	0.76	mg/L			04/13/21 11:40	1
Method: EPA 6020B - Metal	s (ICP/MS) - To	otal Recover	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.039		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 15:04	1
Calcium	35		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 15:04	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	ield Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.34				SU			04/08/21 13:15	1

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4.6

Client: Southern Company Job ID: 180-119811-1

Project/Site: Plant Wansley Ash Pond PZ

**Client Sample ID: PZ-27S** Lab Sample ID: 180-119811-17

Date Collected: 04/08/21 14:31 **Matrix: Water** Date Received: 04/10/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77		1.0	0.71	mg/L			04/14/21 00:53	1
Fluoride	0.028	J	0.10	0.026	mg/L			04/14/21 00:53	1
Sulfate	5.8		1.0	0.76	mg/L			04/14/21 00:53	1
Method: EPA 6020B - Metal:	s (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.43		0.080	0.039	mg/L		04/12/21 12:45	04/15/21 15:07	1
Calcium	16		0.50	0.13	mg/L		04/12/21 12:45	04/15/21 15:07	1
Lithium	0.0044	J	0.0050	0.0034	mg/L		04/12/21 12:45	04/15/21 15:07	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	180		10	10	mg/L			04/14/21 18:42	1
Method: Field Sampling - F	eld Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.39				SU			04/08/21 14:31	

Job ID: 180-119811-1

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

Lab Sample ID: MB 180-352846/43

**Matrix: Water** 

Analysis Batch: 352846

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

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

MB MB Analyte Result Qualifier RL **MDL** Unit Dil Fac D **Prepared** Analyzed Chloride < 0.71 1.0 0.71 mg/L 04/13/21 22:30 0.026 mg/L Fluoride < 0.026 0.10 04/13/21 22:30 Sulfate 1.0 0.76 mg/L 04/13/21 22:30 < 0.76

Lab Sample ID: MB 180-352846/6

**Matrix: Water** 

**Analysis Batch: 352846** 

MB MB

Analyte Result Qualifier RL **MDL** Unit D Dil Fac Prepared Analyzed Chloride 0.71 mg/L < 0.71 1.0 04/13/21 08:48 Fluoride 0.10 < 0.026 0.026 mg/L 04/13/21 08:48 Sulfate 04/13/21 08:48 < 0.76 1.0 0.76 mg/L

Lab Sample ID: LCS 180-352846/42

**Matrix: Water** 

**Analysis Batch: 352846** 

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

**Client Sample ID: Lab Control Sample** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 50.0 54.8 mg/L 110 90 - 110 Fluoride 2.50 2.56 mg/L 103 90 - 110 50.0 Sulfate 54.1 mg/L 108 90 - 110

Lab Sample ID: LCS 180-352846/5

**Matrix: Water** 

**Analysis Batch: 352846** 

	Spike	LCS	LCS			%Rec.	
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits	
Chloride	50.0	53.7		mg/L	107	90 - 110	
Fluoride	2.50	2.52		mg/L	101	90 - 110	
Sulfate	50.0	53.9		mg/L	108	90 - 110	

Lab Sample ID: 180-119811-3 MS

**Matrix: Water** 

Analysis Ratch: 352846

Allalysis Datell. 332040										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2.4		50.0	52.2		mg/L		100	90 - 110	
Fluoride	1.4	F1	2.50	3.58	F1	mg/L		87	90 - 110	
Sulfate	60		50.0	107		mg/L		94	90 - 110	

Lab Sample ID: 180-119811-3 MSD

**Matrix: Water** 

Analysis Batch: 352846

7 many one Datem Coze ic											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2.4		50.0	52.5		mg/L		100	90 - 110	0	20
Fluoride	1.4	F1	2.50	3.60	F1	mg/L		88	90 - 110	1	20
Sulfate	60		50.0	108		mg/L		95	90 - 110	0	20

Eurofins TestAmerica, Pittsburgh

Client Sample ID: PZ-24

Prep Type: Total/NA

Client Sample ID: PZ-24

Prep Type: Total/NA

Prep Type: Total/NA

Job ID: 180-119811-1

Client Sample ID: PZ-25S

Client Sample ID: PZ-28

Client Sample ID: PZ-28

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

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

Lab Sample ID: 180-119811-4 MS

**Matrix: Water** 

Analysis Batch: 352846

Client Sample ID: PZ-25S Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Result Qualifier Added Result Qualifier Unit %Rec Limits Analyte D Chloride 3.7 50.0 52.9 mg/L 98 90 - 110 Fluoride 0.093 J 2.50 2.38 mg/L 92 90 - 110 Sulfate 5.1 50.0 97 90 - 110 53.6 mg/L

Lab Sample ID: 180-119811-4 MSD

**Matrix: Water** 

**Analysis Batch: 352846** 

Sample Sample Spike MSD MSD %Rec. **RPD** %Rec Analyte Result Qualifier Added Result Qualifier Unit Limits **RPD** I imit D Chloride 3.7 50.0 53.2 mg/L 99 90 - 11020 Fluoride 0.093 2.50 2.39 mg/L 92 90 - 110 0 20 Sulfate 5.1 50.0 54.2 mg/L 98 90 - 110 20

Lab Sample ID: 180-119811-7 MS

**Matrix: Water** 

Analysis Batch: 352846

Sample Sample Spike MS MS %Rec. Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits Chloride 3.6 50.0 50.3 mg/L 93 90 - 110 Fluoride < 0.026 2.50 2.30 mg/L 92 90 - 110 Sulfate 1.7 50.0 48.9 mg/L 94 90 - 110

Lab Sample ID: 180-119811-7 MSD

**Matrix: Water** 

Analysis Batch: 352846											
-	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	3.6		50.0	52.0		mg/L		97	90 - 110	3	20
Fluoride	< 0.026		2.50	2.37		mg/L		95	90 - 110	3	20
Sulfate	1.7		50.0	50.8		mg/L		98	90 - 110	4	20
	Analyte Chloride Fluoride	Analyte Result Chloride 3.6 Fluoride <0.026	AnalyteResult ChlorideQualifierFluoride<0.026	Analyte         Result Othloride         Qualifier Added           Fluoride         <0.026	Analyte         Result Chloride         Qualifier         Added Added Action         Result South           Fluoride         <0.026	Analyte         Result Chloride         Qualifier         Added Added Secult Chloride         Result Result Chloride         Qualifier Solution           Fluoride         <0.026	Analyte         Result Chloride         Result Chloride         Sample Result Chloride         Spike Added Result Chloride         MSD	Analyte         Result Chloride         Qualifier         Added South Chloride         MSD	Analyte         Result Chloride         Qualifier         Added South Chloride         MSD MSD         WSD MSD         MSD MSD         MSD MSD         MSD MSD         MSD MSD         MSD MSD MSD         MSD MSD MSD         MSD MSD MSD MSD MSD         MSD MSD MSD MSD MSD MSD MSD MSD MSD MSD	Analyte         Result         Qualifier         Added Solution         Result Chloride         Qualifier         MSD MSD         WSD MSD         WRec.         %Rec.         MREC.         Limits         MREC.         MREC.         MREC.         Limits         MREC.         MREC.	Analyte         Result         Qualifier         Added Added         Result Spike         MSD MSD         Unit         D MSD MSD         MREC.           Chloride         3.6         50.0         52.0         mg/L         97         90 - 110         3           Fluoride         <0.026

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

Lab Sample ID: MB 180-352766/1-A

**Matrix: Water** 

**Analysis Batch: 353260** 

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 352766** 

mg/L

MB MB Result Qualifier RL **MDL** Unit D Dil Fac **Analyte** Prepared Analyzed Boron < 0.039 0.080 0.039 mg/L 04/12/21 12:45 04/15/21 13:58 0.13 mg/L Calcium < 0.13 0.50 04/12/21 12:45 04/15/21 13:58 0.0050 0.0034 mg/L 04/12/21 12:45 04/15/21 13:58 Lithium < 0.0034

Lab Sample ID: LCS 180-352766/2-A

**Matrix: Water** 

Lithium

**Prep Type: Total Recoverable Analysis Batch: 353260 Prep Batch: 352766** %Rec. Spike LCS LCS **Analyte** Added Result Qualifier Unit D %Rec Limits Boron 1.25 1.22 mg/L 98 80 - 120 Calcium 25.0 30.1 80 - 120 mg/L 120

0.551

Eurofins TestAmerica, Pittsburgh

80 - 120

110

**Client Sample ID: Lab Control Sample** 

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0.500

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-119811-1

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

Lab Sample ID: 180-119811-1 MS

**Matrix: Water** 

Analysis Batch: 353260

Client Sample ID: PZ-22

Prep	Type: Total Recoverable
	<b>Prep Batch: 352766</b>
	%Rec

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Boron	0.98		1.25	2.25		mg/L		101	75 - 125	
Calcium	88		25.0	117		mg/L		118	75 - 125	
Lithium	0.11		0.500	0.655		mg/L		109	75 - 125	

Lab Sample ID: 180-119811-1 MSD

**Matrix: Water** 

Client Sample ID: PZ-22 **Prep Type: Total Recoverable** 

Analysis Batch: 353260									Prep Ba	tch: 35	52766
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	0.98		1.25	2.20		mg/L		97	75 - 125	2	20
Calcium	88		25.0	119		mg/L		124	75 - 125	1	20
Lithium _	0.11		0.500	0.642		mg/L		106	75 - 125	2	20

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

Lab Sample ID: MB 180-353099/2

**Matrix: Water** 

Analysis Batch: 353099

Client Sample ID: Method Blank

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Type: Total/NA

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			04/14/21 18:42	1

Lab Sample ID: LCS 180-353099/1

**Matrix: Water** 

Analysis Batch: 353099									
		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Total Dissolved Solids		486	448		mg/L		92	80 - 120	

Lab Sample ID: 180-119811-10 [

**Matrix: Water** 

**Analysis Batch: 353099** 

DU	Client Sample ID: Dup-2
	Prep Type: Total/NA

DU DU RPD Sample Sample Analyte Result Qualifier Result Qualifier Unit Limit **Total Dissolved Solids** 470 500 mg/L

# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

## HPLC/IC

### Analysis Batch: 352846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-119811-1	PZ-22	Total/NA	Water	EPA 300.0 R2.1	
180-119811-1	PZ-22	Total/NA	Water	EPA 300.0 R2.1	
180-119811-2	PZ-23S	Total/NA	Water	EPA 300.0 R2.1	
180-119811-3	PZ-24	Total/NA	Water	EPA 300.0 R2.1	
180-119811-4	PZ-25S	Total/NA	Water	EPA 300.0 R2.1	
180-119811-5	PZ-26S	Total/NA	Water	EPA 300.0 R2.1	
180-119811-6	PZ-26D	Total/NA	Water	EPA 300.0 R2.1	
180-119811-7	PZ-28	Total/NA	Water	EPA 300.0 R2.1	
180-119811-8	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-119811-9	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-119811-10	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-119811-11	Dup-1	Total/NA	Water	EPA 300.0 R2.1	
180-119811-12	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-119811-13	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-119811-14	PZ-27D	Total/NA	Water	EPA 300.0 R2.1	
180-119811-15	PZ-23D	Total/NA	Water	EPA 300.0 R2.1	
180-119811-16	PZ-29D	Total/NA	Water	EPA 300.0 R2.1	
180-119811-17	PZ-27S	Total/NA	Water	EPA 300.0 R2.1	
MB 180-352846/43	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-352846/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-352846/42	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-352846/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-119811-3 MS	PZ-24	Total/NA	Water	EPA 300.0 R2.1	
180-119811-3 MSD	PZ-24	Total/NA	Water	EPA 300.0 R2.1	
180-119811-4 MS	PZ-25S	Total/NA	Water	EPA 300.0 R2.1	
180-119811-4 MSD	PZ-25S	Total/NA	Water	EPA 300.0 R2.1	
180-119811-7 MS	PZ-28	Total/NA	Water	EPA 300.0 R2.1	
180-119811-7 MSD	PZ-28	Total/NA	Water	EPA 300.0 R2.1	

### Metals

## **Prep Batch: 352766**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
180-119811-1	PZ-22	Total Recoverable	Water	3005A	
180-119811-2	PZ-23S	Total Recoverable	Water	3005A	
180-119811-3	PZ-24	Total Recoverable	Water	3005A	
180-119811-4	PZ-25S	Total Recoverable	Water	3005A	
180-119811-5	PZ-26S	Total Recoverable	Water	3005A	
180-119811-6	PZ-26D	Total Recoverable	Water	3005A	
180-119811-7	PZ-28	Total Recoverable	Water	3005A	
180-119811-8	EB-2	Total Recoverable	Water	3005A	
180-119811-9	FB-2	Total Recoverable	Water	3005A	
180-119811-10	Dup-2	Total Recoverable	Water	3005A	
180-119811-11	Dup-1	Total Recoverable	Water	3005A	
180-119811-12	FB-1	Total Recoverable	Water	3005A	
180-119811-13	EB-1	Total Recoverable	Water	3005A	
180-119811-14	PZ-27D	Total Recoverable	Water	3005A	
180-119811-15	PZ-23D	Total Recoverable	Water	3005A	
180-119811-16	PZ-29D	Total Recoverable	Water	3005A	
180-119811-17	PZ-27S	Total Recoverable	Water	3005A	
MB 180-352766/1-A	Method Blank	Total Recoverable	Water	3005A	

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Job ID: 180-119811-1

# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

**Metals (Continued)** 

### Prep Batch: 352766 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-352766/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-119811-1 MS	PZ-22	Total Recoverable	Water	3005A	
180-119811-1 MSD	PZ-22	Total Recoverable	Water	3005A	

### **Analysis Batch: 353260**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-119811-1	PZ-22	Total Recoverable	Water	EPA 6020B	352766
180-119811-2	PZ-23S	Total Recoverable	Water	EPA 6020B	352766
180-119811-3	PZ-24	Total Recoverable	Water	EPA 6020B	352766
180-119811-4	PZ-25S	Total Recoverable	Water	EPA 6020B	352766
180-119811-5	PZ-26S	Total Recoverable	Water	EPA 6020B	352766
180-119811-6	PZ-26D	Total Recoverable	Water	EPA 6020B	352766
180-119811-7	PZ-28	Total Recoverable	Water	EPA 6020B	352766
180-119811-8	EB-2	Total Recoverable	Water	EPA 6020B	352766
180-119811-9	FB-2	Total Recoverable	Water	EPA 6020B	352766
180-119811-10	Dup-2	Total Recoverable	Water	EPA 6020B	352766
180-119811-11	Dup-1	Total Recoverable	Water	EPA 6020B	352766
180-119811-12	FB-1	Total Recoverable	Water	EPA 6020B	352766
180-119811-13	EB-1	Total Recoverable	Water	EPA 6020B	352766
180-119811-14	PZ-27D	Total Recoverable	Water	EPA 6020B	352766
180-119811-15	PZ-23D	Total Recoverable	Water	EPA 6020B	352766
180-119811-16	PZ-29D	Total Recoverable	Water	EPA 6020B	352766
180-119811-17	PZ-27S	Total Recoverable	Water	EPA 6020B	352766
MB 180-352766/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	352766
LCS 180-352766/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	352766
180-119811-1 MS	PZ-22	Total Recoverable	Water	EPA 6020B	352766
180-119811-1 MSD	PZ-22	Total Recoverable	Water	EPA 6020B	352766

## **General Chemistry**

### **Analysis Batch: 353099**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-119811-1	PZ-22	Total/NA	Water	SM 2540C	
180-119811-2	PZ-23S	Total/NA	Water	SM 2540C	
180-119811-3	PZ-24	Total/NA	Water	SM 2540C	
180-119811-4	PZ-25S	Total/NA	Water	SM 2540C	
180-119811-5	PZ-26S	Total/NA	Water	SM 2540C	
180-119811-6	PZ-26D	Total/NA	Water	SM 2540C	
180-119811-7	PZ-28	Total/NA	Water	SM 2540C	
180-119811-8	EB-2	Total/NA	Water	SM 2540C	
180-119811-9	FB-2	Total/NA	Water	SM 2540C	
180-119811-10	Dup-2	Total/NA	Water	SM 2540C	
180-119811-11	Dup-1	Total/NA	Water	SM 2540C	
180-119811-12	FB-1	Total/NA	Water	SM 2540C	
180-119811-13	EB-1	Total/NA	Water	SM 2540C	
180-119811-14	PZ-27D	Total/NA	Water	SM 2540C	
180-119811-15	PZ-23D	Total/NA	Water	SM 2540C	
180-119811-16	PZ-29D	Total/NA	Water	SM 2540C	
180-119811-17	PZ-27S	Total/NA	Water	SM 2540C	
MB 180-353099/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-353099/1	Lab Control Sample	Total/NA	Water	SM 2540C	

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Job ID: 180-119811-1

# **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond PZ

Job ID: 180-119811-1

## **General Chemistry (Continued)**

### **Analysis Batch: 353099 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-119811-10 DU	Dup-2	Total/NA	Water	SM 2540C	

## Field Service / Mobile Lab

## Analysis Batch: 352774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-119811-1	PZ-22	Total/NA	Water	Field Sampling	
180-119811-2	PZ-23S	Total/NA	Water	Field Sampling	
180-119811-3	PZ-24	Total/NA	Water	Field Sampling	
180-119811-4	PZ-25S	Total/NA	Water	Field Sampling	
180-119811-5	PZ-26S	Total/NA	Water	Field Sampling	
180-119811-6	PZ-26D	Total/NA	Water	Field Sampling	
180-119811-7	PZ-28	Total/NA	Water	Field Sampling	
180-119811-14	PZ-27D	Total/NA	Water	Field Sampling	
180-119811-15	PZ-23D	Total/NA	Water	Field Sampling	
180-119811-16	PZ-29D	Total/NA	Water	Field Sampling	
180-119811-17	PZ-27S	Total/NA	Water	Field Sampling	

4

6

9

10

<u> 11</u>

| 4

:07	Tage.	# qop	Preservation Codes:	A - HCL M - Hexane B - NaOH N - None C - 7A Acetalo O - A extra07		F - MeOH G - Amchlor	H - Ascorbic Acid	(c)	of conf	- 186-1198 - 186-1198	Special Instructions/Note:	1 PH= 5 60	9	3 PH= G.O.	E S S S S S S S S S S S S S S S S S S S	3 pH= 4.43	3 PH 6, 4,	1	A/2 = Ha C	3 PH= V.X	2 pH=	=Hd	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)  Return To Client		Method of Shipment:	Company	ime: Ui Piemi	Date/Time: / 0 ', 0 O Company	smarks:
Lab PM: Brown, Shali E-Mail:	shali.brown@eurofinset.com	Analysis Re					(0)	A no se	SD (Ye	Matrix  Watrix  Watrix	ation Code:	Water N N	Water MM	Water NN	Water WN /	Water MM	Water MM	Water MU 🗸	Water WW	Water WW	Water WN	Water		Special Instructions/QC Requirem	Time:	Company C ( Received 6: 5	Company Received by	Company Received by:	Cooler Temperature(s) °C and Other Remarks:
Sampler. 1. (50018			Due Date Requested:	TAT Requested (days): RUSH	3-day TAT	#Od#:	#OM	Project #: 18019922	SSOW#:	Sample Date Time G=rrah	X	4-8-21 1400 0	4-7-21 1254 6	4-4-21 1230 G	4-7-21 1120 6	4-7-21 1428 6	4-7-21 1537 6	4-4-21 1057 6	4-7-21 1220 G	4-4-21 1340 6	4-7-21 0	9	ant Poison B Unknown Radiological		Date:	Date/Time: 4-21 / 0910	391	Date/Time:	
Client Information	SCS Contacts	Company. GA Power	Address: 241 Raiph McGill Blvd SE	City. Atlanta	State, Zip: GA, 30308	Phone: 404-506-7116(Tel)	Email: SCS Contacts	Project Name: CCR - Plant Wansley Ash Pond PZ	Site:	Sample Identification		22-29	PZ-235	172-29	PZ - 25S	PZ-26S	PZ-26D	P2-28	1	al	200-2	-	Possible Hazard Identification  Non-Hazard Flammable Skin Irritant	Deliverable Requested: I, II, III, IV, Other (specify)	Empty Kit Relinquished by:	Relinquished by: (W/Pr Hell	Relinquished by:	$\sim$	Custody Seals Infact: Custody Seal No.:

💸 eurofins Environment Testing America

**Chain of Custody Record** 

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

**Chain of Custody Record** 

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

Client Information	Sampler: Filor	DOUGA		Lab PM: Brown	Lab PM: Brown, Shali	Carrie	Carrier Tracking No(s):	COC No:		
Client Contact: SCS Contacts	Phone 770	-465	5998	E-Mail:	E-Mail: Shali brown@eurofinset.com	com		Page:	7 # 7	
Company:								Job #:		
Address	Duo Data Bacanadad	1				Analysis Requested	ted			
241 Ralph McGill Blvd SE	Due Date Nednest							Preservati		
City: Atlanta	TAT Requested (days)	ays): RUSH	_		17			A - HCL B - NaOH		g 5
State, Zip: GA, 30308		3-day TAT	ΑT					C - Zn Acetate D - Nitric Acid E - NaHSO4		0 - Asna02 P - Na204S Q - Na2S03
Phone: 404-506-7116(TeI)	PO#:				inger d			F - MeOH G - Amchlo		203
Email: SCS Contacts	:#OM				(ON					odecahydrate ne
Project Name: CCR - Plant Wansley Ash Pond PZ	Project #: 18019922				10 86			tainer K - EDTA L - EDA		5 specify)
Site:	SSOW#:				15D (Y			of con		
Sample Identification	Sample Date	Sample	Sample Type (C=comp,	Watrix (Wewater, S=solid, O=waste/oil,	ield Filtered Perform MS/M App III Metals (F			TedmuM listo	-	
	$\bigvee$	X	770		X				Special instructions/Note:	s/Note:
Dup-i	12.8-1	\	ŋ	Water	> > > N			S PH= NA		
FB-1	4-7-21	1510	ŋ	Water	NN / N			3 PH= NA		
	12-2-4	0451	ŋ	Water	NNV			3 PH= NA		
022-2J	11-2-11	1529	ŋ	Water	NUNV			3 PH 7	.38	
DZ-23D	12-8-11	1155	O	Water	NN / /			3 pH= 6.94	46	
052-20	4-8-71	13/5	ŋ	Water	NV			분	6.34	
522-29	4-8-71	14/31	ŋ	Water	N N V			ス 語 る	73	
			ŋ	Water				=Hd		
			ŋ	Water				=Hd		
			ŋ	Water				=Hd		
			ŋ	Water				=Hd		
Possible Hazard Identification  Non-Hazard Flammable Skin Irritant	Poison B Y Unknown		] Radiological		Sample Disp	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	yassessed if samples are	retained longer	than 1 month)	
I, III, IV, Ot					Special Instru	Requiren				0
Empty Kit Relinquished by:		Date:			Time:		Method of Shipment:			
	Date/Fime: $\sqrt{-9-3}$	160/	0	Company ACC	Received by	4	Date/Time:	21 095	00	7
Relinquished by:	4/9/2 Date/Time:	16:00	,	Company	Received b	1) The wo	tro bate Ame.	10-21		WATER TO
	Date/Illie		3	Company	Received by	Aug.	Date/Time:	20:01	Company	
△ Yes △ No					Cooler Temp	Cooler Temperature(s) °C and Other Remarks:	is:			
									Ver: 01/16/2019	6/2019

Ihis Tag

FedEx® Saturday Delivery

SC ID:LIYA (678) 966-9991 IAYLOR S TESTING AMERICA ATL REGENCY PARKWAY NW

SHIP DATE: 09APR21 ACTWGT: 45.25 LB CAD: 859116/CAFE3409

BILL RECIPIENT

SUITE 900 NORCROSS, GA 30071 UNITED STATES US

SHIP DATE: 09A 180-119811 Waybil ACTWGT: 45.25 CAD: 859116/CAF.

SC

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR

EUROPINS TESTING AMERICA SOIS REGENCY PARKWAY NW SUIT 900 NORCROSS, GA 30071 UNITED STATES US

BILL RECIPIENT

**EUROFINS TESTAMERICA PITTSBURGH** 

301 ALPHA DR.

RIDC PARK

SAMPLE RECIEVING

2

**EUROFINS TESTAMERICA PITTSBURGH** SAMPLE RECIEVING

PITTSBURGH PA 15238 301 ALPHA DR. RIDC PARK 412) 963-7058

REF: ACC - PLT WANSLEY



SATURDAY 12:00P

## MASTER ##

SATURDAY 12:00P

PRIORITY OVERNIGHT

2 of 2

hermometer ID

15238 \_\_\_CPA\_US PIT

PRIORITY OVERNIGHT

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



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Uncorrected temp

Thermometer ID



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Initials



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

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PITTSBURGH PA 15238

5/4/2021 (Rev. 1)

Job Number: 180-119811-1

Login Number: 119811

List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

Creator: Watson, Debbie

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.	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: 180-126277-1

Client Project/Site: 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: 10/4/2021 3:35:03 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: Plant Wansley Ash Pond Laboratory Job ID: 180-126277-1

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3

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#### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

Laboratory: Eurofins TestAmerica, Pittsburgh

**Narrative** 

Job Narrative 180-126277-1

#### Comments

100421 Revised report to include re-analysis results for the following sample at client request: 180-126367-6 (EB-3). This report replaces the report previously issued on 092021.

#### Receipt

The samples were received on 8/26/2021 10:00 AM and 8/28/2021 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 22 coolers at receipt time were 2.3° C, 2.3° C, 2.5° C, 2.8° C, 2.8° C, 3.1° C, 3.1° C, 3.6° C, 3.6° C, 3.7° C, 3.7° C, 3.8° C, 3.8° C, 3.8° C, 3.8° C, 4.2° C, 4.2° C, 4.6° C, 4.6° C, 4.8° C and 4.8° C.

#### **Receipt Exceptions**

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): EB-1 (180-126278-2). The container labels list a sample id of EB-2, while the COC lists EB-1. The ID on the COC was used.

#### GC Semi VOA

Method 300.0: The matrix spike duplicate (MSD) recoveries for analytical batch 180-370761, 180-370919 and 180-371083 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### Metals

Method 7470A: The matrix spike / matrix spike duplicate(MS/MSD) precision for preparation batch 180-370941 and analytical batch 180-371007 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

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.

Job ID: 180-126277-1

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## **Definitions/Glossary**

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

### **Qualifiers**

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

**Metals** 

H Sample was prepped or analyzed beyond the specified holding time

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 Job ID: 180-126277-1

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

 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

# **Sample Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

WGWC-9

WGWC-22

180-126367-8

180-126367-9

Lab Sample ID Client Sample ID Matrix Collected Receive	ed
180-126277-1 WGWA-5 Water 08/24/21 12:18 08/26/21 1	10:00
180-126277-2 FB-1 Water 08/24/21 13:20 08/26/21 1	10:00
180-126277-3 WGWA-6 Water 08/24/21 13:40 08/26/21 1	10:00
180-126277-4 WGWA-7 Water 08/24/21 15:10 08/26/21 1	10:00
180-126277-5 Dup-1 Water 08/24/21 00:00 08/26/21 1	10:00
180-126278-1 WGWA-2 Water 08/23/21 15:35 08/26/21 1	10:00
180-126278-2 EB-1 Water 08/24/21 11:00 08/26/21 1	10:00
180-126278-3 WGWA-1 Water 08/24/21 11:45 08/26/21 1	10:00
180-126278-4 WGWA-4 Water 08/24/21 14:10 08/26/21 1	10:00
180-126364-1 WGWA-18 Water 08/25/21 11:25 08/28/21 0	09:15
180-126364-2 WGWC-13 Water 08/25/21 12:45 08/28/21 0	09:15
180-126364-3 WGWC-14A Water 08/25/21 13:30 08/28/21 0	09:15
180-126364-4 EB-2 Water 08/25/21 15:05 08/28/21 0	09:15
180-126364-5 WGWC-17 Water 08/25/21 14:55 08/28/21 0	09:15
180-126364-6 WGWC-19 Water 08/26/21 11:05 08/28/21 0	09:15
180-126364-7 Dup-2 Water 08/26/21 00:00 08/28/21 0	09:15
180-126364-8 WGWC-10 Water 08/26/21 12:35 08/28/21 0	09:15
180-126364-9 WGWC-24 Water 08/26/21 13:55 08/28/21 0	09:15
180-126364-10 Dup-3 Water 08/26/21 00:00 08/28/21 0	09:15
180-126364-11 WGWC-25 Water 08/26/21 15:52 08/28/21 0	09:15
180-126364-12 WGWC-8 Water 08/26/21 12:41 08/28/21 0	09:15
180-126364-13 WGWC-15 Water 08/26/21 16:14 08/28/21 0	09:15
180-126364-14 WGWC-20 Water 08/26/21 11:32 08/28/21 0	09:15
180-126364-15 WGWC-23 Water 08/26/21 14:55 08/28/21 0	09:15
180-126364-16 FB-3 Water 08/26/21 14:53 08/28/21 0	09:15
180-126367-1 WGWA-3 Water 08/25/21 10:50 08/28/21 0	09:15
180-126367-2 WGWC-11 Water 08/25/21 12:00 08/28/21 0	09:15
180-126367-3 WGWC-12 Water 08/25/21 13:30 08/28/21 0	09:15
180-126367-4 FB-2 Water 08/25/21 14:35 08/28/21 0	09:15
180-126367-5 WGWC-16 Water 08/25/21 14:50 08/28/21 0	09:15
180-126367-6 EB-3 Water 08/26/21 10:10 08/28/21 0	09:15
180-126367-7 WGWC-21 Water 08/26/21 11:30 08/28/21 0	09:15

Water

Water

08/26/21 13:00 08/28/21 09:15

08/26/21 15:20 08/28/21 09:15

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Job ID: 180-126277-1

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## **Method Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Method **Method Description** Protocol Laboratory EPA 300.0 R2.1 TAL PIT Anions, Ion Chromatography EPA **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: 180-126277-1

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Lab Sample ID: 180-126277-1

**Matrix: Water** 

**Client Sample ID: WGWA-5** 

Date Collected: 08/24/21 12:18 Date Received: 08/26/21 10:00

	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 t ID: CHICS2100B		1			370761	09/10/21 09:37	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			369936	09/01/21 08:57	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/24/21 12:18	FDS	TAL PIT

**Client Sample ID: FB-1** 

Date Collected: 08/24/21 13:20

Date Received: 08/26/21 10:00

Lab Sample ID: 180-126277-2

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370761	09/10/21 13:10	J1T	TAL PIT
	Instrumer	nt ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369936	09/01/21 09:00	RJR	TAL PIT
	Instrumer	nt ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT
	Instrumer	nt ID: NOEQUIP								

**Client Sample ID: WGWA-6** 

Date Collected: 08/24/21 13:40 Date Received: 08/26/21 10:00

Lab Sample ID: 180-126277-3 **Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1			370761	09/10/21 13:42	J1T	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			369936	09/01/21 09:03	RJR	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			369662	08/24/21 13:40	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Client Sample ID: WGWA-7

Date Collected: 08/24/21 15:10 Date Received: 08/26/21 10:00

Lab Sample ID:	: 180-126277-4
	<b>Matrix: Water</b>

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			370761	09/10/21 13:26	J1T	TAL PIT
	Instrumer	t ID: CHICS2100B								

**Matrix: Water** 

**Matrix: Water** 

**Matrix: Water** 

Lab Sample ID: 180-126277-4

Lab Sample ID: 180-126277-5

Lab Sample ID: 180-126278-1

**Client Sample ID: WGWA-7** Date Collected: 08/24/21 15:10 Date Received: 08/26/21 10:00

Project/Site: Plant Wansley Ash Pond

Client: Southern Company

	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	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: NEMO		1			369936	09/01/21 09:11	RJR	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT
Total/NA	Analysis Instrumer	Field Sampling at ID: NOEQUIP		1			369662	08/24/21 15:10	FDS	TAL PIT

Client Sample ID: Dup-1 Date Collected: 08/24/21 00:00 Date Received: 08/26/21 10:00

Batch Dil Initial Batch Batch Final Prepared **Prep Type** Type Method Run **Factor** Amount Amount Number or Analyzed **Analyst** Lab Total/NA Analysis EPA 300.0 R2.1 371996 09/19/21 19:40 DFE TAL PIT Instrument ID: CHIC2100A Total Recoverable Prep 3005A 50 mL 50 mL 369722 08/31/21 08:56 AMD TAL PIT Total Recoverable Analysis **EPA 6020B** 369936 09/01/21 09:14 RJR **TAL PIT** 1 Instrument ID: NEMO Total/NA SM 2540C Analysis 100 mL 100 mL 369797 08/31/21 13:45 KMM TAL PIT Instrument ID: NOEQUIP

Client Sample ID: WGWA-2 Date Collected: 08/23/21 15:35 Date Received: 08/26/21 10:00

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 371083 09/11/21 16:57 J1T TAL PIT Analysis Instrument ID: CHICS2100B Total/NA Analysis EPA 300.0 R2.1 370384 09/07/21 22:59 SAB **TAL PIT** Instrument ID: INTEGRION Total Recoverable Prep 3005A 50 mL 50 mL 369722 08/31/21 08:56 AMD TAL PIT Total Recoverable Analysis **EPA 6020B** 369936 09/01/21 09:17 RJR **TAL PIT** 1 Instrument ID: NEMO Total/NA Analysis SM 2540C 100 mL 100 mL 08/30/21 17:35 KMM TAL PIT 369673 1 Instrument ID: NOEQUIP Total/NA Analysis Field Sampling 08/23/21 15:35 FDS TAL PIT 369662 Instrument ID: NOEQUIP

Client Sample ID: EB-1 Date Collected: 08/24/21 11:00

Date Received: 08/26/21 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	EPA 300.0 R2.1		1			371083	09/11/21 17:46	J1T	TAL PIT
	Instrumer	t ID: CHICS2100B								

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-126278-2

**Matrix: Water** 

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126278-2

**Matrix: Water** 

**Client Sample ID: EB-1** Date Collected: 08/24/21 11:00

Date Received: 08/26/21 10:00

	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			370384	09/07/21 21:30	SAB	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			369936	09/01/21 09:20	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT

Lab Sample ID: 180-126278-3

Date Collected: 08/24/21 11:45 Date Received: 08/26/21 10:00

**Client Sample ID: WGWA-1** 

**Matrix: Water** 

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 t ID: CHICS2100B	- 1011	1	Amount	Amount	371083	09/11/21 18:03		TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: INTEGRION		1			370384	09/07/21 21:12	SAB	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			369936	09/01/21 09:23	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369661	08/30/21 15:16	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/24/21 11:45	FDS	TAL PIT

Lab Sample ID: 180-126278-4 **Client Sample ID: WGWA-4** Date Collected: 08/24/21 14:10

**Matrix: Water** 

Date Received: 08/26/21 10:00

	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 t ID: CHICS2100B		1			371083	09/11/21 18:19	J1T	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: INTEGRION		1			370384	09/07/21 23:53	SAB	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369722	08/31/21 08:56	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			369936	09/01/21 09:26	RJR	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369797	08/31/21 13:45	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/24/21 14:10	FDS	TAL PIT

Job ID: 180-126277-1

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126364-1

**Matrix: Water** 

**Client Sample ID: WGWA-18** Date Collected: 08/25/21 11:25

Date Received: 08/28/21 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			370919	09/11/21 03:39	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			370289	09/03/21 10:35	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			369662	08/25/21 11:25	FDS	TAL PIT

**Client Sample ID: WGWC-13** 

Date Collected: 08/25/21 12:45 Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-2 **Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 at ID: CHIC2100A		1			370919	09/11/21 04:28	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: A		1			370289	09/03/21 10:38	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			369662	08/25/21 12:45	FDS	TAL PIT

Client Sample ID: WGWC-14A

Date Collected: 08/25/21 13:30

Date Received: 08/28/21 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	EPA 300.0 R2.1		1			370919	09/11/21 04:45	J1T	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370289	09/03/21 10:42	RSK	TAL PIT
	Instrumen	t ID: A								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			369662	08/25/21 13:30	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

Lab Sample ID: 180-126364-3

**Matrix: Water** 

Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126364-4 **Client Sample ID: EB-2** Date Collected: 08/25/21 15:05

**Matrix: Water** 

Date Received: 08/28/21 09:15

Client: Southern Company

	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			370919	09/11/21 05:01	J1T	TAL PIT
	Instrumer	nt ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			370289	09/03/21 11:00	RSK	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT

Lab Sample ID: 180-126364-5 **Client Sample ID: WGWC-17** 

Date Collected: 08/25/21 14:55 **Matrix: Water** Date Received: 08/28/21 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			370919	09/11/21 05:17	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			370289	09/03/21 11:04	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/25/21 14:55	FDS	TAL PIT

Client Sample ID: WGWC-19 Lab Sample ID: 180-126364-6 Date Collected: 08/26/21 11:05

Date Received: 08/28/21 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			370919	09/11/21 05:34	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: A		1			370289	09/03/21 11:08	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/26/21 11:05	FDS	TAL PIT

Lab Sample ID: 180-126364-7 **Client Sample ID: Dup-2** Date Collected: 08/26/21 00:00 **Matrix: Water** 

Date Received: 08/28/21 09:15

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			370919	09/11/21 06:39	J1T	TAL PIT
	Instrumer	t ID: CHIC2100A								

Eurofins TestAmerica, Pittsburgh

**Matrix: Water** 

Job ID: 180-126277-1 Project/Site: Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-126364-7

Date Collected: 08/26/21 00:00 **Matrix: Water** Date Received: 08/28/21 09:15

	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	369957	09/01/21 16:11	AMD	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B at ID: A		1			370289	09/03/21 11:11	RSK	TAL PIT
Total/NA	Analysis Instrumer	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT

Lab Sample ID: 180-126364-8 **Client Sample ID: WGWC-10** 

Date Collected: 08/26/21 12:35 **Matrix: Water** 

Date Received: 08/28/21 09:15

	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type Total/NA	_ <b>Type</b> Analysis	- Method EPA 300.0 R2.1	Run	Factor	Amount	Amount	Number 370919	or Analyzed 09/11/21 06:55	Analyst	- <b>Lab</b> TAL PIT
Total/TVA	,	t ID: CHIC2100A		<b>.</b>			370313	00/11/21 00:00	011	1/4
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370294	09/03/21 13:16	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			369662	08/26/21 12:35	FDS	TAL PIT

Lab Sample ID: 180-126364-9 Client Sample ID: WGWC-24 Date Collected: 08/26/21 13:55 **Matrix: Water** 

Date Received: 08/28/21 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			370919	09/11/21 07:12	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370294	09/03/21 15:19	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370307	09/04/21 10:39	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			371007	09/10/21 15:48	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			369662	08/26/21 13:55	FDS	TAL PIT

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Project/Site: Plant Wansley Ash Pond

**Client Sample ID: Dup-3** 

Date Collected: 08/26/21 00:00

Lab Sample ID: 180-126364-10

**Matrix: Water** 

Date Received: 08/28/21 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			370919	09/11/21 07:44	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 15:22	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370307	09/04/21 10:42	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			371007	09/10/21 15:49	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT

**Client Sample ID: WGWC-25** 

Date Collected: 08/26/21 15:52

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-11

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			370919	09/11/21 08:17	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 15:25	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370307	09/04/21 10:45	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			371007	09/10/21 15:25	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			369662	08/26/21 15:52	FDS	TAL PIT

**Client Sample ID: WGWC-8** 

Date Collected: 08/26/21 12:41

Date Received: 08/28/21 09:15

Lab Sample II	D: 180-126364-12
	Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		1			370919	09/11/21 11:31	J1T	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHIC2100A		5			370919	09/11/21 11:47	J1T	TAL PIT

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Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** 

Date Collected: 08/26/21 12:41 Date Received: 08/28/21 09:15 Lab Sample ID: 180-126364-12

**Matrix: Water** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370294	09/03/21 15:27	RSK	TAL PIT
	Instrument	t ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrument	EPA 6020B t ID: NEMO		1			370307	09/04/21 10:47	RSK	TAL PIT
Total/NA	Analysis Instrument	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrument	Field Sampling t ID: NOEQUIP		1			369662	08/26/21 12:41	FDS	TAL PIT

**Client Sample ID: WGWC-15** 

Date Collected: 08/26/21 16:14

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-13

Lab Sample ID: 180-126364-14

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			370919	09/11/21 09:06	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370294	09/03/21 15:39	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370307	09/04/21 10:56	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling at ID: NOEQUIP		1			369662	08/26/21 16:14	FDS	TAL PIT

Client Sample ID: WGWC-20

Date Collected: 08/26/21 11:32

Date Received: 08/28/21 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			370919	09/11/21 12:02	J1T	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total/NA	Analysis	EPA 300.0 R2.1		5			370919	09/11/21 12:18	J1T	TAL PIT
	Instrumen	t ID: CHIC2100A								
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370294	09/03/21 15:42	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370307	09/04/21 10:59	RSK	TAL PIT
	Instrumen	t ID: NEMO								

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**Matrix: Water** 

### **Lab Chronicle**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-20** 

Lab Sample ID: 180-126364-14

**Matrix: Water** 

Job ID: 180-126277-1

Date Collected: 08/26/21 11:32 Date Received: 08/28/21 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	7470A	_		25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			371007	09/10/21 15:27	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			369662	08/26/21 11:32	FDS	TAL PIT

Lab Sample ID: 180-126364-15 **Client Sample ID: WGWC-23** 

Date Collected: 08/26/21 14:55 **Matrix: Water** 

Date Received: 08/28/21 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			370919	09/11/21 10:11	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370294	09/03/21 15:45	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B at ID: NEMO		1			370307	09/04/21 11:02	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A at ID: HGZ		1			371007	09/10/21 15:28	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C at ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling		1			369662	08/26/21 14:55	FDS	TAL PIT

**Client Sample ID: FB-3** Lab Sample ID: 180-126364-16 Date Collected: 08/26/21 14:53 **Matrix: Water** 

Date Received: 08/28/21 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			370919	09/11/21 09:55	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 15:47	RSK	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369967	09/01/21 17:34	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370307	09/04/21 11:10	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			371007	09/10/21 15:34	KEM	TAL PIT

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Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126364-16 **Client Sample ID: FB-3** 

Date Collected: 08/26/21 14:53 **Matrix: Water** 

Date Received: 08/28/21 09:15

Client: Southern Company

	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	370094	09/02/21 11:51	KMM	TAL PIT

**Client Sample ID: WGWA-3** Lab Sample ID: 180-126367-1 Date Collected: 08/25/21 10:50 **Matrix: Water** 

Date Received: 08/28/21 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: CHICS2100B		1			370999	09/11/21 12:09	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 13:36	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			370651	08/25/21 10:50	FDS	TAL PIT

**Client Sample ID: WGWC-11** Lab Sample ID: 180-126367-2 **Matrix: Water** 

Date Collected: 08/25/21 12:00 Date Received: 08/28/21 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			370999	09/11/21 11:53	J1T	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370294	09/03/21 13:39	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			370651	08/25/21 12:00	FDS	TAL PIT
	Instrumen	t ID: NOEQUIP								

**Client Sample ID: WGWC-12** Lab Sample ID: 180-126367-3

Date Collected: 08/25/21 13:30 Date Received: 08/28/21 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			370999	09/11/21 11:36	J1T	TAL PIT
	Instrumen	t ID: CHICS2100B								
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370294	09/03/21 13:42	RSK	TAL PIT
	Instrumen	it ID: NEMO								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	369958	09/01/21 16:13	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								

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**Matrix: Water** 

Job ID: 180-126277-1

**Matrix: Water** 

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-12

Batch

Instrument ID: CHICS2100B

Instrument ID: NEMO

Instrument ID: NOEQUIP

3005A

**EPA 6020B** 

SM 2540C

Method

EPA 300.0 R2.1

Date Collected: 08/25/21 13:30

Date Received: 08/28/21 09:15

Client: Southern Company

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1			370651	08/25/21 13:30	FDS	TAL PIT

Initial

Amount

50 mL

100 mL

Final

Amount

50 mL

100 mL

Dil

1

Factor

Run

Client Sample ID: FB-2

**Prep Type** 

Total Recoverable

Total Recoverable

Total/NA

Total/NA

Date Collected: 08/25/21 14:35

Batch

Type

Prep

Analysis

Analysis

Analysis

Date Received: 08/28/21 09:15

ımber	or Analyzed	Analyst	Lab	
'0651	08/25/21 13:30	FDS	TAL PIT	_

Lab Sample ID: 180-126367-3

Lab Sample ID: 180-126367-4 **Matrix: Water** 

Batch Prepared Number or Analyzed Analyst Lab 370999 09/11/21 11:20 J1T TAL PIT 369963 09/01/21 17:08 AMD TAL PIT 370294 09/03/21 13:45 RSK TAL PIT 369958 09/01/21 16:13 KMM TAL PIT

Client Sample ID: WGWC-16

Date Collected: 08/25/21 14:50 Date Received: 08/28/21 09:15

Lab Sample ID: 180-126367-5

**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 t ID: CHICS2100B		1			370999	09/11/21 09:36	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 13:48	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	369959	09/01/21 16:21	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			370651	08/25/21 14:50	FDS	TAL PIT

Date Received: 08/28/21 09:15

	Instrument ID:	NOEQUIP				
Total/NA	Analysis Fiel Instrument ID:	ld Sampling NOEQUIP	1	370651	08/25/21 14:50 FDS	TAL PIT
	nple ID: EB-3 ed: 08/26/21 10:10			La	b Sample ID: 180 M	-126367-6 atrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumer	EPA 6020B nt ID: NEMO		1			370294	09/03/21 13:51	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGZ		1			371007	09/10/21 15:35	KEM	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	372692	09/24/21 06:57	RJR	TAL PIT
Total/NA	Analysis Instrumer	EPA 7470A nt ID: HGZ		1			372848	09/24/21 16:41	RJR	TAL PIT

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Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: EB-3** Lab Sample ID: 180-126367-6 Date Collected: 08/26/21 10:10

**Matrix: Water** 

Date Received: 08/28/21 09:15

Client: Southern Company

	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	370094	09/02/21 11:51	KMM	TAL PIT

**Client Sample ID: WGWC-21** Lab Sample ID: 180-126367-7

**Matrix: Water** 

Date Collected: 08/26/21 11:30 Date Received: 08/28/21 09:15

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 t ID: CHICS2100B		1			370999	09/11/21 08:14	J1T	TAL PIT
Total/NA	Analysis Instrumen	EPA 300.0 R2.1 t ID: CHICS2100B		5			370999	09/11/21 08:30	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 13:53	RSK	TAL PIT
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis Instrumen	EPA 7470A t ID: HGZ		1			371007	09/10/21 15:38	KEM	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			370651	08/26/21 11:30	FDS	TAL PIT

Lab Sample ID: 180-126367-8 Client Sample ID: WGWC-9

**Matrix: Water** 

Date Collected: 08/26/21 13:00 Date Received: 08/28/21 09:15

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			370999	09/11/21 08:46	J1T	TAL PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis Instrumen	EPA 6020B t ID: NEMO		1			370294	09/03/21 13:56	RSK	TAL PIT
Total/NA	Analysis Instrumen	SM 2540C t ID: NOEQUIP		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
Total/NA	Analysis Instrumen	Field Sampling t ID: NOEQUIP		1			370651	08/26/21 13:00	FDS	TAL PIT

**Client Sample ID: WGWC-22** Lab Sample ID: 180-126367-9

Date Collected: 08/26/21 15:20 **Matrix: Water** 

Date Received: 08/28/21 09:15

Prep Type	Batch	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	<b>Type</b> Analysis	EPA 300.0 R2.1	Kuii	1	Amount	Amount	370999	09/11/21 07:57	J1T	TAL PIT
	Instrumer	t ID: CHICS2100B								

Eurofins TestAmerica, Pittsburgh

#### **Lab Chronicle**

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-22 Lab Sample ID: 180-126367-9

. Matrix: Water

Date Collected: 08/26/21 15:20 Date Received: 08/28/21 09:15

	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	369963	09/01/21 17:08	AMD	TAL PIT
Total Recoverable	Analysis	EPA 6020B		1			370294	09/03/21 13:59	RSK	TAL PIT
	Instrumen	t ID: NEMO								
Total/NA	Prep	7470A			25 mL	25 mL	370941	09/10/21 09:50	MM1	TAL PIT
Total/NA	Analysis	EPA 7470A		1			371007	09/10/21 15:39	KEM	TAL PIT
	Instrumen	t ID: HGZ								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	370094	09/02/21 11:51	KMM	TAL PIT
	Instrumen	t ID: NOEQUIP								
Total/NA	Analysis	Field Sampling		1			370651	08/26/21 15:20	FDS	TAL PIT
	Instrumen	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

AMD = Alysha Donlan

MM1 = Mary Beth Miller

RJR = Ron Rosenbaum

Batch Type: Analysis

DFE = David Eppinger

FDS = Sampler Field

J1T = Jianwu Tang

KEM = Kimberly Mahoney

KMM = Kendric Moore

RJR = Ron Rosenbaum

RSK = Robert Kurtz

SAB = Sharon Bacha

Eurofins TestAmerica, Pittsburgh

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11

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** Lab Sample ID: 180-126277-1

Date Collected: 08/24/21 12:18 **Matrix: Water** 

Date Received: 08/26/21 10:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1	F1	1.0	0.71	mg/L			09/10/21 09:37	1
Fluoride	0.073	J	0.10	0.026	mg/L			09/10/21 09:37	1
Sulfate	2.8	F1	1.0	0.76	mg/L			09/10/21 09:37	1
Method: EPA 6020B - Meta	ils (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 08:57	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 08:57	1
Barium	0.028		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 08:57	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 08:57	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 08:57	1
Calcium	47		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 08:57	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 08:57	1
Cobalt	0.00079	J	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 08:57	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 08:57	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 08:57	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 08:57	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 08:57	1
Thallium -	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 08:57	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10	10	mg/L			08/30/21 15:16	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

6.80

Analyzed

08/24/21 12:18

Dil Fac

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: FB-1** Lab Sample ID: 180-126277-2

Date Collected: 08/24/21 13:20 **Matrix: Water** 

Method: EPA 300.0 R2.1 - Anio	ns, Ion Chr	omatogra	phy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/10/21 13:10	1
Fluoride	0.065	J	0.10	0.026	mg/L			09/10/21 13:10	1
Sulfate	<0.76		1.0	0.76	mg/L			09/10/21 13:10	1

Method: EPA 6020B - Analyte	Metals (ICP/MS) - Tot Result (	ble RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038	 0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:00	
Arsenic	<0.00031	0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:00	
Barium	<0.0016	0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:00	•
Beryllium	<0.00018	0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:00	
Boron	<0.039	0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:00	•
Calcium	<0.13	0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:00	•
Chromium	<0.0015	0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:00	
Cobalt	<0.00013	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:00	•
Lead	<0.00013	0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:00	•
Lithium	<0.0034	0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:00	
Molybdenum	<0.00061	0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:00	•
Selenium	<0.0015	0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:00	•
Thallium	<0.00015	0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:00	

General Chemistry								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10	ma/l			08/30/21 15:16	1

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** Lab Sample ID: 180-126277-3

Date Collected: 08/24/21 13:40 **Matrix: Water** 

Date Received: 08/26/21 10:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.8		1.0	0.71	mg/L			09/10/21 13:42	1
Fluoride	0.16		0.10	0.026	mg/L			09/10/21 13:42	1
Sulfate	8.9		1.0	0.76	mg/L			09/10/21 13:42	1
Method: EPA 6020B - Meta	nls (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:03	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:03	1
Barium	0.0074	J	0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:03	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:03	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:03	1
Calcium	26		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:03	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:03	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:03	1
Lead	< 0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:03	1
Lithium	0.0041	J	0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:03	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:03	1
Selenium	< 0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:03	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:03	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120			10	mg/L			08/30/21 15:16	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

7.88

Dil Fac

Analyzed

08/24/21 13:40

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-7** Lab Sample ID: 180-126277-4

Date Collected: 08/24/21 15:10 **Matrix: Water** 

Date Received: 08/26/21 10:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			09/10/21 13:26	1
Fluoride	0.054	J	0.10	0.026	mg/L			09/10/21 13:26	1
Sulfate	<0.76		1.0	0.76	mg/L			09/10/21 13:26	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:11	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:11	1
Barium	0.012		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:11	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:11	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:11	1
Calcium	1.7		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:11	1
Cobalt	0.00017	J	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:11	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:11	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:11	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:11	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:11	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		10	10	mg/L			08/30/21 15:16	1

RL

MDL Unit

SU

Prepared

D

Analyzed

08/24/21 15:10

Result Qualifier

5.53

Dil Fac

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: Dup-1 Lab Sample ID: 180-126277-5

Matrix: Water

08/31/21 13:45

Date Collected: 08/24/21 00:00 Date Received: 08/26/21 10:00

**Total Dissolved Solids** 

Method: EPA 300.0 R2.1 -	<b>Anions, Ion Chr</b>	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		1.0	0.71	mg/L			09/19/21 19:40	1
Fluoride	<0.026		0.10	0.026	mg/L			09/19/21 19:40	1
Sulfate	<0.76		1.0	0.76	mg/L			09/19/21 19:40	1
- Method: EPA 6020B - Met	als (ICP/MS) - To	tal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:14	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:14	1
Barium	0.012		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:14	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:14	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:14	1
Calcium	1.4		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:14	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:14	1
Cobalt	0.00013	J	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:14	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:14	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:14	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:14	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:14	1
Thallium -	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:14	1
- General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

10

10 mg/L

22

Eurofins TestAmerica, Pittsburgh

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-2** Lab Sample ID: 180-126278-1

Date Collected: 08/23/21 15:35 **Matrix: Water** 

Date Received: 08/26/21 10:00

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3	F1	1.0	0.71	mg/L			09/11/21 16:57	1
Fluoride	0.097	J	0.10	0.026	mg/L			09/07/21 22:59	1
Sulfate	1.3		1.0	0.76	mg/L			09/07/21 22:59	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:17	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:17	1
Barium	0.023		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:17	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:17	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:17	1
Calcium	13		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:17	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:17	1
Cobalt	0.00049	J	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:17	1
Lead	0.00023	J	0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:17	1
Lithium	0.0066		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:17	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:17	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:17	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:17	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids			10	10	mg/L			08/30/21 17:35	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

6.18

Dil Fac

Analyzed

08/23/21 15:35

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126278-2 **Client Sample ID: EB-1** 

Date Collected: 08/24/21 11:00 **Matrix: Water** Date Received: 08/26/21 10:00

Method: EPA 300.0 R2.1								
Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71	1.0	0.71	mg/L			09/11/21 17:46	1
Fluoride	<0.026	0.10	0.026	mg/L			09/07/21 21:30	1
Sulfate	<0.76	1.0	0.76	mg/L			09/07/21 21:30	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:20	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:20	1
Barium	<0.0016		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:20	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:20	1
Boron	<0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:20	1
Calcium	<0.13		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:20	•
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:20	
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:20	•
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:20	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:20	
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:20	
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:20	
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:20	

General Chemistry							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10	10	10 mg/L			08/30/21 15:16	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** Lab Sample ID: 180-126278-3

**Matrix: Water** 

Date Collected: 08/24/21 11:45 Date Received: 08/26/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.1		1.0	0.71	mg/L			09/11/21 18:03	1
Fluoride	0.062	J	0.10	0.026	mg/L			09/07/21 21:12	1
Sulfate	<0.76		1.0	0.76	mg/L			09/07/21 21:12	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:23	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:23	1
Barium	0.049		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:23	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:23	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:23	1
Calcium	1.2		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:23	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:23	1
Cobalt	0.0016	J	0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:23	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:23	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:23	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:23	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:23	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:23	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		10	10	mg/L			08/30/21 15:16	1
Method: Field Sampling -									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
pH	5.21				SU			08/24/21 11:45	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** Lab Sample ID: 180-126278-4 Date Collected: 08/24/21 14:10

**Matrix: Water** 

Date Received: 08/26/21 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.5		1.0	0.71	mg/L			09/11/21 18:19	1
Fluoride	0.17		0.10	0.026	mg/L			09/07/21 23:53	1
Sulfate	7.9		1.0	0.76	mg/L			09/07/21 23:53	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 09:26	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 09:26	1
Barium	0.0055	J	0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 09:26	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 09:26	1
Boron	< 0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 09:26	1
Calcium	15		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 09:26	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 09:26	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 09:26	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 09:26	1
Lithium	0.0036	J	0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 09:26	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 09:26	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 09:26	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 09:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		10	10	mg/L			08/31/21 13:45	1
Method: Field Sampling -	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.22				SU			08/24/21 14:10	1

10/4/2021 (Rev. 1)

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-18** Lab Sample ID: 180-126364-1 Date Collected: 08/25/21 11:25

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		1.0	0.71	mg/L			09/11/21 03:39	1
Fluoride	0.13		0.10	0.026	mg/L			09/11/21 03:39	1
Sulfate	8.2		1.0	0.76	mg/L			09/11/21 03:39	1
- Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 10:35	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 10:35	1
Barium	0.015		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 10:35	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 10:35	1
Boron	0.10		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 10:35	1
Calcium	16		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 10:35	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 10:35	1
Cobalt	0.00084	J	0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 10:35	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 10:35	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 10:35	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 10:35	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 10:35	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 10:35	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	92		10	10	mg/L			09/01/21 16:13	1
Method: Field Sampling -	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.74				SU			08/25/21 11:25	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-13** Lab Sample ID: 180-126364-2 Date Collected: 08/25/21 12:45

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.2		1.0	0.71	mg/L			09/11/21 04:28	1
Fluoride	0.20		0.10	0.026	mg/L			09/11/21 04:28	1
Sulfate	1.8		1.0	0.76	mg/L			09/11/21 04:28	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 10:38	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 10:38	1
Barium	0.046		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 10:38	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 10:38	1
Boron	0.063	J	0.080	0.039	mg/L		09/01/21 16:11	09/03/21 10:38	1
Calcium	4.0		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 10:38	1
Chromium	0.0017	J	0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 10:38	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 10:38	1
Lead	0.00025	J	0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 10:38	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 10:38	1
Molybdenum	0.00092	J	0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 10:38	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 10:38	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 10:38	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	53		10	10	mg/L			09/01/21 16:13	1
Method: Field Sampling -	Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.27				SU			08/25/21 12:45	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: 180-126364-3 Date Collected: 08/25/21 13:30

5.39

**Matrix: Water** 

Date Received: 08/28/21 09:15

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		1.0	0.71	mg/L			09/11/21 04:45	1
Fluoride	0.071	J	0.10	0.026	mg/L			09/11/21 04:45	1
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 04:45	1
Method: EPA 6020B - Meta	nls (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 10:42	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 10:42	1
Barium	0.030		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 10:42	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 10:42	1
Boron	0.043	J	0.080	0.039	mg/L		09/01/21 16:11	09/03/21 10:42	1
Calcium	0.70		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 10:42	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 10:42	1
Cobalt	0.0029		0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 10:42	1
Lead	0.00041	J	0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 10:42	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 10:42	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 10:42	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 10:42	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 10:42	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		10	10	mg/L			09/01/21 16:13	1
Method: Field Sampling -	Field Sampling								
Method: Fleid Sampling - I Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	

SU

08/25/21 13:30

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-2 Lab Sample ID: 180-126364-4

Date Collected: 08/25/21 15:05 Matrix: Water Date Received: 08/28/21 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	<0.71		1.0	0.71	mg/L			09/11/21 05:01	1
	Fluoride	0.037	J	0.10	0.026	mg/L			09/11/21 05:01	1
	Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 05:01	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 11:00	-
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 11:00	
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 11:00	
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 11:00	
Boron	<0.039		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 11:00	
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 11:00	
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 11:00	
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 11:00	
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 11:00	
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 11:00	
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 11:00	
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 11:00	
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 11:00	

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/01/21 16:13	1

3

4

6

8

9

11

12

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-17** Lab Sample ID: 180-126364-5

Date Collected: 08/25/21 14:55 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.71	mg/L			09/11/21 05:17	1
Fluoride	0.093	J	0.10	0.026	mg/L			09/11/21 05:17	1
Sulfate	3.3		1.0	0.76	mg/L			09/11/21 05:17	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 11:04	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 11:04	1
Barium	0.011		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 11:04	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 11:04	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 11:04	1
Calcium	6.0		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 11:04	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 11:04	1
Cobalt	0.00042	J	0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 11:04	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 11:04	1
Lithium	0.0048	J	0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 11:04	1
Molybdenum	0.0022	J	0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 11:04	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 11:04	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 11:04	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	84		10	10	mg/L			09/01/21 16:13	1

RL

MDL Unit

SU

Result Qualifier

6.09

Dil Fac

Analyzed

08/25/21 14:55

Prepared

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** Lab Sample ID: 180-126364-6 Date Collected: 08/26/21 11:05

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3		1.0	0.71	mg/L			09/11/21 05:34	1
Fluoride	0.38		0.10	0.026	mg/L			09/11/21 05:34	1
Sulfate	3.5		1.0	0.76	mg/L			09/11/21 05:34	1
Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 11:08	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 11:08	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 11:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 11:08	1
Boron	<0.039		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 11:08	1
Calcium	10		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 11:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 11:08	1
Cobalt	0.00022	J	0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 11:08	1
Lead	< 0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 11:08	1
Lithium	0.057		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 11:08	1
Molybdenum	0.0011	J	0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 11:08	1
Selenium	< 0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 11:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 16:11	09/03/21 11:08	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	94		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling -	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.66				SU			08/26/21 11:05	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: Dup-2** Lab Sample ID: 180-126364-7 Date Collected: 08/26/21 00:00

**Matrix: Water** 

Date Received: 08/28/21 09:15

**General Chemistry** 

**Total Dissolved Solids** 

Analyte

Method: EPA 300.0 R2	2.1 - Anions, Ion Ch	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		1.0	0.71	mg/L			09/11/21 06:39	1
Fluoride	0.38		0.10	0.026	mg/L			09/11/21 06:39	1
Sulfate	3.3		1.0	0.76	mg/L			09/11/21 06:39	1
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 11:11	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 11:11	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 11:11	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 11:11	1
Boron	<0.039		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 11:11	1
Calcium	10		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 11:11	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 11:11	1
Cobalt	0.00020	J	0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 11:11	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 11:11	1
Lithium	0.058		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 11:11	1
Molybdenum	0.0010	J	0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 11:11	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 16:11	09/03/21 11:11	1
Thallium	<0.00015		0.0010	0.00015	ma/l		09/01/21 16:11	09/03/21 11:11	1

RL

10

MDL Unit

10 mg/L

Prepared

Analyzed

09/02/21 11:51

Result Qualifier

95

Eurofins TestAmerica, Pittsburgh

Dil Fac

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** Lab Sample ID: 180-126364-8

Date Collected: 08/26/21 12:35 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.6		1.0	0.71	mg/L			09/11/21 06:55	1
Fluoride	0.16		0.10	0.026	mg/L			09/11/21 06:55	1
Sulfate	1.8		1.0	0.76	mg/L			09/11/21 06:55	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:16	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:16	1
Barium	0.032		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:16	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:16	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:16	1
Calcium	7.6		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:16	1
Chromium	0.0024		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:16	1
Cobalt	0.00044	J	0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:16	1
Lead	0.00026	J	0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:16	1
Lithium	0.0044	J	0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:16	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:16	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:16	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:16	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		10	10	mg/L			09/02/21 11:51	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

6.31

Dil Fac

Analyzed

08/26/21 12:35

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-24** Lab Sample ID: 180-126364-9 Date Collected: 08/26/21 13:55

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		1.0	0.71	mg/L	— <u> </u>		09/11/21 07:12	1
Fluoride	1.2		0.10	0.026	Ū			09/11/21 07:12	1
Sulfate	170		1.0		mg/L			09/11/21 07:12	1
Method: EPA 6020B - Meta	ls (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038	·	0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:19	1
Arsenic	0.0033		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:19	1
Barium	0.042		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:19	1
Beryllium	0.014		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:19	1
Boron	2.1		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:39	1
Cadmium	0.00061	J	0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:19	1
Calcium	69		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:19	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:19	1
Cobalt	0.13		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:19	1
Lead	0.0012		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:19	1
Lithium	0.0076		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:19	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:19	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:19	1
Thallium	0.00072	J	0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:19	1
Method: EPA 7470A - Merc	ury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00026		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling - I	Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	4.33				SU			08/26/21 13:55	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: Dup-3 Lab Sample ID: 180-126364-10

Date Collected: 08/26/21 00:00 Matrix: Water

Date Received: 08/28/21 09:15

Analyte	Anions, Ion Chi Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		1.0	0.71	mg/L			09/11/21 07:44	1
Fluoride	1.2		0.10	0.026	mg/L			09/11/21 07:44	1
Sulfate	170		1.0	0.76	mg/L			09/11/21 07:44	1
Method: EPA 6020B - Meta	ils (ICP/MS) - To	otal Recoveral	ole						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:22	1
Arsenic	0.0035		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:22	1
Barium	0.043		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:22	1
Beryllium	0.014		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:22	1
Boron	2.2		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:42	1
Cadmium	0.00056	J	0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:22	1
Calcium	71		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:22	1
Chromium	0.0021		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:22	1
Cobalt	0.14		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:22	1
Lead	0.0012		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:22	1
Lithium	0.0079		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:22	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:22	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:22	1
Thallium	0.00074	J	0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:22	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00026		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:49	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	420		10	10	mg/L			09/02/21 11:51	1

10/4/2021 (Rev. 1)

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-25** Lab Sample ID: 180-126364-11

Date Collected: 08/26/21 15:52 **Matrix: Water** 

Method: EPA 300.0 R2.1 - Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79	F1	1.0	0.71	mg/L			09/11/21 08:17	1
Fluoride	0.047	J	0.10	0.026	mg/L			09/11/21 08:17	1
Sulfate	13		1.0	0.76	mg/L			09/11/21 08:17	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038	·	0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:25	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:25	1
Barium	0.41		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:25	1
Beryllium	0.00028	J	0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:25	1
Boron	0.70		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:25	1
Calcium	16		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:25	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:25	1
Cobalt	0.0050		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:25	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:25	1
Lithium	0.0044	J	0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:25	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:25	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:25	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:25	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0019		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:25	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	200		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling -	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.30				SU			08/26/21 15:52	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-8 Lab Sample ID: 180-126364-12

Date Collected: 08/26/21 12:41 Date Received: 08/28/21 09:15 **Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		1.0	0.71	mg/L			09/11/21 11:31	
Fluoride	0.21		0.10	0.026	mg/L			09/11/21 11:31	
Sulfate	220		5.0	3.8	mg/L			09/11/21 11:47	
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:27	
Arsenic	0.0013		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:27	
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:27	
Beryllium	0.0020	J	0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:27	
Boron	2.4		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:47	
Calcium	85		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:27	
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:27	
Cobalt	0.00050	J	0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:27	
Lead	0.00014	J	0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:27	
Lithium	0.013		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:27	
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:27	
Selenium	0.0037	J	0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:27	
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:27	

	Seneral Chemistry									
A	nalyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ţ	otal Dissolved Solids	550		10	10	mg/L			09/02/21 11:51	1

	Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.36				SU			08/26/21 12:41	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** Lab Sample ID: 180-126364-13

Date Collected: 08/26/21 16:14 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4		1.0	0.71	mg/L			09/11/21 09:06	1
Fluoride	0.77		0.10	0.026	mg/L			09/11/21 09:06	1
Sulfate	16		1.0	0.76	mg/L			09/11/21 09:06	1
Method: EPA 6020B - Metal	ls (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:39	1
Arsenic	0.0012		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:39	1
Barium	0.029		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:39	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:39	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:56	1
Calcium	31		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:39	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:39	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:39	1
Lithium	0.0059		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:39	1
Molybdenum	0.0029	J	0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:39	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling - F	ield Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.58				SU			08/26/21 16:14	

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-20** Lab Sample ID: 180-126364-14

Date Collected: 08/26/21 11:32 **Matrix: Water** 

Method: EPA 300.0 R2	2.1 - Anions, Ion Ch	romatogra	ohy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		1.0	0.71	mg/L			09/11/21 12:02	
Fluoride	2.0		0.10	0.026	mg/L			09/11/21 12:02	
Sulfate	290		5.0	3.8	mg/L			09/11/21 12:18	;
Method: EPA 6020B -	Metals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:42	
Arsenic	0.00031	J	0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:42	
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:42	
Beryllium	0.0081		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:42	
Boron	2.1		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 10:59	
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:42	
Calcium	120		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:42	
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:42	
Cobalt	0.00046	J	0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:42	
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:42	
Lithium	0.11		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:42	
Molybdenum	0.00079	J	0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:42	
Selenium	0.0016	J	0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:42	
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:42	
Method: EPA 7470A -	Mercury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	0.00033		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:27	-

Gonoral Gnomical									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	720		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling - Fie	eld Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
					011			00/00/04 44 00	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
рН	5.37		SU			08/26/21 11:32	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-23** Lab Sample ID: 180-126364-15

Date Collected: 08/26/21 14:55 **Matrix: Water** 

Date	Received:	08/28/21	09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.3		1.0	0.71	mg/L			09/11/21 10:11	1
Fluoride	0.081	J	0.10	0.026	mg/L			09/11/21 10:11	1
Sulfate	7.5		1.0	0.76	mg/L			09/11/21 10:11	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:45	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:45	1
Barium	0.0078	J	0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:45	1
Beryllium	0.00089	J	0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:45	1
Boron	0.052	J	0.080	0.039	mg/L		09/01/21 17:34	09/04/21 11:02	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:45	1
Calcium	4.6		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:45	1
Cobalt	0.00017	J	0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:45	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:45	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:45	1
Selenium	0.0020	J	0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:45	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	88		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling -									
Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
pH	5.80				SU			08/26/21 14:55	1

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: FB-3** Lab Sample ID: 180-126364-16

Date Collected: 08/26/21 14:53 **Matrix: Water** 

Date Received: 08/28/21 09:15

Total Dissolved Solids

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/11/21 09:55	1
Fluoride	0.042	J	0.10	0.026	mg/L			09/11/21 09:55	1
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 09:55	1
Method: EPA 6020B - Me	tals (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 15:47	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 15:47	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 15:47	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 15:47	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:34	09/04/21 11:10	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 15:47	1
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 15:47	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 15:47	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 15:47	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 15:47	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 15:47	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 15:47	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 15:47	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 15:47	1
Method: EPA 7470A - Me	rcury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:34	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

10

10 mg/L

<10

09/02/21 11:51

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** Lab Sample ID: 180-126367-1

Date Collected: 08/25/21 10:50 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9		1.0	0.71	mg/L			09/11/21 12:09	1
Fluoride	0.077	J	0.10	0.026	mg/L			09/11/21 12:09	1
Sulfate	0.79	J	1.0	0.76	mg/L			09/11/21 12:09	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:36	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:36	1
Barium	0.014		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:36	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:36	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:36	1
Calcium	1.7		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:36	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:36	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:36	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:36	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:36	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:36	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:36	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:36	1
General Chemistry									
Analyte	Result	Qualifier	RL _	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	21		10	10	mg/L	_		09/01/21 16:13	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

5.52

Dil Fac

Analyzed

08/25/21 10:50

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** Lab Sample ID: 180-126367-2

Date Collected: 08/25/21 12:00 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		1.0	0.71	mg/L			09/11/21 11:53	1
Fluoride	0.056	J	0.10	0.026	mg/L			09/11/21 11:53	1
Sulfate	1.1		1.0	0.76	mg/L			09/11/21 11:53	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:39	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:39	1
Barium	0.040		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:39	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:39	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:39	1
Calcium	1.5		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:39	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:39	1
Cobalt	0.00045	J	0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:39	1
Lead	0.00023	J	0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:39	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:39	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:39	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:39	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		10	10	mg/L			09/01/21 16:13	1

RL

MDL Unit

SU

D

Prepared

Result Qualifier

5.66

Analyzed

08/25/21 12:00

Dil Fac

Job ID: 180-126277-1 Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-12** Lab Sample ID: 180-126367-3

Date Collected: 08/25/21 13:30 **Matrix: Water** 

Date Received: 08/28/21 09:15

Analyte

pН

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		1.0	0.71	mg/L			09/11/21 11:36	1
Fluoride	0.14		0.10	0.026	mg/L			09/11/21 11:36	1
Sulfate	13		1.0	0.76	mg/L			09/11/21 11:36	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	rable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:42	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:42	1
Barium	0.016		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:42	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:42	1
Boron	< 0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:42	1
Calcium	14		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:42	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:42	1
Cobalt	0.00050	J	0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:42	1
Lead	< 0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:42	1
Lithium	0.0061		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:42	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:42	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:42	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:42	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		10	10	mg/L			09/01/21 16:13	1

RL

MDL Unit

SU

Result Qualifier

6.69

Eurofins TestAmerica, Pittsburgh

Dil Fac

Analyzed

08/25/21 13:30

Prepared

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: FB-2** Lab Sample ID: 180-126367-4 Date Collected: 08/25/21 14:35

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Anio	ns, Ion Chr	omatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/11/21 11:20	1
Fluoride	0.053	J	0.10	0.026	mg/L			09/11/21 11:20	1
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 11:20	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:45	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:45	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:45	1
Boron	<0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:45	1
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:45	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:45	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:45	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:45	1

General Chemistry									
Analyte	Result Qualifier	RL	MDL U	nit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids	<10	10	10 m	α/I			09/01/21 16:13	1	

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** Lab Sample ID: 180-126367-5 Date Collected: 08/25/21 14:50

**Matrix: Water** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		1.0	0.71	mg/L			09/11/21 09:36	1
Fluoride	0.099	J	0.10	0.026	mg/L			09/11/21 09:36	1
Sulfate	63		1.0	0.76	mg/L			09/11/21 09:36	1
Method: EPA 6020B - Met	als (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:48	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:48	1
Barium	0.035		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:48	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:48	1
Boron	0.89		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:48	1
Calcium	27		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:48	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:48	1
Cobalt	< 0.00013		0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:48	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:48	1
Lithium	0.0046	J	0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:48	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:48	1
Selenium	0.0019	J	0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:48	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:48	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		10	10	mg/L			09/01/21 16:21	1
Method: Field Sampling -	Field Sampling								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.25				SU			08/25/21 14:50	1

Client: Southern Company

Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-3 Lab Sample ID: 180-126367-6

Matrix: Water

09/01/21 17:08 09/03/21 13:51

09/01/21 17:08 09/03/21 13:51

09/01/21 17:08 09/03/21 13:51

09/01/21 17:08 09/03/21 13:51

09/01/21 17:08 09/03/21 13:51

09/01/21 17:08 09/03/21 13:51

Date Collected: 08/26/21 10:10 Date Received: 08/28/21 09:15

Cobalt

Lead

Lithium

Molybdenum

Selenium

Thallium

Method: EPA 300.0 R	2.1 - Anions, Ion Chi	romatograp	hy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	<0.71		1.0	0.71	mg/L			09/11/21 07:41	
Fluoride	0.058	J	0.10	0.026	mg/L			09/11/21 07:41	
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 07:41	
Method: EPA 6020B -	· Metals (ICP/MS) - To	otal Recove	rable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:51	
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:51	
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:51	
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:51	
Boron	<0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:51	
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:08	09/03/21 13:51	
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:51	
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:51	

Method: EPA 7470A - Mercury	y (CVAA)							
Analyte	Result Qual	ifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00019 J	0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:35	1
Mercury	<0.00013 H	0.00020	0.00013	mg/L		09/24/21 06:57	09/24/21 16:41	1

0.0025

0.0010

0.0050

0.015

0.0050

0.0010

0.00013 mg/L

0.00013 mg/L

0.0034 mg/L

0.00061 mg/L

0.0015 mg/L

0.00015 mg/L

<0.00013

< 0.00013

< 0.0034

<0.00061

<0.0015

<0.00015

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			09/02/21 11:51	1

2

3

5

6

<u>8</u>

10

12

13

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-21** Lab Sample ID: 180-126367-7 Date Collected: 08/26/21 11:30

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47		1.0	0.71	mg/L			09/11/21 08:14	1
Fluoride	2.0		0.10	0.026	mg/L			09/11/21 08:14	1
Sulfate	190		5.0	3.8	mg/L			09/11/21 08:30	5
- Method: EPA 6020B - Meta	ıls (ICP/MS) - To	otal Recove	erable						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00076	J	0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:53	1
Arsenic	0.00057	J	0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:53	1
Barium	0.0086	J	0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:53	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:53	1
Boron	0.087		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:53	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:08	09/03/21 13:53	1
Calcium	51		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:53	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:53	1
Cobalt	0.00042	J	0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:53	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:53	1
Lithium	0.032		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:53	1
Molybdenum	0.044		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:53	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:53	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:53	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:38	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	480		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling - I	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.88				SU			08/26/21 11:30	

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-9** Lab Sample ID: 180-126367-8 Date Collected: 08/26/21 13:00

**Matrix: Water** 

Date Received: 08/28/21 09:15

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1	F2 F1	1.0	0.71	mg/L			09/11/21 08:46	1
Fluoride	1.0	F1	0.10	0.026	mg/L			09/11/21 08:46	1
Sulfate	52	F2 F1	1.0	0.76	mg/L			09/11/21 08:46	1
Method: EPA 6020B - Meta	als (ICP/MS) - To	otal Recove	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:56	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:56	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:56	1
Beryllium	0.00038	J	0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:56	1
Boron	0.56		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:56	1
Calcium	9.3		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:56	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:56	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:56	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:56	1
Lithium	0.030		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:56	1
Molybdenum	0.0028	J	0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:56	1
Selenium	0.0028	J	0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:56	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:56	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		10	10	mg/L			09/02/21 11:51	1

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08/26/21 13:00

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-22** Lab Sample ID: 180-126367-9 Date Collected: 08/26/21 15:20

**Matrix: Water** 

Method: EPA 300.0 R2.1 - Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.2		1.0	0.71	mg/L			09/11/21 07:57	1
Fluoride	0.51		0.10	0.026	mg/L			09/11/21 07:57	1
Sulfate	100		1.0		mg/L			09/11/21 07:57	1
Method: EPA 6020B - Meta	ils (ICP/MS) - To	otal Recove	erable						
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:59	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:59	1
Barium	0.031		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:59	1
Beryllium	0.00053	J	0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:59	1
Boron	0.36		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:59	1
Cadmium	< 0.00022		0.0025	0.00022	mg/L		09/01/21 17:08	09/03/21 13:59	1
Calcium	24		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:59	1
Chromium	< 0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:59	1
Cobalt	0.00038	J	0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:59	1
Lead	0.00022	J	0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:59	1
Lithium	0.011		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:59	1
Molybdenum	< 0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:59	1
Selenium	0.0049	J	0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:59	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:59	1
Method: EPA 7470A - Merc	cury (CVAA)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018	J	0.00020	0.00013	mg/L		09/10/21 09:50	09/10/21 15:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		10	10	mg/L			09/02/21 11:51	1
Method: Field Sampling - I	Field Sampling								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.40				SU			08/26/21 15:20	

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

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

Lab Sample ID: MB 180-370384/6

**Matrix: Water** 

Analysis Batch: 370384

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

MB MB

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.026		0.10	0.026	mg/L			09/07/21 13:53	1
Sulfate	<0.76		1.0	0.76	mg/L			09/07/21 13:53	1

Lab Sample ID: LCS 180-370384/5

**Matrix: Water** 

Analysis Batch: 370384

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

%Rec.

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Fluoride 2.50 2.41 mg/L 96 90 - 110 Sulfate 50.0 47.0 90 - 110 mg/L 94

Lab Sample ID: 180-126278-1 MS

**Matrix: Water** 

Analysis Batch: 370384

**Client Sample ID: WGWA-2** 

**Client Sample ID: WGWA-2** 

Prep Type: Total/NA

Sample Sample Spike MS MS %Rec. Result Qualifier **Result Qualifier** Added Analyte Unit D %Rec Limits 0.097 J 2.50 Fluoride 2.70 mg/L 104 90 - 110 Sulfate 50.0 49 1 96 90 - 110 1.3 mg/L

Lab Sample ID: 180-126278-1 MSD

**Matrix: Water** 

**Analysis Batch: 370384** 

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Fluoride	0.097	J	2.50	2.73		mg/L		105	90 - 110	1	20
Sulfate	1.3		50.0	49.9		mg/L		97	90 - 110	2	20

Lab Sample ID: MB 180-370761/88

**Matrix: Water** 

Analysis Batch: 370761

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

Prep Type: Total/NA

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Chloride < 0.71 1.0 0.71 mg/L 09/10/21 09:20 Fluoride 0.10 0.026 mg/L 09/10/21 09:20 < 0.026 Sulfate 0.76 mg/L 09/10/21 09:20 < 0.76 1.0

Lab Sample ID: LCS 180-370761/87

**Matrix: Water** 

Analysis Batch: 370761

**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	52.0		mg/L		104	90 - 110	
Fluoride	2.50	2.56		mg/L		102	90 - 110	
Sulfate	50.0	51.5		ma/l		103	90 - 110	

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10/4/2021 (Rev. 1)

Job ID: 180-126277-1

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126277-1 MS

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

**Client Sample ID: WGWA-5 Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 370761** 

7 man <b>y</b> 0.0 2 a com 0.0 c c c	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2.1	F1	50.0	53.3		mg/L		102	90 - 110	
Fluoride	0.073	J	2.50	2.60		mg/L		101	90 - 110	
Sulfate	2.8	F1	50.0	53.0		mg/L		101	90 - 110	

Lab Sample ID: 180-126277-1 MSD **Client Sample ID: WGWA-5 Prep Type: Total/NA** 

**Matrix: Water** 

Analysis Batch: 370761

•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2.1	F1	50.0	58.0	F1	mg/L		112	90 - 110	8	20
Fluoride	0.073	J	2.50	2.83		mg/L		110	90 - 110	8	20
Sulfate	2.8	F1	50.0	58.2	F1	mg/L		111	90 - 110	9	20

Lab Sample ID: MB 180-370919/63 **Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA** 

Analysis Batch: 370919

	МВ	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/11/21 03:23	1
Fluoride	<0.026		0.10	0.026	mg/L			09/11/21 03:23	1
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 03:23	1

Lab Sample ID: LCS 180-370919/62 **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA** 

Analysis Batch: 370919

	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	50.0	49.2		mg/L		98	90 - 110		_
Fluoride	2.50	2.65		mg/L		106	90 - 110		
Sulfate	50.0	47.4		mg/L		95	90 - 110		

Lab Sample ID: 180-126364-1 MS **Client Sample ID: WGWA-18** 

**Matrix: Water** 

Analysis Batch: 370919

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2.3		50.0	50.4		mg/L		96	90 - 110	
Fluoride	0.13		2.50	2.58		mg/L		98	90 - 110	
Sulfate	8.2		50.0	54.3		mg/L		92	90 - 110	

Lab Sample ID: 180-126364-1 MSD **Client Sample ID: WGWA-18** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 370919

_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	2.3		50.0	53.5		mg/L		102	90 - 110	6	20
Fluoride	0.13		2.50	2.71		mg/L		103	90 - 110	5	20
Sulfate	8.2		50.0	58.0		mg/L		100	90 - 110	7	20

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**Prep Type: Total/NA** 

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: 180-126364-11 MS

**Matrix: Water** 

**Analysis Batch: 370919** 

**Client Sample ID: WGWC-25 Prep Type: Total/NA** 

-	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	79	F1	50.0	128		mg/L		97	90 - 110	
Fluoride	0.047	J	2.50	2.56		mg/L		101	90 - 110	
Sulfate	13		50.0	62.5		mg/L		100	90 - 110	

Lab Sample ID: 180-126364-11 MSD

**Matrix: Water** 

Analysis Batch: 370919

**Client Sample ID: WGWC-25 Prep Type: Total/NA** 

_	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	79	F1	50.0	124	F1	mg/L		89	90 - 110	3	20
Fluoride	0.047	J	2.50	2.51		mg/L		99	90 - 110	2	20
Sulfate	13		50.0	60.6		mg/L		96	90 - 110	3	20

Lab Sample ID: MB 180-370999/41

**Matrix: Water** 

Analysis Batch: 370999

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

**Client Sample ID: Lab Control Sample** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.71		1.0	0.71	mg/L			09/11/21 03:52	1
Fluoride	<0.026		0.10	0.026	mg/L			09/11/21 03:52	1
Sulfate	<0.76		1.0	0.76	mg/L			09/11/21 03:52	1

Lab Sample ID: LCS 180-370999/40

**Matrix: Water** 

**Analysis Batch: 370999** 

-	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	50.0	53.2		mg/L		106	90 - 110	 	
Fluoride	2.50	2.64		mg/L		106	90 - 110		
Sulfate	50.0	53.0		mg/L		106	90 - 110		

Lab Sample ID: 180-126367-8 MS

**Matrix: Water** 

Analysis Batch: 370999

Alialysis Dalcii. 370333										
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	3.1	F2 F1	50.0	48.4		mg/L		91	90 - 110	
Fluoride	1.0	F1	2.50	3.13	F1	mg/L		84	90 - 110	
Sulfate	52	F2 F1	50.0	90.3	F1	mg/L		76	90 - 110	

Lab Sample ID: 180-126367-8 MSD

**Matrix: Water** 

Analysis Batch: 370999

Alialysis Datell. 37 0333											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	3.1	F2 F1	50.0	59.8	F1 F2	mg/L		113	90 - 110	21	20
Fluoride	1.0	F1	2.50	3.83	F1	mg/L		112	90 - 110	20	20
Sulfate	52	F2 F1	50.0	111	F1 F2	mg/L		118	90 - 110	21	20

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**Client Sample ID: WGWC-9** 

Prep Type: Total/NA

Client Sample ID: WGWC-9

Prep Type: Total/NA

Prep Type: Total/NA

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

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

Lab Sample ID: MB 180-371083/6 Client Sample ID: Method Blank

**Matrix: Water** 

**Analysis Batch: 371083** 

**Prep Type: Total/NA** 

MB MB Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte D Prepared Chloride < 0.71 1.0 0.71 mg/L 09/11/21 16:24 Fluoride < 0.026 0.10 0.026 mg/L 09/11/21 16:24 Sulfate 1.0 09/11/21 16:24 < 0.76 0.76 mg/L

Lab Sample ID: LCS 180-371083/5 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 371083** 

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 50.0 53.1 mg/L 106 90 - 110 Fluoride 2.50 2.63 mg/L 105 90 - 110 Sulfate 50.0 52.9 mg/L 106 90 - 110

Lab Sample ID: 180-126278-1 MS **Client Sample ID: WGWA-2 Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 371083** 

Sample Sample Spike MS MS %Rec. Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 3.3 F1 50.0 51.2 mg/L 96 90 - 110

Lab Sample ID: 180-126278-1 MSD **Client Sample ID: WGWA-2 Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 371083** 

Sample Sample Spike MSD MSD %Rec. **RPD** Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec **RPD** Limit Chloride 3.3 F1 50.0 61.5 F1 116 mg/L

Lab Sample ID: MB 180-371996/90 **Client Sample ID: Method Blank** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 371996** 

мв мв Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac mg/L Chloride < 0.71 1.0 0.71 09/19/21 17:24 Fluoride 09/19/21 17:24 < 0.026 0.10 0.026 mg/L Sulfate < 0.76 1.0 0.76 mg/L 09/19/21 17:24

Lab Sample ID: LCS 180-371996/89 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 371996

Alialysis Dalcii. 31 1330								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 50.0	47.6		mg/L		95	90 - 110	
Fluoride	2.50	2.51		mg/L		100	90 - 110	
Sulfate	50.0	47.3		mg/L		95	90 - 110	

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Job ID: 180-126277-1

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-369722/1-A

**Matrix: Water** 

Analysis Batch: 369936

**Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 369722** 

,	<del>-</del>								
	MB I	MB							
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		08/31/21 08:56	09/01/21 08:08	1
Arsenic	< 0.00031		0.0010	0.00031	mg/L		08/31/21 08:56	09/01/21 08:08	1
Barium	<0.0016		0.010	0.0016	mg/L		08/31/21 08:56	09/01/21 08:08	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		08/31/21 08:56	09/01/21 08:08	1
Boron	<0.039		0.080	0.039	mg/L		08/31/21 08:56	09/01/21 08:08	1
Calcium	<0.13		0.50	0.13	mg/L		08/31/21 08:56	09/01/21 08:08	1
Chromium	<0.0015		0.0020	0.0015	mg/L		08/31/21 08:56	09/01/21 08:08	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		08/31/21 08:56	09/01/21 08:08	1
Lead	<0.00013		0.0010	0.00013	mg/L		08/31/21 08:56	09/01/21 08:08	1
Lithium	<0.0034		0.0050	0.0034	mg/L		08/31/21 08:56	09/01/21 08:08	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		08/31/21 08:56	09/01/21 08:08	1
Selenium	<0.0015		0.0050	0.0015	mg/L		08/31/21 08:56	09/01/21 08:08	1
Thallium	<0.00015		0.0010	0.00015	mg/L		08/31/21 08:56	09/01/21 08:08	1
<u> </u>									

Lab Sample ID: LCS 180-369722/2-A

**Matrix: Water** 

Analysis Batch: 369936

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

**Prep Batch: 369722** 

Tananjone Battern Court								
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	0.250	0.246		mg/L		98	80 - 120	
Arsenic	1.00	1.03		mg/L		103	80 - 120	
Barium	1.00	1.00		mg/L		100	80 - 120	
Beryllium	0.500	0.479		mg/L		96	80 - 120	
Boron	1.25	1.28		mg/L		102	80 - 120	
Calcium	25.0	26.6		mg/L		106	80 - 120	
Chromium	0.500	0.502		mg/L		100	80 - 120	
Cobalt	0.500	0.503		mg/L		101	80 - 120	
Lead	0.500	0.502		mg/L		100	80 - 120	
Lithium	0.500	0.509		mg/L		102	80 - 120	
Molybdenum	0.500	0.520		mg/L		104	80 - 120	
Selenium	1.00	1.03		mg/L		103	80 - 120	
Thallium	1.00	1.07		mg/L		107	80 - 120	

Lab Sample ID: MB 180-369957/1-A

**Matrix: Water** 

**Analysis Batch: 370289** 

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

**Prep Batch: 369957** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 16:11	09/03/21 08:37	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 16:11	09/03/21 08:37	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 16:11	09/03/21 08:37	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 16:11	09/03/21 08:37	1
Boron	<0.039		0.080	0.039	mg/L		09/01/21 16:11	09/03/21 08:37	1
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 16:11	09/03/21 08:37	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 16:11	09/03/21 08:37	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 16:11	09/03/21 08:37	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 16:11	09/03/21 08:37	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 16:11	09/03/21 08:37	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 16:11	09/03/21 08:37	1

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Job ID: 180-126277-1

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

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

MB MB

MD MD

Lab Sample ID: MB 180-369957/1-A

Lab Sample ID: LCS 180-369957/2-A

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 370289** 

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

**Prep Batch: 369957** 

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Selenium <0.0015 0.0050 0.0015 mg/L 09/01/21 16:11 09/03/21 08:37 09/01/21 16:11 09/03/21 08:37 Thallium < 0.00015 0.0010 0.00015 mg/L

> **Client Sample ID: Lab Control Sample Prep Type: Total Recoverable**

**Prep Batch: 369957** 

Analysis Batch: 370289							Prep Batch: 36995
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.237		mg/L		95	80 - 120
Arsenic	1.00	1.02		mg/L		102	80 - 120
Barium	1.00	1.01		mg/L		101	80 - 120
Beryllium	0.500	0.504		mg/L		101	80 - 120
Boron	1.25	1.18		mg/L		94	80 - 120
Calcium	25.0	26.9		mg/L		107	80 - 120
Chromium	0.500	0.506		mg/L		101	80 - 120
Cobalt	0.500	0.510		mg/L		102	80 - 120
Lead	0.500	0.504		mg/L		101	80 - 120
Lithium	0.500	0.485		mg/L		97	80 - 120
Molybdenum	0.500	0.512		mg/L		102	80 - 120
Selenium	1.00	1.03		mg/L		103	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120

Lab Sample ID: MB 180-369963/1-A

**Matrix: Water** 

Analysis Batch: 370294

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

**Prep Batch: 369963** 

	IVIB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:08	09/03/21 13:05	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:08	09/03/21 13:05	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:08	09/03/21 13:05	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:08	09/03/21 13:05	1
Boron	<0.039		0.080	0.039	mg/L		09/01/21 17:08	09/03/21 13:05	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:08	09/03/21 13:05	1
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 17:08	09/03/21 13:05	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:08	09/03/21 13:05	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:08	09/03/21 13:05	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:08	09/03/21 13:05	1
Lithium	< 0.0034		0.0050	0.0034	mg/L		09/01/21 17:08	09/03/21 13:05	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:08	09/03/21 13:05	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:08	09/03/21 13:05	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:08	09/03/21 13:05	1

Lab Sample ID: LCS 180-369963/2-A

**Matrix: Water** 

**Analysis Batch: 370294** 

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

_	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Antimony	 0.250	0.242		mg/L		97	80 - 120	
Arsenic	1.00	1.01		mg/L		101	80 - 120	

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**Prep Batch: 369963** 

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: LCS 180-369963/2-A

**Matrix: Water** 

**Analysis Batch: 370294** 

**Client Sample ID: Lab Control Sample Prep Type: Total Recoverable Prep Batch: 369963** 

Spike	LCS	LCS				%Rec.	
Added	Result	Qualifier	Unit	D	%Rec	Limits	
1.00	0.999		mg/L		100	80 - 120	
0.500	0.475		mg/L		95	80 - 120	
1.25	1.20		mg/L		96	80 - 120	
0.500	0.503		mg/L		101	80 - 120	
25.0	26.7		mg/L		107	80 - 120	
0.500	0.488		mg/L		98	80 - 120	
0.500	0.494		mg/L		99	80 - 120	
0.500	0.497		mg/L		99	80 - 120	
0.500	0.499		mg/L		100	80 - 120	
0.500	0.516		mg/L		103	80 - 120	
1.00	0.989		mg/L		99	80 - 120	
1.00	0.999		mg/L		100	80 - 120	
	Added 1.00 0.500 1.25 0.500 25.0 0.500 0.500 0.500 0.500 0.500 1.00	Added         Result           1.00         0.999           0.500         0.475           1.25         1.20           0.500         0.503           25.0         26.7           0.500         0.488           0.500         0.494           0.500         0.497           0.500         0.499           0.500         0.516           1.00         0.989	Added         Result         Qualifier           1.00         0.999         0.500         0.475           1.25         1.20         0.503         0.503           25.0         26.7         0.500         0.488           0.500         0.494         0.500         0.497           0.500         0.499         0.500         0.516           1.00         0.989         0.989	Added         Result         Qualifier         Unit           1.00         0.999         mg/L           0.500         0.475         mg/L           1.25         1.20         mg/L           0.500         0.503         mg/L           25.0         26.7         mg/L           0.500         0.488         mg/L           0.500         0.494         mg/L           0.500         0.497         mg/L           0.500         0.499         mg/L           0.500         0.516         mg/L           1.00         0.989         mg/L	Added         Result         Qualifier         Unit         D           1.00         0.999         mg/L         mg/L           0.500         0.475         mg/L         mg/L           1.25         1.20         mg/L         mg/L           0.500         0.503         mg/L         mg/L           0.500         0.488         mg/L         mg/L           0.500         0.494         mg/L         mg/L           0.500         0.497         mg/L         mg/L           0.500         0.516         mg/L         mg/L           1.00         0.989         mg/L         mg/L	Added         Result         Qualifier         Unit         D         %Rec           1.00         0.999         mg/L         100           0.500         0.475         mg/L         95           1.25         1.20         mg/L         96           0.500         0.503         mg/L         101           25.0         26.7         mg/L         107           0.500         0.488         mg/L         98           0.500         0.494         mg/L         99           0.500         0.497         mg/L         99           0.500         0.499         mg/L         100           0.500         0.516         mg/L         103           1.00         0.989         mg/L         99	Added         Result         Qualifier         Unit         D         %Rec         Limits           1.00         0.999         mg/L         100         80 - 120           0.500         0.475         mg/L         95         80 - 120           1.25         1.20         mg/L         96         80 - 120           0.500         0.503         mg/L         101         80 - 120           25.0         26.7         mg/L         107         80 - 120           0.500         0.488         mg/L         98         80 - 120           0.500         0.494         mg/L         99         80 - 120           0.500         0.497         mg/L         99         80 - 120           0.500         0.499         mg/L         100         80 - 120           0.500         0.516         mg/L         103         80 - 120           0.500         0.989         mg/L         99         80 - 120

Lab Sample ID: 180-126364-8 MS

**Matrix: Water** 

**Client Sample ID: WGWC-10 Prep Type: Total Recoverable** 

Pren Batch: 369963

Analysis Batch: 370294					0 140				Prep Batch: 369963
	Sample	Sample	Spike	MS	MS				%Rec.
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	<0.00038		0.250	0.233		mg/L		93	75 - 125
Arsenic	< 0.00031		1.00	1.02		mg/L		102	75 - 125
Barium	0.032		1.00	1.03		mg/L		99	75 - 125
Beryllium	<0.00018		0.500	0.480		mg/L		96	75 - 125
Boron	< 0.039		1.25	1.21		mg/L		97	75 - 125
Cadmium	<0.00022		0.500	0.501		mg/L		100	75 - 125
Calcium	7.6		25.0	33.8		mg/L		105	75 - 125
Chromium	0.0024		0.500	0.494		mg/L		98	75 - 125
Cobalt	0.00044	J	0.500	0.497		mg/L		99	75 - 125
Lead	0.00026	J	0.500	0.505		mg/L		101	75 - 125
Lithium	0.0044	J	0.500	0.504		mg/L		100	75 - 125
Molybdenum	<0.00061		0.500	0.520		mg/L		104	75 - 125
Selenium	<0.0015		1.00	0.966		mg/L		97	75 - 125
Thallium	< 0.00015		1.00	1.03		mg/L		103	75 - 125

Lab Sample ID: 180-126364-8 MSD

**Matrix: Water** 

Analysis Batch: 370294

**Client Sample ID: WGWC-10 Prep Type: Total Recoverable Prep Batch: 369963** 

Sample	Sample	Spike	1400					~ -		
	Campie	Spike	MSD	MSD				%Rec.		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00038		0.250	0.240		mg/L		96	75 - 125	3	20
<0.00031		1.00	1.02		mg/L		102	75 - 125	1	20
0.032		1.00	1.04		mg/L		100	75 - 125	1	20
<0.00018		0.500	0.469		mg/L		94	75 - 125	2	20
< 0.039		1.25	1.24		mg/L		99	75 - 125	2	20
<0.00022		0.500	0.504		mg/L		101	75 - 125	1	20
7.6		25.0	34.7		mg/L		109	75 - 125	3	20
0.0024		0.500	0.500		mg/L		100	75 - 125	1	20
0.00044	J	0.500	0.501		mg/L		100	75 - 125	1	20
0.00026	J	0.500	0.501		mg/L		100	75 - 125	1	20
0.0044	J	0.500	0.495		mg/L		98	75 - 125	2	20
	<0.00038 <0.00031 0.032 <0.00018 <0.039 <0.00022 7.6 0.0024 0.00044 0.00026	<0.00031 0.032 <0.00018 <0.039 <0.00022 7.6	<0.00038	<0.00038         0.250         0.240           <0.00031	<0.00038	<0.00038         0.250         0.240         mg/L           <0.00031	<0.00038         0.250         0.240         mg/L           <0.00031	<0.00038         0.250         0.240         mg/L         96           <0.00031	<0.00038         0.250         0.240         mg/L         96         75 - 125           <0.00031	<0.00038         0.250         0.240         mg/L         96         75 - 125         3           <0.00031

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Job ID: 180-126277-1 Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: 180-126364-8 MSD

**Matrix: Water** 

Analysis Batch: 370294

**Client Sample ID: WGWC-10 Prep Type: Total Recoverable Prep Batch: 369963** 

MSD MSD %Rec. **RPD** Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Molybdenum <0.00061 0.500 0.519 mg/L 104 75 - 125 0 20 Selenium < 0.0015 1.00 0.990 mg/L 99 75 - 125 2 20 Thallium <0.00015 1.00 75 - 125 20 1.02 mg/L 102

Lab Sample ID: MB 180-369967/1-A

**Matrix: Water** 

Analysis Batch: 370294

**Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 369967** 

MR MR

MB MB

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.00038		0.0020	0.00038	mg/L		09/01/21 17:34	09/03/21 14:45	1
Arsenic	<0.00031		0.0010	0.00031	mg/L		09/01/21 17:34	09/03/21 14:45	1
Barium	<0.0016		0.010	0.0016	mg/L		09/01/21 17:34	09/03/21 14:45	1
Beryllium	<0.00018		0.0025	0.00018	mg/L		09/01/21 17:34	09/03/21 14:45	1
Cadmium	<0.00022		0.0025	0.00022	mg/L		09/01/21 17:34	09/03/21 14:45	1
Calcium	<0.13		0.50	0.13	mg/L		09/01/21 17:34	09/03/21 14:45	1
Chromium	<0.0015		0.0020	0.0015	mg/L		09/01/21 17:34	09/03/21 14:45	1
Cobalt	<0.00013		0.0025	0.00013	mg/L		09/01/21 17:34	09/03/21 14:45	1
Lead	<0.00013		0.0010	0.00013	mg/L		09/01/21 17:34	09/03/21 14:45	1
Lithium	<0.0034		0.0050	0.0034	mg/L		09/01/21 17:34	09/03/21 14:45	1
Molybdenum	<0.00061		0.015	0.00061	mg/L		09/01/21 17:34	09/03/21 14:45	1
Selenium	<0.0015		0.0050	0.0015	mg/L		09/01/21 17:34	09/03/21 14:45	1
Thallium	<0.00015		0.0010	0.00015	mg/L		09/01/21 17:34	09/03/21 14:45	1

Lab Sample ID: MB 180-369967/1-A

**Matrix: Water** 

**Analysis Batch: 370307** 

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

**Prep Batch: 369967** 

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.080 09/01/21 17:34 09/04/21 10:33 Boron < 0.039 0.039 mg/L

Lab Sample ID: LCS 180-369967/2-A

**Matrix: Water** 

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

Analysis Batch: 370294	Spike	LCS	LCS				Prep Batch: 369967 %Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Antimony	0.250	0.235		mg/L		94	80 - 120
Arsenic	1.00	0.981		mg/L		98	80 - 120
Barium	1.00	0.995		mg/L		99	80 - 120
Beryllium	0.500	0.498		mg/L		100	80 - 120
Cadmium	0.500	0.504		mg/L		101	80 - 120
Calcium	25.0	26.3		mg/L		105	80 - 120
Chromium	0.500	0.487		mg/L		97	80 - 120
Cobalt	0.500	0.484		mg/L		97	80 - 120
Lead	0.500	0.505		mg/L		101	80 - 120
Lithium	0.500	0.522		mg/L		104	80 - 120
Molybdenum	0.500	0.507		mg/L		101	80 - 120
Selenium	1.00	0.985		mg/L		99	80 - 120
Thallium	1.00	1.01		ma/L		101	80 - 120

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

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

Lab Sample ID: LCS 180-369967/2-A Client Sample ID: Lab Control Sample

**Matrix: Water** 

Analysis Batch: 370307

**Prep Type: Total Recoverable Prep Batch: 369967** 

Spike LCS LCS %Rec. Result Qualifier Added Limits Unit %Rec 1.25 1.22 mg/L 98 80 - 120

Method: EPA 7470A - Mercury (CVAA)

Lab Sample ID: MB 180-370941/1-A **Client Sample ID: Method Blank** 

**Matrix: Water** 

Analyte

Mercury

Boron

**Analysis Batch: 371007** 

Prep Type: Total/NA

**Prep Batch: 370941** 

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Analyte Dil Fac 0.00020 0.00013 mg/L 09/10/21 09:50 09/10/21 16:48

Lab Sample ID: LCS 180-370941/2-A

**Matrix: Water** 

**Analysis Batch: 371007** 

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

**Prep Batch: 370941** 

LCS LCS %Rec. Spike

Added Result Qualifier Limits **Analyte** Unit %Rec

80 - 120 Mercury 0.00250 0.00261 mg/L 104

Lab Sample ID: MB 180-372692/1-A

**Matrix: Water** 

**Analysis Batch: 372848** 

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

**Prep Batch: 372692** 

MB MB

<0.00013

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Mercury < 0.00013 0.00020 0.00013 mg/L 09/24/21 06:57 09/24/21 16:16

Lab Sample ID: LCS 180-372692/2-A

**Matrix: Water** 

**Analysis Batch: 372848** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA **Prep Batch: 372692** 

LCS LCS Spike %Rec.

Analyte Added Result Qualifier Unit %Rec Limits Mercury 0.00250 0.00248 mg/L 80 - 120

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

Lab Sample ID: MB 180-369661/2 Client Sample ID: Method Blank **Matrix: Water** 

**Analysis Batch: 369661** 

Prep Type: Total/NA

MB MB

Result Qualifier RL **MDL** Unit Prepared Analyzed **Total Dissolved Solids** <del><</del>10 10 10 mg/L 08/30/21 15:16

Lab Sample ID: LCS 180-369661/1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 369661** 

LCS LCS Spike %Rec. Added Limits Result Qualifier Unit %Rec Total Dissolved Solids 685 692 mg/L 101 80 - 120

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Job ID: 180-126277-1

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

**Client Sample ID: WGWA-2** 

Client Sample ID: Method Blank

**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** 

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: MB 180-369673/2

**Matrix: Water** 

**Analysis Batch: 369673** 

MB MB

Result Qualifier RL **MDL** Unit Analyzed Dil Fac Analyte Prepared 10 08/30/21 17:35 **Total Dissolved Solids** <10 10 mg/L

Lab Sample ID: LCS 180-369673/1

**Matrix: Water** 

**Analysis Batch: 369673** 

Spike LCS LCS %Rec. Added Result Qualifier Unit D %Rec Limits 685 80 - 120 Total Dissolved Solids 694 mg/L 101

Lab Sample ID: 180-126278-1 DU

**Matrix: Water** 

**Analysis Batch: 369673** 

Sample Sample DU DU **RPD** Result Qualifier Result Qualifier **RPD** Limit Analyte Unit Total Dissolved Solids 110 107 mg/L

Lab Sample ID: MB 180-369797/2

**Matrix: Water** 

**Analysis Batch: 369797** 

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total Dissolved Solids 10 ma/L 08/31/21 13:45 <10 10

Lab Sample ID: LCS 180-369797/1

**Matrix: Water** 

Analysis Batch: 369797

LCS LCS Spike %Rec. Added Result Qualifier Limits Analyte Unit %Rec Total Dissolved Solids 685 672 98 80 - 120 mg/L

Lab Sample ID: MB 180-369958/2

**Matrix: Water** 

**Analysis Batch: 369958** 

MB MB

**MDL** Unit Analyte Result Qualifier RL Dil Fac Prepared Analyzed 10 09/01/21 16:13 **Total Dissolved Solids** <10 10 mg/L

Lab Sample ID: LCS 180-369958/1

**Matrix: Water** 

**Analysis Batch: 369958** 

Spike LCS LCS %Rec. Added Result Qualifier Limits Unit %Rec Total Dissolved Solids 685 728 mg/L 106 80 - 120

Lab Sample ID: MB 180-369959/2

**Matrix: Water** 

**Analysis Batch: 369959** 

MB MB

RL MDL Unit Analyte Result Qualifier Prepared Analyzed Dil Fac **Total Dissolved Solids** 10 09/01/21 16:21 <10 10 mg/L

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**Client Sample ID: Method Blank** 

Spike

Added

685

DU DU

228

RL

10

Spike

Added

685

Result Qualifier

MDL Unit

10 mg/L

LCS LCS

DU DU

102

Result Qualifier

698

Result Qualifier

10

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

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

Sample Sample

220

Result Qualifier

MB MB Result Qualifier

<10

Sample Sample

94

Result Qualifier

Lab Sample ID: LCS 180-369959/1

**Matrix: Water** 

**Analysis Batch: 369959** 

**Total Dissolved Solids** 

Lab Sample ID: 180-126367-5 DU

**Matrix: Water** 

Analyte

Analysis Batch: 369959

**Total Dissolved Solids** 

Lab Sample ID: MB 180-370094/2

**Matrix: Water** 

**Analysis Batch: 370094** 

Analyte

Total Dissolved Solids

Lab Sample ID: LCS 180-370094/1 **Matrix: Water** 

Analysis Batch: 370094

Analyte Total Dissolved Solids

Lab Sample ID: 180-126364-6 DU

**Matrix: Water** 

Analysis Batch: 370094

Analyte

Total Dissolved Solids

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

%Rec.

LCS LCS Result Qualifier Unit %Rec Limits 676 mg/L 99 80 - 120

Unit

mg/L

Unit

mg/L

Unit

mg/L

Client Sample ID: WGWC-16

Prep Type: Total/NA

4

**RPD** RPD Limit

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prepared Analyzed Dil Fac

09/02/21 11:51

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

%Rec.

%Rec

102

Limits

80 - 120

Client Sample ID: WGWC-19

Prep Type: Total/NA

RPD Limit 10

Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

## HPLC/IC

#### Analysis Batch: 370384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126278-1	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-126278-2	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-126278-3	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-126278-4	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370384/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370384/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126278-1 MS	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-126278-1 MSD	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 370761**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-126277-2	FB-1	Total/NA	Water	EPA 300.0 R2.1	
180-126277-3	WGWA-6	Total/NA	Water	EPA 300.0 R2.1	
180-126277-4	WGWA-7	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370761/88	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370761/87	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126277-1 MS	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	
180-126277-1 MSD	WGWA-5	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 370919**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-126364-2	WGWC-13	Total/NA	Water	EPA 300.0 R2.1	
180-126364-3	WGWC-14A	Total/NA	Water	EPA 300.0 R2.1	
180-126364-4	EB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126364-5	WGWC-17	Total/NA	Water	EPA 300.0 R2.1	
180-126364-6	WGWC-19	Total/NA	Water	EPA 300.0 R2.1	
180-126364-7	Dup-2	Total/NA	Water	EPA 300.0 R2.1	
180-126364-8	WGWC-10	Total/NA	Water	EPA 300.0 R2.1	
180-126364-9	WGWC-24	Total/NA	Water	EPA 300.0 R2.1	
180-126364-10	Dup-3	Total/NA	Water	EPA 300.0 R2.1	
180-126364-11	WGWC-25	Total/NA	Water	EPA 300.0 R2.1	
180-126364-12	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-126364-12	WGWC-8	Total/NA	Water	EPA 300.0 R2.1	
180-126364-13	WGWC-15	Total/NA	Water	EPA 300.0 R2.1	
180-126364-14	WGWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-126364-14	WGWC-20	Total/NA	Water	EPA 300.0 R2.1	
180-126364-15	WGWC-23	Total/NA	Water	EPA 300.0 R2.1	
180-126364-16	FB-3	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370919/63	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370919/62	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126364-1 MS	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-126364-1 MSD	WGWA-18	Total/NA	Water	EPA 300.0 R2.1	
180-126364-11 MS	WGWC-25	Total/NA	Water	EPA 300.0 R2.1	
180-126364-11 MSD	WGWC-25	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 370999**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-1	WGWA-3	Total/NA	Water	EPA 300.0 R2.1	
180-126367-2	WGWC-11	Total/NA	Water	EPA 300.0 R2.1	

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond

# **HPLC/IC (Continued)**

#### **Analysis Batch: 370999 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-3	WGWC-12	Total/NA	Water	EPA 300.0 R2.1	
180-126367-4	FB-2	Total/NA	Water	EPA 300.0 R2.1	
180-126367-5	WGWC-16	Total/NA	Water	EPA 300.0 R2.1	
180-126367-6	EB-3	Total/NA	Water	EPA 300.0 R2.1	
180-126367-7	WGWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-126367-7	WGWC-21	Total/NA	Water	EPA 300.0 R2.1	
180-126367-8	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-126367-9	WGWC-22	Total/NA	Water	EPA 300.0 R2.1	
MB 180-370999/41	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-370999/40	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126367-8 MS	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	
180-126367-8 MSD	WGWC-9	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 371083**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126278-1	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-126278-2	EB-1	Total/NA	Water	EPA 300.0 R2.1	
180-126278-3	WGWA-1	Total/NA	Water	EPA 300.0 R2.1	
180-126278-4	WGWA-4	Total/NA	Water	EPA 300.0 R2.1	
MB 180-371083/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-371083/5	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-126278-1 MS	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	
180-126278-1 MSD	WGWA-2	Total/NA	Water	EPA 300.0 R2.1	

#### **Analysis Batch: 371996**

<b>Lab Sample ID</b> 180-126277-5	Client Sample ID  Dup-1	Prep Type Total/NA	Matrix Water	Method EPA 300.0 R2.1	Prep Batch
MB 180-371996/90	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-371996/89	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

#### **Metals**

#### **Prep Batch: 369722**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total Recoverable	Water	3005A	
180-126277-2	FB-1	Total Recoverable	Water	3005A	
180-126277-3	WGWA-6	Total Recoverable	Water	3005A	
180-126277-4	WGWA-7	Total Recoverable	Water	3005A	
180-126277-5	Dup-1	Total Recoverable	Water	3005A	
180-126278-1	WGWA-2	Total Recoverable	Water	3005A	
180-126278-2	EB-1	Total Recoverable	Water	3005A	
180-126278-3	WGWA-1	Total Recoverable	Water	3005A	
180-126278-4	WGWA-4	Total Recoverable	Water	3005A	
MB 180-369722/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369722/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

#### Analysis Batch: 369936

Lab Sample ID 180-126277-1	Client Sample ID WGWA-5	Prep Type  Total Recoverable	Matrix Water	Method EPA 6020B	Prep Batch 369722
180-126277-2	FB-1	Total Recoverable	Water	EPA 6020B	369722
180-126277-3	WGWA-6	Total Recoverable	Water	EPA 6020B	369722

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Job ID: 180-126277-1

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Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

# **Metals (Continued)**

#### **Analysis Batch: 369936 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-4	WGWA-7	Total Recoverable	Water	EPA 6020B	369722
180-126277-5	Dup-1	Total Recoverable	Water	EPA 6020B	369722
180-126278-1	WGWA-2	Total Recoverable	Water	EPA 6020B	369722
180-126278-2	EB-1	Total Recoverable	Water	EPA 6020B	369722
180-126278-3	WGWA-1	Total Recoverable	Water	EPA 6020B	369722
180-126278-4	WGWA-4	Total Recoverable	Water	EPA 6020B	369722
MB 180-369722/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369722
LCS 180-369722/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369722

#### **Prep Batch: 369957**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total Recoverable	Water	3005A	<u> </u>
180-126364-2	WGWC-13	Total Recoverable	Water	3005A	
180-126364-3	WGWC-14A	Total Recoverable	Water	3005A	
180-126364-4	EB-2	Total Recoverable	Water	3005A	
180-126364-5	WGWC-17	Total Recoverable	Water	3005A	
180-126364-6	WGWC-19	Total Recoverable	Water	3005A	
180-126364-7	Dup-2	Total Recoverable	Water	3005A	
MB 180-369957/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369957/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

#### **Prep Batch: 369963**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-8	WGWC-10	Total Recoverable	Water	3005A	
180-126367-1	WGWA-3	Total Recoverable	Water	3005A	
180-126367-2	WGWC-11	Total Recoverable	Water	3005A	
180-126367-3	WGWC-12	Total Recoverable	Water	3005A	
180-126367-4	FB-2	Total Recoverable	Water	3005A	
180-126367-5	WGWC-16	Total Recoverable	Water	3005A	
180-126367-6	EB-3	Total Recoverable	Water	3005A	
180-126367-7	WGWC-21	Total Recoverable	Water	3005A	
180-126367-8	WGWC-9	Total Recoverable	Water	3005A	
180-126367-9	WGWC-22	Total Recoverable	Water	3005A	
MB 180-369963/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369963/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-126364-8 MS	WGWC-10	Total Recoverable	Water	3005A	
180-126364-8 MSD	WGWC-10	Total Recoverable	Water	3005A	

#### **Prep Batch: 369967**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-9	WGWC-24	Total Recoverable	Water	3005A	
180-126364-10	Dup-3	Total Recoverable	Water	3005A	
180-126364-11	WGWC-25	Total Recoverable	Water	3005A	
180-126364-12	WGWC-8	Total Recoverable	Water	3005A	
180-126364-13	WGWC-15	Total Recoverable	Water	3005A	
180-126364-14	WGWC-20	Total Recoverable	Water	3005A	
180-126364-15	WGWC-23	Total Recoverable	Water	3005A	
180-126364-16	FB-3	Total Recoverable	Water	3005A	
MB 180-369967/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-369967/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

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Client: Southern Company Job ID: 180-126277-1

Project/Site: Plant Wansley Ash Pond

#### **Metals**

#### **Analysis Batch: 370289**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total Recoverable	Water	EPA 6020B	369957
180-126364-2	WGWC-13	Total Recoverable	Water	EPA 6020B	369957
180-126364-3	WGWC-14A	Total Recoverable	Water	EPA 6020B	369957
180-126364-4	EB-2	Total Recoverable	Water	EPA 6020B	369957
180-126364-5	WGWC-17	Total Recoverable	Water	EPA 6020B	369957
180-126364-6	WGWC-19	Total Recoverable	Water	EPA 6020B	369957
180-126364-7	Dup-2	Total Recoverable	Water	EPA 6020B	369957
MB 180-369957/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369957
LCS 180-369957/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369957

## Analysis Batch: 370294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-8	WGWC-10	Total Recoverable	Water	EPA 6020B	369963
180-126364-9	WGWC-24	Total Recoverable	Water	EPA 6020B	369967
180-126364-10	Dup-3	Total Recoverable	Water	EPA 6020B	369967
180-126364-11	WGWC-25	Total Recoverable	Water	EPA 6020B	369967
180-126364-12	WGWC-8	Total Recoverable	Water	EPA 6020B	369967
180-126364-13	WGWC-15	Total Recoverable	Water	EPA 6020B	369967
180-126364-14	WGWC-20	Total Recoverable	Water	EPA 6020B	369967
180-126364-15	WGWC-23	Total Recoverable	Water	EPA 6020B	369967
180-126364-16	FB-3	Total Recoverable	Water	EPA 6020B	369967
180-126367-1	WGWA-3	Total Recoverable	Water	EPA 6020B	369963
180-126367-2	WGWC-11	Total Recoverable	Water	EPA 6020B	369963
180-126367-3	WGWC-12	Total Recoverable	Water	EPA 6020B	369963
180-126367-4	FB-2	Total Recoverable	Water	EPA 6020B	369963
180-126367-5	WGWC-16	Total Recoverable	Water	EPA 6020B	369963
180-126367-6	EB-3	Total Recoverable	Water	EPA 6020B	369963
180-126367-7	WGWC-21	Total Recoverable	Water	EPA 6020B	369963
180-126367-8	WGWC-9	Total Recoverable	Water	EPA 6020B	369963
180-126367-9	WGWC-22	Total Recoverable	Water	EPA 6020B	369963
MB 180-369963/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369963
MB 180-369967/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369967
LCS 180-369963/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369963
LCS 180-369967/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369967
180-126364-8 MS	WGWC-10	Total Recoverable	Water	EPA 6020B	369963
180-126364-8 MSD	WGWC-10	Total Recoverable	Water	EPA 6020B	369963

## **Analysis Batch: 370307**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-9	WGWC-24	Total Recoverable	Water	EPA 6020B	369967
180-126364-10	Dup-3	Total Recoverable	Water	EPA 6020B	369967
180-126364-11	WGWC-25	Total Recoverable	Water	EPA 6020B	369967
180-126364-12	WGWC-8	Total Recoverable	Water	EPA 6020B	369967
180-126364-13	WGWC-15	Total Recoverable	Water	EPA 6020B	369967
180-126364-14	WGWC-20	Total Recoverable	Water	EPA 6020B	369967
180-126364-15	WGWC-23	Total Recoverable	Water	EPA 6020B	369967
180-126364-16	FB-3	Total Recoverable	Water	EPA 6020B	369967
MB 180-369967/1-A	Method Blank	Total Recoverable	Water	EPA 6020B	369967
LCS 180-369967/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020B	369967

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond

## Metals

#### **Prep Batch: 370941**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-9	WGWC-24	Total/NA	Water	7470A	
180-126364-10	Dup-3	Total/NA	Water	7470A	
180-126364-11	WGWC-25	Total/NA	Water	7470A	
180-126364-14	WGWC-20	Total/NA	Water	7470A	
180-126364-15	WGWC-23	Total/NA	Water	7470A	
180-126364-16	FB-3	Total/NA	Water	7470A	
180-126367-6	EB-3	Total/NA	Water	7470A	
180-126367-7	WGWC-21	Total/NA	Water	7470A	
180-126367-9	WGWC-22	Total/NA	Water	7470A	
MB 180-370941/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-370941/2-A	Lab Control Sample	Total/NA	Water	7470A	

#### **Analysis Batch: 371007**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-9	WGWC-24	Total/NA	Water	EPA 7470A	370941
180-126364-10	Dup-3	Total/NA	Water	EPA 7470A	370941
180-126364-11	WGWC-25	Total/NA	Water	EPA 7470A	370941
180-126364-14	WGWC-20	Total/NA	Water	EPA 7470A	370941
180-126364-15	WGWC-23	Total/NA	Water	EPA 7470A	370941
180-126364-16	FB-3	Total/NA	Water	EPA 7470A	370941
180-126367-6	EB-3	Total/NA	Water	EPA 7470A	370941
180-126367-7	WGWC-21	Total/NA	Water	EPA 7470A	370941
180-126367-9	WGWC-22	Total/NA	Water	EPA 7470A	370941
MB 180-370941/1-A	Method Blank	Total/NA	Water	EPA 7470A	370941
LCS 180-370941/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	370941

#### **Prep Batch: 372692**

<b>Lab Sample ID</b> 180-126367-6	Client Sample ID EB-3	Prep Type Total/NA	Matrix Water	Method 7470A	Prep Batch
MB 180-372692/1-A	Method Blank	Total/NA	Water	7470A	
LCS 180-372692/2-A	Lab Control Sample	Total/NA	Water	7470A	

#### **Analysis Batch: 372848**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-6	EB-3	Total/NA	Water	EPA 7470A	372692
MB 180-372692/1-A	Method Blank	Total/NA	Water	EPA 7470A	372692
LCS 180-372692/2-A	Lab Control Sample	Total/NA	Water	EPA 7470A	372692

## **General Chemistry**

## Analysis Batch: 369661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total/NA	Water	SM 2540C	
180-126277-2	FB-1	Total/NA	Water	SM 2540C	
180-126277-3	WGWA-6	Total/NA	Water	SM 2540C	
180-126277-4	WGWA-7	Total/NA	Water	SM 2540C	
180-126278-2	EB-1	Total/NA	Water	SM 2540C	
180-126278-3	WGWA-1	Total/NA	Water	SM 2540C	
MB 180-369661/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369661/1	Lab Control Sample	Total/NA	Water	SM 2540C	

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Job ID: 180-126277-1

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**General Chemistry** 

#### **Analysis Batch: 369673**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch	1
180-126278-1	WGWA-2	Total/NA	Water	SM 2540C	
MB 180-369673/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369673/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126278-1 DU	WGWA-2	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 369797**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-5	Dup-1	Total/NA	Water	SM 2540C	
180-126278-4	WGWA-4	Total/NA	Water	SM 2540C	
MB 180-369797	7/2 Method Blank	Total/NA	Water	SM 2540C	
LCS 180-36979	7/1 Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 369958**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total/NA	Water	SM 2540C	_
180-126364-2	WGWC-13	Total/NA	Water	SM 2540C	
180-126364-3	WGWC-14A	Total/NA	Water	SM 2540C	
180-126364-4	EB-2	Total/NA	Water	SM 2540C	
180-126364-5	WGWC-17	Total/NA	Water	SM 2540C	
180-126367-1	WGWA-3	Total/NA	Water	SM 2540C	
180-126367-2	WGWC-11	Total/NA	Water	SM 2540C	
180-126367-3	WGWC-12	Total/NA	Water	SM 2540C	
180-126367-4	FB-2	Total/NA	Water	SM 2540C	
MB 180-369958/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369958/1	Lab Control Sample	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 369959**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-5	WGWC-16	Total/NA	Water	SM 2540C	<del></del>
MB 180-369959/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-369959/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126367-5 DU	WGWC-16	Total/NA	Water	SM 2540C	

#### **Analysis Batch: 370094**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
180-126364-6	WGWC-19	Total/NA	Water	SM 2540C		
180-126364-7	Dup-2	Total/NA	Water	SM 2540C		
180-126364-8	WGWC-10	Total/NA	Water	SM 2540C		
180-126364-9	WGWC-24	Total/NA	Water	SM 2540C		
180-126364-10	Dup-3	Total/NA	Water	SM 2540C		
180-126364-11	WGWC-25	Total/NA	Water	SM 2540C		
180-126364-12	WGWC-8	Total/NA	Water	SM 2540C		
180-126364-13	WGWC-15	Total/NA	Water	SM 2540C		
180-126364-14	WGWC-20	Total/NA	Water	SM 2540C		
180-126364-15	WGWC-23	Total/NA	Water	SM 2540C		
180-126364-16	FB-3	Total/NA	Water	SM 2540C		
180-126367-6	EB-3	Total/NA	Water	SM 2540C		
180-126367-7	WGWC-21	Total/NA	Water	SM 2540C		
180-126367-8	WGWC-9	Total/NA	Water	SM 2540C		
180-126367-9	WGWC-22	Total/NA	Water	SM 2540C		
MB 180-370094/2	Method Blank	Total/NA	Water	SM 2540C		

Eurofins TestAmerica, Pittsburgh

Page 71 of 101

Job ID: 180-126277-1

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-1

## **General Chemistry (Continued)**

#### **Analysis Batch: 370094 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-370094/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-126364-6 DU	WGWC-19	Total/NA	Water	SM 2540C	

#### Field Service / Mobile Lab

#### Analysis Batch: 369662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total/NA	Water	Field Sampling	
180-126277-3	WGWA-6	Total/NA	Water	Field Sampling	
180-126277-4	WGWA-7	Total/NA	Water	Field Sampling	
180-126278-1	WGWA-2	Total/NA	Water	Field Sampling	
180-126278-3	WGWA-1	Total/NA	Water	Field Sampling	
180-126278-4	WGWA-4	Total/NA	Water	Field Sampling	
180-126364-1	WGWA-18	Total/NA	Water	Field Sampling	
180-126364-2	WGWC-13	Total/NA	Water	Field Sampling	
180-126364-3	WGWC-14A	Total/NA	Water	Field Sampling	
180-126364-5	WGWC-17	Total/NA	Water	Field Sampling	
180-126364-6	WGWC-19	Total/NA	Water	Field Sampling	
180-126364-8	WGWC-10	Total/NA	Water	Field Sampling	
180-126364-9	WGWC-24	Total/NA	Water	Field Sampling	
180-126364-11	WGWC-25	Total/NA	Water	Field Sampling	
180-126364-12	WGWC-8	Total/NA	Water	Field Sampling	
180-126364-13	WGWC-15	Total/NA	Water	Field Sampling	
180-126364-14	WGWC-20	Total/NA	Water	Field Sampling	
180-126364-15	WGWC-23	Total/NA	Water	Field Sampling	

#### **Analysis Batch: 370651**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
180-126367-1 WGWA-3 180-126367-2 WGWC-11		Total/NA	Water	Field Sampling		
		Total/NA	Water	Field Sampling		
180-126367-3	WGWC-12	Total/NA	Water	Field Sampling		
180-126367-5	WGWC-16	Total/NA	Water	Field Sampling		
180-126367-7	WGWC-21	Total/NA	Total/NA Water			
80-126367-8 WGWC-9		Total/NA	Water	Field Sampling		
180-126367-9	WGWC-22	Total/NA	Water	Field Sampling		

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**



Client Information	Sampler:	4110			PM: own, Sh	ali				Carrier Tracking	No(s):	COC No:
Client Contact: SCS Contacts	Phone: 770-5	94-599	8		//ail: ali.browi	t: .brown@eurofinset.com						Page:
Company: GA Power									sis Re	quested		Job#:
Address: 241 Ralph McGill Blvd SE	Due Date Reques	ted:										Preservation Codes:
City: Atlanta	TAT Requested (c	lays):			11							A - HCL M - Hexane B - NaOH N - None
State, Zip:												C - Zn Acetate
GA, 30308 Phone:	PO#:			_	-10		اۃ	:(0):	;			F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4
404-506-7116(Tel) Email:	WO #:				No)		25400	120/74 TI 5/9320	l l :	3/9320		H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone
SCS Contacts Project Name:	Project #:				Yes or		S SM	PA 60 Ao,Se, 6 9318	(470):	6 9316	a substantial subs	J - DI Water V - MCAA K - EDTA W - pH 4-5
CCR - Plant Wansley Ash Pond	18019922 SSOW#:				ple (Y		300	als (E b,LI,N	50207	W-84	containers	L - EDA Z - other (specify)
Site:	ISSUVV#:				Sam ASD (	B, Ca	S (EP/	V Met r,Co,F 228 (S	EPA	228 (\$	5	1
Sample Identification	Sample Date	Sample Time		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Al	- A	App III Metals: B,	CI, F, SO & TDS (EPA 300 & SM 2540C)	Detected App IV Metals (EPA 6020/7470) Sb,As,Ba,Be,Cr,Co,Pb,Li,Mo,Se,Tl Radium 226 & 228 (SW-846 9315/9320)	App IV Metals (EPA 6020/7470):	Sp, As, Ba, Bel, cd, Cr, Co, Po, L., rg, Mo, Se, Radium 226 & 228 (SW-846 9315/9320)	Total Number	Special Instructions/Note:
WGWA-5	8-24-21	1218	G	Water	NN	1	1	1/	1000			pH= 6.80
FB-1	8-24-21	(320	G	Water	MN	V	//					PH= NA
WGWA-6	8-24-21	1340	G	Water	MN		7	1				PH= 7.88
WGWA - 7	8-24-21	1510	G	Water	NH	1	1	1				pH= 5.53
Dup - 1	8-24-21	7510	G	Water	M ~	1	11					pH= N M
ραρ	8 21 31		G	Water			Ť					pH=
111111111111111111111111111111111111111			G	Water	$^{+}$		H					pH=
			G	Water	11							pH=
			G	Water	$\top$							pH=
180-126277 Chain of Custody			G	Water	Ħ							pH=
			G	Water	$\pm$							pH=
Possible Hazard Identification	- <del> </del>				Sa				may be	assessed if s	amples are retail	ned longer than 1 month)
Non-Hazard Flammable Skin Irritant  Deliverable Requested: I, II, III, IV other (specify)	Poison B Unkn	own F	Radiological		9.			To Client	Quirem	Disposal By La	ab Arci	nive For Months
		ID-ta:					ii iou u	CHOHA/QU RE	quireill		Chiloman	
Empty Kit Relinquished by:  Relinquished by:	Date/Timel	Date:	ا ا	Company	Time:		ived by	60		Method of	Shipment:	Company
	Date/Time 25	21 11	15		4		eived by	1/1	4	- 8	25/21	145
Refinquished by:	8/257	21	1140	<del>Somp</del> any				· IN	W	atrol	Date/T/may	76-21 Composite
Relinguished by:	######################################	Ē		Company		Rece	eived by	r.			Date/Time:	1000 Company
Custody Seals Intact: Custody Seal No.:						Cool	er Temp	perature(s) °C a	nd Other	Remarks:		

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**

eurofins

Client Information	Sampler: J. Bo. Phone: 770-5	iled			PM: own, SI	hali					Carrier T	racking No(s):		COC No:
Client Information Client Contact: SCS Contacts	Phone: 220-5	97-594	8	E-M		m@a	m@eurofinset.com						Page:	
Company:				3110	T .	VIII COC	QI QIII IŞ							Job#:
GA Power Address:	Due Date Request	ed:			700	orana .		P	nalys	is Re	queste	d I		Preservation Codes:
241 Ralph McGill Blvd SE City: Atlanta					- 10									A - HCL M - Hexane
City: Atlanta	TAT Requested (d	ays):			ш		1							B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip: GA, 30308														D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3
Phone: 404-506-7116(Tel)	PO#:					L	<u>S</u>	7470):	(20)	F	(20)			F - MeOH   R - Na2S2O3   G - Amchlor   S - H2SO4   H - Ascorbic Acid   T - TSP Dodecahydrate
Email: SCS Contacts	WO#.				ž o	fou	M 264	6020/	315/93	ö	315/93		90	I - Ice U - Acetone
Project Name:	Project #:				ζes (	<b>.</b>	85	EPA M	346 9	747	346 9		of containers	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
CCR - Plant Wansley Ash Pond Site:	18019922 SSOW#:	-			- ed S	e	A 30	stals	SW.	602	NS.		conf	Other:
			_		Sar	tals: B, Ca	S (EF	ĕ S	228	EPA E	228	1 11	logo	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Ak	Field Filtered Sample (Yes or No)	App III Metals: B, Ca	CI, F, SO & TDS (EPA 300 & SM 2640C)	Detected App IV Metals (EPA 6020/7470):	Radium 226 & 228 (SW-846 9315/9320)	App IV Metals (EPA 6020/7470):	Radium 226 & 228 (SW-846 9316/9320)		Total Number	Special Instructions/Note:
		$\geq \leq$		ation Code:	X	٧,	1/	1	1/					pH= / 62
w6wA-2	3-23-21	1535	G	Water	MA	/ 🗸	V	$\vee$	1				4	6.18
WGWA-2 EB-1	3-24-21	1100	G	Water	NI	1 1		V	1					pH=
W GWA-1 W GWA-4	8-24-4	1145	G	Water	vi	/ /		V						PH= 5,2(
WGWA-4	8-24-21	1410	G	Water	W	//		/						PH= 7,22
			G	Water										pH=
			G	Water	П									pH=
			G	Water	П									pH=
			G	Water	П									pH=
180-126278 Chain of Cust			G	Water	П		П						1	pH=
180-126278 Chain of Custody			G	Water	П									pH=
			G	Water	П									pH=
Possible Hazard Identification	_		1		s	ampl	e Disp	osal (	1 fee m	ay be	assesse	d if samples	are retair	ned longer than 1 month)
Non-Hazard Flammable Skin Irritant Po	ison B Unkno	own L	Radiological		_			To Clie			Disposal	By Lab	Arch	nive For Months
Deliverable Requested: I, II, III, IV, Other (specify)	1				S	pecia	I Instru	ctions/	QC Red	quirem	ents:			1
Empty Kit Relinquished by:		Date:			Time			1			Ме	thod of Shipme	nt	
Relinquished by:	Date/Time:	5/21	1145	Company			b Byles	y. <b>/</b>	T			Garle/T	me:)	Company
Relinquished by:	Date/Time:	151	114	<del>Com</del> pany		Rec	eived	y:	16	) N	1 set	Date!	met -	262 Company WAR
Relinquished by:	Date/Time:	1		Company		Red	eived b	y:				Date/T	ime:	(00) Company
Custody Seals Intact: Custody Seal No.:						Coc	oler Tem	perature(	(s) °C and	d Other	Remarks:			

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**

·C	f	i	n	S

Client Information	Sampler: Hunter	Sampler. Hunter And Bro								
Client Contact: SCS Contacts	Phone: 770 - 5	94-599	8	E-Mail: shali.brow	m@eui	rofinse		26364 Chain of Cu		
Company: GA Power			-					is Requested		Job#:
Address:	Due Date Requested						Allalys	is Requested		Preservation Codes:
241 Ralph McGill Blvd SE	TAT Requested (day	e).		_						A - HCL M - Hexane
Atlanta	TAT Requestes (us)	<b>3</b> ].								B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip: GA, 30308				. 100						D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3
Phone: IO4-506-7116(Tel)	PO#:					(၁)	20)	Se,TI		F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
mail:	WO#:		-	(Yes or No)		CI, F, SO & TDS (EPA 300 & SM 2640C)	6,TI e,TI 16/93:	App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cd,Cr,Co,Pb,LI,Hg,Mo,Se,TI Radium 226 & 228 (SW-846 9316/9320)		I - Iso Dodecanydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)  Other:
SCS Contacts Project Name:	Project #:		-	Yes or			Mo,S		ners	
CCR - Plant Wansley Ash Pond	18019922			0	g		als (i		containe	
site:	SSUVV#.	SSOW#:					V Met	EPA d,Cr,C	96	The state of the s
		1	mple Matr		App III Metals: B,	, SO & TDS	Detected App IV Metals (EPA 6020/7470) Sb,As,Ba,Be,Cr,Co,Pb,LI,Mo,Se,Tl Radium 226 & 228 (SW-846 9315/9320)	IV Metals (18,8a,8a,C)	Total Number of	
Sample Identification	Sample Date	Time G=	grab) BT=Tissue,		App	2,	Sb,A Radi	Sb,A		Special Instructions/Note:
		1 1 1 1 1 1 1 1 1 1	reservation Co	de: X						ou- r
WGWA-18	8-25-21	1125	G Wate	er M	1	<b>V</b>	1//			PH= 6,74
WGW(-13	8-75-21 1	245	G Wate	er wa	11		111		4	PH= 6-27
WGWC-14A	8-25-21 1	330	G Wate	er M/	v 🗸					PH= 5.39
EB-2	8-25-21	1505	G Wate	er N/	V /	1	11		4	pH=
W GWC-17	8-75-21	455	G Wate	er MA	1	1	//		4	PH= 6.09
W6WL-19	8-26-21	105	G Wate	er MA	v 🗸	7	///		4	pH= (0-66
N40-Z	8-26-21		G Wate	er M	V/	<b>V</b>	.//		14	pH=
WGWC- (0		235	G Wate	er W	V /	1			4	pH= (a:31
W6WC-Z4		355	G Wate	er NA	11	1		11		PH= 4.33
Dup-3	8-26-21		G Wate	er N	1/	1		11	4	pH=
W6WL-25		1552	G Wat	er NI	1/	/		1//	4	pH= 5.30
Possible Hazard Identification				S	ample	Dispo	sal ( A fee m	ay be assessed if	samples are retain	ned longer than 1 month)
	Poison B Unknow	n Radio	ological				To Client	Disposal By I	Lab Arch	ive For Months
Deliverable Requested: I, II, III, IV, Other (specify)						ii isu u	Juona QO INEC		-(Ob)	
Empty Kit Relinquished by:	Date/Time:	ate:	Company	Time		ivade	0 0	Method	of Shipment:	Company
Relinquished by Alle	8-27-21	/1140	AC	<u></u>	1//	220	ford 1	licked	8-27-2	11:42
Relinquished by Charles Majled	Date/Time:	11:4	Company	1	Rece	eived by	Die	cetro	Date/Time:	X-21 Company APRIT
Relinquished by:	Date/Time:		Company	7	Rece	eived by			Date/Time:	9/5 Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No					Cool	er Temp	erature(s) °C and	Other Remarks:		/ 1 - 1 - 1

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**



Client Information	Sampler	Tokasa	11-11-	1 Lab Brow	PM: wn, Sha	ali			Carrier Tracking	No(s):	COC No:
Client Contact:	Phone: 770 - 5	G 11 - E	978	L-IVIS	ail:						Page:
SCS Contacts Company:	1-40-6	74-3	(10	sna	II.Drowr	@eurofi	nset.co	<u>m</u>		-	Job#:
GA Power								<b>Analys</b>	is Requested		
Address: 241 Ralph McGill Blvd SE	Due Date Requeste	d:		000							Preservation Codes:
City:	TAT Requested (da	ys):	•		1						A - HCL M - Hexane B - NaOH N - None
Atlanta State, Zip:					3 10						C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S
GA, 30308								<u>.</u>			E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3
Phone: 404-506-7116(Tel)	PO #:				6	00	7470	320)	,Se,T	- III	G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email: SCS Contacts	WO #:				Sample (Yes or No)	M 254	8020	3e,TI	19,Mo 15/9:	9	I - Ice U - Acetone J - DI Water V - MCAA
Project Name:	Project #:		Yes or N	85	Ada	46 93	77470 1,L1,F	line i	K - EDTA W - pH 4-5		
CCR - Plant Wansley Ash Pond	18019922 SSOW#:					300	100	Detected App IV Metals (EPA 6020/7470) Sb,As,Ba,Be,Cr,Co,Pb,LI,Mo,Se,TI Radium 226 & 228 (SW-846 9315/9320)	W-8	onta	L - EDA Z - other (specify)  Other:
Site:						App III Metals: B, Ca CI, F, SO & TDS (EPA 300 & SM 2640C)	Met	Sb,As,Ba,Be,Cr,Co,Pb,Ll,Mo,Se,Tl Radlum 226 & 228 (SW-846 9316/9320)	App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cd,Cr,Co,Pb,Ll,Hg,Mo,Se,Tl Radium 226 & 228 (SW-846 9315/9320)	Total Number of containers	
			Sample	Matrix	Filtered Sa	tals: I	N out	28 & 2	Be,Cc	nber	
			Туре	(W=water, S=solid.		SO &	Pet	Ba,	V Me	Nu.	
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab)	S=solid, O=waste/oil, BT=Tissue, A=Air)	Field	App III Metals: CI, F, SO & TD	l late	Sb, A	App I	Tota	Special Instructions/Note:
Complete deciral model of the control of the contro		><		tion Code:	XX		1 101		وعوقاه		
W6WC-8	8-24-21	1241	G	Water	NN	1//			ř.	4	pH= 5.36
W6WC-15	8-24-21	1614	G	Water	NN	11				6	PH= 7.58 Fxtra Rad
WGW (- ZO	8-24-21	1132	G	Water	NN	11			11	4	pH= 5.37
W6WC-23	8-26-24	1455	G	Water	MN	V			11	4	
FB-3	8-26-21	1453	G	Water	MW	11/				7	pH=
			G	Water	П					1 1 4	pH=
			G	Water							pH=
			G	Water							pH=
			G	Water						-	pH=
			G	Water	T						pH=
			G	Water	T						pH=
Possible Hazard Identification				- 1					ay be assessed if s	amples are retain	ned longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B Unkno	wn L	Radiological			Retu			Disposal By La	ab Arch	ive For Months
Deliverable Requested: I, II, III, IV, Other (specify)				-1	Sp	ecial Ins	truction	s/QC Red	quirements:		
Empty Kit Relinquished by:		Date:			Time:		1		Method of	Shipment	
Relinquished by:	8-27-21	/114	0	Company		Receive	Ich	cool	Meskel	Date/Time: 8-27-21	11:42 Company
Relinquished Wich	Date/Time: 8-211-21	1 97 :	42	Company		Received	by:	20	Valus	Date/Time:	O 2 / Company
Relinquished by:	Date/Time:			Company		Received by: Date/Time:					905 Company
Custody Seals Intact: Custody Seal No.:						Cooler T	emperatu	re(s) °C and	d Other Remarks:		

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

# **Chain of Custody Record**



Client Information  Dient Contact:	Dhono:		H. Aulo	Lab Bro	wn, S	hali	-					Tracking No(s):	(1))) 11) 11) 11) 11)	COC No:
SCS Contacts	770-5	44-59	18			wn@e	urofins	et.com			_			
Company: GA Power								А	nalysi	is Req	ues			
.ddress: 241 Ralph McGill Blvd SE	Due Date Request	ed:										180-126367	Chain of	Custody
ity: ttanta	TAT Requested (d	ays):			ш	8								
tate, Zip:					ш	и.								C - Zn Acetate D - Nitric Acid E - NaHSO4 Q - Na2SO3
SA, 30308 hone:	PO #:			-	ш	8		70):		F,	-			F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4
04-506-7116(Tel) mail:	WO #:	WO#:						20/74.	5/9320	Mo,Se	9320			1 - Ice
SCS Contacts Project Name:	Project #:						300 & SM 2540C)	PA 60	9316	470): LI,Hg,	5 9315			
toget Name. CCR - Plant Wansley Ash Pond ite:	18019922	18019922					300	V Metals (EF	228 (SW-846	020/7 0,Pb,	W-84		1   12	L - EDA Z - other (specify)
te:	SSOW#:	OW#:					(EPA			GPA 6 d,Cr,C 228 (S				
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrîx (W=water, S=solld, O=waste/oll, BT=Tissue, A=Alr	Field Filtered	Refrorm (MS/MSD (Yes or No)	CI, F, SO & TDS (EPA	Detected App IV Metals (EPA 6020/7470): Sh As Ba Be Cr.Co Ph. I Mo Se. Ti	Radium 226 & 2	App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cd,Cr,Co,Pb,Ll,Hg,Mo,Se,Tl	Radlum 226 & 2		Total Number of	Special Instructions/Note:
		><		ation Code:	X	X					, , .		X	
W 6WA-3	8-25-21	1050	G	Water	n	MV	1/	V						PH= 5.5Z
WGWC-11	3-25-21	1200	G	Water	M	NV		V	11				4	PH= 5.66
	7-25-21	1330	G	Water	M	NV	11	/	1/				6	PH= 6,69
W GWC-12 FB-2	8-25-21	1435	G	Water	N	NI		<b>√</b>					4	PH= N/H
W 6u C-16	8-25-21	1450	G	Water	N	UV		1	1				4	PH= 5,25
EB-3	8-26-21	1010	G	Water	M	Ni	//			$\checkmark$	1		14	PH= NA
NGWC-21 WGWC-27	8-26-21	1130	G	Water	W	VI	1			V	/			PH= 6.28
w Gwc-9	8-26-21	1300	G	Water	W	N V		/					4	PH= 5.84
WGWC-ZZ	8-26-21	1520	G	Water	N	VI				<b>V</b>	/		4	PH= 5.40
			G	Water	П									pH=
- 4			G	Water	П	TT								pH=
ossible Hazard Identification  Non-Hazard Flammable Skin Irrita eliverable Requested: I, II, III, IV, Other (specify)	ant Poison B Unkn	own □ <sub>F</sub>	Radiologica				Return	To Clie	nt	ay be a	isposa	sed if sa <mark>mple</mark> s al By Lab	are retain	ed longer than 1 month) ive For Months
mpty Kit Relinguished by:		Date:			Tim	e:	-				N	Method of Shipmer	nt	
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301 ALPHA DR.

RIDC PARK

PITTSBURGH PA 15238

SAMPLE RECIEVING

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ATL

BILL THIRD PARTY

SAMPLE RECIEVING PITTSBURGH

Part # 159469-434 RIT2 EXP 06/22

10/4/2021 (Rev. 1

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Thermometer ID Uncorrected temp

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Initials



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10/4/2021 (Rev. 1)

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**TestAmerica** Environment Testing

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EUROFINS TESTAMERICA PITTSBURGH BILL THIRD PARTY Fed EXPage 81 of 101

301 ALPHA DR. RIDC PARK

SAMPLE RECIEVING

VITTSBURGH PA 15238

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**Environment Testing** 

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301 ALPHA DR. RIDC PARK

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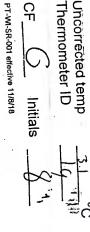
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SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH

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Environment Testing

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301 ALPHA DR. RIDC PARK

ITTSBURGH PA 15238

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EUROFINS TESTAMERICA PITTSBURGH

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Environment Testing

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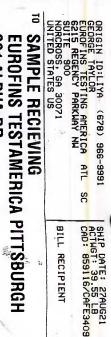
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301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238

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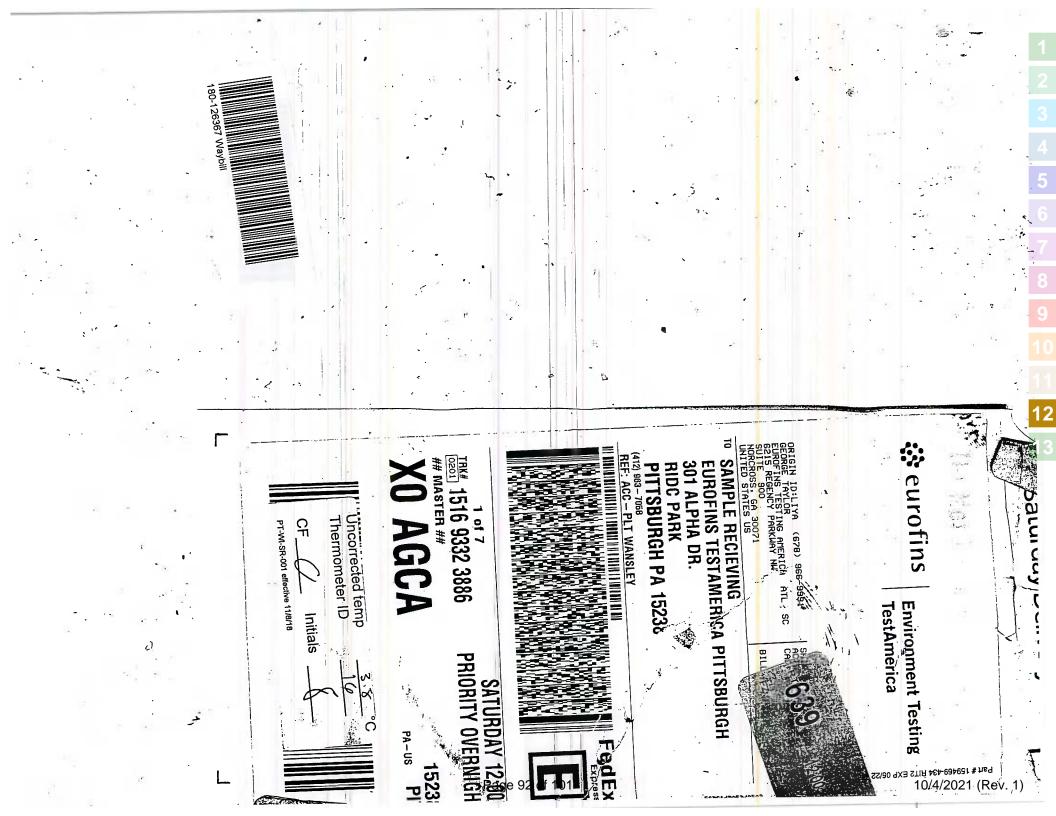
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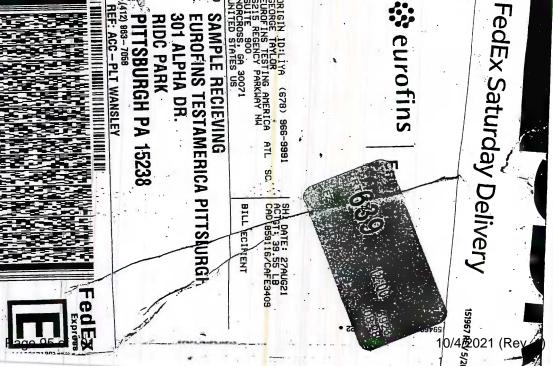
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PITTSBURGH PA 15238

SAMPLE RECIEVING SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

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SATURDAY 12:00P PRIORITY OVERNIGHT

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**Environment Testing** TestAmerica



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SATURDAY 12:001 PRIORITY OVERNIGH



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BILL RECIPIENT

SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

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Client: Southern Company

Job Number: 180-126277-1

Login Number: 126277 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

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.	False	
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: 180-126277-1

Login Number: 126278 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.	False	
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: 180-126277-1

Login Number: 126364 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

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: 180-126277-1

Login Number: 126367 List Source: Eurofins TestAmerica, Pittsburgh

List Number: 1

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	



# **Environment Testing America**

## **ANALYTICAL REPORT**

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

Laboratory Job ID: 180-126277-2

Client Project/Site: Plant Wansley Ash Pond

#### For:

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

Attn: Kristen N Jurinko

Authorized for release by: 10/12/2021 7:47:37 PM

Shali Brown, Project Manager II (615)301-5031

Shali.Brown@Eurofinset.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: Plant Wansley Ash Pond Laboratory Job ID: 180-126277-2

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#### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-2

Laboratory: Eurofins TestAmerica, Pittsburgh

**Narrative** 

Job Narrative 180-126277-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 8/26/2021 10:00 AM and 8/28/2021 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 22 coolers at receipt time were 2.3° C, 2.3° C, 2.5° C, 2.8° C, 2.8° C, 3.1° C, 3.1° C, 3.6° C, 3.6° C, 3.7° C, 3.7° C, 3.8° C, 3.8° C, 3.8° C, 3.8° C, 4.2° C, 4.2° C, 4.6° C, 4.6° C, 4.8° C and 4.8° C.

#### **Receipt Exceptions**

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): EB-1 (180-126278-2). The container labels list a sample id of EB-2, while the COC lists EB-1. The ID on the COC was used.

The containers received for the following samples did not match the information listed on the Chain-of-Custody (COC): WGWA-5 (180-126277-1), FB-1 (180-126277-2), WGWA-6 (180-126277-3), WGWA-7 (180-126277-4) and Dup-1 (180-126277-5). Two plastic nitric preserved containers were received for each of the following samples, while the COC does not list the RAD analysis. The RAD analysis was added .

#### RAD

Methods 903.0, 9315: radium-226 Batch 525966

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 (180-126278-3), WGWA-4 (180-126278-4), (LCS 160-525966/1-A), (LCSD 160-525966/2-A) and (MB 160-525966/23-A)

#### Methods 903.0, 9315: Radium-226 Batch 525800

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-5 (180-126277-1), FB-1 (180-126277-2), WGWA-6 (180-126277-3), WGWA-7 (180-126277-4), Dup-1 (180-126277-5), WGWA-2 (180-126278-1), EB-1 (180-126278-2), (LCS 160-525800/1-A) and (MB 160-525800/24-A)

#### Method 9315: Radium-226 prep batch 160-526227:

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-18 (180-126364-1), WGWC-13 (180-126364-2), WGWC-14A (180-126364-3), EB-2 (180-126364-4), WGWC-17 (180-126364-5), WGWC-19 (180-126364-6), Dup-2 (180-126364-7), WGWC-10 (180-126364-8), WGWC-24 (180-126364-9), Dup-3 (180-126364-10), WGWC-25 (180-126364-11), WGWC-8 (180-126364-12), WGWC-15 (180-126364-13), WGWC-20 (180-126364-14), WGWC-23 (180-126364-15), FB-3 (180-126364-16), WGWA-3 (180-126367-1), WGWC-11 (180-126367-2), WGWC-12 (180-126367-3), FB-2 (180-126367-4), (LCS 160-526227/2-A), (LCSD 160-526227/3-A) and (MB 160-526227/1-A)

#### Methods 904.0, 9320: Radium 228 prep batch 160-525827

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-5 (180-126277-1), FB-1 (180-126277-2), WGWA-6 (180-126277-3), WGWA-7 (180-126277-4), Dup-1 (180-126277-5), WGWA-2 (180-126278-1), EB-1 (180-126278-2), (LCS 160-525827/1-A) and (MB 160-525827/24-A)

#### Methods 904.0, 9320: Radium-228 prep batch 160-526057:

The radium-228 laboratory control sample (LCS) associated with the following samples recovered at 129%(LCS 160-526057/1-A). The limits in our LIMS system at (75-125%) reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of

Job ID: 180-126277-2

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#### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-2

### Job ID: 180-126277-2 (Continued)

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

(61-138%) per method requirements. The LCS is within criteria and no further action is required.

Methods 904.0, 9320: Radium-228 prep batch 160-526057:

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 (180-126278-3), WGWA-4 (180-126278-4), (LCS 160-526057/1-A), (LCSD 160-526057/2-A) and (MB 160-526057/23-A)

#### Method 9320: Radium-228 prep batch 160-526246:

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-18 (180-126364-1), WGWC-13 (180-126364-2), WGWC-14A (180-126364-3), EB-2 (180-126364-4), WGWC-17 (180-126364-5), WGWC-19 (180-126364-6), Dup-2 (180-126364-7), WGWC-10 (180-126364-8), WGWC-24 (180-126364-9), Dup-3 (180-126364-10), WGWC-25 (180-126364-11), WGWC-8 (180-126364-12), WGWC-15 (180-126364-13), WGWC-20 (180-126364-14), WGWC-23 (180-126364-15), FB-3 (180-126364-16), WGWA-3 (180-126367-1), WGWC-11 (180-126367-2), WGWC-12 (180-126367-3), FB-2 (180-126367-4), (LCS 160-526246/2-A), (LCSD 160-526246/3-A) and (MB 160-526246/1-A)

#### Methods 904.0, 9320: Radium-228 prep batch 160-526247:

The method blank was counted on a detector that failed the daily background check high. The detector passed the background check the day prior to and after the sample count. The method blank activity is below the MDC and RL. The lab does not believe this excursion adversely affects the data. The data have been reported with this narrative. (MB 160-526247/1-A)

#### Methods 904.0, 9320: Radium-228 prep batch 160-526247:

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-16 (180-126367-5), EB-3 (180-126367-6), WGWC-21 (180-126367-7), WGWC-9 (180-126367-8), WGWC-22 (180-126367-9), (LCS 160-526247/2-A) and (MB 160-526247/1-A)

#### Method PrecSep 0: Ra-228 Batch 160-526057:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-1 (180-126278-3) and WGWA-4 (180-126278-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

#### Method PrecSep 0: Ra-228 Batch 160-526246:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-18 (180-126364-1), WGWC-13 (180-126364-2), WGWC-14A (180-126364-3), EB-2 (180-126364-4), WGWC-17 (180-126364-5), WGWC-19 (180-126364-6), Dup-2 (180-126364-7), WGWC-10 (180-126364-8), WGWC-24 (180-126364-9), Dup-3 (180-126364-10), WGWC-25 (180-126364-11), WGWC-8 (180-126364-12), WGWC-15 (180-126364-13), WGWC-20 (180-126364-14), WGWC-23 (180-126364-15), FB-3 (180-126364-16), WGWA-3 (180-126367-1), WGWC-11 (180-126367-2), WGWC-12 (180-126367-3) and FB-2 (180-126367-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

#### Method PrecSep-21: Ra-226 Batch 160-525966:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-1 (180-126278-3) and WGWA-4 (180-126278-4). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

#### Method PrecSep-21: Ra-226 Batch 160-526227:

Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: WGWA-18 (180-126364-1), WGWC-13 (180-126364-2), WGWC-14A (180-126364-3), EB-2 (180-126364-4), WGWC-17 (180-126364-5), WGWC-19 (180-126364-6), Dup-2 (180-126364-7), WGWC-10 (180-126364-8), WGWC-24 (180-126364-9), Dup-3 (180-126364-10), WGWC-25 (180-126364-11), WGWC-8 (180-126364-12), WGWC-15 (180-126364-13), WGWC-20 (180-126364-14), WGWC-23 (180-126364-15), FB-3 (180-126364-16), WGWA-3 (180-126367-1), WGWC-11 (180-126367-2), WGWC-12 (180-126367-3) and FB-2 (180-126367-4), A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

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

### **Definitions/Glossary**

Client: Southern Company Job ID: 180-126277-2

Project/Site: 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
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 Job ID: 180-126277-2

Project/Site: 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
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	12-08-21
California	Los Angeles County Sanitation Districts	10259	06-30-22
California	State	2886	06-30-21 *
Connecticut	State	PH-0241	03-31-23
Florida	NELAP	E87689	06-30-22
HI - RadChem Recognition	State	n/a	06-30-22
Illinois	NELAP	004553	11-30-21
Iowa	State	373	12-01-22
Kansas	NELAP	E-10236	10-31-21
Kentucky (DW)	State	KY90125	01-01-22
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-21
Louisiana	NELAP	04080	06-30-22
Louisiana (DW)	State	LA011	12-31-21
Maryland	State	310	09-30-22
MI - RadChem Recognition	State	9005	06-30-22
Missouri	State	780	06-30-22
Nevada	State	MO000542020-1	07-31-22
New Jersey	NELAP	MO002	06-30-22
New York	NELAP	11616	04-01-22
North Dakota	State	R-207	06-30-22
NRC	NRC	24-24817-01	12-31-22
Oklahoma	State	9997	08-31-22
Oregon	NELAP	4157	09-01-22
Pennsylvania	NELAP	68-00540	03-01-22
South Carolina	State	85002001	06-30-22
Texas	NELAP	T104704193	07-31-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-17-00028	03-11-23
Utah	NELAP	MO000542021-14	08-01-22
Virginia	NELAP	10310	06-14-22
Washington	State	C592	08-30-22
West Virginia DEP	State	381	10-31-22

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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

## **Sample Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

WGWC-9

WGWC-22

180-126367-8

180-126367-9

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-126277-1	WGWA-5	Water	08/24/21 12:18	08/26/21 10:00
180-126277-2	FB-1	Water	08/24/21 13:20	08/26/21 10:00
180-126277-3	WGWA-6	Water	08/24/21 13:40	08/26/21 10:00
180-126277-4	WGWA-7	Water	08/24/21 15:10	08/26/21 10:00
180-126277-5	Dup-1	Water	08/24/21 00:00	08/26/21 10:00
180-126278-1	WGWA-2	Water	08/23/21 15:35	08/26/21 10:00
180-126278-2	EB-1	Water	08/24/21 11:00	08/26/21 10:00
180-126278-3	WGWA-1	Water	08/24/21 11:45	08/26/21 10:00
180-126278-4	WGWA-4	Water	08/24/21 14:10	08/26/21 10:00
180-126364-1	WGWA-18	Water	08/25/21 11:25	08/28/21 09:15
180-126364-2	WGWC-13	Water	08/25/21 12:45	08/28/21 09:15
180-126364-3	WGWC-14A	Water	08/25/21 13:30	08/28/21 09:15
180-126364-4	EB-2	Water	08/25/21 15:05	08/28/21 09:15
180-126364-5	WGWC-17	Water	08/25/21 14:55	08/28/21 09:15
180-126364-6	WGWC-19	Water	08/26/21 11:05	08/28/21 09:15
180-126364-7	Dup-2	Water	08/26/21 00:00	08/28/21 09:15
180-126364-8	WGWC-10	Water	08/26/21 12:35	08/28/21 09:15
180-126364-9	WGWC-24	Water	08/26/21 13:55	08/28/21 09:15
180-126364-10	Dup-3	Water	08/26/21 00:00	08/28/21 09:15
180-126364-11	WGWC-25	Water	08/26/21 15:52	08/28/21 09:15
180-126364-12	WGWC-8	Water	08/26/21 12:41	08/28/21 09:15
180-126364-13	WGWC-15	Water	08/26/21 16:14	08/28/21 09:15
180-126364-14	WGWC-20	Water	08/26/21 11:32	08/28/21 09:15
180-126364-15	WGWC-23	Water	08/26/21 14:55	08/28/21 09:15
180-126364-16	FB-3	Water	08/26/21 14:53	08/28/21 09:15
180-126367-1	WGWA-3	Water	08/25/21 10:50	08/28/21 09:15
180-126367-2	WGWC-11	Water	08/25/21 12:00	08/28/21 09:15
180-126367-3	WGWC-12	Water	08/25/21 13:30	08/28/21 09:15
180-126367-4	FB-2	Water	08/25/21 14:35	08/28/21 09:15
180-126367-5	WGWC-16	Water	08/25/21 14:50	08/28/21 09:15
180-126367-6	EB-3	Water	08/26/21 10:10	08/28/21 09:15
180-126367-7	WGWC-21	Water	08/26/21 11:30	08/28/21 09:15

Water

Water

08/26/21 13:00 08/28/21 09:15

08/26/21 15:20 08/28/21 09:15

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Job ID: 180-126277-2

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### **Method Summary**

Client: Southern Company

Project/Site: 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: 180-126277-2

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Client: Southern Company

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-5** 

Lab Sample ID: 180-126277-1 Date Collected: 08/24/21 12:18 **Matrix: Water** 

Date Received: 08/26/21 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			1000.52 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCORANGE	Ē	1			529910	10/04/21 19:57	FLC	TAL SL
Total/NA	Prep	PrecSep_0			1000.52 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCPURPLE		1			529909	10/04/21 12:47	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			530585	10/08/21 15:38	ЕМН	TAL SL

**Client Sample ID: FB-1** Lab Sample ID: 180-126277-2

Date Collected: 08/24/21 13:20 **Matrix: Water** 

Date Received: 08/26/21 10:00

Batc	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			1000.84 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCORANG	SE.	1			529910	10/04/21 19:57	FLC	TAL SL
Total/NA	Prep	PrecSep_0			1000.84 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			529908	10/04/21 12:50	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			530585	10/08/21 15:38	ЕМН	TAL SL

**Client Sample ID: WGWA-6** Lab Sample ID: 180-126277-3 Date Collected: 08/24/21 13:40 **Matrix: Water** 

Date Received: 08/26/21 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			1000.91 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis	9315		1			530098	10/05/21 07:00	ANW	TAL SL
	Instrumer	nt ID: GFPCORANG	E							
Total/NA	Prep	PrecSep_0			1000.91 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis	9320		1			529908	10/04/21 12:50	ANW	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Analysis	Ra226_Ra228		1			530585	10/08/21 15:38	EMH	TAL SL
	Instrumer	nt ID: NOEQUIP								

**Client Sample ID: WGWA-7** Lab Sample ID: 180-126277-4

Date Collected: 08/24/21 15:10 Date Received: 08/26/21 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			1000.50 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis	9315		1			530098	10/05/21 07:00	ANW	TAL SL
	Instrumer	t ID: GFPCORAN	IGE							

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**Matrix: Water** 

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

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Client Sample ID: WGWA-7 Lab Sample ID: 180-126277-4

Date Collected: 08/24/21 15:10 Matrix: Water Date Received: 08/26/21 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			1000.50 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCBLUE		1			529908	10/04/21 12:51	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			530585	10/08/21 15:38	EMH	TAL SL

Client Sample ID: Dup-1 Lab Sample ID: 180-126277-5

Date Collected: 08/24/21 00:00
Date Received: 08/26/21 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			1000.44 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis	9315		1			530098	10/05/21 07:01	ANW	TAL SL
	Instrumer	nt ID: GFPCORANG	SE .							
Total/NA	Prep	PrecSep_0			1000.44 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis	9320		1			529908	10/04/21 12:51	ANW	TAL SL
	Instrumer	nt ID: GFPCBLUE								
Total/NA	Analysis	Ra226_Ra228		1			530585	10/08/21 15:38	EMH	TAL SL
	Instrumer	nt ID: NOEQUIP								

Client Sample ID: WGWA-2 Lab Sample ID: 180-126278-1

Date Collected: 08/23/21 15:35 Matrix: Water Date Received: 08/26/21 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			1000.11 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis	9315		1			530098	10/05/21 07:01	ANW	TAL SL
	Instrumer	t ID: GFPCORANG	E							
Total/NA	Prep	PrecSep_0			1000.11 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis	9320		1			529908	10/04/21 12:51	ANW	TAL SL
	Instrumer	t ID: GFPCBLUE								
Total/NA	Analysis	Ra226_Ra228		1			530585	10/08/21 15:38	EMH	TAL SL
	Instrumer	t ID: NOEQUIP								

Client Sample ID: EB-1 Lab Sample ID: 180-126278-2

Date Collected: 08/24/21 11:00 Matrix: Water Date Received: 08/26/21 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			1000.62 mL	1.0 g	525800	09/08/21 08:51	MAV	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	530098	10/05/21 07:01	ANW	TAL SL
	Instrumer	t ID: GFPCORAN	GE							
Total/NA	Prep	PrecSep_0			1000.62 mL	1.0 g	525827	09/08/21 10:16	MJ	TAL SL
Total/NA	Analysis	9320		1			529908	10/04/21 12:51	ANW	TAL SL
	Instrumer	t ID: GFPCBLUE								

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**Matrix: Water** 

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10/12/2021

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-1 Lab Sample ID: 180-126278-2 Date Collected: 08/24/21 11:00

**Matrix: Water** 

Job ID: 180-126277-2

Date Received: 08/26/21 10:00

Client: Southern Company

	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			530585	10/08/21 15:38	EMH	TAL SL

**Client Sample ID: WGWA-1** Lab Sample ID: 180-126278-3 Date Collected: 08/24/21 11:45 **Matrix: Water** 

Date Received: 08/26/21 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			1000.4 mL	1.0 g	525966	09/08/21 15:41	MAV	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCRED		1			529904	10/04/21 17:48	ANW	TAL SL
Total/NA	Prep	PrecSep_0			1000.4 mL	1.0 g	526057	09/09/21 09:09	MJ	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCPROTEA	۸N	1			530078	10/04/21 12:30	ANW	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			530583	10/08/21 15:34	EMH	TAL SL

Lab Sample ID: 180-126278-4 Client Sample ID: WGWA-4

Date Collected: 08/24/21 14:10 Date Received: 08/26/21 10:00

Batch Batch Dil Initial Final Batch Prepared Method Amount Number or Analyzed **Prep Type** Type **Factor Amount** Run Analyst Lab PrecSep-21 Total/NA 525966 09/08/21 15:41 MAV TAL SL Prep 1000.0 mL 1.0 g Total/NA Analysis 9315 529904 10/04/21 17:48 ANW TAL SL 1 Instrument ID: GFPCRED Total/NA Prep PrecSep 0 1000.0 mL 1.0 g 526057 09/09/21 09:09 MJ TAL SL Total/NA Analysis 530078 10/04/21 12:30 ANW TAL SL 1 Instrument ID: GFPCPROTEAN Total/NA Analysis Ra226 Ra228 530583 10/08/21 15:34 EMH TAL SL 1 Instrument ID: NOEQUIP

**Client Sample ID: WGWA-18** Lab Sample ID: 180-126364-1 Date Collected: 08/25/21 11:25

Date Received: 08/28/21 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			1000.15 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.15 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:46	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			531332	10/12/21 18:42	EMH	TAL SL

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**Matrix: Water** 

**Matrix: Water** 

10/12/2021

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

Client Sample ID: WGWC-13

Lab Sample ID: 180-126364-2

**Matrix: Water** 

Date Collected: 08/25/21 12:45 Date Received: 08/28/21 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			1004.01 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCBLUE		1			530401	10/06/21 16:43	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1004.01 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCRED		1			530403	10/06/21 12:46	SCB	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-14A

Date Collected: 08/25/21 13:30

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-3 **Matrix: Water** 

Initial Dil Batch Batch Final Batch Prepared **Prep Type** Туре Method Run Factor **Amount Amount** Number or Analyzed **Analyst** Lab Total/NA Prep PrecSep-21 1000.84 mL 526227 09/09/21 17:26 RER TAL SL 1.0 g Total/NA Analysis 9315 530401 10/06/21 16:43 SCB TAL SL Instrument ID: GFPCBLUE Total/NA Prep PrecSep 0 1000.84 mL 1.0 g 526246 09/10/21 09:01 MJ TAL SL Total/NA Analysis 530403 10/06/21 12:46 SCB TAL SL 9320 1 Instrument ID: GFPCRED Total/NA Analysis Ra226 Ra228 TAL SL 1 531332 10/12/21 18:42 EMH Instrument ID: NOEQUIP

Client Sample ID: EB-2 Lab Sample ID: 180-126364-4 Date Collected: 08/25/21 15:05

Date Received: 08/28/21 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			1001.46 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:44	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1001.46 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:46	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-17 Lab Sample ID: 180-126364-5

Date Collected: 08/25/21 14:55

Date Received: 08/28/21 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			1003.76 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis	9315		1			530401	10/06/21 16:44	SCB	TAL SL
	Instrumen	t ID: GFPCBLUE								

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**Matrix: Water** 

Lab Chronicie

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-17 Lab Sample ID: 180-126364-5

Date Collected: 08/25/21 14:55

Matrix: Water

Date Received: 08/28/21 09:15

Client: Southern Company

	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			1003.76 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCRED		1			530403	10/06/21 12:47	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-19 Lab Sample ID: 180-126364-6

Date Collected: 08/26/21 11:05

Date Received: 08/28/21 09:15

Matrix: Water

Batch Dil Initial Final Batch **Batch** Prepared Method Number or Analyzed **Prep Type** Type **Factor Amount** Amount Run Analyst Lab Total/NA PrecSep-21 526227 09/09/21 17:26 RER TAL SL Prep 1007.86 mL 1.0 g Total/NA 9315 TAL SL Analysis 530401 10/06/21 16:44 SCB 1 Instrument ID: GFPCBLUE Total/NA PrecSep 0 1007.86 mL 09/10/21 09:01 MJ TAL SL Prep 1.0 g 526246 TAL SL Total/NA Analysis 9320 530403 10/06/21 12:48 SCB Instrument ID: GFPCRED Total/NA Analysis Ra226 Ra228 531332 10/12/21 18:42 EMH TAL SL Instrument ID: NOEQUIP

Client Sample ID: Dup-2 Lab Sample ID: 180-126364-7

Date Collected: 08/26/21 00:00 Date Received: 08/28/21 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			1003.63 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:45	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1003.63 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:48	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-10 Lab Sample ID: 180-126364-8

Date Collected: 08/26/21 12:35 Date Received: 08/28/21 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			1005.04 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis	9315		1			530401	10/06/21 16:45	SCB	TAL SL
	Instrumer	t ID: GFPCBLUE								
Total/NA	Prep	PrecSep_0			1005.04 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis	9320		1			530403	10/06/21 12:48	SCB	TAL SL
	Instrumer	t ID: GFPCRED								

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2

Job ID: 180-126277-2

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**Matrix: Water** 

10/12/2021

**Matrix: Water** 

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** 

Date Collected: 08/26/21 12:35

Client: Southern Company

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-8

**Matrix: Water** 

Job ID: 180-126277-2

	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			531332	10/12/21 18:42	EMH	TAL SL

Client Sample ID: WGWC-24

Date Collected: 08/26/21 13:55 Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-9 **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 1003.30 mL 1.0 g 526227 09/09/21 17:26 RER TAL SL Total/NA Analysis 9315 530401 10/06/21 16:45 SCB TAL SL Instrument ID: GFPCBLUE Total/NA 09/10/21 09:01 MJ TAL SL Prep PrecSep 0 1003.30 mL 1.0 g 526246 Total/NA TAL SL 9320 530403 10/06/21 12:48 SCB Analysis 1 Instrument ID: GFPCRED Total/NA Analysis Ra226 Ra228 531332 10/12/21 18:42 EMH TAL SL Instrument ID: NOEQUIP

**Client Sample ID: Dup-3** 

Date Collected: 08/26/21 00:00

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-10

**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			1003.40 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:45	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1003.40 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:48	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			531332	10/12/21 18:42	EMH	TAL SL

**Client Sample ID: WGWC-25** 

Date Collected: 08/26/21 15:52

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126364-11

**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			1005.53 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:46	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1005.53 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:50	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

10/12/2021

Client Sample ID: WGWC-8

Date Collected: 08/26/21 12:41 Date Received: 08/28/21 09:15 Lab Sample ID: 180-126364-12

**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			1005.26 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:46	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1005.26 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:51	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-15 Lab Sample ID: 180-126364-13

Date Collected: 08/26/21 16:14

Date Received: 08/28/21 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			1003.79 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCBLUE		1			530401	10/06/21 16:46	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1003.79 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:51	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-20

Lab Sample ID: 180-126364-14

Date Collected: 08/26/21 11:32

Matrix: Water

Date Received: 08/28/21 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			1002.28 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCPURPLE		1			530402	10/06/21 16:34	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1002.28 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530403	10/06/21 12:51	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-23 Lab Sample ID: 180-126364-15

Date Collected: 08/26/21 14:55 Date Received: 08/28/21 09:15

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			1001.45 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis	9315		1			530402	10/06/21 16:35	SCB	TAL SL
	Instrumen	t ID: GFPCPURP	LE							

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**Matrix: Water** 

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-23 Lab Sample ID: 180-126364-15 **Matrix: Water** 

Date Collected: 08/26/21 14:55 Date Received: 08/28/21 09:15

Client: Southern Company

	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			1001.45 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCRED		1			530403	10/06/21 12:51	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228		1			531332	10/12/21 18:42	EMH	TAL SL

**Client Sample ID: FB-3** Lab Sample ID: 180-126364-16

Date Collected: 08/26/21 14:53

Date Received: 08/28/21 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			1006.40 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 t ID: GFPCPURPLE		1			530402	10/06/21 16:35	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1006.40 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCRED		1			530403	10/06/21 12:51	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 It ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Lab Sample ID: 180-126367-1 **Client Sample ID: WGWA-3** Date Collected: 08/25/21 10:50 **Matrix: Water** 

Date Received: 08/28/21 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			1001.41 mL	1.0 g	526227	09/09/21 17:26	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCPURPLE	≣	1			530402	10/06/21 16:36	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1001.41 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			530401	10/06/21 12:43	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

Client Sample ID: WGWC-11 Lab Sample ID: 180-126367-2

Date Collected: 08/25/21 12:00 Date Received: 08/28/21 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			1005.01 mL	1.0 g	526227	09/09/21 17:30	RER	TAL SL
Total/NA	Analysis	9315		1			530402	10/06/21 16:36	SCB	TAL SL
	Instrumer	t ID: GFPCPURPI	.E							
Total/NA	Prep	PrecSep_0			1005.01 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis	9320		1			530401	10/06/21 12:43	SCB	TAL SL
	Instrumer	nt ID: GFPCBLUE								

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**Matrix: Water** 

**Matrix: Water** 

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

**Client Sample ID: WGWC-11** 

Lab Sample ID: 180-126367-2

**Matrix: Water** 

Date Collected: 08/25/21 12:00 Date Received: 08/28/21 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	Ra226_Ra228		1			531332	10/12/21 18:42	EMH	TAL SL

**Client Sample ID: WGWC-12** 

Date Collected: 08/25/21 13:30

Date Received: 08/28/21 09:15

	<b>,</b>		
31332	10/12/21 18:42	EMH	TAL SL
La	b Sample II	D: 180-	126367-3

**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			1005.82 mL	1.0 g	526227	09/09/21 17:30	RER	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCPURPLE	<u> </u>	1			530402	10/06/21 16:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1005.82 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCBLUE		1			530401	10/06/21 12:44	SCB	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			531332	10/12/21 18:42	ЕМН	TAL SL

**Client Sample ID: FB-2** 

Date Collected: 08/25/21 14:35

Date Received: 08/28/21 09:15

Lab Sample ID: 180-126367-4

**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			1000.84 mL	1.0 g	526227	09/09/21 17:30	RER	TAL SL
Total/NA	Analysis Instrumen	9315 t ID: GFPCPURPLE		1			530402	10/06/21 16:37	SCB	TAL SL
Total/NA	Prep	PrecSep_0			1000.84 mL	1.0 g	526246	09/10/21 09:01	MJ	TAL SL
Total/NA	Analysis Instrumen	9320 t ID: GFPCBLUE		1			530401	10/06/21 12:44	SCB	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 t ID: NOEQUIP		1			531332	10/12/21 18:42	EMH	TAL SL

Client Sam	ple ID: WO	SWC-16					Lab Sample ID: 180-126367-						
<b>Date Collecte</b>	d: 08/25/21	14:50							Ma	trix: Water			
Date Receive	d: 08/28/21 (	09:15											
	Batch	Batch		Dil	Initial	Final	Batch	Prepared					
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab			

	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			1001.00 mL	1.0 g	526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis Instrumen	9315 at ID: GFPCRED		1			530631	10/11/21 21:22	EMH	TAL SL
Total/NA	Prep	PrecSep_0			1001.00 mL	1.0 g	526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis Instrumen	9320 at ID: GFPCPROTEA	N	1	1.0 mL	1.0 mL	530525	10/07/21 12:29	SCB	TAL SL
Total/NA	Analysis Instrumen	Ra226_Ra228 at ID: NOEQUIP		1			531331	10/12/21 18:39	ЕМН	TAL SL

Client: Southern Company

**Client Sample ID: EB-3** 

Project/Site: Plant Wansley Ash Pond

Lab Sample ID: 180-126367-6

**Matrix: Water** 

Date Collected: 08/26/21 10:10 Date Received: 08/28/21 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			1000.12 mL	1.0 g	526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis Instrumer	9315 at ID: GFPCRED		1			530631	10/11/21 21:22	EMH	TAL SL
Total/NA	Prep	PrecSep_0			1000.12 mL	1.0 g	526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCRED		1			530479	10/07/21 12:42	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 at ID: NOEQUIP		1			531331	10/12/21 18:39	ЕМН	TAL SL

Lab Sample ID: 180-126367-7 Client Sample ID: WGWC-21

Date Collected: 08/26/21 11:30 **Matrix: Water** 

Date Received: 08/28/21 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			1002.10 mL	1.0 g	526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis Instrumer	9315 nt ID: GFPCRED		1			530631	10/11/21 21:22	EMH	TAL SL
Total/NA	Prep	PrecSep_0			1002.10 mL	1.0 g	526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 nt ID: GFPCRED		1			530479	10/07/21 12:43	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531331	10/12/21 18:39	EMH	TAL SL

Client Sample ID: WGWC-9 Lab Sample ID: 180-126367-8 Date Collected: 08/26/21 13:00

Date Received: 08/28/21 09:15

Batch Batch Dil Initial Final **Batch** Prepared **Prep Type** Туре Method Amount Amount Number or Analyzed Run **Factor** Analyst Lab Total/NA PrecSep-21 526228 09/09/21 17:37 MLK TAL SL Prep 1000.21 mL 1.0 g Total/NA 9315 530631 10/11/21 21:22 EMH TAL SL Analysis Instrument ID: GFPCRED Total/NA 1000.21 mL 09/10/21 09:05 MJ TAL SL Prep PrecSep\_0 1.0 g 526247 Total/NA Analysis 9320 1 530479 10/07/21 12:43 ANW TAL SL Instrument ID: GFPCRED Total/NA Analysis Ra226 Ra228 531331 10/12/21 18:39 EMH TAL SL Instrument ID: NOEQUIP

Client Sample ID: WGWC-22 Lab Sample ID: 180-126367-9

Date Collected: 08/26/21 15:20 Date Received: 08/28/21 09:15

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		· <del></del>	1000.05 mL	1.0 g	526228	09/09/21 17:37	MLK	TAL SL
Total/NA	Analysis	9315		1	1.0 mL	1.0 mL	530631	10/11/21 21:25	EMH	TAL SL
	Instrumer	t ID: GFPCRED								

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**Matrix: Water** 

**Matrix: Water** 

10/12/2021

### **Lab Chronicle**

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Date Received: 08/28/21 09:15

**Client Sample ID: WGWC-22** Lab Sample ID: 180-126367-9

Date Collected: 08/26/21 15:20

**Matrix: Water** 

	Batch	Batch		Dil	l Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			1000.05 mL	1.0 g	526247	09/10/21 09:05	MJ	TAL SL
Total/NA	Analysis Instrumer	9320 at ID: GFPCRED		1			530479	10/07/21 12:43	ANW	TAL SL
Total/NA	Analysis Instrumer	Ra226_Ra228 nt ID: NOEQUIP		1			531331	10/12/21 18:39	EMH	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

MAV = Melesa Viehmann

MJ = Mary Johns

MLK = Micha Korrinhizer

RER = Rhonda Ridenhower

Batch Type: Analysis

ANW = Aamber Woods

EMH = Elizabeth Hoerchler

FLC = Fernando Cruz

SCB = Sarah Bernsen

Eurofins TestAmerica, Pittsburgh

10/12/2021

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWA-5 Lab Sample ID: 180-126277-1

Matrix: Water

Date Collected: 08/24/21 12:18 Date Received: 08/26/21 10:00

Method: 9315 - Ra	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.218	U	0.239	0.240	1.00	0.386	pCi/L	09/08/21 08:51	10/04/21 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110					09/08/21 08:51	10/04/21 19:57	1

Method: 9320 -	Radium-228 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00761	U	0.287	0.287	1.00	0.510	pCi/L	09/08/21 10:16	10/04/21 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.8		40 - 110					09/08/21 10:16	10/04/21 12:47	1
Y Carrier	81.1		40 - 110					09/08/21 10:16	10/04/21 12:47	1

Method: Ra226_Ra2	28 - Con	ibined 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	0.226	U	0.373	0.374	2.00	0.510	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: FB-1 Lab Sample ID: 180-126277-2

Matrix: Water

Date Collected: 08/24/21 13:20 Date Received: 08/26/21 10:00

Method: 9315 - Rad	dium-226 (	(GFPC)								
		`	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0226	U	0.202	0.202	1.00	0.408	pCi/L	09/08/21 08:51	10/04/21 19:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/08/21 08:51	10/04/21 19:57	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	0.852		0.331	0.340	1.00	0.468	pCi/L	09/08/21 10:16	10/04/21 12:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/08/21 10:16	10/04/21 12:50	1
Y Carrier	88.2		40 - 110					09/08/21 10:16	10/04/21 12:50	1

Method: Ra226_Ra	228 - Combined Ra	idium-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	0.829	0.388	0.395	2.00	0.468	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-6** Lab Sample ID: 180-126277-3 Date Collected: 08/24/21 13:40

**Matrix: Water** 

Date Received: 08/26/21 10:00

Method: 9315 - R	Radium-226 (	(GFPC)	Count	Total						
Analyte	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analvzed	Dil Fac
Radium-226	3.52		0.546	0.631	1.00	0.347		09/08/21 08:51	10/05/21 07:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/08/21 08:51	10/05/21 07:00	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	6.26		0.611	0.840	1.00	0.442	pCi/L	09/08/21 10:16	10/04/21 12:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/08/21 10:16	10/04/21 12:50	1
Y Carrier	83.4		40 - 110					09/08/21 10:16	10/04/21 12:50	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	9.78		0.819	1.05	2.00	0.442	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWA-7 Lab Sample ID: 180-126277-4

Matrix: Water

Date Collected: 08/24/21 15:10 Date Received: 08/26/21 10:00

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0388	U	0.164	0.164	1.00	0.342	pCi/L	09/08/21 08:51	10/05/21 07:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/08/21 08:51	10/05/21 07:00	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	0.504	U	0.343	0.346	1.00	0.536	pCi/L	09/08/21 10:16	10/04/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/08/21 10:16	10/04/21 12:51	1
Y Carrier	82.2		40 - 110					09/08/21 10:16	10/04/21 12:51	1

Method: Ra226_Ra2	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	0.465	U	0.380	0.383	2.00	0.536	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: Dup-1** Lab Sample ID: 180-126277-5 Date Collected: 08/24/21 00:00

**Matrix: Water** 

Date Received: 08/26/21 10:00

Method: 9315 -		J. 1 J,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.213	U	0.203	0.204	1.00	0.317	pCi/L	09/08/21 08:51	10/05/21 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					09/08/21 08:51	10/05/21 07:01	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	0.534		0.313	0.316	1.00	0.475		09/08/21 10:16		1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					09/08/21 10:16	10/04/21 12:51	1
Y Carrier	87.9		40 - 110					09/08/21 10:16	10/04/21 12:51	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.747		0.373	0.376	2.00	0.475	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-2** Lab Sample ID: 180-126278-1 Date Collected: 08/23/21 15:35

**Matrix: Water** 

Date Received: 08/26/21 10:00

	Method: 9315 - Rad	ium-226 (	(GFPC)								
				Count Uncert.	Total Uncert.						
	Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Radium-226	0.0226	U	0.195	0.195	1.00	0.379	pCi/L	09/08/21 08:51	10/05/21 07:01	1
	Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
l	Ba Carrier	89.0		40 - 110					09/08/21 08:51	10/05/21 07:01	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	0.609		0.289	0.295	1.00	0.417	pCi/L	09/08/21 10:16	10/04/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/08/21 10:16	10/04/21 12:51	1
Y Carrier	87.1		40 - 110					09/08/21 10:16	10/04/21 12:51	1

Method: Ra226 Ra	228 - Com	bined Ra	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.632		0.349	0.354	2.00	0.417	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-1 Lab Sample ID: 180-126278-2

Matrix: Water

Date Collected: 08/24/21 11:00 Date Received: 08/26/21 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	0.00933	U	0.179	0.179	1.00	0.348	pCi/L	09/08/21 08:51	10/05/21 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					09/08/21 08:51	10/05/21 07:01	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	0.480		0.294	0.297	1.00	0.449	pCi/L	09/08/21 10:16	10/04/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.5		40 - 110					09/08/21 10:16	10/04/21 12:51	1
Y Carrier	86.4		40 - 110					09/08/21 10:16	10/04/21 12:51	1

Method: Ra226_Ra	228 - Com	bined Rad	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.489		0.344	0.347	2.00	0.449	pCi/L		10/08/21 15:38	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-1** 

Date Collected: 08/24/21 11:45 Date Received: 08/26/21 10:00

Lab Sample ID: 180-126278-3 **Matrix: Water** 

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.378		0.237	0.240	1.00	0.318	pCi/L	09/08/21 15:41	10/04/21 17:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.1		40 - 110					09/08/21 15:41	10/04/21 17:48	1

adium-228 (	(GFPC)								
Rosult	Qualifier	Count Uncert.	Total Uncert.	ΡI	MDC	Unit	Propared	Analyzed	Dil Fac
		<del></del>	<del>``</del>						Dil Fac
0.220	U	0.284	0.285	1.00	0.472	pCi/L	09/09/21 09:09	10/04/21 12:30	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
93.1		40 - 110					09/09/21 09:09	10/04/21 12:30	1
80.4		40 - 110					09/09/21 09:09	10/04/21 12:30	1
	Result   0.220   %Yield   93.1		Count Uncert.	Count Uncert. Uncert.   Count Uncert.   Uncert.   Uncert.   Uncert.   (2σ+/-)   (2σ	Count Uncert. Uncert.   Uncert.	Count Uncert. Uncert.   Count Uncert.   Cou	Count Uncert. Uncert.   Count Uncert.   Cou	Count Uncert. Uncert.   Count Uncert.   Cou	Count Uncert. Uncert. Uncert.   Count Uncer

Method: Ra226_Ra	228 - Con	bined Rad	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	0.598		0.370	0.373	2.00	0.472	pCi/L		10/08/21 15:34	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-4** Lab Sample ID: 180-126278-4 Date Collected: 08/24/21 14:10

**Matrix: Water** 

adium-226 (	(GFPC)								
		Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.546		0.321	0.325	1.00	0.419	pCi/L	09/08/21 15:41	10/04/21 17:48	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
69.6		40 - 110					09/08/21 15:41	10/04/21 17:48	1
	Result 0.546 %Yield	%Yield Qualifier	Count Uncert.	Count Uncert. Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.	Count Uncert. Uncert. Uncert.   Variety   V	Count   Total   Uncert.   Uncert.   Uncert.   Count   Uncert.   Uncert.	Count Uncert. Uncert.   Uncert.	Count Uncert. Uncert. Uncert.   Variety   V

Method: 9320 - R	tadium-228 (	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.06		0.471	0.481	1.00	0.688	pCi/L	09/09/21 09:09	10/04/21 12:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.6		40 - 110					09/09/21 09:09	10/04/21 12:30	1
Y Carrier	78.9		40 - 110					09/09/21 09:09	10/04/21 12:30	1

Method: Ra226_Ra	228 - Con	ibined Rad	dium-226 a	nd Radium	า-228					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.61		0.570	0.581	2.00	0.688	pCi/L		10/08/21 15:34	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

92.6

Date Received: 08/28/21 09:15

Ba Carrier

Client Sample ID: WGWA-18

Date Collected: 08/25/21 11:25

Lab Sample I

40 - 110

Lab Sample ID: 180-126364-1

09/09/21 17:26 10/06/21 16:43

**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	0.0729	U	0.223	0.223	1.00	0.409	pCi/L	09/09/21 17:26	10/06/21 16:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analvzed	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	0.572		0.302	0.307	1.00	0.455	pCi/L	09/10/21 09:01	10/06/21 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					09/10/21 09:01	10/06/21 12:46	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 12:46	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	0.645		0.375	0.379	2.00	0.455	pCi/L		10/12/21 18:42	1

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12

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-13 Lab Sample ID: 180-126364-2

Date Collected: 08/25/21 12:45 Matrix: Water

Date Received: 08/28/21 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	0.172	U	0.253	0.253	1.00	0.430	pCi/L	09/09/21 17:26	10/06/21 16:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/09/21 17:26	10/06/21 16:43	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	0.741		0.315	0.323	1.00	0.452	pCi/L	09/10/21 09:01	10/06/21 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/10/21 09:01	10/06/21 12:46	1
Y Carrier	83.0		40 - 110					09/10/21 09:01	10/06/21 12:46	1

Method: Ra226 Ra	228 - Combined	Radium-226 a	ınd Radiun	n-228					
_		Count	Total						
		Uncert.	Uncert.						
Analyte	Result Qualifie	r (2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.913	0.404	0.410	2.00	0.452	pCi/L		10/12/21 18:42	1

Eurofins TestAmerica, Pittsburgh

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-14A Lab Sample ID: 180-126364-3

Date Collected: 08/25/21 13:30 Matrix: Water Date Received: 08/28/21 09:15

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.310	U	0.278	0.279	1.00	0.432	pCi/L	09/09/21 17:26	10/06/21 16:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					09/09/21 17:26	10/06/21 16:43	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	0.395		0.256	0.259	1.00	0.392	pCi/L	09/10/21 09:01	10/06/21 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.8		40 - 110					09/10/21 09:01	10/06/21 12:46	1
Y Carrier	83.0		40 - 110					09/10/21 09:01	10/06/21 12:46	1

Method: Ra226_Ra	228 - Con	nbined Rad	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	0.705		0.378	0.381	2.00	0.432	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-2 Lab Sample ID: 180-126364-4

Matrix: Water

Date Collected: 08/25/21 15:05 Date Received: 08/28/21 09:15

Method: 9315 - Ra	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.118	U	0.268	0.268	1.00	0.475	pCi/L	09/09/21 17:26	10/06/21 16:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		40 - 110					09/09/21 17:26	10/06/21 16:44	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	0.207	U	0.241	0.242	1.00	0.397	pCi/L	09/10/21 09:01	10/06/21 12:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.3		40 - 110					09/10/21 09:01	10/06/21 12:46	1
Y Carrier	82.6		40 - 110					09/10/21 09:01	10/06/21 12:46	1

Method: Ra226_Ra2	28 - Con	ibined 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	0.325	U	0.360	0.361	2.00	0.475	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-17** Lab Sample ID: 180-126364-5 Date Collected: 08/25/21 14:55

**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	0.110	U	0.244	0.244	1.00	0.436	pCi/L	09/09/21 17:26	10/06/21 16:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/09/21 17:26	10/06/21 16:44	1

Method: 9320 - I	(ddiuiii-220 )	(0110)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454	U	0.300	0.303	1.00	0.467	pCi/L	09/10/21 09:01	10/06/21 12:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/10/21 09:01	10/06/21 12:47	1
Y Carrier	86.0		40 - 110					09/10/21 09:01	10/06/21 12:47	1

Method: Ra226 Ra	228 - Com	bined Ra	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.565		0.387	0.389	2.00	0.467	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-19** 

Lab Sample ID: 180-126364-6 Date Collected: 08/26/21 11:05 **Matrix: Water** 

Method: 9315 - R	adium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.196	U	0.235	0.235	1.00	0.386	pCi/L	09/09/21 17:26	10/06/21 16:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					09/09/21 17:26	10/06/21 16:44	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	0.600		0.285	0.291	1.00	0.416	pCi/L	09/10/21 09:01	10/06/21 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.0		40 - 110					09/10/21 09:01	10/06/21 12:48	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 12:48	1

Method: Ra226_Ra	228 - Con	nbined Rad	dium-226 a	nd Radium	-228					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.796		0.369	0.374	2.00	0.416	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: Dup-2 Lab Sample ID: 180-126364-7

Matrix: Water

Date Collected: 08/26/21 00:00 Date Received: 08/28/21 09:15

Method: 9315 - Ra	dium-226 (	GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0717	U	0.212	0.212	1.00	0.389	pCi/L	09/09/21 17:26	10/06/21 16:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		40 - 110					09/09/21 17:26	10/06/21 16:45	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	0.641		0.311	0.317	1.00	0.462	pCi/L	09/10/21 09:01	10/06/21 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.9		40 - 110					09/10/21 09:01	10/06/21 12:48	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 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	0.712		0.376	0.381	2.00	0.462	pCi/L		10/12/21 18:42	1

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Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-10** Lab Sample ID: 180-126364-8 Date Collected: 08/26/21 12:35

**Matrix: Water** 

Method: 9315 - Rac	lium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.186	U	0.264	0.265	1.00	0.447	pCi/L	09/09/21 17:26	10/06/21 16:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/09/21 17:26	10/06/21 16:45	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	0.135	U	0.235	0.236	1.00	0.400	pCi/L	09/10/21 09:01	10/06/21 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/10/21 09:01	10/06/21 12:48	1
Y Carrier	83.7		40 - 110					09/10/21 09:01	10/06/21 12:48	1

_ Method: Ra226_Ra2	28 - Con	nbined Rad	dium-226 a	nd Radium	<b>-228</b>					
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.321	U	0.353	0.355	2.00	0.447	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-24** Lab Sample ID: 180-126364-9 Date Collected: 08/26/21 13:55

**Matrix: Water** 

Method: 9315 - R	Radium-226 (	GFPC)								
	·	•	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.560		0.284	0.289	1.00	0.349	pCi/L	09/09/21 17:26	10/06/21 16:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/09/21 17:26	10/06/21 16:45	1

Method: 9320 - F	Radium-228 (	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.07		0.332	0.346	1.00	0.436	pCi/L	09/10/21 09:01	10/06/21 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.0		40 - 110					09/10/21 09:01	10/06/21 12:48	1
Y Carrier	83.7		40 - 110					09/10/21 09:01	10/06/21 12:48	1

Method: Ra226_Ra	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	1.63		0.437	0.451	2.00	0.436	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: Dup-3** Lab Sample ID: 180-126364-10 Date Collected: 08/26/21 00:00

**Matrix: Water** 

Date Received: 08/28/21 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	0.461		0.294	0.297	1.00	0.416	pCi/L	09/09/21 17:26	10/06/21 16:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/09/21 17:26	10/06/21 16:45	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	0.834		0.301	0.310	1.00	0.411	pCi/L	09/10/21 09:01	10/06/21 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/10/21 09:01	10/06/21 12:48	1
Y Carrier	86.0		40 - 110					09/10/21 09:01	10/06/21 12:48	1

Method: Ra226_Ra	228 - Con	nbined Rad	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	1.30		0.421	0.429	2.00	0.416	pCi/L		10/12/21 18:42	1

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Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-25 Lab Sample ID: 180-126364-11

Date Collected: 08/26/21 15:52 Matrix: Water

Date Collected: 08/26/21 15:52 Matrix: V
Date Received: 08/28/21 09:15

Method: 9315 - Rac	lium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.444	U	0.315	0.318	1.00	0.464	pCi/L	09/09/21 17:26	10/06/21 16:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/09/21 17:26	10/06/21 16:46	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	0.678		0.271	0.278	1.00	0.374	pCi/L	09/10/21 09:01	10/06/21 12:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/10/21 09:01	10/06/21 12:50	1
Y Carrier	83.4		40 - 110					09/10/21 09:01	10/06/21 12:50	1

Method: Ra226 Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.12		0.416	0.422	2.00	0.464	pCi/L		10/12/21 18:42	1

10/12/2021

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Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-8** Lab Sample ID: 180-126364-12 Date Collected: 08/26/21 12:41

**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	0.669		0.354	0.359	1.00	0.477	pCi/L	09/09/21 17:26	10/06/21 16:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/09/21 17:26	10/06/21 16:46	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	2.20		0.370	0.421	1.00	0.345	pCi/L	09/10/21 09:01	10/06/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/10/21 09:01	10/06/21 12:51	1
Y Carrier	86.4		40 - 110					09/10/21 09:01	10/06/21 12:51	1

Method: Ra226_Ra	228 - Con	ibined Rad	dium-226 a	nd Radium	า-228					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.87		0.512	0.553	2.00	0.477	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-15** Lab Sample ID: 180-126364-13 Date Collected: 08/26/21 16:14

**Matrix: Water** 

Date Received: 08/28/21 09:15

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.361	U	0.334	0.336	1.00	0.527	pCi/L	09/09/21 17:26	10/06/21 16:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					09/09/21 17:26	10/06/21 16:46	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	0.318	U	0.280	0.282	1.00	0.450	pCi/L	09/10/21 09:01	10/06/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					09/10/21 09:01	10/06/21 12:51	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 12:51	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	0.678		0.436	0.439	2.00	0.527	pCi/L		10/12/21 18:42	1

10/12/2021

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-20** Lab Sample ID: 180-126364-14

Date Collected: 08/26/21 11:32 **Matrix: Water** Date Received: 08/28/21 09:15

Method: 9315 - Ra	adium-226 (	(GFPC)								
			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.485		0.292	0.295	1.00	0.407	pCi/L	09/09/21 17:26	10/06/21 16:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/09/21 17:26	10/06/21 16:34	1
_										

Method: 9320 - F	Radium-228 (	(GFPC)								
Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12	<u> </u>	0.312	0.329	1.00	0.385	pCi/L	09/10/21 09:01	10/06/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.8		40 - 110					09/10/21 09:01	10/06/21 12:51	1
Y Carrier	85.2		40 - 110					09/10/21 09:01	10/06/21 12:51	1

Method: Ra226_Ra	228 - Con	nbined Ra	dium-226 a	nd Radiun	n-228					
_			Count	Total						
Analyte	Pocult	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Allalyte	Nesuit	Qualifier	(2017-)	(2017-)	INL .	IVIDO	OIIIL	Frepareu	Allalyzeu	Dillac
Combined Radium 226 + 228	1.60		0.427	0.442	2.00	0.407	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-23** Lab Sample ID: 180-126364-15 Date Collected: 08/26/21 14:55

**Matrix: Water** 

Method: 9315 - R	adium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.336	U	0.280	0.282	1.00	0.430	pCi/L	09/09/21 17:26	10/06/21 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		40 - 110					09/09/21 17:26	10/06/21 16:35	1

Method: 9320 - I	Radium-228 (	(GFPC)								
Analyte	Posult	Qualifier	Count Uncert. (2σ+/-)	Total Uncert.	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	(20+/-)	(2σ+/-)	KL _	INIDC	UIIIL	Frepareu	Allalyzeu	DII Fac
Radium-228	0.368	U	0.245	0.248	1.00	0.377	pCi/L	09/10/21 09:01	10/06/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.6		40 - 110					09/10/21 09:01	10/06/21 12:51	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 12:51	1

Method: Ra226_Ra	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	0.703		0.372	0.376	2.00	0.430	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: FB-3** Lab Sample ID: 180-126364-16 Date Collected: 08/26/21 14:53

**Matrix: Water** 

Method: 9315 - Rac	lium-226 (	GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.335	U	0.298	0.299	1.00	0.464	pCi/L	09/09/21 17:26	10/06/21 16:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					09/09/21 17:26	10/06/21 16:35	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	0.344	U	0.277	0.279	1.00	0.439	pCi/L	09/10/21 09:01	10/06/21 12:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.9		40 - 110					09/10/21 09:01	10/06/21 12:51	1
Y Carrier	85.2		40 - 110					09/10/21 09:01	10/06/21 12:51	1

Method: Ra226_Ra	228 - Con	ibined 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	0.679		0.407	0.409	2.00	0.464	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWA-3** Lab Sample ID: 180-126367-1 Date Collected: 08/25/21 10:50

**Matrix: Water** 

Method: 9315 - Rad	dium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0179	U	0.199	0.199	1.00	0.387	pCi/L	09/09/21 17:26	10/06/21 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/09/21 17:26	10/06/21 16:36	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	-0.139	U	0.240	0.240	1.00	0.450	pCi/L	09/10/21 09:01	10/06/21 12:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/10/21 09:01	10/06/21 12:43	1
Y Carrier	84.9		40 - 110					09/10/21 09:01	10/06/21 12:43	1

Method: Ra226_Ra2	228 - Con	bined 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	-0.121	U	0.312	0.312	2.00	0.450	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-11** Lab Sample ID: 180-126367-2 Date Collected: 08/25/21 12:00

**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	-0.00827	U	0.199	0.199	1.00	0.392	pCi/L	09/09/21 17:30	10/06/21 16:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/09/21 17:30	10/06/21 16:36	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	0.409		0.259	0.262	1.00	0.398	pCi/L	09/10/21 09:01	10/06/21 12:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/10/21 09:01	10/06/21 12:43	1
Y Carrier	85.2		40 - 110					09/10/21 09:01	10/06/21 12:43	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	0.401		0.327	0.329	2.00	0.398	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-12 Lab Sample ID: 180-126367-3

Matrix: Water

Date Collected: 08/25/21 13:30 Date Received: 08/28/21 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	0.260	U	0.269	0.270	1.00	0.430	pCi/L	09/09/21 17:30	10/06/21 16:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		40 - 110					09/09/21 17:30	10/06/21 16:37	1

			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.183	U	0.273	0.273	1.00	0.457	pCi/L	09/10/21 09:01	10/06/21 12:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.2		40 - 110					09/10/21 09:01	10/06/21 12:44	1
Y Carrier	86.0		40 - 110					09/10/21 09:01	10/06/21 12:44	1

Method: Ra226_Ra2	28 - Con	bined Ra	dium-226 a	nd Radium	<b>-228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.443	U	0.383	0.384	2.00	0.457	pCi/L		10/12/21 18:42	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: FB-2 Lab Sample ID: 180-126367-4

Matrix: Water

Date Collected: 08/25/21 14:35 Date Received: 08/28/21 09:15

Method: 9315 - Rac	dium-226 (	GFPC)								
	·	,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0625	U	0.215	0.216	1.00	0.398	pCi/L	09/09/21 17:30	10/06/21 16:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.7		40 - 110					09/09/21 17:30	10/06/21 16:37	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	0.626		0.290	0.295	1.00	0.429	pCi/L	09/10/21 09:01	10/06/21 12:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.7		40 - 110					09/10/21 09:01	10/06/21 12:44	1
Y Carrier	90.5		40 - 110					09/10/21 09:01	10/06/21 12:44	1

Method: Ra226 Ra	228 - Con	bined Ra	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count	Total						
			Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.688		0.361	0.366	2.00	0.429	pCi/L		10/12/21 18:42	1

12

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-16** Lab Sample ID: 180-126367-5 Date Collected: 08/25/21 14:50

**Matrix: Water** 

Date Received: 08/28/21 09:15

Prepared	Analyzed	Dil Fac
09/09/21 17:37	10/11/21 21:22	1
Prepared	Analyzed	Dil Fac
09/09/21 17:37	10/11/21 21:22	1
	9/09/21 17:37  Prepared	9/09/21 17:37 10/11/21 21:22 <b>Prepared Analyzed</b>

Method: 9320 - F	(adium-228 (	(GFPC)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.449		0.267	0.270	1.00	0.405	pCi/L	09/10/21 09:05	10/07/21 12:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.5		40 - 110					09/10/21 09:05	10/07/21 12:29	1
Y Carrier	82.2		40 - 110					09/10/21 09:05	10/07/21 12:29	1

Method: Ra226_Ra	228 - Con	bined Ra	dium-226 a	nd Radiun	n- <b>228</b>					
_			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.518		0.282	0.285	2.00	0.405	pCi/L		10/12/21 18:39	1

10/12/2021

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: EB-3 Lab Sample ID: 180-126367-6

Matrix: Water

Date Collected: 08/26/21 10:10 Date Received: 08/28/21 09:15

Method: 9315 - Rad	dium-226 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0672	U	0.0892	0.0894	1.00	0.149	pCi/L	09/09/21 17:37	10/11/21 21:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/09/21 17:37	10/11/21 21:22	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	0.168	U	0.244	0.244	1.00	0.409	pCi/L	09/10/21 09:05	10/07/21 12:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.1		40 - 110					09/10/21 09:05	10/07/21 12:42	1
Y Carrier	82.6		40 - 110					09/10/21 09:05	10/07/21 12:42	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	0.235	U	0.260	0.260	2.00	0.409	pCi/L		10/12/21 18:39	1

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-21 Lab Sample ID: 180-126367-7

Matrix: Water

Date Collected: 08/26/21 11:30 Date Received: 08/28/21 09:15

idium-226 (	(GFPC)								
		Count Uncert.	Total Uncert.						
Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
0.293		0.125	0.128	1.00	0.139	pCi/L	09/09/21 17:37	10/11/21 21:22	1
%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
93.4		40 - 110					09/09/21 17:37	10/11/21 21:22	1
	Result 0.293	%Yield Qualifier	Count Uncert.	Count Uncert. Uncert.	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.	Count Uncert. Uncert.   Uncert.	Count   Total   Uncert.   Uncert.   Uncert.     Result   Qualifier   (2σ+/-)   (2σ+/-)   RL   MDC   Unit     PCi/L	Count   Total   Uncert.   Uncert.   Uncert.   Uncert.   Uncert.   O.293   O.125   O.128   O.128   O.139   PCi/L   O.139   Prepared   O.293   O.126   O.127   O.128   O.128	Count Uncert. Uncert. Uncert.   Variety   V

Method: 9320 - F	Radium-228 (	(GFPC)								
		,	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.880		0.310	0.320	1.00	0.423	pCi/L	09/10/21 09:05	10/07/21 12:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/10/21 09:05	10/07/21 12:43	1
Y Carrier	80.7		40 - 110					09/10/21 09:05	10/07/21 12:43	1

Method: Ra226_Ra	228 - Com	bined Rad	dium-226 a	nd Radiun	n-228					
_			Count	Total						
Analyte	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.17		0.334	0.345	2.00	0.423			10/12/21 18:39	1

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Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

Client Sample ID: WGWC-9 Lab Sample ID: 180-126367-8

Matrix: Water

Date Collected: 08/26/21 13:00 Date Received: 08/28/21 09:15

Method: 9315 - Ra	dium-226 (	(GFPC)								
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0757	U	0.0807	0.0810	1.00	0.127	pCi/L	09/09/21 17:37	10/11/21 21:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/09/21 17:37	10/11/21 21:22	1

Method: 9320 - F	Maurum-220 (	GI FG)	Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.606		0.275	0.281	1.00	0.394	pCi/L	09/10/21 09:05	10/07/21 12:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/10/21 09:05	10/07/21 12:43	1
Y Carrier	84.1		40 - 110					09/10/21 09:05	10/07/21 12:43	1

Method: Ra226 Ra	228 - Com	bined 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	0.681		0.287	0.292	2.00	0.394	pCi/L		10/12/21 18:39	1

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12

Client: Southern Company Job ID: 180-126277-2

Project/Site: Plant Wansley Ash Pond

**Client Sample ID: WGWC-22** Lab Sample ID: 180-126367-9 Date Collected: 08/26/21 15:20

**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	0.108	U	0.0931	0.0936	1.00	0.139	pCi/L	09/09/21 17:37	10/11/21 21:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/09/21 17:37	10/11/21 21:25	1
_										

Method: 9320 - F	Radium-228 (	(GFPC)	01	T-4-1						
			Count Uncert.	Total Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.44		0.445	0.546	1.00	0.373	pCi/L	09/10/21 09:05	10/07/21 12:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.8		40 - 110					09/10/21 09:05	10/07/21 12:43	1
Y Carrier	83.7		40 - 110					09/10/21 09:05	10/07/21 12:43	1

Method: Ra226 Ra	228 - Con	bined 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	3.54		0.455	0.554	2.00	0.373	pCi/L		10/12/21 18:39	1

Job ID: 180-126277-2

10

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-525800/24-A

Lab Sample ID: LCS 160-525800/1-A

**Matrix: Water** 

**Matrix: Water** 

**Analysis Batch: 529904** 

Analysis Batch: 530098

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 525800

MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-226 0.2302 U 0.203 0.204 1.00 0.311 pCi/L 09/08/21 08:51 10/05/21 07:01

Total

MB MB

Carrier %Yield Qualifier Limits Ba Carrier 94.6 40 - 110 Prepared Analyzed Dil Fac

09/08/21 08:51 10/05/21 07:01

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 525800

Total LCS LCS %Rec. **Spike** Uncert. Analyte Added Result Qual  $(2\sigma + / -)$ RL %Rec Limits MDC Unit Radium-226 11.3 10.51 1.33 1.00 0.331 pCi/L 93 75 - 125

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 93.4 40 - 110

Lab Sample ID: MB 160-525966/23-A

Count

**Matrix: Water** 

**Analysis Batch: 529910** 

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

Prep Batch: 525966

Count Total Uncert. MB MB Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ **MDC** Unit Prepared Dil Fac RL Analyzed Radium-226 Ū 1.00 09/08/21 15:41 10/04/21 17:56 0.2989 0.268 0.269 0.415 pCi/L MR MR

Dil Fac Carrier %Yield Qualifier Limits Prepared Analyzed 09/08/21 15:41 10/04/21 17:56 Ba Carrier 92.8 40 - 110

Lab Sample ID: LCS 160-525966/1-A

**Matrix: Water** 

**Analysis Batch: 529904** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 525966

Total Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-226 11.3 10.41 1.40 1.00 0.411 pCi/L 92 75 - 125

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 75.2 40 - 110

Lab Sample ID: LCSD 160-525966/2-A Client Sample ID: Lab Control Sample Dup

**Analysis Batch: 529904** 

**Matrix: Water** Prep Type: Total/NA Prep Batch: 525966

Total Spike LCSD LCSD Uncert. %Rec. **RER** Analyte Added Result Qual  $(2\sigma + / -)$ RL MDC Unit %Rec Limits RER Limit Radium-226 11.3 11.00 1.42 1.00 0.342 pCi/L 75 - 125 0.21

Eurofins TestAmerica, Pittsburgh

10

RL

1.00

Total

Uncert.

 $(2\sigma + / -)$ 

1.37

RL

1.00

**MDC** Unit

pCi/L

**MDC** Unit

0.452 pCi/L

**MDC** Unit

0.384 pCi/L

0.401

RL

RL

1.00

**MDC** Unit

0.200 pCi/L

1.00

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: LCSD 160-525966/2-A

**Matrix: Water** 

**Analysis Batch: 529904** 

LCSD LCSD

Carrier **%Yield Qualifier** Limits Ba Carrier 87.5 40 - 110

Lab Sample ID: MB 160-526227/1-A

**Analysis Batch: 530401** 

**Matrix: Water** 

		Count	Total
MB	MB	Uncert.	Uncert.
sult	Qualifier	(2σ+/-)	(2σ+/-)

Analyte Result Radium-226 0.03627 Ū 0.208

MB MB Carrier %Yield Qualifier Limits

Ba Carrier 85.2 40 - 110

Lab Sample ID: LCS 160-526227/2-A **Matrix: Water** 

**Analysis Batch: 530401** 

Total

LCSD LCSD

Result Qual

10.48

0.208

Spike Uncert. LCS LCS Analyte Added Result Qual  $(2\sigma + / -)$ Radium-226 11.3 10.67 1.42

**Spike** 

Added

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 85.4 40 - 110

Lab Sample ID: LCSD 160-526227/3-A

**Matrix: Water** 

Analyte

Anaiy	SIS	Batcn:	530401	

Radium-226 11.3 LCSD LCSD

Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 94.9

Lab Sample ID: MB 160-526228/1-A

**Matrix: Water** 

Analysis Batch: 530631

Alialysis balcii. 55065	•	
		Count
	MB MB	Uncert.

Analyte Result Qualifier  $(2\sigma + / -)$ Radium-226 0.09496 U 0.121

ΜB MΒ %Yield Qualifier Limits Carrier Ba Carrier 40 - 110 68.3

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

Prep Type: Total/NA

Prep Batch: 525966

**Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 526227

Prepared Analyzed Dil Fac 09/09/21 17:26 10/06/21 16:41

Prepared Analyzed Dil Fac 09/09/21 17:26 10/06/21 16:41

**Client Sample ID: Lab Control Sample** 

%Rec.

Limits

75 - 125

Prep Type: Total/NA

**Prep Batch: 526227** 

Client Sample ID: Lab Control Sample Dup

%Rec

94

Prep Type: Total/NA

Prep Batch: 526227

%Rec. **RER** Limits %Rec RER Limit 75 - 125 92 0.07

**Client Sample ID: Method Blank** 

Prep Type: Total/NA Prep Batch: 526228

Prepared Analyzed Dil Fac 09/09/21 17:37 10/11/21 21:21 Prepared Dil Fac Analyzed

09/09/21 17:37 10/11/21 21:21

Eurofins TestAmerica, Pittsburgh

Total

Uncert.

 $(2\sigma + / -)$ 

0.121

Job ID: 180-126277-2

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: LCS 160-526228/2-A

**Matrix: Water** 

Analysis Batch: 530631

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

09/08/21 10:16 10/04/21 12:51

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA Prep Batch: 526228

Total LCS LCS Uncert. %Rec.

Analyte Added Result Qual  $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits Radium-226 11.3 10.94 1.22 1.00 0.224 pCi/L 75 - 125

LCS LCS

Carrier %Yield Qualifier Limits Ba Carrier 72.9 40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-525827/24-A

**Matrix: Water** 

Analyte

Radium-228

**Analysis Batch: 529908** 

Count

Spike

Prep Batch: 525827 Total MB MB Uncert. Uncert. Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac

0.415 pCi/L

MΒ MΒ Carrier %Yield Qualifier Limits 40 - 110 Ba Carrier 94.6

0.258

0.2846

Prepared Analyzed Dil Fac 09/08/21 10:16 10/04/21 12:51 Y Carrier 87.9 40 - 110 09/08/21 10:16 10/04/21 12:51

1.00

Lab Sample ID: LCS 160-525827/1-A

**Matrix: Water** 

Analysis Batch: 529904

Total Spike LCS LCS Uncert. %Rec. Added Result Qual  $(2\sigma + / -)$ RL**MDC** Unit Limits **Analyte** %Rec Radium-228 9.27 10.22 1.19 1.00 0.366 pCi/L 110 75 - 125

0.259

LCS LCS Carrier %Yield Qualifier Limits 93.4 Ba Carrier 40 - 110 Y Carrier 81.5 40 - 110

Lab Sample ID: MB 160-526057/23-A

**Matrix: Water Analysis Batch: 529904** 

Count Total MB MB Uncert. Uncert. Analyte Result Qualifier  $(2\sigma + / -)$  $(2\sigma + / -)$ RL **MDC** Unit Prepared Analyzed Dil Fac Radium-228 0.4075 U 0.288 0.290 1.00 0.446 pCi/L 09/09/21 09:09 10/04/21 12:36

MB MB Dil Fac Carrier %Yield Qualifier Limits Prepared Analyzed Ba Carrier 92.8 40 - 110 09/09/21 09:09 10/04/21 12:36 Y Carrier 73.6 40 - 110 09/09/21 09:09 10/04/21 12:36

10

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

Prep Type: Total/NA

Prep Batch: 525827

**Prep Batch: 526057** 

Total

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Job ID: 180-126277-2

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

Lab Sample ID: LCS 160-526057/1-A

**Matrix: Water** 

**Analysis Batch: 530078** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 526057

				. ota.				
	Spike	LCS	LCS	Uncert.				%Rec.
Analyte	Added	Result	Qual	(2σ+/-)	RL	MDC Unit	%Rec	Limits
Radium-228	9.27	11.97		1.43	1.00	0.564 pCi/L	129	75 - 125

LCS LCS

Carrier	%Yield	Qualifier	Limits
Ba Carrier	75.2		40 - 110
Y Carrier	80.0		40 - 110

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

Prep Type: Total/NA

**Prep Batch: 526057** 

Lab Sample ID: LCSD 160-526057/2-A

**Matrix: Water** 

Analysis Batch: 530078

				Total
	Spike	LCSD	LCSD	Uncert.
Analyte	Added	Result	Qual	(2σ+/-)
Radium-228	9.27	9.586		1.16

40 - 110

9.586 1.16

MDC Unit 0.447 pCi/L

RL

1.00

%Rec. %Rec Limits 103 75 - 125

Limit RER 0.92

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrier 40 - 110 87.5

Lab Sample ID: MB 160-526246/1-A

Lab Sample ID: LCS 160-526246/2-A

79.6

**Matrix: Water** 

**Matrix: Water** 

Y Carrier

**Analysis Batch: 530403** 

**Client Sample ID: Method Blank** 

Prep Type: Total/NA **Prep Batch: 526246** 

Dil Fac

			Count	iotai						
	MB	MB	Uncert.	Uncert.						
Analyte	Result	Qualifier	(2σ+/-)	(2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5801		0.308	0.313	1.00	0.459	pCi/L	09/10/21 09:01	10/06/21 12:46	1

	INID	IVID	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	85.2		40 - 110
Y Carrier	83.0		40 - 110

09/10/21 09:01 10/06/21 12:46 09/10/21 09:01 10/06/21 12:46

Prepared

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA **Prep Batch: 526246** 

Analyzed

**Analysis Batch: 530403** 

Total Spike LCS LCS Uncert. %Rec. Analyte Added  $(2\sigma + / -)$ Limits Result Qual RL **MDC** Unit %Rec Radium-228 9.27 10.00 1.19 1.00 0.471 pCi/L 108 75 - 125

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	85.4		40 - 110
Y Carrier	83.0		40 - 110

Client: Southern Company

Job ID: 180-126277-2 Project/Site: Plant Wansley Ash Pond

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

Lab Sample ID: LCSD 160-526246/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Water** 

Analysis Batch: 530403

Total LCSD LCSD Spike Uncert. %Rec. **RER** Analyte Added Result Qual  $(2\sigma + / -)$ RL**MDC** Unit %Rec Limits RER Limit Radium-228 9.27 9.911 1.15 1.00 0.378 pCi/L 107 75 - 125 0.04

LCSD LCSD Carrier %Yield Qualifier Limits Ba Carrier 94.9 40 - 110 Y Carrier 85.6 40 - 110

Lab Sample ID: MB 160-526247/1-A Client Sample ID: Method Blank

**Matrix: Water** 

Analysis Batch: 530525

Count Total MB MB Uncert. Uncert. Analyte Result Qualifier RL **MDC** Unit Prepared  $(2\sigma + / -)$  $(2\sigma + / -)$ Analyzed Dil Fac 0.576 pCi/L 09/10/21 09:05 10/07/21 12:29 Radium-228 0.05123 U 0.328 0.328 1.00

MB MB Carrier %Yield Qualifier Limits Prepared Analyzed Dil Fac 40 - 110 09/10/21 09:05 10/07/21 12:29 Ba Carrier 68.3 40 - 110 09/10/21 09:05 10/07/21 12:29 Y Carrier 83.0

Lab Sample ID: LCS 160-526247/2-A **Client Sample ID: Lab Control Sample** 

**Matrix: Water** 

Analysis Batch: 530525

Total Spike LCS LCS Uncert. %Rec. Analyte Added Result Qual  $(2\sigma + / -)$ RL **MDC** Unit %Rec Limits Radium-228 9.26 10.88 1.30 1.00 0.480 pCi/L 117 75 - 125

LCS LCS Carrier %Yield Qualifier Limits Ba Carrier 72.9 40 - 110 82.2 40 - 110 Y Carrier

Prep Type: Total/NA

Prep Batch: 526246

Prep Type: Total/NA

**Prep Batch: 526247** 

Prep Type: Total/NA

**Prep Batch: 526247** 

## **QC Association Summary**

Job ID: 180-126277-2

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

#### **Prep Batch: 525800**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total/NA	Water	PrecSep-21	
180-126277-2	FB-1	Total/NA	Water	PrecSep-21	
180-126277-3	WGWA-6	Total/NA	Water	PrecSep-21	
180-126277-4	WGWA-7	Total/NA	Water	PrecSep-21	
180-126277-5	Dup-1	Total/NA	Water	PrecSep-21	
180-126278-1	WGWA-2	Total/NA	Water	PrecSep-21	
180-126278-2	EB-1	Total/NA	Water	PrecSep-21	
MB 160-525800/24-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525800/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

#### **Prep Batch: 525827**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126277-1	WGWA-5	Total/NA	Water	PrecSep_0	
180-126277-2	FB-1	Total/NA	Water	PrecSep_0	
180-126277-3	WGWA-6	Total/NA	Water	PrecSep_0	
180-126277-4	WGWA-7	Total/NA	Water	PrecSep_0	
180-126277-5	Dup-1	Total/NA	Water	PrecSep_0	
180-126278-1	WGWA-2	Total/NA	Water	PrecSep_0	
180-126278-2	EB-1	Total/NA	Water	PrecSep_0	
MB 160-525827/24-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-525827/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

#### **Prep Batch: 525966**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126278-3	WGWA-1	Total/NA	Water	PrecSep-21	
180-126278-4	WGWA-4	Total/NA	Water	PrecSep-21	
MB 160-525966/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-525966/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-525966/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

#### **Prep Batch: 526057**

Lab Sample ID 180-126278-3	Client Sample ID WGWA-1	Prep Type Total/NA	Matrix Water	Method PrecSep 0	Prep Batch
		1		• –	
180-126278-4	WGWA-4	Total/NA	Water	PrecSep_0	
MB 160-526057/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-526057/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-526057/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

#### **Prep Batch: 526227**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total/NA	Water	PrecSep-21	
180-126364-2	WGWC-13	Total/NA	Water	PrecSep-21	
180-126364-3	WGWC-14A	Total/NA	Water	PrecSep-21	
180-126364-4	EB-2	Total/NA	Water	PrecSep-21	
180-126364-5	WGWC-17	Total/NA	Water	PrecSep-21	
180-126364-6	WGWC-19	Total/NA	Water	PrecSep-21	
180-126364-7	Dup-2	Total/NA	Water	PrecSep-21	
180-126364-8	WGWC-10	Total/NA	Water	PrecSep-21	
180-126364-9	WGWC-24	Total/NA	Water	PrecSep-21	
180-126364-10	Dup-3	Total/NA	Water	PrecSep-21	
180-126364-11	WGWC-25	Total/NA	Water	PrecSep-21	

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## **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley Ash Pond

Rad (Continued)

#### Prep Batch: 526227 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-12	WGWC-8	Total/NA	Water	PrecSep-21	
180-126364-13	WGWC-15	Total/NA	Water	PrecSep-21	
180-126364-14	WGWC-20	Total/NA	Water	PrecSep-21	
180-126364-15	WGWC-23	Total/NA	Water	PrecSep-21	
180-126364-16	FB-3	Total/NA	Water	PrecSep-21	
180-126367-1	WGWA-3	Total/NA	Water	PrecSep-21	
180-126367-2	WGWC-11	Total/NA	Water	PrecSep-21	
180-126367-3	WGWC-12	Total/NA	Water	PrecSep-21	
180-126367-4	FB-2	Total/NA	Water	PrecSep-21	
MB 160-526227/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-526227/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-526227/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

#### **Prep Batch: 526228**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-5	WGWC-16	Total/NA	Water	PrecSep-21	
180-126367-6	EB-3	Total/NA	Water	PrecSep-21	
180-126367-7	WGWC-21	Total/NA	Water	PrecSep-21	
180-126367-8	WGWC-9	Total/NA	Water	PrecSep-21	
180-126367-9	WGWC-22	Total/NA	Water	PrecSep-21	
MB 160-526228/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-526228/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

#### **Prep Batch: 526246**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126364-1	WGWA-18	Total/NA	Water	PrecSep_0	
180-126364-2	WGWC-13	Total/NA	Water	PrecSep_0	
180-126364-3	WGWC-14A	Total/NA	Water	PrecSep_0	
180-126364-4	EB-2	Total/NA	Water	PrecSep_0	
180-126364-5	WGWC-17	Total/NA	Water	PrecSep_0	
180-126364-6	WGWC-19	Total/NA	Water	PrecSep_0	
180-126364-7	Dup-2	Total/NA	Water	PrecSep_0	
180-126364-8	WGWC-10	Total/NA	Water	PrecSep_0	
180-126364-9	WGWC-24	Total/NA	Water	PrecSep_0	
180-126364-10	Dup-3	Total/NA	Water	PrecSep_0	
180-126364-11	WGWC-25	Total/NA	Water	PrecSep_0	
180-126364-12	WGWC-8	Total/NA	Water	PrecSep_0	
180-126364-13	WGWC-15	Total/NA	Water	PrecSep_0	
180-126364-14	WGWC-20	Total/NA	Water	PrecSep_0	
180-126364-15	WGWC-23	Total/NA	Water	PrecSep_0	
180-126364-16	FB-3	Total/NA	Water	PrecSep_0	
180-126367-1	WGWA-3	Total/NA	Water	PrecSep_0	
180-126367-2	WGWC-11	Total/NA	Water	PrecSep_0	
180-126367-3	WGWC-12	Total/NA	Water	PrecSep_0	
180-126367-4	FB-2	Total/NA	Water	PrecSep_0	
MB 160-526246/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-526246/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-526246/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep 0	

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Job ID: 180-126277-2

## **QC Association Summary**

Client: Southern Company Project/Site: Plant Wansley Ash Pond Job ID: 180-126277-2

#### Rad

#### **Prep Batch: 526247**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-126367-5	WGWC-16	Total/NA	Water	PrecSep_0	
180-126367-6	EB-3	Total/NA	Water	PrecSep_0	
180-126367-7	WGWC-21	Total/NA	Water	PrecSep_0	
180-126367-8	WGWC-9	Total/NA	Water	PrecSep_0	
180-126367-9	WGWC-22	Total/NA	Water	PrecSep_0	
MB 160-526247/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-526247/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

301 Alpha Drive RIDC Park

**Chain of Custody Record** Pittsburgh, PA 15238 Phone (412) 963-7058 Fax (412) 963-2468

4.5 E	urofins	
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Environment Testing America

Client Information	Sampler: 4,	410			PM: own, Sh	ali				Carrier Tracking	No(s):	COC No:
Client Information Client Contact: SCS Contacts	Phone: 770-5	94-599	8	E-N	Mail: ali.brow	n@e	urofins	et com		1		Page:
Company: GA Power	, ,			19		me.c	GI OIII IO		is Pa	quested		Job#:
Address:	Due Date Request	ed:						Allalys	13 1	questeu		Preservation Codes:
241 Ralph McGill Blvd SE City: Atlanta	TAT Requested (d	ays):			-							A - HCL M - Hexane B - NaOH N - None
Atlanta State, Zip:					H					0 3		C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S
GA, 30308 Phone:	PO#:				411			<u> </u>				E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3
404-506-7116(Tel)					9	8	40C)	320)	Se.	320)		G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email: SCS Contacts	WO #:				S or h		300 & SM 2540C)	Se,TI	(0): Ha.M	315/9	2	I - Ice U - Acetone
Project Name: CCR - Plant Wansley Ash Pond	Project #: 18019922				P   5		8 00	(EPA LI,Mo,	20/747 Pb.Ll.	846 9	containers	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
Site:	SSOW#:				1 Sample (	ខ	EPA 3	Detected App IV Metals (EPA 60207470); Sb.As,Ba,Be,Cr,Co,Pb,Ll,Mo,Se,Tl Radlum 226 & 228 (SW-846 9315/9320)	App IV Metals (EPA 6020/7470): Sb.As Ba Be Cd.Cr.Co.Pb.Ll.Hg.Mo.Se.Tl	8 (SW	of conj	Other:
			Sample	Matrix	red S	App III Metals: B, Ca	CI, F, SO & TDS (EPA	pp IV 3e,Cr, 6	als (E	6 & 22		
			Туре	(W=water, S=solid,	Field Filtered	₩ ₩	808	s, Ba, E	V Met	III 22	Total Number	
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab) в	O=waste/oil, T=Tissue, A=Al	Field	App	Cl, F,	Detec Sb,A: Radit	App Sb.A	Radlı	Tota	Special Instructions/Note:
	><	$\times$	Preservati	on Code:	$\bowtie$				432		X	
WGWA-5	8-24-21	1218	G	Water	NN	1	<b>/</b>					pH= 6.80
FB-1	8-24-21	(320	G	Water	MV	11	1	<b>/</b>				PH= NA
W6WA-6	8-24-21	1340	G	Water	MV	11	1					PH= 7.88
WGWA-7	8-24-21	1510	G	Water	MA	/	1	1				<sup>pH=</sup> 5.53
Dup - 1	8-24-21		G	Water	MA	1	11					PH= NA
			G	Water								pH=
			G	Water	TT							pH=
			G	Water	11							pH=
			G	Water								pH=
180-126277 Chain of Custody	11		G	Water	H							pH=
			G	Water	Ħ	$\vdash$						pH=
Possible Hazard Identification	<u>~</u>	1 _			S	mple	e Disp	osal ( A fee n				ed longer than 1 month)
Non-Hazard Flammable Skin Irritant Pois	on B Dunkno	own R	Radiological			$\Box_F$	Return	To Client		Disposal By Lab	Arch	ive For Months
Deliverable Requested: I, II, III, IV Other (specify)					S	pecial	Instru	ctions/QC Re	quireme	nts:		
Empty Kit Relinquished by:	IData/fimal	Date:	10	0000000	Time		aire de	1		Method of S	hlpment:	
Relinquished by:	Date/Time 25	21 114	15	ompany	(	Rec	SIVE GOY	1/1		8/	23/21	Company Company
Reflinguished by	Date Time X	71	1/4/	ompany		Rec	eived by	1	W	utrol	Date/Time-	16-21 Comparation
Relinguished by:	Mate/Time:		// / C	ompany		Rec	eived by	r.			Date/Time:	1000 Company
Custody Seals Intact: Custody Seal No.:	1					Coo	ler Temp	perature(s) °C an	d Other R	emarks:		7000

301 Alpha Drive RIDC Park

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

## **Chain of Custody Record**

💸 eurofins

Environment Testing America

Client Information	Sampler: J. Bos. Phone: 770-5	iled			PM: wn, Sh	nali					Carrier Trackin	g No(s):	COC No:
Client Contact: SCS Contacts	Phone: 770-5	97-594	8	E-M		m@ei	ırofins	et.com					Page:
Company: GA Power									a divo	io Bos	uested		Job #:
Address:	Due Date Request	ed:			7100		П		lalys	15 Ket	duesteu		Preservation Codes:
241 Ralph McGill Blvd SE	TAT Requested (d	avs):			-118								A - HCL M - Hexane B - NaOH N - None
Atlanta		_,_,			- 8								C - Zn Acetate O - AsNaO2
State, Zip: GA, 30308													D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3
Phone: 104-506-7116(Tel)	PO #:					L	စ္ခြ	470):	(02	Se.T	(g)		G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
mail: SCS Contacts	WO#.				Sample (Yes or No)	5	M 264	6020/	15/93	:(a.Mo.	15/93		I - Ice U - Acetone
roject Name:	Project #:		_		γes γ	1	S 50	EPA I,Mo,S	146 93	07.470 b.LI.H	146 93		K - EDTA W - pH 4-5 L - EDA Z - other (specify)
CCR - Plant Wansley Ash Pond	18019922 SSOW#:				ald l	a = 5	A 30	etals Pb,L	SW-8	Co.P	SW-8	Conte	Other:
					ered Sample (	B, C	S (EF	Z,Co	228	GEP/	228	l of	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, O=waste/oil, BT=Tissue, A=Air	Field Filtered	ž	CI, F, SO & TDS (EPA 300 & SM 2640C)	Detected App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cr,Co,Pb,Ll,Mo,Se,Tl	Radium 226 & 228 (SW-846 9315/9320)	App IV Metals (EPA 6020/7470): Sb.As. Ba. Be. Cd. Cr. Co. Pb. Ll. Hg. Mo. Se. Tl	Radium 226 & 228 (SW-846 9316/9320)	Total Number of containers	Special Instructions/Note:
		$>\!\!<$	Preserva	ation Code:	$\bowtie$								
WGWA-2 EB-1	3-23-21	1535	G	Water	m	/ 🗸	V	V	<b>√</b>			4	
EB-1	3-24-21	1100	G	Water	NN	1/			/				pH=
WGWA-1	8-24-4	1145	G	Water	NU		1	V					PH= 5,21
W6WA-4	8-24-21	1410	G	Water	W	1	1	1					PH= 7,22
			G	Water	П								pH=
			G	Water	Ħ								pH=
			G	Water	T	$\top$	П						pH=
	-		G	Water	Ħ	+							pH=
180 (1997)			G	Water	Ħ	+				_			pH=
180-126278 Chain of Custody			G	Water	Ħ	+	$\Box$						pH=
			G	Water	Ħ	+				+			pH=
Possible Hazard Identification					S	ample	Disp	osal ( A	fee m	ay be a	ssessed if s	samples are retail	ned longer than 1 month)
Non-Hazard Flammable Skin Irritant Po	ison B Unkno	own $\square_F$	Radiological			$\Box_{F}$	Return	To Clien	t		Disposal By L	abArci	hive For Months
eliverable Requested: I, II, III, IV, Other (specify)	1				s	pecia	Instru	ctions/Q	C Rec	uireme	nts:		
mpty Kit Relinquished by:		Date:			Time			K	1		Method o	of Shipment	
telinquished by:	Date/Time:	5/21	1145	Company		Rec	by by	[. <b>[</b> ]	$\mathcal{T}$			Bate/Time:	Company
elinquished by:	Date/Time:	121	114	Gempany		Req	eived	y:	11	) N	sotos	Date/Time:	262 Company
Relinquished by:	Date/Time:	, ,	/ ( (	Company		Rec	eived by	y: /	4			Date/Time:	(OOT) Company
Custody Seals Intact: Custody Seal No.:						Con	ler Tem	perature(s	°C and	Other R	emarks:		70001

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**

ofins

Environment Testing America

Client Information	Sampler. Hunte	v Aula	1	Lab Bro	PM: wn, Sha	ali						
Client Contact SCS Contacts	Phone: 770 -	594-5	998	E-Ma	ail: li.browr	n@eur	rofinse	_	80-12	26364 Chain of Cust	ody	
Company:		371		0.10			000		a brai	io Dominated		Job#:
GA Power ddress:	Due Date Request	ted:						An	lalysi	s Requested		Preservation Codes:
41 Ralph McGill Blvd SE	TAT Requested (d	ane).										A - HCL M - Hexane
ıtlanta	TAT Requested (a	aysį.										B - NaOH N - None C - Zn Acetate O - AsNaO2
tate, Zip: 6A, 30308												D - Nitric Acid
hone: 04-506-7116(Tel)	PO#:						(S)	7470):	20)	20)	1 1	F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
mail: CS Contacts	WO#:			11	Sample (Yes or No)		M 264	6020/ Se,TI	116/93	16,93	ν,	1 - Ice U - Acetone
roject Name:	Project #:			1	Yes or		S & S	EPA,	46 93	46 93	ineri	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
CCR - Plant Wansley Ash Pond	18019922 SSOW#:	+			9 <u>0</u> 2	, e	A 30	Pb,L	SW-8	,Co,P	Conta	Other:
					iered Sampl	B, Ca	S (EF	S N	228	(EPA	rofe	
		Sample	Sample Type (C=comp,	Matrix (w-water, s-solid,	Field Filtered	App III Metals:	CI, F, SO & TDS (EPA 300 & SM 2640C)	Detected App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cr,Co,Pb,Ll,Mo,Se,Tl	um 226 &	App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cd,Cr,Co,Pb,LI,Ng,Mo,Se,TI Radlum 226 & 228 (SW-846 9316/9320)	Total Number of containers	
Sample Identification	Sample Date	Time	G=grab)	O=waste/oil, BT=Tissue, A=Air	<b>是</b> 表	App	ő	Sb,A	Rad	App Sb,A Radi	Tot	Special Instructions/Note:
	_><	><	100 1 11 1	ation Code:	XX				7		X	OH= / OH
WGWA-18	8-25-21	1125	G	Water	MN		1	V	/			PH= 6,74
WGW(-13	8-75-21	1245	G	Water	WW	1	1	<b>√</b>	/	8		PH= 6-27
WGWC-14A	8-25-21	1330	G	Water	MN				/			pH= 5.39
EB-2	8-25-21	1505	G	Water	MA		1					pH=
W GWC-17	8-75-21	1455	G	Water	MN	1	1		$\sqrt{}$		4	PH= 6.09
W6WC-19	8-26-21	1105	G	Water	MN	1	7	<b>/</b>	/		4	PH= (0-66
N40-Z	8-26-21		G	Water	MA	1	7	/	/		14	pH=
WGWC- (O	8-26-21	1235	G	Water	MA	1/	1				14	PH= 6:31
M6WC-Z4	8-26-21	1355	G	Water	NN	1	1			11	4	PH= 4.33
Dup-3	8-26-21		G	Water	NN	1	7			11	4	pH=
W6WL-25	B-24-21	1552	G	Water	MM	1	1			1//	4	DH= 5.30
Possible Hazard Identification		1			Sá					ay be assessed if sa	mples are retail	ned longer than 1 month)
Non-Hazard Flammable Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify)	Poison B Unkn	own F	Radiological		Sr			To Clien		Disposal By Lat	Arch	nive For Months
		In .						,001137 Q	O May	Method of S	Chinmont	
Empty Kit Relinquished by: telinquished by:	Date/Time:	Date:		Company	Time		ei <b>yod b</b> y:	2	()	Method of s	Date/Time:	Company
11 to alle	8-27-2	1/114	9	ACC		11	110	free	1/		8-272	11:42
relinquished Mested Mested	Date/Time:	2/ 11.	42	Company	1	Rece	eived by:	D	20	000-	Date/Time:	X-21 Company April
Relinquished by:	Date/Time:		- 4	Company		Rece	eived by:				Date/Time:	9/5 Company
Custody Seals Intact: Custody Seal No.:  Δ Yes Δ No						Coole	er Temp	erature(s)	°C and	Other Remarks:		

301 Alpha Drive RIDC Park

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

# **Chain of Custody Record**



Environment Testing America

Client Information	Sampler loby	Toka so	11-A	1 Lab Brow	PM: wn, Sha	ali				Carrier Trackin	g No(s):	COC No:
Client Contact:	Phone: 770 - 5	611 - E	978	L-IVIS	ail:							Page:
SCS Contacts Company:	1-1-10-5	74-3	(10	sna	II.Drowt	n@euro	tinse	t.com				Job#:
GA Power								Analys	is Req	uested		
Address: 241 Ralph McGill Blvd SE	Due Date Requeste	d:		000								Preservation Codes:
City:	TAT Requested (day	ys):			1 16		Ш					A - HCL M - Hexane B - NaOH N - None
Atlanta State, Zip:					5		Н					C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S
GA, 30308							Ш		1.			E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3
Phone: 404-506-7116(Tel)	PO #:				0		() ()	7470	Se,T	320)		G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email: SCS Contacts	WO #:				No o		M 25	6020) Se,TI	19,Mo	316/93	0	I - Ice U - Acetone J - DI Water V - MCAA
Project Name:	Project #:	-			S S		S 5	Mo,5	747	6 93	iner	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
CCR - Plant Wansley Ash Pond	18019922				Yes (		8	b,Li,	020 P.P.	%-%	nta l	
Site:	SSOW#:				Sample (Yes or No)	B, Ca	CI, F, SO & TDS (EPA 300 & SM 2540C)	Detected App IV Metals (EPA 6020/7470) Sb,Ae, Ba,Be,Cr,Co,Pb,Ll,Mo,Se,Tl Radium 226 & 228 (SW-846 9316/9320)	App IV Metals (EPA 6020/7470): Sb,As,Ba,Be,Cd,Cr,Co,Pb,Ll,Hg,Mo,Se,Tl	28 (S	Total Number of containers	Other:
			Sample	Matrix	Filtered	tals:	TDS	App II Be,Cr	tals (	26 & 2	nber	
			Туре	(W=water, S=solid.		E Ze	SO	Ba, m 2	V Me	E 5	Nu	
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab)	S=solid, O=waste/oil, BT=Tissue, A=Air)	Field	App III Metals:	<u>.</u>	Sb, A	App I	Radit	Tota	Special Instructions/Note:
Complete deciral model of the control of the contro		> <		tion Code:	XX		li li					
W6WC-8	8-24-21	1241	G	Water	NA	// .	/			ř	4	ph= 5.36
W6WL-15	8-24-21	1614	G	Water	MN	1/1					6	PH= 7.58 Fetra Rad
WGW (- ZO	8-24-21	1132	G	Water	NN			1.3	1	1	4	pH= 5.37
W6WC-23	8-26-24	1455	G	Water	MN	1	$\sqrt{}$			1	19	pH= 5.80
FB-3	8-26-21	1453	G	Water	Mu	11,			/	<b>&gt;</b>	4	pH=
			G	Water	П							pH=
			G	Water								pH=
			G	Water				10-11				pH=
			G	Water	Ħ						-	pH=
			G	Water	П							pH=
			G	Water	Ħ							pH=
Possible Hazard Identification				- 1					ay be a	ssessed if s	samples are retain	ed longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B Unkno	wn L	Radiological					o Client		isposal By L	ab Archi	ive For Months
Deliverable Requested: I, II, III, IV, Other (specify)				-1	S	pecial In	struc	tions/QC Red	quireme	nts:		
Empty Kit Relinquished by:		Date:			Time					Method o	of Shipment	
Relinquished by:	8-27-21	114	)	Company		Receive	110	chood.	Me	z Kel	Date/Time: 8-27-21	11:42 Company
Relinquished Wich Williams	Date/Time: 8-211-21	1 27:	42	Company		Receiv	ed by:	DU	Va	lus'	Date/Time:	Company All H
Relinquished by:	Date/Time:			Company		Receiv	ed by:				Date/Time:	9115 Company
Custody Seals Intact: Custody Seal No.:						Cooler	Temp	erature(s) °C and	d Other R	emarks:		

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



Environment Testing

Phone (412) 963-7058 Fax (412) 963-2468 Lab PM: Carrier Tracking No(s): Si Bers Ford/H. Auld Brown, Shali Client Information Client Contact: 770-544-5998 SCS Contacts shali brown@eurofinset.com Company: **GA Power Analysis Reques** Address: Due Date Requested: 241 Ralph McGill Blvd SE City: TAT Requested (days): Atlanta D - Nitric Acid P - Na2O4S State, Zip: E - NaHSO4 Q - Na2SO3 GA, 30308 F - MeOH R - Na2S2O3 Phone: PO#: G - Amchior S - H2SO4 404-506-7116(Tel) H - Ascorbic Acid T - TSP Dodecahydrate WO #: U - Acetone 1 - Ice J - DI Water V - MCAA SCS Contacts of containers W - pH 4-5 K - EDTA Project Name: Project #: Z - other (specify) L-EDA CCR - Plant Wansley Ash Pond 18019922 Other: CI, F, SO & TDS (EPA SSOW#: App III Metals: B, Ca Total Number Matrix Sample (W=water, Type S=solid, Sample (C=comp. G=grab) Special Instructions/Note: Sample Identification Sample Date Time BT=Tissue, A=Air Preservation Code: 5.52 8-25-21 G Water √ W GWA-Z 1050 2-25-21 5.66 WGWC-11 G Water 1200 G Water 7-25-21 1330 WGWC-1Z NA 1435 8-25-21 G Water 5,25 W 6w C-16 8-25-21 1450 G Water EB-3 8-26-21 G Water 1010 4 PH= 6.28 W6WC-21 8-26-21 G Water 1130 1 PH= 5.84 w Gw C-9 8-26-21 G Water 1300 4 PH= 5.40 W6WC-27 3-76-21 G Water 1520 G Water Water Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological Return To Client Disposal By Lab Archive For Months Special Instructions/QC Requirements: Deliverable Requested: I, II, III, IV, Other (specify) Method of Shipment: Empty Kit Relinquished by: Date: Time: CompanyACC Date/Time: 8-27-21 Company Relinquished Company Date/Time Company Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: Δ Yes Δ No

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**Environment Testing** 

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PRIORITY OVERNIGH

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Initials

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

Thermometer ID

Uncorrected temp

4 of 4

FedEx

Page 67 of 99

SAMPLE RECIEVING

IN ID:LIYA (678) 966 SE TAYLOR TINS TESTING AMERICA REGENCY PARKWAY NW

ATL

BILL THIRD PARTY

SAMPLE RECIEVING PITTSBURGH

301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238

Part # 159469-434 RIT2 EXP 06/22

Using

This

MPS# 1516 9332 3143 301 ALPHA DR EUROFINS RIDC PARK SAMPLE RECIEVING ITTSBURGH PA 15238 eurofins Uncorrected temp PT-WI-SR-DO1 effective 1/18118 **TESTAMERICA PITTSBURGH** PEL. Environment 0201 **TestAmerica** Initials SS THU - 26 AUG 10:30A PRIORITY OVERNIGHT BILL THIRD PARTY Testing FedEx • SS/80 TX3 STIR PEA-684621 \* 159 Page 68 of 99 10/12/2021

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Environment **TestAmerica** 

IGH ID:LIYA (678) 966-9991
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ROFINS TO STATES US 301 ALPHA DR. RIDC PARK SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH 1516 9332 3132 PITTSBURGH PA 15238 PT-WI-SR-001 effective 11/8/18 Uncorrected temp 38 SHIP DATE: 25AUG21 ACTUGT: 45.40 LB CAD: 859116/CAFE3409 BILL THIRD PARTY

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TestAmerica Environment Testing

SAMPLE RECIEVING

ATL

301 ALPHA DR. RIDC PARK VITTSBURGH PA 15238 EUROFINS TESTAMERICA PITTSBURGH

SHIP DATE: 25AUG21 ACTWGT: 45.40 LB " CAD: 859116/CAFE3409 BILL THIRD PARTY

Fed Expansion Page 70 of 99

Thermometer ID

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THU = 26 AUG 10:30A PRIORITY OVERNIGHT

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**Environment Testing** 

SAMPLE RECIEVING PITTSBURGH

301 ALPHA DR. RIDC PARK

OFINS TESTING AMERICA IS REGENCY PARKWAY NW ITE 900 CROSS, GA 30071 ITED STATES US

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ITTSBURGH PA 15238

PRIORITY OVERNIGH 26 AUG

Uncorrected temp Thermometer ID

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

4 of 4

Part # 159469-434 RIT2 EXP 06/22

10/12/2021

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301 ALPHA DR

RIDC PARK

**ITTSBURGH PA 15238** 

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SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH

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Environment Testing TestAmerica

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301 ALPHA DR. RIDC PARK

PITTSBURGH PA 15238

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TestAmerica Environment Testing

Thermometer ID 1020 THU - 26 AUG 10:30A PRIORITY OVERNIGHT 15238 PIT

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Page 74 of 99

301 ALPHA DR. RIDC PARK

ITTSBURGH PA 15238

EUROFINS TESTAMERICA PITTSBURGH

SAMPLE RECIEVING

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**Environment Testing TestAmerica** 

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301 ALPHA DR. EUROFINS TESTAMERICA PITTSBURGH

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

Initials

SATURDAY 12:00 PRIORITY OVERNIGH

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301 ALPHA DR.

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**ITSBURGH PA 15238** 

SAMPLE RECIEVING PITTSBURGH

BILL RECIPIENT

PRIORITY OVERNIGHT

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Environment Testing

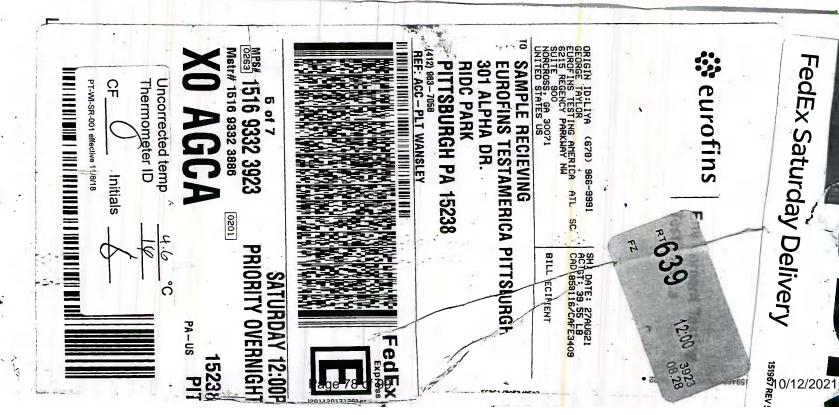
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FedEx Saturday Delivery

**TestAmerica** 

Testing

159469-434 RIT2-EXP 06/2

ORIGIN ID:LIYA (678) 966-9991 GEORGE TAYLOR EUROFINS TESTING AMERICA ATL ( 6215 REGENCY PARKWAY NW SUITE 900 NORCROSS, GA 30071 UNITED STATES US (678) 966-9991 S

SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

BILL RECIPIENT

SAMPLE RECIEVING

**EUROFINS TESTAMERICA PITTSBURGH** 

301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

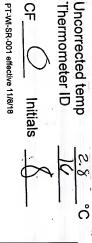
Page 79 of 99

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PRIORITY OVERNIGHT SATURDAY 12:00P

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**Environment Testing** TestAmerica

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(412) 963-7058 REF: ACC-PLT WANSLEY

PITTSBURGH PA 15238

Page 80 of 99

SAMPLE RECIEVING EUROFINS TESTAMERICA PITTSBURGH

TINS TESTING AMERICA ATL

SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

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301 ALPHA DR.

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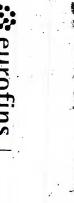
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PA-US

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SATURDAY 12:00F

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**Environment Testing** 





REF. ACC - PLT WANSLEY

PRIORITY OVERNIGHT SATURDAY 12:00P

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Uncorrected temp Thermometer ID

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

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Page 83 of 99





FedEx Saturday Delivery **Environment Testing TestAmerica** 

IGIN ID:LIYA (678) 966-9991
ORGE TAYLOR
ORGE TAYLOR
ROFINS TESTING AMERICA ATL
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1TE 900
RCROSS, 6A 90071
ITED STATES US (678) 966-9991 SC SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

SAMPLE RECIEVING

301 ALPHA DR.

**EUROFINS TESTAMERICA PITTSBURGH** 

RIDC PARK

PITTSBURGH PA 15238

BILL RECIPIENT

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Page 85 of 99

MPS# 1516 9332 3912 SATURDAY 12:00P PRIORITY OVERNIGHT

4 of 7

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

edEx Saturday Delivery

**Environment Testing** TestAmerica



AIGIN ID:LIYA (678) 966-9991 CORGE TAYLOR IROFINS TESTING AMERICA ATL 215 REGENCY PARKWAY NW SAMPLE RECIEVING
EUROFINS TESTAMERICA PITTSBURGH 301 ALPHA DR. RIDC PARK PITTSBURGH PA 15238

BILL RECIPIENT

SHIP DATE: 27AUG21 ACTWGT: 39.55 LB CAD: 859116/CAFE3409

0201

6 of 7

SATURDAY 12:001 PRIORITY OVERNIGH



Page 86 of 99.

# Chain of Custody Record

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

	Sampler			Lab PM					Carrier Tracking Mala	Line Malelal				I
Client Information (Sub Contract Lab)				Brown, Shali	Shali					(e)Ou Sun		180-442825.1		
Crient Confact. Shipping/Receiving	Phone			E-Mail Shali E	LOWD G	Furofir	E-Mail: Shali Brown@Eurofinset.com		State of Origin	ig.		Page		Т
Company TestAmerica Laboratories Inc				¥.	creditati	ons Requ	Accreditations Required (See note)	ote)	8			Job #		$\top$
Address.	Date Date Bourse				1							180-126277-2		
13715 Rider Trail North,	9/29/2021	.;					₹	nalvsis R	Analysis Reguested			Preservation Codes:	odes:	T
City Earth City	TAT Requested (days):	ays):			130	L						A - HCL B - NaOH	M - Hexane N - None	
State, Zip MO, 63045	T						pue				245	C - Zn Acetate D - Nitric Acid	0 - AsNaO2 P - Na2O4S	
Phone. 314-298-8566(Tel) 314-298-8757(Fax)	#Od#						9ZZ-шг					F - MeOH G - Amchlor		
Email	#OM			OK NO	(0	ur SSe	ribsA I					H - Ascorbic Acid I - Ice		
Project Name. Plant Wansley Ash Pond	Project #: 18019922			Selli	N 10 2	ıibsA î	pənidm			_		J - UI Water K - EDTA L - EDA	V - MCAA W - pH 4-5 Z - other (specify)	_
Site: Wansley CCR	SSOW#			elames	SD (Xe	c2eb_2	 bc/ co					Other:		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, oG=corab)	Matrix (W=water, S=solid, O=waste/oil, ield	M\&M mnoha <sup>c</sup> 919\82269_03£	315_Ra226/Pre	8225emuibe				otal Number o			
	$\bigvee$	X	ם ה	7	X	6					1	Special	Special Instructions/Note:	T
WGWA-5 (180-126277-1)	8/24/21	12:18 Fastern		Water	×	×	×				~			_
FB-1 (180-126277-2)	8/24/21	13:20 Eastern		Water	×	×	×				2			
WGWA-6 (180-126277-3)	8/24/21	13:40 Fastern		Water	×	×	×			+	2			$\overline{}$
WGWA-7 (180-126277-4)	8/24/21	15:10 Eastern		Water	×	×	×				2			$\overline{}$
Dup-1 (180-126277-5)	8/24/21	Eastern		Water	×	×	×				2			1
				_										$\overline{}$
										-				_
					_									_
														_
Note Since laboratory accreditations are subject to change, Eurofins TestAmenca 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 cur 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.	ca places the ownership c being analyzed, the sa date, return the signed	of method, and mples must be Chain of Custo	alyte & accreditation shipped back to the dy attesting to said	n compliance e Eurofins Tes complicance	upon out America o Eurofii	subconte laborato	act laborate ny or other nerica	ries. This sai	nple shipment is:	forwarded uning changes to	der chain-of-c accreditation	ustody. If the labo	of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently ples 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. Shall be brought to Eurofins.	
Possible Hazard Identification					Samp	e Disp	osal (A)	ee may be	assessed if	samples a	re retained	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	1 month)	_
Unconfirmed						Return	Return To Client	Ц	Disposal By Lab	Lab	Archive For	e For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverab	ble Rank: 2			Specia	Instru	ctions/Q(	Special Instructions/QC Requirements:	ents:					_
Empty Kit Relinquished by:		Date:		Time	je j				Method	Method of Shipment:				—
Reinquished by O	3	171	Two Company	HO KOO	Rec	Received by	İ	FED EX	-	Date/Time			Company	
Reinquished by FED EX	Date/Time		Company	any	Rec	Received	0	1	,(	Date/Time	15	1		_
r	Date/Time:		Company	any	Red	Received by	1			Date/Time	2	5003	Company	
Custody Seals Intact: Custody Seal No.:					<u>  8</u>	ler Temp	erature(s)	Cooler Temperature(s) °C and Other Remarks:	emarks:					

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

Cooler Temperature(s) °C and Other Remarks:

Company

### N · None O · Ashlao2 P · Na2O4S Q · Na2SO3 R · Na2S233 S · H2SO4 T · TSP Dodecahydrate Note Since laboratory accreditations are subject to change, Eurofins TestAmenica places the ownership of method, analyte & accreditation 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 TestAmenica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmenica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmenica. Company ETA STC Special Instructions/Note: W - pH 4-5 Z - other (specify) V - MCAA 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 180-126278-2 Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid F - MaSO4 F - MeOH G - Amchlor H - Ascorbic Acid COC No. 180-442825.1 Page 1 of 1 5001 I - Ice J - DI Water K - EDTA L - EDA Total Number of containers 2 N ~ N Date/Time | 2 ( Method of Shipment Carrier Tracking No(s) State of Origin. Georgia Analysis Requested Special Instructions/QC Requirements. FED EX Accreditations Required (See note) E-Mail: Shali.Brown@Eurofinset.com × × × × Ra226Ra228\_GFPC/ Combined Radium-226 and Received by × × × × 315\_Ra226/PrecSep\_21 Radium 226 320\_Ra228/PrecSep\_0 Radium 228 × × × Lab PM Brown, Shali erform MS/MSD (Yes or No) Time: BT=Tissue, A=Air (W=water, S=solid, O=waste/oil, COMPANY H Preservation Code: Water Matrix Water Water Water (C=comp, G=grab) 17 80 Type Primary Deliverable Rank: 2 Eastern 11:00 Eastern 11:45 Sample Eastern 14:10 Eastern Time 15:35 N Date (AT Requested (days) Due Date Requested: Sample Date 8/24/21 8/24/21 8/23/21 8/24/21 Project # 18019922 9/29/2021 SSOW# Date/Time Phone # ON Client Information (Sub Contract Lab) Deliverable Requested: I, II, III, IV, Other (specify) Sample Identification - Client ID (Lab ID) 314-298-8566(Tel) 314-298-8757(Fax) FEDEX Possible Hazard Identification FestAmerica Laboratories, Inc. WGWA-4 (180-126278-4) Empty Kit Relinquished by Plant Wansley Ash Pond WGWA-2 (180-126278-1) WGWA-1 (180-126278-3) 13715 Rider Trail North, EB-1 (180-126278-2) Shipping/Receiving Wansley CCR State, Zip. MO, 63045 elinquished by **Jnconfirmed** d paysing finguished by Earth City

Custody Seal No

Custody Seals Intact:

△ Yes △ No

Ver: 06/08/2021

# 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	Lab PM. Brown Shali			Carrier Tracking No(s)	(s)oN bi	COC No.		
Client Contact	Phone:			E-Mail.	0.19			State of Oscillary		180-442825.1	5.1	
Company				Shali	3rown@	Eurofins	Shali. Brown@Eurofinset.com	Georgia		Page:		
TestAmerica Laboratories, Inc.				Ψ.	ccreditatio	ns Requir	Accreditations Required (See note).			# qof		
Address 13715 Rider Trail North	Due Date Requeste	ted:								180-126364-2 Preservation Codes	4-2	
City	TAT Requested (days):	lays):		1	-		Analysis F	Analysis Requested		A - HGI	M. House	
Earth City State, Zip.										B - NaOH C - Zn Acetate		N - None O - AsNaO2
MO, 63045						pue s	Dise			D - Nitric Acid		48
Prione 314-298-8566(Tel) 314-298-8757(Fax)	# Od				320		77-1111			F - MeOH G - Amchlor		203
Email	#OM			10 10	(0	977 WI	ninevi			H - Ascorbic A I - Ice		odecahydrate ne
Project Name Plant Wansley Ash Pond	Project #: 18019922			300	N 10 8	uibeA l	naurau			J - D! Water K - EDTA L - EDA	V - MCAA W - pH 4-5 Z - other (enecity)	, 5 5 5 6 7 6 7 7
Site: Wansley CCR	\$SOW#			elame:	eV) G	Sep_2					3	(Appel
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, o	Matrix (wewater, Sweete, Sweete, Owwaste/Oil, Owwaste/Oil	Perform MS/MS	315_R4226/Prec	8SS-muiba9			to 19dmuM listo		
	$\bigvee$	X			X	6	4				Special Instructions/Note:	s/Note:
WGWA-18 (180-126364-1)	8/25/21	11:25 Eactorn		Water	×	×	×			1		
WGWC-13 (180-126364-2)	8/25/21	12:45 Fastern		Water	×	×	 	-		7 6		
WGWC-14A (180-126364-3)	8/25/21	13.30 Eastern		Water	×	×	×			2 2		
EB-2 (180-126364-4)	8/25/21	15:05 Eastern		Water	×	×	×			2		
WGWC-17 (180-126364-5)	8/25/21	14:55 Eastern		Water	×	×	×			2 2		
WGWC-19 (180-126364-6)	8/26/21	11:05 Eastern		Water	×	×	×			2		
Dup-2 (180-126364-7)	8/26/21	Eastern		Water	×	×	×			1 0		
WGWC-10 (180-126364-8)	8/26/21	12:35 Eastern		Water	×	×	×			0		
WGWC-24 (180-126364-9)	8/26/21	13:55 Eastern		Water	×	×	×			2		
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 Ongin 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.	places the ownershir sing analyzed, the sa ste, return the signed	of method, ana mples must be s Chain of Custoo	lyte & accreditation hipped back to the yattesting to said	n compliance e Eurofins Tes I complicance	upon out s tAmerica la to Eurofins	ubcontrac aboratory TestAme	ct laboratories. This sa or other instructions wi	nple shipment is fon	warded under chair changes to accredit	n-of-custody. If the la	aboratory does no	t currently ofins
Possible Hazard Identification					Sample	Dispo	Sample Disposal ( A fee may be assessed if samples are retained to	es Ji possos il	ctor ore solum			
						etum Ta	Return To Client	Disposal By Lab		med longer ma	n 1 month)	
, III, IV, Other (specify)	Primary Deliverable Rank: 2	ble Rank: 2			Special	Instruct	Special Instructions/QC Requirements	ents:		ALCHIVE FOR	Months	(0)
linquished by:		Date:		Time	je.			Method of Shipment	Shipment			
Mo	Date/jme 0/21	170	Company	- Arion	Recei	Received by	72 622		Date/Time:		Company	T
Relinquished by FED EX	Date/Time:		Company	any	Recei	Received by	LEDEX		Date/Time:		Company	
	Date/Time:		Company	any	Recei	Received by:	7 7	'}	8/31/21 Date/Time	5001	Company	ノベ
Custody Seals Intact: Custody Seal No.: △ Yes △ No					Coole	r Temper	Cooler Temperature(s) °C and Other Remarks:	emarks:				
					+							

Ver: 06/08/202

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 · Ashlao2
P · Na2O4S
Q · Na2SO3
R · Na2S203
S · H2SO4
T · TSP Dodecahydrate 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 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. V - MCAA W - pH 4-5 Z - other (specify) Special Instructions/Note: Preservation Codes: A - HCL
B - NaOH
C - Zn Acetate
C - Zn Acetate
D - Nitric Acid
F - MeOH
G - Amchlor
H - Ascorbic Acid COC No: 180-442825.2 180-126364-2 Page Page 2 of 2 I · Ice J · DI Water K · EDTA L · EDA Total Number of containers N N 2 4 0 7 Carrier Tracking No(s) State of Origin: Georgia **Analysis Requested** Shali.Brown@Eurofinset.com × × × × × × × × 315\_Ra226/PrecSep\_21 Radium 226 × × × × × 320\_Ra228/PrecSep\_0 Radium 228 × × × × × × Lab PM. Brown, Shali E-Mail: Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No) BT=Tissue, A=Air (Wewater, Sesolid, Oewaste/oil, Preservation Code: Matrix Water Water Water Water Water Water Water Type (C=comp, G=grab) Sample Eastern 16:14 Eastern 11:32 Eastern 12:41 Sample Eastern 14:55 Eastern Eastern 14:53 Time 15:52 (AT Requested (days) Due Date Requested Sample Date 8/26/21 8/26/21 8/26/21 8/26/21 8/26/21 8/26/21 8/26/21 Project # 18019922 10/3/2021 # OM Client Information (Sub Contract Lab) Sample Identification - Client ID (Lab ID) Phone 314-298-8566(Tel) 314-298-8757(Fax) TestAmerica Laboratories, Inc. WGWC-25 (180-126364-11) WGWC-15 (180-126364-13) WGWC-20 (180-126364-14) WGWC-23 (180-126364-15) WGWC-8 (180-126364-12) Plant Wansley Ash Pond 13715 Rider Trail North Dup-3 (180-126364-10) FB-3 (180-126364-16) Shipping/Receiving Wansley CCR State, Zip MO, 63045 Earth 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 Possible Hazard Identification Inconfirmed

Months

Special Instructions/QC Requirements:

Primary Deliverable Rank:

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

Relinquished by FED EX Relinquished by FED EX Relinquished by FED EX Custody Seals Intact: Custody Seal No:	Received by FED EX Date/Time Company Received by A M Bate/Time Company Received by A M Bate/Time Company Received by Company Received by Company Cooler Temperature(s) Com Other Remarks
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Ver: 06/08/2021

# 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)				Droise	o do	-			Car	Carrier Tracking No(s)	(s):	COC No.		
Client Contact	Dhono			ם כ	Drown, Shall	_						180-442825.1	25.1	
Shipping/Receiving	950			E-Mai	= =	L			State	State of Origin:		Page		
Company				Sha	II. Brown	Shall Brown@Eurofinset.com	set.com		Gec	Georgia		Page 1 of 1	_	
TestAmerica Laboratories, Inc.					Accredi	Accreditations Required (See note)	ired (See n	ote):				# qof		
Address	Due Date Requested:	Į										180-126367-2	57-2	
13715 Rider Trail North,	10/3/2021	i					Ā	alvsis	Analysis Reguested	fed		Preservation Codes	on Codes:	
City Earth City	TAT Requested (days)	ys):			10 10							A - HCL B - NaOH	M · Hexane N · None	
State, Zip MO, 63045					70		pue					C - Zn Acetate D - Nitric Acid		
Phone 314-298-8566(Tel) 314-298-8757(Fax)	PO#:				. (		92Z-wr					F - MeOH G - Amchlor	R - Na2S203 R - Na2S203 S - H2S04	
Email	# OM					325 m	ribeЯ l					H - Ascorbic Acid	Acid	cahydrate
Project Name. Plant Wansley Ash Pond	Project# 18019922					ibsA t	penidm					_	V - MCAA W - pH 4-5 Z - other (specify)	(Áir
Site Wansley CCR	SSOW#					c2eb_2	oo /od		_			of cont		
Sample Identification - Client ID (Lab ID)	Sample Date	Sample	Sample Type (C=comp, G=crab)	Matrix (w=water, S=colid, O=watsfoll,	beretlia biela MISM mnohe	9320_Ra228/Pre	7a226Ra228_GF					o hadmuM lato		
	$\bigvee$	X		on Code:	X								Special Instructions/Note:	ote:
WGWA-3 (180-126367-1)	8/25/21	10:50 Fastern		Water		×	×					7		
WGWC-11 (180-126367-2)	8/25/21	12:00 Fastern		Water		×	×			+		2		
WGWC-12 (180-126367-3)	8/25/21	13:30 Eastern		Water		×	×	-				4		
FB-2 (180-126367-4)	8/25/21	14:35 Eastern		Water		×	×	-				2		
WGWC-16 (180-126367-5)	8/25/21	14:50 Fastern		Water		×	×			+		2		
EB-3 (180-126367-6)	8/26/21	10:10 Fastern		Water		×	×	-				2		
WGWC-21 (180-126367-7)	8/26/21	11:30 Fastern		Water		×	×					2		
WGWC-9 (180-126367-8)	8/26/21	13:00 Fastern		Water		×	×	-		+		2		
WGWC-22 (180-126367-9)	8/26/21	15:20 Eastern		Water		×	×					2		
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-criterior. If the laboratory does not subcontract laboratories.	places the ownership	of method, and	alyte & accredit	ation compliar	ce upon	out subcontr	act laborato	ries. This	sample ship	nent is forward	ed under chair	1-of-custody If the	o laboratory does not o	1

maintain accreditation in the State of Origin itseld above for analysis/lests/matrix being analyzed, the samples white & accreditation compliance upon out subcontract laboratoris. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently analyzed, the samples must be shipped back to the Eurofins TestAmerica aboratory 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

			<u> </u>	e maj	samples are retained longer th	an 1 month)	
	Unconfirmed			Return To Client Disposal By Lab	Lab Archive For	Months	
	Deliverable Requested: I, II, IV, Other (specify)	Primary Deliverable Rank: 2		Redni		SUPPORT	1
	Empty Kit Relinquished by:	Data					
	Polinninghan his				Method of Shipment:		ı
	ON ON RADIONALISM	Date Time / 20/21 1700	1) Se Campany ++	Received by: FED EX	Date/Time:	Company	1
1	Relinquished by:	Date/Time	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
0/	FED EX		(included)	Received by		Company	ı
12	Relinquished by:	Date/Time	Company		0001 101100		
2/2			<b>S</b>	vereived by	Date/Time:	Сотралу	
20	Custody Seals Intact:   Custody Seal No						
21	Δ Yes Δ No			Cooler Temperature(s) C and Other Remarks:			

Job Number: 180-126277-2

Login Number: 126277

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	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
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	

Job Number: 180-126277-2

Login Number: 126277

List Number: 2

Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis

List Creation: 08/31/21 02:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td>34</td>	True	34
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	

Job Number: 180-126277-2

Login Number: 126278

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.	False	
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	

Job Number: 180-126277-2

Login Number: 126278

List Number: 2

Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis

List Creation: 08/31/21 02:27 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	

Job Number: 180-126277-2

Login Number: 126364

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	

Job Number: 180-126277-2

Login Number: 126364

List Number: 2

Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis

List Creation: 08/31/21 02:43 PM

Quarties	Anower	Comment
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: 180-126277-2

Login Number: 126367

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	

Client: Southern Company Job Number: 180-126277-2

Login Number: 126367

List Source: Eurofins TestAmerica, St. Louis

List Number: 2

List Creation: 08/31/21 01:27 PM

Creator: Mazariegos, Leonel A

Creator. Mazariegos, Leoner A		
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	

# Appendix C1: Data Validation Reports





#### Memorandum

Date: March 29, 2021

To: Adria Reimer

From: Kristoffer Henderson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables – Eurofins

TestAmerica Laboratory Job IDs 180-116807-1 and 180-116807-2

**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 2-4 February 2021, 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
- Fluoride by USEPA Method 300.0

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.

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
180-116807-1	Dup-1
180-116807-2	EB-1
180-116807-3	WGWA-1
180-116807-4	WGWA-2
180-116807-5	WGWA-18
180-116807-6	WGWA-3
180-116807-7	WGWA-4
180-116807-8	WGWA-7
180-116916-1	Dup-2
180-116916-2	FB-2
180-116916-3	WGWA-6
180-116916-4	WGWA-5
180-116916-5	WGWC-19

Laboratory ID	Client ID
180-116916-6	WGWC-11
180-116916-7	WGWC-12
180-116916-8	WGWC-8
180-116916-9	WGWC-15
180-116916-10	WGWC-16
180-116916-11	WGWC-17
180-116916-12	FB-1
180-116916-13	EB-2
180-116916-14	WGWC-9
180-116916-15	WGWC-10
180-116916-16	WGWC-13
180-116916-17	WGWC-14A

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.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

The container labels for the two plastic liters for sample WGWC-12 did not match the collection date listed on the COC. The label listed a sample collection date of 2/2/21, while the COC lists 2/3/21. The container label for one out of two of the plastic liters for sample WGWC-17 did not match the collection date listed on the COC. The label listed a sample collection date of 3/2/21, while the COC lists 2/4/21. The samples were logged in per the COC.

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. (Mercury was evaluated separately in Section 2.0, below).

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

#### 1.1 Overall Assessment

The metals 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%.

#### 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). Two method blanks were reported (batches 346412 and 346791). Metals were not detected in the method blanks above the method detection limits (MDLs).

#### 1.4 <u>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</u>

MS/MSD pairs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two sample set specific MS/MSD pairs were reported using samples WGWA-1 and WGWA-6. 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). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

#### 1.6 Equipment Blank

Two equipment blanks were collected with the sample set, EB-1 and EB-2. Metals were not detected in the equipment blanks above the MDLs.

#### 1.7 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. Metals were not detected in the field blanks above the MDLs.

#### 1.8 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 < reporting limit (RL)] was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-15, respectively.

#### 1.9 **Sensitivity**

The samples were reported to the MDLs. No elevated nondetect results were 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). Three method blanks were reported (batches 345897, 346076 and 346077). Mercury was not detected in the method blanks above the MDL.

#### 2.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported using sample Dup-1. The recovery and RPD results were within the laboratory specified acceptance criteria.

#### 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). Three LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

#### 2.6 Equipment Blank

Two equipment blanks were collected with the sample set, EB-1 and EB-2. 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 and FB-2. 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 < RL) was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-15, 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 FLUORIDE

The samples were analyzed for fluoride by USEPA method 300.0.

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.

Plant Wansley AP Site Data Validation 29 March 2021 Page 7

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ⊗ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

#### 3.1 Overall Assessment

The fluoride 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 fluoride analysis of a water sample is 28 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 (batches 345752, 346231 and 346367). Fluoride was not detected in the method blanks above the MDL.

#### 3.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Three sample set specific MS/MSD pairs were reported using samples WGWA-7, WGWC-14A 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. The recovery results were within the laboratory specified acceptance criteria.

#### 3.6 **Equipment Blank**

Two equipment blanks were collected with the sample set, EB-1 and EB-2. Fluoride was not detected in the equipment blanks above the MDL.

#### 3.7 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. Fluoride was not detected in FB-2.

Fluoride was detected in FB-1 at an estimated concentration greater than the MDL and less than the RL. Therefore, the estimated fluoride 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	Fluoride	0.035	J	0.20	U	3
WGWA-1	Fluoride	0.028	J	0.20	U	3
WGWA-2	Fluoride	0.065	J	0.20	U	3
WGWA-18	Fluoride	0.071	J	0.20	U	3
WGWA-3	Fluoride	0.035	J	0.20	U	3
WGWA-4	Fluoride	0.15	J	0.20	U	3
WGWC-16	Fluoride	0.052	J	0.20	U	3
WGWC-17	Fluoride	0.064	J	0.20	U	3
WGWC-10	Fluoride	0.12	J	0.20	U	3
WGWC-13	Fluoride	0.16	J	0.20	U	3
WGWC-14A	Fluoride	0.033	J	0.20	U	3
WGWA-6	Fluoride	0.088	J	0.20	U	3
WGWC-11	Fluoride	0.027	J	0.20	U	3
WGWC-12	Fluoride	0.082	J	0.20	U	3
WGWC-8	Fluoride	0.15	J	0.20	U	3

mg/L-milligrams per liter

#### 3.8 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 < RL) was demonstrated between the field duplicates and the original samples, WGWA-3 and WGWC-15, respectively.

J-estimated concentration greater than the MDL and less than the RL

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

#### 3.9 **Sensitivity**

The samples were reported to the MDL. No elevated nondetect results were reported.

#### 3.10 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.

#### 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

#### 4.1.1 <u>Completeness</u>

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%.

#### 4.1.2 Analysis Anomaly

The laboratory noted that during the in the growth process for the radium-226 and radium-228 analyses samples WGWA-5, WGWC-11, WGWC-15, WGWC-16, WGWC-10 and WGWC-13 were filtered. No qualifications were applied to the data, based on professional and technical judgment,

The radium-228 result for sample WGWA-5 was more negative than the total propagated uncertainty (TPU) ( $2\sigma$ ). Therefore, the radium-228 and combined radium 226 + 228 results for sample WGWA-5 were UJ qualified as estimated less than the minimum detectable concentrations (MDCs).

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
WGWA-5	Radium-228	-0.358	U	-0.358	UJ	13
WGWA-5	Combined Radium 226 + 228	-0.314	U	-0.314	UJ	13

pCi/L-picocuries per liter

U-not detected at or above the MDC

#### 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). Two method blanks were reported for the radium-226 data (batches 498078 and 498288). Three method blanks were reported for the radium-228 data (batches 498080, 498366 and 499478). Radium-226 and radium-228 were not detected in the method blanks above the MDCs.

#### 4.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

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). One LCS and one LCS/LCS duplicate (LCSD) pair were reported for radium-226. One LCS and two LCS/LCSD pairs were reported for radium-228. The recovery and

replicate error ratio (RER) [2 sigma  $(2\sigma)$ ] results were within the laboratory specified acceptance criteria, with the following exceptions.

The laboratory noted the LCS recoveries were assessed to regulatory specified acceptance criteria of 75-125% instead of the laboratory statistical limits of 61-138%. Since the samples were not governed by the regulatory limits and based on professional and technical judgment, the sample validation was based on the laboratory statistical limits.

The recovery of radium-228 in the LCS in batch 498080 was high and outside of the laboratory specified acceptance criteria. The LCS recovery and RER of radium-228 in the LCS/LCSD pair in batch 498366 were high and outside of the laboratory specified acceptance criteria. Therefore, the radium concentrations in the associated samples greater than the MDCs were J+ qualified as estimated with high biases, in addition, the combined radium 226 + 228 concentrations in the associated samples greater than the MDCs were J+ qualified as estimated with high biases.

The recovery of radium-228 in the LCS in batch 499478 was high and outside of the regulatory specified acceptance criteria. Since the recovery of radium-228 in the LCS in batch 499478 was within the laboratory specified acceptance criteria, no qualifications were applied to the data.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
WGWA-4	Combined Radium 226 + 228	1.05	NA	1.05	J+	5
Dup-2	Radium-228	0.771	*	0.771	J+	5
Dup-2	Combined Radium 226 + 228	0.852	NA	0.852	J+	5
WGWC-19	Radium-228	0.639	*	0.639	J+	5
WGWC-19	Combined Radium 226 + 228	0.684	NA	0.684	J+	5
WGWC-11	Radium-228	0.620	*	0.620	J+	5
WGWC-11	Combined Radium 226 + 228	0.718	NA	0.718	J+	5
WGWC-14A	Combined Radium 226 + 228	0.564	NA	0.564	J+	5

pCi/L-picocuries per liter

NA-not applicable

#### 4.6 <u>Laboratory Duplicate</u>

Laboratory duplicates were not reported.

#### **4.7** Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

<sup>\*-</sup>laboratory flag indicating LCS and/or LCSD was outside of the acceptance limits

#### 4.8 **Equipment Blank**

Two equipment blanks were collected with the sample set, EB-1 and EB-2. Radium-226 and Radium-228 were not detected in the equipment blanks above the MDCs.

#### 4.9 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. 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-15, respectively.

#### 4.11 Sensitivity

The samples were reported to the MDCs. Samples WGWA-1, WGWA-3, WGWA-4, WGWA-7, WGWA-5, WGWC-17, FB-2, WGWA-6, WGWA-5, WGWC-8, WGWC-15 and WGWC-16 were analyzed at reduced sample volume for the radium-228 analyses. Samples WGWA-1, WGWA-3, WGWA-4, WGWA-7, WGWA-5 and WGWC-17 were analyzed at reduced sample volume for the radium-226 analyses. Therefore, elevated nondetect results were reported for these samples.

#### 4.12 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.

\* \* \* \* \*

### 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.

### **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 of limits
5	LCS or RPD recovery outside of limits (LCS/LCSD)
6	Surrogate recovery outside of 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



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#### Memorandum

Date: May 26, 2021

To: Adria Reimer

From: Matthew Richardson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables - Eurofins

TestAmerica Laboratory Job ID 180-118172-1 Revision 2

SITE: Plant Wansley Ash Pond PZ

#### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of five aqueous samples, one field duplicate, one equipment blank and one field blank, collected 8-9 March 2021, as part of the Plant Wansley Ash Pond 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
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0 R2.1
- Acid Soluble and Insoluble Sulfide by US EPA Methods 9030B/9034
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Total Alkalinity by SM 2320 B

#### **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 supporting project objectives. Qualified data should be used within the limitation of the qualification.

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) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
180-118172-1	PZ-22
180-118172-2	PZ-23S
180-118172-3	PZ-24
180-118172-4	PZ-27S

Laboratory ID	Client ID
180-118172-5	PZ-27D
180-118172-6	FB-1
180-118172-7	Dup-1
180-118172-8	EB-1

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

A collection time was not documented on the chain of custody (COC) for field duplicate. The field duplicate was logged by the laboratory with the collection time of 00:00.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

The laboratory report was revised twice. The first revision was provided on 19 March 2021 to change the reporting units of metals from  $\mu$ g/L to mg/L. The second revision was provided on 4 May 2021 to report lithium data for samples PZ-22, PZ-23S, PZ-24 and PZ-27S per the client's request. The revised report was identified as 180-118172-1 Revision 2.

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.

- ✓ Overall Assessment
- ✓ Holding Time
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Equipment Blank
- ⊗ Field Blank
- ⊗ Field Duplicate
- ✓ Sensitivity

Plant Wansley AP Site Data Validation 26 May 2021 Page 3

#### ✓ Electronic Data Deliverables Review

#### 1.1 Overall Assessment

The metals data reported in this data package are considered usable for supporting 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). One method blank was reported (batch 349140). Metals were not detected in the method blank above the method detection limits (MDLs).

#### 1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported using sample PZ-22. 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). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

#### 1.6 **Equipment Blank**

One equipment blank, EB-1, was collected with the sample set. Metals were not detected in the equipment blank above the MDLs, with the following exception.

Boron was detected in EB-1 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Since the boron concentration in EB-1 was U qualified due to field blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

#### 1.7 Field Blank

One field blank, FB-1, was collected with the sample set. Metals were not detected in the field blank above the MDLs, with the following exception.

Boron was detected in FB-1 at an estimated concentration (0.075 mg/L) greater than the MDL and less than the RL. Therefore, the estimated boron concentration in EB-1 was U qualified as not detected at the RL, and the boron concentrations in the associated samples were J+ qualified as estimated with high biases, based on professional and technical judgment.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
EB-1	Boron	0.043	J	0.080	U	3
PZ-23S	Boron	0.19	NA	0.19	J+	3
PZ-24	Boron	0.33	NA	0.33	J+	3
PZ-27S	Boron	0.48	NA	0.48	J+	3
PZ-27D	Boron	0.23	NA	0.23	J+	3
Dup-1	Boron	0.49	NA	0.49	J+	3

mg/L-milligrams per liter

J-estimated concentration greater than the MDL and less than the RL

NA-not applicable

#### 1.8 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-1. Acceptable precision (RPD  $\leq 20\%$  or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, PZ-27S, with the following exception.

The RPD for iron was greater than 20% in the field duplicate pair. Therefore, the iron concentrations in DUP-1 and PZ-27S were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
PZ-27S	Iron	0.35	NA	33	0.35	J	7
Dup-1	Iron	0.25	NA		0.25	J	7

Final Review: K Henderson 05/28/2021

mg/L-milligrams per liter

NA-not applicable

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

#### 1.9 **Sensitivity**

The samples were reported to the MDLs. Elevated non-detect 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 WET CHEMISTRY

The samples were analyzed for anions by USEPA method 300.0, sulfide by US EPA methods 9030B/9034, TDS by SM 2540C and total alkalinity by SM 2320 B. Total alkalinity results were reported as total alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub>.

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

#### 2.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for supporting 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%.

Final Review: K Henderson 05/28/2021

#### 2.2 <u>Holding Times</u>

The holding times for a water sample are listed below. The holding times were met for the sample analyses.

Analysis	Holding Time
Anions	28 days from collection to analysis
Sulfide	7 days from collection to analysis
TDS	7 days from collection to analysis
Total Alkalinity	14 days from collection to analysis

#### 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). One method blank was reported for the anions (batch 349204). Three method blanks were reported for TDS (batches 349481, 349487 and 349489). One method blank was reported for total alkalinity (batch 349535). One method blank was reported for sulfide (batch 349117). The wet chemistry parameters were not detected in the method blanks above the MDLs.

#### 2.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

One sample set specific MS/MSD pair was reported for the anions using sample PZ-24. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of fluoride and sulfate in the MSD using sample PZ-24 were low and outside of the laboratory specified acceptance criteria. Therefore, the fluoride and sulfate concentrations in sample PZ-24 were J- qualified as estimated with low biases.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
PZ-24	Fluoride	1.1	NA	1.1	J-	4
PZ-24	Sulfate	80	NA	80	J-	4

mg/L-milligrams per liter NA-not applicable

#### 2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). An LCS was reported for each analytical batch per analysis. The recovery results were within the laboratory specified acceptance criteria.

#### 2.6 <u>Laboratory Duplicate</u>

One sample set specific laboratory duplicate was reported for TDS using sample PZ-23S. The RPD result was within the laboratory specified acceptance criteria.

One sample set specific laboratory duplicate was reported for total alkalinity using sample PZ-23S. The RPD result was within the laboratory specified acceptance criteria

#### 2.7 Equipment Blank

One equipment blank, EB-1, was collected with the sample set. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

#### 2.8 Field Blank

One field blank, FB-1, was collected with the sample set. The wet chemistry parameters were not detected in the field blank above the MDLs.

#### 2.9 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-1. Acceptable precision (RPD  $\leq$  20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, PZ-27S, with the following exception.

Fluoride was detected at an estimated concentration greater than the MDL and less than the RL in the field duplicate sample DUP-1 and not detected in the parent sample PZ-27S, resulting in a noncalculable RPD result. Since the difference between the results were less than the RL, no qualifications were applied to the data.

#### 2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

#### 2.11 <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.

\* \* \* \* \*

## 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 OC 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.

## 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



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#### Memorandum

Date: May 26, 2021

To: Adria Reimer

From: Matthew Richardson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables - Eurofins

TestAmerica Laboratory Job ID 180-118348-1 Revision 1

**SITE: Plant Wansley Ash Pond PZ** 

#### 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 10-12 March 2021, as part of the Plant Wansley Ash Pond 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
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0 R2.1
- Acid Soluble and Insoluble Sulfide by US EPA Methods 9030B/9034
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Total Alkalinity by SM 2320 B

#### **EXECUTIVE SUMMARY**

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives, with the following exceptions.

The non-detect total alkalinity results in EB-1, EB-2, FB-1 and FB-2 were R qualified as rejected due to holding time exceedances.

The qualified data that were not rejected should be used within the limitations of the qualifications.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

DVR Wansley 180-118348-1 Final Review: K Henderson 05/28/2021

- US EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
180-118348-1	WGWA-1
180-118348-2	WGWA-2
180-118348-3	WGWA-3
180-118348-4	WGWA-4
180-118348-5	WGWA-5
180-118348-6	WGWA-6
180-118348-7	WGWA-7
180-118348-8	WGWA-18
180-118348-9	WGWC-8
180-118348-10	Dup-1
180-118348-11	WGWC-16
180-118348-12	WGWC-17
180-118348-13	EB-1

Laboratory ID	Client ID
180-118348-14	EB-2
180-118348-15	FB-1
180-118398-1	WGWC-15
180-118398-2	WGWC-10
180-118398-3	WGWC-11
180-118398-4	WGWC-13
180-118398-5	WGWC-14A
180-118398-6	WGWC-9
180-118398-7	WGWC-19
180-118398-8	Dup-2
180-118398-9	FB-2
180-118398-10	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 the field duplicates. The field duplicates were logged by the laboratory with the collection time of 00:00.

The laboratory report was revised on 21 April 2021 to correctly report the thallium result from the reanalysis of WGWC-10. The revised report was identified as 180-118348-1 Revision 1.

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 (✓) 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**

Plant Wansley AP Site Data Validation 26 May 2021 Page 3

- ✓ 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

#### 1.1.1 <u>Completeness</u>

The metals data reported in this data package are considered usable for supporting 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%.

#### 1.1.2 Analysis Anomaly

The narrative indicated the recovery for selenium in the continuing calibration verification (CCV) in batch 350467 was outside the method specified acceptance criteria with a high bias. Since selenium was not detected in the associated samples, no qualifications were applied to the data.

#### 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 350102, 350579 and 352257). 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 WGWA-1. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

#### 1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs and one LCS/LCS duplicate (LCSD) pair were reported. The recovery and RPD results were within the laboratory specified acceptance criteria.

#### 1.6 Equipment Blank

Two equipment blanks were collected with the sample set, EB-1 and EB-2. Metals were not detected in the equipment blanks above the MDLs.

#### 1.7 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. Metals were not detected in the field blanks above the MDLs.

#### 1.8 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 < RL) was demonstrated between the field duplicates and the original samples, WGWA-2 and WGWC-19, respectively, with the following exceptions.

The RPD result for iron was greater than 20% in field duplicate pair DUP-2/WGWC-19. Therefore, the iron concentrations in DUP-2 and WGWC-19 were J qualified as estimated.

The RPD results for barium, calcium, magnesium, potassium and sodium were greater than 20% in field duplicate pair DUP-1/WGWA-2. Therefore, the barium, calcium, magnesium, potassium and sodium concentrations in DUP-1 and WGWA-2 were J qualified as estimated.

Arsenic, beryllium, boron, cobalt, lead and thallium were detected at concentrations greater than the RLs in parent sample WGWA-2 and not detected in field duplicate DUP-1, resulting in noncalculable RPDs between the results. Since the differences between the results were less than the RLs, no qualifications were applied to the data.

Lithium was detected at a concentration greater than the RL in parent sample WGWA-2 and was detected in field duplicate DUP-1. Therefore, the lithium concentration in WGWA-2 was J qualified and the non-detect result in DUP-1 was UJ qualified as estimated less than the MDL.

Manganese was detected at a concentration greater than the RL in parent sample WGWA-2 and detected at an estimated concentration greater than the MDL and less than the RL in field duplicate DUP-1 and the difference between the concentrations was greater than the RL. Therefore, the manganese concentrations in WGWA-2 and DUP-1 were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
Dup-1	Barium	0.013	NA	59	0.013	J	7
WGWA-2	Barium	0.024	NA		0.024	J	7
Dup-1	Calcium	1.8	NA	144	1.8	J	7
WGWA-2	Calcium	11	NA		11	J	7
Dup-1	Lithium	0.0050	U	NC	0.0050	UJ	7
WGWA-2	Lithium	0.0075	NA		0.0075	J	7
Dup-1	Magnesium	1.1	NA	117	1.1	J	7
WGWA-2	Magnesium	4.2	NA		4.2	J	7
Dup-1	Manganese	0.0012	J	NC	0.0012	J	7
WGWA-2	Manganese	0.032	NA		0.032	J	7
Dup-1	Potassium	1.2	NA	63	1.2	J	7
WGWA-2	Potassium	2.3	NA		2.3	J	7
Dup-1	Sodium	2.7	NA	109	2.7	J	7
WGWA-2	Sodium	9.2	NA		9.2	J	7
Dup-2	Iron	0.053	NA	60	0.053	J	7
WGWC-19	Iron	0.098	NA		0.098	J	7

mg/L-milligrams per liter

NA-not applicable

NC-not calculable

J-estimated concentration greater than the MDL and less than the RL

#### 1.9 Sensitivity

The samples were reported to the MDLs. Elevated non-detect 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.

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

#### 2.0 WET CHEMISTRY

The samples were analyzed for anions by USEPA method 300.0, sulfide by US EPA methods 9030B/9034, TDS by SM 2540C and total alkalinity by SM 2320 B. Total alkalinity results were reported as total alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub>.

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

#### 2.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for supporting project objectives, with the following exceptions. The non-detect total alkalinity results in EB-1, EB-2, FB-1 and FB-2 were R qualified as rejected due to holding time exceedances. 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 95.4%.

#### 2.2 Holding Times

The holding times for a water sample are listed below. The holding times were met for the sample analyses, with the following exceptions.

Analysis	Holding Time
Anions	28 days from collection to analysis
Sulfide	7 days from collection to analysis
TDS	7 days from collection to analysis
Total Alkalinity	14 days from collection to analysis

Samples Dup-1 and WGWA-18 were analyzed outside of the holding time requirement for TDS. Therefore, the TDS concentrations in Dup-1 and WGWA-18 were J qualified as estimated.

Samples WGWA-1, Dup-1, WGWA-2, WGWC-16, WGWC-17, WGWA-3, EB-1, WGWA-4, WGWA-5, EB-2, WGWA-6, WGWA-7, FB-1, WGWA-18, WGWC-8, WGWC-15, WGWC-12, WGWC-10, WGWC-11, WGWC-13, WGWC-14A, WGWC-9, WGWC-19, Dup-2 and FB-2 were analyzed outside of the holding time requirement for total alkalinity. Therefore, the total alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub> results in the samples were R qualified as rejected.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
Dup-1	Alkalinity Total as CaCO <sub>3</sub>	11	Н	11	J	2
Dup-1	Dissolved Solids	29	Н	29	J	2
Dup-1	Bicarbonate Alkalinity as CaCO <sub>3</sub>	11	Н	11	J	2
Dup-2	Alkalinity Total as CaCO <sub>3</sub>	90	Н	90	J	2
Dup-2	Bicarbonate Alkalinity as CaCO <sub>3</sub>	90	Н	90	J	2
EB-1	Alkalinity Total as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
EB-1	Bicarbonate Alkalinity as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
EB-2	Alkalinity Total as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
EB-2	Bicarbonate Alkalinity as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
FB-1	Alkalinity Total as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
FB-1	Bicarbonate Alkalinity as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
FB-2	Alkalinity Total as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
FB-2	Bicarbonate Alkalinity as CaCO <sub>3</sub>	5.0	U, H	5.0	R	2
WGWA-1	Alkalinity Total as CaCO3	7.8	Н	7.8	J	2
WGWA-1	Bicarbonate Alkalinity as CaCO <sub>3</sub>	7.8	Н	7.8	J	2
WGWA-18	Alkalinity Total as CaCO <sub>3</sub>	31	Н	31	J	2
WGWA-18	Dissolved Solids	72	Н	72	J	2
WGWA-18	Bicarbonate Alkalinity as CaCO <sub>3</sub>	31	Н	31	J	2
WGWA-2	Alkalinity Total as CaCO <sub>3</sub>	61	Н	61	J	2
WGWA-2	Bicarbonate Alkalinity as CaCO <sub>3</sub>	61	Н	61	J	2
WGWA-3	Alkalinity Total as CaCO <sub>3</sub>	11	Н	11	J	2

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
WGWA-3	Bicarbonate Alkalinity as CaCO <sub>3</sub>	11	Н	11	J	2
WGWA-4	Alkalinity Total as CaCO <sub>3</sub>	61	Н	61	J	2
WGWA-4	Bicarbonate Alkalinity as CaCO <sub>3</sub>	61	Н	61	J	2
WGWA-5	Alkalinity Total as CaCO <sub>3</sub>	7.6	Н	7.6	J	2
WGWA-5	Bicarbonate Alkalinity as CaCO <sub>3</sub>	7.6	Н	7.6	J	2
WGWA-6	Alkalinity Total as CaCO <sub>3</sub>	86	Н	86	J	2
WGWA-6	Bicarbonate Alkalinity as CaCO <sub>3</sub>	86	Н	86	J	2
WGWA-7	Alkalinity Total as CaCO <sub>3</sub>	7.5	Н	7.5	J	2
WGWA-7	Bicarbonate Alkalinity as CaCO <sub>3</sub>	7.5	Н	7.5	J	2
WGWC-10	Alkalinity Total as CaCO <sub>3</sub>	32	Н	32	J	2
WGWC-10	Bicarbonate Alkalinity as CaCO <sub>3</sub>	32	Н	32	J	2
WGWC-11	Alkalinity Total as CaCO <sub>3</sub>	9.7	Н	9.7	J	2
WGWC-11	Bicarbonate Alkalinity as CaCO <sub>3</sub>	9.7	Н	9.7	J	2
WGWC-12	Alkalinity Total as CaCO <sub>3</sub>	46	Н	46	J	2
WGWC-12	Bicarbonate Alkalinity as CaCO <sub>3</sub>	46	Н	46	J	2
WGWC-13	Alkalinity Total as CaCO <sub>3</sub>	33	Н	33	J	2
WGWC-13	Bicarbonate Alkalinity as CaCO <sub>3</sub>	33	Н	33	J	2
WGWC-14A	Alkalinity Total as CaCO <sub>3</sub>	32	Н	32	J	2
WGWC-14A	Bicarbonate Alkalinity as CaCO <sub>3</sub>	32	Н	32	J	2
WGWC-15	Alkalinity Total as CaCO <sub>3</sub>	99	Н	99	J	2
WGWC-15	Bicarbonate Alkalinity as CaCO <sub>3</sub>	99	Н	99	J	2
WGWC-16	Alkalinity Total as CaCO <sub>3</sub>	8.3	Н	8.3	J	2
WGWC-16	Bicarbonate Alkalinity as CaCO <sub>3</sub>	8.3	Н	8.3	J	2
WGWC-17	Alkalinity Total as CaCO <sub>3</sub>	44	Н	44	J	2
WGWC-17	Bicarbonate Alkalinity as CaCO <sub>3</sub>	44	Н	44	J	2
WGWC-19	Alkalinity Total as CaCO <sub>3</sub>	88	Н	88	J	2
WGWC-19	Bicarbonate Alkalinity as CaCO <sub>3</sub>	88	Н	88	J	2
WGWC-8	Alkalinity Total as CaCO <sub>3</sub>	6.8	Н	6.8	J	2
WGWC-8	Bicarbonate Alkalinity as CaCO <sub>3</sub>	6.8	Н	6.8	J	2

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
WGWC-9	Alkalinity Total as CaCO <sub>3</sub>	38	Н	38	J	2
WGWC-9	Bicarbonate Alkalinity as CaCO <sub>3</sub>	38	Н	38	J	2

mg/L-milligrams per liter

H-laboratory flag indicating the sample was prepared or analyzed beyond the specific holding time U-not detected at a concentration greater than or equal to the MDL

#### 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). Three method blanks were reported for anions (two for batch 350116 and one for batch 350369). Five method blanks were reported for TDS (batches 349759, 349921, 349926, 350089 and 350091). Five method blanks were reported for total alkalinity (three for batch 350921 and one each for batches 350993 and 351516). Three method blanks were reported for sulfide (batches 349361, 349362 and 349716). The wet chemistry parameters were not detected in the method blanks above the MDLs.

#### 2.4 Matrix Spike/Matrix Spike Duplicate

Three sample set specific MS/MSD pairs were reported for the anions using samples WGWA-1, Dup-1 and WGWC-15. The recovery and RPD results were within the laboratory specified acceptance criteria.

Two sample set specific MS/MSD pairs were reported for sulfide using samples WGWA-1 and FB-2. The recovery and RPD results were within the laboratory specified acceptance criteria.

#### 2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). An LCS and/or low level LCS (LLCS) were reported for each analytical batch per analysis. The recovery results were within the laboratory specified acceptance criteria.

#### 2.6 <u>Laboratory Duplicate</u>

Two sample set specific laboratory duplicates were reported for TDS using samples WGWC-14A and WGWA-18. The RPD results were within the laboratory specified acceptance criteria.

Three sample set specific laboratory duplicates were reported for total alkalinity using samples WGWA-18, EB-1 and FB-1. The RPD results were within the laboratory specified acceptance criteria

#### 2.7 **Equipment Blank**

Two equipment blanks were collected with the sample set, EB-1 and EB-2. The wet chemistry parameters were not detected in the equipment blanks above the MDLs.

#### 2.8 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. The wet chemistry parameters were not detected in the field blanks above the MDLs.

#### **2.9** 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 < RL) was demonstrated between the field duplicates and the original samples, WGWA-2 and WGWC-19, respectively, with the following exceptions.

The RPD results for chloride, TDS, bicarbonate alkalinity as CaCO<sub>3</sub> and total alkalinity as CaCO<sub>3</sub> were greater than 20% in field duplicate pair DUP-1/WGWA-2. Therefore, the chloride, TDS, bicarbonate alkalinity as CaCO<sub>3</sub> and total alkalinity as CaCO<sub>3</sub> in DUP-1 and WGWA-2 were J qualified as estimated.

Fluoride was detected at a concentration greater than the RL in parent sample WGWA-2 and not detected in field duplicate DUP-1, resulting in a noncalculable RPD result. Since the difference between the results were less than the RL, no qualifications were applied to the data.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
Dup-1	Bicarbonate alkalinity as CaCO <sub>3</sub>	11	Н	139	11	J	7
WGWA-2	Bicarbonate alkalinity as CaCO <sub>3</sub>	61	Н		61	J	7
Dup-1	Alkalinity Total as CaCO <sub>3</sub>	11	Н	139	11	J	7
WGWA-2	Alkalinity Total as CaCO <sub>3</sub>	61	Н		61	J	7
Dup-1	Chloride	1.7	NA	42	1.7	J	7
WGWA-2	Chloride	2.6	NA		2.6	J	7
Dup-1	Dissolved Solids	29	Н	110	29	J	7
WGWA-2	Dissolved Solids	100	NA		100	J	7

mg/L-milligrams per liter

H-laboratory flag indicating the sample was prepared or analyzed beyond the specified holding time NA-not applicable

Plant Wansley AP Site Data Validation 26 May 2021 Page 11

# 2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

# 2.11 <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.

\* \* \* \* \*



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Final Review: JK Caprio 6/16/2021

# Memorandum

Date: May 28, 2021

To: Adria Reimer

From: Kristoffer Henderson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverable - Eurofins

TestAmerica Laboratory Job ID 180-118348-2

**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 10-12 March 2021, as part of the Plant Wansley AP on-site sampling event.

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.

The data were reviewed based on the pertinent methods referenced in the laboratory reports, professional and technical judgment and the following documents:

 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
180-118348-1	WGWA-1
180-118348-2	WGWA-2
180-118348-3	WGWA-3
180-118348-4	WGWA-4
180-118348-5	WGWA-5
180-118348-6	WGWA-6
180-118348-7	WGWA-7
180-118348-8	WGWA-18
180-118348-9	WGWC-8
180-118348-10	Dup-1
180-118348-11	WGWC-16
180-118348-12	WGWC-17
180-118348-13	EB-1

Laboratory ID	Client ID
180-118348-14	EB-2
180-118348-15	FB-1
180-118398-1	WGWC-15
180-118398-2	WGWC-10
180-118398-3	WGWC-11
180-118398-4	WGWC-13
180-118398-5	WGWC-14A
180-118398-6	WGWC-9
180-118398-7	WGWC-19
180-118398-8	Dup-2
180-118398-9	FB-2
180-118398-10	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 the field duplicates. The field duplicates were logged by the laboratory with the collection time of 00:00.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

#### 1.0 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

Plant Wansley AP Site Data Validation 28 May 2021 Page 3

- ✓ Field Blank
- ✓ Field Duplicate
- ✓ Sensitivity
- ✓ Electronic Data Deliverables Review

#### 1.1 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%.

# 1.2 **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.

#### 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). Two method blanks were reported for the radium-226 data (batches 502473 and 502505). Two method blanks were reported for the radium-228 data (batches 502475 and 502508). Radium-226 and radium-228 were not detected in the method blanks above the minimum detectable concentrations (MDCs).

#### 1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD pairs were not reported with the data.

#### 1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS and one LCS/LCS duplicate (LCSD) pair were reported for radium-226. One LCS and one LCS/LCSD pair were reported for radium-228. The recovery and replicate error ratio (RER) [2 sigma  $(2\sigma)$ ] results were within the laboratory specified acceptance criteria.

#### 1.6 Laboratory Duplicate

Two laboratory duplicates were reported using sample WGWC-17, one each for radium-226 and radium-228. The RER results were within the laboratory specified acceptance criteria.

#### 1.7 Tracers and Carriers

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

#### 1.8 **Equipment Blank**

Two equipment blanks were collected with the sample set, EB-1 and EB-2. Radium-226 and Radium-228 were not detected in the equipment blanks above the MDCs.

# 1.9 Field Blank

Two field blanks were collected with the sample set, FB-1 and FB-2. Radium-226 and Radium-228 were not detected in the field blanks above the MDCs.

#### 1.10 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-2 and WGWC-19, respectively.

# 1.11 <u>Sensitivity</u>

The samples were reported to the MDCs. No elevated nondetect results were reported.

#### 1.12 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.

\* \* \* \* \*

Final Review: JK Caprio 6/16/2021

# 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.

# **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 of limits
5	LCS or RPD recovery outside of limits (LCS/LCSD)
6	Surrogate recovery outside of 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



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# Memorandum

Date: May 26, 2021
To: Adria Reimer

From: Matthew Richardson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables – Eurofins

TestAmerica Laboratory Job ID 180-118350-1 Revision 1

**SITE: Plant Wansley Ash Pond PZ** 

#### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of six aqueous samples, one field duplicate, one equipment blank and one field blank, collected 9 and 11 March 2021, as part of the Plant Wansley Ash Pond 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
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0 R2.1
- Acid Soluble and Insoluble Sulfide by US EPA Methods 9030B/9034
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C
- Total Alkalinity by SM 2320 B

#### **EXECUTIVE SUMMARY**

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives, with the following exceptions.

The non-detect TDS results in EB-2 and FB-2 were R qualified as rejected due to holding time exceedances.

The qualified data that were not rejected should be used within the limitations of the qualifications.

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) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
180-118350-1	PZ-23D
180-118350-2	PZ-25S
180-118350-3	PZ-26S
180-118350-4	PZ-26D
180-118350-5	PZ-28

Laboratory ID	Client ID
180-118350-6	EB-2
180-118350-7	Dup-2
180-118350-8	FB-2
180-118350-9	PZ-29D

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

A collection time was not documented on the chain of custody (COC) for the field duplicate. The field duplicate was logged by the laboratory with the collection time of 00:00.

The laboratory report was revised on 4 May 2021 to report lithium data for samples PZ-25S and PZ-26S per the client's request. The revised report was identified as 180-118350-1 Revision 1.

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.

- ✓ 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

#### 1.1.1 <u>Completeness</u>

The metals data reported in this data package are considered usable for supporting 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%.

## 1.1.2 Analysis Anomaly

The laboratory noted the recovery of boron was high in a continuing calibration verification (CCV) in batch 349781. Since boron was not detected in the associated samples, no qualifications were applied to the data.

### 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). One method blank was reported (batch 349566). Metals were not detected in the method blank above the method detection limits (MDLs), with the following exception.

Manganese was detected in the method blank in batch 349566 at an estimated concentration greater than the MDL and less than the reporting limit (RL). Therefore, the estimated manganese 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**
EB-2	Manganese	0.0014	JВ	0.0050	U	3
FB-2	Manganese	0.00094	JВ	0.0050	U	3

mg/L-milligrams per liter

J-estimated concentration greater than the MDL and less than the RL

B-laboratory flag indicating the compound was found in the blank and sample

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

# 1.4 <u>Matrix Spike/Matrix Spike Duplicate (MS/MSD)</u>

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported using sample PZ-23D. 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). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

# 1.6 **Equipment Blank**

One equipment blank, EB-2, was collected with the sample set. Metals were not detected in the equipment blank above the MDLs, with the following exception.

Manganese was detected in EB-2 at an estimated concentration greater than the MDL and less than the RL. Since the manganese concentration in EB-2 was U qualified due to method blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

# 1.7 Field Blank

One field blank, FB-2, was collected with the sample set. Metals were not detected in the field blank above the MDLs, with the following exceptions.

Boron and manganese detected in FB-2 at estimated concentrations greater than the MDLs and less than the RLs. Since the manganese concentration in FB-2 was U qualified due to method blank contamination, no additional qualifications were applied to the manganese data. However, the estimated boron concentrations in PZ-25S and PZ-28 were U qualified as not detected at the RL, and the boron concentrations in PZ-26D and DUP-2 were J+ qualified as estimated with high biases, based on professional and technical judgment.

Sample	Analyte	Laboratory Result	Laboratory	Validation Result	Validation	Reason Code
		(mg/L)	Flag	(mg/L)	Qualifier	Code
PZ-25S	Boron	0.073	J	0.080	U	3
PZ-26D	Boron	0.22	NA	0.22	J+	3
PZ-28	Boron	0.044	J	0.080	U	3

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Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
DUP-2	Boron	0.16	NA	0.16	J+	3

mg/L-milligrams per liter

J-estimated concentration greater than the MDL and less than the RL

NA-not applicable

### 1.8 Field Duplicate

One field duplicate sample was collected with the sample set, DUP-2. Acceptable precision (RPD  $\leq 20\%$  or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, PZ-26D, with the following exception.

The RPD result for boron was greater than 20% in the field duplicate pair. Therefore, the boron concentrations in DUP-2 and PZ-26D were J qualified as estimated.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	RPD	Validation Result (mg/L)	Validation Qualifier	Reason Code
PZ-26D	Boron	0.22	NA	32	0.22	J	7
DUP-2	Boron	0.16	NA		0.16	J	7

mg/L-milligrams per liter

NA-not applicable

#### 1.9 **Sensitivity**

The samples were reported to the MDLs. Elevated non-detect 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 WET CHEMISTRY

The samples were analyzed for anions by USEPA method 300.0, sulfide by US EPA methods 9030B/9034, TDS by SM 2540C and total alkalinity by SM 2320 B. Total alkalinity results were reported as total alkalinity as CaCO<sub>3</sub> to pH 4.5 and bicarbonate alkalinity as CaCO<sub>3</sub>.

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

Plant Wansley AP Site Data Validation 26 May 2021 Page 6

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

# 2.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for supporting project objectives, with the following exceptions. The non-detect TDS results in EB-2 and FB-2 were R qualified as rejected due to holding time exceedances. 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 96.8%.

#### 2.2 Holding Times

The holding times for a water sample are listed below. The holding times were met for the sample analyses, with the following exceptions.

Analysis	Holding Time
Anions	28 days from collection to analysis
Sulfide	7 days from collection to analysis
TDS	7 days from collection to analysis
Total Alkalinity	14 days from collection to analysis

Samples PZ-23D, PZ-25S, PZ-26S, PZ-26D, PZ-28, EB-2, Dup-2 and FB-2 were analyzed two days outside of the holding time requirement. Therefore, the TDS concentrations in PZ-23D, PZ-25S, PZ-26S, PZ-26D, PZ-28 and Dup-2 were J qualified as estimated, and the non-detect TDS results in EB-2 and FB-2 were R qualified as rejected.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
PZ-23D	Dissolved Solids	300	NA	300	J	2

Page	7
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Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
PZ-25S	Dissolved Solids	79	NA	79	J	2
PZ-26S	Dissolved Solids	370	NA	370	J	2
PZ-26D	Dissolved Solids	180	NA	180	J	2
PZ-28	Dissolved Solids	53	NA	53	J	2
EB-2	Dissolved Solids	10	U	10	R	2
Dup-2	Dissolved Solids	170	NA	170	J	2
FB-2	Dissolved Solids	10	U	10	R	2

mg/L-milligrams per liter

NA-not applicable

U-not detected at a concentration greater than or equal to the MDL

#### 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). One method blank was reported for anions (batch 349310). One method blank was reported for TDS (batch 349924). One method blank was reported for total alkalinity (batch 349682). One method blank was reported for sulfide (batch 349361). The wet chemistry parameters were not detected in the method blanks above the MDLs, with the following exception.

Sulfate was detected in the method blank in batch 349310 at an estimated concentration greater than the MDL and less than the RL. Since sulfate was detected in the associated samples at concentrations greater than the RL, no qualifications were applied to the data.

#### 2.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

One sample set specific MS/MSD pair was reported for the anions using sample PZ-26D. The recovery and RPD results were within the laboratory specified acceptance criteria.

One sample set specific MS/MSD pair was reported for sulfide using sample PZ-25S. The recovery and RPD results were within the laboratory specified acceptance criteria.

#### 2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). An LCS was reported for each analytical batch per analysis. The recovery results were within the laboratory specified acceptance criteria.

# 2.6 <u>Laboratory Duplicate</u>

One sample set specific laboratory duplicate was reported for TDS using sample Dup-2. The RPD result was within the laboratory specified acceptance criteria.

One sample set specific laboratory duplicate was reported for total alkalinity using sample PZ-25S. The RPD result was within the laboratory specified acceptance criteria

#### 2.7 Equipment Blank

One equipment blank, EB-1, was collected with the sample set. The wet chemistry parameters were not detected in the equipment blank above the MDLs.

#### 2.8 Field Blank

One field blank, FB-1, was collected with the sample set. The wet chemistry parameters were not detected in the field blank above the MDLs.

# **2.9** Field Duplicate

One field duplicate sample was collected with the sample set, DUP-1. Acceptable precision (RPD  $\leq$  20% or the difference between the concentrations < RL) was demonstrated between the field duplicate and the original sample, PZ-26D, with the following exception.

Sulfide was detected at a concentration greater than the RL in the field duplicate sample DUP-2 and not detected in the parent sample PZ-26D, resulting in a noncalculable RPD result. Since the difference between the results were less than the RL, no qualifications were applied to the data.

#### 2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

# 2.11 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.

\* \* \* \* \*

# 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.

# 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

Plant Wansley AP Site Data Validation 26 May 2021 Page 12

# 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 OC 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.

# 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



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# Memorandum

Date: May 26, 2021

To: Adria Reimer

From: Matthew Richardson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables - Eurofins

TestAmerica Laboratory Job ID 180-119811-1 Revision 1

**SITE: Plant Wansley Ash Pond PZ** 

#### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of eleven aqueous samples, two field duplicates, two equipment blanks and two field blanks, collected 7-8 April 2021, as part of the Plant Wansley Ash Pond 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
- Anions (Chloride, Fluoride and Sulfate) by USEPA Method 300.0 R2.1
- Total Dissolved Solids (TDS) by Standard Method (SM) 2540C

#### **EXECUTIVE SUMMARY**

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications.

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) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006).

The following samples were analyzed and reported in the laboratory report:

Laboratory ID	Client ID
180-119811-1	PZ-22
180-119811-2	PZ-23S
180-119811-3	PZ-24
180-119811-4	PZ-25S
180-119811-5	PZ-26S
180-119811-6	PZ-26D
180-119811-7	PZ-28
180-119811-8	EB-2
180-119811-9	FB-2

Laboratory ID	Client ID
180-119811-10	Dup-2
180-119811-11	Dup-1
180-119811-12	FB-1
180-119811-13	EB-1
180-119811-14	PZ-27D
180-119811-15	PZ-23D
180-119811-16	PZ-29D
180-119811-17	PZ-27S

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 the field duplicates. The field duplicates were logged by the laboratory with the collection time of 00:00.

The laboratory report was revised on 4 May 2021 to report lithium data for samples PZ-22, PZ-23S, PZ-24, PZ-25S, PZ-26S and PZ-27S per the client's request. The revised report was identified as 180-119811-1 Revision 1.

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.

- ✓ 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 supporting 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). One method blank was reported (batch 352766). Metals were not detected in the method blank above the method detection limits (MDLs).

#### 1.4 Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSDs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One sample set specific MS/MSD pair was reported using sample PZ-22. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria.

#### 1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). One LCS was reported. The recovery results were within the laboratory specified acceptance criteria.

#### 1.6 Equipment Blank

Two equipment blanks, EB-1 and EB-2 were collected with the sample set. Metals were not detected in the equipment blanks above the MDLs.

#### 1.7 <u>Field Blank</u>

Two field blanks, FB-1 and FB-2 were collected with the sample set. Metals were not detected in the field blanks above the MDLs.

#### 1.8 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 < reporting limit (RL)] was demonstrated between the field duplicates and the original samples, PZ-23D and PZ-26S; respectively.

# 1.9 **Sensitivity**

The samples were reported to the MDLs. Elevated non-detect 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 WET CHEMISTRY

The samples were analyzed for anions by USEPA method 300.0 and TDS by SM 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

#### 2.1 Overall Assessment

The wet chemistry data reported in this data set are considered usable for supporting 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

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the total number of analytical results requested on samples submitted for these analyses, for this data set is 100%.

#### 2.2 Holding Times

The holding times for a water sample are listed below. The holding times were met for the sample analyses.

Analysis	Holding Time
Anions	28 days from collection to analysis
TDS	7 days from collection to analysis

# 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). Two method blanks were reported for anions (both from batch 352846). One method blank was reported for TDS (batch 353099). The wet chemistry parameters were not detected in the method blanks above the MDLs.

#### 2.4 Matrix Spike/Matrix Spike Duplicate

Three sample set specific MS/MSD pairs were reported for the anions using samples PZ-24, PZ-25S and PZ-28. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The recoveries of fluoride in the MS/MSD pair using sample PZ-24 were low and outside of the laboratory specified acceptance criteria. Therefore, the fluoride concentration in PZ-24 was J-qualified as estimated with a low bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
PZ-24	Fluoride	1.4	F1	1.4	J-	4

mg/L-milligrams per liter

F1-laboratory flag indicating the MS and/or MSD recovery exceeds control limits

#### 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). An LCS was reported for each analytical batch per analysis. The recovery results were within the laboratory specified acceptance criteria.

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

# 2.6 <u>Laboratory Duplicate</u>

One sample set specific laboratory duplicate was reported for TDS using sample DUP-2. The RPD result was within the laboratory specified acceptance criteria.

#### **Equipment Blank**

Two equipment blanks, EB-1 and EB-2 were collected with the sample set. Metals were not detected in the equipment blanks above the MDLs.

# 2.8 Field Blank

Two field blanks, FB-1 and FB-2 were collected with the sample set. Metals were not detected in the field blanks above the MDLs.

# **2.9** 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 < RL) was demonstrated between the field duplicates and the original samples, PZ-23D and PZ-26S; respectively.

# 2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were not reported.

#### 2.11 <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.

\* \* \* \* \*

# 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 OC 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.

# 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



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# Memorandum

Date: November 4, 2021

To: Adria Reimer

From: Matthew Richardson

CC: J. Caprio

Subject: Stage 2A Data Validation - Level II Data Deliverables - Eurofins

TestAmerica Laboratory Job IDs 180-126277-1 Revision 1 and 180-

126277-2

**SITE: Plant Wansley Ash Pond** 

#### INTRODUCTION

This report summarizes the findings of the Stage 2A data validation of twenty-five aqueous samples, three field duplicate samples, three equipment blanks and three field blanks, collected 23-26 August 2021, as part of the Plant Wansley Ash Pond 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 US EPA Method 7470A
- Anions (Chloride, Fluoride and Sulfate) by US EPA Method 300.0 R2.1 Total Dissolved Solids (TDS) by Standard Method (SM) 2540C

The samples were analyzed at Eurofins TestAmerica St. Louis, Missouri, for the following analytical tests:

- Radium-226 by US EPA Method 9315
- Radium-228 by US EPA Method 9320
- Total Radium by Calculation

#### **EXECUTIVE SUMMARY**

Overall, based on this Stage 2A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications.

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) and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, November 2020 (EPA 542-R-20-006); 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
180-126277-1	WGWA-5
180-126277-2	FB-1
180-126277-3	WGWA-6
180-126277-4	WGWA-7
180-126277-5	Dup-1
180-126278-1	WGWA-2
180-126278-2	EB-1
180-126278-3	WGWA-1
180-126278-4	WGWA-4
180-126364-1	WGWA-18
180-126364-2	WGWC-13
180-126364-3	WGWC-14A
180-126364-4	EB-2
180-126364-5	WGWC-17
180-126364-6	WGWC-19
180-126364-7	Dup-2
180-126364-8	WGWC-10

Laboratory ID	Client ID
180-126364-9	WGWC-24
180-126364-10	Dup-3
180-126364-11	WGWC-25
180-126364-12	WGWC-8
180-126364-13	WGWC-15
180-126364-14	WGWC-20
180-126364-15	WGWC-23
180-126364-16	FB-3
180-126367-1	WGWA-3
180-126367-2	WGWC-11
180-126367-3	WGWC-12
180-126367-4	FB-2
180-126367-5	WGWC-16
180-126367-6	EB-3
180-126367-7	WGWC-21
180-126367-8	WGWC-9
180-126367-9	WGWC-22

The samples were received within 0-6 degrees Celsius (°C). No sample preservation issues were noted by the laboratory.

A collection time was not documented on the chain of custody (COC) for the field duplicate samples. The field duplicate samples were logged by the laboratory with the collection time of 00:00.

180-126277-1 and 180-126277-2: The laboratory noted the container label for sample EB-1 was listed as EB-2 on the container labels. The sample was logged in as EB-1 per the COC.

180-126277-2: The laboratory narrative indicated the sample containers for WGWA-5, FB-1, WGWA-6, WGWA-7 and Dup-1 did not match the information on the COC. Two nitric preserved

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sample containers were received for these samples, and the radiochemistry analyses were not requested on the COC. The radiochemistry analyses were added for the samples.

Incorrect error corrections were observed on the COC, instead of the proper procedure of a single strike through, correction, and initials and date of person making the corrections.

180-126277-1: The laboratory report was revised to include the reanalysis results for sample EB-3, per the client's request. The revised report was identified as 180-126277-1 Revision 1.

The field pH data included in the laboratory report were not validated.

#### 1.0 METALS

The samples were analyzed for metals by US EPA methods 3005A/6020B. (Mercury was evaluated separately in Section 2.0, below)

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

#### 1.1 Overall Assessment

The metals data reported in this data package are considered usable for supporting 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). Four method blanks were reported (batches 369722, 369957, 369963 and 369967). 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 WGWC-10. 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). Four LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

#### 1.6 **Equipment Blank**

Three equipment blanks, EB-1, EB-2 and EB-3 were collected with the sample set. Metals were not detected in the equipment blanks above the MDLs.

#### 1.7 Field Blank

Three field blanks, FB-1, FB-2 and FB-3 were collected with the sample set. Metals were not detected in the field blanks above the MDLs.

### 1.8 Field Duplicate

Three field duplicate samples, Dup-1, Dup-2 and Dup-3 were collected with the sample set. Acceptable precision [RPD  $\leq$  20% or the difference between the concentrations < reporting limit (RL)] was demonstrated between the field duplicates and the original samples, WGWA-7, WGWC-19 and WGWC-24; respectively, with the following exception.

Chromium was detected at a concentration greater than the RL in the field duplicate sample Dup-3 and not detected in the parent sample WGWC-24, resulting in a noncalculable RPD result.

Therefore, the chromium concentration in Dup-3 was J qualified as estimated and the non-detect result in WGWC-24 was UJ qualified as estimated less than the MDL.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier*	Reason Code**
Dup-3	Chromium	0.0021	NA	0.0021	J	7
WGWC-24	Chromium	0.0015	U	0.0015	UJ	7

mg/L-milligrams per liter

U-not detected at or above the MDL

NA-not applicable

# 1.9 <u>Sensitivity</u>

The samples were reported to the MDLs. Elevated non-detect 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 US EPA 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 Deliverable Review

<sup>\*</sup> Validation qualifiers are defined in Attachment 1 at the end of this report

<sup>\*\*</sup>Reason codes are defined in Attachment 2 at the end of this report

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# 2.1 Overall Assessment

The mercury data reported in this data package are considered usable for supporting 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 the mercury analysis of a water sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses, with the following exception.

Sample EB-3 was reanalyzed outside the 28 days holding time requirement. Both sets of results were reported in the laboratory report and EDD. The initial analysis was considered for validation, and marked as "Yes" in the Reportable column of the EDD.

# 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). Two method blanks were reported (batches 370941 and 372692). 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 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Two LCSs were reported. The recovery results were within the laboratory specified acceptance criteria.

# 2.6 Equipment Blank

Three equipment blanks were collected with the sample set, and EB-3 was analyzed for mercury per the COC.

Mercury was detected in the equipment blank EB-3 at an estimated concentration greater than the MDL and less than the RL. Since the estimated mercury concentration in EB-3 was U qualified as not detected at the RL due to field blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

# 2.7 Field Blank

Three field blanks were collected with the sample set, and FB-3 was analyzed for mercury per the COC.

Mercury (0.00020 mg/L) was detected in the field blank FB-3 at a concentration greater than the RL. Therefore, the mercury concentrations in the associated samples greater than the field blank concentration and less than ten times the field blank concentration were J+ qualified as estimated with high biases, the estimated mercury concentrations in samples WGWC-22 and EB-3 were U qualified as not detected at the RL and the mercury concentration in sample WGWC-21 was U qualified as not detected at the reported concentration.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
Dup-3	Mercury	0.00026	NA	0.00026	J+	3
WGWC-25	Mercury	0.0019	NA	0.0019	J+	3
WGWC-20	Mercury	0.00033	NA	0.00033	J+	3
WGWC-23	Mercury	0.00022	NA	0.00022	J+	3
WGWC-24	Mercury	0.00026	NA	0.00026	J+	3
EB-3	Mercury	0.00019	J	0.00020	U	3
WGWC-21	Mercury	0.00020	NA	0.00020	U	3
WGWC-22	Mercury	0.00018	J	0.00020	U	3

mg/L-milligram per liter

J-estimated concentration greater than or equal to the MDL and less than the RL

NA-not applicable

#### 2.8 Field Duplicate

Three field duplicate samples were collected with the sample set. The field duplicate pairs were not analyzed for mercury per the COC.

### 2.9 Sensitivity

The samples were reported to the MDL. Elevated non-detect results were not reported.

# 2.10 <u>Electronic Data Deliverable Review</u>

Results and sample ID 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

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#### 3.0 WET CHEMISTRY

The samples were analyzed for anions by US EPA method 300.0 and TDS by SM 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 package are considered usable for supporting 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.

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#### 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). Six method blanks were reported for the anions (batches 370384, 370761, 370919, 370999, 371083 and 371996). Six method blanks were reported for TDS (batches 369661, 369673, 369797, 369958, 369959 and 370094). The wet chemistry parameters were not detected in the method blanks above the MDLs.

# 3.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

Six sample set specific MS/MSD pairs were reported for the anions using samples WGWA-2, WGWA-5, WGWA-18, WGWC-25, WGWC-9 and WGWA-2. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The MSD recoveries of chloride and sulfate in the MS/MSD pair using sample WGWA-5 were high and outside the laboratory specified acceptance criteria. Therefore, the chloride and sulfate concentrations in sample WGWA-5 were J+ qualified as estimated with high biases.

The MSD recovery of chloride in the MS/MSD pair using sample WGWC-25 was low and outside the laboratory specified acceptance criteria. Therefore, the chloride concentration in sample WGWC-25 was J- qualified as estimated with a low bias.

The MS recoveries of fluoride and sulfate in the MS/MSD pair using sample WGWC-9 were low and outside the laboratory specified acceptance criteria. The MSD recoveries of chloride, fluoride and sulfate and RPD results for chloride and sulfate in the MS/MSD pair using sample WGWC-9 were high and outside the laboratory specified acceptance criteria. Therefore, the chloride, fluoride and sulfate in sample WGWC-9 were J qualified as estimated.

The MSD recovery of chloride in the MS/MSD pair using sample WGWA-2 was high and outside the laboratory specified acceptance criteria. Therefore, the chloride concentration in sample WGWA-2 was J+ qualified as estimated with a high bias.

Sample	Analyte	Laboratory Result (mg/L)	Laboratory Flag	Validation Result (mg/L)	Validation Qualifier	Reason Code
WGWA-2	Chloride	3.3	F1	3.3	J+	4
WGWA-5	Chloride	2.1	F1	2.1	J+	4
WGWA-5	Sulfate	2.8	F1	2.8	J+	4
WGWC-25	Chloride	79	F1	79	J-	4
WGWC-9	Chloride	3.1	F2 F1	3.1	J	4
WGWC-9	Fluoride	1.0	F1	1.0	J	4
WGWC-9	Sulfate	52	F2 F1	52	J	4

mg/L-milligrams per liter

### 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). An LCS was reported for each analytical batch per analysis. The recovery results were within the laboratory specified acceptance criteria.

### 3.6 Laboratory Duplicate

Three sample set specific laboratory duplicates were reported for TDS using samples WGWA-2, WGWC-16 and WGWC-19. The RPD results were within the laboratory specified acceptance criteria.

### 3.7 **Equipment Blank**

Three equipment blanks, EB-1, EB-2 and EB-3 were collected with the sample set. The wet chemistry parameters were not detected in the equipment blanks above the MDLs, with the following exceptions.

Fluoride was detected in the equipment blanks EB-2 and EB-3 at estimated concentrations greater than the MDLs and less than the RLs. Since the estimated fluoride concentrations in EB-2 and EB-3 were U qualified as not detected at the RL due to field blank contamination, no additional qualifications were applied to the data.

### 3.8 Field Blank

Three field blanks, FB-1, FB-2 and FB-3 were collected with the sample set. The wet chemistry parameters were not detected in the field blanks above the MDLs, with the following exceptions.

F1-laboratory flag indicating the MS and/or MSD recovery exceeds control limits

F2-laboratory flag indicating the MS/MSD RPD exceeds control limits

Fluoride was detected in the field blanks FB-1, FB-2 and FB-3 at estimated concentrations greater than the MDLs and less than the RLs. Therefore, the estimated fluoride 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
EB-2	Fluoride	0.037	J	0.10	U	3
EB-3	Fluoride	0.058	J	0.10	U	3
WGWA-1	Fluoride	0.062	J	0.10	U	3
WGWA-2	Fluoride	0.097	J	0.10	U	3
WGWA-3	Fluoride	0.077	J	0.10	U	3
WGWA-5	Fluoride	0.073	J	0.10	U	3
WGWA-7	Fluoride	0.054	J	0.10	U	3
WGWC-11	Fluoride	0.056	J	0.10	U	3
WGWC-14A	Fluoride	0.071	J	0.10	U	3
WGWC-16	Fluoride	0.099	J	0.10	U	3
WGWC-17	Fluoride	0.093	J	0.10	U	3
WGWC-23	Fluoride	0.081	J	0.10	U	3
WGWC-25	Fluoride	0.047	J	0.10	U	3

mg/L-milligrams per liter

J-estimated concentration greater than or equal to the MDL and less than the RL

### 3.9 Field Duplicate

Three field duplicate samples, Dup-1, Dup-2 and Dup-3 were collected with the sample set. Acceptable precision (RPD  $\leq$  20% or the difference between the concentrations < RL) was demonstrated between the field duplicates and the original samples, WGWA-7, WGWC-19 and WGWC-24; respectively, with the following exception.

Fluoride was detected at an estimated concentration greater than the MDL and less than the RL in the field duplicate sample Dup-1 and not detected in the parent sample WGWA-7, resulting in a noncalculable RPD result. Since the difference between the results were less than the RL, no qualifications were applied to the data.

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### 3.10 **Sensitivity**

The samples were reported to the MDLs. Elevated non-detect results were not 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 US EPA method 9315, radium-228 by US EPA 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

### 4.1.1 Completeness

The radium-226 and radium-228 data reported in this data set are considered usable for supporting 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%.

### 4.1.2 Analysis Anomaly

The laboratory narrative indicated the method blank in batch 526247 was analyzed on a detector with a failed background check. Since the background check failure was biased high and the radium-228 result was less than the minimum detectable concentration (MDC), no qualifications were applied to the data, based on professional and technical judgment.

The radium-226 and radium-228 concentrations in samples FB-3, WGWC-17, WGWC-15 and WGWC-23 were less than the MDCs. Therefore, based on professional and technical judgment, the combined radium results in these samples were U qualified as not detected at the MDCs.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
FB-3	Combined Radium 226 + 228	0.679	NA	0.679	U	13
WGWC-17	Combined Radium 226 + 228	0.565	NA	0.565	U	13
WGWC-15	Combined Radium 226 + 228	0.678	NA	0.678	U	13
WGWC-23	Combined Radium 226 + 228	0.703	NA	0.703	U	13

pCi/L- picocuries per liter NA-not applicable

### 4.2 <u>Holding Times</u>

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). Four method blanks were reported for the radium-226 data (batches 525800, 525966, 526227 and 526228). Four method blanks were reported for the radium-228 data (batches 525827, 526057, 526246 and 526247). Radium-226 and radium-228 were not detected in the method blanks above the MDCs, with the following exception.

Radium-228 was detected above the MDC in the method blank in batch 526246 (0.5801 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 concentrations in the associated samples greater than the method blank concentration and less than ten times the method blank concentration were J+ qualified as estimated with high biases. In addition, the combined radium concentrations in the associated samples with a non-detect radium-226 result and a U qualified radium-228 result were U qualified as not detected at the reported concentration. Also, the combined radium concentration with a

 $radium-228\ concentration\ that\ was\ J+\ qualified\ as\ estimated\ with\ a\ high\ bias\ were\ also\ J+\ qualified\ as\ estimated\ with\ a\ high\ bias.$ 

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
Dup-1	Radium-228	0.534	NA	0.534	U	3
Dup-1	Combined Radium 226 + 228	0.747	NA	0.747	U	3
Dup-2	Radium-228	0.641	NA	0.641	J+	3
Dup-2	Combined Radium 226 + 228	0.712	NA	0.712	J+	3
Dup-3	Radium-228	0.834	NA	0.834	J+	3
Dup-3	Combined Radium 226 + 228	1.30	NA	1.30	J+	3
EB-1	Radium-228	0.48	NA	0.48	U	3
EB-1	Combined Radium 226 + 228	0.489	NA	0.489	U	3
FB-1	Combined Radium 226 + 228	0.829	NA	0.829	J+	3
FB-1	Radium-228	0.852	NA	0.852	J+	3
FB-2	Radium-228	0.626	NA	0.626	J+	3
FB-2	Combined Radium 226 + 228	0.688	NA	0.688	J+	3
WGWA-18	Radium-228	0.572	NA	0.572	U	3
WGWA-18	Combined Radium 226 + 228	0.645	NA	0.645	J+	3
WGWA-2	Radium-228	0.609	NA	0.609	J+	3
WGWA-2	Combined Radium 226 + 228	0.632	NA	0.632	J+	3
WGWA-4	Radium-228	1.06	NA	1.06	J+	3
WGWA-4	Combined Radium 226 + 228	1.61	NA	1.61	J+	3
WGWC-11	Combined Radium 226 + 228	0.401	NA	0.401	U	3
WGWC-11	Radium-228	0.409	NA	0.409	U	3
WGWC-13	Radium-228	0.741	NA	0.741	J+	3
WGWC-13	Combined Radium 226 + 228	0.913	NA	0.913	J+	3
WGWC-14A	Radium-228	0.395	NA	0.395	U	3
WGWC-14A	Combined Radium 226 + 228	0.705	NA	0.705	U	3
WGWC-16	Radium-228	0.449	NA	0.449	U	3
WGWC-16	Combined Radium 226 + 228	0.518	NA	0.518	U	3
WGWC-19	Radium-228	0.600	NA	0.60	J+	3

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code	
WGWC-19	Combined Radium 226 + 228	0.796	NA	0.796	J+	3	
WGWC-20	Radium-228	1.12	NA	1.12	J+	3	
WGWC-20	Combined Radium 226 + 228	1.60	NA	1.60	J+	3	
WGWC-21	Radium-228	0.88	NA	0.88	J+	3	
WGWC-21	Combined Radium 226 + 228	1.17	NA	1.17	J+	3	
WGWC-22	Radium-228	3.44	NA	3.44	J+	3	
WGWC-22	Combined Radium 226 + 228	3.54	NA	3.54	J+	3	
WGWC-24	Radium-228	1.07	NA	1.07	J+	3	
WGWC-24	Combined Radium 226 + 228	1.63	NA	1.63	J+	3	
WGWC-25	Radium-228	0.678	NA	0.678	J+	3	
WGWC-25	Combined Radium 226 + 228	1.12	NA	1.12	J+	3	
WGWC-8	Radium-228	2.20	NA	2.20	J+	3	
WGWC-8	Combined Radium 226 + 228	2.87	NA	2.87	J+	3	
WGWC-9	Radium-228	0.606	NA	0.606	J+	3	
WGWC-9	Combined Radium 226 + 228	0.681	NA	0.681	J+	3	

pCi/L- picocuries per liter NA-not applicable

### 4.4 <u>Matrix Spike/Matrix Spike Duplicate</u>

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). Two LCSs and two LCS/LCS duplicate (LCSD) pair were reported for radium-226. Two LCSs and two LCS/LCSD pairs were reported for radium-228. The recovery and replicate error ratio (RER) [2 sigma  $(2\sigma)$ ] results were within the laboratory specified acceptance criteria, with the following exceptions.

The laboratory noted the LCS recoveries were assessed to regulatory specified acceptance criteria of 75-125% instead of the laboratory statistical limits of 61-138%. Since the samples were not governed by the regulatory limits and based on professional and technical judgment, the sample validation was based on the laboratory statistical limits.

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The recovery of radium-228 in the LCS in batch 526057 was high and outside the regulatory specified acceptance criteria. Since the recovery of radium-228 in the LCS in batch 526057 was within the laboratory specified acceptance criteria, no qualifications were applied to the data.

### 4.6 Laboratory Duplicate

Laboratory duplicates were not reported.

### 4.7 <u>Tracers and Carriers</u>

Carriers were reported for the radium-226 and radium-228 analyses. The recovery results were within the laboratory specified acceptance criteria.

### 4.8 **Equipment Blank**

Three equipment blanks, EB-1, EB-2 and EB-3 were collected with the sample set. Radium-226 and Radium-228 were not detected in the equipment blanks above the MDCs, with the following exceptions.

Radium-228 (0.480 pCi/L) was detected at a concentration greater than the MDC in EB-1. Since the radium-228 concentration in EB-1 was U qualified as not detected at the sample results due to method blank and field blank contamination and based on professional and technical judgment, no additional qualifications were applied to the data.

### 4.9 Field Blank

Three field blanks, FB-1, FB-2 and FB-3 were collected with the sample set. Radium-226 and Radium-228 were not detected in the field blanks above the MDCs, with the following exceptions.

Radium-228 (0.852 pCi/L) was detected at a concentration greater than the MDC in FB-1. Therefore, the radium-228 and combined radium concentrations in the associated samples greater than the MDCs and less than the field blank concentrations were U qualified as not detected at the reported concentrations and the radium-228 and combined radium concentrations in the associated samples greater than the field blank concentration and less than ten times the method blank concentration were J+ qualified as estimated with high biases.

Radium-228 (0.626 pCi/L) was detected at a concentration greater than the MDC in FB-2. Therefore, the radium-228 and combined radium concentrations in the associated samples greater than the MDCs and less than the field blank concentrations were U qualified as not detected at the reported concentrations and the radium-228 and combined radium concentrations in the associated samples greater than the field blank concentration and less than ten times the method blank concentration were J+ qualified as estimated with high biases.

Sample	Analyte	Laboratory Result (pCi/L)	Laboratory Flag	Validation Result (pCi/L)	Validation Qualifier	Reason Code
EB-1	Radium-228	0.480	NA	0.480	U	3
EB-1	Combined Radium 226 + 228	0.489	NA	0.489	U	3
Dup-1	Radium-228	0.534	NA	0.534	U	3
WGWA-2	Radium-228	0.609	NA	0.609	U	3
WGWA-2	Combined Radium 226 + 228	0.632	NA	0.632	U	3
Dup-1	Combined Radium 226 + 228	0.747	NA	0.747	U	3
WGWA-4	Radium-228	1.06	NA	1.06	J+	3
WGWA-4	Combined Radium 226 + 228	1.61	NA	1.61	J+	3
WGWA-6	Radium-228	6.26	NA	6.26	J+	3
WGWA-18	Combined Radium 226 + 228	0.645	NA	0.645	U	3
WGWA-18	Radium-228	0.572	NA	0.572	U	3
WGWC-11	Combined Radium 226 + 228	0.401	NA	0.401	U	3
WGWC-11	Radium-228	0.409	NA	0.409	U	3
WGWC-13	Combined Radium 226 + 228	0.913	NA	0.913	J+	3
WGWC-13	Radium-228	0.741	NA	0.741	J+	3
WGWC-14A	Combined Radium 226 + 228	0.705	NA	0.705	J+	3
WGWC-14A	Radium-228	0.395	NA	0.395	U	3
WGWC-16	Combined Radium 226 + 228	0.518	NA	0.518	U	3
WGWC-16	Radium-228	0.449	NA	0.449	U	3

pCi/L- picocuries per liter NA-not applicable

### 4.10 Field Duplicate

Three field duplicate samples, Dup-1, Dup-2 and Dup-3 were collected with the sample set. Acceptable precision (RER  $(2\sigma)$  < 3) was demonstrated between the field duplicates and the original samples, WGWA-7, WGWC-19 and WGWC-24; respectively.

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### 4.11 **Sensitivity**

The samples were reported to the MDCs. Elevated non-detect results were not reported.

### **4.12** 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.

\* \* \* \* \*

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## 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.

## 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

# Appendix C2: Field Sampling Forms

Purge Logs

**Test Date / Time:** 2/2/2021 10:45:16 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: 120.6 ft Total

Depth: 130.59 ft

Initial Depth to Water: 25.01 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 125.6 ft Estimated Total Volume Pumped:

13 liter

Flow Cell Volume: 90 ml Final Flow Rate: 130 ml/min

Final Draw Down: 1 in.

Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1115. 38F 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 %	+/- 5	+/- 300	+/- 10	
2/2/2021 10:45 AM	00:00	5.69 pH	15.40 °C	37.39 μS/cm	1.46 mg/L	8.07 NTU	144.5 mV	25.1 ft	130.00 ml/min
2/2/2021 10:50 AM	05:00	5.38 pH	15.50 °C	37.71 μS/cm	1.47 mg/L	9.00 NTU	142.7 mV	25.1 ft	130.00 ml/min
2/2/2021 10:55 AM	10:00	5.33 pH	15.62 °C	37.43 μS/cm	1.49 mg/L	7.55 NTU	138.5 mV	25.1 ft	130.00 ml/min
2/2/2021 11:00 AM	15:00	5.34 pH	15.83 °C	37.43 μS/cm	1.49 mg/L	5.91 NTU	137.1 mV	25.1 ft	130.00 ml/min
2/2/2021 11:05 AM	20:00	5.34 pH	15.58 °C	37.46 µS/cm	1.50 mg/L	5.13 NTU	136.0 mV	25.1 ft	130.00 ml/min
2/2/2021 11:10 AM	25:00	5.35 pH	15.56 °C	37.50 μS/cm	1.48 mg/L	5.81 NTU	135.3 mV	25.1 ft	130.00 ml/min
2/2/2021 11:15 AM	30:00	5.36 pH	15.59 °C	37.40 μS/cm	1.48 mg/L	4.78 NTU	134.1 mV	25.1 ft	130.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/2/2021 11:50:29 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: 92.7 ft
Total Depth: 102.65 ft

Initial Depth to Water: 8.24 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 97.5 ft Estimated Total Volume Pumped:

9 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 0.96 ft Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1220. 41F 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 %	+/- 5	+/- 300	+/- 10	
2/2/2021 11:50 AM	00:00	6.09 pH	14.81 °C	136.36 μS/cm	0.24 mg/L	7.32 NTU	134.4 mV	8.24 ft	150.00 ml/min
2/2/2021 11:55 AM	05:00	6.08 pH	15.49 °C	124.21 μS/cm	0.12 mg/L	4.06 NTU	130.8 mV	9.20 ft	150.00 ml/min
2/2/2021 12:00 PM	10:00	6.08 pH	15.80 °C	123.83 μS/cm	0.09 mg/L	3.21 NTU	128.7 mV	9.20 ft	150.00 ml/min
2/2/2021 12:05 PM	15:00	6.09 pH	15.98 °C	123.96 μS/cm	0.10 mg/L	1.11 NTU	127.6 mV	9.20 ft	150.00 ml/min
2/2/2021 12:10 PM	20:00	6.09 pH	15.59 °C	126.49 μS/cm	0.12 mg/L	0.96 NTU	127.6 mV	9.20 ft	150.00 ml/min
2/2/2021 12:15 PM	25:00	6.10 pH	15.54 °C	127.13 μS/cm	0.13 mg/L	0.93 NTU	126.9 mV	9.20 ft	150.00 ml/min
2/2/2021 12:20 PM	30:00	6.10 pH	15.94 °C	126.34 µS/cm	0.15 mg/L	0.88 NTU	124.4 mV	9.20 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 2/2/2021 11:10:57 AM Project: Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 2.95 ft

Pump Type: Bladder Pump Tubing Type: Poly

Pump Intake From TOC: 14 ft Estimated Total Volume Pumped:

10.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 300 ml/min Final Draw Down: 0.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1145 on 2-2-21. Dup-1 here.

### **Weather Conditions:**

Sunny, 30s.

### 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	
2/2/2021 11:10 AM	00:00	6.93 pH	16.33 °C	31.20 μS/cm	5.76 mg/L	2.00 NTU	120.1 mV	2.95 ft	300.00 ml/min
2/2/2021 11:15 AM	05:00	6.24 pH	16.38 °C	31.34 μS/cm	5.73 mg/L	2.10 NTU	115.8 mV	2.95 ft	300.00 ml/min
2/2/2021 11:18 AM	07:09	6.08 pH	16.29 °C	31.65 μS/cm	5.74 mg/L	2.10 NTU	131.7 mV	2.95 ft	300.00 ml/min
2/2/2021 11:18 AM	07:52	5.98 pH	16.31 °C	31.39 μS/cm	5.72 mg/L	2.10 NTU	134.9 mV	3.00 ft	300.00 ml/min
2/2/2021 11:23 AM	12:52	5.87 pH	16.33 °C	31.32 μS/cm	5.76 mg/L	0.70 NTU	118.1 mV	3.00 ft	300.00 ml/min
2/2/2021 11:28 AM	17:52	5.75 pH	16.38 °C	31.42 μS/cm	5.69 mg/L	0.50 NTU	119.0 mV	3.00 ft	300.00 ml/min
2/2/2021 11:33 AM	22:52	5.78 pH	16.24 °C	31.12 μS/cm	5.69 mg/L	0.60 NTU	118.2 mV	3.00 ft	300.00 ml/min
2/2/2021 11:38 AM	27:52	5.86 pH	16.33 °C	31.14 µS/cm	5.68 mg/L	0.30 NTU	116.2 mV	3.00 ft	300.00 ml/min
2/2/2021 11:43 AM	32:52	5.78 pH	16.37 °C	30.94 μS/cm	5.65 mg/L	0.40 NTU	118.0 mV	3.00 ft	300.00 ml/min

### Samples

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

**Test Date / Time:** 2/2/2021 12:18:33 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 5.03 ft

Pump Type: Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 68.9 ft Estimated Total Volume Pumped:

4.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 3.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1250 on 2-2-21.

### **Weather Conditions:**

Sunny, 40s.

### 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	
2/2/2021 12:18 PM	00:00	6.68 pH	22.04 °C	100.84 μS/cm	4.23 mg/L	5.00 NTU	65.2 mV	5.03 ft	150.00 ml/min
2/2/2021 12:20 PM	01:56	6.63 pH	17.82 °C	113.71 μS/cm	1.48 mg/L	5.00 NTU	38.7 mV	5.03 ft	150.00 ml/min
2/2/2021 12:25 PM	06:56	6.58 pH	16.38 °C	124.48 μS/cm	0.24 mg/L	1.00 NTU	43.1 mV	5.30 ft	150.00 ml/min
2/2/2021 12:30 PM	11:56	6.62 pH	16.10 °C	125.97 μS/cm	0.13 mg/L	1.20 NTU	39.9 mV	5.30 ft	150.00 ml/min
2/2/2021 12:35 PM	16:56	6.61 pH	15.82 °C	125.38 μS/cm	0.08 mg/L	1.10 NTU	38.6 mV	5.30 ft	150.00 ml/min
2/2/2021 12:40 PM	21:56	6.60 pH	15.48 °C	125.46 μS/cm	0.08 mg/L	0.85 NTU	37.3 mV	5.30 ft	150.00 ml/min
2/2/2021 12:45 PM	26:56	6.61 pH	15.50 °C	124.84 μS/cm	0.08 mg/L	0.80 NTU	34.0 mV	5.30 ft	150.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/3/2021 11:05:07 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

Location Name: WGWA-5
Well Diameter: 2 in
Casing Type: PVC

Screen Length: 10 ft Top of Screen: 13.6 ft Total Depth: 23.60 ft

Initial Depth to Water: 14.97 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 18.6 ft Estimated Total Volume Pumped:

28 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min

Final Draw Down: 7 in

Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1325. 47F clear. Purge start time: 10:10 Total Purge Time: 195 min.

### **Low-Flow Readings:**

	_								
Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
2/3/2021 11:05 AM	00:00	6.56 pH	14.23 °C	34.89 μS/cm	2.99 mg/L	33.00 NTU	47.9 mV	15.50 ft	100.00 ml/min
2/3/2021 11:10 AM	05:00	5.96 pH	14.57 °C	32.19 µS/cm	3.16 mg/L	31.00 NTU	61.6 mV	15.60 ft	100.00 ml/min
2/3/2021 11:15 AM	10:00	5.70 pH	14.69 °C	30.60 µS/cm	3.24 mg/L	26.90 NTU	73.9 mV	15.60 ft	100.00 ml/min
2/3/2021 11:20 AM	15:00	5.57 pH	14.63 °C	28.57 μS/cm	3.47 mg/L	24.60 NTU	84.0 mV	15.70 ft	100.00 ml/min
2/3/2021 11:25 AM	20:00	5.49 pH	14.68 °C	27.25 μS/cm	3.60 mg/L	21.90 NTU	93.6 mV	15.70 ft	100.00 ml/min
2/3/2021 11:30 AM	25:00	5.46 pH	14.47 °C	26.60 µS/cm	3.62 mg/L	23.60 NTU	101.3 mV	15.70 ft	100.00 ml/min
2/3/2021 11:35 AM	30:00	5.44 pH	14.72 °C	26.61 µS/cm	3.82 mg/L	23.50 NTU	107.2 mV	15.70 ft	100.00 ml/min
2/3/2021 11:40 AM	35:00	5.45 pH	14.27 °C	27.61 µS/cm	3.74 mg/L	22.70 NTU	111.6 mV	15.70 ft	100.00 ml/min
2/3/2021 11:45 AM	40:00	5.41 pH	15.53 °C	28.23 µS/cm	3.73 mg/L	22.10 NTU	116.0 mV	15.70 ft	100.00 ml/min
2/3/2021 11:50 AM	45:00	5.39 pH	16.14 °C	26.34 µS/cm	3.92 mg/L	21.90 NTU	120.0 mV	15.70 ft	100.00 ml/min
2/3/2021 11:55 AM	50:00	5.37 pH	16.03 °C	26.32 μS/cm	4.04 mg/L	21.30 NTU	124.7 mV	15.70 ft	100.00 ml/min
2/3/2021 12:00 PM	55:00	5.37 pH	16.43 °C	26.46 µS/cm	4.13 mg/L	20.40 NTU	128.8 mV	15.70 ft	100.00 ml/min
2/3/2021 12:05 PM	01:00:00	5.35 pH	15.98 °C	25.57 μS/cm	4.23 mg/L	19.80 NTU	132.7 mV	15.70 ft	100.00 ml/min
2/3/2021 12:10 PM	01:05:00	5.34 pH	16.16 °C	25.98 µS/cm	4.27 mg/L	19.20 NTU	135.4 mV	15.70 ft	100.00 ml/min
2/3/2021 12:15 PM	01:10:00	5.35 pH	16.47 °C	25.82 µS/cm	4.26 mg/L	18.60 NTU	137.7 mV	15.70 ft	100.00 ml/min

2/3/2021	01:15:00	5.35 pH	16.34 °C	25.40 µS/cm	4.42 mg/L	18.60 NTU	140.1 mV	15.70 ft	100.00 ml/min
12:20 PM 2/3/2021	01:20:00	5.32 pH	16.07 °C	25.16 µS/cm	4.58 mg/L	18.60 NTU	143.1 mV	15.70 ft	100.00 ml/min
12:25 PM 2/3/2021 12:30 PM	01:25:00	5.32 pH	15.89 °C	25.18 μS/cm	4.62 mg/L	17.40 NTU	144.4 mV	15.70 ft	100.00 ml/min
2/3/2021 12:35 PM	01:30:00	5.32 pH	15.71 °C	24.83 µS/cm	4.63 mg/L	17.30 NTU	146.5 mV	15.70 ft	100.00 ml/min
2/3/2021 12:40 PM	01:35:00	5.32 pH	15.62 °C	25.78 µS/cm	4.72 mg/L	17.00 NTU	147.2 mV	15.70 ft	100.00 ml/min
2/3/2021 12:45 PM	01:40:00	5.32 pH	15.89 °C	25.65 μS/cm	4.77 mg/L	16.90 NTU	148.3 mV	15.70 ft	100.00 ml/min
2/3/2021 12:50 PM	01:45:00	5.32 pH	15.97 °C	25.25 μS/cm	4.73 mg/L	16.00 NTU	149.5 mV	15.70 ft	100.00 ml/min
2/3/2021 12:55 PM	01:50:00	5.32 pH	16.29 °C	25.35 µS/cm	4.76 mg/L	15.60 NTU	150.1 mV	15.70 ft	100.00 ml/min
2/3/2021 1:00 PM	01:55:00	5.33 pH	16.41 °C	25.22 µS/cm	4.73 mg/L	14.70 NTU	150.4 mV	15.70 ft	100.00 ml/min
2/3/2021 1:05 PM	02:00:00	5.33 pH	16.07 °C	24.78 µS/cm	4.78 mg/L	13.30 NTU	151.0 mV	15.70 ft	100.00 ml/min
2/3/2021 1:10 PM	02:05:00	5.32 pH	16.29 °C	25.54 µS/cm	4.79 mg/L	12.80 NTU	151.6 mV	15.70 ft	100.00 ml/min
2/3/2021 1:15 PM	02:10:00	5.32 pH	16.30 °C	25.18 µS/cm	4.82 mg/L	11.60 NTU	151.7 mV	15.70 ft	100.00 ml/min
2/3/2021 1:20 PM	02:15:00	5.32 pH	15.68 °C	25.26 µS/cm	4.90 mg/L	10.20 NTU	152.4 mV	15.70 ft	100.00 ml/min
2/3/2021 1:25 PM	02:20:00	5.31 pH	15.28 °C	25.45 µS/cm	4.94 mg/L	9.92 NTU	160.3 mV	15.70 ft	100.00 ml/min

### Samples

Sample ID:	Description:

**Test Date / Time:** 2/3/2021 10:00:11 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

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: 16.18 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

11 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 14 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1030. 36 F 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 %	+/- 5	+/- 300	+/- 10	
2/3/2021 10:00 AM	00:00	7.64 pH	15.23 °C	0.31 µS/cm	7.12 mg/L	2.98 NTU	95.8 mV	17.00 ft	100.00 ml/min
2/3/2021 10:05 AM	05:00	7.83 pH	15.26 °C	170.29 μS/cm	0.48 mg/L	2.87 NTU	88.1 mV	17.30 ft	100.00 ml/min
2/3/2021 10:10 AM	10:00	7.80 pH	15.13 °C	171.68 μS/cm	0.21 mg/L	2.32 NTU	79.9 mV	17.60 ft	100.00 ml/min
2/3/2021 10:15 AM	15:00	7.79 pH	15.04 °C	169.45 μS/cm	0.20 mg/L	1.12 NTU	71.1 mV	17.70 ft	100.00 ml/min
2/3/2021 10:20 AM	20:00	7.78 pH	14.76 °C	171.69 μS/cm	0.22 mg/L	1.17 NTU	63.0 mV	17.80 ft	100.00 ml/min
2/3/2021 10:25 AM	25:00	7.77 pH	15.59 °C	170.65 μS/cm	0.23 mg/L	1.17 NTU	55.9 mV	17.80 ft	100.00 ml/min
2/3/2021 10:30 AM	30:00	7.77 pH	15.26 °C	169.90 μS/cm	0.23 mg/L	1.19 NTU	49.5 mV	17.80 ft	100.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 2/2/2021 1:38:44 PM Project: Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 27.23 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 34.6 ft Estimated Total Volume Pumped:

5.3 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 2 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1410 on 2-2-21.

### **Weather Conditions:**

Sunny, 40s.

### 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	
2/2/2021 1:38 PM	00:00	7.56 pH	17.89 °C	10.96 μS/cm	9.03 mg/L	5.00 NTU	34.7 mV	27.23 ft	150.00 ml/min
2/2/2021 1:43 PM	05:00	6.50 pH	15.18 °C	23.55 μS/cm	8.97 mg/L	0.30 NTU	60.3 mV	27.30 ft	150.00 ml/min
2/2/2021 1:48 PM	10:00	6.13 pH	15.34 °C	23.03 μS/cm	9.35 mg/L	0.40 NTU	70.3 mV	27.30 ft	150.00 ml/min
2/2/2021 1:53 PM	15:00	5.97 pH	15.30 °C	23.26 μS/cm	9.17 mg/L	0.40 NTU	73.9 mV	27.30 ft	150.00 ml/min
2/2/2021 1:58 PM	20:00	5.90 pH	15.21 °C	23.59 μS/cm	8.93 mg/L	0.35 NTU	75.8 mV	27.40 ft	150.00 ml/min
2/2/2021 2:03 PM	25:00	5.86 pH	15.21 °C	24.23 μS/cm	9.11 mg/L	0.40 NTU	76.7 mV	27.40 ft	150.00 ml/min
2/2/2021 2:08 PM	30:00	5.84 pH	15.07 °C	24.30 μS/cm	9.16 mg/L	0.40 NTU	79.0 mV	27.40 ft	150.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/2/2021 1:10:47 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: 26.9 ft Total Depth: 36.9 ft

Initial Depth to Water: 22.18 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 31.9 ft Estimated Total Volume Pumped:

9 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 16 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1450. 46F 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 %	+/- 5	+/- 300	+/- 10	
2/2/2021 1:10 PM	00:00	6.65 pH	14.68 °C	120.60 μS/cm	4.40 mg/L	1.32 NTU	117.1 mV	22.18 ft	100.00 ml/min
2/2/2021 1:15 PM	05:00	7.02 pH	15.76 °C	130.16 μS/cm	1.28 mg/L	1.82 NTU	96.0 mV	23.60 ft	100.00 ml/min
2/2/2021 1:20 PM	10:00	7.24 pH	15.94 °C	132.61 µS/cm	0.98 mg/L	1.65 NTU	85.4 mV	23.00 ft	100.00 ml/min
2/2/2021 1:25 PM	15:00	7.41 pH	15.94 °C	133.39 μS/cm	0.78 mg/L	1.54 NTU	78.3 mV	23.20 ft	100.00 ml/min
2/2/2021 1:30 PM	20:00	7.49 pH	15.89 °C	135.33 μS/cm	0.67 mg/L	1.44 NTU	73.2 mV	23.40 ft	100.00 ml/min
2/2/2021 1:35 PM	25:00	7.44 pH	15.85 °C	137.56 μS/cm	0.50 mg/L	1.42 NTU	68.1 mV	23.60 ft	100.00 ml/min
2/2/2021 1:40 PM	30:00	7.31 pH	16.02 °C	137.59 μS/cm	0.38 mg/L	1.19 NTU	62.7 mV	23.60 ft	100.00 ml/min
2/2/2021 1:45 PM	35:00	7.18 pH	15.71 °C	138.35 μS/cm	0.34 mg/L	1.31 NTU	58.0 mV	23.60 ft	100.00 ml/min
2/2/2021 1:50 PM	40:00	7.07 pH	15.51 °C	137.34 μS/cm	0.33 mg/L	1.19 NTU	54.8 mV	23.60 ft	100.00 ml/min
2/2/2021 1:55 PM	45:00	6.98 pH	15.39 °C	137.14 μS/cm	0.32 mg/L	0.99 NTU	51.9 mV	23.60 ft	100.00 ml/min
2/2/2021 2:00 PM	50:00	6.90 pH	15.31 °C	136.44 µS/cm	0.30 mg/L	1.04 NTU	49.8 mV	23.60 ft	100.00 ml/min
2/2/2021 2:05 PM	55:00	6.84 pH	15.26 °C	134.80 μS/cm	0.30 mg/L	0.82 NTU	48.5 mV	23.60 ft	100.00 ml/min
2/2/2021 2:10 PM	01:00:00	6.77 pH	15.18 °C	132.18 μS/cm	0.34 mg/L	0.81 NTU	47.0 mV	23.60 ft	100.00 ml/min
2/2/2021 2:15 PM	01:05:00	6.72 pH	15.15 °C	127.52 μS/cm	0.46 mg/L	0.80 NTU	46.4 mV	23.60 ft	100.00 ml/min
2/2/2021 2:20 PM	01:10:00	6.66 pH	15.16 °C	121.66 µS/cm	0.69 mg/L	1.11 NTU	46.2 mV	23.60 ft	100.00 ml/min

2/2/2021 2:25 PM	01:15:00	6.63 pH	15.08 °C	116.36 μS/cm	0.94 mg/L	1.02 NTU	46.0 mV	23.60 ft	100.00 ml/min
2/2/2021 2:30 PM	01:20:00	6.61 pH	15.08 °C	114.38 µS/cm	1.15 mg/L	1.01 NTU	46.5 mV	23.60 ft	100.00 ml/min
2/2/2021 2:35 PM	01:25:00	6.58 pH	15.17 °C	111.03 μS/cm	1.32 mg/L	0.91 NTU	46.5 mV	23.60 ft	100.00 ml/min
2/2/2021 2:40 PM	01:30:00	6.55 pH	15.20 °C	107.32 μS/cm	1.44 mg/L	0.94 NTU	46.6 mV	23.60 ft	100.00 ml/min
2/2/2021 2:45 PM	01:35:00	6.50 pH	15.16 °C	105.45 μS/cm	1.52 mg/L	0.89 NTU	47.1 mV	23.60 ft	100.00 ml/min
2/2/2021 2:50 PM	01:40:00	6.47 pH	15.04 °C	103.25 μS/cm	1.63 mg/L	0.88 NTU	47.6 mV	23.60 ft	100.00 ml/min

### Samples

Sample ID:
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**Test Date / Time:** 2/3/2021 3:17:33 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. 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: 3.3 ft

Pump Type: Bladder Pump Tubing Type: Poly Pump Intake From TOC: 54.4 ft Estimated Total Volume Pumped:

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 13.2 in Instrument Used: Aqua TROLL 400 Serial Number: 714344

#### **Test Notes:**

Sampled at 1545 on 2-3-21.

### **Weather Conditions:**

Sunny, 40s.

### 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	
2/3/2021 3:17 PM	00:00	5.66 pH	15.12 °C	726.50 µS/cm	2.78 mg/L	5.00 NTU	102.5 mV	3.30 ft	100.00 ml/min
2/3/2021 3:22 PM	05:00	5.28 pH	14.39 °C	739.58 µS/cm	1.42 mg/L	1.70 NTU	119.6 mV	4.00 ft	100.00 ml/min
2/3/2021 3:27 PM	10:00	5.13 pH	14.17 °C	743.15 µS/cm	1.21 mg/L	1.90 NTU	128.0 mV	4.10 ft	100.00 ml/min
2/3/2021 3:32 PM	15:00	5.08 pH	14.12 °C	743.82 µS/cm	1.18 mg/L	1.50 NTU	131.1 mV	4.20 ft	100.00 ml/min
2/3/2021 3:37 PM	20:00	5.08 pH	14.08 °C	744.96 µS/cm	1.18 mg/L	1.10 NTU	132.0 mV	4.30 ft	100.00 ml/min
2/3/2021 3:42 PM	25:00	5.08 pH	14.04 °C	747.29 µS/cm	1.20 mg/L	1.20 NTU	132.2 mV	4.40 ft	100.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 1:44:27 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

Location Name: WGWC-9 Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 51.4 ft

Total Depth: 61.42 ft

Initial Depth to Water: 19.76 ft

Pump Type: Peri Pump Tubing Type: Poly

Pump Intake From TOC: 56.4 ft Estimated Total Volume Pumped:

3.2 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 13.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1412 on 2-4-21.

### **Weather Conditions:**

Cloudy, 40s.

### 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	
2/4/2021 1:44 PM	00:00	5.77 pH	14.66 °C	163.19 μS/cm	6.63 mg/L	5.00 NTU	141.1 mV	19.76 ft	100.00 ml/min
2/4/2021 1:49 PM	05:00	6.14 pH	15.78 °C	168.16 μS/cm	5.04 mg/L	2.30 NTU	131.0 mV	20.60 ft	100.00 ml/min
2/4/2021 1:54 PM	10:00	6.21 pH	16.31 °C	169.67 μS/cm	4.91 mg/L	2.60 NTU	148.3 mV	20.70 ft	100.00 ml/min
2/4/2021 1:59 PM	15:00	6.25 pH	16.66 °C	167.07 μS/cm	4.78 mg/L	1.90 NTU	127.2 mV	20.80 ft	100.00 ml/min
2/4/2021 2:04 PM	20:00	6.27 pH	16.55 °C	166.27 μS/cm	4.76 mg/L	1.60 NTU	125.8 mV	20.80 ft	100.00 ml/min
2/4/2021 2:09 PM	25:00	6.22 pH	16.33 °C	168.30 μS/cm	4.77 mg/L	1.60 NTU	126.2 mV	20.90 ft	100.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 3:08:01 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

Location Name: WGWC-10
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft

Top of Screen: 138.9 ft Total Depth: 148.95 ft

Initial Depth to Water: 15.52 ft

Pump Type: Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 143.9 ft Estimated Total Volume Pumped:

4.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 11.8 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1550 on 2-4-21.

### **Weather Conditions:**

Cloudy, 40s.

### 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	
2/4/2021 3:08 PM	00:00	6.53 pH	13.03 °C	59.01 μS/cm	9.50 mg/L	5.00 NTU	129.9 mV	15.52 ft	100.00 ml/min
2/4/2021 3:13 PM	05:00	6.28 pH	14.31 °C	62.99 μS/cm	2.01 mg/L	1.80 NTU	126.5 mV	16.10 ft	100.00 ml/min
2/4/2021 3:18 PM	10:00	6.21 pH	14.89 °C	61.75 μS/cm	1.20 mg/L	2.30 NTU	143.3 mV	16.20 ft	100.00 ml/min
2/4/2021 3:23 PM	15:00	6.22 pH	14.98 °C	60.88 μS/cm	2.61 mg/L	2.20 NTU	124.2 mV	16.30 ft	100.00 ml/min
2/4/2021 3:28 PM	20:00	6.26 pH	14.96 °C	62.49 μS/cm	3.49 mg/L	1.90 NTU	122.4 mV	16.30 ft	100.00 ml/min
2/4/2021 3:33 PM	25:00	6.27 pH	14.48 °C	63.91 μS/cm	3.99 mg/L	2.30 NTU	121.8 mV	16.40 ft	100.00 ml/min
2/4/2021 3:38 PM	30:00	6.27 pH	14.24 °C	64.68 μS/cm	4.42 mg/L	2.00 NTU	121.2 mV	16.50 ft	100.00 ml/min
2/4/2021 3:43 PM	35:00	6.24 pH	14.03 °C	65.16 µS/cm	4.62 mg/L	1.90 NTU	121.9 mV	16.50 ft	100.00 ml/min
2/4/2021 3:48 PM	40:00	6.21 pH	13.97 °C	65.20 μS/cm	4.69 mg/L	2.00 NTU	122.2 mV	16.50 ft	100.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/3/2021 1:56:37 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 21.91 ft

Pump Type: Bladder Pump Tubing Type: Poly

Pump Intake From TOC: 44.5 ft Estimated Total Volume Pumped:

6 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 10.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1435 on 2-3-21.

### **Weather Conditions:**

Sunny, 40s.

### 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	
2/3/2021 1:56 PM	00:00	6.87 pH	19.35 °C	31.02 μS/cm	7.38 mg/L	5.00 NTU	62.7 mV	21.91 ft	150.00 ml/min
2/3/2021 2:01 PM	05:00	6.11 pH	17.58 °C	31.31 μS/cm	7.81 mg/L	3.20 NTU	85.0 mV	22.50 ft	150.00 ml/min
2/3/2021 2:06 PM	10:00	5.77 pH	17.27 °C	31.28 μS/cm	8.23 mg/L	3.10 NTU	100.6 mV	22.60 ft	150.00 ml/min
2/3/2021 2:11 PM	15:00	5.52 pH	17.21 °C	31.19 μS/cm	8.16 mg/L	2.90 NTU	111.5 mV	22.70 ft	150.00 ml/min
2/3/2021 2:16 PM	20:00	5.40 pH	16.67 °C	31.02 μS/cm	8.06 mg/L	2.90 NTU	119.4 mV	22.80 ft	150.00 ml/min
2/3/2021 2:21 PM	25:00	5.31 pH	16.15 °C	30.97 μS/cm	8.15 mg/L	2.80 NTU	124.9 mV	22.80 ft	150.00 ml/min
2/3/2021 2:26 PM	30:00	5.24 pH	15.80 °C	30.97 μS/cm	8.17 mg/L	2.50 NTU	129.7 mV	22.80 ft	150.00 ml/min
2/3/2021 2:31 PM	35:00	5.21 pH	15.79 °C	31.08 µS/cm	8.18 mg/L	2.60 NTU	132.4 mV	22.80 ft	150.00 ml/min

### Samples

Sample ID:	Description:
Sample ID:	Description:

Test Date / Time: 2/3/2021 12:32:54 PM Project: Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 21.5 ft

Pump Type: Bladder Pump Tubing Type: Poly Pump Intake From TOC: 71.5 ft Estimated Total Volume Pumped:

27.8 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 1.2 in Instrument Used: Aqua TROLL 400 Serial Number: 714344

#### **Test Notes:**

Sampled at 1325 on 2-3-21. Purge start time: 10:20 Total purge time: 185 min.

### **Weather Conditions:**

Sunny, 40s.

### 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	
2/3/2021 12:32 PM	00:00	6.89 pH	16.00 °C	107.32 μS/cm	1.27 mg/L	5.00 NTU	67.1 mV	21.50 ft	150.00 ml/min
2/3/2021 12:37 PM	05:00	6.63 pH	16.62 °C	105.72 μS/cm	0.46 mg/L	6.30 NTU	64.0 mV	21.60 ft	150.00 ml/min
2/3/2021 12:42 PM	10:00	6.47 pH	16.64 °C	106.18 μS/cm	0.53 mg/L	10.4 NTU	62.8 mV	21.60 ft	150.00 ml/min
2/3/2021 12:47 PM	15:00	6.34 pH	16.51 °C	107.71 μS/cm	0.35 mg/L	10.2 NTU	63.9 mV	21.60 ft	150.00 ml/min
2/3/2021 12:52 PM	20:00	6.21 pH	16.64 °C	108.76 μS/cm	0.26 mg/L	10.1 NTU	65.2 mV	21.60 ft	150.00 ml/min
2/3/2021 12:57 PM	25:00	6.17 pH	16.72 °C	109.48 μS/cm	0.27 mg/L	9.50 NTU	64.3 mV	21.60 ft	150.00 ml/min
2/3/2021 1:02 PM	30:00	6.16 pH	16.69 °C	109.73 μS/cm	0.26 mg/L	9.10 NTU	63.0 mV	21.60 ft	150.00 ml/min
2/3/2021 1:07 PM	35:00	6.16 pH	16.82 °C	109.99 μS/cm	0.24 mg/L	9.10 NTU	61.3 mV	21.60 ft	150.00 ml/min
2/3/2021 1:12 PM	40:00	6.14 pH	16.81 °C	111.48 μS/cm	0.23 mg/L	8.30 NTU	59.7 mV	21.60 ft	150.00 ml/min
2/3/2021 1:17 PM	45:00	6.15 pH	16.85 °C	111.92 μS/cm	0.26 mg/L	8.10 NTU	57.4 mV	21.60 ft	150.00 ml/min
2/3/2021 1:22 PM	50:00	6.15 pH	16.89 °C	111.83 μS/cm	0.30 mg/L	9.00 NTU	56.2 mV	21.60 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 10:40:09 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

Location Name: WGWC-13
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 85.5 ft

Total Depth: 95.55 ft

Initial Depth to Water: 19.81 ft

Pump Type: Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 90.5 ft Estimated Total Volume Pumped:

6.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 22.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1115 on 2-4-21.

### **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	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/4/2021 10:40 AM	00:00	8.44 pH	11.75 °C	104.48 μS/cm	5.68 mg/L	5.00 NTU	163.8 mV	19.81 ft	100.00 ml/min
2/4/2021 10:45 AM	05:00	7.12 pH	13.04 °C	68.69 μS/cm	1.91 mg/L	3.20 NTU	143.3 mV	21.40 ft	100.00 ml/min
2/4/2021 10:50 AM	10:00	6.55 pH	13.78 °C	63.70 μS/cm	1.75 mg/L	2.80 NTU	133.4 mV	21.50 ft	100.00 ml/min
2/4/2021 10:55 AM	15:00	6.38 pH	13.94 °C	62.66 μS/cm	1.70 mg/L	3.20 NTU	130.3 mV	21.50 ft	100.00 ml/min
2/4/2021 11:00 AM	20:00	6.31 pH	13.94 °C	62.38 μS/cm	1.77 mg/L	3.15 NTU	128.5 mV	21.50 ft	100.00 ml/min
2/4/2021 11:05 AM	25:00	6.28 pH	13.99 °C	61.93 μS/cm	1.74 mg/L	2.70 NTU	126.6 mV	21.60 ft	100.00 ml/min
2/4/2021 11:10 AM	30:00	6.34 pH	13.93 °C	61.98 μS/cm	1.80 mg/L	2.80 NTU	122.6 mV	21.70 ft	100.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 11:34:33 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

Location Name: WGWC-14A

Initial Depth to Water: 19.64 ft

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33 ft Total Depth: 43.08 ft Pump Type: Peri Pump Tubing Type: Poly Pump Intake From TOC: 38 ft Estimated Total Volume Pumped:

8.1 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 10.3 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1240 on 2-4-21. Extra rad.

#### **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	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3	
2/4/2021 11:34 AM	00:00	6.72 pH	13.20 °C	0.57 μS/cm	10.03 mg/L	5.00 NTU	112.9 mV	19.64 ft	125.00 ml/min
2/4/2021 11:39 AM	05:00	5.85 pH	13.35 °C	28.11 μS/cm	3.67 mg/L	6.40 NTU	140.5 mV	20.10 ft	125.00 ml/min
2/4/2021 11:44 AM	10:00	5.64 pH	14.69 °C	26.75 μS/cm	3.12 mg/L	6.10 NTU	165.2 mV	20.20 ft	125.00 ml/min
2/4/2021 11:49 AM	15:00	5.56 pH	14.84 °C	26.28 μS/cm	2.34 mg/L	5.00 NTU	142.8 mV	20.20 ft	125.00 ml/min
2/4/2021 11:54 AM	20:00	5.51 pH	14.96 °C	25.78 μS/cm	1.83 mg/L	2.40 NTU	143.9 mV	20.30 ft	125.00 ml/min
2/4/2021 11:59 AM	25:00	5.51 pH	15.25 °C	25.50 μS/cm	1.50 mg/L	3.70 NTU	145.9 mV	20.30 ft	125.00 ml/min
2/4/2021 12:04 PM	30:00	5.51 pH	15.31 °C	25.37 μS/cm	1.37 mg/L	3.10 NTU	145.5 mV	20.30 ft	125.00 ml/min
2/4/2021 12:09 PM	35:00	5.49 pH	15.34 °C	25.15 μS/cm	1.19 mg/L	1.00 NTU	146.5 mV	20.30 ft	125.00 ml/min
2/4/2021 12:14 PM	40:00	5.49 pH	15.48 °C	25.68 μS/cm	1.16 mg/L	1.10 NTU	147.5 mV	20.30 ft	125.00 ml/min
2/4/2021 12:19 PM	45:00	5.65 pH	15.61 °C	29.78 μS/cm	0.95 mg/L	1.20 NTU	145.3 mV	20.40 ft	125.00 ml/min
2/4/2021 12:24 PM	50:00	5.70 pH	15.50 °C	32.04 μS/cm	0.80 mg/L	1.10 NTU	144.1 mV	20.40 ft	125.00 ml/min
2/4/2021 12:29 PM	55:00	5.72 pH	15.57 °C	33.50 μS/cm	0.73 mg/L	0.50 NTU	143.6 mV	20.40 ft	125.00 ml/min
2/4/2021 12:34 PM	1:00:00	5.74 pH	15.70 °C	34.33 μS/cm	0.66 mg/L	0.60 NTU	143.2 mV	20.40 ft	125.00 ml/min
2/4/2021 12:39 PM	1:05:00	5.76 pH	15.70 °C	34.47 μS/cm	0.64 mg/L	0.60 NTU	143.1 mV	20.40 ft	125.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 10:05:17 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

**Location Name: WGWC-15** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.4 ft Total Depth: 53.36 ft

Initial Depth to Water: 20.09 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 48.6 ft Estimated Total Volume Pumped:

12 liter

Flow Cell Volume: 90 ml Final Flow Rate: 60 ml/min Final Draw Down: 144 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1105. 41F overcast. DUP-2 collected. Purge start time: 0940 Total purge time: 85 min.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
2/4/2021 10:05 AM	00:00	8.08 pH	10.97 °C	265.17 μS/cm	3.39 mg/L	9.54 NTU	164.1 mV	28.60 ft	100.00 ml/min
2/4/2021 10:10 AM	05:00	7.91 pH	13.36 °C	235.46 μS/cm	2.50 mg/L	5.78 NTU	149.0 mV	27.20 ft	100.00 ml/min
2/4/2021 10:15 AM	10:00	7.82 pH	13.38 °C	233.17 μS/cm	2.44 mg/L	5.43 NTU	141.5 mV	27.80 ft	100.00 ml/min
2/4/2021 10:20 AM	15:00	7.78 pH	13.55 °C	232.74 μS/cm	2.37 mg/L	5.11 NTU	122.8 mV	28.40 ft	100.00 ml/min
2/4/2021 10:25 AM	20:00	7.75 pH	13.51 °C	231.49 μS/cm	2.30 mg/L	4.58 NTU	133.0 mV	28.90 ft	100.00 ml/min
2/4/2021 10:30 AM	25:00	7.77 pH	11.88 °C	224.65 μS/cm	2.23 mg/L	4.56 NTU	120.2 mV	29.50 ft	100.00 ml/min
2/4/2021 10:35 AM	30:00	7.73 pH	14.18 °C	233.50 μS/cm	2.27 mg/L	4.23 NTU	126.3 mV	30.10 ft	100.00 ml/min
2/4/2021 10:40 AM	35:00	7.73 pH	14.51 °C	231.28 μS/cm	2.15 mg/L	3.97 NTU	123.8 mV	30.80 ft	100.00 ml/min
2/4/2021 10:45 AM	40:00	7.74 pH	14.56 °C	229.87 μS/cm	2.06 mg/L	3.69 NTU	121.4 mV	31.30 ft	60.00 ml/min
2/4/2021 10:50 AM	45:00	7.77 pH	13.75 °C	223.89 μS/cm	2.04 mg/L	3.98 NTU	112.6 mV	21.70 ft	60.00 ml/min
2/4/2021 10:55 AM	50:00	7.77 pH	12.62 °C	226.26 μS/cm	2.09 mg/L	3.68 NTU	111.8 mV	31.90 ft	60.00 ml/min
2/4/2021 11:00 AM	55:00	7.77 pH	12.33 °C	228.32 μS/cm	2.10 mg/L	4.57 NTU	117.2 mV	32.00 ft	60.00 ml/min
2/4/2021 11:05 AM	01:00:00	7.77 pH	12.45 °C	228.14 μS/cm	2.14 mg/L	4.59 NTU	109.5 mV	32.00 ft	60.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 11:40:28 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

**Location Name: WGWC-16** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 24.8 ft Total Depth: 34.78 ft

Initial Depth to Water: 19.25 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 30 ft Estimated Total Volume Pumped:

6.25 liter

Flow Cell Volume: 90 ml

Final Flow Rate: 125 ml/min Final

Draw Down: 108 in

Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1230. 49F overcast.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
2/4/2021 11:40 AM	00:00	7.28 pH	13.54 °C	391.57 μS/cm	7.96 mg/L	28.40 NTU	138.6 mV	19.40 ft	125.00 ml/min
2/4/2021 11:45 AM	05:00	5.71 pH	15.70 °C	350.84 μS/cm	3.99 mg/L	25.30 NTU	145.3 mV	19.40 ft	125.00 ml/min
2/4/2021 11:50 AM	10:00	5.47 pH	15.87 °C	350.20 μS/cm	3.78 mg/L	25.90 NTU	157.2 mV	19.40 ft	125.00 ml/min
2/4/2021 11:55 AM	15:00	5.44 pH	15.86 °C	349.62 μS/cm	3.73 mg/L	24.50 NTU	160.0 mV	19.50 ft	125.00 ml/min
2/4/2021 12:00 PM	20:00	5.44 pH	15.71 °C	350.64 μS/cm	3.71 mg/L	14.90 NTU	151.1 mV	19.50 ft	125.00 ml/min
2/4/2021 12:05 PM	25:00	5.42 pH	16.05 °C	350.93 μS/cm	3.74 mg/L	11.80 NTU	160.8 mV	19.60 ft	125.00 ml/min
2/4/2021 12:10 PM	30:00	5.43 pH	16.03 °C	348.58 μS/cm	3.72 mg/L	8.23 NTU	151.4 mV	19.70 ft	125.00 ml/min
2/4/2021 12:15 PM	35:00	5.43 pH	16.02 °C	349.36 μS/cm	3.74 mg/L	6.87 NTU	150.6 mV	19.70 ft	125.00 ml/min
2/4/2021 12:20 PM	40:00	5.42 pH	16.00 °C	348.54 μS/cm	3.78 mg/L	5.23 NTU	149.9 mV	19.80 ft	125.00 ml/min
2/4/2021 12:25 PM	45:00	5.43 pH	16.03 °C	346.88 μS/cm	3.80 mg/L	5.05 NTU	149.0 mV	19.80 ft	125.00 ml/min
2/4/2021 12:30 PM	50:00	5.42 pH	16.09 °C	343.86 μS/cm	3.79 mg/L	4.18 NTU	157.1 mV	19.80 ft	125.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/4/2021 1:15:09 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** O. Fuquea

**Location Name: WGWC-17** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 in Top of Screen: 85.9 ft Total Depth: 95.94 ft

Initial Depth to Water: 30.04 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

6 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 19 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1345. 52F light rain. FB-2 collected at 1320.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
2/4/2021 1:15 PM	00:00	6.34 pH	14.72 °C	93.48 µS/cm	2.03 mg/L	4.54 NTU	77.3 mV	30.50 ft	150.00 ml/min
2/4/2021 1:20 PM	05:00	6.29 pH	15.71 °C	96.29 μS/cm	0.18 mg/L	3.99 NTU	67.4 mV	31.00 ft	150.00 ml/min
2/4/2021 1:25 PM	10:00	6.31 pH	15.71 °C	96.25 μS/cm	0.14 mg/L	3.71 NTU	62.5 mV	31.50 ft	150.00 ml/min
2/4/2021 1:30 PM	15:00	6.32 pH	15.57 °C	96.96 μS/cm	0.13 mg/L	3.87 NTU	58.7 mV	31.50 ft	150.00 ml/min
2/4/2021 1:35 PM	20:00	6.31 pH	15.56 °C	97.21 μS/cm	0.14 mg/L	3.76 NTU	55.6 mV	31.60 ft	150.00 ml/min
2/4/2021 1:40 PM	25:00	6.31 pH	15.53 °C	96.97 μS/cm	0.15 mg/L	2.88 NTU	52.8 mV	31.60 ft	150.00 ml/min
2/4/2021 1:45 PM	30:00	6.31 pH	15.66 °C	96.49 μS/cm	0.18 mg/L	2.47 NTU	50.7 mV	31.70 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 2/3/2021 2:01:16 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: 84.8 ft Total Depth: 94.84 ft

Initial Depth to Water: 19.34 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: 18 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

### **Test Notes:**

Collected at 1430. 49F 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 %	+/- 5	+/- 300	+/- 10	
2/3/2021 2:01 PM	00:00	6.52 pH	15.81 °C	152.32 μS/cm	0.27 mg/L	4.54 NTU	114.6 mV	20.60 ft	100.00 ml/min
2/3/2021 2:06 PM	05:00	6.61 pH	16.42 °C	147.78 μS/cm	0.15 mg/L	3.23 NTU	115.0 mV	20.80 ft	100.00 ml/min
2/3/2021 2:11 PM	10:00	6.66 pH	16.54 °C	146.50 μS/cm	0.12 mg/L	1.45 NTU	111.1 mV	21.00 ft	100.00 ml/min
2/3/2021 2:16 PM	15:00	6.68 pH	16.61 °C	149.02 μS/cm	0.11 mg/L	1.32 NTU	111.3 mV	21.00 ft	100.00 ml/min
2/3/2021 2:21 PM	20:00	6.71 pH	16.84 °C	149.35 μS/cm	0.13 mg/L	1.88 NTU	108.2 mV	21.10 ft	100.00 ml/min
2/3/2021 2:26 PM	25:00	6.73 pH	17.06 °C	151.55 μS/cm	0.14 mg/L	1.29 NTU	106.6 mV	21.10 ft	100.00 ml/min
2/3/2021 2:31 PM	30:00	6.75 pH	17.10 °C	154.11 μS/cm	0.15 mg/L	1.24 NTU	105.4 mV	21.10 ft	100.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 3/11/2021 8:45:33 AM Project: Plant Wansley- Ash Pond Operator Name: Ryan Walker

Location Name: WGWA-1
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 119 ft
Total Depth: 129.86 ft

Initial Depth to Water: 24.01 ft

Pump Type: QED Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 124 ft Estimated Total Volume Pumped:

5000 ml

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.09 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 09:35. Sunny, 50 s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/11/2021 8:45 AM	00:00	6.82 pH	11.03 °C	59.19 μS/cm	9.32 mg/L	0.56 NTU	207.2 mV	24.01 ft	100.00 ml/min
3/11/2021 8:50 AM	05:00	5.76 pH	12.28 °C	44.94 μS/cm	3.29 mg/L	1.03 NTU	216.1 mV	24.10 ft	100.00 ml/min
3/11/2021 8:55 AM	10:00	5.65 pH	13.60 °C	49.56 μS/cm	1.23 mg/L	1.73 NTU	135.8 mV	24.10 ft	100.00 ml/min
3/11/2021 9:00 AM	15:00	5.36 pH	14.70 °C	44.08 μS/cm	0.61 mg/L	1.12 NTU	148.2 mV	24.10 ft	100.00 ml/min
3/11/2021 9:05 AM	20:00	5.25 pH	14.79 °C	45.56 µS/cm	1.52 mg/L	0.94 NTU	177.9 mV	24.10 ft	100.00 ml/min
3/11/2021 9:10 AM	25:00	5.20 pH	14.79 °C	45.42 µS/cm	1.76 mg/L	0.63 NTU	198.1 mV	24.10 ft	100.00 ml/min
3/11/2021 9:15 AM	30:00	5.21 pH	14.68 °C	44.74 µS/cm	1.73 mg/L	0.96 NTU	205.2 mV	24.10 ft	100.00 ml/min
3/11/2021 9:20 AM	35:00	5.23 pH	14.43 °C	44.13 µS/cm	1.68 mg/L	0.44 NTU	209.4 mV	24.10 ft	100.00 ml/min
3/11/2021 9:25 AM	40:00	5.20 pH	14.37 °C	42.47 µS/cm	1.67 mg/L	0.33 NTU	212.3 mV	24.10 ft	100.00 ml/min
3/11/2021 9:30 AM	45:00	5.23 pH	14.48 °C	43.44 µS/cm	1.67 mg/L	0.41 NTU	213.5 mV	24.10 ft	100.00 ml/min
3/11/2021 9:35 AM	50:00	5.26 pH	14.55 °C	43.39 μS/cm	1.67 mg/L	0.32 NTU	215.2 mV	24.10 ft	100.00 ml/min

Sample ID:	Description:
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Test Date / Time: 3/10/2021 8:24:18 AM Project: Plant Wansley- Ash Pond Operator Name: Ryan Walker

Location Name: WGWA-2
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft

Top of Screen: 92 ft Total Depth: 102.65 ft

Initial Depth to Water: 8.82 ft

Pump Type: QED Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 98 ft Estimated Total Volume Pumped:

3600 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 0.68 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 08:55. Sunny, 50 s.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/10/2021 8:24 AM	00:00	6.34 pH	13.84 °C	181.43 μS/cm	0.89 mg/L	1.59 NTU	32.6 mV	8.82 ft	120.00 ml/min
3/10/2021 8:29 AM	05:00	6.11 pH	14.50 °C	164.12 μS/cm	0.98 mg/L	2.10 NTU	128.1 mV	9.40 ft	120.00 ml/min
3/10/2021 8:34 AM	10:00	6.11 pH	14.65 °C	161.92 μS/cm	0.45 mg/L	1.37 NTU	177.8 mV	9.40 ft	120.00 ml/min
3/10/2021 8:39 AM	15:00	6.10 pH	14.84 °C	159.45 μS/cm	0.20 mg/L	1.23 NTU	189.7 mV	9.50 ft	120.00 ml/min
3/10/2021 8:44 AM	20:00	6.04 pH	15.09 °C	157.55 μS/cm	0.15 mg/L	0.35 NTU	195.5 mV	9.50 ft	120.00 ml/min
3/10/2021 8:49 AM	25:00	6.12 pH	15.19 °C	159.51 μS/cm	0.13 mg/L	0.19 NTU	192.5 mV	9.50 ft	120.00 ml/min
3/10/2021 8:54 AM	30:00	6.11 pH	15.16 °C	159.93 μS/cm	0.13 mg/L	0.26 NTU	194.3 mV	9.50 ft	120.00 ml/min

### **Samples**

Sample II	ID:	Description:	
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**Test Date / Time:** 3/10/2021 10:19:42 AM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

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: 2.88 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 14 ft
Estimated Total Volume Pumped:

10500 ml

Flow Cell Volume: 130 ml Final Flow Rate: 300 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 500

Serial Number: 601857

**Test Notes:** Sampled at 1054. Sunny 55 degrees.

Dup-1 taken here.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/10/2021 10:19 AM	00:00	7.93 pH	18.33 °C	62.93 μS/cm	7.72 mg/L	4.04 NTU	152.7 mV	2.88 ft	300.00 ml/min
3/10/2021 10:24 AM	05:00	5.48 pH	16.46 °C	31.28 µS/cm	6.13 mg/L	0.88 NTU	192.3 mV	2.88 ft	300.00 ml/min
3/10/2021 10:29 AM	10:00	5.37 pH	16.51 °C	36.87 µS/cm	6.04 mg/L	0.31 NTU	207.6 mV	2.88 ft	300.00 ml/min
3/10/2021 10:34 AM	15:00	5.41 pH	16.53 °C	35.73 µS/cm	6.00 mg/L	4.16 NTU	212.9 mV	2.88 ft	300.00 ml/min
3/10/2021 10:39 AM	20:00	5.45 pH	16.44 °C	33.69 µS/cm	6.06 mg/L	5.83 NTU	217.7 mV	2.88 ft	300.00 ml/min
3/10/2021 10:44 AM	25:00	5.47 pH	16.55 °C	29.45 μS/cm	6.02 mg/L	5.20 NTU	222.9 mV	2.88 ft	300.00 ml/min
3/10/2021 10:49 AM	30:00	5.48 pH	16.59 °C	29.38 μS/cm	6.02 mg/L	5.37 NTU	227.3 mV	2.88 ft	300.00 ml/min
3/10/2021 10:54 AM	35:00	5.49 pH	16.64 °C	30.82 µS/cm	6.03 mg/L	3.28 NTU	231.0 mV	2.88 ft	300.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/10/2021 11:27:48 AM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

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: 4.68 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 69 ft Estimated Total Volume Pumped:

7050 ml

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 1.17 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1217. Sunny 68 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/10/2021 11:27 AM	00:00	5.53 pH	25.46 °C	38.75 μS/cm	5.86 mg/L	2.03 NTU	228.9 mV	4.68 ft	120.00 ml/min
3/10/2021 11:32 AM	05:00	6.04 pH	25.18 °C	61.38 µS/cm	5.37 mg/L	42.7 NTU	216.6 mV	4.68 ft	120.00 ml/min
3/10/2021 11:37 AM	10:00	6.45 pH	23.69 °C	110.02 μS/cm	3.51 mg/L	49.2 NTU	205.0 mV	4.68 ft	120.00 ml/min
3/10/2021 11:42 AM	15:00	6.54 pH	23.36 °C	124.08 μS/cm	2.70 mg/L	44.5 NTU	-14.6 mV	4.91 ft	150.00 ml/min
3/10/2021 11:47 AM	20:00	6.64 pH	23.64 °C	127.79 μS/cm	2.47 mg/L	54.1 NTU	-86.6 mV	5.09 ft	150.00 ml/min
3/10/2021 11:52 AM	25:00	6.72 pH	24.01 °C	128.96 μS/cm	2.43 mg/L	46.7 NTU	-111.0 mV	5.22 ft	150.00 ml/min
3/10/2021 11:57 AM	30:00	6.80 pH	17.49 °C	116.64 μS/cm	2.53 mg/L	17.5 NTU	-78.8 mV	5.40 ft	150.00 ml/min
3/10/2021 12:02 PM	35:00	7.19 pH	17.17 °C	121.36 μS/cm	0.38 mg/L	5.72 NTU	-108.8 mV	5.55 ft	150.00 ml/min
3/10/2021 12:07 PM	40:00	7.22 pH	17.22 °C	120.82 μS/cm	0.19 mg/L	4.90 NTU	-119.0 mV	5.69 ft	150.00 ml/min
3/10/2021 12:12 PM	45:00	7.19 pH	17.34 °C	119.76 μS/cm	0.15 mg/L	4.47 NTU	-120.5 mV	5.85 ft	150.00 ml/min
3/10/2021 12:17 PM	50:00	7.19 pH	17.23 °C	118.95 μS/cm	0.14 mg/L	3.68 NTU	-120.5 mV	5.85 ft	150.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/10/2021 2:12:13 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** Hunter Auld

Location Name: WGWA-5
Well Diameter: 2 in

Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 13.1 ft
Total Depth: 23.19 ft

Initial Depth to Water: 14.2 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 19 ft Estimated Total Volume Pumped:

46.3 liter

Flow Cell Volume: 130 ml Final Flow Rate: 250 ml/min Final Draw Down: 4.8 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Start Purge:1400

Sampled at 1705, cloudy 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	
3/10/2021 2:12 PM	00:00	5.57 pH	17.22 °C	38.25 μS/cm	4.41 mg/L	10.1 NTU	123.1 mV	14.20 ft	250.00 ml/min
3/10/2021 2:17 PM	05:00	5.48 pH	17.24 °C	35.91 μS/cm	4.35 mg/L	13.4 NTU	156.5 mV	14.50 ft	250.00 ml/min
3/10/2021 2:22 PM	10:00	5.38 pH	16.88 °C	33.00 µS/cm	4.46 mg/L	9.69 NTU	177.5 mV	14.60 ft	250.00 ml/min
3/10/2021 2:27 PM	15:00	5.37 pH	16.69 °C	32.33 µS/cm	4.53 mg/L	10.1 NTU	191.6 mV	14.60 ft	250.00 ml/min
3/10/2021 2:32 PM	20:00	5.34 pH	17.00 °C	32.23 µS/cm	4.58 mg/L	9.90 NTU	203.3 mV	14.60 ft	250.00 ml/min
3/10/2021 2:37 PM	25:00	5.31 pH	17.02 °C	31.28 µS/cm	4.73 mg/L	11.0 NTU	212.0 mV	14.60 ft	250.00 ml/min
3/10/2021 2:42 PM	30:00	5.32 pH	16.75 °C	30.84 μS/cm	4.81 mg/L	9.36 NTU	219.3 mV	14.60 ft	250.00 ml/min
3/10/2021 2:47 PM	35:00	5.31 pH	16.81 °C	30.58 μS/cm	4.82 mg/L	10.7 NTU	223.1 mV	14.60 ft	250.00 ml/min
3/10/2021 2:52 PM	40:00	5.30 pH	16.70 °C	30.24 μS/cm	4.87 mg/L	11.2 NTU	229.0 mV	14.60 ft	250.00 ml/min
3/10/2021 2:57 PM	45:00	5.31 pH	16.68 °C	30.70 μS/cm	4.89 mg/L	11.7 NTU	232.7 mV	14.60 ft	250.00 ml/min
3/10/2021 3:02 PM	50:00	5.29 pH	16.70 °C	30.15 μS/cm	4.93 mg/L	12.2 NTU	237.5 mV	14.60 ft	250.00 ml/min
3/10/2021 3:07 PM	55:00	5.28 pH	16.64 °C	29.92 μS/cm	4.99 mg/L	13.1 NTU	241.0 mV	14.60 ft	250.00 ml/min
3/10/2021 3:12 PM	01:00:00	5.28 pH	16.36 °C	30.04 μS/cm	5.02 mg/L	15.3 NTU	243.5 mV	14.60 ft	250.00 ml/min
3/10/2021 3:17 PM	01:05:00	5.27 pH	16.66 °C	29.64 μS/cm	5.05 mg/L	16.2 NTU	247.0 mV	14.60 ft	250.00 ml/min
3/10/2021 3:22 PM	01:10:00	5.23 pH	17.00 °C	28.43 μS/cm	5.18 mg/L	19.1 NTU	253.5 mV	14.60 ft	250.00 ml/min

3/10/2021 3:27 PM	01:15:00	5.26 pH	17.06 °C	29.69 µS/cm	5.06 mg/L	21.4 NTU	255.4 mV	14.60 ft	250.00 ml/min
3/10/2021 3:32 PM	01:20:00	5.25 pH	17.08 °C	30.06 μS/cm	5.02 mg/L	34.2 NTU	258.4 mV	14.60 ft	250.00 ml/min
3/10/2021 3:37 PM	01:25:00	5.23 pH	17.44 °C	29.53 μS/cm	4.97 mg/L	20.6 NTU	261.7 mV	14.60 ft	250.00 ml/min
3/10/2021 3:42 PM	01:30:00	5.24 pH	17.46 °C	29.01 µS/cm	5.20 mg/L	12.5 NTU	263.3 mV	14.60 ft	250.00 ml/min
3/10/2021 3:47 PM	01:35:00	5.24 pH	17.26 °C	28.77 µS/cm	5.14 mg/L	9.62 NTU	262.9 mV	14.60 ft	250.00 ml/min
3/10/2021 3:52 PM	01:40:00	5.24 pH	16.94 °C	28.94 μS/cm	5.12 mg/L	9.41 NTU	265.7 mV	14.60 ft	250.00 ml/min
3/10/2021 3:57 PM	01:45:00	5.23 pH	17.02 °C	28.81 μS/cm	5.11 mg/L	8.90 NTU	268.1 mV	14.60 ft	250.00 ml/min
3/10/2021 4:02 PM	01:50:00	5.24 pH	17.07 °C	29.83 μS/cm	5.01 mg/L	10.4 NTU	269.7 mV	14.60 ft	250.00 ml/min
3/10/2021 4:07 PM	01:55:00	5.24 pH	16.91 °C	29.27 μS/cm	5.06 mg/L	9.95 NTU	270.2 mV	14.60 ft	250.00 ml/min
3/10/2021 4:12 PM	02:00:00	5.25 pH	16.86 °C	29.35 μS/cm	5.04 mg/L	10.2 NTU	269.2 mV	14.60 ft	250.00 ml/min
3/10/2021 4:17 PM	02:05:00	5.23 pH	16.86 °C	29.16 μS/cm	5.10 mg/L	9.30 NTU	270.2 mV	14.60 ft	250.00 ml/min
3/10/2021 4:22 PM	02:10:00	5.24 pH	17.06 °C	29.53 μS/cm	5.05 mg/L	9.40 NTU	272.0 mV	14.60 ft	250.00 ml/min
3/10/2021 4:27 PM	02:15:00	5.24 pH	17.11 °C	29.22 μS/cm	5.05 mg/L	9.40 NTU	273.6 mV	14.60 ft	250.00 ml/min
3/10/2021 4:32 PM	02:20:00	5.23 pH	16.80 °C	29.39 μS/cm	5.07 mg/L	9.50 NTU	275.7 mV	14.60 ft	250.00 ml/min
3/10/2021 4:37 PM	02:25:00	5.22 pH	16.97 °C	28.94 μS/cm	5.07 mg/L	9.20 NTU	277.3 mV	14.60 ft	250.00 ml/min
3/10/2021 4:42 PM	02:30:00	5.24 pH	16.75 °C	29.83 µS/cm	5.01 mg/L	9.00 NTU	277.7 mV	14.60 ft	250.00 ml/min
3/10/2021 4:47 PM	02:35:00	5.23 pH	16.50 °C	29.11 μS/cm	5.08 mg/L	9.20 NTU	280.2 mV	14.60 ft	250.00 ml/min
3/10/2021 4:52 PM	02:40:00	5.23 pH	16.52 °C	29.26 μS/cm	5.08 mg/L	9.00 NTU	280.5 mV	14.60 ft	250.00 ml/min
3/10/2021 4:57 PM	02:45:00	5.22 pH	16.79 °C	29.07 μS/cm	5.08 mg/L	9.10 NTU	281.6 mV	14.60 ft	250.00 ml/min
3/10/2021 5:02 PM	02:50:00	5.22 pH	16.94 °C	28.83 µS/cm	5.06 mg/L	9.10 NTU	282.7 mV	14.60 ft	250.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/11/2021 10:18:50 AM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

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: 15.34 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 99 ft Estimated Total Volume Pumped:

5200 ml

Flow Cell Volume: 130 ml Final Flow Rate: 140 ml/min Final Draw Down: 1.94 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

**Test Notes:** Sampled at 1058. Sunny 63 degrees.

FB-1 taken here at 1030.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/11/2021 10:18 AM	00:00	7.16 pH	16.24 °C	160.45 μS/cm	9.24 mg/L	0.57 NTU	190.6 mV	15.34 ft	100.00 ml/min
3/11/2021 10:23 AM	05:00	7.36 pH	16.48 °C	142.71 μS/cm	1.31 mg/L	0.63 NTU	-50.9 mV	15.67 ft	120.00 ml/min
3/11/2021 10:28 AM	10:00	7.81 pH	16.49 °C	132.64 μS/cm	1.12 mg/L	0.72 NTU	-78.1 mV	15.95 ft	120.00 ml/min
3/11/2021 10:33 AM	15:00	7.87 pH	16.51 °C	147.64 μS/cm	0.91 mg/L	0.24 NTU	-98.5 mV	16.24 ft	140.00 ml/min
3/11/2021 10:38 AM	20:00	7.90 pH	16.49 °C	137.88 μS/cm	0.58 mg/L	0.26 NTU	-111.9 mV	16.50 ft	140.00 ml/min
3/11/2021 10:43 AM	25:00	7.91 pH	16.54 °C	136.88 μS/cm	0.54 mg/L	0.57 NTU	-118.9 mV	16.76 ft	140.00 ml/min
3/11/2021 10:48 AM	30:00	7.92 pH	16.54 °C	125.93 μS/cm	0.49 mg/L	1.24 NTU	-123.3 mV	16.92 ft	140.00 ml/min
3/11/2021 10:53 AM	35:00	7.92 pH	16.58 °C	124.24 μS/cm	0.48 mg/L	0.16 NTU	-125.7 mV	17.10 ft	140.00 ml/min
3/11/2021 10:58 AM	40:00	7.93 pH	16.60 °C	131.21 μS/cm	0.43 mg/L	0.37 NTU	-127.7 mV	17.28 ft	140.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/10/2021 1:10:22 PM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

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: 25.21 ft

Pump Type: QED Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 34 ft Estimated Total Volume Pumped:

7700 ml

Flow Cell Volume: 130 ml Final Flow Rate: 220 ml/min Final Draw Down: 0.11 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1345. Sunny 72 degrees

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/10/2021 1:10 PM	00:00	5.94 pH	22.18 °C	25.42 μS/cm	6.71 mg/L	4.92 NTU	113.1 mV	25.21 ft	220.00 ml/min
3/10/2021 1:15 PM	05:00	5.23 pH	17.92 °C	26.39 µS/cm	7.40 mg/L	3.20 NTU	172.0 mV	25.32 ft	220.00 ml/min
3/10/2021 1:20 PM	10:00	5.12 pH	17.71 °C	26.42 µS/cm	7.44 mg/L	5.88 NTU	190.3 mV	25.32 ft	220.00 ml/min
3/10/2021 1:25 PM	15:00	5.05 pH	17.93 °C	25.41 µS/cm	7.43 mg/L	5.37 NTU	201.8 mV	25.32 ft	220.00 ml/min
3/10/2021 1:30 PM	20:00	5.02 pH	17.89 °C	25.30 μS/cm	7.36 mg/L	4.84 NTU	209.3 mV	25.32 ft	220.00 ml/min
3/10/2021 1:35 PM	25:00	4.99 pH	17.94 °C	25.30 μS/cm	7.37 mg/L	5.67 NTU	214.8 mV	25.32 ft	220.00 ml/min
3/10/2021 1:40 PM	30:00	4.96 pH	18.07 °C	25.29 µS/cm	7.36 mg/L	6.48 NTU	219.4 mV	25.32 ft	220.00 ml/min
3/10/2021 1:45 PM	35:00	4.96 pH	18.18 °C	25.27 µS/cm	7.33 mg/L	4.35 NTU	222.2 mV	25.32 ft	220.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/10/2021 2:27:49 PM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

**Location Name: WGWA-18** 

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: 20.36 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 34 ft Estimated Total Volume Pumped:

8900 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 3.36 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1542. Partly cloudy 73 degrees

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/10/2021 2:27 PM	00:00	6.52 pH	21.35 °C	82.04 μS/cm	7.72 mg/L	0.36 NTU	165.8 mV	20.36 ft	100.00 ml/min
3/10/2021 2:32 PM	05:00	6.72 pH	18.01 °C	120.46 μS/cm	2.18 mg/L	0.33 NTU	-55.5 mV	21.70 ft	120.00 ml/min
3/10/2021 2:37 PM	10:00	6.70 pH	17.79 °C	115.92 μS/cm	1.82 mg/L	0.17 NTU	-67.5 mV	22.30 ft	120.00 ml/min
3/10/2021 2:42 PM	15:00	6.27 pH	17.65 °C	98.66 μS/cm	3.11 mg/L	0.24 NTU	-39.6 mV	22.40 ft	120.00 ml/min
3/10/2021 2:47 PM	20:00	6.08 pH	17.59 °C	95.51 μS/cm	2.99 mg/L	0.22 NTU	-19.9 mV	22.50 ft	120.00 ml/min
3/10/2021 2:52 PM	25:00	5.99 pH	17.61 °C	93.07 μS/cm	2.71 mg/L	0.21 NTU	-2.2 mV	22.61 ft	120.00 ml/min
3/10/2021 2:57 PM	30:00	5.93 pH	17.49 °C	93.47 µS/cm	2.15 mg/L	0.22 NTU	13.2 mV	22.76 ft	120.00 ml/min
3/10/2021 3:02 PM	35:00	5.92 pH	17.63 °C	93.62 µS/cm	1.67 mg/L	0.18 NTU	23.8 mV	22.87 ft	120.00 ml/min
3/10/2021 3:07 PM	40:00	5.90 pH	17.55 °C	92.36 µS/cm	1.35 mg/L	0.18 NTU	33.3 mV	22.99 ft	120.00 ml/min
3/10/2021 3:12 PM	45:00	5.86 pH	17.46 °C	90.64 μS/cm	1.08 mg/L	0.21 NTU	41.2 mV	23.11 ft	120.00 ml/min
3/10/2021 3:17 PM	50:00	5.86 pH	17.49 °C	87.31 μS/cm	1.44 mg/L	0.17 NTU	46.7 mV	23.20 ft	120.00 ml/min
3/10/2021 3:22 PM	55:00	5.82 pH	17.45 °C	82.83 µS/cm	1.98 mg/L	0.28 NTU	56.4 mV	23.31 ft	120.00 ml/min
3/10/2021 3:27 PM	01:00:00	5.80 pH	17.56 °C	80.57 μS/cm	2.43 mg/L	0.31 NTU	65.2 mV	23.40 ft	120.00 ml/min
3/10/2021 3:32 PM	01:05:00	5.83 pH	17.73 °C	77.99 µS/cm	2.82 mg/L	0.24 NTU	70.3 mV	23.50 ft	120.00 ml/min
3/10/2021 3:37 PM	01:10:00	5.81 pH	17.55 °C	76.14 μS/cm	2.86 mg/L	0.22 NTU	76.6 mV	23.61 ft	120.00 ml/min

3/10/2021	01:15:00	F 90 ml l	17.52 °C	76 47 uC/om	2.00	0.18 NTU	90.0 ~\/	23.72 ft	120.00 ml/min
3:42 PM	01:15.00	5.80 pH	17.52 C	76.47 µS/cm	2.98 mg/L	0.16 N10	80.9 mV	23.7211	120.00 mi/min

## Samples

Sample ID:	Description:
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**Test Date / Time:** 3/11/2021 11:40:53 AM **Project:** Plant Wansley- Ash Pond **Operator Name:** Ryan Walker

Location Name: WGWC-8

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 49 ft Total Depth: 59.63 ft

Initial Depth to Water: 4.34 ft

Pump Type: QED Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 54 ft
Estimated Total Volume Pumped:

3000 ml

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.46 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 12:12. Sunny 60 s.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/11/2021 11:40 AM	00:00	5.82 pH	16.03 °C	911.71 μS/cm	4.43 mg/L	1.93 NTU	200.5 mV	4.34 ft	100.00 ml/min
3/11/2021 11:45 AM	05:00	5.70 pH	16.08 °C	898.67 μS/cm	2.50 mg/L	2.45 NTU	205.8 mV	4.80 ft	100.00 ml/min
3/11/2021 11:50 AM	10:00	5.52 pH	16.23 °C	909.38 μS/cm	2.10 mg/L	1.78 NTU	212.3 mV	4.80 ft	100.00 ml/min
3/11/2021 11:55 AM	15:00	5.44 pH	16.44 °C	915.78 μS/cm	1.94 mg/L	1.22 NTU	217.0 mV	4.80 ft	100.00 ml/min
3/11/2021 12:00 PM	20:00	5.39 pH	16.34 °C	916.51 μS/cm	1.82 mg/L	1.27 NTU	219.7 mV	4.80 ft	100.00 ml/min
3/11/2021 12:05 PM	25:00	5.36 pH	16.62 °C	917.67 μS/cm	1.71 mg/L	1.46 NTU	221.9 mV	4.80 ft	100.00 ml/min
3/11/2021 12:10 PM	30:00	5.35 pH	16.61 °C	918.47 μS/cm	1.58 mg/L	1.52 NTU	224.4 mV	4.80 ft	100.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/12/2021 9:40:30 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** Hunter Auld

Location Name: WGWC-9

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 51.4 ft Total Depth: 61.42 ft

Initial Depth to Water: 19.58 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 56 ft Estimated Total Volume Pumped:

5.2 liter

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 27.8 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1007, sunny 60s.

### 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	
3/12/2021 9:40 AM	00:00	6.12 pH	18.49 °C	177.45 μS/cm	2.76 mg/L	1.78 NTU	213.2 mV	19.58 ft	100.00 ml/min
3/12/2021 9:45 AM	05:00	5.87 pH	18.63 °C	176.81 μS/cm	1.47 mg/L	3.55 NTU	211.2 mV	21.70 ft	100.00 ml/min
3/12/2021 9:50 AM	10:00	5.87 pH	18.79 °C	176.38 μS/cm	1.41 mg/L	2.19 NTU	207.3 mV	21.70 ft	100.00 ml/min
3/12/2021 9:55 AM	15:00	5.88 pH	18.83 °C	176.32 μS/cm	1.39 mg/L	4.98 NTU	204.2 mV	21.80 ft	100.00 ml/min
3/12/2021 10:00 AM	20:00	5.88 pH	19.10 °C	175.12 μS/cm	1.33 mg/L	3.59 NTU	203.5 mV	21.80 ft	100.00 ml/min
3/12/2021 10:05 AM	25:00	5.88 pH	19.10 °C	176.61 μS/cm	1.37 mg/L	2.30 NTU	202.6 mV	21.90 ft	100.00 ml/min

### **Samples**

Sa	ample ID:	Description:
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Test Date / Time: 3/11/2021 3:38:29 PM Project: Plant Wansley- Ash Pond Operator Name: Ryan Walker

**Location Name: WGWC-10** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 138 ft Total Depth: 148.98 ft

Initial Depth to Water: 14.65 ft

Pump Type: QED Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 143 ft Estimated Total Volume Pumped:

4500 ml

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.65 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 16:25. Sunny, 60 s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/11/2021 3:38 PM	00:00	7.29 pH	24.63 °C	29.31 µS/cm	8.06 mg/L	0.38 NTU	64.8 mV	14.65 ft	100.00 ml/min
3/11/2021 3:43 PM	05:00	6.74 pH	18.73 °C	82.46 µS/cm	4.34 mg/L	1.22 NTU	90.5 mV	15.90 ft	100.00 ml/min
3/11/2021 3:48 PM	10:00	6.47 pH	17.80 °C	80.59 µS/cm	0.91 mg/L	1.37 NTU	108.1 mV	15.50 ft	100.00 ml/min
3/11/2021 3:53 PM	15:00	6.43 pH	17.45 °C	79.92 µS/cm	1.33 mg/L	1.23 NTU	116.9 mV	15.80 ft	100.00 ml/min
3/11/2021 3:58 PM	20:00	6.45 pH	17.55 °C	80.22 µS/cm	2.28 mg/L	1.11 NTU	123.0 mV	15.90 ft	100.00 ml/min
3/11/2021 4:03 PM	25:00	6.50 pH	17.42 °C	81.44 µS/cm	3.67 mg/L	1.08 NTU	127.5 mV	16.00 ft	100.00 ml/min
3/11/2021 4:08 PM	30:00	6.54 pH	17.30 °C	82.40 µS/cm	4.67 mg/L	1.12 NTU	131.6 mV	16.10 ft	100.00 ml/min
3/11/2021 4:13 PM	35:00	6.54 pH	17.20 °C	82.59 µS/cm	5.02 mg/L	1.17 NTU	135.7 mV	16.20 ft	100.00 ml/min
3/11/2021 4:18 PM	40:00	6.53 pH	17.07 °C	82.50 µS/cm	5.10 mg/L	1.35 NTU	140.0 mV	16.30 ft	100.00 ml/min
3/11/2021 4:23 PM	45:00	6.56 pH	17.28 °C	82.68 µS/cm	5.12 mg/L	1.22 NTU	140.8 mV	16.30 ft	100.00 ml/min

	Sample ID:	Description:
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**Test Date / Time:** 3/12/2021 11:24:16 PM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

**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: 20.11 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 44 ft
Estimated Total Volume Pumped:

4125 ml

Flow Cell Volume: 130 ml Final Flow Rate: 125 ml/min Final Draw Down: 5.16 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1154. Sunny 72 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/12/2021 11:24 AM	00:00	7.07 pH	20.92 °C	37.73 μS/cm	7.90 mg/L	4.75 NTU	130.6 mV	20.11 ft	150.00 ml/min
3/12/2021 11:29 AM	05:00	5.40 pH	17.69 °C	31.21 µS/cm	8.49 mg/L	33.4 NTU	235.4 mV	21.13 ft	150.00 ml/min
3/12/2021 11:34 AM	10:00	5.29 pH	17.58 °C	30.68 µS/cm	8.35 mg/L	20.2 NTU	264.3 mV	24.00 ft	150.00 ml/min
3/12/2021 11:39 AM	15:00	5.30 pH	17.67 °C	31.02 µS/cm	8.37 mg/L	15.6 NTU	276.2 mV	24.77 ft	125.00 ml/min
3/12/2021 11:44 AM	20:00	5.34 pH	17.94 °C	31.51 µS/cm	8.34 mg/L	8.79 NTU	282.0 mV	25.10 ft	125.00 ml/min
3/12/2021 11:49 AM	25:00	5.43 pH	18.25 °C	32.05 µS/cm	8.34 mg/L	5.36 NTU	283.0 mV	25.22 ft	125.00 ml/min
3/12/2021 11:54 AM	30:00	5.43 pH	18.10 °C	32.48 µS/cm	8.36 mg/L	3.10 NTU	286.1 mV	25.27 ft	125.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/12/2021 10:09:29 AM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

**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: 19.87 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

10600 ml

Flow Cell Volume: 130 ml Final Flow Rate: 220 ml/min Final Draw Down: 1.19 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1059. Sunny 69 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/12/2021 10:09 AM	00:00	6.61 pH	17.93 °C	102.99 μS/cm	5.10 mg/L	9.52 NTU	238.4 mV	19.87 ft	140.00 ml/min
3/12/2021 10:14 AM	05:00	6.33 pH	17.27 °C	86.70 µS/cm	0.72 mg/L	751 NTU	91.2 mV	20.51 ft	220.00 ml/min
3/12/2021 10:19 AM	10:00	6.43 pH	17.40 °C	88.62 µS/cm	0.20 mg/L	143 NTU	79.1 mV	20.59 ft	220.00 ml/min
3/12/2021 10:24 AM	15:00	6.50 pH	17.32 °C	92.10 μS/cm	0.17 mg/L	106 NTU	71.5 mV	20.65 ft	220.00 ml/min
3/12/2021 10:29 AM	20:00	6.51 pH	17.29 °C	98.15 μS/cm	0.19 mg/L	61.8 NTU	67.7 mV	20.71 ft	220.00 ml/min
3/12/2021 10:34 AM	25:00	6.57 pH	17.28 °C	96.11 μS/cm	0.18 mg/L	47.3 NTU	62.3 mV	20.78 ft	220.00 ml/min
3/12/2021 10:39 AM	30:00	6.60 pH	17.32 °C	97.27 μS/cm	0.18 mg/L	37.1 NTU	59.2 mV	20.84 ft	220.00 ml/min
3/12/2021 10:44 AM	35:00	6.63 pH	17.39 °C	92.98 µS/cm	0.17 mg/L	22.9 NTU	57.1 mV	20.90 ft	220.00 ml/min
3/12/2021 10:49 AM	40:00	6.66 pH	17.42 °C	108.36 μS/cm	0.17 mg/L	9.42 NTU	55.1 mV	20.95 ft	220.00 ml/min
3/12/2021 10:54 AM	45:00	6.66 pH	17.34 °C	110.53 μS/cm	0.17 mg/L	6.35 NTU	54.8 mV	21.00 ft	220.00 ml/min
3/12/2021 10:59 AM	50:00	6.66 pH	17.31 °C	110.33 μS/cm	0.18 mg/L	4.73 NTU	54.8 mV	21.06 ft	220.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/11/2021 1:23:36 PM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

**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: 19.46 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

3600 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 3.04 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1353. Sunny 72 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/11/2021 1:23 PM	00:00	6.74 pH	22.84 °C	53.47 μS/cm	7.50 mg/L	0.86 NTU	95.7 mV	19.46 ft	120.00 ml/min
3/11/2021 1:28 PM	05:00	5.95 pH	18.65 °C	56.34 µS/cm	2.53 mg/L	2.95 NTU	135.1 mV	20.22 ft	120.00 ml/min
3/11/2021 1:33 PM	10:00	5.99 pH	18.42 °C	58.41 µS/cm	3.06 mg/L	6.94 NTU	145.2 mV	21.88 ft	120.00 ml/min
3/11/2021 1:38 PM	15:00	5.95 pH	18.02 °C	57.79 μS/cm	3.01 mg/L	5.85 NTU	152.3 mV	22.29 ft	120.00 ml/min
3/11/2021 1:43 PM	20:00	5.95 pH	17.93 °C	57.75 μS/cm	2.97 mg/L	4.97 NTU	156.4 mV	22.37 ft	120.00 ml/min
3/11/2021 1:48 PM	25:00	5.94 pH	18.03 °C	57.86 μS/cm	2.87 mg/L	4.17 NTU	159.8 mV	22.46 ft	120.00 ml/min
3/11/2021 1:53 PM	30:00	5.95 pH	18.03 °C	58.22 μS/cm	2.83 mg/L	3.67 NTU	162.1 mV	22.50 ft	120.00 ml/min

#### **Samples**

Sample II	ID:	Description:	
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Test Date / Time: 3/11/2021 2:31:17 PM Project: Plant Wansley - Ash Pond

Operator Name: T. Goble

**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: 18.53 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

6750 ml

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 2.97 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1516. Sunny 73 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/11/2021 2:31 PM	00:00	5.96 pH	23.92 °C	28.56 µS/cm	6.58 mg/L	1.62 NTU	162.1 mV	18.53 ft	150.00 ml/min
3/11/2021 2:36 PM	05:00	5.39 pH	18.43 °C	25.63 µS/cm	5.46 mg/L	1.24 NTU	202.7 mV	19.46 ft	150.00 ml/min
3/11/2021 2:41 PM	10:00	5.28 pH	18.23 °C	25.55 µS/cm	5.42 mg/L	0.63 NTU	220.7 mV	20.23 ft	150.00 ml/min
3/11/2021 2:46 PM	15:00	5.20 pH	18.45 °C	25.56 µS/cm	5.38 mg/L	1.28 NTU	232.8 mV	20.91 ft	150.00 ml/min
3/11/2021 2:51 PM	20:00	5.07 pH	18.60 °C	27.46 µS/cm	3.48 mg/L	0.88 NTU	242.7 mV	20.98 ft	150.00 ml/min
3/11/2021 2:56 PM	25:00	5.04 pH	18.63 °C	28.87 µS/cm	2.45 mg/L	1.04 NTU	248.9 mV	21.10 ft	150.00 ml/min
3/11/2021 3:01 PM	30:00	5.05 pH	18.31 °C	30.23 µS/cm	1.83 mg/L	3.87 NTU	249.5 mV	21.21 ft	150.00 ml/min
3/11/2021 3:06 PM	35:00	5.05 pH	18.13 °C	31.04 µS/cm	1.47 mg/L	4.50 NTU	249.6 mV	21.30 ft	150.00 ml/min
3/11/2021 3:11 PM	40:00	5.09 pH	18.24 °C	31.43 µS/cm	1.65 mg/L	4.88 NTU	246.5 mV	21.41 ft	150.00 ml/min
3/11/2021 3:16 PM	45:00	5.10 pH	18.15 °C	31.78 µS/cm	1.54 mg/L	4.31 NTU	243.0 mV	21.50 ft	150.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/12/2021 11:09:52 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** Hunter Auld

**Location Name: WGWC-15** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43.3 ft Total Depth: 53.36 ft

Initial Depth to Water: 20.13 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 48.3 ft Estimated Total Volume Pumped:

5.2 liter

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 16.4 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1157, sunny 70s, FB-2 here at 1205.

### 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	
3/12/2021 11:09 AM	00:00	7.02 pH	20.58 °C	133.07 μS/cm	8.52 mg/L	0.13 NTU	164.9 mV	20.13 ft	100.00 ml/min
3/12/2021 11:14 AM	05:00	7.12 pH	17.36 °C	207.78 μS/cm	3.28 mg/L	0.30 NTU	144.7 mV	20.70 ft	100.00 ml/min
3/12/2021 11:19 AM	10:00	7.33 pH	17.57 °C	224.05 μS/cm	2.20 mg/L	0.93 NTU	71.9 mV	20.80 ft	100.00 ml/min
3/12/2021 11:24 AM	15:00	7.54 pH	18.05 °C	227.49 μS/cm	1.61 mg/L	0.21 NTU	19.1 mV	20.90 ft	100.00 ml/min
3/12/2021 11:29 AM	20:00	7.65 pH	17.79 °C	220.79 μS/cm	1.73 mg/L	1.20 NTU	7.2 mV	21.00 ft	100.00 ml/min
3/12/2021 11:34 AM	25:00	7.69 pH	18.01 °C	215.23 μS/cm	2.35 mg/L	1.10 NTU	8.6 mV	21.10 ft	100.00 ml/min
3/12/2021 11:39 AM	30:00	7.70 pH	17.83 °C	209.47 μS/cm	2.85 mg/L	0.60 NTU	18.3 mV	21.20 ft	100.00 ml/min
3/12/2021 11:44 AM	35:00	7.71 pH	18.40 °C	207.77 μS/cm	3.19 mg/L	0.50 NTU	25.3 mV	21.30 ft	100.00 ml/min
3/12/2021 11:49 AM	40:00	7.71 pH	18.61 °C	206.45 μS/cm	3.33 mg/L	0.40 NTU	30.5 mV	21.40 ft	100.00 ml/min
3/12/2021 11:54 AM	45:00	7.72 pH	18.57 °C	205.88 μS/cm	3.33 mg/L	0.60 NTU	34.4 mV	21.50 ft	100.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/11/2021 1:20:36 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** Hunter Auld

**Location Name: WGWC-16** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 24.7 ft Total Depth: 34.78 ft

Initial Depth to Water: 19.09 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 29.7 ft Estimated Total Volume Pumped:

4.8 liter

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 2.5 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1347, sunny 70s, EB-2 here at 1355- gloves.

### 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	
3/11/2021 1:20 PM	00:00	5.28 pH	17.29 °C	350.27 μS/cm	4.56 mg/L	4.40 NTU	129.1 mV	19.09 ft	125.00 ml/min
3/11/2021 1:25 PM	05:00	5.25 pH	17.07 °C	350.97 μS/cm	3.82 mg/L	4.23 NTU	153.2 mV	19.30 ft	150.00 ml/min
3/11/2021 1:30 PM	10:00	5.22 pH	16.91 °C	351.12 μS/cm	3.75 mg/L	3.76 NTU	168.7 mV	19.30 ft	150.00 ml/min
3/11/2021 1:35 PM	15:00	5.22 pH	17.07 °C	350.89 μS/cm	3.71 mg/L	2.50 NTU	179.4 mV	19.30 ft	150.00 ml/min
3/11/2021 1:40 PM	20:00	5.22 pH	16.95 °C	351.38 μS/cm	3.72 mg/L	1.80 NTU	187.9 mV	19.30 ft	150.00 ml/min
3/11/2021 1:45 PM	25:00	5.21 pH	17.02 °C	352.42 μS/cm	3.76 mg/L	1.20 NTU	193.4 mV	19.30 ft	150.00 ml/min

### **Samples**

Sa	ample ID:	Description:
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**Test Date / Time:** 3/11/2021 11:41:19 AM **Project:** Plant Wansley - Ash Pond

Operator Name: T. Goble

**Location Name: WGWC-17** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 in Top of Screen: 85.9 ft Total Depth: 95.94 ft

Initial Depth to Water: 30.04 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

6000 ml

Flow Cell Volume: 130 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.98 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1210. Sunny 68 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/11/2021 11:41 AM	00:00	7.19 pH	19.66 °C	73.27 µS/cm	7.72 mg/L	0.61 NTU	69.7 mV	30.04 ft	200.00 ml/min
3/11/2021 11:46 AM	05:00	5.88 pH	17.45 °C	78.49 µS/cm	0.56 mg/L	1.00 NTU	28.3 mV	30.91 ft	200.00 ml/min
3/11/2021 11:51 AM	10:00	5.89 pH	17.50 °C	77.48 µS/cm	0.70 mg/L	0.59 NTU	49.8 mV	32.40 ft	200.00 ml/min
3/11/2021 11:56 AM	15:00	5.91 pH	17.40 °C	77.88 µS/cm	0.62 mg/L	0.79 NTU	43.8 mV	32.68 ft	200.00 ml/min
3/11/2021 12:01 PM	20:00	5.93 pH	17.41 °C	78.16 µS/cm	0.43 mg/L	0.62 NTU	38.2 mV	32.82 ft	200.00 ml/min
3/11/2021 12:06 PM	25:00	5.95 pH	17.48 °C	78.26 µS/cm	0.34 mg/L	0.47 NTU	35.7 mV	32.90 ft	200.00 ml/min
3/11/2021 12:11 PM	30:00	5.96 pH	17.47 °C	75.35 μS/cm	0.29 mg/L	0.59 NTU	34.1 mV	33.02 ft	200.00 ml/min

#### **Samples**

Sample II	ID:	Description:	
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Test Date / Time: 3/11/2021 1:58:34 PM Project: Plant Wansley- Ash Pond Operator Name: Ryan Walker

**Location Name: WGWC-19** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 84 ft Total Depth: 94.84 ft

Initial Depth to Water: 18.96 ft

Pump Type: QED Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 89 ft Estimated Total Volume Pumped:

12250 ml

Flow Cell Volume: 130 ml Final Flow Rate: 250 ml/min Final Draw Down: 2.14 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 14:55. Sunny, 70 s. Dup-2 here.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/11/2021 1:58 PM	00:00	6.97 pH	17.88 °C	184.65 μS/cm	1.65 mg/L	0.33 NTU	-85.3 mV	18.96 ft	200.00 ml/min
3/11/2021 2:03 PM	05:00	6.94 pH	17.95 °C	169.54 μS/cm	0.36 mg/L	0.73 NTU	-31.9 mV	21.00 ft	200.00 ml/min
3/11/2021 2:08 PM	10:00	6.89 pH	18.05 °C	168.46 μS/cm	0.12 mg/L	0.68 NTU	-3.9 mV	21.00 ft	200.00 ml/min
3/11/2021 2:13 PM	15:00	6.93 pH	17.93 °C	168.85 μS/cm	0.09 mg/L	0.55 NTU	11.3 mV	21.00 ft	200.00 ml/min
3/11/2021 2:18 PM	20:00	6.96 pH	18.04 °C	170.84 μS/cm	0.09 mg/L	0.42 NTU	24.7 mV	21.00 ft	200.00 ml/min
3/11/2021 2:23 PM	25:00	6.94 pH	17.92 °C	173.28 μS/cm	0.09 mg/L	0.57 NTU	37.2 mV	21.10 ft	200.00 ml/min
3/11/2021 2:28 PM	30:00	6.99 pH	17.87 °C	178.20 μS/cm	0.10 mg/L	0.50 NTU	44.9 mV	21.10 ft	250.00 ml/min
3/11/2021 2:33 PM	35:00	7.01 pH	18.28 °C	184.74 μS/cm	0.10 mg/L	0.63 NTU	52.5 mV	21.10 ft	250.00 ml/min
3/11/2021 2:38 PM	40:00	7.04 pH	17.72 °C	190.36 μS/cm	0.13 mg/L	0.50 NTU	55.1 mV	21.10 ft	250.00 ml/min
3/11/2021 2:43 PM	45:00	7.09 pH	17.98 °C	194.08 μS/cm	0.12 mg/L	0.67 NTU	47.2 mV	21.10 ft	250.00 ml/min
3/11/2021 2:48 PM	50:00	7.07 pH	18.21 °C	196.69 μS/cm	0.13 mg/L	0.61 NTU	40.7 mV	21.10 ft	250.00 ml/min
3/11/2021 2:53 PM	55:00	7.12 pH	17.93 °C	199.82 μS/cm	0.14 mg/L	0.59 NTU	39.9 mV	21.10 ft	250.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/8/2021 2:35:51 PM **Project:** Plant Wansley - Ash Pond PZ

**Operator Name:** Hunter Auld

Location Name: PZ-22
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 32.8 ft
Total Depth: 42.85 ft

Initial Depth to Water: 25.86 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 36 ft Estimated Total Volume Pumped:

7.5 liter

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 6.5 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1525, sunny 60s.

### 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	
3/8/2021 2:35 PM	00:00	5.56 pH	19.75 °C	715.57 μS/cm	6.50 mg/L	9.44 NTU	195.3 mV	25.86 ft	150.00 ml/min
3/8/2021 2:40 PM	05:00	5.55 pH	19.48 °C	724.97 µS/cm	5.03 mg/L	22.0 NTU	211.0 mV	26.20 ft	150.00 ml/min
3/8/2021 2:45 PM	10:00	5.55 pH	19.41 °C	724.55 μS/cm	4.94 mg/L	8.37 NTU	219.2 mV	26.20 ft	150.00 ml/min
3/8/2021 2:50 PM	15:00	5.55 pH	19.49 °C	725.20 μS/cm	4.89 mg/L	5.95 NTU	224.2 mV	26.30 ft	150.00 ml/min
3/8/2021 2:55 PM	20:00	5.55 pH	19.47 °C	727.48 µS/cm	4.86 mg/L	9.32 NTU	227.8 mV	26.30 ft	150.00 ml/min
3/8/2021 3:00 PM	25:00	5.55 pH	19.39 °C	728.69 µS/cm	4.90 mg/L	8.41 NTU	230.6 mV	26.40 ft	150.00 ml/min
3/8/2021 3:05 PM	30:00	5.55 pH	19.34 °C	728.43 µS/cm	4.93 mg/L	8.44 NTU	234.1 mV	26.40 ft	150.00 ml/min
3/8/2021 3:10 PM	35:00	5.54 pH	19.50 °C	728.64 µS/cm	4.84 mg/L	7.87 NTU	234.3 mV	26.40 ft	150.00 ml/min
3/8/2021 3:15 PM	40:00	5.54 pH	19.72 °C	728.68 μS/cm	4.82 mg/L	5.39 NTU	235.4 mV	26.40 ft	150.00 ml/min
3/8/2021 3:20 PM	45:00	5.54 pH	19.44 °C	733.17 µS/cm	5.05 mg/L	3.02 NTU	234.3 mV	26.40 ft	150.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 1:27:21 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: Ryan Walker

Location Name: PZ-23D Well Diameter: 2 in Casing Type: PVC

Screen Length: 10 ft Top of Screen: 84 ft Total Depth: 94.8 ft

Initial Depth to Water: 48.94 ft

Pump Type: Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 89 ft Estimated Total Volume Pumped:

9600 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 0.19 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 14:50. Sunny 60 s.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/9/2021 1:27 PM	00:00	7.27 pH	19.25 °C	622.69 µS/cm	3.30 mg/L	3.72 NTU	7.9 mV	48.94 ft	120.00 ml/min
3/9/2021 1:32 PM	05:00	7.24 pH	18.41 °C	599.80 μS/cm	1.63 mg/L	6.62 NTU	30.7 mV	49.10 ft	120.00 ml/min
3/9/2021 1:37 PM	10:00	7.26 pH	18.19 °C	598.39 μS/cm	1.13 mg/L	8.53 NTU	37.9 mV	49.10 ft	120.00 ml/min
3/9/2021 1:42 PM	15:00	7.25 pH	18.00 °C	596.79 μS/cm	0.83 mg/L	14.1 NTU	42.3 mV	49.10 ft	120.00 ml/min
3/9/2021 1:47 PM	20:00	7.25 pH	17.94 °C	592.40 μS/cm	0.69 mg/L	24.3 NTU	0.2 mV	49.10 ft	120.00 ml/min
3/9/2021 1:52 PM	25:00	7.21 pH	17.76 °C	582.45 μS/cm	0.59 mg/L	39.2 NTU	-62.0 mV	49.10 ft	120.00 ml/min
3/9/2021 1:57 PM	30:00	7.13 pH	17.79 °C	557.32 μS/cm	0.52 mg/L	37.7 NTU	-87.1 mV	49.10 ft	120.00 ml/min
3/9/2021 2:02 PM	35:00	7.13 pH	17.70 °C	552.09 μS/cm	0.49 mg/L	30.4 NTU	-94.3 mV	49.10 ft	120.00 ml/min
3/9/2021 2:07 PM	40:00	7.08 pH	17.59 °C	537.59 μS/cm	0.44 mg/L	19.0 NTU	-94.1 mV	49.10 ft	120.00 ml/min
3/9/2021 2:12 PM	45:00	7.05 pH	17.77 °C	529.18 μS/cm	0.40 mg/L	22.9 NTU	-94.3 mV	49.10 ft	120.00 ml/min
3/9/2021 2:17 PM	50:00	7.01 pH	17.62 °C	518.24 μS/cm	0.38 mg/L	20.5 NTU	-93.7 mV	49.10 ft	120.00 ml/min
3/9/2021 2:22 PM	55:00	6.95 pH	17.72 °C	501.66 μS/cm	0.35 mg/L	18.9 NTU	-92.4 mV	49.10 ft	120.00 ml/min
3/9/2021 2:27 PM	01:00:00	6.94 pH	17.69 °C	489.15 μS/cm	0.33 mg/L	15.2 NTU	-94.3 mV	49.10 ft	120.00 ml/min
3/9/2021 2:32 PM	01:05:00	6.90 pH	17.69 °C	473.72 μS/cm	0.31 mg/L	11.8 NTU	-95.1 mV	49.10 ft	120.00 ml/min
3/9/2021 2:37 PM	01:10:00	6.88 pH	17.72 °C	490.51 μS/cm	0.29 mg/L	9.45 NTU	-96.8 mV	49.10 ft	120.00 ml/min

3/9/2021 2:42 PM	01:15:00	6.85 pH	17.64 °C	483.51 μS/cm	0.27 mg/L	7.63 NTU	-98.1 mV	49.10 ft	120.00 ml/min
3/9/2021 2:47 PM	01:20:00	6.85 pH	17.67 °C	479.14 μS/cm	0.25 mg/L	3.97 NTU	-99.8 mV	49.10 ft	120.00 ml/min

## Samples

Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 9:57:23 AM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: Ryan Walker

Location Name: PZ-23S Well Diameter: 2 in Casing Type: PVC

Screen Length: 10 ft Top of Screen: 61 ft Total Depth: 71.73 ft

Initial Depth to Water: 48.98 ft

Pump Type: Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 66 ft Estimated Total Volume Pumped:

17400 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 11.92 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 12:30. Sunny, 60 s. FB-1 here.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/9/2021 9:57 AM	00:00	7.20 pH	17.00 °C	912.26 μS/cm	0.62 mg/L	7.65 NTU	17.1 mV	48.98 ft	120.00 ml/min
3/9/2021 10:02 AM	05:00	7.25 pH	17.19 °C	885.82 μS/cm	0.37 mg/L	10.7 NTU	-43.8 mV	50.80 ft	120.00 ml/min
3/9/2021 10:07 AM	10:00	7.24 pH	17.40 °C	856.60 μS/cm	0.35 mg/L	17.5 NTU	-65.4 mV	51.40 ft	120.00 ml/min
3/9/2021 10:12 AM	15:00	7.24 pH	17.30 °C	841.68 μS/cm	0.38 mg/L	43.8 NTU	-66.2 mV	52.30 ft	120.00 ml/min
3/9/2021 10:17 AM	20:00	7.23 pH	17.24 °C	816.74 μS/cm	0.38 mg/L	68.8 NTU	-60.3 mV	52.70 ft	120.00 ml/min
3/9/2021 10:22 AM	25:00	7.25 pH	17.30 °C	808.64 μS/cm	0.39 mg/L	69.8 NTU	-55.4 mV	53.50 ft	120.00 ml/min
3/9/2021 10:27 AM	30:00	7.25 pH	17.16 °C	804.89 μS/cm	0.40 mg/L	95.7 NTU	-44.6 mV	54.00 ft	120.00 ml/min
3/9/2021 10:32 AM	35:00	7.27 pH	17.20 °C	801.99 μS/cm	0.39 mg/L	109 NTU	-36.3 mV	54.90 ft	120.00 ml/min
3/9/2021 10:37 AM	40:00	7.27 pH	17.19 °C	799.69 µS/cm	0.39 mg/L	133 NTU	-40.3 mV	55.30 ft	120.00 ml/min
3/9/2021 10:42 AM	45:00	7.24 pH	17.21 °C	795.68 μS/cm	0.38 mg/L	94.7 NTU	-36.9 mV	55.70 ft	120.00 ml/min
3/9/2021 10:47 AM	50:00	7.28 pH	17.12 °C	789.04 μS/cm	0.38 mg/L	84.7 NTU	-39.1 mV	56.30 ft	120.00 ml/min
3/9/2021 10:52 AM	55:00	7.27 pH	17.13 °C	785.42 μS/cm	0.39 mg/L	79.7 NTU	-42.3 mV	56.70 ft	120.00 ml/min
3/9/2021 10:57 AM	01:00:00	7.28 pH	17.11 °C	779.44 μS/cm	0.37 mg/L	68.3 NTU	-47.0 mV	57.00 ft	120.00 ml/min
3/9/2021 11:02 AM	01:05:00	7.28 pH	17.29 °C	773.46 μS/cm	0.37 mg/L	49.2 NTU	-51.4 mV	57.30 ft	120.00 ml/min
3/9/2021 11:07 AM	01:10:00	7.27 pH	17.20 °C	764.06 μS/cm	0.37 mg/L	29.8 NTU	-55.4 mV	57.90 ft	120.00 ml/min

3/9/2021									
11:12 AM	01:15:00	7.29 pH	17.20 °C	763.36 µS/cm	0.41 mg/L	11.1 NTU	-64.0 mV	58.30 ft	120.00 ml/min
3/9/2021									
11:17 AM	01:20:00	7.28 pH	17.19 °C	758.16 µS/cm	0.46 mg/L	7.63 NTU	-68.8 mV	58.70 ft	120.00 ml/min
3/9/2021									
11:22 AM	01:25:00	7.30 pH	17.25 °C	747.28 µS/cm	0.50 mg/L	4.78 NTU	-74.2 mV	59.20 ft	120.00 ml/min
3/9/2021									
11:27 AM	01:30:00	7.29 pH	17.30 °C	740.23 µS/cm	0.60 mg/L	5.08 NTU	-77.4 mV	59.60 ft	100.00 ml/min
3/9/2021	01:35:00	7.31 pH	17.51 °C	736.09 µS/cm	0.69 mg/L	4.00 NTU	-78.2 mV	60.10 ft	100.00 ml/min
11:32 AM									
3/9/2021	01:40:00	7.30 pH	17.63 °C	731.13 µS/cm	0.85 mg/L	3.51 NTU	-76.9 mV	60.30 ft	100.00 ml/min
11:37 AM									
3/9/2021	01:45:00	7.30 pH	17.54 °C	723.45 µS/cm	1.07 mg/L	2.50 NTU	-72.6 mV	60.50 ft	100.00 ml/min
11:42 AM		-		·					
3/9/2021	01:50:00	7.32 pH	17.51 °C	722.76 µS/cm	1.24 mg/L	3.17 NTU	-69.4 mV	60.70 ft	100.00 ml/min
11:47 AM				·					
3/9/2021	01:55:00	7.32 pH	17.35 °C	722.23 µS/cm	1.37 mg/L	3.91 NTU	-65.8 mV	60.90 ft	100.00 ml/min
11:52 AM		'		'	<u> </u>				
3/9/2021	02:00:00	7.33 pH	17.49 °C	726.50 µS/cm	1.48 mg/L	3.84 NTU	-63.5 mV	60.90 ft	120.00 ml/min
11:57 AM									
3/9/2021	02:05:00	7.33 pH	17.46 °C	730.73 µS/cm	1.60 mg/L	2.03 NTU	-61.0 mV	60.90 ft	120.00 ml/min
12:02 PM	0=100100			Took					
3/9/2021	02:10:00	7.33 pH	17.55 °C	826.52 µS/cm	1.74 mg/L	2.19 NTU	-51.0 mV	60.90 ft	120.00 ml/min
12:07 PM	02.10.00	7.00 pri	17.00 0	020.02 po/om		2.101110		00.0011	120.00 1111/11111
3/9/2021	02:15:00	7.34 pH	17.58 °C	890.99 µS/cm	1.49 mg/L	1.80 NTU	-46.2 mV	60.90 ft	120.00 ml/min
12:12 PM	02.15.00	7.54 pm	17.50 0	030.33 μο/οπ	1.43 Hg/L	1.00 1410	40.2 IIIV	00.30 10	120.00 1111/111111
3/9/2021	02:20:00	7.34 pH	17.54 °C	919.67 µS/cm	1.34 mg/L	0.84 NTU	-44.5 mV	60.90 ft	120.00 ml/min
12:17 PM	02.20.00	7.04 pm	17.54 0	0.10.07 μο/οπ	1.57 mg/L	3.071110		00.50 10	120.00 111/111111
3/9/2021	02:25:00	7.33 pH	17.67 °C	918.62 µS/cm	1.19 mg/L	1.08 NTU	-46.9 mV	60.90 ft	120.00 ml/min
12:22 PM	02.23.00	7.33 pri	17.07	910.02 μ3/011	1.19 Hig/L	1.00 N10	-40.5 IIIV	00.90 10	120.00 111/111111
3/9/2021	02:30:00	7.29 pH	17.78 °C	900.90 µS/cm	1.07 mg/L	1.08 NTU	-46.9 mV	60.90 ft	120.00 ml/min
12:27 PM	02.30.00	7.25 pi i	17.76	900.90 μ3/611	1.07 Hig/L	1.00 1410	40.5 1117	00.90 10	120.00 1111/111111

## Samples

Sample ID:	Description:

**Test Date / Time:** 3/9/2021 10:22:49 AM **Project:** Plant Wansley - Ash Pond PZ

**Operator Name: Hunter Auld** 

Location Name: PZ-24
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 33.8 ft
Total Depth: 43.88 ft

Initial Depth to Water: 16.01 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

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

6.3 liter

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 44.28 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1050, sunny 60s, EB-1 here at 1100 - tubing.

### 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	
3/9/2021 10:22 AM	00:00	5.71 pH	16.77 °C	262.05 μS/cm	3.39 mg/L	3.22 NTU	207.6 mV	16.01 ft	120.00 ml/min
3/9/2021 10:27 AM	05:00	5.64 pH	16.66 °C	227.01 μS/cm	2.62 mg/L	0.11 NTU	201.5 mV	19.50 ft	120.00 ml/min
3/9/2021 10:32 AM	10:00	5.64 pH	16.85 °C	227.12 μS/cm	2.34 mg/L	1.21 NTU	198.5 mV	19.60 ft	100.00 ml/min
3/9/2021 10:37 AM	15:00	5.54 pH	16.88 °C	237.22 μS/cm	1.29 mg/L	0.67 NTU	196.4 mV	19.70 ft	100.00 ml/min
3/9/2021 10:42 AM	20:00	5.55 pH	17.25 °C	235.38 μS/cm	1.27 mg/L	0.18 NTU	195.8 mV	19.70 ft	100.00 ml/min
3/9/2021 10:47 AM	25:00	5.56 pH	17.12 °C	234.53 μS/cm	1.34 mg/L	0.83 NTU	194.5 mV	19.70 ft	100.00 ml/min

### **Samples**

	Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 3:58:15 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: Ryan Walker

Location Name: PZ-25S Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43 ft

Total Depth: 53.86 ft

Initial Depth to Water: 28.84 ft

Pump Type: Bladder pump

**Tubing Type: Poly** 

Pump Intake From TOC: 48 ft Estimated Total Volume Pumped:

5470.833 ml

Flow Cell Volume: 130 ml Final Flow Rate: 130 ml/min Final Draw Down: 0.56 ft Instrument Used: Aqua TROLL 500

Serial Number: 602547

#### **Test Notes:**

Collected at 16:42. Sunny, 60 s. EB-2 here.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 0.5	+/- 3 %	+/- 0.3	+/- 10	+/- 10	+/- 0.3	
3/9/2021 3:58 PM	00:00		18.61 °C	97.59 μS/cm	4.84 mg/L	7.19 NTU		28.84 ft	130.00 ml/min
3/9/2021 4:15 PM	17:05	4.29 pH	18.13 °C	94.72 μS/cm	7.27 mg/L	7.55 NTU	129.7 mV	29.00 ft	130.00 ml/min
3/9/2021 4:20 PM	22:05	5.84 pH	17.93 °C	92.84 µS/cm	4.30 mg/L	9.88 NTU	151.5 mV	29.00 ft	130.00 ml/min
3/9/2021 4:25 PM	27:05	5.83 pH	17.93 °C	91.94 µS/cm	4.19 mg/L	4.49 NTU	160.5 mV	29.30 ft	130.00 ml/min
3/9/2021 4:30 PM	32:05	5.79 pH	17.81 °C	93.78 μS/cm	4.14 mg/L	3.94 NTU	168.6 mV	29.40 ft	130.00 ml/min
3/9/2021 4:35 PM	37:05	5.83 pH	17.72 °C	95.00 μS/cm	4.11 mg/L	3.22 NTU	171.7 mV	29.40 ft	130.00 ml/min
3/9/2021 4:40 PM	42:05	5.81 pH	17.57 °C	95.44 μS/cm	4.08 mg/L	2.96 NTU	176.6 mV	29.40 ft	130.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 1:13:14 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: T. Goble

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: 14.05 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 75 ft Estimated Total Volume Pumped:

4750 ml

Flow Cell Volume: 130 ml Final Flow Rate: 190 ml/min

Final Draw Down: 0 ft

Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1338. Partly cloudy 69 degrees

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/9/2021 1:13 PM	00:00	6.26 pH	25.12 °C	0.05 μS/cm	8.13 mg/L	7.92 NTU	154.6 mV	14.05 ft	190.00 ml/min
3/9/2021 1:18 PM	05:00	6.17 pH	19.33 °C	250.82 μS/cm	0.60 mg/L	2.26 NTU	132.6 mV	14.05 ft	190.00 ml/min
3/9/2021 1:23 PM	10:00	6.14 pH	19.38 °C	249.71 μS/cm	0.33 mg/L	2.00 NTU	127.4 mV	14.05 ft	190.00 ml/min
3/9/2021 1:28 PM	15:00	6.15 pH	19.14 °C	248.41 μS/cm	0.25 mg/L	1.76 NTU	122.4 mV	14.05 ft	190.00 ml/min
3/9/2021 1:33 PM	20:00	6.18 pH	19.16 °C	248.32 μS/cm	0.24 mg/L	1.65 NTU	116.8 mV	14.05 ft	190.00 ml/min
3/9/2021 1:38 PM	25:00	6.19 pH	19.12 °C	247.76 μS/cm	0.21 mg/L	1.92 NTU	114.3 mV	14.05 ft	190.00 ml/min

### **Samples**

	Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 2:04:42 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: T. Goble

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: 12.41 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 36 ft Estimated Total Volume Pumped:

6025 ml

Flow Cell Volume: 130 ml Final Flow Rate: 220 ml/min Final Draw Down: 0.33 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1434. Sunny 69 degrees

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/9/2021 2:04 PM	00:00	4.33 pH	19.03 °C	602.47 μS/cm	1.44 mg/L	4.59 NTU	198.9 mV	12.41 ft	150.00 ml/min
3/9/2021 2:09 PM	05:00	4.23 pH	18.67 °C	611.06 µS/cm	0.79 mg/L	4.04 NTU	251.1 mV	12.70 ft	175.00 ml/min
3/9/2021 2:14 PM	10:00	4.24 pH	18.61 °C	611.95 µS/cm	0.67 mg/L	3.15 NTU	274.3 mV	12.74 ft	220.00 ml/min
3/9/2021 2:19 PM	15:00	4.27 pH	19.01 °C	614.72 µS/cm	0.62 mg/L	3.26 NTU	287.6 mV	12.74 ft	220.00 ml/min
3/9/2021 2:24 PM	20:00	4.29 pH	19.45 °C	617.77 µS/cm	0.55 mg/L	3.71 NTU	297.6 mV	12.74 ft	220.00 ml/min
3/9/2021 2:29 PM	25:00	4.29 pH	19.37 °C	623.09 µS/cm	0.49 mg/L	3.31 NTU	307.3 mV	12.74 ft	220.00 ml/min
3/9/2021 2:34 PM	30:00	4.29 pH	19.53 °C	624.27 μS/cm	0.43 mg/L	4.25 NTU	316.7 mV	12.74 ft	220.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 3/8/2021 12:36:35 PM **Project:** Plant Wansley - Ash Pond PZ

**Operator Name: Hunter Auld** 

Location Name: PZ-27D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 71.7 ft
Total Depth: 81.74 ft

Initial Depth to Water: 19.93 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 76 ft Estimated Total Volume Pumped:

3.8 liter

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 3.2 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Start Purge: 1235

Sampled at 1300. Sunny, 60s.

### Low-Flow Readings:

Date Time	Elapsed Time	На	Temperature	Specific	RDO	Turbidity	ORP	Depth To	Flow	
Date Time	Liapoca Time	Pii	Temperature	Conductivity	Concentration		Orti	Water	1 1011	
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 10	+/- 100	+/- 0.3		
3/8/2021	00:00	7.37 pH	16.71 °C	1,164.8	0.61 mg/L	0.09 NTU	199.9 mV	19.93 ft	150.00 ml/min	
12:36 PM	00.00	7.57 pm	10.71	μS/cm	0.01 mg/L	0.09 1110	155.5 111	19.95 11	150.00 111/111111	
3/8/2021	05:00	7.42 pH	16.62 °C	1,161.3	0.44 mg/L	0.03 NTU	54.6 mV	20.20 ft	150.00 ml/min	
12:41 PM	05.00	7.42 pm	10.02 C	μS/cm	0.44 mg/L	0.03 N 10	34.0 IIIV	20.20 10	130.00 111/111111	
3/8/2021	10:00	7.43 pH	16.77 °C	1,161.0	0.29 mg/L	0.64 NTU	64.1 mV	20.20 ft	150.00 ml/min	
12:46 PM	10.00	7.43 pri	16.77	μS/cm	0.29 mg/L	0.04 1110	04.1 1110	20.20 11		
3/8/2021	15:00	15:00	15:00 7.44 pH	16.77 °C	1,160.8	0.24 mg/L	1.19 NTU	0.3 mV	20.20 ft	150.00 ml/min
12:51 PM	15.00	7.44 pm	10.77	μS/cm	0.24 mg/L	1.191110	0.5 111	20.20 10	130.00 111/111111	
3/8/2021	20:00	20:00 7.44 pH	44 pH 16.82 °C	1,159.9	0.20 mg/L	3.40 NTU	-30.7 mV	20,20 ft	150.00 ml/min	
12:56 PM	20:00 7.2			μS/cm	0.20 mg/L	3.40 NTU	-30.7 MV	20.20 10	130.00 111/111111	

#### **Samples**

Sample ID:
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**Test Date / Time:** 3/8/2021 1:17:03 PM **Project:** Plant Wansley - Ash Pond PZ

**Operator Name:** Hunter Auld

Location Name: PZ-27S
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 29.9 ft
Total Depth: 39.93 ft

Initial Depth to Water: 16.88 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 34 ft Estimated Total Volume Pumped:

6.8 liter

Flow Cell Volume: 130 ml Final Flow Rate: 150 ml/min Final Draw Down: 3.8 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

#### **Test Notes:**

Sampled at 1400, sunny 60s, Dup-1 here.

### 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	
3/8/2021 1:17 PM	00:00	5.38 pH	16.93 °C	297.83 μS/cm	1.12 mg/L	6.48 NTU	117.0 mV	16.88 ft	150.00 ml/min
3/8/2021 1:22 PM	05:00	5.35 pH	16.80 °C	294.07 μS/cm	0.54 mg/L	168 NTU	168.0 mV	17.20 ft	150.00 ml/min
3/8/2021 1:27 PM	10:00	5.34 pH	16.72 °C	292.11 μS/cm	0.40 mg/L	178 NTU	188.2 mV	17.20 ft	150.00 ml/min
3/8/2021 1:32 PM	15:00	5.35 pH	16.76 °C	289.70 μS/cm	0.36 mg/L	76.5 NTU	201.7 mV	17.20 ft	150.00 ml/min
3/8/2021 1:37 PM	20:00	5.35 pH	16.83 °C	288.30 μS/cm	0.34 mg/L	70.4 NTU	210.0 mV	17.20 ft	150.00 ml/min
3/8/2021 1:42 PM	25:00	5.35 pH	16.78 °C	289.04 μS/cm	0.33 mg/L	42.1 NTU	214.5 mV	17.20 ft	150.00 ml/min
3/8/2021 1:47 PM	30:00	5.35 pH	16.80 °C	287.93 μS/cm	0.33 mg/L	12.2 NTU	215.5 mV	17.20 ft	150.00 ml/min
3/8/2021 1:52 PM	35:00	5.35 pH	16.80 °C	287.74 μS/cm	0.37 mg/L	5.01 NTU	218.8 mV	17.20 ft	150.00 ml/min
3/8/2021 1:57 PM	40:00	5.36 pH	16.89 °C	286.79 μS/cm	0.41 mg/L	2.29 NTU	222.4 mV	17.20 ft	150.00 ml/min

Sample ID:	Description:
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**Test Date / Time:** 3/9/2021 3:03:41 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: T. Goble

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: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 67 ft
Estimated Total Volume Pumped:

3750 ml

Flow Cell Volume: 130 ml Final Flow Rate: 120 ml/min Final Draw Down: 0.85 ft Instrument Used: Aqua TROLL 500

Serial Number: 601857

#### **Test Notes:**

Sampled at 1533. Sunny 70 degrees

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 2	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
3/9/2021 3:03 PM	00:00	5.93 pH	23.39 °C	104.56 μS/cm	5.46 mg/L	0.34 NTU	243.8 mV	29.06 ft	150.00 ml/min
3/9/2021 3:08 PM	05:00	5.75 pH	19.68 °C	64.80 µS/cm	4.41 mg/L	1.36 NTU	251.9 mV	29.72 ft	120.00 ml/min
3/9/2021 3:13 PM	10:00	5.68 pH	19.47 °C	64.28 µS/cm	4.62 mg/L	3.39 NTU	256.5 mV	29.76 ft	120.00 ml/min
3/9/2021 3:18 PM	15:00	5.68 pH	18.82 °C	63.58 µS/cm	4.63 mg/L	5.72 NTU	257.2 mV	29.80 ft	120.00 ml/min
3/9/2021 3:23 PM	20:00	5.67 pH	18.60 °C	56.80 μS/cm	4.63 mg/L	4.54 NTU	258.7 mV	29.84 ft	120.00 ml/min
3/9/2021 3:28 PM	25:00	5.65 pH	18.24 °C	56.39 μS/cm	4.67 mg/L	4.77 NTU	260.2 mV	29.87 ft	120.00 ml/min
3/9/2021 3:33 PM	30:00	5.65 pH	18.06 °C	55.47 μS/cm	4.66 mg/L	2.35 NTU	261.1 mV	29.91 ft	120.00 ml/min

### **Samples**

Sample II	ID:	Description:	
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**Test Date / Time:** 3/11/2021 9:46:00 AM **Project:** Plant Wansley - Ash Pond PZ

**Operator Name:** Hunter Auld

Well Diameter: 2 in
Casing Type: PVC

Screen Length: 10 ft Top of Screen: 119.5 ft Total Depth: 129.57 ft

Initial Depth to Water: 21.08 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 124 ft Estimated Total Volume Pumped:

18.5 liter

Flow Cell Volume: 130 ml Final Flow Rate: 100 ml/min Final Draw Down: 18.5 in Instrument Used: Aqua TROLL 500

Serial Number: 608421

### **Test Notes:**

Purge start: 0920

Sampled at 1225, sunny, 60s.

### **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	
3/11/2021 9:46 AM	00:00	6.72 pH	16.47 °C	19.13 μS/cm	8.67 mg/L	3.61 NTU	227.1 mV	21.08 ft	100.00 ml/min
3/11/2021 9:51 AM	05:37	6.41 pH	17.61 °C	411.31 μS/cm	1.01 mg/L	18.2 NTU	-4.0 mV	22.90 ft	100.00 ml/min
3/11/2021 9:56 AM	10:37	6.44 pH	17.54 °C	410.35 μS/cm	0.87 mg/L	20.2 NTU	-25.9 mV	23.00 ft	100.00 ml/min
3/11/2021 10:01 AM	15:37	6.45 pH	17.48 °C	404.87 μS/cm	0.80 mg/L	21.7 NTU	-32.0 mV	23.10 ft	100.00 ml/min
3/11/2021 10:06 AM	20:37	6.45 pH	17.55 °C	400.00 μS/cm	0.74 mg/L	19.8 NTU	-32.7 mV	23.20 ft	100.00 ml/min
3/11/2021 10:11 AM	25:37	6.44 pH	17.95 °C	400.88 μS/cm	0.73 mg/L	20.6 NTU	-33.4 mV	23.30 ft	100.00 ml/min
3/11/2021 10:16 AM	30:37	6.44 pH	18.35 °C	405.13 μS/cm	0.69 mg/L	17.5 NTU	-32.5 mV	23.40 ft	100.00 ml/min
3/11/2021 10:21 AM	35:37	6.44 pH	18.05 °C	399.91 μS/cm	0.68 mg/L	19.5 NTU	-31.6 mV	23.50 ft	100.00 ml/min
3/11/2021 10:26 AM	40:37	6.44 pH	18.06 °C	399.47 μS/cm	0.69 mg/L	20.1 NTU	-30.9 mV	23.60 ft	100.00 ml/min
3/11/2021 10:31 AM	45:37	6.44 pH	18.23 °C	398.94 μS/cm	0.70 mg/L	25.2 NTU	-30.9 mV	23.70 ft	100.00 ml/min
3/11/2021 10:36 AM	50:37	6.44 pH	18.31 °C	397.05 μS/cm	0.68 mg/L	17.4 NTU	-31.3 mV	23.80 ft	100.00 ml/min
3/11/2021 10:41 AM	55:37	6.44 pH	18.30 °C	400.10 μS/cm	0.68 mg/L	18.6 NTU	-31.4 mV	23.90 ft	100.00 ml/min
3/11/2021 10:46 AM	01:00:37	6.44 pH	18.18 °C	400.60 μS/cm	0.69 mg/L	23.8 NTU	-31.1 mV	24.00 ft	100.00 ml/min
3/11/2021 10:51 AM	01:05:37	6.44 pH	18.27 °C	401.60 μS/cm	0.69 mg/L	21.8 NTU	-31.3 mV	24.20 ft	100.00 ml/min
3/11/2021 10:56 AM	01:10:37	6.44 pH	18.54 °C	400.77 μS/cm	0.67 mg/L	25.4 NTU	-32.7 mV	24.20 ft	100.00 ml/min

3/11/2021	04.45.07	0.44 11	40.50.00	000 00 04	0.70 //	44.0 NITH	20.0 1/	04.00 (	100.00 1/ :
11:01 AM	01:15:37	6.44 pH	19.52 °C	399.26 μS/cm	0.73 mg/L	11.8 NTU	-33.6 mV	24.30 ft	100.00 ml/min
3/11/2021	01:20:37	6.43 pH	18.63 °C	392.90 μS/cm	0.78 mg/L	10.8 NTU	-30.8 mV	24.30 ft	100.00 ml/min
11:06 AM 3/11/2021		•							
11:11 AM	01:25:37	6.44 pH	18.60 °C	398.71 μS/cm	0.67 mg/L	10.9 NTU	-32.6 mV	24.40 ft	100.00 ml/min
3/11/2021	01:30:37	6.43 pH	18.67 °C	394.87 μS/cm	0.59 mg/L	11.1 NTU	-33.3 mV	24.40 ft	100.00 ml/min
11:16 AM	01.30.37	6.43 pH	10.07 C	394.07 μ3/011	0.59 Hig/L	11.1 N10	-33.3 1117	24.40 11	100.00 111/111111
3/11/2021	01:35:37	6.43 pH	18.70 °C	395.61 µS/cm	0.58 mg/L	10.6 NTU	-34.6 mV	24.50 ft	100.00 ml/min
11:21 AM 3/11/2021				·					
11:26 AM	01:40:37	6.43 pH	19.37 °C	397.77 μS/cm	0.59 mg/L	10.6 NTU	-36.1 mV	24.60 ft	100.00 ml/min
3/11/2021	01:45:37	6.43 pH	20.00 °C	399.57 μS/cm	0.58 mg/L	10.5 NTU	-37.6 mV	24.60 ft	100.00 ml/min
11:31 AM	01.45.57	0.43 pri	20.00 C	399.37 μ3/611	0.38 Hig/L	10.5 1110	-37.01110	24.00 11	100.00 111/111111
3/11/2021	01:50:37	6.43 pH	19.98 °C	397.26 µS/cm	0.57 mg/L	9.80 NTU	-38.2 mV	24.60 ft	100.00 ml/min
11:36 AM 3/11/2021		-							
11:41 AM	01:55:37	6.42 pH	19.92 °C	396.25 µS/cm	0.55 mg/L	10.9 NTU	-38.2 mV	24.60 ft	100.00 ml/min
3/11/2021	00.00.07	0.40 -11	40.00.00	205 42 6/272	0.57 //	45 4 NTU	20.2\/	04.70.6	400 00 1/ :
11:46 AM	02:00:37	6.42 pH	19.99 °C	395.42 μS/cm	0.57 mg/L	15.1 NTU	-38.3 mV	24.70 ft	100.00 ml/min
3/11/2021	02:05:37	6.41 pH	20.23 °C	396.47 µS/cm	0.55 mg/L	12.7 NTU	-38.2 mV	24.70 ft	100.00 ml/min
11:51 AM 3/11/2021		•		·					
11:56 AM	02:10:37	6.42 pH	20.11 °C	397.16 μS/cm	0.54 mg/L	11.9 NTU	-39.8 mV	24.80 ft	100.00 ml/min
3/11/2021	00:45:07	0.40 -11	20.40.90	205.400/275	0.54//	44 O NITH	40.7>/	04.00.6	400 00 1/ :
12:01 PM	02:15:37	6.42 pH	20.49 °C	395.49 μS/cm	0.54 mg/L	11.2 NTU	-40.7 mV	24.80 ft	100.00 ml/min
3/11/2021	02:20:37	6.41 pH	20.47 °C	395.36 µS/cm	0.54 mg/L	10.8 NTU	-41.3 mV	24.90 ft	100.00 ml/min
12:06 PM 3/11/2021		•		·	-				
12:11 PM	02:25:37	6.41 pH	20.25 °C	391.87 µS/cm	0.52 mg/L	9.50 NTU	-41.4 mV	24.90 ft	100.00 ml/min
3/11/2021	20.00.0=	0.44 11	00.40.00	200 40 04	0.50 "	0.40 NITU	44.0 \	04.00 (	100.00 1/ :
12:16 PM	02:30:37	6.41 pH	20.48 °C	392.43 μS/cm	0.53 mg/L	9.40 NTU	-41.3 mV	24.90 ft	100.00 ml/min
3/11/2021	02:35:37	6.41 pH	20.32 °C	394.00 μS/cm	0.53 mg/L	9.40 NTU	-42.2 mV	25.00 ft	100.00 ml/min
12:21 PM	02.00.0.	J p	20.02 3	22.100   20,0111	2.00g, <b>2</b>				10.00

## Samples

Sample ID:	Description:

Date: 2021-04-08 10:58:44

Project Information:

Operator Name

Taylor Goble

Pump Information:

Pump Model/Type

Peristaltic Pump

Taylor Goble

Pump Model/Type

Peristaltic Pump

Company NameAtlantic Coast ConsultingTubing TypepolyProject NamePlant Wansley Ash Pond PZTubing Diameter.17 inSite NamePlant Wansley - Ash PondTubing Length73 ft

Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 601533

Turbidity Make/Model HACH 2100Q Pump placement from TOC 68 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-28 120 mL/min Well diameter 2 in Total System Volume 0.4158299 L Calculated Sample Rate Well Total Depth 72.96 ft 300 sec Stabilization Drawdown Screen Length 10 ft 7 in Depth to Water 3.5 L 29.03 ft **Total Volume Pumped** 

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	10:37:45	600.02	18.08	6.20	71.27	2.39	29.66	4.19	103.38
Last 5	10:42:45	900.01	17.99	5.86	68.02	2.12	29.71	4.23	100.26
Last 5	10:47:45	1200.00	18.03	5.78	67.10	1.89	29.74	4.23	96.16
Last 5	10:52:45	1500.00	18.08	5.75	66.68	1.55	29.75	4.21	93.20
Last 5	10:57:47	1802.00	18.13	5.70	66.25	1.36	29.76	4.19	92.64
Variance 0			0.04	-0.08	-0.91			-0.00	-4.10
Variance 1			0.05	-0.03	-0.42			-0.03	-2.96
Variance 2			0.06	-0.06	-0.43			-0.02	-0.56

Notes

Sampled at 1057. Cloudy 65 degrees

**Test Date / Time:** 4/8/2021 2:06:32 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: O. Fuquea

Location Name: PZ-27S
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 29.9 ft
Total Depth: 39.93 ft

Initial Depth to Water: 16.9 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 35 ft Estimated Total Volume Pumped:

3.75 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 4 in

Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1431. 73 F 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	
4/8/2021 2:06 PM	00:00	6.10 pH	21.02 °C	318.14 μS/cm	2.60 mg/L	5.56 NTU	89.7 mV	17.20 ft	150.00 ml/min
4/8/2021 2:11 PM	05:00	5.48 pH	18.22 °C	335.00 μS/cm	0.42 mg/L	7.61 NTU	89.6 mV	17.20 ft	150.00 ml/min
4/8/2021 2:16 PM	10:00	5.41 pH	18.04 °C	333.24 μS/cm	0.43 mg/L	6.32 NTU	89.7 mV	17.20 ft	150.00 ml/min
4/8/2021 2:21 PM	15:00	5.38 pH	17.72 °C	333.76 μS/cm	0.40 mg/L	5.47 NTU	90.6 mV	17.30 ft	150.00 ml/min
4/8/2021 2:26 PM	20:00	5.38 pH	17.76 °C	330.68 μS/cm	0.40 mg/L	4.79 NTU	91.2 mV	17.30 ft	150.00 ml/min
4/8/2021 2:31 PM	25:00	5.39 pH	18.02 °C	330.33 μS/cm	0.43 mg/L	3.32 NTU	91.5 mV	17.30 ft	150.00 ml/min

### **Samples**

Sa	ample ID:	Description:
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**Test Date / Time:** 4/8/2021 12:41:09 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: O. Fuquea

Location Name: PZ-29D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 119.5 ft
Total Depth: 129.57 ft

Initial Depth to Water: 21.42 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 125 ft Estimated Total Volume Pumped:

53.4 liter

Flow Cell Volume: 90 ml Final Flow Rate: 120 ml/min Final Draw Down: 28 in Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1315. 70F overcast. Total purge time: 445 min.

### 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	
4/8/2021 12:41 PM	00:00	6.59 pH	21.27 °C	355.18 μS/cm	0.93 mg/L	7.60 NTU	50.2 mV	23.80 ft	150.00 ml/min
4/8/2021 12:46 PM	05:00	6.62 pH	20.22 °C	428.95 μS/cm	0.16 mg/L	6.19 NTU	5.3 mV	23.80 ft	150.00 ml/min
4/8/2021 12:51 PM	10:00	6.50 pH	19.81 °C	354.36 μS/cm	0.23 mg/L	7.06 NTU	9.5 mV	23.80 ft	150.00 ml/min
4/8/2021 12:56 PM	15:00	6.46 pH	19.56 °C	349.13 μS/cm	0.40 mg/L	5.96 NTU	16.6 mV	23.80 ft	150.00 ml/min
4/8/2021 1:01 PM	20:00	6.33 pH	19.82 °C	347.37 μS/cm	0.42 mg/L	6.32 NTU	19.3 mV	23.80 ft	150.00 ml/min
4/8/2021 1:06 PM	25:00	6.33 pH	19.83 °C	339.11 μS/cm	0.44 mg/L	6.66 NTU	19.9 mV	23.80 ft	150.00 ml/min
4/8/2021 1:11 PM	30:00	6.34 pH	20.15 °C	347.30 μS/cm	0.43 mg/L	6.20 NTU	17.1 mV	23.80 ft	150.00 ml/min

### **Samples**

	Sample ID:	Description:	
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**Test Date / Time:** 4/7/2021 3:04:17 PM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: O. Fuquea

Location Name: PZ-27D
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 71.7 ft

Total Depth: 81.74 ft Initial Depth to Water: 19.87 ft **Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 77 ft
Estimated Total Volume Pumped:

3.75 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 3 in

Instrument Used: Aqua TROLL 400

Serial Number: 714293

#### **Test Notes:**

Collected at 1529. 80F 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	
4/7/2021 3:04 PM	00:00	7.38 pH	23.75 °C	844.32 μS/cm	2.72 mg/L	3.94 NTU	55.0 mV	19.90 ft	150.00 ml/min
4/7/2021 3:09 PM	05:00	7.22 pH	19.75 °C	974.11 μS/cm	0.25 mg/L	3.67 NTU	54.5 mV	20.00 ft	150.00 ml/min
4/7/2021 3:14 PM	10:00	7.18 pH	20.13 °C	976.18 μS/cm	0.13 mg/L	3.60 NTU	49.2 mV	20.10 ft	150.00 ml/min
4/7/2021 3:19 PM	15:00	7.17 pH	19.63 °C	986.06 μS/cm	0.10 mg/L	2.23 NTU	43.9 mV	20.10 ft	150.00 ml/min
4/7/2021 3:24 PM	20:00	7.17 pH	19.35 °C	983.62 μS/cm	0.10 mg/L	1.68 NTU	38.9 mV	20.20 ft	150.00 ml/min
4/7/2021 3:29 PM	25:00	7.17 pH	19.02 °C	996.27 μS/cm	0.08 mg/L	1.22 NTU	32.3 mV	20.20 ft	150.00 ml/min

### **Samples**

Sa	ample ID:	Description:
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Date: 2021-04-07 14:29:09

Project Information:
Operator Name
Taylor Goble
Pump Information:
Pump Model/Type

Operator NameTaylor GoblePump Model/TypePeristaltic PumpCompany NameAtlantic Coast ConsultingTubing TypepolyProject NamePlant Wansley Ash Pond PZTubing Diameter.17 inSite NamePlant Wansley - Ash PondTubing Length41 ft

 Latitude
 0° 0' 0"

 Longitude
 0° 0' 0"

 Sonde SN
 601533

Turbidity Make/Model HACH 2100Q Pump placement from TOC 36 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-26S 210 mL/min Well diameter 2 in Total System Volume 0.2730004 L Calculated Sample Rate Well Total Depth 40.80 ft 300 sec Stabilization Drawdown Screen Length 10 ft 3 in Depth to Water 6.6 L 12.25 ft **Total Volume Pumped** 

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	า		+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	14:08:17	600.02	19.63	4.46	630.12	1.15	12.44	3.85	76.63
Last 5	14:13:17	900.01	19.46	4.43	634.38	0.96	12.48	3.84	79.57
Last 5	14:18:17	1200.01	19.50	4.43	631.64	0.91	12.52	3.82	82.47
Last 5	14:23:17	1500.00	19.86	4.42	633.90	0.79	12.55	3.77	84.58
Last 5	14:28:17	1800.00	19.99	4.43	631.54	0.73	12.56	3.74	86.69
Variance 0			0.05	-0.00	-2.74			-0.02	2.91
Variance 1			0.35	-0.01	2.26			-0.05	2.11
Variance 2			0.13	0.01	-2.36			-0.03	2.11

Notes

Sampled at 1428. Sunny 79 degrees

Date: 2021-04-07 15:39:47

Project Information: Pu
Operator Name Taylor Goble Pu

Company Name
Project Name
Site Name
Atlantic Coast Consulting
Plant Wansley Ash Pond PZ
Plant Wansley - Ash Pond

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 601533

Turbidity Make/Model HACH 2100Q

Pump Information:

Pump Model/Type
Tubing Type
Tubing Diameter
Tubing Length

Peristaltic Pump
poly
117 in
17 in
80 ft

Pump placement from TOC 75 ft

Well Information:

Well ID PZ-26D
Well diameter 2 in
Well Total Depth 80.11 ft
Screen Length 10 ft
Depth to Water 13.88 ft

Pumping Information:

Final Pumping Rate 170 mL/min
Total System Volume 0.4470738 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 17 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			+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	15:17:14	1204.01	22.18	6.39	263.46	1.17	15.24	3.49	70.01
Last 5	15:22:14	1504.00	21.82	6.42	262.58	0.88	15.25	3.74	69.05
Last 5	15:27:14	1804.00	20.95	6.43	262.36	0.80	15.27	4.25	70.87
Last 5	15:32:17	2106.99	21.91	6.43	264.98	0.59	15.29	4.22	70.02
Last 5	15:37:17	2406.98	22.18	6.46	264.78	0.52	15.31	4.29	68.60
Variance 0			-0.87	0.00	-0.21			0.52	1.82
Variance 1			0.95	0.00	2.62			-0.03	-0.85
Variance 2			0.27	0.03	-0.20			0.07	-1.43

Notes

Sampled at 1537. Partly cloudy 79 degrees

Date: 2021-04-07 11:21:19

Project Information:
Operator Name
Taylor Goble
Pump Information:
Pump Model/Type

Operator NameTaylor GoblePump Model/TypeQED Bladder PumpCompany NameAtlantic Coast ConsultingTubing TypepolyProject NamePlant Wansley Ash Pond-PZTubing Diameter.17 inSite NamePlant Wansley - Ash PondTubing Length54 ft

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 601533

Turbidity Make/Model HACH 2100Q Pump placement from TOC 49 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-25S 150 mL/min Well diameter 2 in Total System Volume 0.3310249 L Well Total Depth 53.86 ft Calculated Sample Rate 300 sec Stabilization Drawdown Screen Length 10 ft 6 in Depth to Water 28.61 ft **Total Volume Pumped** 4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 50
Last 5	11:00:40	600.02	18.12	5.89	81.43	3.81	29.29	5.22	81.87
Last 5	11:05:40	900.01	17.86	5.61	81.27	3.36	29.32	5.23	80.34
Last 5	11:10:40	1200.00	17.80	5.64	80.81	2.88	29.33	5.21	76.81
Last 5	11:15:40	1500.00	17.72	5.63	80.29	2.45	29.33	5.15	76.36
Last 5	11:20:40	1799.99	17.81	5.57	80.33	2.27	29.33	5.16	78.78
Variance 0			-0.05	0.03	-0.45			-0.03	-3.53
Variance 1			-0.09	-0.01	-0.52			-0.06	-0.45
Variance 2			0.09	-0.06	0.04			0.02	2.42

Notes

Sampled at 1120. Sunny 70 degrees

Date: 2021-04-08 12:31:34

Pump placement from TOC

**Peristaltic Pump** 

poly

.17 in

44 ft

39 ft

Project Information: Pump Information: **Operator Name Taylor Goble** Pump Model/Type

Company Name Atlantic Coast Consulting Tubing Type Project Name Plant Wansley Ash Pond PZ Tubing Diameter Tubing Length Site Name Plant Wansley - Ash Pond

0° 0' 0" Latitude 0° 0' 0" Longitude Sonde SN 601533

Turbidity Make/Model **HACH 2100Q** 

Pumping Information: Well Information:

Final Pumping Rate Well ID PZ-24 110 mL/min Well diameter 2 in Total System Volume 0.2863906 L 300

Calculated Sample Rate Well Total Depth 43.88 ft sec Stabilization Drawdown Screen Length 10 ft 35 in Depth to Water 3.3 L 15.67 ft **Total Volume Pumped** 

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	12:10:14	600.02	18.65	6.05	207.19	1.88	17.59	5.46	89.80
Last 5	12:15:14	900.01	18.30	6.09	207.93	1.61	17.96	5.48	86.81
Last 5	12:20:14	1200.01	18.23	6.05	208.22	1.32	18.30	5.45	88.18
Last 5	12:25:18	1503.94	18.21	6.05	208.13	1.17	18.42	5.47	87.31
Last 5	12:30:17	1802.99	18.47	6.01	207.76	1.05	18.55	5.38	88.59
Variance 0			-0.06	-0.04	0.29			-0.03	1.36
Variance 1			-0.02	0.00	-0.09			0.02	-0.87
Variance 2			0.26	-0.04	-0.37			-0.08	1.27

Notes

Sampled at 1230. Mostly cloudy 70 degrees

**Test Date / Time:** 4/8/2021 10:45:13 AM **Project:** Plant Wansley - Ash Pond PZ

Operator Name: O. Fuquea

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 in

Initial Depth to Water: 48.65 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

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

10.5 liter

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:**

Collected at 1155. 66F overcast. DUP-1 collected.

### **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	
4/8/2021 10:45 AM	00:00	7.84 pH	19.70 °C	568.66 μS/cm	1.84 mg/L	9.63 NTU	86.7 mV	48.65 ft	150.00 ml/min
4/8/2021 10:50 AM	05:00	7.35 pH	19.50 °C	647.41 μS/cm	1.22 mg/L	8.70 NTU	65.1 mV	48.80 ft	150.00 ml/min
4/8/2021 10:55 AM	10:00	7.13 pH	19.51 °C	651.72 μS/cm	0.96 mg/L	8.18 NTU	57.8 mV	48.80 ft	150.00 ml/min
4/8/2021 11:00 AM	15:00	7.06 pH	19.63 °C	639.55 μS/cm	0.81 mg/L	11.10 NTU	50.9 mV	48.80 ft	150.00 ml/min
4/8/2021 11:05 AM	20:00	7.04 pH	19.62 °C	640.79 μS/cm	0.73 mg/L	8.88 NTU	40.5 mV	48.80 ft	150.00 ml/min
4/8/2021 11:10 AM	25:00	7.02 pH	19.54 °C	636.92 µS/cm	0.65 mg/L	8.63 NTU	30.0 mV	48.80 ft	150.00 ml/min
4/8/2021 11:15 AM	30:00	7.01 pH	19.60 °C	629.42 μS/cm	0.60 mg/L	7.33 NTU	14.9 mV	48.80 ft	150.00 ml/min
4/8/2021 11:20 AM	35:00	6.99 pH	19.97 °C	625.82 μS/cm	0.52 mg/L	9.53 NTU	5.0 mV	48.80 ft	150.00 ml/min
4/8/2021 11:25 AM	40:00	6.97 pH	21.01 °C	625.24 μS/cm	0.44 mg/L	8.42 NTU	0.1 mV	48.80 ft	150.00 ml/min
4/8/2021 11:30 AM	45:00	6.97 pH	21.91 °C	618.19 µS/cm	0.41 mg/L	7.83 NTU	-13.5 mV	48.80 ft	150.00 ml/min
4/8/2021 11:35 AM	50:00	6.97 pH	22.05 °C	610.83 µS/cm	0.40 mg/L	8.48 NTU	-18.7 mV	48.80 ft	150.00 ml/min
4/8/2021 11:40 AM	55:00	6.96 pH	22.27 °C	604.32 μS/cm	0.38 mg/L	8.29 NTU	-21.5 mV	48.80 ft	150.00 ml/min
4/8/2021 11:45 AM	01:00:00	6.96 pH	22.54 °C	600.37 μS/cm	0.34 mg/L	6.72 NTU	-23.1 mV	48.80 ft	150.00 ml/min
4/8/2021 11:50 AM	01:05:00	6.94 pH	23.12 °C	596.77 μS/cm	0.28 mg/L	5.27 NTU	-23.4 mV	48.80 ft	150.00 ml/min
4/8/2021 11:55 AM	01:10:00	6.94 pH	23.04 °C	587.54 μS/cm	0.28 mg/L	4.94 NTU	-19.6 mV	48.80 ft	150.00 ml/min

## Samples

Sample ID:	Description:
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Date: 2021-04-07 12:55:08

**QED Bladder Pump** 

poly

.17 in

72 ft

Project Information:

Operator Name

Taylor Goble

Pump Information:

Pump Model/Type

Operator Name Taylor Goble Pump Model/Type
Company Name Atlantic Coast Consulting Tubing Type
Project Name Plant Wansley Ash Pond PZ Tubing Diameter
Site Name Plant Wansley - Ash Pond Tubing Length

Latitude 0° 0' 0"

Longitude 0° 0' 0"

Sonde SN 601533

Turbidity Make/Model HACH 2100Q Pump placement from TOC 67 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-23S 110 mL/min Well diameter 2 in Total System Volume 0.4113665 L Calculated Sample Rate Well Total Depth 71.73 ft 300 sec Stabilization Drawdown Screen Length 10 ft 24 in Depth to Water 4.4 L 48.77 ft **Total Volume Pumped** 

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond µS	cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	12:34:02	1200.01	19.19	6.97	777.21	6.32	50.25	0.79	20.78
Last 5	12:39:02	1500.00	19.50	7.00	779.10	5.86	50.35	0.81	16.71
Last 5	12:44:02	1799.99	19.63	7.02	784.41	5.71	50.39	0.84	14.98
Last 5	12:49:02	2099.99	19.32	7.04	791.37	5.30	50.43	0.91	14.64
Last 5	12:54:04	2401.98	19.05	7.05	801.79	4.87	50.47	0.91	14.74
Variance 0			0.13	0.02	5.32			0.03	-1.73
Variance 1			-0.31	0.02	6.95			0.07	-0.34
Variance 2			-0.27	0.01	10.42			-0.00	0.10

Notes

Sampled at 1254. Sunny 76 degrees

Date: 2021-04-08 14:01:26

Project Information:

Operator Name

Taylor Goble

Pump Information:

Pump Model/Type

Operator NameTaylor GoblePump Model/TypeQED Bladder PumpCompany NameAtlantic Coast ConsultingTubing TypepolyProject NamePlant Wansley Ash Pond PZTubing Diameter.17 inSite NamePlant Wansley - Ash PondTubing Length43 ft

 Latitude
 0° 0' 0"

 Longitude
 0° 0' 0"

 Sonde SN
 601533

Turbidity Make/Model HACH 2100Q Pump placement from TOC 38 ft

Well Information: Pumping Information:

Final Pumping Rate Well ID PZ-22 130 mL/min Well diameter 2 in Total System Volume 0.2819272 L Calculated Sample Rate Well Total Depth 42.85 ft 300 sec Stabilization Drawdown Screen Length 10 ft 6 in Depth to Water 25.74 ft **Total Volume Pumped** 4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	рН	SpCond μS	S/cm Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization	1		+/- 2	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 30
Last 5	13:40:05	600.02	21.46	5.65	678.74	3.20	26.15	5.12	83.57
Last 5	13:45:05	900.01	21.64	5.63	670.20	2.55	26.24	4.99	83.18
Last 5	13:50:05	1200.01	20.97	5.61	678.93	2.03	26.28	5.06	83.85
Last 5	13:55:05	1500.00	20.56	5.61	675.21	1.81	26.30	5.06	84.04
Last 5	14:00:05	1800.00	20.79	5.60	675.55	1.60	26.32	5.04	83.83
Variance 0			-0.67	-0.02	8.73			0.07	0.67
Variance 1			-0.41	-0.00	-3.72			-0.00	0.18
Variance 2			0.22	-0.01	0.35			-0.02	-0.21

Notes

Sampled at 1400. Cloudy 72 degrees. FB-2 poured here

Test Date / Time: 8/24/2021 10:20:10 AM

**Project:** Plant Wansley Ash Pond **Operator Name:** J. Berisford

Location Name: WGWA-1
Well Diameter: 2 in
Casing Type: PVC
Screen Length: 10 ft
Top of Screen: 119.86 ft

Total Depth: 129.86 ft

Initial Depth to Water: 29.46 ft

Pump Type: QED Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 124 ft Estimated Total Volume Pumped:

8.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min

Final Draw Down: 2 in

Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1145. EB-1 here with gloves at 1100

### 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	
8/24/2021 10:20 AM	00:00	7.34 pH	27.35 °C	119.31 μS/cm	7.55 mg/L	4.33 NTU	189.1 mV	29.46 ft	100.00 ml/min
8/24/2021 10:25 AM	05:00	5.91 pH	25.05 °C	34.77 μS/cm	6.96 mg/L	2.03 NTU	103.3 mV	29.60 ft	100.00 ml/min
8/24/2021 10:30 AM	10:00	5.76 pH	24.44 °C	34.75 μS/cm	3.30 mg/L	1.93 NTU	92.6 mV	29.60 ft	100.00 ml/min
8/24/2021 10:35 AM	15:00	5.72 pH	24.33 °C	32.81 µS/cm	1.45 mg/L	1.16 NTU	88.1 mV	29.60 ft	100.00 ml/min
8/24/2021 10:40 AM	20:00	5.61 pH	24.33 °C	32.71 μS/cm	0.70 mg/L	1.44 NTU	81.9 mV	29.60 ft	100.00 ml/min
8/24/2021 10:45 AM	25:00	5.49 pH	24.45 °C	33.17 μS/cm	0.50 mg/L	1.79 NTU	82.3 mV	29.60 ft	100.00 ml/min
8/24/2021 10:50 AM	30:00	5.41 pH	24.69 °C	33.97 μS/cm	0.48 mg/L	1.33 NTU	76.8 mV	29.60 ft	100.00 ml/min
8/24/2021 10:55 AM	35:00	5.38 pH	25.22 °C	34.96 μS/cm	0.55 mg/L	1.24 NTU	85.8 mV	29.60 ft	100.00 ml/min
8/24/2021 11:00 AM	40:00	5.34 pH	25.42 °C	34.16 μS/cm	0.59 mg/L	1.13 NTU	72.9 mV	29.60 ft	100.00 ml/min
8/24/2021 11:05 AM	45:00	5.31 pH	25.59 °C	34.45 µS/cm	0.69 mg/L	0.77 NTU	66.5 mV	29.60 ft	100.00 ml/min
8/24/2021 11:10 AM	50:00	5.29 pH	25.69 °C	34.41 µS/cm	0.80 mg/L	0.72 NTU	64.7 mV	29.60 ft	100.00 ml/min
8/24/2021 11:15 AM	55:00	5.26 pH	25.64 °C	33.85 µS/cm	0.95 mg/L	0.92 NTU	65.9 mV	29.60 ft	100.00 ml/min
8/24/2021 11:20 AM	01:00:00	5.24 pH	25.60 °C	34.16 μS/cm	1.06 mg/L	0.83 NTU	65.6 mV	29.60 ft	100.00 ml/min
8/24/2021 11:25 AM	01:05:00	5.23 pH	25.66 °C	34.00 μS/cm	1.17 mg/L	0.57 NTU	66.0 mV	29.60 ft	100.00 ml/min
8/24/2021 11:30 AM	01:10:00	5.22 pH	25.50 °C	34.11 μS/cm	1.28 mg/L	0.62 NTU	67.0 mV	29.60 ft	100.00 ml/min

8/24/2021	01:15:00	5.21 pH	25.60 °C	34.26 µS/cm	1.37 mg/L	0.75 NTU	67.8 mV	29.60 ft	100.00 ml/min
11:35 AM	01.13.00	5.21 pm	23.00 C	34.20 μ3/6/11	1.57 Hig/L	0.75 1410	07.0111	29.00 11	100.00 111/111111
8/24/2021	01:20:00	5.21 pH	25.59 °C	34.24 µS/cm	1.45 mg/L	0.62 NTU	67.6 mV	29.60 ft	100.00 ml/min
11:40 AM	01:20:00	5.21 pm	25.59 C	34.24 μ3/011	1.45 mg/L	0.02 N10	67.61110	29.60 II	100.00 111/111111
8/24/2021	01:25:00	5 24 all	25.59 °C	24.42.45/000	1 F0 ma/l	0.58 NTU	68.0 mV	29.60 ft	100.00 ml/min
11:45 AM	01.25.00	5.21 pH	25.59 °C	34.43 µS/cm	1.50 mg/L	0.56 NTU	06.0 1110	29.60 11	100.00 m/min

## Samples

Sample ID:	Description:
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Test Date / Time: 8/23/2021 3:00:08 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

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: 11.5 ft

Pump Type: QED Bladder Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 97 ft
Estimated Total Volume Pumped:

4.37 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min

Final Draw Down: 6 in

Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1535

### 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	
8/23/2021 3:00 PM	00:00	6.23 pH	20.28 °C	122.76 μS/cm	2.24 mg/L	2.50 NTU	27.0 mV	11.50 ft	125.00 ml/min
8/23/2021 3:05 PM	05:00	6.20 pH	20.14 °C	122.31 μS/cm	1.56 mg/L	1.73 NTU	43.5 mV	12.00 ft	125.00 ml/min
8/23/2021 3:10 PM	10:00	6.19 pH	20.03 °C	122.66 μS/cm	1.12 mg/L	1.00 NTU	44.1 mV	12.00 ft	125.00 ml/min
8/23/2021 3:15 PM	15:00	6.19 pH	19.94 °C	123.83 μS/cm	0.91 mg/L	0.98 NTU	55.2 mV	12.00 ft	125.00 ml/min
8/23/2021 3:20 PM	20:00	6.19 pH	19.96 °C	124.18 μS/cm	0.73 mg/L	1.05 NTU	43.3 mV	12.00 ft	125.00 ml/min
8/23/2021 3:25 PM	25:00	6.19 pH	19.91 °C	125.28 μS/cm	0.64 mg/L	0.32 NTU	53.5 mV	12.00 ft	125.00 ml/min
8/23/2021 3:30 PM	30:00	6.19 pH	19.79 °C	124.52 μS/cm	0.54 mg/L	0.41 NTU	43.0 mV	12.00 ft	125.00 ml/min
8/23/2021 3:35 PM	35:00	6.18 pH	19.77 °C	125.10 μS/cm	0.49 mg/L	0.29 NTU	42.9 mV	12.00 ft	125.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/25/2021 10:20:12 AM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**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: 3.6 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: 1.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1050

### **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	
8/25/2021 10:20 AM	00:00	5.38 pH	24.05 °C	30.65 μS/cm	5.18 mg/L	0.99 NTU	128.0 mV	3.60 ft	300.00 ml/min
8/25/2021 10:25 AM	05:00	5.50 pH	20.41 °C	30.01 µS/cm	5.66 mg/L	0.59 NTU	92.6 mV	3.70 ft	300.00 ml/min
8/25/2021 10:30 AM	10:00	5.51 pH	20.14 °C	29.79 µS/cm	5.65 mg/L	0.41 NTU	86.6 mV	3.70 ft	300.00 ml/min
8/25/2021 10:35 AM	15:00	5.52 pH	20.21 °C	29.74 µS/cm	5.65 mg/L	0.74 NTU	84.2 mV	3.70 ft	300.00 ml/min
8/25/2021 10:40 AM	20:00	5.52 pH	20.23 °C	29.56 µS/cm	5.63 mg/L	0.42 NTU	83.4 mV	3.70 ft	300.00 ml/min
8/25/2021 10:45 AM	25:00	5.52 pH	20.35 °C	29.57 μS/cm	5.64 mg/L	0.54 NTU	82.8 mV	3.70 ft	300.00 ml/min
8/25/2021 10:50 AM	30:00	5.52 pH	20.37 °C	29.55 μS/cm	5.64 mg/L	0.42 NTU	82.6 mV	3.70 ft	300.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/24/2021 1:35:15 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**Location Name: WGWA-4** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 20 ft Top of Screen: 54 ft Total Depth: 73.9 ft

Initial Depth to Water: 6.05 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 68 ft Estimated Total Volume Pumped:

5.25 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min

Final Draw Down: 8 in

Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1410

### **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	
8/24/2021 1:35 PM	00:00	6.23 pH	24.33 °C	0.00 μS/cm	7.97 mg/L	8.79 NTU	28.9 mV	6.05 ft	150.00 ml/min
8/24/2021 1:40 PM	05:00	6.66 pH	27.08 °C	121.31 μS/cm	2.31 mg/L	4.59 NTU	-22.0 mV	6.30 ft	150.00 ml/min
8/24/2021 1:45 PM	10:00	6.99 pH	21.01 °C	120.55 μS/cm	0.65 mg/L	2.23 NTU	-41.1 mV	6.50 ft	150.00 ml/min
8/24/2021 1:50 PM	15:00	7.06 pH	20.88 °C	122.41 μS/cm	1.05 mg/L	2.84 NTU	-44.2 mV	6.60 ft	150.00 ml/min
8/24/2021 1:55 PM	20:00	7.15 pH	21.56 °C	121.69 μS/cm	0.07 mg/L	2.07 NTU	-49.4 mV	6.60 ft	150.00 ml/min
8/24/2021 2:00 PM	25:00	7.21 pH	21.14 °C	120.95 μS/cm	0.07 mg/L	2.61 NTU	-45.7 mV	6.60 ft	150.00 ml/min
8/24/2021 2:05 PM	30:00	7.23 pH	20.91 °C	121.09 μS/cm	0.07 mg/L	2.02 NTU	-43.8 mV	6.60 ft	150.00 ml/min
8/24/2021 2:10 PM	35:00	7.22 pH	20.76 °C	120.40 μS/cm	0.09 mg/L	1.57 NTU	-41.6 mV	6.60 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/24/2021 10:20:08 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**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: 17.61 ft

**Pump Type: Peristaltic pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 20 ft Estimated Total Volume Pumped:

17.7 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 28.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1218 on 8-24-21. Sunny, 80s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/24/2021 10:20 AM	00:00	7.02 pH	28.82 °C	346.28 μS/cm	7.42 mg/L	20.00 NTU	102.4 mV	18.30 ft	250.00 ml/min
8/24/2021 10:22 AM	01:52	6.80 pH	24.53 °C	264.09 μS/cm	1.31 mg/L	17.00 NTU	-6.0 mV	18.40 ft	150.00 ml/min
8/24/2021 10:27 AM	06:52	6.67 pH	22.06 °C	229.67 μS/cm	0.38 mg/L	17.00 NTU	-7.5 mV	18.60 ft	150.00 ml/min
8/24/2021 10:32 AM	11:52	6.07 pH	22.04 °C	102.29 μS/cm	1.15 mg/L	16.00 NTU	40.8 mV	18.70 ft	150.00 ml/min
8/24/2021 10:37 AM	16:52	5.53 pH	21.75 °C	44.96 μS/cm	2.32 mg/L	13.00 NTU	104.2 mV	18.80 ft	150.00 ml/min
8/24/2021 10:42 AM	21:52	5.43 pH	21.29 °C	39.56 μS/cm	1.02 mg/L	14.00 NTU	129.9 mV	18.90 ft	150.00 ml/min
8/24/2021 10:47 AM	26:52	5.41 pH	21.41 °C	37.68 μS/cm	0.62 mg/L	13.00 NTU	134.1 mV	19.00 ft	150.00 ml/min
8/24/2021 10:52 AM	31:52	5.48 pH	21.06 °C	41.01 μS/cm	0.56 mg/L	12.00 NTU	129.4 mV	19.10 ft	150.00 ml/min
8/24/2021 10:57 AM	36:52	5.54 pH	21.42 °C	45.15 μS/cm	0.57 mg/L	11.90 NTU	123.4 mV	19.10 ft	150.00 ml/min
8/24/2021 11:02 AM	41:52	5.61 pH	21.90 °C	50.37 μS/cm	0.66 mg/L	10.10 NTU	117.4 mV	19.20 ft	150.00 ml/min
8/24/2021 11:07 AM	46:52	5.81 pH	22.15 °C	70.23 μS/cm	0.93 mg/L	9.60 NTU	129.6 mV	19.20 ft	150.00 ml/min
8/24/2021 11:12 AM	51:52	5.93 pH	22.56 °C	84.18 µS/cm	0.93 mg/L	8.20 NTU	120.1 mV	19.30 ft	150.00 ml/min
8/24/2021 11:17 AM	56:52	6.05 pH	23.02 °C	99.93 μS/cm	0.82 mg/L	8.80 NTU	108.1 mV	19.30 ft	150.00 ml/min
8/24/2021 11:22 AM	01:01:52	6.19 pH	23.59 °C	121.18 μS/cm	0.78 mg/L	8.50 NTU	70.4 mV	19.40 ft	150.00 ml/min
8/24/2021 11:27 AM	01:06:52	6.46 pH	23.78 °C	184.23 μS/cm	0.44 mg/L	7.90 NTU	24.3 mV	19.40 ft	150.00 ml/min

8/24/2021	01:11:52	6.37 pH	24.01 °C	152.95 µS/cm	0.69 mg/L	8.60 NTU	45.5 mV	19.50 ft	150.00 ml/min
11:32 AM	01.11.02	0.07 pri	21.01 0	102.00 μο/οιτί	0.00 1119/2	0.001110	10.0 111	10.0011	100.00 1111/111111
8/24/2021	01:16:52	6.48 pH	23.77 °C	177.94 µS/cm	0.62 mg/L	7.00 NTU	55.5 mV	19.50 ft	150.00 ml/min
11:37 AM	01.10.52	0.40 pm	25.77	177.54 μο/οπ	0.02 mg/L	7.001410	55.5 III V	13.30 10	130.00 111/111111
8/24/2021	01:21:52	6.59 pH	23.49 °C	199.47 µS/cm	0.58 mg/L	5.99 NTU	47.4 mV	19.60 ft	150.00 ml/min
11:42 AM	01.21.02	0.00 pri	25.45 0	133.47 μο/οπ	0.50 mg/L	3.33 1110	47.4 IIIV	15.00 10	130.00 111/111111
8/24/2021	01:26:52	6.66 pH	23.84 °C	217.09 µS/cm	0.48 mg/L	5.60 NTU	50.9 mV	19.60 ft	150.00 ml/min
11:47 AM	01.20.52	0.00 pri	25.04 0	217.05 μο/οπ	0.40 mg/L	3.00 1410	30.5 111	15.00 10	130.00 111/111111
8/24/2021	01:31:52	6.69 pH	23.85 °C	226.93 µS/cm	0.46 mg/L	7.80 NTU	34.6 mV	19.70 ft	150.00 ml/min
11:52 AM	01.51.52	0.09 pm	25.05 C	220.93 μ3/6/11	0.40 Hig/L	7.00 1410	34.0 IIIV	19.7010	130.00 111/111111
8/24/2021	01:36:52	6.84 pH	23.32 °C	255.55 µS/cm	0.25 mg/L	7.80 NTU	-37.5 mV	19.70 ft	150.00 ml/min
11:57 AM	01.50.52	0.04 pri	25.52 0	255.55 μ5/611	0.23 mg/L	7.00 1410	-57.51110	19.7010	130.00 111/111111
8/24/2021	01:41:52	6.81 pH	23.43 °C	247.83 µS/cm	0.21 mg/L	5.20 NTU	-20.7 mV	19.80 ft	150.00 ml/min
12:02 PM	01.41.52	0.01 pm	20.40 0	247.05 μ5/6/11	0.21 mg/L	3.20 1110	-20.7 1110	19.00 10	130.00 111/111111
8/24/2021	01:45:23	6.76 pH	23.97 °C	233.52 µS/cm	0.47 mg/L	5.20 NTU	-3.4 mV	19.80 ft	150.00 ml/min
12:05 PM	01.45.25	0.70 pm	23.97 0	255.52 μ5/6/11	0.47 Hig/L	3.20 1110	-3.4 1117	19.00 10	130.00 111/111111
8/24/2021	01:50:23	6.79 pH	23.95 °C	238.18 µS/cm	0.45 mg/L	4.88 NTU	16.4 mV	19.90 ft	150.00 ml/min
12:10 PM	01.30.23	0.79 pm	23.93	230.10 μ3/011	0.45 Hig/L	4.00 NTU	10.4 1110	19.50 11	130.00 1111/111111
8/24/2021	01:55:23	6.80 pH	23.92 °C	242.39 µS/cm	0.47 mg/L	4.60 NTU	22.5 mV	20.00 ft	150.00 ml/min
12:15 PM	01.35.23	0.60 рн	23.92 0	242.39 μ3/011	0.47 Hig/L	4.00 NTO	22.3 1110	20.00 II	130.00 111/111111

## Samples

Sample ID:	Description:
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**Test Date / Time:** 8/24/2021 1:13:35 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

Location Name: WGWA-6

Well Diameter: 2 in Casing Type: PVC Screen Length: 30 ft Top of Screen: 74.5 ft Total Depth: 104.5 ft

Initial Depth to Water: 17.73 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 99.5 ft Estimated Total Volume Pumped:

3.24 liter

Flow Cell Volume: 90 ml Final Flow Rate: 120 ml/min Final Draw Down: 3.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1340 on 8-24-21, Sunny 90s. FB-1 collected here at 1320.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/24/2021 1:13 PM	00:00	7.80 pH	36.68 °C	168.43 μS/cm	5.95 mg/L	2.80 NTU	64.9 mV	17.73 ft	120.00 ml/min
8/24/2021 1:18 PM	05:00	7.34 pH	22.62 °C	161.41 μS/cm	1.09 mg/L	2.30 NTU	-81.4 mV	17.80 ft	120.00 ml/min
8/24/2021 1:23 PM	10:00	7.76 pH	21.01 °C	170.44 μS/cm	1.19 mg/L	2.30 NTU	-67.4 mV	17.80 ft	120.00 ml/min
8/24/2021 1:28 PM	15:00	7.85 pH	21.06 °C	170.84 μS/cm	1.14 mg/L	2.10 NTU	-83.1 mV	17.90 ft	120.00 ml/min
8/24/2021 1:33 PM	20:00	7.87 pH	20.92 °C	170.63 μS/cm	1.16 mg/L	1.20 NTU	-85.9 mV	18.00 ft	120.00 ml/min
8/24/2021 1:38 PM	25:00	7.88 pH	21.19 °C	171.09 μS/cm	1.08 mg/L	0.96 NTU	-95.6 mV	18.00 ft	120.00 ml/min

### **Samples**

	Sample ID:	Description:
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**Test Date / Time:** 8/24/2021 2:20:46 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

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: 28.04 ft

**Pump Type: Peristaltic Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 34.6 ft Estimated Total Volume Pumped:

11.2 liter

Flow Cell Volume: 90 ml Final Flow Rate: 220 ml/min Final Draw Down: 0.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1510 on 8-24-21, Sunny 90s. DUP-1 here.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/24/2021 2:20 PM	00:00	8.15 pH	29.30 °C	0.00 μS/cm	7.35 mg/L	3.00 NTU	40.1 mV	28.04 ft	220.00 ml/min
8/24/2021 2:25 PM	05:00	7.38 pH	22.26 °C	273.13 μS/cm	1.07 mg/L	1.95 NTU	-99.9 mV	28.10 ft	220.00 ml/min
8/24/2021 2:30 PM	10:00	7.37 pH	21.78 °C	269.28 μS/cm	0.37 mg/L	2.80 NTU	-117.3 mV	28.10 ft	220.00 ml/min
8/24/2021 2:35 PM	15:00	6.80 pH	20.84 °C	131.33 μS/cm	1.12 mg/L	1.20 NTU	3.2 mV	28.10 ft	220.00 ml/min
8/24/2021 2:40 PM	20:00	5.89 pH	20.43 °C	37.31 µS/cm	4.34 mg/L	1.01 NTU	110.5 mV	28.10 ft	220.00 ml/min
8/24/2021 2:45 PM	25:00	5.68 pH	20.11 °C	32.00 µS/cm	5.92 mg/L	0.82 NTU	129.7 mV	28.10 ft	220.00 ml/min
8/24/2021 2:50 PM	30:00	5.61 pH	20.16 °C	29.78 µS/cm	6.51 mg/L	0.70 NTU	137.2 mV	28.10 ft	220.00 ml/min
8/24/2021 2:55 PM	35:00	5.56 pH	20.34 °C	28.80 µS/cm	6.65 mg/L	0.80 NTU	139.7 mV	28.10 ft	220.00 ml/min
8/24/2021 3:00 PM	40:00	5.55 pH	20.25 °C	28.15 μS/cm	6.70 mg/L	0.70 NTU	138.1 mV	28.10 ft	220.00 ml/min
8/24/2021 3:05 PM	45:00	5.53 pH	20.44 °C	27.89 µS/cm	6.80 mg/L	0.70 NTU	136.6 mV	28.10 ft	220.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/25/2021 10:26:15 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**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: 21.5 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 34.6 ft Estimated Total Volume Pumped:

9 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 27.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1125 on 8-25-21, Sunny 80s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/25/2021 10:26 AM	00:00	6.87 pH	21.96 °C	87.25 μS/cm	4.97 mg/L	1.30 NTU	117.8 mV	21.50 ft	150.00 ml/min
8/25/2021 10:31 AM	05:00	7.30 pH	19.34 °C	115.35 μS/cm	1.65 mg/L	2.30 NTU	-0.7 mV	22.60 ft	150.00 ml/min
8/25/2021 10:36 AM	10:00	7.31 pH	19.14 °C	117.93 μS/cm	1.46 mg/L	1.20 NTU	13.4 mV	23.00 ft	150.00 ml/min
8/25/2021 10:41 AM	15:00	7.28 pH	18.83 °C	120.18 μS/cm	1.34 mg/L	1.10 NTU	15.1 mV	23.20 ft	150.00 ml/min
8/25/2021 10:46 AM	20:00	7.23 pH	19.25 °C	122.77 μS/cm	1.14 mg/L	0.90 NTU	19.4 mV	23.30 ft	100.00 ml/min
8/25/2021 10:51 AM	25:00	7.15 pH	19.37 °C	123.63 μS/cm	0.95 mg/L	0.80 NTU	21.7 mV	23.30 ft	100.00 ml/min
8/25/2021 10:56 AM	30:00	7.07 pH	19.41 °C	124.10 μS/cm	0.84 mg/L	0.80 NTU	21.5 mV	23.30 ft	100.00 ml/min
8/25/2021 11:01 AM	35:00	6.98 pH	18.41 °C	123.97 μS/cm	0.73 mg/L	0.70 NTU	24.7 mV	23.50 ft	150.00 ml/min
8/25/2021 11:06 AM	40:00	6.88 pH	18.87 °C	124.26 μS/cm	0.61 mg/L	0.70 NTU	31.3 mV	23.60 ft	150.00 ml/min
8/25/2021 11:11 AM	45:00	6.83 pH	18.65 °C	122.70 μS/cm	0.48 mg/L	0.70 NTU	28.9 mV	23.70 ft	150.00 ml/min
8/25/2021 11:16 AM	50:00	6.77 pH	18.74 °C	121.76 μS/cm	0.51 mg/L	0.60 NTU	32.8 mV	23.80 ft	150.00 ml/min
8/25/2021 11:21 AM	55:00	6.74 pH	19.01 °C	120.73 μS/cm	0.62 mg/L	0.50 NTU	33.5 mV	23.80 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/26/2021 12:15:28 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** Toby Johnson

**Location Name: WGWC-8** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 49 ft Total Depth: 59.63 ft

Initial Depth to Water: 6.78 ft

**Pump Type: Dedicated Bladder** 

**Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 54 ft Estimated Total Volume Pumped:

2500 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 0.72 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

#### **Test Notes:**

Collected at 1241, sunny, 80s

### **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	+/- 10	+/- 0.3	
8/26/2021 12:15 PM	00:00	5.82 pH	26.88 °C	743.21 μS/cm	2.63 mg/L	3.25 NTU	115.1 mV	6.78 ft	100.00 ml/min
8/26/2021 12:20 PM	05:00	5.84 pH	24.40 °C	770.86 μS/cm	3.33 mg/L	3.29 NTU	-54.8 mV	7.20 ft	100.00 ml/min
8/26/2021 12:25 PM	10:00	5.51 pH	24.40 °C	769.79 μS/cm	3.10 mg/L	3.50 NTU	-24.3 mV	7.30 ft	100.00 ml/min
8/26/2021 12:30 PM	15:00	5.38 pH	24.18 °C	766.58 μS/cm	2.91 mg/L	2.08 NTU	0.4 mV	7.40 ft	100.00 ml/min
8/26/2021 12:35 PM	20:00	5.36 pH	23.97 °C	766.33 μS/cm	2.80 mg/L	2.77 NTU	18.6 mV	7.40 ft	100.00 ml/min
8/26/2021 12:40 PM	25:00	5.36 pH	24.04 °C	762.96 μS/cm	2.69 mg/L	1.53 NTU	39.1 mV	7.50 ft	100.00 ml/min

#### **Samples**

	Sample ID:	Description:
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Test Date / Time: 8/26/2021 12:10:03 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**Location Name: WGWC-9** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 51 ft Total Depth: 61.42 ft

Initial Depth to Water: 20.24 ft

Pump Type: Peristaltic Pump

**Tubing Type: Poly** 

Pump Intake From TOC: 56 ft
Estimated Total Volume Pumped:

6.25 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 42.7 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1300

### **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	
8/26/2021 12:10 PM	00:00	7.41 pH	29.61 °C	0.34 μS/cm	6.91 mg/L	7.69 NTU	38.9 mV	20.24 ft	125.00 ml/min
8/26/2021 12:15 PM	05:00	5.90 pH	24.50 °C	148.58 μS/cm	1.62 mg/L	5.09 NTU	65.2 mV	20.90 ft	125.00 ml/min
8/26/2021 12:20 PM	10:00	5.88 pH	23.47 °C	151.81 μS/cm	1.28 mg/L	2.25 NTU	96.5 mV	21.90 ft	125.00 ml/min
8/26/2021 12:25 PM	15:00	5.88 pH	23.55 °C	151.05 μS/cm	1.21 mg/L	2.21 NTU	64.9 mV	22.50 ft	125.00 ml/min
8/26/2021 12:30 PM	20:00	5.88 pH	23.40 °C	149.98 μS/cm	1.18 mg/L	1.37 NTU	62.8 mV	22.90 ft	125.00 ml/min
8/26/2021 12:35 PM	25:00	5.86 pH	22.71 °C	149.06 μS/cm	1.17 mg/L	2.02 NTU	62.0 mV	23.10 ft	125.00 ml/min
8/26/2021 12:40 PM	30:00	5.87 pH	23.16 °C	149.24 μS/cm	1.16 mg/L	1.47 NTU	61.0 mV	23.40 ft	125.00 ml/min
8/26/2021 12:45 PM	35:00	5.86 pH	22.74 °C	149.45 μS/cm	1.89 mg/L	1.36 NTU	92.1 mV	23.70 ft	125.00 ml/min
8/26/2021 12:50 PM	40:00	5.86 pH	22.27 °C	149.22 μS/cm	2.25 mg/L	1.22 NTU	93.8 mV	23.80 ft	125.00 ml/min
8/26/2021 12:55 PM	45:00	5.85 pH	22.13 °C	148.28 μS/cm	2.24 mg/L	2.74 NTU	62.9 mV	23.80 ft	125.00 ml/min
8/26/2021 1:00 PM	50:00	5.84 pH	23.09 °C	149.19 μS/cm	2.26 mg/L	3.54 NTU	94.0 mV	23.80 ft	125.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/26/2021 11:47:53 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**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

Initial Depth to Water: 16.43 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 143.9 ft Estimated Total Volume Pumped:

5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 11.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1235 on 8-26-21. Partly Sunny, 80s.

### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/26/2021 11:47 AM	00:00	7.00 pH	27.10 °C	80.48 µS/cm	7.59 mg/L	1.60 NTU	121.4 mV	16.43 ft	100.00 ml/min
8/26/2021 11:52 AM	05:00	6.42 pH	24.46 °C	65.04 µS/cm	4.60 mg/L	3.60 NTU	112.0 mV	17.00 ft	100.00 ml/min
8/26/2021 11:57 AM	10:00	6.21 pH	22.75 °C	65.74 µS/cm	1.38 mg/L	4.40 NTU	109.1 mV	17.10 ft	100.00 ml/min
8/26/2021 12:02 PM	15:00	6.20 pH	22.22 °C	66.03 µS/cm	1.18 mg/L	5.40 NTU	135.1 mV	17.20 ft	100.00 ml/min
8/26/2021 12:07 PM	20:00	6.23 pH	21.96 °C	65.41 µS/cm	2.56 mg/L	4.20 NTU	108.1 mV	17.20 ft	100.00 ml/min
8/26/2021 12:12 PM	25:00	6.26 pH	21.95 °C	67.14 µS/cm	3.63 mg/L	3.80 NTU	106.5 mV	17.20 ft	100.00 ml/min
8/26/2021 12:17 PM	30:00	6.29 pH	21.92 °C	69.67 µS/cm	4.42 mg/L	4.70 NTU	105.9 mV	17.30 ft	100.00 ml/min
8/26/2021 12:22 PM	35:00	6.30 pH	21.80 °C	70.52 µS/cm	4.90 mg/L	4.50 NTU	105.5 mV	17.30 ft	100.00 ml/min
8/26/2021 12:27 PM	40:00	6.30 pH	21.85 °C	70.90 µS/cm	5.12 mg/L	4.40 NTU	105.3 mV	17.30 ft	100.00 ml/min
8/26/2021 12:32 PM	45:00	6.31 pH	22.12 °C	70.89 µS/cm	5.17 mg/L	4.50 NTU	105.6 mV	17.40 ft	100.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/25/2021 11:30:48 AM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**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: 23.92 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 44 ft Estimated Total Volume Pumped:

6 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 32 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1200

### 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	
8/25/2021 11:30 AM	00:00	6.15 pH	28.72 °C	0.00 μS/cm	7.60 mg/L	2.83 NTU	35.1 mV	23.92 ft	200.00 ml/min
8/25/2021 11:35 AM	05:00	5.66 pH	22.03 °C	29.53 μS/cm	8.04 mg/L	4.85 NTU	91.3 mV	25.70 ft	200.00 ml/min
8/25/2021 11:40 AM	10:00	5.68 pH	21.02 °C	29.12 µS/cm	7.87 mg/L	5.05 NTU	82.4 mV	26.40 ft	200.00 ml/min
8/25/2021 11:45 AM	15:00	5.72 pH	21.45 °C	29.38 µS/cm	7.65 mg/L	3.82 NTU	123.3 mV	26.60 ft	200.00 ml/min
8/25/2021 11:50 AM	20:00	5.70 pH	21.32 °C	29.66 µS/cm	7.56 mg/L	3.45 NTU	80.2 mV	26.60 ft	200.00 ml/min
8/25/2021 11:55 AM	25:00	5.68 pH	21.74 °C	29.91 µS/cm	7.50 mg/L	3.22 NTU	80.1 mV	26.60 ft	200.00 ml/min
8/25/2021 12:00 PM	30:00	5.66 pH	20.96 °C	30.12 μS/cm	7.50 mg/L	2.62 NTU	79.8 mV	26.60 ft	200.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/25/2021 12:25:03 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**Location Name: WGWC-12** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 66.54 ft Total Depth: 76.54 ft

Initial Depth to Water: 23.7 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

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

13 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min

Final Draw Down: 7 in

Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time -1330, 2nd rad collected here

### 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	
8/25/2021 12:25 PM	00:00	5.90 pH	28.12 °C	0.00 μS/cm	7.64 mg/L	33.00 NTU	27.7 mV	23.70 ft	200.00 ml/min
8/25/2021 12:30 PM	05:00	6.55 pH	20.57 °C	97.44 μS/cm	2.72 mg/L	639.00 NTU	12.5 mV	24.20 ft	200.00 ml/min
8/25/2021 12:35 PM	10:00	6.55 pH	19.85 °C	99.89 µS/cm	1.65 mg/L	311.00 NTU	17.2 mV	24.30 ft	200.00 ml/min
8/25/2021 12:40 PM	15:00	6.58 pH	19.50 °C	106.26 μS/cm	0.20 mg/L	44.00 NTU	17.3 mV	24.30 ft	200.00 ml/min
8/25/2021 12:45 PM	20:00	6.62 pH	19.93 °C	109.41 μS/cm	0.18 mg/L	21.00 NTU	16.8 mV	24.30 ft	200.00 ml/min
8/25/2021 12:50 PM	25:00	6.64 pH	19.99 °C	111.79 μS/cm	0.18 mg/L	17.00 NTU	16.3 mV	24.30 ft	200.00 ml/min
8/25/2021 12:55 PM	30:00	6.66 pH	19.85 °C	111.85 μS/cm	0.18 mg/L	13.00 NTU	16.5 mV	24.30 ft	200.00 ml/min
8/25/2021 1:00 PM	35:00	6.64 pH	19.48 °C	112.47 μS/cm	0.19 mg/L	10.00 NTU	18.0 mV	24.30 ft	200.00 ml/min
8/25/2021 1:05 PM	40:00	6.67 pH	19.90 °C	112.35 μS/cm	0.20 mg/L	9.54 NTU	16.7 mV	24.30 ft	200.00 ml/min
8/25/2021 1:10 PM	45:00	6.68 pH	20.03 °C	112.28 μS/cm	0.21 mg/L	7.21 NTU	16.7 mV	24.30 ft	200.00 ml/min
8/25/2021 1:15 PM	50:00	6.67 pH	20.08 °C	112.58 μS/cm	0.22 mg/L	7.05 NTU	16.9 mV	24.30 ft	200.00 ml/min
8/25/2021 1:20 PM	55:00	6.68 pH	20.06 °C	111.52 μS/cm	0.23 mg/L	6.89 NTU	17.1 mV	24.30 ft	200.00 ml/min
8/25/2021 1:25 PM	01:00:00	6.67 pH	19.93 °C	110.82 μS/cm	0.24 mg/L	5.55 NTU	17.8 mV	24.30 ft	200.00 ml/min
8/25/2021 1:30 PM	01:05:00	6.69 pH	19.84 °C	110.70 μS/cm	0.25 mg/L	4.82 NTU	17.4 mV	24.30 ft	200.00 ml/min

## Samples

Sample ID:	Description:
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**Test Date / Time:** 8/25/2021 12:15:11 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**Location Name: WGWC-13** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 20 ft

Top of Screen: 75.55 ft Total

Depth: 95.55 ft

Initial Depth to Water: 22.65 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 90.55 ft Estimated Total Volume Pumped:

4.2 liter

Flow Cell Volume: 90 ml Final Flow Rate: 120 ml/min

Final Draw Down: 3 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1245 on 8-25-21, Sunny 80s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/25/2021 12:15 PM	00:00	6.51 pH	25.55 °C	63.03 µS/cm	4.84 mg/L	8.40 NTU	112.8 mV	22.65 ft	120.00 ml/min
8/25/2021 12:20 PM	05:00	6.17 pH	23.35 °C	61.94 µS/cm	1.28 mg/L	8.70 NTU	100.8 mV	22.80 ft	120.00 ml/min
8/25/2021 12:25 PM	10:00	6.24 pH	22.80 °C	62.73 µS/cm	2.08 mg/L	4.70 NTU	94.6 mV	22.80 ft	120.00 ml/min
8/25/2021 12:30 PM	15:00	6.27 pH	22.27 °C	63.25 µS/cm	2.40 mg/L	3.70 NTU	105.1 mV	22.80 ft	120.00 ml/min
8/25/2021 12:35 PM	20:00	6.26 pH	22.22 °C	62.77 µS/cm	2.37 mg/L	3.60 NTU	107.4 mV	22.90 ft	120.00 ml/min
8/25/2021 12:40 PM	25:00	6.27 pH	22.04 °C	62.79 µS/cm	2.43 mg/L	3.60 NTU	107.5 mV	22.90 ft	120.00 ml/min

### **Samples**

	Sample ID:	Description:
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**Test Date / Time:** 8/25/2021 1:03:27 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. 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: 22.64 ft

**Pump Type: Peristaltic pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 28.05 ft Estimated Total Volume Pumped:

4.5 liter

Flow Cell Volume: 90 ml Final Flow Rate: 150 ml/min Final Draw Down: 3.1 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1330 on 8-25-21, Sunny 90s.

### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/25/2021 1:03 PM	00:00	6.26 pH	30.55 °C	0.00 μS/cm	7.43 mg/L	15.00 NTU	63.8 mV	22.64 ft	150.00 ml/min
8/25/2021 1:08 PM	05:00	5.38 pH	23.88 °C	30.78 µS/cm	1.70 mg/L	11.10 NTU	175.6 mV	22.80 ft	150.00 ml/min
8/25/2021 1:13 PM	10:00	5.38 pH	23.51 °C	30.81 µS/cm	1.41 mg/L	8.40 NTU	173.1 mV	22.80 ft	150.00 ml/min
8/25/2021 1:18 PM	15:00	5.37 pH	23.59 °C	30.65 µS/cm	1.35 mg/L	5.80 NTU	172.0 mV	22.80 ft	150.00 ml/min
8/25/2021 1:23 PM	20:00	5.38 pH	23.09 °C	31.18 µS/cm	1.33 mg/L	4.70 NTU	170.6 mV	22.90 ft	150.00 ml/min
8/25/2021 1:28 PM	25:00	5.39 pH	22.80 °C	31.97 µS/cm	1.31 mg/L	4.50 NTU	168.7 mV	22.90 ft	150.00 ml/min

### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/26/2021 3:31:39 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** Toby Johnson

**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: 20.06 ft

**Pump Type: Dedicated Bladder** 

**Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 48 ft Estimated Total Volume Pumped:

4000 ml

Flow Cell Volume: 90 ml Final Flow Rate: 100 ml/min Final Draw Down: 1.44 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

#### **Test Notes:**

Collected at 1614, extra rad here, sunny, 80s

### 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	+/- 10	+/- 0.3	
8/26/2021 3:31 PM	00:00	7.39 pH	30.01 °C	209.54 μS/cm	6.75 mg/L	1.75 NTU	88.1 mV	20.06 ft	100.00 ml/min
8/26/2021 3:36 PM	05:00	7.19 pH	24.90 °C	220.40 μS/cm	4.37 mg/L	12.80 NTU	53.4 mV	20.60 ft	100.00 ml/min
8/26/2021 3:41 PM	10:00	7.27 pH	24.67 °C	227.61 μS/cm	4.45 mg/L	3.40 NTU	-2.6 mV	20.80 ft	100.00 ml/min
8/26/2021 3:46 PM	15:00	7.38 pH	25.76 °C	232.06 μS/cm	3.90 mg/L	2.18 NTU	-26.5 mV	20.90 ft	100.00 ml/min
8/26/2021 3:51 PM	20:00	7.46 pH	26.29 °C	234.35 μS/cm	3.47 mg/L	1.18 NTU	-27.6 mV	21.10 ft	100.00 ml/min
8/26/2021 3:56 PM	25:00	7.53 pH	26.58 °C	233.92 μS/cm	3.28 mg/L	2.19 NTU	-24.7 mV	21.20 ft	100.00 ml/min
8/26/2021 4:01 PM	30:00	7.57 pH	26.67 °C	231.38 μS/cm	3.56 mg/L	0.76 NTU	-18.5 mV	21.30 ft	100.00 ml/min
8/26/2021 4:06 PM	35:00	7.58 pH	26.77 °C	228.89 μS/cm	3.74 mg/L	1.21 NTU	-8.7 mV	21.40 ft	100.00 ml/min
8/26/2021 4:11 PM	40:00	7.58 pH	26.62 °C	224.84 μS/cm	3.80 mg/L	0.78 NTU	0.6 mV	21.50 ft	100.00 ml/min

### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/25/2021 2:20:03 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**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: 19.46 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 29 ft Estimated Total Volume Pumped:

3.75 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 4.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time -1450, FB-2 here at 1435

#### 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	
8/25/2021 2:20 PM	00:00	7.07 pH	26.70 °C	280.00 μS/cm	7.78 mg/L	4.44 NTU	31.7 mV	19.46 ft	125.00 ml/min
8/25/2021 2:25 PM	05:00	5.30 pH	20.79 °C	271.02 μS/cm	4.94 mg/L	2.41 NTU	91.9 mV	19.80 ft	125.00 ml/min
8/25/2021 2:30 PM	10:00	5.28 pH	19.59 °C	270.44 μS/cm	4.29 mg/L	2.02 NTU	89.3 mV	19.80 ft	125.00 ml/min
8/25/2021 2:35 PM	15:00	5.26 pH	19.42 °C	268.54 μS/cm	3.94 mg/L	1.98 NTU	87.5 mV	19.80 ft	125.00 ml/min
8/25/2021 2:40 PM	20:00	5.26 pH	19.37 °C	267.99 μS/cm	3.84 mg/L	1.84 NTU	132.5 mV	19.80 ft	125.00 ml/min
8/25/2021 2:45 PM	25:00	5.26 pH	19.26 °C	267.68 μS/cm	3.83 mg/L	1.50 NTU	86.1 mV	19.80 ft	125.00 ml/min
8/25/2021 2:50 PM	30:00	5.25 pH	19.26 °C	267.83 μS/cm	3.78 mg/L	1.05 NTU	129.4 mV	19.80 ft	125.00 ml/min

#### **Samples**

Sample ID:	Description:
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**Test Date / Time:** 8/25/2021 2:23:57 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**Location Name: WGWC-17** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 in Top of Screen: 85.9 ft Total Depth: 95.94 ft

Initial Depth to Water: 29.85 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 90.9 ft Estimated Total Volume Pumped:

7 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min

Final Draw Down: 3 in

Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1455 on 8-25-21. EB-2 here (tubing). Partly cloudy, 90s.

#### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/25/2021 2:23 PM	00:00	6.41 pH	27.95 °C	79.47 µS/cm	3.63 mg/L	4.00 NTU	63.6 mV	29.85 ft	200.00 ml/min
8/25/2021 2:28 PM	05:00	6.07 pH	19.91 °C	87.61 µS/cm	1.24 mg/L	15.00 NTU	58.8 mV	30.00 ft	200.00 ml/min
8/25/2021 2:33 PM	10:00	6.08 pH	19.90 °C	88.76 µS/cm	1.35 mg/L	9.00 NTU	58.1 mV	30.10 ft	200.00 ml/min
8/25/2021 2:38 PM	15:00	6.10 pH	21.47 °C	89.48 µS/cm	1.09 mg/L	7.10 NTU	58.1 mV	30.10 ft	200.00 ml/min
8/25/2021 2:43 PM	20:00	6.10 pH	21.37 °C	89.45 µS/cm	0.76 mg/L	5.30 NTU	60.4 mV	30.10 ft	200.00 ml/min
8/25/2021 2:48 PM	25:00	6.09 pH	21.24 °C	89.69 µS/cm	0.39 mg/L	3.10 NTU	57.4 mV	30.10 ft	200.00 ml/min

#### **Samples**

Sam	ple ID:	Description:
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**Test Date / Time:** 8/26/2021 10:35:17 AM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**Location Name: WGWC-19** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 84.8 ft Total Depth: 94.84 ft

Initial Depth to Water: 20.82 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 89.8 ft Estimated Total Volume Pumped:

6 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 8.2 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1105 on 8-26-21. Dup-2 here. Cloudy 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 %	+/- 5	+/- 300	+/- 10	
8/26/2021 10:35 AM	00:00	6.95 pH	23.02 °C	185.46 μS/cm	3.10 mg/L	0.90 NTU	114.3 mV	20.82 ft	200.00 ml/min
8/26/2021 10:40 AM	05:00	6.71 pH	20.57 °C	175.88 μS/cm	0.46 mg/L	2.60 NTU	14.6 mV	21.40 ft	200.00 ml/min
8/26/2021 10:45 AM	10:00	6.67 pH	20.32 °C	152.49 μS/cm	0.29 mg/L	1.80 NTU	56.0 mV	21.40 ft	200.00 ml/min
8/26/2021 10:50 AM	15:00	6.66 pH	20.09 °C	145.65 μS/cm	0.23 mg/L	1.60 NTU	74.3 mV	21.40 ft	200.00 ml/min
8/26/2021 10:55 AM	20:00	6.66 pH	19.94 °C	144.73 μS/cm	0.20 mg/L	1.40 NTU	81.1 mV	21.50 ft	200.00 ml/min
8/26/2021 11:00 AM	25:00	6.66 pH	19.98 °C	145.11 μS/cm	0.18 mg/L	1.30 NTU	98.7 mV	21.50 ft	200.00 ml/min

#### **Samples**

Sam	ple ID:	Description:
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**Test Date / Time:** 8/26/2021 10:45:24 AM **Project:** Plant Wansley - Ash Pond **Operator Name:** Toby Johnson

**Location Name: WGWC-20** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 32 ft Total Depth: 42.85 ft

Initial Depth to Water: 31.68 ft

Pump Type: Dedicated Bladder

**Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 37 ft Estimated Total Volume Pumped:

6777.5 ml

Flow Cell Volume: 90 ml

Final Flow Rate: 150 ml/min Final

Draw Down: 0.21 ft

Instrument Used: Aqua TROLL 400

Serial Number: 850762

#### **Test Notes:**

Collected at 1132, sunny, 80s

#### 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	+/- 10	+/- 0.3	
8/26/2021 10:45 AM	00:00	5.41 pH	22.63 °C	831.65 μS/cm	6.45 mg/L	2.16 NTU	157.9 mV	31.68 ft	150.00 ml/min
8/26/2021 10:50 AM	05:00	5.39 pH	22.86 °C	889.03 μS/cm	5.26 mg/L	1.72 NTU	131.9 mV	31.80 ft	150.00 ml/min
8/26/2021 10:55 AM	10:00	5.37 pH	23.50 °C	919.77 μS/cm	5.01 mg/L	0.71 NTU	143.5 mV	31.80 ft	150.00 ml/min
8/26/2021 11:00 AM	15:00	5.37 pH	23.72 °C	927.64 μS/cm	5.46 mg/L	0.69 NTU	115.2 mV	31.80 ft	150.00 ml/min
8/26/2021 11:01 AM	15:46	5.37 pH	23.68 °C	936.42 µS/cm	6.20 mg/L	0.69 NTU	107.3 mV	31.80 ft	150.00 ml/min
8/26/2021 11:06 AM	20:46	5.37 pH	23.59 °C	939.99 μS/cm	5.43 mg/L	0.63 NTU	104.9 mV	31.80 ft	150.00 ml/min
8/26/2021 11:11 AM	25:46	5.37 pH	23.36 °C	948.42 μS/cm	4.74 mg/L	0.58 NTU	102.2 mV	31.80 ft	150.00 ml/min
8/26/2021 11:15 AM	30:11	5.37 pH	23.46 °C	951.94 μS/cm	4.39 mg/L	0.52 NTU	113.3 mV	31.80 ft	150.00 ml/min
8/26/2021 11:20 AM	35:11	5.37 pH	23.81 °C	959.64 μS/cm	5.54 mg/L	0.31 NTU	100.8 mV	31.80 ft	150.00 ml/min
8/26/2021 11:25 AM	40:11	5.37 pH	24.09 °C	935.74 μS/cm	5.76 mg/L	0.32 NTU	98.2 mV	31.80 ft	150.00 ml/min
8/26/2021 11:30 AM	45:11	5.37 pH	24.36 °C	964.13 μS/cm	5.43 mg/L	0.52 NTU	94.8 mV	31.80 ft	150.00 ml/min

#### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/26/2021 9:45:01 AM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**Location Name: WGWC-21** 

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: 50.22 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 66 ft Estimated Total Volume Pumped:

13.12 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 110 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time 1130

#### **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	
8/26/2021 9:45 AM	00:00	6.89 pH	21.60 °C	547.29 μS/cm	4.23 mg/L	1.51 NTU	28.4 mV	50.22 ft	125.00 ml/min
8/26/2021 9:50 AM	05:00	7.01 pH	19.50 °C	793.29 μS/cm	1.53 mg/L	10.00 NTU	-14.1 mV	51.80 ft	125.00 ml/min
8/26/2021 9:55 AM	10:00	7.01 pH	19.23 °C	803.24 μS/cm	0.69 mg/L	6.11 NTU	-13.9 mV	52.60 ft	125.00 ml/min
8/26/2021 10:00 AM	15:00	6.96 pH	19.41 °C	754.08 μS/cm	0.54 mg/L	3.61 NTU	-49.9 mV	53.30 ft	125.00 ml/min
8/26/2021 10:05 AM	20:00	6.94 pH	20.57 °C	743.22 μS/cm	0.62 mg/L	2.59 NTU	-46.6 mV	53.60 ft	125.00 ml/min
8/26/2021 10:10 AM	25:00	6.93 pH	21.10 °C	732.63 μS/cm	0.71 mg/L	2.68 NTU	-11.2 mV	53.90 ft	125.00 ml/min
8/26/2021 10:15 AM	30:00	6.94 pH	21.19 °C	717.94 μS/cm	0.97 mg/L	2.05 NTU	-36.8 mV	54.40 ft	125.00 ml/min
8/26/2021 10:20 AM	35:00	6.94 pH	19.72 °C	727.79 μS/cm	0.65 mg/L	1.39 NTU	-32.1 mV	54.80 ft	125.00 ml/min
8/26/2021 10:25 AM	40:00	6.94 pH	19.55 °C	716.76 µS/cm	0.59 mg/L	1.22 NTU	-26.5 mV	55.50 ft	125.00 ml/min
8/26/2021 10:30 AM	45:00	6.93 pH	19.54 °C	704.09 μS/cm	0.54 mg/L	1.78 NTU	0.4 mV	55.70 ft	125.00 ml/min
8/26/2021 10:35 AM	50:00	6.92 pH	19.85 °C	700.29 μS/cm	0.52 mg/L	1.82 NTU	-23.3 mV	56.30 ft	125.00 ml/min
8/26/2021 10:40 AM	55:00	6.92 pH	20.39 °C	697.31 μS/cm	0.52 mg/L	1.77 NTU	-0.4 mV	57.00 ft	125.00 ml/min
8/26/2021 10:45 AM	01:00:00	6.91 pH	20.79 °C	685.77 μS/cm	0.52 mg/L	1.55 NTU	-1.9 mV	57.50 ft	125.00 ml/min
8/26/2021 10:50 AM	01:05:00	6.90 pH	20.82 °C	673.92 μS/cm	0.50 mg/L	1.62 NTU	-4.7 mV	57.80 ft	125.00 ml/min
8/26/2021 10:55 AM	01:10:00	6.90 pH	20.71 °C	672.77 μS/cm	0.50 mg/L	1.22 NTU	-7.6 mV	58.10 ft	125.00 ml/min

8/26/2021	01:15:00	6.91 pH	20.57 °C	667.40 µS/cm	0.51 mg/L	1.04 NTU	-42.0 mV	58.40 ft	125.00 ml/min
11:00 AM	01.10.00	0.01 pm	20.07	007.40 μο/οπ	0.01 mg/L	1.041110	42.0 111 V	00.40 It	120.00 1111/111111
8/26/2021	01:20:00	6.90 pH	20.65 °C	658.97 µS/cm	0.53 mg/L	1.35 NTU	-45.4 mV	58.60 ft	125.00 ml/min
11:05 AM	01.20.00	0.90 pm	20.03 C	030.97 μ3/6111	0.55 mg/L	1.33 NTO	-43.4 1110	36.00 11	
8/26/2021	01:25:00	6.90 pH	20.66 °C	654.65 µS/cm	0.59 mg/L	1.44 NTU	-11.2 mV	58.90 ft	125.00 ml/min
11:10 AM	01.23.00	0.90 pm	20.00 C	034.03 μ3/611	0.59 mg/L	1.44 1010	-11.21110	36.90 11	123.00 111/111111
8/26/2021	01:30:00	6.90 pH	20.91 °C	647.87 µS/cm	0.71 mg/L	1.32 NTU	-36.6 mV	59.10 ft	125.00 ml/min
11:15 AM	01.30.00	6.90 рп	20.91 C	047.07 μ3/0111	0.7 T HIG/L	1.52 1110	-50.0 111	39.1011	123.00 1111/111111
8/26/2021	01:35:00	1:35:00 6.89 pH	21.47 °C	639.43 µS/cm	0.85 mg/L	1.29 NTU	-28.5 mV	59.30 ft	125.00 ml/min
11:20 AM	01.33.00	0.69 pri	21.47 0	039.43 μ3/611	0.83 Hig/L	1.29 1110	-20.5 1117	59.50 It	123.00 1111/111111
8/26/2021	01:40:00	6.88 pH	23.48 °C	650.23 µS/cm	0.89 mg/L	1.14 NTU	-4.0 mV	59.40 ft	405.001/
11:25 AM	01.40.00	0.00 μπ	23.46 C	650.25 μ5/611	0.69 Hig/L	1.14 N10	-4.0 1110	59.40 II	125.00 ml/min
8/26/2021	01:45:00	6 00 vH	25.90.0€	645 20 uS/om	0.02 ma/l	1 24 NTU	20.0 m\/	E0 40 ft	125 00 ml/min
11:30 AM	01:45:00	6.88 pH	25.80 °C	645.30 μS/cm	0.93 mg/L	1.34 NTU	-28.8 mV	59.40 ft	125.00 ml/min

#### **Samples**

Sample ID:	Description:
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Test Date / Time: 8/26/2021 1:50:01 PM

**Project:** Plant Wansley AP **Operator Name:** J. Berisford

**Location Name: WGWC-22** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 33.88 ft Total Depth: 43.88 ft

Initial Depth to Water: 18.37 ft

**Pump Type: QED Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 37 ft
Estimated Total Volume Pumped:

11.25 liter

Flow Cell Volume: 90 ml Final Flow Rate: 125 ml/min Final Draw Down: 43.5 in Instrument Used: Aqua TROLL 400

Serial Number: 714302

#### **Test Notes:**

Sunny, sample time- 1520

#### **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	
8/26/2021 1:50 PM	00:00	6.58 pH	27.15 °C	171.23 μS/cm	7.26 mg/L	52.00 NTU	44.2 mV	18.37 ft	125.00 ml/min
8/26/2021 1:55 PM	05:00	5.44 pH	24.29 °C	251.51 μS/cm	2.22 mg/L	171.00 NTU	93.7 mV	19.80 ft	125.00 ml/min
8/26/2021 2:00 PM	10:00	5.44 pH	22.96 °C	258.14 μS/cm	1.69 mg/L	142.00 NTU	133.7 mV	19.80 ft	125.00 ml/min
8/26/2021 2:05 PM	15:00	5.42 pH	23.02 °C	263.91 μS/cm	1.43 mg/L	104.00 NTU	135.2 mV	20.40 ft	125.00 ml/min
8/26/2021 2:10 PM	20:00	5.41 pH	22.89 °C	266.04 μS/cm	1.18 mg/L	76.00 NTU	134.8 mV	20.90 ft	125.00 ml/min
8/26/2021 2:15 PM	25:00	5.41 pH	22.22 °C	265.33 μS/cm	1.06 mg/L	64.00 NTU	83.1 mV	20.50 ft	125.00 ml/min
8/26/2021 2:20 PM	30:00	5.40 pH	22.99 °C	267.75 μS/cm	1.01 mg/L	41.00 NTU	81.9 mV	21.70 ft	125.00 ml/min
8/26/2021 2:25 PM	35:00	5.39 pH	23.92 °C	268.19 μS/cm	0.98 mg/L	30.00 NTU	82.3 mV	21.90 ft	125.00 ml/min
8/26/2021 2:30 PM	40:00	5.39 pH	23.79 °C	267.63 μS/cm	0.96 mg/L	22.00 NTU	130.1 mV	22.00 ft	125.00 ml/min
8/26/2021 2:35 PM	45:00	5.39 pH	24.02 °C	270.88 μS/cm	0.96 mg/L	19.00 NTU	84.0 mV	22.00 ft	125.00 ml/min
8/26/2021 2:40 PM	50:00	5.39 pH	24.15 °C	270.94 μS/cm	0.95 mg/L	14.00 NTU	131.1 mV	22.00 ft	125.00 ml/min
8/26/2021 2:45 PM	55:00	5.40 pH	23.69 °C	270.30 μS/cm	0.95 mg/L	11.00 NTU	83.2 mV	22.00 ft	125.00 ml/min
8/26/2021 2:50 PM	01:00:00	5.40 pH	24.01 °C	272.43 μS/cm	0.95 mg/L	10.00 NTU	81.9 mV	22.00 ft	125.00 ml/min
8/26/2021 2:55 PM	01:05:00	5.40 pH	23.79 °C	271.42 μS/cm	0.94 mg/L	8.47 NTU	81.3 mV	22.00 ft	125.00 ml/min
8/26/2021 3:00 PM	01:10:00	5.40 pH	23.34 °C	273.55 μS/cm	0.96 mg/L	8.25 NTU	125.6 mV	22.00 ft	125.00 ml/min

8/26/2021	01:15:00	5.41 pH	22.71 °C	273.28 μS/cm	0.96 mg/L	7.00 NTU	80.9 mV	22.00 ft	125.00 ml/min
3:05 PM									
8/26/2021	04.00.00	5.40 -11	00.57.00	075.400/	0.07	0.00 NITH	405.5\/	00.00.0	405.00
3:10 PM	01:20:00	5.40 pH	22.57 °C	275.12 μS/cm	0.97 mg/L	6.23 NTU	125.5 mV	22.00 ft	125.00 ml/min
8/26/2021	01:25:00	5.40 pH	23.06 °C	273.49 µS/cm	0.96 mg/L	5.58 NTU	81.6 mV	22.00 ft	125.00 ml/min
3:15 PM	01.25.00	3.40 pm	23.00 C	273.49 μ3/611	0.90 mg/L	3.38 NTO	01.0111	22.00 It	123.00 1111/111111
8/26/2021 3:20 PM	01:30:00	5.40 pH	23.07 °C	273.71 μS/cm	0.96 mg/L	4.31 NTU	127.1 mV	22.00 ft	125.00 ml/min

### Samples

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	Sample ID:	Description:

**Test Date / Time:** 8/26/2021 1:53:48 PM **Project:** Plant Wansley - Ash Pond **Operator Name:** Toby Johnson

**Location Name: WGWC-23** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 43 ft Total Depth: 53.86 ft

Initial Depth to Water: 30.81 ft

**Pump Type: Dedicated Bladder** 

**Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 48 ft Estimated Total Volume Pumped:

7800 ml

Flow Cell Volume: 90 ml Final Flow Rate: 130 ml/min Final Draw Down: 0.29 ft Instrument Used: Aqua TROLL 400

Serial Number: 850762

#### **Test Notes:**

Collected at 1455, FB-3 collected here, sunny, 80s

#### 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	+/- 10	+/- 0.3	
8/26/2021 1:53 PM	00:00	5.87 pH	26.22 °C	89.15 μS/cm	6.35 mg/L	0.73 NTU	116.0 mV	30.81 ft	130.00 ml/min
8/26/2021 1:58 PM	05:00	5.79 pH	22.60 °C	84.09 µS/cm	5.41 mg/L	1.18 NTU	93.1 mV	31.10 ft	130.00 ml/min
8/26/2021 2:03 PM	10:00	5.80 pH	22.12 °C	87.85 μS/cm	6.49 mg/L	1.34 NTU	86.8 mV	31.10 ft	130.00 ml/min
8/26/2021 2:08 PM	15:00	5.76 pH	22.01 °C	86.45 µS/cm	5.84 mg/L	1.36 NTU	87.0 mV	31.10 ft	130.00 ml/min
8/26/2021 2:13 PM	20:00	5.76 pH	21.98 °C	86.48 µS/cm	6.19 mg/L	1.47 NTU	85.8 mV	31.10 ft	130.00 ml/min
8/26/2021 2:18 PM	25:00	5.80 pH	21.81 °C	87.20 μS/cm	5.81 mg/L	1.26 NTU	82.0 mV	31.10 ft	130.00 ml/min
8/26/2021 2:23 PM	30:00	5.77 pH	22.07 °C	87.98 μS/cm	5.27 mg/L	1.11 NTU	83.6 mV	31.10 ft	130.00 ml/min
8/26/2021 2:28 PM	35:00	5.78 pH	22.17 °C	88.73 μS/cm	6.10 mg/L	0.81 NTU	82.8 mV	31.10 ft	130.00 ml/min
8/26/2021 2:33 PM	40:00	5.78 pH	22.16 °C	89.42 µS/cm	6.21 mg/L	1.11 NTU	82.2 mV	31.10 ft	130.00 ml/min
8/26/2021 2:38 PM	45:00	5.77 pH	21.55 °C	88.81 µS/cm	5.23 mg/L	0.99 NTU	83.0 mV	31.10 ft	130.00 ml/min
8/26/2021 2:43 PM	50:00	5.79 pH	22.00 °C	90.71 μS/cm	5.60 mg/L	0.85 NTU	83.1 mV	31.10 ft	130.00 ml/min
8/26/2021 2:48 PM	55:00	5.80 pH	22.25 °C	91.42 μS/cm	5.91 mg/L	0.83 NTU	81.5 mV	31.10 ft	130.00 ml/min
8/26/2021 2:53 PM	01:00:00	5.80 pH	22.43 °C	91.86 μS/cm	6.09 mg/L	0.73 NTU	80.6 mV	31.10 ft	130.00 ml/min

### Samples

Sample ID:	Description:
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**Test Date / Time:** 8/26/2021 1:27:40 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**Location Name: WGWC-24** 

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: 15.78 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 35.8 ft Estimated Total Volume Pumped:

6.8 liter

Flow Cell Volume: 90 ml Final Flow Rate: 225 ml/min Final Draw Down: 2.6 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1355 on 8-26-21. Sunny, 80s. DUP-3 here.

#### Low-Flow Readings:

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/26/2021 1:27 PM	00:00	4.37 pH	23.54 °C	623.30 μS/cm	2.62 mg/L	5.40 NTU	266.3 mV	15.78 ft	225.00 ml/min
8/26/2021 1:32 PM	05:00	4.34 pH	21.23 °C	666.58 μS/cm	0.91 mg/L	5.40 NTU	246.2 mV	15.90 ft	225.00 ml/min
8/26/2021 1:37 PM	10:00	4.33 pH	20.65 °C	667.06 μS/cm	0.39 mg/L	6.90 NTU	299.7 mV	15.90 ft	225.00 ml/min
8/26/2021 1:42 PM	15:00	4.33 pH	20.65 °C	678.03 μS/cm	0.34 mg/L	5.20 NTU	217.9 mV	15.90 ft	225.00 ml/min
8/26/2021 1:47 PM	20:00	4.33 pH	20.68 °C	679.45 μS/cm	0.32 mg/L	3.90 NTU	277.2 mV	15.90 ft	225.00 ml/min
8/26/2021 1:52 PM	25:00	4.33 pH	20.74 °C	684.15 μS/cm	0.32 mg/L	3.30 NTU	205.8 mV	15.90 ft	225.00 ml/min

#### **Samples**

Sam	ple ID:	Description:
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**Test Date / Time:** 8/26/2021 2:29:38 PM **Project:** Plant Wansley - Ash Pond

Operator Name: H. Auld

**Location Name: WGWC-25** 

Well Diameter: 2 in Casing Type: PVC Screen Length: 10 ft Top of Screen: 29.9 ft Total Depth: 39.93 ft

Initial Depth to Water: 18.13 ft

**Pump Type: Bladder Pump** 

**Tubing Type: Poly** 

Pump Intake From TOC: 34.9 ft Estimated Total Volume Pumped:

17.4 liter

Flow Cell Volume: 90 ml Final Flow Rate: 200 ml/min Final Draw Down: 2.04 in Instrument Used: Aqua TROLL 400

Serial Number: 714344

#### **Test Notes:**

Sampled at 1552 on 8-26-21. Sunny 80s.

#### **Low-Flow Readings:**

Date Time	Elapsed Time	рН	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 100	+/- 5 %	+/- 10 %	+/- 5	+/- 300	+/- 10	
8/26/2021 2:29 PM	00:00	5.29 pH	21.55 °C	347.81 μS/cm	2.60 mg/L	22.00 NTU	217.7 mV	18.13 ft	200.00 ml/min
8/26/2021 2:34 PM	05:00	5.26 pH	19.68 °C	357.54 μS/cm	1.78 mg/L	38.00 NTU	240.7 mV	18.30 ft	200.00 ml/min
8/26/2021 2:39 PM	10:00	5.27 pH	19.35 °C	358.73 μS/cm	1.52 mg/L	36.00 NTU	181.2 mV	18.30 ft	200.00 ml/min
8/26/2021 2:44 PM	15:00	5.27 pH	19.14 °C	357.29 μS/cm	1.24 mg/L	30.00 NTU	169.1 mV	18.30 ft	200.00 ml/min
8/26/2021 2:49 PM	20:00	5.27 pH	19.14 °C	355.73 μS/cm	1.14 mg/L	23.00 NTU	161.6 mV	18.30 ft	200.00 ml/min
8/26/2021 2:54 PM	25:00	5.28 pH	19.14 °C	356.92 μS/cm	1.50 mg/L	22.00 NTU	156.7 mV	18.30 ft	200.00 ml/min
8/26/2021 2:59 PM	30:00	5.28 pH	19.10 °C	355.38 μS/cm	1.03 mg/L	17.00 NTU	151.3 mV	18.30 ft	200.00 ml/min
8/26/2021 3:04 PM	35:00	5.28 pH	19.09 °C	352.10 μS/cm	1.01 mg/L	14.00 NTU	176.5 mV	18.30 ft	200.00 ml/min
8/26/2021 3:09 PM	40:00	5.28 pH	18.79 °C	349.34 μS/cm	2.46 mg/L	12.00 NTU	178.4 mV	18.30 ft	200.00 ml/min
8/26/2021 3:14 PM	45:00	5.28 pH	18.74 °C	350.20 μS/cm	0.99 mg/L	11.00 NTU	149.3 mV	18.30 ft	200.00 ml/min
8/26/2021 3:19 PM	50:00	5.29 pH	19.07 °C	348.77 μS/cm	0.32 mg/L	9.00 NTU	146.4 mV	18.30 ft	200.00 ml/min
8/26/2021 3:24 PM	55:00	5.29 pH	19.79 °C	344.86 μS/cm	0.32 mg/L	7.00 NTU	142.3 mV	18.30 ft	200.00 ml/min
8/26/2021 3:29 PM	01:00:00	5.30 pH	19.85 °C	341.87 μS/cm	0.34 mg/L	8.00 NTU	167.2 mV	18.30 ft	200.00 ml/min
8/26/2021 3:34 PM	01:05:00	5.29 pH	19.89 °C	340.20 μS/cm	0.35 mg/L	6.10 NTU	145.0 mV	18.30 ft	200.00 ml/min
8/26/2021 3:39 PM	01:10:00	5.30 pH	19.62 °C	340.09 μS/cm	0.34 mg/L	5.20 NTU	143.2 mV	18.30 ft	200.00 ml/min

8/26/2021 3:44 PM	01:15:00	5.30 pH	19.49 °C	339.04 µS/cm	0.34 mg/L	5.10 NTU	142.4 mV	18.30 ft	200.00 ml/min
8/26/2021 3:49 PM	01:20:00	5.30 pH	19.32 °C	337.86 µS/cm	0.33 mg/L	4.20 NTU	141.8 mV	18.30 ft	200.00 ml/min

### Samples

Sample ID:	Description:
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Calibration Logs



SITE:	PLANT	T WANSLEY	- 1-1		
TECHNICIAN:	10110	O. FUQU			
75504175000000		naraman popularana surveis work	.U.C.000.037409200 III		
WATER LEVEL:		SOLNIST			
WATER LEVEL S/N:		322814			_
INSTRUMENT S/N:	7412	93			
INSTRUMENT TYPE:	AquaTroll	_L nut			
CAL. SOLUTION/S:	ID: COND	LOT#: 06/033	EXP. DATE: 9-21		
	1D: PH4	LOT#: 06E1407	EXP. DATE: 9-72		
	1D: pH 7	LOT#:061615	EXP. DATE: 9-22	i la	
	1D: pH 10	LOT#: 060517	EXP. DATE: 4-72		_
	ID: ORP	LOT#: DGJE73	EXP. DATE: 7-21		Midday pH check
	ID:	LOT#:	EXP. DATE:		Must be less that .10
	ID:	LOT#:	EXP. DATE:		(6.90-7.10 range)
Calibration Date: 2	7-7-21				Recalibrate if not within range
	100% sat. = 10	1. 2010			
		7.00 = 7.	20	10.00 = 10.75	Midday pH check 7.0 = 7.09
PH Recal (if needed):	4.00 = 3.96		20		
CONDUCTIVITY:	Annahis and the second	Ces   7.00 =		10.00 =	7.0= NA post recal check
		- 1413		-	
ORF (IIIV)	243	= 240		-	
Calibration Date:	7-3-21				
		200,			
	100% sat 10.	The State of the S	10.245		Midday pH check
PH Recal (if needed):			98 7.20	10.00 = /0.//	7.0= 7.08
		7.00 =		10.00 =	7.0= WA post recal check
CONDUCTIVITY:		- 413		-	
ORP (mV)	257	= 240			
				-	
020000000000000000000000000000000000000	2-4-21			-	
Calibration Date:	2-4-21	2 - 4-		-	
RDO:	100% sat. = 9				Midday pH check
RDO: PH:	100% sat. = 94 4.00 = 3.78	7.00 = G.	. 48	10.00 = 10.0Z	7.0= 7.02
RDO: PH: PH Recal (if needed):	100% sat. = 90 4.00 = 3.78 4.00 =	7.00 = 6	.48	10.00 = 10.0Z 10.00 =	
RDO: PH: PH Recal (if needed): CONDUCTIVITY:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7	7.00 = G. 7.00 = = 1413	.48	-120000700	7.0= 7.02
RDO: PH: PH Recal (if needed): CONDUCTIVITY:	100% sat. = 90 4.00 = 3.78 4.00 =	7.00 = 6	.98	-120000700	7.0= 7.02
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7	7.00 = G. 7.00 = = 1413	· <del>§</del> 8	-120000700	7.0= 7.02
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV) Calibration Date:	100% sat. = 90 4.00 = 3.78 4.00 = 1438.7 260	7.00 = G. 7.00 = = 1413	. Ŷ8	-120000700	7.0= 7.02
RDO: PH: PH Recal (freeded): CONDUCTIVITY: ORP (mV) Calibration Date: RDO:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260	7.00 = G. 7.00 = = 1413 = 240	. Ŷ8	-120000700	7.0 = 7.02 7.0 = 7.0 post recal check
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV) Calibration Date: RDO: PH:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260 100% sat. = 4.00 =	7.00 = G. 7.00 = = 1413	. 48	-120000700	7.0 = 7.02 7.0 = 7.0 post recal check
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260 100% sat. = 4.00 =	7.00 = G. 7.00 = = 1413 = 240	· \$8	10.00 =	7.0 = 7.02 7.0 = 7.0 post recal check
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed):	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260 100% sat. = 4.00 =	7.00 = 6. 7.00 = 14/3 = 240  7.00 = 7.00 = 7.00 =	. 48	10.00 =	7.0 = 7.02 7.0 = 7.02 MA-post recal check  Midday pH check 7.0 =
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260 100% sat. = 4.00 =	7.00 = G. 7.00 =  14/3  240  7.00 =  7.00 =	. \$8	10.00 =	7.0 = 7.02 7.0 = 7.02 MA-post recal check  Midday pH check 7.0 =
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260 100% sat. = 4.00 = 4.00 =	7.00 = G. 7.00 =  14/3  240  7.00 =  7.00 =	· <del>\$</del> 8	10.00 =	7.0 = 7.02 7.0 = 7.02 7.0 = 7.
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260  100% sat. = 4.00 = 4.00 =	7.00 = G 7.00 = = 1413 = 240	. 48	10.00 =	7.0 = 7.02 7.0 = 7.02 7.0 = MA-post recal check  Midday pH check 7.0 = 7.0 = post recal check
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO:	100% sat. = 94 4.00 = 3.78 4.00 = 1438.7 260  100% sat. = 4.00 = 100% sat. = 4.00 =	7.00 = G 7.00 = = 1413 = 240 7.00 = = 7.00 =	. 48	10.00 = 10.00 = 10.00 =	7.0 = 7.02 7.0 = 7.02 7.0 = 7.0 = 7.0 = Midday pH check 7.0 = 7.0 = post recal check  Midday pH check 7.0 = 7.0 = 7.0 = post recal check
RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: PH Recal (if needed): CONDUCTIVITY: ORP (mV)  Calibration Date: RDO: PH: RDO: PH:	100% sat. = 99 4.00 = 3.78 4.00 = 1438.7 260  100% sat. = 4.00 =	7.00 = G 7.00 = = 1413 = 240	. \$8	10.00 =	7.0 = 7.02 7.0 = 7.02 7.0 = 7.0 = 7.0 = Midday pH check 7.0 = 7.0 = post recal check  Midday pH check 7.0 = 7.0 = 7.0 = post recal check



SITE:	Vla	nt 1	Vansley			
TECHNICIAN:	J. Anda					
		•				
	Salard	131				
WATER LEVEL:	Solmst-	101				
WATER LEVEL S/N:	122	26				
INSTRUMENT S/N:	714344					
INSTRUMENT TYPE:	AquaTroll					
CAL. SOLUTION/S:	10: 9HL	LOT#:	05E14D7	EXP. DATE:	09/22	
	10:017	LOT#:	061615	EXP. DATE:	09/22	
	ID: DH 10	LOT#:	0GD851	EXP. DATE:	05/22	
	10: ORP	LOT#:	0/21/1018	EXP. DATE:	05/21	
	ID: COND.	LOT #:	06/1033	EXP. DATE:	09/21	
	ID:	LOT#:		EXP. DATE:	_ 5	
	ID:	LOT#:		EXP. DATE:		SECOND COMMITTEE OF STREET
	1.1-1			- 7.000000000000000000000000000000000000		Midday pH rechecks
Calibration Date:		13 1320				Recalibrate if needed
RDO	100% sat. = 100	.62	· .		The state of the s	
PH	4.00 = 3.58		7.00 = (0)	06	10.00 = 9	.79 Midday pH check
CONDUCTIVITY	: 1413 = 138	9				7.0= 6.69
ORP (mV)	240= 24	17.8				cal done ) 7=
Rest Manual	,	1				car none 7=
Calibration Date: 2	13/21					
	100% sat. = 99	3				
	4.00 = 41.33		7.00 =/	28	10.00 - 1/	0. Z 4Midday pH check
CONDUCTIVITY:	The second secon	7	7.00 - 77	20	10.00 = /1	7.0 EZ 1.1/
	240 = 23	1				7.0= 7.14
ORP (mv)	- VIO 63	1				Recal din-
Calibration Date: 2	61/21					THE CHET CAPTE
	11/60	· .				
	100% sat. = /0 2			-		
	4.00 = 4.20		7.00 = 7.0	6	10.00 = 7.	.92 Midday pH check
CONDUCTIVITY:	1413=1413	7				7.0 = 7.11
ORP (mV)	240= 24	2				011
		720-12-1				Recal done
<b>Calibration Date:</b>						
RDO:	100% sat. =					
	4.00 =		7.00 =		10.00 =	Midday pH check
CONDUCTIVITY:					10.00 =	7.0 =
						7.0 =
OKF (IIIV)					_	
Calibration Date:						
	100% sat. =					Midday old sheek
	4.00 =		7.00 =		10.00 =	Midday pH check
CONDUCTIVITY:			7,00 =		10.00 =	7.0 =
ORP (mV)						



SITE:	Plant Wansley							
TECHNICIAN:	Plant Wansley							
	s							
	17120006376	. 7						
INSTRUMENT S/N: INSTRUMENT TYPE:	Hach 2100Q	9_1	_					
CAL. SOLUTION:	THE PROPERTY OF THE PARTY OF TH	EXP. DATE: N	74					
CAL. SOLUTION:	printing and the second		-					
	10 NTU-LOT# 10136		1/2					
	20 NTU - LOT # 110139	EXP. DATE: 08	16					
	A 700 7 70							
200 2 2	2/2/21							
Calibration Date:	401							
	Calibation Solution	Instrument Reading						
	0.0	0.76	NTU					
	10.0	10.0	NTU					
	20.0	20.4	NTU					
	-10/01							
Calibration Date:	2/3/21							
	Calibation Solution	Instrument Reading	9					
	0.0	0.20	NTU					
	10.0	10.2	NTU					
	20.0	20.0	NTU					
1934	A. I							
Calibration Date:	19/21							
	Calibation Solution	Instrument Reading						
	0.0	0.2	NTU					
	10.0	10.1	NTU					
	20.0	20.1	NTU					
	20.0	CU. /	NIU					
Calibration Date:								
Cambration Date:	Calibation Solution	Instrument Dending						
		Instrument Reading						
	0.0		NTU					
	10.0		NTU					
	20.0		NTU					
Calibration Date:								
Campration Date:	Collhatian Polytion	lesterment Booding						
9	Calibation Solution	Instrument Reading	1400					
	0.0		NTU					
8	10.0		NTU					
	20.0		NTU					
Calibration Date:								
Campration Date:	Calibation Calution	Instrument Desiler						
1 0	Calibation Solution	Instrument Reading	Liganos					
31	0.0		NTU					
	10.0		NTU					
	20.0		METER					



SITE:		last Wars	ley AP	/PZ			
TECHNICIAN:		Kyan Wil	165			_	
WATER LEVEL:		Sola	st				
WATER LEVEL S/N:		37	85.89				
		U.					
INSTRUMENT S/N:		£3281	3 60	2547			
INSTRUMENT TYPE:	AquaTroll			257 +			
CAL. SOLUTION/S:	10: PH4	LOT#: DED 04	EXP. DATE:	04/22			
	1D: 0H7	LOT#: 96-1 100	6 EXP. DATE:	12/21		_	
	1D: 'OHID	LOT#: 46-1 134		12/21			
	1D: 02P	LOT#: 06-11018		09/21		Midday	pH check
	ID:	LOT#: DETITO(S	EXP. DATE:	05/21			ess that .10
	ID;	LOT#:	EXP. DATE:				.10 range)
55000 (0 000 0 F	10101					Recalibrate	if not within range
Calibration Date:	5/9/21	19 09					
		19,09	1.06		10.00	Midday pl	1 check
PH Recal (if needed):		7.00 =	6,89	10.00 =	10.00	— <sup>7.0=</sup> 6	95 post recal check
CONDUCTIVITY:		= 1423		10.00 =			post recal check
	241,56	= 246.4					
		2-10:4					
Calibration Date:	3/10/21	4.0					
RDO:	100% sat. =	99.81				Midday pl	1 check
PH;	4.00 = 1,10	7.00 =	7.00	10.00 =	10.06	7.0 = -	7.10
PH Recal (if needed):	4.00 =	7.00 =		10.00 =	00 = 12 = 0 = 1	7.0=	post recal check
CONDUCTIVITY:	1413	- 10.50					
ORP (mV)	248.63	= 250.	9				
Calibration Date:	11/21						
	100% sat. =	99.81				Addednie od	J abook
	4.00 = 4,31		7.00	10.00 =	10.07	7.0 = 7	W. 20035
PH Recal (if needed):	STATE OF THE PARTY	7.00 =	7.00	10.00 =	10.07	7.0=	post recal check
CONDUCTIVITY:	1413	= 157	2.1				
ORP (mV)	241.94	- 242.	7				
Calibration Date:					Ÿ.		
	100% sat. =					Midday ph	1 check
	4.00 =	7.00 =		10.00 =		7.0 =	
PH Recal (if needed): CONDUCTIVITY:		7.00 ≈		10.00 =		7.0=	post recal check
ORP (mV)							
Calibration Date:							
RDO:	100% sat. =					Midday pt	l check
	4.00 =	7.00 =		10.00 =		7.0 =	
PH Recal (if needed): CONDUCTIVITY:		7.00 =		10.00 =		7.0=	post recal check
ORP (mV)							



SITE:			Plant Wansley		
TECHNICIAN:		8-46A	Walker		
INSTRUMENT S/N:	19090C079596				
CAL. SOLUTION:		PI	EXP. DATE:	New	
	10 NTU - LOT # A	0350	EXP. DATE:	04/2	
		0339	EXP. DATE:	03/2	
Calibration Date:	3/9/2  Calibation Solution	Ins	strument Reading		
	0.0		0.09		
	10.0		10.4	MTU	
	20.0		20,8	NTU	
Calibration Date:	3/10/21	190	2073		
	Calibation Solution	Ins	strument Reading		
	0.0		0.12	NTU	
	10.0		10.0	NTU	
	20.0	4	19.9	NTU	
Calibration Date:	3/11/21	41			
	Calibation Solution	Ins	trument Reading		
	0.0	_	0.15	NTU	
	10.0	_	9.93	NTU	
	20.0		20.0	NTU	
Calibration Date:	Calibation Solution	Ins	strument Reading		
	0.0			NTU	
	10.0			NTU	
	20.0			NTU	
Calibration Date:	Calibatian Calculan	1 400			
	Calibation Solution	Ins	trument Reading	Variable 1	
	0.0	_		—_ NTU	
	10.0	-		NTU	
	20.0			NTU	
Calibration Date:	Calibation Solution	Ins	trument Reading		
	0.0				
	10.0			NTU	
	20.0			— NTU	



SITE: TECHNICIAN:	Wansi	y AP					
WATER LEVEL: WATER LEVEL S/N:	Solins F 438	32					
INSTRUMENT S/N:	60842 ( AquaTroll	- Pine	menter /	<i>y</i> 10		_	
CAL. SOLUTION/S:	10: 0H 7	LOT#: 05E1407 LOT#: 16B200 LOT#: 06J170	EXP. DATE: 02/2	23	10/22		
	10: 0RP	LOT#: 06H1018	EXP. DATE: 09/2 EXP. DATE: 05/6 EXP. DATE:	21		Midday pl Must be less (6.90-7.1	that .10
Calibration Date: 3	18/21	-				Recalibrate if i	not within range
	100% sat. = 100	H-1	<b></b>		9.97	Midday pH	
	4.00 = 4.34		21	10.00 =	1,1+	7.0 = 7	
PH Recal (if needed)	- Complete C	7.00 =		10.00 #		7.0=	post recal check
CONDUCTIVITY: ORP (mV)		743					
Calibration Date:	3/9/21 : 100% sat. = 98. : 4.00 = 3,99	7.00 = 7.	73		10.60	Midday pH 6	
PH Recal (if needed):			0 )	10.00 =	70,00		post recal check
26이 다시에면 많이 보게 되었어요?	Market of Chickens and Chickens	7.00 =		10.00 =		— <sup>7,0=</sup>	post recal check
CONDUCTIVITY: ORP (mV)		1380 253		(a) (i)			
Calibration Date:	3-10-21 100% sat. = 103.	2				Midday pH o	hack
	4.00 = 4.04	7.00 = (0.	15	10.00 =	10.01	7.0 = 7	
PH Recal (if needed):		7.00 =		10.00 =	15.1.000000001100 = 100	7.0=	post recal check
CONDUCTIVITY:	transferance	4 8		10,00		-0.7	
ORP (mV)		233					
Calibration Date:	3/11/21						
	100% sat. = 10 <sup>1</sup> ,		c	97110	10.07	Midday pH o	. 0 4
	4.00 = 3.94	7.00 = -7.0		10.00 =	10:07		post recal check
PH Recal (if needed): CONDUCTIVITY:	Marine Control of the	7.00 =		10.00 =		7.0=	post recar check
ORP (mV)	The state of the s	0113	•				
Calibration Date: /		(				*****	Nation (
	100% sat. = 90 .	1 7 7 2	1.	10.00	10-08	Midday pH c	neck
	4.00 = 4,10	7.00 = 7.0		10.00 =	10100	— <sup>7.0</sup> =	and secolaries
PH Recal (if needed): CONDUCTIVITY: ORP (mV)	1913 =	7.00 =		10.00 =		7.0=	post recal check
(1117)		610					



SITE:		Plant Wansley	
TECHNICIAN:	- H. A.	( d/	
INSTRUMENT S/N: INSTRUMENT TYPE:	39 56 C Hach 2100Q	(Pire rent.	_/ )
CAL. SOLUTION:	O NTU - LOT# A	NA EXP. DATE:	lew j
	10 NTU - LOT # A0		6-Z
	20 NTU - LOT # Au 3	3 9 EXP. DATE: №	ar-i
Calibration Date:	3/8/21		
	Calibation Solution	Instrument Reading	0)
	0.0	0.2	NTU
	10.0	9,6	_NTU
	20.0	17.7	NTU
Calibration Date:	3/9/21	<b>©</b>	
	Calibation Solution	Instrument Reading	-
	0.0	0. 2	_NTU
	10.0	9.7	_NTU
	20.0	10 19.8	_NTU
Calibration Date:	3/10/21	1 2 3 3 3	
	Calibation Solution	Instrument Reading	-
	0.0	0.3	-NTU
	20.0	19.6	_NTU
	Total and the state of the stat	17.0	-NTU
Calibration Date:	3/11/21		
	Calibation Solution	Instrument Reading	
	0.0	0. 2	NTU
	10.0	9.2	NTU
	20.0	20.5	NTU
Calibration Date: 3		1 090-107-200-00-00-00-00-00-00-00-00-00-00-00-00	
	Calibation Solution	Instrument Reading	-
	0.0	0.2	_NTU
	10.0	9.7	_NTU
	20.0	11.6	_NTU
Calibration Date:	Calibation Solution	Instrument Reading	
	0.0	modulient Reading	NTU
	10.0		NTU
	20.0		NTU



SITE:	Plant Wansley		
TECHNICIAN:	T. Gabie		
WATER LEVEL:	501M5 F		
WATER LEVEL S/N:	378591		
	A		===4
INSTRUMENT S/N:	601857		
INSTRUMENT TYPE:	AquaTroll		_
CAL. SOLUTION/S:	10: (and. LOT#: OGE 436 EXP. DATE: 05/		
	ID: PH 4 LOT#: GCDO46 EXP. DATE: O4/		<del>-</del>
	10: pH7 LOT#: 168200 EXP. DATE: 02/		-
	10: ALIO LOT#: 055170 EXP. DATE: 10/		Midday pH check
		DI H, O	Must be less that .10
	ID: LOT #: EXP. DATE:		(6.90-7.10 range)
	1-9-71		Recalibrate if not within range
Calibration Date:	100% sat = 100 . 86		Last Living
	100% sat = 700 . 36 4.00 = 4\.15 7.00 = 7.20	10.00 = 9.90	$Midday pH check$ $7.0 = \  \                               $
PH Recal (if needed):		10.00 = 7 . 10	7.0= // post recal check NA
CONDUCTIVITY:		10.00 =	
ORP (mV)		-	
22703/2021 20.112305	3 30 30 30 30 30 30 30 30 30 30 30 30 30	_	
Calibration Date:	3-10-21		
RDO:	100% sat. = 100 . 15		Midday pH check
PH:	4.00 = L1.02 7.00 = Co. 95	10.00 = 10.44	_ 7.0= 7.24
PH Recal (if needed):		10.00 = 10.31	7.0= 7.0 Post recal check
CONDUCTIVITY:	010000000000000000000000000000000000000	_	
ORP (mV)	751 = 289.9	-	
Calibration Date:	2-11-21		
	100% sat. = 99.96		Midday pH check
	4.00 = 4,00 7.00 = 6.85	10.00 = 9.81	7.0 = 7.31
PH Recal (if needed):		10.00 = 10.28	7.0= 7.02 post recal check
CONDUCTIVITY:		Mark Mark	
	245 = 237.1	<del>-</del>	
Calibration Date: 3			
	100% sat. = 99.75	######################################	Midday pH check
	4.00 = 4.05 7.00 = 7.09	10.00 = 10.07	7.0 =
PH Recal (if needed): CONDUCTIVITY:		10.00 =	_ 7.0= NA post recal check Only worked
ORP (mV)	2.3	_	half -day
Calibration Date:			
RDO:	100% sat. =	2	Midday pH check
PH:	4.00 = 7.00 =	10.00 =	7.0 =
PH Recal (if needed):		10.00 =	7,0= post recal check
CONDUCTIVITY: ORP (mV)		3	
Site (inv)		-	



SITE:		Plant Wansley		
TECHNICIAN:		T. Gobie		
INSTRUMENT S/N: INSTRUMENT TYPE: CAL. SOLUTION:	17120Cc Hach 2100Q O NTU- LOT # New	043767 DI EXP. DATE:		
	10 NTU - LOT # 人心	3 (e EXP. DATE:	Aug /21	
	20 NTU - LOT # AO I		AJA /21	
Calibration Date:	3 - 8 - 2 ( Calibation Solution	Instrument Reading		SA (site wide wo
	0.0		NTU /\	17 13112 WICE W
	10.0		NTU	levels all d
	20.0		NTU	5 8134.7
alibration Date:	3-9-21 Calibation Solution	Instrument Reading		
	0.0	0.18	NTU	100 = 101
	10.0	9.62		800 = 803
	20.0	20.5	NTU	
alibration Date:	3 - (0 - 2   Calibation Solution 0,0 10.0 20.0	Instrument Reading O.22 9.70 20.2	NTU NTU NTU	100 = 102 800 = 800
alibration Date:	3-11-21			
alibration Date:	Calibation Solution	Instrument Reading	_	100 = 104
	0.0	9.95	NTU	Sam = 11-27
	10.0 20.0	20.3	— NTU NTU	800 = 802
alibration Date:	3-12-21			
	Calibation Solution	Instrument Reading		100= 102
	0.0	0-27	— NTU	800 - 400
	10.0 20.0	20.3	— NTU	100 - 100
llibration Date:	Calibation Solution	Instrument Reading	NTU	
	0.0		NTU	
	10.0		NTU	
	20.0		NTU	



SITE: TECHNICIAN:	Plan	+ Wansle	y Ash Pa	nd		
WATER LEVEL:	· · · · · · · · · · · · · · · · · · ·	Solinst	Switz to			
WATER LEVEL S/N:		371591				
INSTRUMENT S/N:	040	821				
INSTRUMENT TYPE:	AquaTroll					
CAL. SOLUTION/S:		OT#: OGE 140		7/22		
	10: pH7 1	OT#: OG 161	S EXP. DATE: O	9/22		
	The state of the s	.ot#: OGD45		+/22		
	ID: ORP 1	OT#: 16423	4 EXP. DATE: 10	121		
	10: Cond 1	OT#: 0GT1	()33EXP. DATE: ()	9/21	Midday	pH check
	ID: I	OT#;	EXP. DATE:		Must be le	ss that .10
	ID: I	.OT#:	EXP. DATE:			.10 range)
alibration Date:	1-7-21	1			Recalibrate	if not within range
	100% sat = 99.			<del></del>	Midday pl	1 check
	4.00= 4.88	7.00 =	7.57	10.00 = 10,4		.04 /
PH Recal (if needed):	PHILIPPIN PROPERTY.	7.00 =		10.00 =	7.0= /\/.	post recal check
CONDUCTIVITY:		1433				
ORP (mV)	240 =	189.1				
alibration Date:	1-8-21					
	100% sat. = 96 . 3	3			***********	0.4446
	4.00 = 4.49		7.57		Midday pl 4 Co 7.0 =	
		7.00 =		10.00 = 10.0		05 post recal check √
PH Recal (if needed):	minimum and the second	7.00 =	7.61	10.00 = 10 . 4	7.0= (,	O.P. bost secal cueck A
CONDUCTIVITY:						
ORP (mV)	240 -	192.6				
alibration Date:						
RDO:	100% sat. =				Midday pi	d check
PH:	4.00 =	7.00 =		10.00 =	7.0 =	neromonia.
PH Recal (if needed):	4.00 =	7.00 =		10.00 =	7.0=	post recal check
CONDUCTIVITY:						
ORP (mV)						
-WW B						
alibration Date:	4000/					2.02.02
	100% sat. =	7.00 -			Midday pi	4 check
PH Recal (if needed):		7.00 =		10.00 =	7.0 =	nort could shock
CONDUCTIVITY:		7.00 =		10.00 =	7.0=	post recal check
ORP (mV)						
alibration Date:						
3,033,03	100% sat. =				Adlada	ld chack
	4.00 =	7.00 -		10.00 -	Midday pi	1 CHOCK
PH Recal (if needed):		7.00 =		10.00 =	7.0 =	post recal check
CONDUCTIVITY:	111111111111111111111111111111111111111	7.00 =		10.00 =	7.0=	prost result eneck
ORP (mV)				_		



SITE:	WANSLEY AP		
TECHNICIAN:	O FUQUED		_
WATER LEVEL:	SOLUTST MICH		
WATER LEVEL S/N:	322814		
	9		_
INSTRUMENT S/N:	714293		
INSTRUMENT TYPE:	AquaTroll		
CAL. SOLUTION/S:		1-21	
		- 22	
	ID: DH 10 LOT#: OCD 808 EXP. DATE: 4	-22 1-27	_
	ID: DRO LOT#: OG IL ID IS EXP. DATE:	5 - 71	Midday pH check
	ID: LOT#: EXP. DATE:	3 91	Must be less that .10
	ID: LOT #: EXP. DATE:		(6.90-7.10 range)
	4-7-21		Recalibrate If not within range
	1 1 ACC C		224 JUL 1970 A CONTROLS
	100% sat. = 100, 14 % 4.00 = 4.30 7.00 = 73 7.04	10.00 = 9.42	7.0 = 7.06 (ONO = 13 1432
PH Recal (if needed):	The state of the s	10.00 =	7.0= post recal check NA
CONDUCTIVITY:		10,00 =	
ORP (mV)			
000000000000000000000000000000000000000	New to be server		
Calibration Date:	4-8-21		
RDO:	100% sat. = 100 · 5 0/4		Midday pH check
	4.00 = 4.09 7.00 = 6.99	10.00 = 9.99	7.0=7.04
PH Recal (if needed):	PROPERTY AND ADMINISTRATION OF THE PROPERTY AND ADM	10.00 =	7.0= post recal check NA
CONDUCTIVITY:	A CONTRACTOR OF THE PARTY OF TH	- 1000000	
ORP (mV)	179199 - 192.4		
Calibration Date:			
7272	100% set. =		Midday pH check
	4.00 = 7.00 =	10.00 =	7.0 =
PH Recal (if needed):	EMPLOY - LONG -	10.00 =	7.0= post recal check
CONDUCTIVITY:		N.	
ORP (mV)	-		
Calibration Date:	* 14.11.40 P. 195		84 NOVA 11 10 A 11 C 11 A 11 C
	100% sat. =		Midday pH check
PH Recal (if needed):	4.00 = 7.00 = 4.00 = 7.00 =	10.00 =	7.0 = 7.0 = post recal check
CONDUCTIVITY:	4.00 = 7.00 =	10.00 =	7.0= post recal check
ORP (mV)	*		
Calibration Date:			
	100% sat. =		Midday pH check
	4.00 = 7.00 =	10.00 =	7.0 =
PH Recal (if needed):	NAME OF TAXABLE PARTY O	10.00 =	7.0 s post recal check
CONDUCTIVITY:			
ORP (mV)	*		



SITE:		Plant Wansley
TECHNICIAN:		O. FUQUEA
INSTRUMENT S/N: INSTRUMENT TYPE: CAL. SOLUTION:	160400049 Hach 2100Q O NTU - LOT # New D 10 NTU - LOT # A0130 20 NTU - LOT # A0130	I EXP. DATE: — EXP. DATE: 人。
Calibration Date:	4-9-21	
	Calibation Solution	Instrument Reading
	0.0	0.7 NTU
	10.0	9.93 NTU
	20.0	19.47 NTU
Calibration Date:	9-4-8-21	
	Calibation Solution	Instrument Reading
	0.0	O.IL NTU
	10.0	9.93 NTU
	20.0	19.82 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	NTUNTU
	20.0	NTU
Calibration Date:	Calibation Solution	Instrument Reading
	0.0	NTU
	10.0	NTU
	20.0	NTU
Calibration Date:	12	
	Calibation Solution	Instrument Reading
	0.0	NTU
	10.0	NTU
	20.0	NTU



SITE: TECHNICIAN:		Plant Wansley T. Goble				
INSTRUMENT S/N;		C612353				
CAL. SOLUTION:	O NTU - LOT #	New DI	EXP. DATE:	_		
	10 NTU - LOT #	120107	EXP. DATE:	501-21		
	20 NTU - LOT #	A0113	EXP. DATE:	5-11-21		

Calibration Date:

4-7-21

	Instrument Reading	Calibation Solution
NTU	0.23	0.0
NTI	10.2	10.0
NTI	20.5	20.0

100 - 98.4

800 - 803

Calibration Date: 4-21

Calibation Solution	Instrument Reading	
0.0	0.15	NT
10.0	9.74	NT
20.0	19.9	NT

100 = 99.6

800 = 801

Calibration Date:

_	Calibation Solution	Instrument Reading	
Ξ	0.0		NTU
	10.0		NTU
1	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

Calibration Date:

	Calibation Solution	Instrument Reading	
Ξ	0.0		NTU
	10.0		NTU
	20.0		NTU



SITE:	Plant	Wansley	- AP		_	
TECHNICIAN:	H. Au	id 0			-	
WATER LEVEL:	Salik	51 MIO1				
WATER LEVEL S/N:		832				
	- 100				7	
INSTRUMENT S/N:	714344					
INSTRUMENT TYPE:	AquaTroll	60 TO 1 W. T.			_	
CAL. SOLUTION/S:	ID: 0 H4 LOT	#: 0GE 441 EXP	DATE: 05/22		_	
	ID: PH 7 LOT	The second secon	DATE: 02/22			
	ID: pH 10 LOT	#: 210100@7 EXP	. DATE: 02/22			
	ID: 0129 LOT	#: 19460167 EXP	DATE: 09/21			
	10: COND 1413 LOT	#: 160949 EXP	DATE: 4/22		Midday p	H check
	ID: LOT	#: EXP	. DATE:		Must be les	s that .10
	ID: LOT	#: EXP	, DATE:			LO range) not within range
Calibration Date:	8-24-21			STATE OF THE STATE	Novembraio II	riot within range
	: 100% sat. = 15 Z.	7		9.74	Midday pH	check
	: 4.00 = 3.97	7.00 = 6.9	10.00 = .	9.77	7.0 =	
PH Recal (if needed)		7.00 =	10.00 =		7.0=	post recal check
CONDUCTIVITY	13144	1715				
ORP (mV		238	-			
100 TL 23 ( ) NO LE 4 (						
Calibration Date:	8-25-21					
	: 100% sat. = 98. (	0			Midday pH	check
	: 4.00 = 95 4.96	7.00 = 7.0	5 10.00 =	10.04	7.0 =	
PH Recal (if needed)		7.00 =	10.00 =	1077241111111111111111111111111111111111	7.0=	post recal check
CONDUCTIVITY	: <del>1416</del> 1413 = 1	1461				
ORP (mV	228 =	219				
	0 21 21					
Calibration Date:	8-26-21	y/				
	100% sat. = 100.7		0 40.00-	10.01	Midday ph 7.0 =	cneck
PH Recal (if needed)		7.00 = 7.0	10.00 =	10.01	7.0=	post recal check
CONDUCTIVITY	10.10.22	1390	10.00 =		_ /.0=	600000000000000000000000000000000000000
	228 =	231				
OKF (IIIV	1_223 -	231	-			
Calibration Date:						
RDO	: 100% sat. =				Midday ph	check
	4.00 =	7.00 =	10.00 =		7.0 =	
PH Recal (if needed)	4.00 =	7.00 =	10.00 =		7.0=	post recal check
CONDUCTIVITY		100000				
ORP (mV	)					
Calibration Date:						
	: 100% sat. =				Midday pl	Laheak
	: 4.00 =	7.00 =	10.00 =		7.0 =	LMIDIMIN.
PH Recal (if needed)	Matter	7.00 =	10.00 =		7.0=	post recal check
CONDUCTIVITY		7.00 4	10.00 #			1
ORP (mV						



SITE:		Plant Wansley -	AP
TECHNICIAN:	H.A	ulcl	
INSTRUMENT S/N:	1109060123	5 3	
INSTRUMENT TYPE:	Hach 2100Q		
CAL. SOLUTION:	O NTU - LOT#	EXP. DATE:	
	10 NTU - LOT #	EXP. DATE:	
	20 NTU - LOT #	EXP. DATE:	
Calibration Date:	8-24-Z	2	
	Calibation Solution	Instrument Reading	_
	0.0	0.3	NTU
	10.0	10.1	NTL
	20.0	20.2	NTL
	0.0 10.0 20.0	Instrument Reading  0 1 3  10 . Z  20 . 4	NTU NTU NTU
Calibration Date:	8-26-21		
	Calibation Solution	Instrument Reading	_
	0.0	0.2	NTU
	10.0	10.0	NTU
	20.0	19.9	NTU
Calibration Date:	Calibation Solution	Instrument Reading	
	0.0		NTU
	10.0		NTL
	20.0		NTL
Calibration Date:	Calibation Solution	Instrument Reading	
	0.0		NTL
	10.0		NTU
	20.0		NTU
Calibration Date:	O-W-M-C-Line		
	Calibation Solution	Instrument Reading	-
	0.0		NTU
	10.0		NTU

20.0



SITE:	P/44	+ Warsley AP		
TECHNICIAN:		T Wansley AP Bristal		
WATER LEVEL:		/sast		
WATER LEVEL S/N:		267301		
WATER LEVEL ON.		2.61 301		
INSTRUMENT S/N:	714	130 Z		
INSTRUMENT TYPE:	AquaTroll			
CAL. SOLUTION/S:	10: prf 4 LO	T#: 1 6 060 0 EXP. DATE: "	1123	
		T#: 16F907 EXP. DATE: 6		
	ID: OH TO LO		6/23	
	ID: Const LO	T#: 160944 EXP. DATE: 4		
	10: 627 LO	T#: 16 F 445 EXP. DATE: ?	3/22	Midday pH check
	ID: LO	T#: EXP. DATE:		Must be less that .10
	ID: LO	T#: EXP. DATE:		(6.90-7.10 range)
Calibration Date:	0/23/21			Recalibrate if not within range
	: 100% sat. = 101.4			Midday pH check
	4.00 = 4.07	7.00 = 7-13	10.00 = 9,93	7.0 =
PH Recal (if needed)	Mariana	7.00 =	10.00 =	7.0= post recal check
CONDUCTIVITY		1672	10.00 =	
	240 =	239.3		
Ord (iiiv				
Calibration Date:	8/2-1/21			
	200 H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u>'</u>		Midday pH check
PH	100% sat. = 100.6	7.00 = 7,03	10.00 = 9,99	7.0 = 7.04
PH Recal (if needed)	Management	7.00 =	10.00 =	7.0= post recal check
CONDUCTIVITY		1491	10,00 =	
ORP (mV		226.7		
OKI (IIIV	Lot			
Calibration Date:	alesta (			
BDO	: 100% sat. = 99. /	14		Midday pH check
	4.00 = 4 61	7.00 = 7,UZ	10.00 = 10.00	7.0 = 7.03
PH Recal (if needed)	Management of the Control of the Con	7.00 =	10.00 =	7.0= post recal check
CONDUCTIVITY		1764	10.00 =	
ORP (mV		226.5		
OKI (IIIV	2-10			
Calibration Date:	2/76/21			
RDO	: 100% sat. = 106.5			Midday pH check
	: 4.00 = 3.99	7.00= 7.00	10.00= 10.06	7.0 = 7.01
PH Recal (if needed)	Market Company of the	7.00 =	10.00 =	7.0= post recal check
CONDUCTIVITY		1449	10.00.	A.IM.TT. SEATOLOGICALISM
ORP (mV	240 =	230,7		
Calibration Date:				
RDO	: 100% sat. =			Midday pH check
	: 4.00 =	7.00 =	10.00 =	7.0 =
PH Recal (if needed)		7.00 =	10.00 =	7.0= post recal check
CONDUCTIVITY		(7)(0.5)	0000000	
ORP (mV	)			



SITE: TECHNICIAN:		Plant Wansley 33014 Jan	
INSTRUMENT S/N:	1604060	44767	
CAL. SOLUTION:	ONTU-LOT# NA	EXP. DATE: DI 420	
	10 NTU - LOT # 4-1013	EXP. DATE: 4/22	
	20 NTU - LOT # 4/013	EXP. DATE: 4/22	

Calibration Date: 8/23/21

Calibation Solution	Instrument Reading	
0.0	0.21	NTU
10.0	9.73	NTU
20.0	20.4	NTU

Calibration Date: 8/24/21

Calibation Solution	Instrument Reading	
0.0	0.15	NTU
10.0	9.85	NTU
20.0	20.0	NTU

Calibration Date: 8/25/21

Calibation Solution	Instrument Reading	-
0.0	0116	NTU
10.0	1002/012	NTU
20.0	19.8	NTU

Calibration Date: 8/26/21

Calibation Solution	Instrument Reading	
0.0	0.20	NTU
10.0	9.59	NTU
20.0	2015	NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0		NTU
10.0		NTU
20.0		NTU

Calibration Date:

Calibation Solution	Instrument Reading	
0.0	7	NTU
10.0		NTU
20.0		NTU



SITE: Y	ant Wan	sley WD					
TECHNICIAN:		Tol	oy Valuso	Δ		-	
WATER LEVEL:		Solinst	_				
WATER LEVEL S/N:		322101				-	
THE STATE OF THE S		3.200101				<del>-</del>	
INSTRUMENT S/N:	250	0762					
INSTRUMENT TYPE:	AquaTroll	.00				5	
CAL. SOLUTION/S:	ID: ORP	LOT#: 21146	4 EXP. DATE:	8/2022		-	
	10: PIF 10	LOT#: 7/080/		250518		7	
	10: PH 7	LOT # : Z 10 100				_	
	10:p# 4	LOT#: 6-06		4/2023			
	10: Concludivity	LOT#: 16-D9	49 EXP. DATE:	4/2022		Midday	pH check
	ID:	LOT#:	EXP. DATE:				ss that .10
	ID:	LOT#:	EXP, DATE:				.10 range) If not within range
Calibration Date:							7.35554555555555555555555555555555555555
RDO:	100% sat = 10	3.88			DECCE - 1-01-40	Midday ph	1 check
PH:	4.00 = 4.36	7.00 =	7,14	10.00 =	10.01	7.0 = 7	OZ
PH Recal (if needed):		7.00 =		10.00 =		7.0=	post recal check
CONDUCTIVITY:	1413 psla	- 1,413.4					
ORP (mV)	+238	= 220,8					
(12)							
Calibration Date:	100% sat. = 105	- 20					
	4.00 = 3, 99		7.02		000	Midday pl	1(57.7)
PH: PH Recal (if needed):	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAME	7.00 =	1.00		9,98	7.0 = 7	
CONDUCTIVITY:		7.00 =	14/211	10.00 =		-7.0=	post recal check
	231,51	- 7463.9 - 235.	1463.4				
		4351					
Calibration Date: §	123/2021						
RDO:	100% sat 97	35				Midday pl	f check
PH:	4.00 = 4.06	7.00 =	6.97	10.00 =	9.81 9.77	7.0 = 7	
PH Recal (if needed):	BANTATOORAGEAGUE	7.00 =	27.30-12030	10.00 =		7.0=	post recal check
CONDUCTIVITY:		- 1351.9					
ORP (mV)	228.77	- 224,1	5				
Calibration Date: 8	124/2021						
	CONTRACTOR STATE	1914					252052
	100% sat. = (4.00 = 3.96	700-	my a t	10.00 =	10,07	Midday pt-	The second secon
PH Recal (if needed):		7.00 =	7.01		10107	10000 100	post recal check
CONDUCTIVITY:		= 1461	.8	10.00 =		7.0=	post recal cripts.
	228,14	- 22	5.9				
	10-1-21	***************************************	9				
Calibration Date: 8	125/2021	200 4004					
	CONTRACTOR OF THE PROPERTY OF	7,19			000	Midday pl	
	4.00= 4,04	7.00 =	7.03	10.00 =	9,98	7.0=7	50,
PH Recal (if needed);		7.00 =	7 /	10.00 =		7.0=	post recal check
CONDUCTIVITY: ORP (mV)	729 11	= 132	5. 1				
7111 11111	069-(111	05.2					



SITE:	Plan	+1	Dansley	(COC)	)				
TECHNICIAN:	Toby Johnson								
			7	,					
WATER LEVEL:			Saling	1					
WATER LEVEL S/N:	322(01								
			0 -						
INSTRUMENT S/N:	3	- 7	35076	2					
INSTRUMENT TYPE:	AquaTroll								
CAL. SOLUTION/S:	10: ORP	LOT	1:21140141	EXP. DATE:		250			
	10: p 1+ 10		1:21080189	EXP. DATE:	THE RESERVE THE PERSON NAMED IN	022			
	10: PH7		1:21010066	EXP. DATE:	The second second	22			
	ID: PH 4		#: 16 P680	EXP. DATE:		23			876 N. 48 MENS M. 188
	10: Canducto	1		EXP. DATE:	4120	220			y pH check
	ID:	LOT		EXP. DATE:				10000000	less that .10
	10.	LOT	7.	EXP. DATE;					7.10 range) te if not within range
Calibration Date: &	7/26/202	1						1.00 000000	
	100% sat. = 100		3					Midday	pH check
	4.00 = 11,01	-11/1		98		10.00 =	0,00		7.62
PH Recal (if needed)	4.00 =		7.00 =			10.00 =		7.0=	post recal check
CONDUCTIVITY	1413	**	1445.8						
ORP (mV)	230,71		230,9						
	8 - 1 - 1 -								
Calibration Date:									
RDO:	100% sat. =							Midday	pH check
PH:	4.00 =		7.00 =			10.00 =	10.	7.0 =	
PH Recal (if needed):	4.00 =		7.00 =			10.00 =		7.0=	post recal check
CONDUCTIVITY			69369			1000010		5,0460	
ORP (mV)	230,71	н	230,9						
Calibration Date:									
	100% sat. =							Affeldow	ald about
	4.00 =		7.00 =			10.00 =		7.0 =	pH check
PH Recal (if needed):	110000		7.00 =			10.00 =		7.0=	post recal check
CONDUCTIVITY:			7.00 -			10.00 -			
ORP (mV)		-							
THE 5000									
Calibration Date:									
RDO:	100% sat. =							Midday I	oH check
	4.00 =		7.00 =			10.00 =		7.0 =	
PH Recal (if needed):			7.00 ==		5	10.00 =		7.0=	post recal check
CONDUCTIVITY:	WWW.	ш							
ORP (mV)									
Calibration Date:									
- A. C.	100% sat. =							Midday p	old check
	4.00 =		7.00 =			10.00 =		7.0 =	TT SELECTOR
PH Recal (if needed):	EPSCADAPCA.		7.00 =			10.00 =		7.0=	post recal check
CONDUCTIVITY:		M :	1188			. 3.00			*
ORP (mV)		ш							



SITE:	Plant Wansley					
TECHNICIAN:	Toby Shoson					
		7				
	17010	CAFEHOO				
INSTRUMENT S/N:		0055429				
INSTRUMENT TYPE:						
CAL. SOLUTION:	ONTU- LOT# 40	1	W			
	10 NTU - LOT # 40/6		101			
	20 NTU - LOT # A 0/67	EXP. DATE: 9	101			
Calibration Date: $\delta$	2/10/2021					
Cambration Date: 2	Calibation Solution	Instrument Reading				
	0.0	O.31	_			
	10.0	10.3	-NTU			
	, , , , , , , , , , , , , , , , , , , ,	20,0	-NTU			
	20.0	2010	NTU			
Calibration Date: $\delta$	120/2021					
Cambration Date:	Calibation Solution	Instrument Reading				
		0.38	=,,,,,,			
	0.0	10.0	_NTU			
	10.0	10,0	_NTU			
	20.0	149	_NTU			
Calibration Date: &	2/22/0021					
Calibration Date: ¿		E LO COMPANIA				
	Calibation Solution	Instrument Reading	-			
	0.0	9,34	-NTU			
	10.0	13.4 (3.75 / 3.5	-NTU			
	20.0	20,8	NTU			
Calibration Date:	1/21/2001					
Calibration Date:		1 2				
	Calibation Solution	Instrument Reading	-			
	0,0	0.03	_NTU			
	10.0	9,25	_NTU			
	20.0	20.9	_NTU			
Calibration Date: 8	1126/2021					
Cambration Date: 8	Calibation Solution	Instrument Reading				
	Table 1	2 31	-			
	0.0	0.20	_NTU			
	10.0	9,2	-NTU			
	20.0	19.9	_NTU			
Calibration Date:	7/26/2021					
-ansidation batter (	Calibation Solution	Instrument Reading				
	0.0	15.59	NTU			
	10.0	9.78	-NTU			
		193				
	20.0	( ( / /	NTU			

# APPENDIX D

Statistical Analysis Reports

# GROUNDWATER STATS CONSULTING

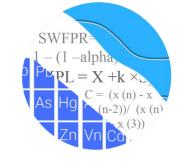
August 24, 2021

Southern Company Services Attn: Ms. Kristen Jurinko 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308

Re: Plant Wansley Ash Pond

March 2021 Statistical Analysis

Dear Ms. Jurinko,



Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 Groundwater Detection and Assessment Monitoring Statistical summary 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 except for those discussed below. 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, WGWC-19, WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25

Note that wells WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25 were first sampled in March 2021. These wells have been sampled for Appendix III

parameters and lithium a total of two times, and will be incorporated into statistical analyses once a minimum of 8 samples are available.

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 Appendix IV downgradient well/constituent pairs with 100% non-detects 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 2021, cadmium and mercury were not detected; therefore, these constituents were not required to be sampled during the March 2021 event. These data are plotted on 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 non-detect 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 non-detects, 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% non-detects in background, simple substitution of one-half the most recent reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.</li>
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.

 Nonparametric prediction limits are used on data containing greater than 50% non-detects.

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 – March 2021

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 March 2021 (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 March 2021 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; therefore, it 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. A summary table of the background prediction limits and exceedances follows this letter. Exceedances were identified for the following well/constituent pairs:

Boron: WGWC-8, WGWC-9, and WGWC-16

• Calcium: WGWC-8

• Chloride: WGWC-8 and WGWC-16

Fluoride: WGWC-9, WGWC-15, and WGWC-19
 Sulfate: WGWC-8, WGWC-9, and WGWC-16

• TDS: WGWC-8

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:

Boron: WGWC-8Calcium: WGWC-8Chloride: WGWC-8

Sulfate: WGWA-4 (upgradient) and WGWC-8

• TDS: WGWC-8

#### Decreasing trends:

Chloride: WGWA-5 (upgradient)Fluoride: WGWC-9 and WGWC-19

#### **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 – March 2021

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% non-detects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and 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 March 2021 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% non-detects 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 Federal 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 State GWPS is:

913.829.1470

- 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 March 2021 sample event (Figure G). Note that a GWPS is established for cadmium and mercury; however, since these constituents were not sampled during the March 2021 sampling event, 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,

Andrew T. Collins

**Project Manager** 

Kristina L. Rayner

**Groundwater Statistician** 

Kristina Rayner

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

### 100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/11/2021 1:12 PM 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

Lead (mg/L)

WGWC-12, WGWC-19

Molybdenum (mg/L)

WGWC-16, WGWC-8

Selenium (mg/L)

WGWC-13, WGWC-17

Thallium (mg/L)

WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-8, WGWC-9

# Appendix III Interwell Prediction Limits - Significant Results

		Plant Wans	sley Client:	Southern C	ompany [	Data: Wansl	ey Ash Pond	Printed 5/1	11/2021, 1:04 PM			
Constituent	Well	Upper Lin	n. Lower Lim	. Date	Observ.	Sig. Bg I	N Bg Mean	Std. Dev.	%NDs ND Adj.	Transfor	m <u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	3/11/2021	1.1	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	3/11/2021	2.4	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	3/12/2021	0.64	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	3/11/2021	83	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	3/11/2021	49	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	3/11/2021	110	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/12/2021	0.88	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-19	0.284	n/a	3/11/2021	0.31	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	3/12/2021	0.98	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	3/11/2021	64	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	3/11/2021	220	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	3/12/2021	62	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	3/11/2021	530	Yes 127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2

# Appendix III Interwell Prediction Limits - All Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:04 PM

		Plant Wansl	ey Client:	Southern Co	ompany D	ata: V	Vansle	y Ash Pond	Printed 5/1	1/2021,	1:04 PM			
Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	n <u>Alpha</u>	Method
Boron (mg/L)	WGWC-10	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.08	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	0.08	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-13	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-14A	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-15	0.08	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-16	0.08	n/a	3/11/2021	1.1	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-17	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-19	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	3/11/2021	2.4	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	3/12/2021	0.64	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-10	58	n/a	3/11/2021	7.9	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-11	58	n/a	3/12/2021	1.6	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-12	58	n/a	3/12/2021	15	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-13	58	n/a	3/11/2021	4	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-14A	58	n/a	3/11/2021	0.79	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-15	58	n/a	3/12/2021	31	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-16	58	n/a	3/11/2021	32	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-17	58	n/a	3/11/2021	5.7	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-19	58	n/a	3/11/2021	15	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	3/11/2021	83	Yes	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-9	58	n/a	3/12/2021	11	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-10	6.05	n/a	3/11/2021	1.7	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-11	6.05	n/a	3/12/2021	3.6	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-12	6.05	n/a	3/12/2021	3.5	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-13	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-14A	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-15	6.05	n/a	3/12/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	3/11/2021			127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-17	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-19	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	3/11/2021			127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-9	6.05	n/a	3/12/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-10	0.284	n/a	3/11/2021	0.15	No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-11	0.284	n/a	3/12/2021				n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-12	0.284	n/a	3/12/2021	0.096J	No		n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-13	0.284	n/a	3/11/2021		No		n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-14A	0.284	n/a	3/11/2021		No		n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/12/2021				n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L) Fluoride (mg/L)	WGWC-16 WGWC-17	0.284	n/a	3/11/2021 3/11/2021		No		n/a n/a	n/a	48.43		n/a	0.00007753 0.00007753	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
	WGWC-17	0.284	n/a			No	159		n/a	48.43		n/a		, ,,,
Fluoride (mg/L) Fluoride (mg/L)	WGWC-19	<b>0.284</b> 0.284	n/a	<b>3/11/2021</b> 3/11/2021		No	<b>159</b> 159	n/a n/a	<b>n/a</b> n/a	<b>48.43</b> 48.43		n/a	0.00007753 0.00007753	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a <b>n/a</b>	3/12/2021			159	n/a	n/a	48.43		n/a <b>n/a</b>	0.00007753	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-10	7.96	4.96	3/11/2021		No		n/a	n/a	0	n/a	n/a	0.00017733	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-10	7.96	4.96	3/12/2021		No		n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
	WGWC-11	7.96	4.96	3/12/2021		No	158	n/a	n/a	0			0.0001574	NP Inter (normality) 1 of 2
pH (S.U.) pH (S.U.)	WGWC-12 WGWC-13	7.96	4.96	3/11/2021		No	158	n/a n/a	n/a n/a	0	n/a n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-13	7.96	4.96	3/11/2021		No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-14A WGWC-15	7.96	4.96	3/12/2021		No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-15	7.96	4.96	3/11/2021		No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-10	7.96	4.96	3/11/2021	5.96	No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-17 WGWC-19	7.96	4.96	3/11/2021		No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-19	7.96	4.96	3/11/2021		No	158	n/a	n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-9	7.96	4.96	3/12/2021			158		n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
			-		-	-								, 9/

# Appendix III Interwell Prediction Limits - All Results

		Plant Wansl	ey Client:	Southern Co	ompany [	Data: \	Vansle	y Ash Pond	Printed 5/1	1/2021, 1:04 PM			
Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transform	n <u>Alpha</u>	Method
Sulfate (mg/L)	WGWC-10	21	n/a	3/11/2021	2.8	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-11	21	n/a	3/12/2021	2	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-12	21	n/a	3/12/2021	14	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-13	21	n/a	3/11/2021	2.9	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-14A	21	n/a	3/11/2021	1.7	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-15	21	n/a	3/12/2021	19	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	3/11/2021	64	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-17	21	n/a	3/11/2021	3.9	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-19	21	n/a	3/11/2021	4	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	3/11/2021	220	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	3/12/2021	62	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-10	190	n/a	3/11/2021	52	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-11	190	n/a	3/12/2021	27	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-12	190	n/a	3/12/2021	78	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-13	190	n/a	3/11/2021	63	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-14A	190	n/a	3/11/2021	24	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-15	190	n/a	3/12/2021	130	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	3/11/2021	190	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-17	190	n/a	3/11/2021	75	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-19	190	n/a	3/11/2021	100	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	3/11/2021	530	Yes	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-9	190	n/a	3/12/2021	130	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2

# Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:08 PM

	Plant Wansley Client: Southern Compan	y Data: Wan	sley Ash F	ond Prin	ted 5/	11/2021	, 1:08 P	М			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	WGWC-8	0.199	63	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8	12.18	98	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)	-0.1281	-63	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8	19.96	106	58	Yes	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19	-0.01821	-89	-81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9	-0.1359	-117	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)	0.7157	79	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	13.18	84	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	61.15	99	58	Yes	16	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - Prediction Limits Exceedances - All Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:08 PM

	Plant Wansley	Client: Southern Compan	y Data: War	isley Ash I	Pond Pr	inted 5/	11/2021	I, 1:08 F	PM			
Constituent	<u>Well</u>		Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	WGWA-1 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-18 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-2 (bg)		0	-27	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-3 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-4 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-5 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-6 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-7 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-16		-0.8188	-51	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8		0.199	63	58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9		0.04945	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-1 (bg)		0.05215	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-18 (bg)		-1.185	-38	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-2 (bg)		-0.5121	-36	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-3 (bg)		0	8	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-4 (bg)		0	-19	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-5 (bg)		-0.07827	-28	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-6 (bg)		0	7	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-7 (bg)		-0.09755	-32	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8		12.18	98	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-1 (bg)		0.1237	56	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-18 (bg)		-0.1056	-32	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-2 (bg)		0.03627	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-3 (bg)		0	-14	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-4 (bg)		-0.01807	-51	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)		-0.1281	-63	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-6 (bg)		0	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-7 (bg)		0	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16		-35.21	-42	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8		19.96	106	58	Yes	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-1 (bg)		0	-27	-81	No	20	75	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-18 (bg)		-0.01055	-72	-81	No	20	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-2 (bg)		-0.01627	-73	-81	No	20	45	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-3 (bg)		0	-33	-81	No	20	70	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-4 (bg)		-0.005875	-62	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-5 (bg)		0	33	74	No	19	89.47	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-6 (bg)		-0.005996	-75	-81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-7 (bg)		0	-10	-81	No	20	80	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-15		-0.0422	-76	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19		-0.01821	-89	-81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9		-0.1359	-117	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-1 (bg)		0	-21	-58	No	16	87.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-18 (bg)		-0.8514	-38	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-2 (bg)		-0.04053	-21	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-3 (bg)		0.01618	14	58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)		0.7157	79	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-5 (bg)		0.02834	15	53	No	15	26.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-6 (bg)		0	-3	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-7 (bg)		0	-19	-58	No	16	68.75	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16		-77.41	-29	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8		13.18	84 57	<b>58</b>	Yes	16	0	n/a	n/a	0.01	NP ND
Sulfate (mg/L)	WGWC-9		2.074	57	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-1 (bg)		1.837	21	58	No	16	25	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-18 (bg)		-1.093	-5	-58 =0	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-2 (bg)		1.593	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-3 (bg)		1.928	11	58	No	16 16	6.25	n/a	n/a	0.01	NP ND
Total Dissolved Solids (mg/L)	WGWA-4 (bg)		0.7703	17	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-5 (bg)		-0.7739	-6 24	-53 =0	No	15	13.33	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-6 (bg)		2.648	21	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-7 (bg)		0.7294	6	58 <b>59</b>	No	16 16	18.75		n/a	0.01	NP ND
Total Dissolved Solids (mg/L)	WGWC-8		61.15	99	58	Yes	16	0	n/a	n/a	0.01	NP

## **Upper Tolerance Limits Summary Table**

Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:09 PM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Alpha</u> Method 0.0022 98.2 0.003368 Antimony (mg/L) n/a n/a 111 n/a n/a n/a n/a NP Inter(NDs) 0.0004328 NP Inter(NDs) Arsenic (mg/L) 0.0014 n/a n/a 151 n/a n/a 78.15 n/a n/a Barium (mg/L) 0.062 n/a 151 0 0.0004328 NP Inter(normality) n/a n/a n/a n/a n/a Beryllium (mg/L) 0.0025 n/a 151 92.72 n/a 0.0004328 NP Inter(NDs) NP Inter(NDs) Cadmium (mg/L) 0.0025 n/a n/a 143 n/a n/a 100 n/a 0.0006523 n/a Chromium (mg/L) 0.0049 n/a 151 n/a 94.7 n/a 0.0004328 NP Inter(NDs) Cobalt (mg/L) 0.0004556 NP Inter(normality) 0.013 n/a 46.67 n/a n/a n/a 150 n/a n/a Combined Radium 226 + 228 (pCi/L) 10.4 148 0 0.0005048 NP Inter(normality) 48.43 0.0002871 NP Inter(normality) Fluoride (mg/L) 0.284 n/a n/a 159 n/a n/a n/a n/a Lead (mg/L) 0.001 135 87.41 n/a 0.0009833 NP Inter(NDs) NP Inter(normality) Lithium (mg/L) 0.009 49.65 n/a 0.0007228 n/a n/a 141 n/a n/a n/a Mercury (mg/L) 0.0002 127 88.98 0.001482 NP Inter(NDs) Molybdenum (mg/L) 0.0004556 NP Inter(NDs) 0.015 n/a n/a 150 n/a n/a 89.33 n/a n/a Selenium (mg/L) 0.005 n/a 151 94.04 n/a 0.0004328 NP Inter(NDs) NP Inter(NDs) Thallium (mg/L) 0.001 91.39 n/a 0.0004328 n/a n/a 151 n/a n/a n/a

	WANSL	EY AP GWPS			
		CCR-Rule		Federal	State
Constituent Name	MCL	Specified	Background	<b>GWPS</b>	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

 $\label{thm:lighted} \textit{Highlighted cells indicate background is higher than established limit.}$ 

## Federal Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:19 PM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance
 Sig.
 N
 Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.05511
 0.04727
 0.04
 Yes
 19
 0.05147
 0.007214
 0
 None
 In(x)
 0.01
 Param.

#### Federal Confidence Intervals - All Results

Data: Wansley Ash Pond Printed 5/11/2021, 1:19 PM Client: Southern Company Std. Dev. Constituent Well Compliance N %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method Upper Lim. Lower Lim. Sig. WGWC-12 0.0023 0.006 14 0.002021 0.00008018 92.86 0.01 NP (NDs) Antimony (mg/L) No None No WGWC-9 0.0005998 78.57 NP (NDs) Antimony (mg/L) 0.002 0.0011 0.006 No 14 0.001709 None No 0.01 WGWC-10 0.001 0.0005 0.01 0.0008647 0.0002579 73.68 0.01 NP (NDs) Arsenic (ma/L) No 19 None No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 19 0.0009221 0.0001852 84.21 No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 19 0.0009474 0.0001578 89.47 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 No 19 0.0007705 0.0003275 42.11 No 0.01 NP (normality) None WGWC-14A 0.0017 0.00095 0.001255 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 0.0005979 63.16 None No Arsenic (mg/L) WGWC-15 0.002218 0.001316 0.01 19 0.001767 0.0007698 0 0.01 Arsenic (mg/L) WGWC-16 0.0014 0.0009 0.01 Nο 19 0.001166 0.000338 47.37 None Nο 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00058 0.01 No 0.0008316 0.0002108 47.37 None No 0.01 NP (normality) WGWC-8 0.0011 0.00071 0.0009447 0.000273 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 52.63 None Nο WGWC-9 0.0017 0.00078 0.01 0.0009974 0.01 NP (NDs) Arsenic (mg/L) No 19 0.0002133 84.21 0 WGWC-10 0.041 0.035 2 19 0.0389 0.006385 0.01 NP (normality) Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.04001 0.03165 2 No 0.03632 0.008138 0 None In(x) 0.01 Param Barium (mg/L) WGWC-12 0.0214 0.015 2 Nο 19 0.01718 0.004267 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-13 0.046 2 No 19 0.05132 0.009074 0 0.01 Param None No Barium (mg/L) WGWC-14A 0.04655 0.03101 2 No 19 0.03947 0.01419 0 None sqrt(x) 0.01 Param Barium (mg/L) WGWC-15 0.02388 0.01998 2 0.02193 0.003332 0 No 0.01 Param No 19 None Barium (mg/L) WGWC-16 0.068 0.034 2 No 19 0.04971 0.01622 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-17 0.019 0.011 2 No 19 0.01515 0.004036 n No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0012 2 No 19 0.002804 0.001937 31.58 None No 0.01 NP (normality) WGWC-8 0.005 2 0.01 Barium (mg/L) 0.001 19 0.002962 0.001771 36.84 NP (normality) No None No 0.005 Barium (mg/L) WGWC-9 0.00076 2 19 0.002486 0.001832 0.01 NP (normality) No 31.58 None No WGWC-14A 0.001788 0.01 NP (NDs) Beryllium (mg/L) 0.0025 0.00025 0.004 No 19 0.001076 68.42 None No Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 19 0.00238 0.0005231 94.74 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002122 0.001547 0.004 19 0.001834 0.0004906 0 0.01 Param No None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 19 0.001387 0.001086 47.37 0.01 NP (normality) No No WGWC-10 0.002055 0.001385 0.001989 0.0005705 15.79 0.01 Chromium (mg/L) 0.1 19 Kaplan-Meier Param. No No Chromium (mg/L) WGWC-11 0.0021 0.0002749 78.95 0.01 NP (NDs) 0.0017 0.1 No 19 0.0019 Kaplan-Meier WGWC-13 0.002 NP (NDs) Chromium (ma/L) 0.0019 0.1 No 19 0.001984 0.00005015 89.47 Kaplan-Meier No 0.01 Chromium (ma/L) WGWC-14A 0.002 0.0017 0.1 No 0.001984 0.00006882 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-15 0.001974 0.0001147 94.74 0.01 NP (NDs) Chromium (mg/L) 0.002 0.0015 0.1 Nο 19 Kaplan-Meier Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 0.002026 0.0001147 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-10 0.001624 0.0007953 0.013 0.001274 0.0008063 5.263 0.01 Cobalt (mg/L) No 19 None sart(x) Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 19 0.001612 0.0009174 36.84 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001165 0.0004782 0.013 No 19 0.0008879 0.0006689 5.263 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 19 0.001957 0.0009403 73.68 None No 0.01 NP (NDs) Cobalt (mg/L) WGWC-14A 0.013 0.0041 0.013 19 0.008116 0.004234 0 None No 0.01 NP (normality) No 0.01 NP (NDs) Cobalt (mg/L) WGWC-15 0.0025 0.00015 0.013 19 0.002376 0.0005391 94.74 No None No Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 19 0.006965 0.006383 5.263 No 0.01 NP (normality) None Cobalt (mg/L) WGWC-17 0.001683 0.0007808 0.013 0.001232 0.0007708 5.263 0.01 Param. No 19 None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 19 0.001357 0.001119 47.37 Nο 0.01 NP (normality) No None Cobalt (mg/L) WGWC-8 0.0028 0.00066 0.013 19 0.001889 0.0009969 47.37 0.01 NP (normality) No No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 19 0.002407 0.0004061 94.74 No 0.01 NP (NDs) None 0 Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4447 0.1625 0.3036 0.241 0.01 Param 10.4 19 No None No Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6324 0.4028 0 0.01 0.1607 10.4 No 19 0.3966 No Param Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6056 0.1662 19 0.3859 0.3752 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-13 0.776 0.4499 No 0.2785 0 No 0.01 Param 10.4 19 0.6129 None Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8302 0.5225 10.4 19 0.6987 0.3093 0 x^(1/3) 0.01 Param No None Combined Radium 226 + 228 (pCi/L) 0.3527 0 WGWC-15 0.6444 0.2927 10.4 No 19 0.4988 sqrt(x) 0.01 Param 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-16 0.9186 1.819 0.7854 10.4 No 19 1.396 None sqrt(x) Param Combined Radium 226 + 228 (pCi/L) 0.5319 0.09894 10.4 No 19 0.3154 0.3697 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) WGWC-19 0.511 0.126 10.4 No 19 0.3426 0.3052 0 None No 0.01 NP (normality) Combined Radium 226 + 228 (pCi/L) 0 1.951 1.293 10.4 19 1.622 0.5619 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4151 0 1467 19 0.2809 0 2292 n 0.01 104 Nο None Nο Param

## Federal Confidence Intervals - All Results

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		Plant Wansl	ey Client: S	Southern Com	pany	Data	a: Wansley As	h Pond Pri	nted 5/11/2	2021, 1:19 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	<u>%NDs</u>	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride (mg/L)	WGWC-10	0.176	0.1288	4	No	20	0.1524	0.04163	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.045	4	No	20	0.08335	0.03667	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.09725	0.07366	4	No	20	0.09225	0.0206	20	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.2939	0.2135	4	No	20	0.2537	0.07082	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.04	4	No	20	0.0812	0.02968	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.871	0.7709	4	No	20	0.821	0.08822	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.1736	0.07849	4	No	20	0.1598	0.1859	10	None	In(x)	0.01	Param.
Fluoride (mg/L)	WGWC-17	0.1379	0.08713	4	No	20	0.1125	0.04468	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.375	0.322	4	No	20	0.3485	0.0466	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3489	0.1996	4	No	20	0.2743	0.1315	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.521	1.198	4	No	20	1.36	0.2849	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.015	No	17	0.0006853	0.0003923	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	17	0.0009018	0.0002227	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.015	No	17	0.0007529	0.0002551	47.06	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.015	No	17	0.0008112	0.0003525	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.015	No	17	0.0009588	0.0001698	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	17	0.0008982	0.0002873	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	17	0.0009135	0.0002452	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.015	No	17	0.0007994	0.0003729	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	17	0.0009494	0.0002086	94.12	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01493	0.007503	0.04	No	19	0.01177	0.007138	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No	19	0.004437	0.001341	84.21	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007846	0.006125	0.04	No	19	0.006821	0.001782	5.263	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0037	0.04	No	19	0.004421	0.001082	73.68	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-14A	0.005	0.0025	0.04	No	19	0.004111	0.001325	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-15	0.007289	0.005532	0.04	No	19	0.006411	0.001501	10.53	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01057	0.006798	0.04	No	19	0.008684	0.003222	5.263	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005639	0.004704	0.04	No	19	0.005211	0.0008379	5.263	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-19	0.05511	0.04727	0.04	Yes	19	0.05147	0.007214	0	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.018	0.013	0.04	No	19	0.01724	0.0103	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03842	0.03279	0.04	No	19	0.03561	0.004809	0	None	No	0.01	Param.
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No	19	0.01352	0.004439	89.47	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0017	0.1	No	19	0.01357	0.004289	89.47	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.1	No	19	0.01071	0.006545	68.42	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0016	0.1	No	19	0.004216	0.004868	15.79	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No	19	0.01426	0.003212	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.006785	0.003297	0.1	No	19	0.005316	0.003485	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.005469	0.002641	0.1	No	19	0.004279	0.002553	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No	19	0.006347	0.006791	36.84	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.0071	0.003	0.1	No	19	0.005396	0.003456	0	None	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	19	0.004753	0.001076	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	19	0.004763	0.001035	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	19	0.004847	0.0006653	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	19	0.004753	0.001078	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	19	0.004763	0.001032	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.0111	0.005817	0.05	No	19	0.008461	0.004514	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	19	0.004756	0.001064	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.003858	0.003102	0.05	No	19	0.003504	0.0006592	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002823	0.002196	0.05	No	19	0.002509	0.0005347	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	19	0.0009518	0.0002099	94.74	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-11	0.001	0.00016	0.002	No	19	0.0009558	0.0001927	94.74	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	19	0.0005142	0.0004267	42.11	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	19	0.0004768	0.0004122	36.84	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-19	0.001	0.00018	0.002	No	19	0.0009568	0.0001881	94.74	None	No	0.01	NP (NDs)

## State Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Lithium (mg/L)	WGWC-19	0.05511	0.04727	0.009	Yes	19	0.05147	0.007214	0	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.018	0.013	0.009	Yes	19	0.01724	0.0103	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03842	0.03279	0.009	Yes	19	0.03561	0.004809	0	None	No	0.01	Param.

#### State Confidence Intervals - All Results

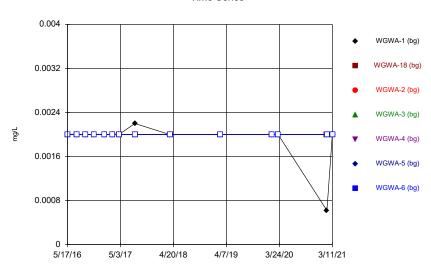
Data: Wansley Ash Pond Client: Southern Company Std. Dev. Constituent Well Compliance %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method Upper Lim. Lower Lim. Sig. N WGWC-12 0.0023 0.006 14 0.002021 0.00008018 92.86 0.01 NP (NDs) Antimony (mg/L) No None No Antimony (mg/L) WGWC-9 0.0005998 78.57 NP (NDs) 0.002 0.0011 0.006 No 14 0.001709 None No 0.01 WGWC-10 0.001 0.0005 0.01 0.0008647 0.0002579 73.68 0.01 Arsenic (ma/L) NP (NDs) No 19 None No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 19 0.0009221 0.0001852 84.21 No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 19 0.0009474 0.0001578 89.47 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 No 19 0.0007705 0.0003275 42.11 No 0.01 NP (normality) None WGWC-14A 0.0017 0.00095 0.001255 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 0.0005979 63.16 None No Arsenic (mg/L) WGWC-15 0.002218 0.001316 0.01 19 0.001767 0.0007698 0 0.01 Arsenic (mg/L) WGWC-16 0.0014 0.0009 0.01 Nο 19 0.001166 0.000338 47.37 None No 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00058 0.01 No 0.0008316 0.0002108 47.37 None No 0.01 NP (normality) WGWC-8 0.0011 0.000273 0.01 NP (NDs) Arsenic (mg/L) 0.00071 0.01 No 19 0.0009447 52.63 None No WGWC-9 0.0017 0.01 0.0009974 0.01 NP (NDs) Arsenic (mg/L) 0.00078 No 19 0.0002133 84.21 0 WGWC-10 0.041 0.035 2 19 0.0389 0.006385 0.01 NP (normality) Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.04001 0.03165 2 No 0.03632 0.008138 0 None In(x) 0.01 Param Barium (mg/L) WGWC-12 0.0214 0.015 2 Nο 19 0.01718 0.004267 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-13 0.05663 0.046 2 19 0.05132 0.009074 0 0.01 Param No None No Barium (mg/L) WGWC-14A 0.04655 0.03101 2 No 19 0.03947 0.01419 0 None sqrt(x) 0.01 Param Barium (mg/L) WGWC-15 0.02388 0.01998 2 0.02193 0.003332 0 No 0.01 Param No 19 None Barium (mg/L) WGWC-16 0.068 0.034 2 No 19 0.04971 0.01622 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-17 0.019 0.011 2 No 19 0.01515 0.004036 0 No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0012 2 No 19 0.002804 0.001937 31.58 None No 0.01 NP (normality) WGWC-8 0.005 2 0.01 Barium (mg/L) 0.001 19 0.002962 0.001771 36.84 NP (normality) No None No 0.005 Barium (mg/L) WGWC-9 0.00076 2 19 0.002486 0.001832 0.01 NP (normality) No 31.58 None No WGWC-14A 0.001788 0.01 NP (NDs) Beryllium (mg/L) 0.0025 0.00025 0.004 No 19 0.001076 68.42 None No Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 19 0.00238 0.0005231 94.74 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002122 0.001547 0.004 0.001834 0.0004906 0 0.01 Param No 19 None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 19 0.001387 0.001086 47.37 0.01 NP (normality) No No Chromium (mg/L) WGWC-10 0.002055 0.001385 0.001989 0.0005705 15.79 0.01 0.1 19 Kaplan-Meier Param. No No Chromium (mg/L) WGWC-11 0.0021 0.0002749 78.95 0.01 NP (NDs) 0.0017 0.1 No 19 0.0019 Kaplan-Meier WGWC-13 0.002 NP (NDs) Chromium (ma/L) 0.0019 0.1 No 19 0.001984 0.00005015 89.47 Kaplan-Meier No 0.01 Chromium (ma/L) WGWC-14A 0.002 0.0017 0.1 No 0.001984 0.00006882 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-15 0.001974 0.0001147 94.74 0.01 NP (NDs) Chromium (mg/L) 0.002 0.0015 0.1 Nο 19 Kaplan-Meier Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 0.002026 0.0001147 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-10 0.001624 0.0007953 0.001274 0.0008063 5.263 0.01 Cobalt (mg/L) 0.013 No 19 None sart(x) Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 19 0.001612 0.0009174 36.84 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001165 0.0004782 0.013 No 19 0.0008879 0.0006689 5.263 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 19 0.001957 0.0009403 73.68 None No 0.01 NP (NDs) Cobalt (mg/L) WGWC-14A 0.013 0.0041 0.013 19 0.008116 0.004234 0 No 0.01 NP (normality) No None 0.01 NP (NDs) Cobalt (mg/L) WGWC-15 0.0025 0.00015 0.013 19 0.002376 0.0005391 94.74 No None No Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 19 0.006965 0.006383 5.263 0.01 NP (normality) None No Cobalt (mg/L) WGWC-17 0.001683 0.0007808 0.013 0.001232 0.0007708 5.263 0.01 Param. No 19 None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 19 0.001357 0.001119 47.37 Nο 0.01 NP (normality) No None Cobalt (mg/L) WGWC-8 0.0028 0.00066 0.013 19 0.001889 0.0009969 47.37 0.01 NP (normality) No No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 19 0.002407 0.0004061 94.74 No 0.01 NP (NDs) None 0 Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4447 0.1625 0.241 0.01 Param 10.4 19 0.3036 No None No Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6324 0.4028 0 0.01 0.1607 10.4 No 19 0.3966 No Param Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6056 0.1662 19 0.3859 0.3752 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-13 0.776 No 0.2785 0 0.01 Param 0.4499 10.4 19 0.6129 None No Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8302 0.5225 10.4 19 0.6987 0.3093 0 x^(1/3) 0.01 Param No None Combined Radium 226 + 228 (pCi/L) 0.3527 0 WGWC-15 0.6444 0.2927 10.4 No 19 0.4988 sqrt(x) 0.01 Param 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-16 0.9186 1.819 0.7854 10.4 No 19 1.396 None sqrt(x) Param Combined Radium 226 + 228 (pCi/L) 0.5319 0.09894 10.4 No 19 0.3154 0.3697 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) WGWC-19 0.511 0.126 10.4 No 19 0.3426 0.3052 0 None No 0.01 NP (normality) Combined Radium 226 + 228 (pCi/L) 0 1.951 1.293 10.4 19 1.622 0.5619 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4151 0 1467 19 0.2809 0 2292 n 0.01 104 Nο None Nο Param

## State Confidence Intervals - All Results

		Otati		muen	00		ici vai	<i>J</i> / (ii	1103	Janes			
		Plant Wansle	y Client: Se	outhern Comp	any	Data:	Wansley Ash	Pond Prin	ited 5/11/20	)21, 1:14 PM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride (mg/L)	WGWC-10	0.176	0.1288	4	No	20	0.1524	0.04163	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.045	4	No	20	0.08335	0.03667	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.09725	0.07366	4	No	20	0.09225	0.0206	20	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.2939	0.2135	4	No	20	0.2537	0.07082	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.04	4	No	20	0.0812	0.02968	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.871	0.7709	4	No	20	0.821	0.08822	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.1736	0.07849	4	No	20	0.1598	0.1859	10	None	ln(x)	0.01	Param.
Fluoride (mg/L)	WGWC-17	0.1379	0.08713	4	No	20	0.1125	0.04468	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.375	0.322	4	No	20	0.3485	0.0466	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3489	0.1996	4	No	20	0.2743	0.1315	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.521	1.198	4	No	20	1.36	0.2849	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.001	No	17	0.0006853	0.0003923	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No	17	0.0009018	0.0002227	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.001	No	17	0.0007529	0.0002551	47.06	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.001	No	17	0.0008112	0.0003525	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.001	No	17	0.0009588	0.0001698	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No	17	0.0008982	0.0002873	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No	17	0.0009135	0.0002452	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.001	No	17	0.0007994	0.0003729	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No	17	0.0009494	0.0002086	94.12	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01493	0.007503	0.009	No	19	0.01177	0.007138	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No	19	0.004437	0.001341	84.21	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007846	0.006125	0.009	No	19	0.006821	0.001782	5.263	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0037	0.009	No	19	0.004421	0.001082	73.68	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-14A	0.005	0.0025	0.009	No	19	0.004111	0.001325	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-15	0.007289	0.005532	0.009	No	19	0.006411	0.001501	10.53	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01057	0.006798	0.009	No	19	0.008684			None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	WGWC-17	0.005639	0.004704	0.009	No	19	0.005211	0.0008379	5.263	None None		0.01 0.01	Param. Param.
Lithium (mg/L)	WGWC-17 WGWC-19	0.005639 <b>0.05511</b>	0.004704 <b>0.04727</b>	0.009 <b>0.009</b>	No <b>Yes</b>	19 <b>19</b>	0.005211 <b>0.05147</b>	0.0008379 <b>0.007214</b>	5.263 <b>0</b>	None None	No In(x) In(x)	0.01 0.01 <b>0.01</b>	Param.
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L)	WGWC-17 WGWC-19 WGWC-8	0.005639 0.05511 0.018	0.004704 0.04727 0.013	0.009 0.009 0.009	No Yes Yes	19 <b>19</b> <b>19</b>	0.005211 0.05147 0.01724	0.0008379 0.007214 0.0103	5.263 0 0	None None	No In(x) In(x) No	0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L)	WGWC-19 WGWC-8 WGWC-9	0.005639 0.05511 0.018 0.03842	0.004704 0.04727 0.013 0.03279	0.009 0.009 0.009	No Yes Yes Yes	19 19 19 19	0.005211 0.05147 0.01724 0.03561	0.0008379 0.007214 0.0103 0.004809	5.263 0 0	None None None	No In(x) In(x) No	0.01 0.01 0.01 0.01 0.01	Param. Param. NP (normality) Param.
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10	0.005639 0.05511 0.018 0.03842 0.015	0.004704 0.04727 0.013 0.03279 0.00093	0.009 0.009 0.009 0.009 0.015	No Yes Yes Yes	19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352	0.0008379 0.007214 0.0103 0.004809 0.004439	5.263 0 0 0 89.47	None None None None	No In(x) In(x) No No	0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-11	0.005639 0.05511 0.018 0.03842 0.015 0.015	0.004704 0.04727 0.013 0.03279 0.00093 0.0017	0.009 0.009 0.009 0.009 0.015	No Yes Yes Yes No	19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289	5.263 0 0 0 89.47 89.47	None None None None None	No In(x) In(x) No No No	0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12	0.005639 0.05511 0.018 0.03842 0.015 0.015	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009	0.009 0.009 0.009 0.009 0.015 0.015	No Yes Yes No No	19 19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289 0.006545	5.263 0 0 0 89.47 89.47 68.42	None None None None None None None None	No In(x) In(x) No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016	0.009 0.009 0.009 0.009 0.015 0.015 0.015	No Yes Yes No No No No	19 19 19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289 0.006545 0.004868	5.263 0 0 0 89.47 89.47 68.42 15.79	None None None None None None None None	No In(x) In(x) No No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001	0.009 0.009 0.009 0.009 0.015 0.015 0.015 0.015	No Yes Yes No No No No No No	19 19 19 19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74	None None None None None None None None	No In(x) In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param. Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015	No Yes Yes No	19 19 19 19 19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74	None None None None None None None None	No In(x) In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.005785 0.005469	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279	0.0008379 0.007214 0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0	None None None None None None None None	No In(x) In(x) No No No No No No No sqrt(x) sqrt(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015	0.004704 0.04727 0.013 0.00279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347	0.0008379 0.007214 0.0103 0.004809 0.004439 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071	0.004704 0.04727 0.013 0.00279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.0031	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  Param.  NP (normality)  NP (normality)  NP (normality)  NP (normality)  NP (normality)  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  Param.  NP (normality)  NP (normality)  NP (normality)  NP (normality)  NP (normality)  NP (NDs)  NP (NDs)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-11	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.01426  0.005316  0.004279  0.006347  0.005396  0.004753  0.004763  0.004847	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653	5.263 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (normality) NP (normality) NP (normality) NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-12	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.004279  0.005316  0.004279  0.005396  0.004753  0.004763  0.004847  0.004753	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003456 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078	5.263 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param.  NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. Param. NP (normality) NP (normality) NP (NDs) NP (normality) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005	0.004704 0.04727 0.013 0.00279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004847 0.004753 0.004763	0.0008379 0.007214 0.0103 0.004809 0.004439 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  Param.  Param.  NP (normality)  NP (normality)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-12	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.004279  0.005316  0.004279  0.005396  0.004753  0.004763  0.004847  0.004753	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param.  NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. Param. NP (normality) NP (normality) NP (NDs) NP (normality) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-17 WGWC-19 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-15	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005	0.004704 0.04727 0.013 0.00279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0003 0.0003	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.01426  0.005316  0.004279  0.006347  0.005396  0.004753  0.004763  0.004753  0.004763  0.004763  0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  Param.  NP (normality)  NP (normality)  NP (normality)  NP (NDs)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-15 WGWC-16 WGWC-16 WGWC-19	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0003 0.0005 0.005817 0.00036	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.01426  0.005316  0.004279  0.006347  0.005396  0.004753  0.004763  0.004753  0.004763  0.004763  0.004763  0.004763  0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74 0 94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  Param.  NP (normality)  NP (normality)  NP (NDs)  Param.  NP (NDs)  Param.  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-15 WGWC-16 WGWC-15 WGWC-16 WGWC-19 WGWC-19 WGWC-19	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.005 0.005 0.005 0.005 0.005 0.0011 0.005 0.005 0.0011	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.0003102	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.01426  0.005316  0.004279  0.006347  0.005396  0.004753  0.004763  0.004763  0.004763  0.004763  0.004763  0.004763  0.004763  0.004763  0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064	5.263 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 94.74 0 0 0 0	None None None None None None None None	No In(x)   In(x)   No   No   No   No   No   No   No   N	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (normality) NP (NDs) Param. NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-15 WGWC-15 WGWC-15 WGWC-15 WGWC-15 WGWC-16 WGWC-19 WGWC-8	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.00111 0.005 0.003858 0.002823	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.0003102	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347	5.263 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 94.74 0 94.74 0	None None None None None None None None	No In(x) In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-18 WGWC-19 WGWC-19 WGWC-19 WGWC-19 WGWC-8 WGWC-9 WGWC-10	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.005 0.00111 0.005 0.003858 0.002823 0.001	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.0002196 0.0002196	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.005316 0.004279 0.006347 0.005396 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347 0.0002099	5.263  0  0  89.47  89.47  68.42  15.79  94.74  0  0  36.84  0  94.74  94.74  94.74  0  94.74  0  94.74  0  94.74  0  94.74	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-16 WGWC-16 WGWC-19 WGWC-19 WGWC-9 WGWC-10 WGWC-19 WGWC-9 WGWC-10 WGWC-10 WGWC-10 WGWC-10	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.005469 0.015 0.005 0.005 0.005 0.005 0.005 0.0011 0.005 0.0011 0.005 0.003858 0.002823 0.001	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.002196 0.000085 0.00016	0.009 0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211 0.05147 0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763	0.0008379 0.007214 0.0103 0.004809 0.004289 0.006545 0.004868 0.003212 0.003456 0.001076 0.001035 0.001078 0.001032 0.004514 0.001084 0.0006592 0.0005347 0.0002099 0.000132	5.263 0 0 0 89.47 89.47 68.42 15.79 94.74 0 36.84 0 94.74 94.74 94.74 94.74 0 94.74 0 94.74 0 94.74 42.11	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Thallium (mg/L)  Thallium (mg/L)  Thallium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-15 WGWC-16 WGWC-16 WGWC-19 WGWC-19 WGWC-19 WGWC-10 WGWC-11 WGWC-19 WGWC-10 WGWC-11 WGWC-11	0.005639 0.05511 0.018 0.03842 0.015 0.015 0.015 0.0015 0.00491 0.015 0.005469 0.015 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.00111 0.005 0.003858 0.002823 0.001 0.001	0.004704 0.04727 0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.002196 0.000085 0.00016 0.00013	0.009 0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No Yes Yes Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.005211  0.05147  0.01724  0.03561  0.01352  0.01357  0.01071  0.004216  0.01426  0.005316  0.004279  0.006347  0.005396  0.004753  0.004763	0.0008379 0.007214 0.0103 0.004439 0.004289 0.006545 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006532 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347 0.0002099 0.0001927 0.0004267	5.263 0 0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 0 94.74 0 0 94.74 1 0 0 94.74 1 0 0 94.74 1 0 0 94.74 94.74	None None None None None None None None	No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param. NP (normality)  Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs)

# FIGURE A.



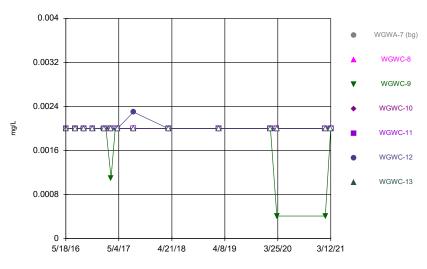


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



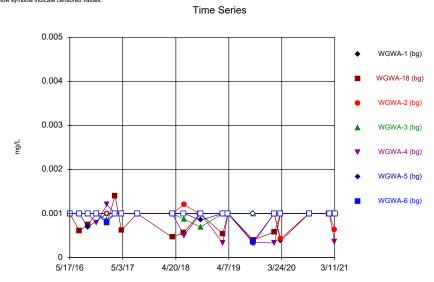
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



Constituent: Antimony Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

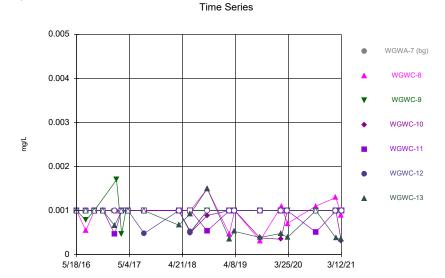


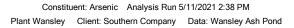
Constituent: Arsenic Analysis Run 5/11/2021 2:38 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

5/17/16

5/3/17





# Time Series 0.08 0.064 0.064 0.064 0.064 0.064 0.064 0.068 0.0

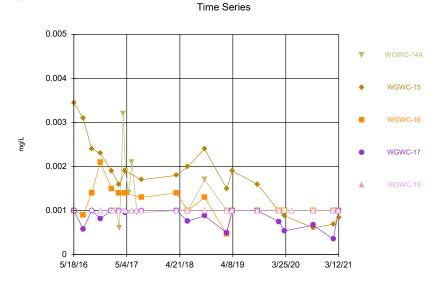
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

4/7/19

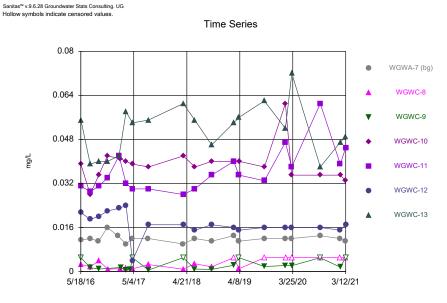
3/24/20

3/11/21

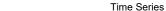
4/20/18

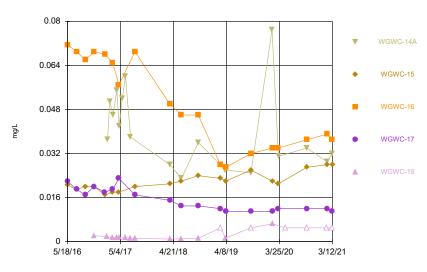


Constituent: Arsenic Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

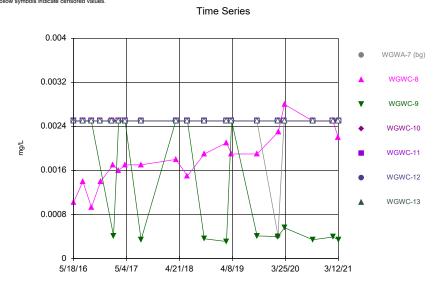


Constituent: Barium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



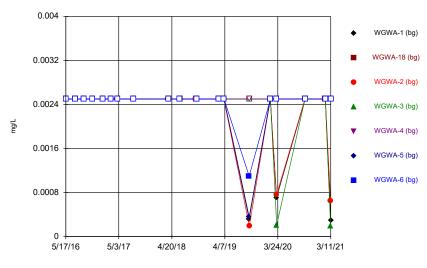


Constituent: Barium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



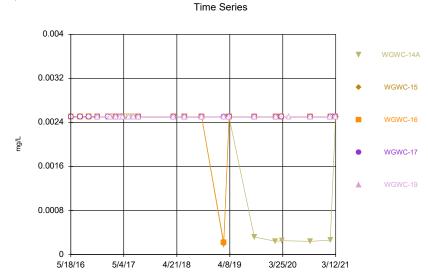
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



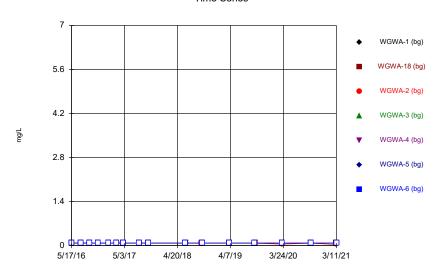
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

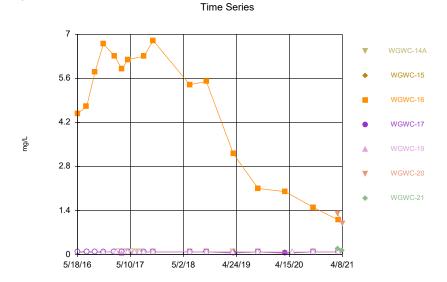


Constituent: Beryllium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





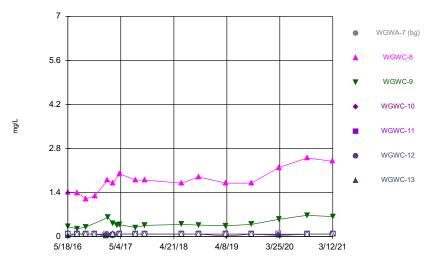
Constituent: Boron, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Boron, total Analysis Run 5/11/2021 2:38 PM

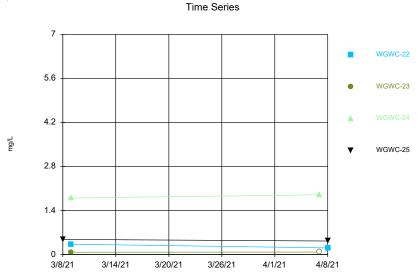
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



Constituent: Boron, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

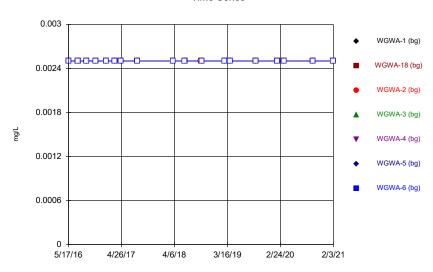
#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



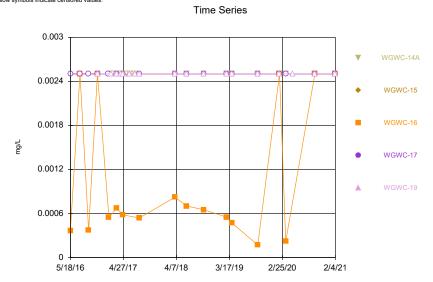
Constituent: Boron, total Analysis Run 5/11/2021 2:38 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



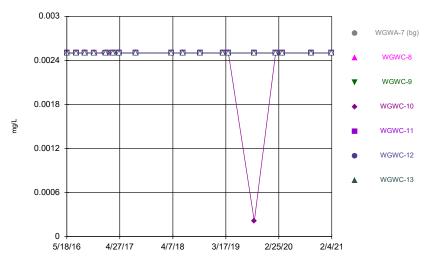


Constituent: Cadmium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



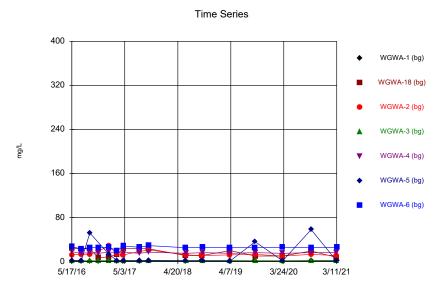
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

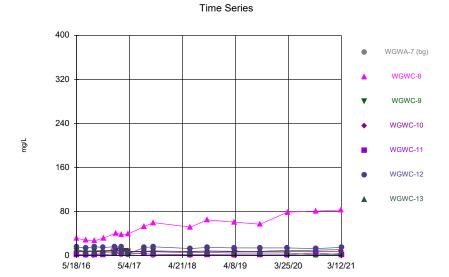


Constituent: Cadmium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



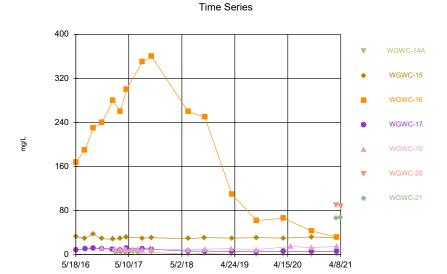
Constituent: Calcium, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Calcium, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

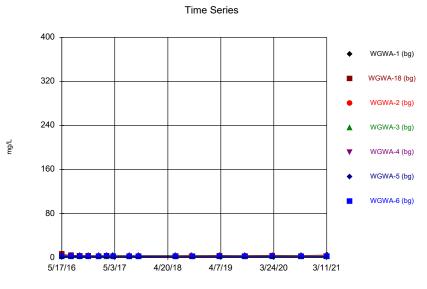
#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Time Series 400 WGWC-22 320 WGWC-23 240 WGWC-25 160 80 0 🍱 3/8/21 3/14/21 3/20/21 3/26/21 4/1/21 4/8/21

Constituent: Calcium, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

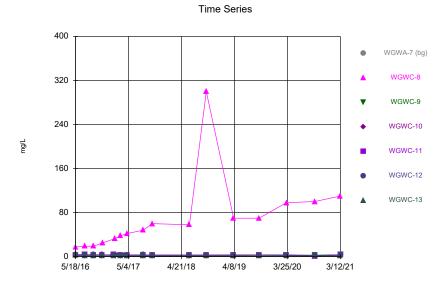


Constituent: Calcium, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





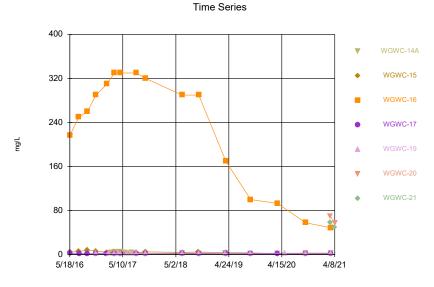
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



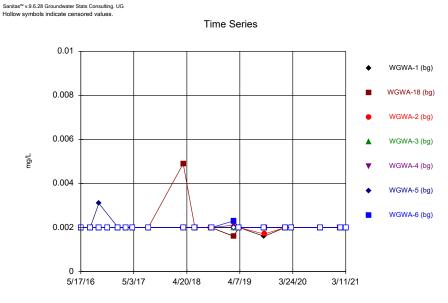
Constituent: Chloride, Total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Time Series 400 WGWC-22 320 WGWC-23 240 WGWC-25 160 80 3/8/21 3/14/21 3/20/21 3/26/21 4/1/21 4/8/21

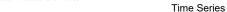
Constituent: Chloride, Total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

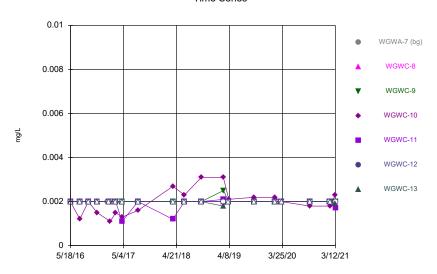


Constituent: Chloride, Total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

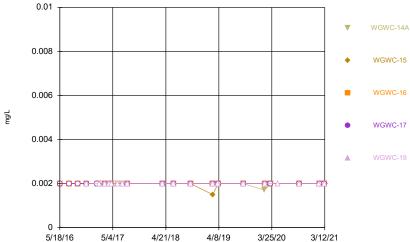


Constituent: Chromium Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





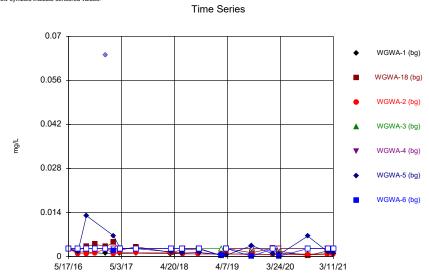
Constituent: Chromium Analysis Run 5/11/2021 2:38 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Time Series

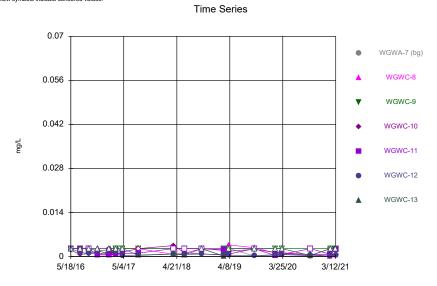
Constituent: Chromium Analysis Run 5/11/2021 2:38 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values



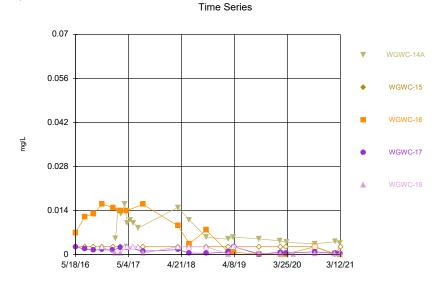
Constituent: Cobalt Analysis Run 5/11/2021 2:38 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Cobalt Analysis Run 5/11/2021 2:38 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

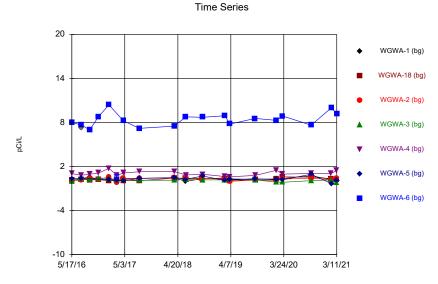


Constituent: Cobalt Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series 20 WGWA-7 (bg) WGWC-8 14 WGWC-9 WGWC-10 pCi/L WGWC-11 WGWC-12 WGWC-13 -10 5/18/16 5/4/17 4/21/18 4/8/19 3/25/20 3/12/21

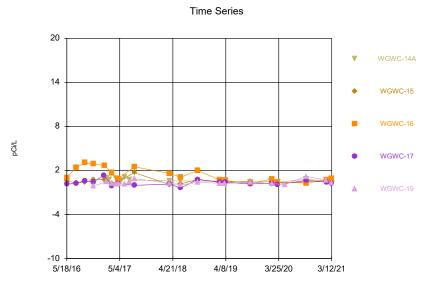
Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:38 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



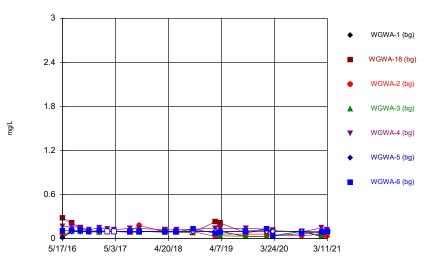
Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





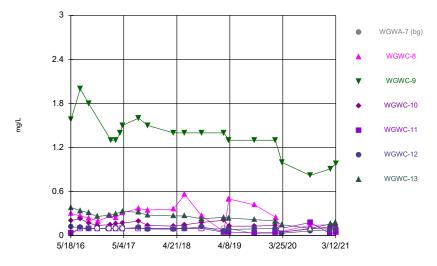
Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





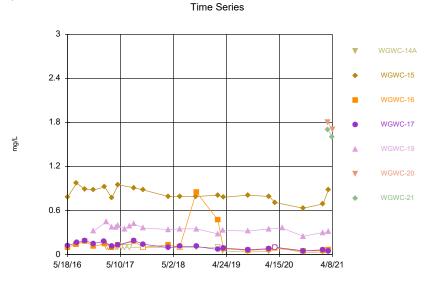
# Constituent: Fluoride, total Analysis Run 5/11/2021 2:38 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



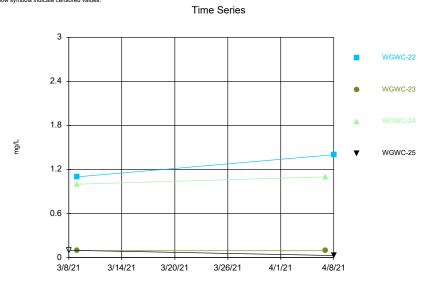
Constituent: Fluoride, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



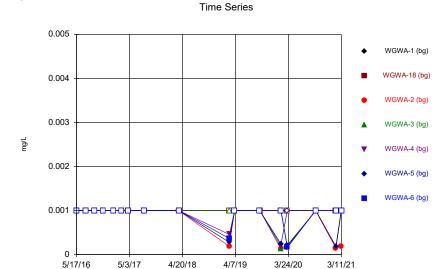
Constituent: Fluoride, total Analysis Run 5/11/2021 2:38 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

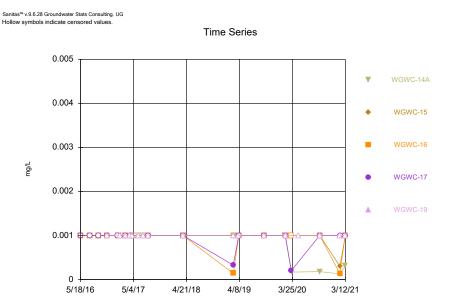


Constituent: Fluoride, total Analysis Run 5/11/2021 2:38 PM

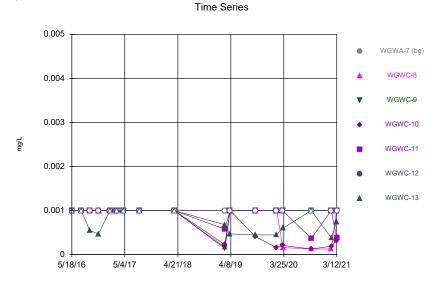
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



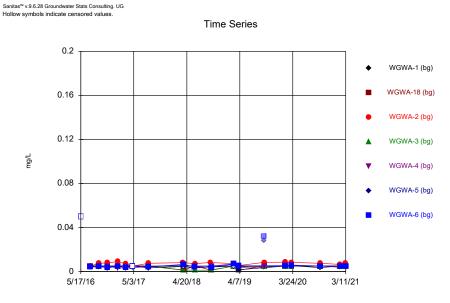
Constituent: Lead Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Lead Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

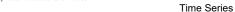


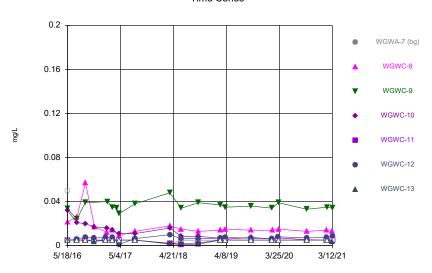
Constituent: Lead Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



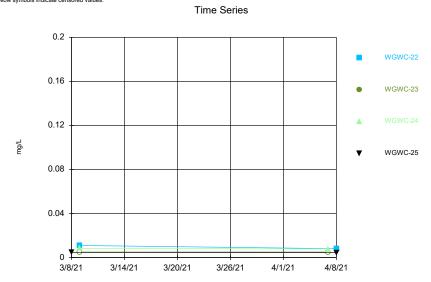
Constituent: Lithium Analysis Run 5/11/2021 2:39 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



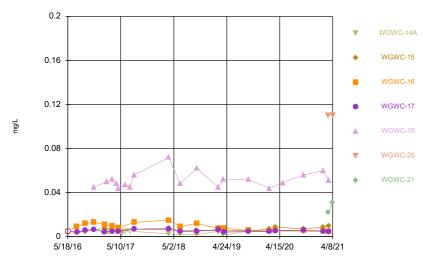


Constituent: Lithium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



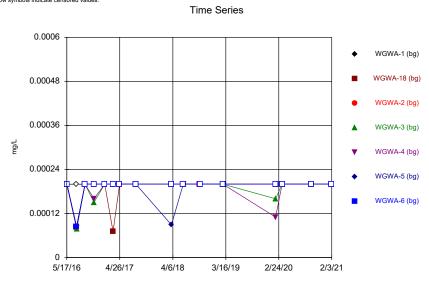
Constituent: Lithium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



Constituent: Lithium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

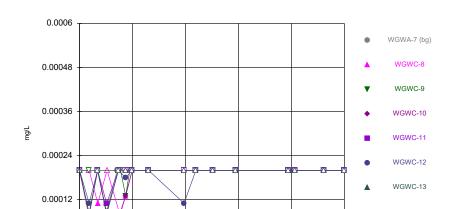
#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Mercury Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

5/18/16

4/27/17



Time Series

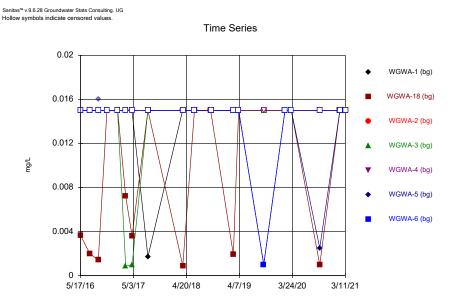
Constituent: Mercury Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

3/17/19

2/25/20

4/7/18

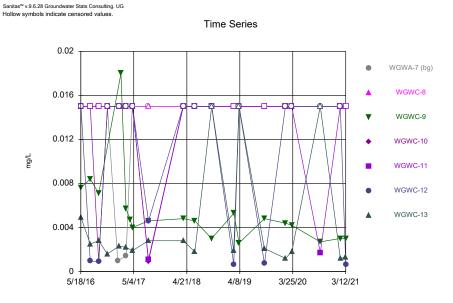
2/4/21



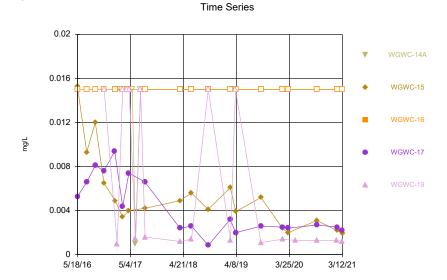
Constituent: Molybdenum Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



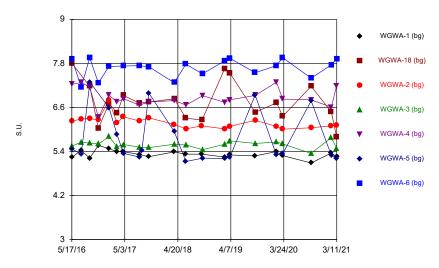
Constituent: Mercury Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Molybdenum Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



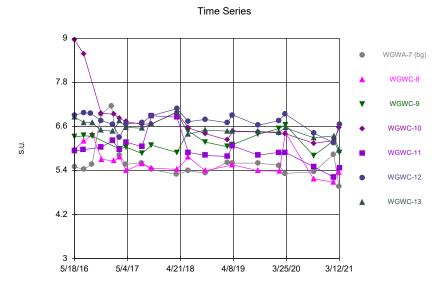
Constituent: Molybdenum Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Time Series

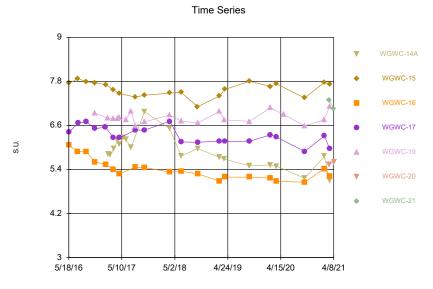
Constituent: pH, Field Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



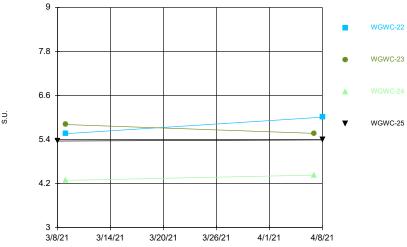
Constituent: pH, Field Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



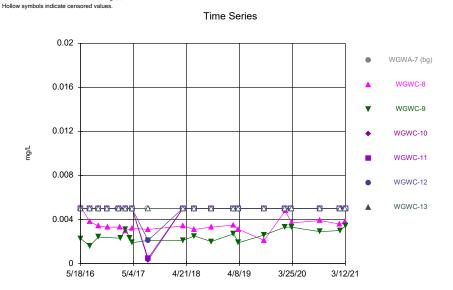
Constituent: pH, Field Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





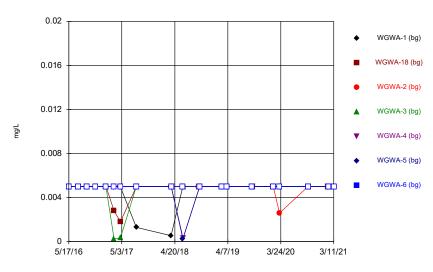
Constituent: pH, Field Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



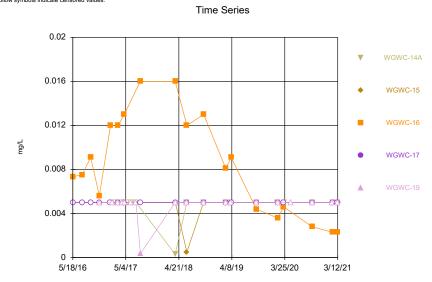
Constituent: Selenium Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond



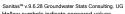


Constituent: Selenium Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

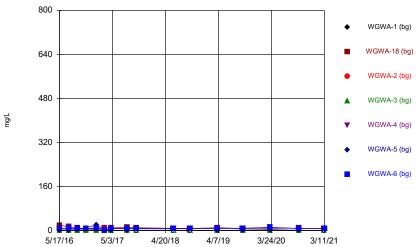
#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Selenium Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond



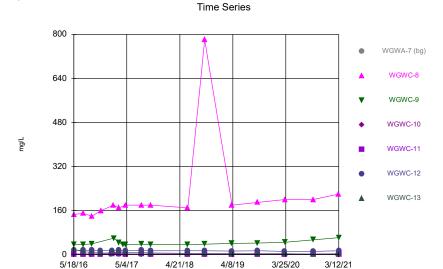




Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

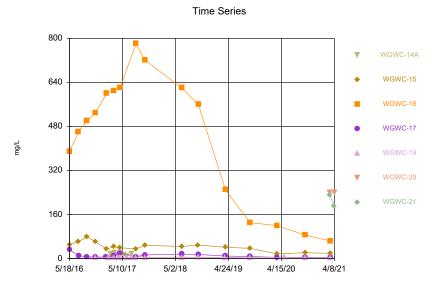
#### v symbols indicate censored values.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



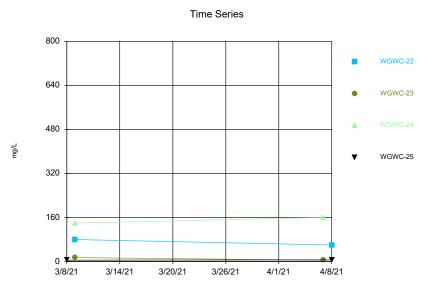
Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

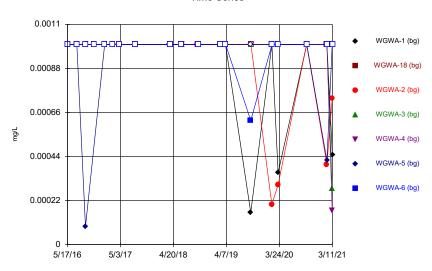


Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

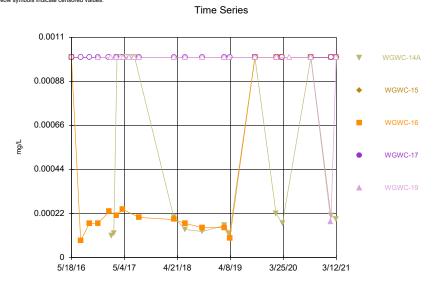


Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



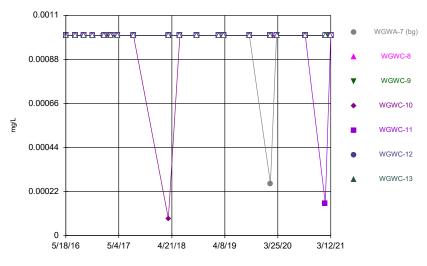
Constituent: Thallium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



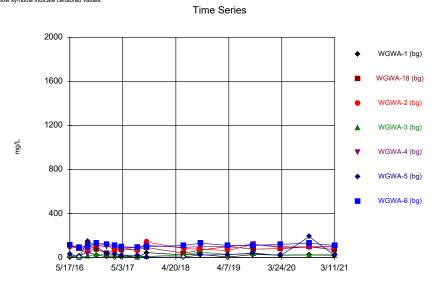
Constituent: Thallium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



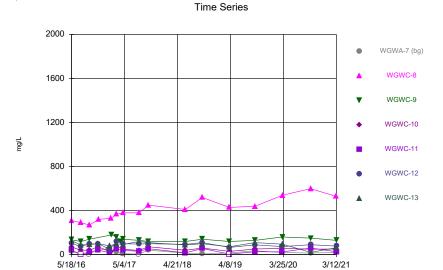
Constituent: Thallium Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



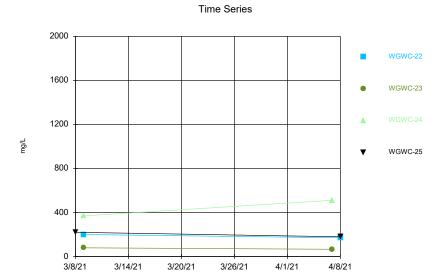
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

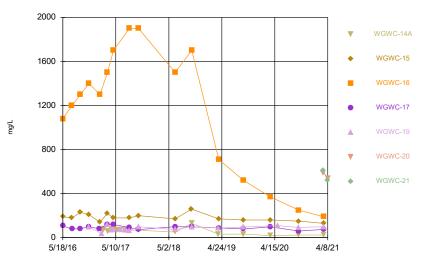


Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:39 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG





Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.002	<0.002	<0.002				
5/18/2016				<0.002	<0.002	<0.002	<0.002
7/19/2016	<0.002	<0.002	<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		<0.002
9/14/2016						<0.002	
11/9/2016	<0.002	<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		<0.002
1/19/2017		<0.002				<0.002	
3/13/2017	<0.002		<0.002				
3/14/2017		<0.002		<0.002	<0.002	<0.002	<0.002
4/24/2017	<0.002		<0.002				
4/25/2017		<0.002		<0.002	<0.002	<0.002	<0.002
8/8/2017	0.0022 (J)	<0.002	<0.002	<0.002			<0.002
8/9/2017					<0.002	<0.002	
3/27/2018	<0.002		<0.002				
3/28/2018		<0.002		<0.002	<0.002	<0.002	<0.002
2/25/2019	<0.002		<0.002				
2/26/2019		<0.002		<0.002	<0.002	<0.002	<0.002
2/3/2020	<0.002		<0.002				
2/4/2020				<0.002	<0.002	<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	<0.002	<0.002
2/2/2021	0.00062 (J)	<0.002	<0.002	<0.002	<0.002		
2/3/2021						<0.002	<0.002
3/10/2021		<0.002	<0.002	<0.002	<0.002	<0.002	
3/11/2021	<0.002						<0.002

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.002			<0.002			
5/19/2016		<0.002	<0.002		<0.002	<0.002	<0.002
7/19/2016	<0.002						
7/20/2016		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
9/13/2016	<0.002						
9/14/2016			<0.002	<0.002	<0.002	<0.002	<0.002
9/15/2016		<0.002					
11/10/2016	<0.002						<0.002
11/11/2016				<0.002	<0.002	<0.002	
11/14/2016		<0.002					
1/18/2017	<0.002						
1/27/2017					<0.002	<0.002	<0.002
2/6/2017		<0.002		<0.002			
2/9/2017			<0.002				
3/14/2017	<0.002						
3/15/2017		<0.002	0.0011 (J)	<0.002	<0.002	<0.002	<0.002
4/11/2017			<0.002				
4/25/2017	<0.002						
4/26/2017		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
8/8/2017	<0.002						
8/9/2017							<0.002
8/10/2017		<0.002	<0.002	<0.002	<0.002	0.0023 (J)	
3/28/2018	<0.002						
3/29/2018		<0.002	<0.002		<0.002	<0.002	<0.002
3/30/2018				<0.002			
2/26/2019	<0.002						
2/27/2019		<0.002		<0.002	<0.002	<0.002	<0.002
2/28/2019			<0.002				
2/5/2020	<0.002		<0.002	<0.002	<0.002	<0.002	<0.002
2/7/2020		<0.002					
3/17/2020	<0.002						
3/18/2020				<0.002	<0.002	<0.002	
3/19/2020		<0.002	0.00041 (J)				<0.002
2/2/2021	<0.002						
2/3/2021		<0.002			<0.002	<0.002	
2/4/2021			0.00041 (J)	<0.002			<0.002
3/10/2021	<0.002						
3/11/2021		<0.002		<0.002			<0.002
3/12/2021			<0.002		<0.002	<0.002	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.002	<0.002	<0.002	
7/19/2016		<0.002	<0.002		
7/20/2016				<0.002	
9/14/2016		<0.002	<0.002	<0.002	
11/10/2016		<0.002	<0.002	<0.002	
11/11/2016					<0.002
1/20/2017				<0.002	
1/24/2017		<0.002	<0.002		
2/6/2017					<0.002
2/8/2017	<0.002				
2/23/2017	<0.002				
3/14/2017		<0.002		<0.002	
3/15/2017			<0.002		<0.002
3/17/2017	<0.002				
4/11/2017	<0.002				<0.002
4/25/2017		<0.002	<0.002	<0.002	
4/26/2017	<0.002				<0.002
5/17/2017	<0.002				
6/7/2017	<0.002				<0.002
7/11/2017	<0.002				<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
3/30/2018		<0.002		<0.002	
2/26/2019				<0.002	
2/27/2019	<0.002	<0.002	<0.002		
2/28/2019					<0.002
2/5/2020	<0.002				
2/7/2020		<0.002	<0.002	<0.002	<0.002
3/18/2020		<0.002	<0.002	<0.002	
3/19/2020	<0.002				
5/4/2020					<0.002
2/3/2021					<0.002
2/4/2021	<0.002	<0.002	<0.002	<0.002	
3/11/2021	<0.002		<0.002	<0.002	<0.002
3/12/2021		<0.002			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	0.00061 (J)	<0.001			<0.001	<0.001
7/20/2016				<0.001	<0.001		
9/13/2016	<0.001	0.00074 (J)	<0.001	<0.001	<0.001		<0.001
9/14/2016						0.00069 (J)	
11/9/2016	<0.001	<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)		0.0008 (J)
1/19/2017		0.00079 (J)				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		0.0014		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		0.00062 (J)		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		0.00046 (J)		<0.001	<0.001	<0.001	<0.001
6/13/2018	0.001 (J)	0.00057 (J)				<0.001	<0.001
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					
10/2/2018							<0.001
10/3/2018				0.00069 (J)	<0.001	0.00085 (J)	
2/25/2019	<0.001		<0.001				
2/26/2019		0.00054 (J)		<0.001	0.00033 (J)	<0.001	<0.001
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	<0.001					<0.001	0.00036 (J)
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)	<0.001	<0.001
2/5/2020		0.00058 (J)					
3/16/2020	0.00038 (J)		0.00043 (J)				
3/17/2020		<0.001		<0.001	<0.001	<0.001	<0.001
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	<0.001	<0.001	<0.001	<0.001	<0.001		
2/3/2021						<0.001	<0.001
3/10/2021		<0.001	0.00063 (J)	<0.001	0.00036 (J)	<0.001	
3/11/2021	<0.001						<0.001

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.001			<0.001			
5/19/2016		<0.001	<0.001		<0.001	<0.001	<0.001
7/19/2016	<0.001						
7/20/2016		0.00055 (J)	0.00078 (J)	<0.001	<0.001	<0.001	<0.001
9/13/2016	<0.001						
9/14/2016			<0.001	<0.001	<0.001	<0.001	<0.001
9/15/2016		<0.001					
11/10/2016	<0.001						<0.001
11/11/2016				<0.001	<0.001	<0.001	
11/14/2016		<0.001					
1/18/2017	0.001 (J)						
1/27/2017					0.00047 (J)	<0.001	0.00066 (J)
2/6/2017		<0.001		<0.001			
2/9/2017			0.0017				
3/14/2017	<0.001						
3/15/2017		<0.001	0.00047 (J)	<0.001	<0.001	<0.001	<0.001
4/11/2017			<0.001				
4/25/2017	<0.001						
4/26/2017		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001						
8/9/2017							<0.001
8/10/2017		<0.001	<0.001	<0.001	<0.001	0.00048 (J)	
3/28/2018	<0.001						
3/29/2018		<0.001	<0.001		<0.001	<0.001	0.00067 (J)
3/30/2018				<0.001			
6/14/2018	0.0005 (J)	<0.001	<0.001	0.0005 (J)	<0.001	0.00052 (J)	0.00093 (J)
10/3/2018	<0.001						
10/4/2018		0.0015	<0.001	0.00089 (J)	0.00054 (J)	<0.001	0.0015
2/26/2019	<0.001						
2/27/2019		0.00047 (J)		<0.001	<0.001	<0.001	0.00036 (J)
2/28/2019			<0.001				
4/2/2019	<0.001						
4/3/2019		<0.001	<0.001		<0.001	<0.001	0.00053 (J)
4/4/2019				<0.001			
9/18/2019	<0.001						0.00039 (J)
9/19/2019		0.00032 (J)	<0.001	0.00038 (J)	<0.001	<0.001	
2/5/2020	<0.001		<0.001	0.00035 (J)	<0.001	<0.001	0.00048 (J)
2/7/2020		0.0011					
3/17/2020	<0.001						
3/18/2020				<0.001	<0.001	<0.001	
3/19/2020		0.00071 (J)	<0.001				0.00039 (J)
9/22/2020	<0.001	0.0011					
9/23/2020			<0.001	<0.001		<0.001	
9/24/2020					0.00051 (J)		<0.001
2/2/2021	<0.001						
2/3/2021		0.0013			<0.001	<0.001	
2/4/2021			<0.001	<0.001			0.00038 (J)
3/10/2021	<0.001						
3/11/2021		0.0009 (J)		0.00031 (J)			0.00035 (J)
3/12/2021			<0.001		<0.001	<0.001	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		0.00345	<0.001	<0.001	
7/19/2016		0.0031	0.0009 (J)		
7/20/2016				0.00058 (J)	
9/14/2016		0.0024	0.0014	<0.001	
11/10/2016		0.0023	0.0021	0.00082 (J)	
11/11/2016					<0.001
1/20/2017				<0.001	
1/24/2017		0.0019	0.0015		
2/6/2017					<0.001
2/8/2017	<0.001				
2/23/2017	<0.001				
3/14/2017		0.0016		<0.001	
3/15/2017			0.0014		<0.001
3/17/2017	0.0006 (J)				
4/11/2017	0.0032				<0.001
4/25/2017		0.0019	0.0014	0.00095 (J)	
4/26/2017	0.0019				<0.001
5/17/2017	0.0014				
6/7/2017	0.0021				<0.001
7/11/2017	0.00095 (J)				<0.001
8/9/2017		0.0017	0.0013	<0.001	
8/10/2017					<0.001
3/29/2018	<0.001		0.0014		<0.001
3/30/2018		0.0018		<0.001	
6/14/2018	<0.001	0.002	<0.001	0.00076 (J)	<0.001
10/3/2018		0.0024			
10/4/2018	0.0017		0.0013	0.00088 (J)	<0.001
2/26/2019				0.0005 (J)	
2/27/2019	<0.001	0.0015	0.00046 (J)		
2/28/2019					<0.001
4/2/2019					<0.001
4/3/2019	<0.001				
4/4/2019		0.0019	<0.001	<0.001	
9/18/2019	<0.001	0.0016	<0.001	<0.001	<0.001
2/5/2020	<0.001				
2/7/2020		0.001	<0.001	0.00075 (J)	<0.001
3/18/2020		0.00088 (J)	<0.001	0.00054 (J)	
3/19/2020	<0.001				
5/4/2020					<0.001
9/23/2020		0.00061 (J)	<0.001	0.00067 (J)	<0.001
9/24/2020	<0.001				
2/3/2021					<0.001
2/4/2021	<0.001	0.00069 (J)	<0.001	0.00035 (J)	
3/11/2021	<0.001		<0.001	<0.001	<0.001
3/12/2021		0.00084 (J)			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.041	0.0221	0.0308				
5/18/2016				0.0174	0.00723	0.0198	0.00518
7/19/2016	0.038	0.018	0.022			0.015	0.0049
7/20/2016				0.012	0.0051		
9/13/2016	0.029	0.021	0.021	0.013	0.0058		0.006
9/14/2016						0.062	
11/9/2016	0.041	0.011	0.025				0.0066
11/10/2016				0.013	0.0063		
1/17/2017	0.044		0.017				
1/18/2017				0.014	0.0059		0.007
1/19/2017		0.012				0.034	
3/13/2017	0.042		0.019				
3/14/2017		0.017		0.014	0.0058	0.018	0.014
4/24/2017	0.039		0.019				
4/25/2017		0.017		0.015	0.0056	0.018	0.0062
8/8/2017	0.044	0.021	0.022	0.015			0.0065
8/9/2017					0.0056	0.016	
3/27/2018	0.041		0.021				
3/28/2018		0.019		0.014	0.0052	0.015	0.0059
6/13/2018	0.045	0.013				0.016	0.0067
6/14/2018			0.02	0.013	0.0057		
9/24/2018			0.02				
9/27/2018	0.047						
9/28/2018		0.014					
10/2/2018							0.0066
10/3/2018				0.014	0.0054	0.016	
2/25/2019	0.049		0.027				
2/26/2019		0.015		0.014	0.012	0.02	0.011
4/1/2019	0.044		0.027				
4/2/2019		0.014		0.014	0.0056	0.016	0.0069
9/16/2019	0.05					0.027	0.0073 (J)
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)	0.022	0.013
2/5/2020		0.02					
3/16/2020	0.046		0.026				
3/17/2020		0.013		0.013	0.0059 (J)	0.017	0.0081 (J)
9/21/2020			0.024	0.015	0.006 (J)		
9/22/2020	0.048	0.015				0.032	0.0079 (J)
2/2/2021	0.05	0.017	0.025	0.015	0.006 (J)		
2/3/2021						0.015	0.0079 (J)
3/10/2021		0.016	0.024	0.014	0.0057 (J)	0.016	
3/11/2021	0.046						0.0077 (J)

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	0.0114			0.0391			
5/19/2016		0.0026	<0.01		0.031	0.0214	0.055
7/19/2016	0.012						
7/20/2016		0.0017 (J)	0.0014 (J)	0.028	0.029	0.019	0.039
9/13/2016	0.011						
9/14/2016			0.00092 (J)	0.035	0.031	0.02	0.04
9/15/2016		0.0039					
11/10/2016	0.016						0.04
11/11/2016				0.042	0.034	0.022	
11/14/2016		0.00085 (J)					
1/18/2017	0.013						
1/27/2017					0.042	0.023	0.042
2/6/2017		0.0011 (J)		0.041			
2/9/2017			0.0015 (J)				
3/14/2017	0.01						
3/15/2017		0.0013 (J)	0.00054 (J)	0.04	0.032	0.024	0.058
4/11/2017			0.0007 (J)				
4/25/2017	0.012						
4/26/2017		0.00098 (J)	<0.01	0.039	0.03	0.004	0.054
8/8/2017	0.012						
8/9/2017							0.055
8/10/2017		0.0025	0.00053 (J)	0.038	0.03	0.017	
3/28/2018	0.01						
3/29/2018		0.00085 (J)	<0.01		0.028	0.017	0.061
3/30/2018				0.042			
6/14/2018	0.012	0.0028	0.00088 (J)	0.038	0.03	0.015	0.055
10/3/2018	0.011						
10/4/2018		0.0017 (J)	0.00076 (J)	0.04	0.035	0.017	0.046
2/26/2019	0.013						
2/27/2019		<0.01		0.04	0.04	0.016	0.054
2/28/2019			0.0023 (J)				
4/2/2019	0.011						
4/3/2019		0.001 (J)	<0.01		0.035	0.015	0.056
4/4/2019				0.04			
9/18/2019	0.012						0.062
9/19/2019		<0.01	0.0018 (J)	0.038	0.033	0.016	
2/5/2020	0.012		0.0022 (J)	0.061	0.047	0.016	0.052
2/7/2020		<0.01					
3/17/2020	0.012						
3/18/2020				0.035	0.038	0.016	
3/19/2020		<0.01	0.0021 (J)				0.072
9/22/2020	0.013	<0.01					
9/23/2020			<0.01	0.035		0.016	
9/24/2020	0.040				0.061		0.038
2/2/2021	0.012	.0.01			0.000	0.04-	
2/3/2021		<0.01	0.0040.75	0.005	0.039	0.015	0.047
2/4/2021	0.044		0.0016 (J)	0.035			0.047
3/10/2021	0.011	-0.01		0.000			0.040
3/11/2021		<0.01	-0.01	0.033	0.045	0.017	0.049
3/12/2021			<0.01		0.045	0.017	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		0.0206	0.0715	0.0219	
7/19/2016		0.019	0.069		
7/20/2016				0.019	
9/14/2016		0.02	0.066	0.017	
11/10/2016		0.02	0.069	0.02	
11/11/2016					0.0022 (J)
1/20/2017				0.018	
1/24/2017		0.017	0.068		
2/6/2017					0.0018 (J)
2/8/2017	0.037				
2/23/2017	0.051				
3/14/2017		0.018		0.019	
3/15/2017			0.065		0.0015 (J)
3/17/2017	0.046				
4/11/2017	0.055				0.0014 (J)
4/25/2017		0.018	0.057	0.023	
4/26/2017	0.042				0.0014 (J)
5/17/2017	0.052				
6/7/2017	0.06				0.0014 (J)
7/11/2017	0.038				0.0013 (J)
8/9/2017		0.02	0.069	0.017	
8/10/2017					0.0012 (J)
3/29/2018	0.028		0.05		0.00097 (J)
3/30/2018		0.021		0.015	
6/14/2018	0.023	0.022	0.046	0.013	0.0011 (J)
10/3/2018		0.024			
10/4/2018	0.036		0.046	0.013	0.0012 (J)
2/26/2019				0.012	
2/27/2019	0.028	0.023	0.028		
2/28/2019					<0.01
4/2/2019					0.0013 (J)
4/3/2019	0.026				
4/4/2019		0.022	0.027	0.011	
9/18/2019	0.025	0.026	0.032	0.011	<0.01
2/5/2020	0.077				
2/7/2020		0.022	0.034	0.011	0.0065 (J)
3/18/2020		0.021	0.034	0.012	
3/19/2020	0.031				
5/4/2020					<0.01
9/23/2020		0.027	0.037	0.012	<0.01
9/24/2020	0.034				
2/3/2021					<0.01
2/4/2021	0.029	0.028	0.039	0.012	
3/11/2021	0.032		0.037	0.011	<0.01
3/12/2021		0.028			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025	<0.0025	<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		<0.0025
9/14/2016						<0.0025	
11/9/2016	<0.0025	<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		<0.0025
1/19/2017		<0.0025				<0.0025	
3/13/2017	<0.0025		<0.0025				
3/14/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025				
4/25/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025
8/9/2017					<0.0025	<0.0025	
3/27/2018	<0.0025		<0.0025				
3/28/2018		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025				<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					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	<0.0025	
2/25/2019	<0.0025		<0.0025				
2/26/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025				
4/2/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/16/2019	0.00032 (J)					0.00036 (J)	0.0011
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	<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	<0.0025	<0.0025
9/21/2020			<0.0025	<0.0025	<0.0025		
9/22/2020	<0.0025	<0.0025				<0.0025	<0.0025
2/2/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		
2/3/2021						<0.0025	<0.0025
3/10/2021		<0.0025	0.00065 (J)	0.00019 (J)	<0.0025	<0.0025	
3/11/2021	0.00029 (J)						<0.0025
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						,	
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.0025			<0.0025			
5/19/2016		0.00102 (J)	<0.0025		<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025						
7/20/2016		0.0014 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2016	<0.0025						
9/14/2016			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/15/2016		0.00093 (J)					
11/10/2016	<0.0025						<0.0025
11/11/2016				<0.0025	<0.0025	<0.0025	
11/14/2016		0.0014 (J)					
1/18/2017	<0.0025						
1/27/2017					<0.0025	<0.0025	<0.0025
2/6/2017		0.0017 (J)		<0.0025			
2/9/2017			0.00041 (J)				
3/14/2017	<0.0025						
3/15/2017		0.0016 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025				
4/25/2017	<0.0025						
4/26/2017		0.0017 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025						
8/9/2017							<0.0025
8/10/2017		0.0017 (J)	0.00034 (J)	<0.0025	<0.0025	<0.0025	
3/28/2018	<0.0025						
3/29/2018		0.0018 (J)	<0.0025		<0.0025	<0.0025	<0.0025
3/30/2018				<0.0025			
6/14/2018	<0.0025	0.0015 (J)	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018	<0.0025						
10/4/2018		0.0019 (J)	0.00036 (J)	<0.0025	<0.0025	<0.0025	<0.0025
2/26/2019	<0.0025						
2/27/2019		0.0021 (J)		<0.0025	<0.0025	<0.0025	<0.0025
2/28/2019			0.00031 (J)				
4/2/2019	<0.0025						
4/3/2019		0.0019 (J)	<0.0025		<0.0025	<0.0025	<0.0025
4/4/2019	.0.005			<0.0025			
9/18/2019	<0.0025	0.0010	0.00044 (1)	.0.005	.0.005	.0.005	<0.0025
9/19/2019		0.0019	0.00041 (J)	<0.0025	<0.0025	<0.0025	
2/5/2020	0.00041 (J)	0.0000	0.0004 (J)	<0.0025	<0.0025	<0.0025	<0.0025
2/7/2020	-0.0005	0.0023					
3/17/2020	<0.0025			10.0005	10.0005	10.0005	
3/18/2020		0.0000	0.00050 (1)	<0.0025	<0.0025	<0.0025	
3/19/2020	-0.0005	0.0028	0.00056 (J)				<0.0025
9/22/2020	<0.0025	0.0025	0.00004 (1)	10.0005		10.0005	
9/23/2020			0.00034 (J)	<0.0025	<0.002E	<0.0025	<0.000E
9/24/2020	<0.002E				<0.0025		<0.0025
2/2/2021	<0.0025	0.0025			<0.0025	<0.0025	
2/3/2021		0.0025	0.00020 ( !)	<0.002E	<0.0025	<0.0025	<0.000E
2/4/2021	<0.002E		0.00039 (J)	<0.0025			<0.0025
3/10/2021	<0.0025	0.002271		<0.0025			<0.0025
3/11/2021		0.0022 (J)	0.00034 ( 1)	~0.0020	<0.0025	<0.0025	~U.UUZƏ
3/12/2021			0.00034 (J)		~0.0025	~0.0025	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.0025	<0.0025	<0.0025	
7/19/2016		<0.0025	<0.0025		
7/20/2016				<0.0025	
9/14/2016		<0.0025	<0.0025	<0.0025	
11/10/2016		<0.0025	<0.0025	<0.0025	
11/11/2016					<0.0025
1/20/2017				<0.0025	
1/24/2017		<0.0025	<0.0025		
2/6/2017					<0.0025
2/8/2017	<0.0025				
2/23/2017	<0.0025				
3/14/2017		<0.0025		<0.0025	
3/15/2017			<0.0025		<0.0025
3/17/2017	<0.0025				
4/11/2017	<0.0025				<0.0025
4/25/2017		<0.0025	<0.0025	<0.0025	
4/26/2017	<0.0025				<0.0025
5/17/2017	<0.0025				
6/7/2017	<0.0025				<0.0025
7/11/2017	<0.0025				<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
3/30/2018		<0.0025		<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
2/26/2019				<0.0025	
2/27/2019	0.00017 (J)	<0.0025	0.00022 (J)		
2/28/2019					<0.0025
4/2/2019					<0.0025
4/3/2019	<0.0025				
4/4/2019		<0.0025	<0.0025	<0.0025	
9/18/2019	0.00032 (J)	<0.0025	<0.0025	<0.0025	<0.0025
2/5/2020	0.00024 (J)				
2/7/2020		<0.0025	<0.0025	<0.0025	<0.0025
3/18/2020	0.00005 (1)	<0.0025	<0.0025	<0.0025	
3/19/2020	0.00025 (J)				.0.005
5/4/2020		-0.0005	-0.0005	-0.0005	<0.0025
9/23/2020	0.00004 (1)	<0.0025	<0.0025	<0.0025	<0.0025
9/24/2020	0.00024 (J)				<0.0025
2/3/2021 2/4/2021	0.00026 (J)	<0.0025	<0.0025	<0.0025	<0.0025
3/11/2021	<0.0025 (J)	-0.0020	<0.0025	<0.0025 <0.0025	<0.0025
3/11/2021	-0.0020	<0.0025	-0.0020	-0.0020	-0.0020
5, 12/2021		-0.0020			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.08	<0.08	<0.08				
5/18/2016				<0.08	<0.08	<0.08	<0.08
7/19/2016	<0.08	<0.08	<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		<0.08
9/14/2016						<0.08	
11/9/2016	<0.08	<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		<0.08
1/19/2017		<0.08				<0.08	
3/13/2017	<0.08		<0.08				
3/14/2017		<0.08		<0.08	<0.08	<0.08	<0.08
4/24/2017	<0.08		<0.08				
4/25/2017		<0.08		<0.08	<0.08	<0.08	<0.08
8/8/2017	<0.08	<0.08	<0.08	<0.08			<0.08
8/9/2017					<0.08	<0.08	
10/10/2017	<0.08		<0.08				
10/11/2017		<0.08		<0.08	<0.08	<0.08	<0.08
6/13/2018	<0.08	<0.08				<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					
10/2/2018							<0.08
10/3/2018				<0.08	<0.08	<0.08	
4/1/2019	<0.08		<0.08				
4/2/2019		<0.08		<0.08	<0.08	<0.08	<0.08
9/16/2019	<0.08					<0.08	<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	<0.08	<0.08
9/21/2020			<0.08	<0.08	<0.08		
9/22/2020	<0.08	<0.08				<0.08	<0.08
3/10/2021		<0.08	0.039 (J)	<0.08	<0.08	<0.08	
3/11/2021	<0.08						<0.08

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	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.08			<0.08			
5/19/2016		1.42	0.314		<0.08	<0.08	0.0252 (J)
7/19/2016	<0.08						
7/20/2016		1.4	0.25	<0.08	<0.08	<0.08	<0.08
9/13/2016	<0.08						
9/14/2016			0.3	<0.08	<0.08	<0.08	<0.08
9/15/2016		1.2					
11/10/2016	<0.08						<0.08
11/11/2016				<0.08	<0.08	<0.08	
11/14/2016		1.3					
1/18/2017	<0.08						
1/27/2017					0.021 (J)	0.047 (J)	0.033 (J)
2/6/2017		1.8		<0.08			
2/9/2017			0.61				
3/14/2017	<0.08						
3/15/2017		1.7	0.42	0.032 (J)	0.058	0.024 (J)	<0.08
4/11/2017			0.37				
4/25/2017	<0.08						
4/26/2017		2	0.38	<0.08	<0.08	<0.08	<0.08
8/8/2017	<0.08						
8/9/2017							<0.08
8/10/2017		1.8	0.29	<0.08	<0.08	<0.08	
10/11/2017	<0.08						
10/12/2017		1.8	0.36	<0.08	<0.08	<0.08	<0.08
6/14/2018	<0.08	1.7	0.39	<0.08	<0.08	<0.08	<0.08
10/3/2018	<0.08						
10/4/2018		1.9	0.37	<0.08	<0.08	<0.08	<0.08
4/2/2019	<0.08						
4/3/2019		1.7	0.35		<0.08	<0.08	<0.08
4/4/2019				0.024 (J)			
9/18/2019	<0.08						<0.08
9/19/2019		1.7	0.39	<0.08	<0.08	<0.08	
3/17/2020	<0.08						
3/18/2020				0.049 (J)	<0.08	0.039 (J)	
3/19/2020		2.2	0.55				0.053 (J)
9/22/2020	<0.08	2.5					
9/23/2020			0.68	<0.08		<0.08	
9/24/2020					<0.08		<0.08
3/10/2021	<0.08						
3/11/2021		2.4		<0.08			<0.08
3/12/2021			0.64		<0.08	<0.08	

		WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/20	016		<0.08	4.48	<0.08			
7/19/20	016		<0.08	4.7				
7/20/20	016				<0.08			
9/14/20	016		<0.08	5.8	<0.08			
11/10/2	2016		<0.08	6.7	<0.08			
11/11/2	2016					<0.08		
1/20/20	017				<0.08			
1/24/20	017		<0.08	6.3				
2/6/201	17					<0.08		
2/8/201	17	<0.08						
2/23/20	017	<0.08						
3/14/20	017		<0.08		<0.08			
3/15/20	017			5.9		0.034 (J)		
3/17/20	017	<0.08						
4/11/20	017	<0.08				<0.08		
4/25/20	017		<0.08	6.2	<0.08			
4/26/20	017	<0.08				<0.08		
5/17/20	017	<0.08						
6/7/201	17	<0.08				<0.08		
7/11/20	017	<0.08				<0.08		
8/9/201	17		<0.08	6.3	<0.08			
8/10/20	017					<0.08		
10/11/2	2017	<0.08	<0.08	6.8	<0.08			
10/12/2	2017					<0.08		
6/14/20	)18	<0.08	<0.08	5.4	<0.08	<0.08		
10/3/20	018		<0.08					
10/4/20	)18	<0.08		5.5	<0.08	<0.08		
4/2/201	19					<0.08		
4/3/201	19	<0.08						
4/4/201	19		<0.08	3.2	0.049 (J)			
9/18/20	)19	<0.08	<0.08	2.1	<0.08	<0.08		
3/18/20	020		0.071 (J)	2	0.049 (J)			
3/19/20	020	0.039 (J)						
5/4/202	20					<0.08		
9/23/20	020		<0.08	1.5	<0.08	<0.08		
9/24/20	020	<0.08						
3/8/202	21						1.3	
3/9/202	21							0.19
3/11/20	)21	<0.08		1.1	<0.08	<0.08		
3/12/20	)21		<0.08					
4/7/202	21							0.13
4/8/202	21						0.98	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				0.48
3/9/2021	0.33	0.073 (J)	1.8	
4/7/2021		<0.08	1.9	
4/8/2021	0.21			0.43

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025	<0.0025	<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		<0.0025
9/14/2016						<0.0025	
11/9/2016	<0.0025	<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		<0.0025
1/19/2017		<0.0025				<0.0025	
3/13/2017	<0.0025		<0.0025				
3/14/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025				
4/25/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025
8/9/2017					<0.0025	<0.0025	
3/27/2018	<0.0025		<0.0025				
3/28/2018		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025				<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					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	<0.0025	
2/25/2019	<0.0025		<0.0025				
2/26/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025				
4/2/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/16/2019	<0.0025					<0.0025	<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	<0.0025	<0.0025
2/5/2020		<0.0025					
3/16/2020	<0.0025		<0.0025				
3/17/2020		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/21/2020			<0.0025	<0.0025	<0.0025		
9/22/2020	<0.0025	<0.0025				<0.0025	<0.0025
2/2/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		
2/3/2021						<0.0025	<0.0025

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	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.0025			<0.0025			
5/19/2016		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025						
7/20/2016		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/13/2016	<0.0025						
9/14/2016			<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
9/15/2016		<0.0025					
11/10/2016	<0.0025						<0.0025
11/11/2016				<0.0025	<0.0025	<0.0025	
11/14/2016		<0.0025					
1/18/2017	<0.0025						
1/27/2017					<0.0025	<0.0025	<0.0025
2/6/2017		<0.0025		<0.0025			
2/9/2017			<0.0025				
3/14/2017	<0.0025						
3/15/2017		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/11/2017			<0.0025				
4/25/2017	<0.0025						
4/26/2017		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025						
8/9/2017							<0.0025
8/10/2017		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
3/28/2018	<0.0025						
3/29/2018		<0.0025	<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	<0.0025	<0.0025
10/3/2018	<0.0025						
10/4/2018		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2/26/2019	<0.0025						
2/27/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
2/28/2019			<0.0025				
4/2/2019	<0.0025						
4/3/2019		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025
4/4/2019				<0.0025			
9/18/2019	<0.0025						<0.0025
9/19/2019		<0.0025	<0.0025	0.00021 (J)	<0.0025	<0.0025	
2/5/2020	<0.0025		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2/7/2020		<0.0025					
3/17/2020	<0.0025						
3/18/2020				<0.0025	<0.0025	<0.0025	
3/19/2020		<0.0025	<0.0025				<0.0025
9/22/2020	<0.0025	<0.0025	0.000	.0.005		.0.005	
9/23/2020			<0.0025	<0.0025		<0.0025	.0.000=
9/24/2020	-0.0005				<0.0025		<0.0025
2/2/2021	<0.0025	-0.0005			-0.0005	-0.0005	
2/3/2021		<0.0025	<0.000F	<0.000F	<0.0025	<0.0025	<0.000F
2/4/2021			<0.0025	<0.0025			<0.0025

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	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.0025	0.000362 (J)	<0.0025	
7/19/2016		<0.0025	<0.0025		
7/20/2016				<0.0025	
9/14/2016		<0.0025	0.00037 (J)	<0.0025	
11/10/2016		<0.0025	<0.0025	<0.0025	
11/11/2016					<0.0025
1/20/2017				<0.0025	
1/24/2017		<0.0025	0.00055 (J)		
2/6/2017					<0.0025
2/8/2017	<0.0025				
2/23/2017	<0.0025				
3/14/2017		<0.0025		<0.0025	
3/15/2017			0.00067 (J)		<0.0025
3/17/2017	<0.0025				
4/11/2017	<0.0025				<0.0025
4/25/2017		<0.0025	0.00058 (J)	<0.0025	
4/26/2017	<0.0025				<0.0025
5/17/2017	<0.0025				
6/7/2017	<0.0025				<0.0025
7/11/2017	<0.0025				<0.0025
8/9/2017		<0.0025	0.00054 (J)	<0.0025	
8/10/2017					<0.0025
3/29/2018	<0.0025		0.00082 (J)		<0.0025
3/30/2018		<0.0025		<0.0025	
6/14/2018	<0.0025	<0.0025	0.0007 (J)	<0.0025	<0.0025
10/3/2018		<0.0025			
10/4/2018	<0.0025		0.00065 (J)	<0.0025	<0.0025
2/26/2019				<0.0025	
2/27/2019	<0.0025	<0.0025	0.00055 (J)		
2/28/2019					<0.0025
4/2/2019					<0.0025
4/3/2019	<0.0025				
4/4/2019		<0.0025	0.00047 (J)	<0.0025	
9/18/2019	<0.0025	<0.0025	0.00017 (J)	<0.0025	<0.0025
2/5/2020	<0.0025				
2/7/2020		<0.0025	<0.0025	<0.0025	<0.0025
3/18/2020		<0.0025	0.00022 (J)	<0.0025	
3/19/2020	<0.0025				
5/4/2020					<0.0025
9/23/2020		<0.0025	<0.0025	<0.0025	<0.0025
9/24/2020	<0.0025				
2/3/2021					<0.0025
2/4/2021	<0.0025	<0.0025	<0.0025	<0.0025	

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.927	23.7	12.2				
5/18/2016				2.1	17.9	1.7	27
7/19/2016	1	23	13			1.5	23
7/20/2016				1.7	15		
9/13/2016	0.44	23	13	1.3	16		25
9/14/2016						52	
11/9/2016	1.1	6.7	19				25
11/10/2016				1.6	15		
1/17/2017	1.4		28				
1/18/2017				1.7	17		26
1/19/2017		8.5				13	
3/13/2017	1.1		14				
3/14/2017		13		1.8	17	1.6	20
4/24/2017	1.1		12				
4/25/2017		23		2	17	1.5	28
8/8/2017	1.1	24	18	2			26
8/9/2017					15	1.3	
10/10/2017	1.2		21				
10/11/2017		23		2.1	17	1.5	29
6/13/2018	1.1	11				1.2	25
6/14/2018			12	2	15		
9/24/2018			11				
9/27/2018	1.2						
9/28/2018		11					
10/2/2018							26
10/3/2018				1.8	16	1.4	
4/1/2019	1		12				
4/2/2019		20		1.8	15	1.1	25
9/16/2019	1.3					36	25
9/17/2019		10	13		16		
9/18/2019				1.6			
3/16/2020	1.1		10				
3/17/2020		10		1.7	15	1.4	26
9/21/2020			13	1.8	16		
9/22/2020	1.2	19				58	25
3/10/2021		7.7	11	1.9	16	1.3	
3/11/2021	1.3						26

				,			
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	1.36			7.17			
5/19/2016		31.4	8.53		1.95	15.8	11.4
7/19/2016	0.88						
7/20/2016		28	8.2	7	1.5	14	7.1
9/13/2016	0.93						
9/14/2016			8.8	7.7	1.8	16	7.4
9/15/2016		27					
11/10/2016	6.1						6.4
11/11/2016				8.2	1.7	15	
11/14/2016		32					
1/18/2017	10						
1/27/2017					3.5	16	6.2
2/6/2017		41		9.1			
2/9/2017			10				
3/14/2017	1.3						
3/15/2017		38	8.6	9	3.8	16	6.7
4/11/2017			8.6				
4/25/2017	1.9						
4/26/2017		39	7.1	8.1	4	3	6.5
8/8/2017	4.8						
8/9/2017							7
8/10/2017		53	7.5	8.1	3.5	15	
10/11/2017	0.93						
10/12/2017		60	8.2	8.6	2.7	16	7
6/14/2018	0.94	52	7.5	7.7	2.2	13	5.5
10/3/2018	1.2						
10/4/2018		65	8	8.5	2	15	5.9
4/2/2019	1.1						
4/3/2019		61	7.2		1.7	14	4.7
4/4/2019				7.9			
9/18/2019	1.5						4.9
9/19/2019		57	8.1	7.5	1.4	14	
3/17/2020	0.82						
3/18/2020				7.5	1.6	14	
3/19/2020		79	9.3				5
9/22/2020	0.89	81					
9/23/2020			10	7.7		13	
9/24/2020					5.2		1.4
3/10/2021	0.89						
3/11/2021		83		7.9			4
3/12/2021			11		1.6	15	

				,			-
	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		32.5	168	8.24			
7/19/2016		30	190				
7/20/2016				11			
9/14/2016		37	230	12			
11/10/2016		29	240	11			
11/11/2016					12		
1/20/2017				10			
1/24/2017		28	280				
2/6/2017					11		
2/8/2017	3.2						
2/23/2017	4.1						
3/14/2017		29		8.8			
3/15/2017			260		10		
3/17/2017	2.4						
4/11/2017	4.1				11		
4/25/2017		32	300	12			
4/26/2017	2.5				8.4		
5/17/2017	5.2						
6/7/2017	5.2				9		
7/11/2017	2.3				9.5		
8/9/2017		30	350	11			
8/10/2017					8.8		
10/11/2017	3.8	31	360	10			
10/12/2017					9.5		
6/14/2018	1.1	29	260	6.2	8.9		
10/3/2018		31					
10/4/2018	2		250	6.4	10		
4/2/2019					11		
4/3/2019	0.84						
4/4/2019		30	110	5.6			
9/18/2019	0.85	31	62	5.5	8.8		
3/18/2020		30	66	6.3			
3/19/2020	0.89						
5/4/2020					15		
9/23/2020		32	43	5.9	13		
9/24/2020	0.99						
3/8/2021						90	
3/9/2021							66
3/11/2021	0.79		32	5.7	15		
3/12/2021		31					
4/7/2021							67
4/8/2021						88	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				14
3/9/2021	15	3.2	65	
4/7/2021		2.7	71	
4/8/2021	14			16

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	3.8	6.05	2.5				
5/18/2016				1.92	1.45	2.14	1.58
7/19/2016	3.9	4	2.6			2.4	1.6
7/20/2016				1.8	1.4		
9/13/2016	3.6	3.1	2.4	1.7	1.4		1.4
9/14/2016						2.1	
11/9/2016	3.9	2.3	2.3				1.5
11/10/2016				1.6	1.3		
1/17/2017	3.8		2.3				
1/18/2017				1.7	1.3		1.5
1/19/2017		2				1.8	
3/13/2017	3.4		2.2				
3/14/2017		1.9		1.6	1.2	2	2.5
4/24/2017	3.4		2.2				
4/25/2017		1.9		1.6	1.2	1.8	1.3
8/8/2017	3.6	2	2.3	1.7			1.4
8/9/2017					1.2	1.9	
10/10/2017	3.6		2.5				
10/11/2017		1.9		1.6	1.2	2.1	1.3
6/13/2018	3.8	2				1.7	1.4
6/14/2018			2.3	1.6	1.2		
9/24/2018			2.4				
9/27/2018	4						
9/28/2018		2.1					
10/2/2018							1.4
10/3/2018				1.6	1.2	1.8	
4/1/2019	4		2.4				
4/2/2019		2.6		1.7	1.2	1.7	1.5
9/16/2019	4					1.8	1.5
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	1.6	1.7
9/21/2020			2.5	1.5	1.2		
9/22/2020	4	2.1				1.5	1.4
3/10/2021		1.9	2.6	1.8	1.2	1.8	
3/11/2021	4.5						1.5

				·			
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	2.06			1.45			
5/19/2016		17.5	1.46		3.21	3.8	2.26
7/19/2016	2.1						
7/20/2016		19	1.5	1.6	3.4	3.8	1.9
9/13/2016	2						
9/14/2016			1.4	1.5	3.1	3.7	1.6
9/15/2016		19					
11/10/2016	1.8						1.4
11/11/2016				1.5	3.2	3.5	
11/14/2016		25					
1/18/2017	1.8						
1/27/2017					3.4	3.1	1.4
2/6/2017		33		1.4			
2/9/2017			1.5				
3/14/2017	1.8						
3/15/2017		38	1.3	1.4	3.1	3.2	1.4
4/11/2017			1.2				
4/25/2017	1.8						
4/26/2017		42	1.2	1.3	3.1	3.2	1.3
8/8/2017	1.9						
8/9/2017							1.4
8/10/2017		48	1.3	1.4	3.1	3.4	
10/11/2017	1.8						
10/12/2017		60	1.4	1.3	3	3.1	1.2
6/14/2018	1.7	58	1.2	1.3	3	3	1.2
10/3/2018	1.8						
10/4/2018		300	1.2	1.3	3.1	3.1	1.2
4/2/2019	1.9						
4/3/2019		70	2		3.3	3	1.2
4/4/2019				1.4			
9/18/2019	2						1.2
9/19/2019		70	1.5	1.5	3.2	3.2	
3/17/2020	2.2						
3/18/2020				1.5	3.2	3.2	
3/19/2020		98	2.1				1.3
9/22/2020	1.8	100					
9/23/2020			2.4	1.3		2.8	
9/24/2020					1		1.6
3/10/2021	1.9						
3/11/2021		110		1.7			1.2
3/12/2021			3.4		3.6	3.5	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		4.59	217	2.72			
7/19/2016		5.9	250				
7/20/2016				1.9			
9/14/2016		7.9	260	1.6			
11/10/2016		6.5	290	1.6			
11/11/2016					2.6		
1/20/2017				1.5			
1/24/2017		4.1	310				
2/6/2017					2.6		
2/8/2017	2.5						
2/23/2017	4.3						
3/14/2017		4.4		1.5			
3/15/2017			330		2.4		
3/17/2017	4.8						
4/11/2017	3.8				2.3		
4/25/2017		4	330	1.8			
4/26/2017	4.8				2.3		
5/17/2017	3.9						
6/7/2017	3.2				2.5		
7/11/2017	4.1				2.3		
8/9/2017		3.6	330	1.4			
8/10/2017					2.5		
10/11/2017	2.2	5	320	1.5			
10/12/2017					2.3		
6/14/2018	2.8	4.3	290	1.5	2.4		
10/3/2018		4.8					
10/4/2018	2.2		290	1.5	2.6		
4/2/2019					2.5		
4/3/2019	2.4						
4/4/2019		3.7	170	1.4			
9/18/2019	2.2	3.2	100	1.5	2.7		
3/18/2020		1.7	93	1.5			
3/19/2020	1.9						
5/4/2020					2.8		
9/23/2020		1.5	58	1.2	2.6		
9/24/2020	3.1						
3/8/2021						70	
3/9/2021							58
3/11/2021	2.6		49	1.3	2.9		
3/12/2021		1.6					
4/7/2021							50
4/8/2021						57	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				74
3/9/2021	2.9	3.5	110	
4/7/2021		3.7	110	
4/8/2021	2.4			77

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.002	<0.002	<0.002				
5/18/2016				<0.002	<0.002	<0.002	<0.002
7/19/2016	<0.002	<0.002	<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		<0.002
9/14/2016						0.0031	
11/9/2016	<0.002	<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		<0.002
1/19/2017		<0.002				<0.002	
3/13/2017	<0.002		<0.002				
3/14/2017		<0.002		<0.002	<0.002	<0.002	<0.002
4/24/2017	<0.002		<0.002				
4/25/2017		<0.002		<0.002	<0.002	<0.002	<0.002
8/8/2017	<0.002	<0.002	<0.002	<0.002			<0.002
8/9/2017					<0.002	<0.002	
3/27/2018	<0.002		<0.002				
3/28/2018		0.0049		<0.002	<0.002	<0.002	<0.002
6/13/2018	<0.002	<0.002				<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					
10/2/2018							<0.002
10/3/2018				<0.002	<0.002	<0.002	
2/25/2019	0.0016 (J)		<0.002				
2/26/2019		0.0016 (J)		<0.002	0.0021 (J)	<0.002	0.0023 (J)
4/1/2019	<0.002		<0.002				
4/2/2019		<0.002		<0.002	<0.002	<0.002	<0.002
9/16/2019	0.0016 (J)					<0.002	<0.002
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	<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	<0.002	<0.002
9/21/2020			<0.002	<0.002	<0.002		
9/22/2020	<0.002	<0.002				<0.002	<0.002
2/2/2021	<0.002	<0.002	<0.002	<0.002	<0.002		
2/3/2021						<0.002	<0.002
3/10/2021		<0.002	<0.002	<0.002	<0.002	<0.002	
3/11/2021	<0.002						<0.002

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.002			<0.002			
5/19/2016		<0.002	<0.002		<0.002	<0.002	<0.002
7/19/2016	<0.002						
7/20/2016		<0.002	<0.002	0.0012 (J)	<0.002	<0.002	<0.002
9/13/2016	<0.002						
9/14/2016			<0.002	<0.002	<0.002	<0.002	<0.002
9/15/2016		<0.002					
11/10/2016	<0.002						<0.002
11/11/2016				0.0015 (J)	<0.002	<0.002	
11/14/2016		<0.002					
1/18/2017	<0.002						
1/27/2017					<0.002	<0.002	<0.002
2/6/2017		<0.002		0.0011 (J)			
2/9/2017			<0.002				
3/14/2017	<0.002						
3/15/2017		<0.002	<0.002	0.0015 (J)	<0.002	<0.002	<0.002
4/11/2017			<0.002				
4/25/2017	<0.002						
4/26/2017		<0.002	<0.002	0.0013 (J)	0.0011 (J)	<0.002	<0.002
8/8/2017	<0.002						
8/9/2017							<0.002
8/10/2017		<0.002	<0.002	0.0016 (J)	<0.002	<0.002	
3/28/2018	<0.002						
3/29/2018		<0.002	<0.002		0.0012 (J)	<0.002	<0.002
3/30/2018				0.0027			
6/14/2018	<0.002	<0.002	<0.002	0.0023 (J)	<0.002	<0.002	<0.002
10/3/2018	<0.002						
10/4/2018		<0.002	<0.002	0.0031	<0.002	<0.002	<0.002
2/26/2019	<0.002						
2/27/2019		<0.002		0.0031	0.0021 (J)	<0.002	0.0018 (J)
2/28/2019			0.0025				
4/2/2019	<0.002						
4/3/2019		<0.002	<0.002		<0.002	<0.002	<0.002
4/4/2019				0.0021 (J)			
9/18/2019	<0.002						<0.002
9/19/2019		<0.002	<0.002	0.0022	<0.002	<0.002	
2/5/2020	<0.002		<0.002	0.0022	<0.002	<0.002	<0.002
2/7/2020		<0.002					
3/17/2020	<0.002						
3/18/2020				<0.002	<0.002	<0.002	
3/19/2020		<0.002	<0.002				<0.002
9/22/2020	<0.002	<0.002					
9/23/2020			<0.002	0.0018 (J)		<0.002	
9/24/2020					<0.002		<0.002
2/2/2021	<0.002						
2/3/2021		<0.002			<0.002	<0.002	
2/4/2021			<0.002	0.0018 (J)			<0.002
3/10/2021	<0.002						
3/11/2021		<0.002		0.0023			0.0019 (J)
3/12/2021			<0.002		0.0017 (J)	<0.002	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.002	<0.002	<0.002	
7/19/2016		<0.002	<0.002		
7/20/2016				<0.002	
9/14/2016		<0.002	<0.002	<0.002	
11/10/2016		<0.002	<0.002	<0.002	
11/11/2016					<0.002
1/20/2017				<0.002	
1/24/2017		<0.002	<0.002		
2/6/2017					<0.002
2/8/2017	<0.002				
2/23/2017	<0.002				
3/14/2017		<0.002		<0.002	
3/15/2017			<0.002		<0.002
3/17/2017	<0.002				
4/11/2017	<0.002				<0.002
4/25/2017		<0.002	<0.002	<0.002	
4/26/2017	<0.002				<0.002
5/17/2017	<0.002				
6/7/2017	<0.002				<0.002
7/11/2017	<0.002				<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
3/30/2018		<0.002		<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
2/26/2019				<0.002	
2/27/2019	<0.002	0.0015 (J)	<0.002		
2/28/2019					<0.002
4/2/2019					<0.002
4/3/2019	<0.002				
4/4/2019		<0.002	<0.002	<0.002	
9/18/2019	<0.002	<0.002	<0.002	<0.002	<0.002
2/5/2020	0.0017 (J)				
2/7/2020		<0.002	<0.002	<0.002	<0.002
3/18/2020		<0.002	<0.002	<0.002	
3/19/2020	<0.002				
5/4/2020					<0.002
9/23/2020		<0.002	<0.002	<0.002	<0.002
9/24/2020	<0.002				
2/3/2021					<0.002
2/4/2021	<0.002	<0.002	<0.002	<0.002	
3/11/2021	<0.002		<0.002	<0.002	<0.002
3/12/2021		<0.002			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	0.0014 (J)	0.0019 (J)	0.00086 (J)			0.0014 (J)	<0.0025
7/20/2016				<0.0025	<0.0025		
9/13/2016	0.0015 (J)	0.0032	0.00095 (J)	<0.0025	<0.0025		<0.0025
9/14/2016						0.013	
11/9/2016	0.0012 (J)	0.0039	0.0011 (J)				<0.0025
11/10/2016				<0.0025	<0.0025		
1/17/2017	0.001 (J)		<0.0025				
1/18/2017				<0.0025	<0.0025		<0.0025
1/19/2017		0.0032				0.064 (O)	
3/13/2017	0.0011 (J)		0.00087 (J)				
3/14/2017		0.0045		<0.0025	<0.0025	0.0066	0.0018 (J)
4/24/2017	0.001 (J)		0.0014 (J)				
4/25/2017		0.002 (J)		<0.0025	<0.0025	0.0026	<0.0025
8/8/2017	0.0011 (J)	0.0031	0.0012 (J)	<0.0025			<0.0025
8/9/2017					<0.0025	0.0025	
3/27/2018	0.00091 (J)		0.0012 (J)				
3/28/2018		0.0013 (J)		<0.0025	<0.0025	0.0015 (J)	<0.0025
6/13/2018	0.00094 (J)	0.0021 (J)				0.0011 (J)	<0.0025
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)					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	0.0013 (J)	
2/25/2019	0.00085 (J)		0.00083 (J)				
2/26/2019		0.00026 (J)		<0.0025	0.00029 (J)	0.0006 (J)	0.00031 (J)
4/1/2019	0.00079 (J)		0.00082 (J)				
4/2/2019		<0.0025		<0.0025	<0.0025	0.00046 (J)	<0.0025
9/16/2019	0.00082					0.0035	9.1E-05 (J)
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	0.00082	<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	0.00066 (J)	0.00014 (J)
9/21/2020			0.00054 (J)	<0.0025	<0.0025		
9/22/2020	0.00072 (J)	0.00033 (J)				0.0065	<0.0025
2/2/2021	0.00082 (J)	0.0018 (J)	0.00069 (J)	<0.0025	<0.0025		
2/3/2021	.,					0.0015 (J)	<0.0025
3/10/2021		0.0015 (J)	0.00073 (J)	<0.0025	<0.0025	0.0011 (J)	
3/11/2021	0.00081 (J)						<0.0025
	` '						

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.0025			0.00201 (J)			
5/19/2016		<0.0025	<0.0025		<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025						
7/20/2016		<0.0025	<0.0025	0.00066 (J)	0.0025	0.0013 (J)	<0.0025
9/13/2016	<0.0025		10.0005	0.00005 (1)	-0.0005	0.00000 / 1)	-0.0005
9/14/2016		-0.0005	<0.0025	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025
9/15/2016	0.00055 (1)	<0.0025					-0.0005
11/10/2016	0.00055 (J)			0.004 (1)	0.00050 (1)	0.0017 (1)	<0.0025
11/11/2016		<0.000E		0.001 (J)	0.00052 (J)	0.0017 (J)	
11/14/2016	0.00007 (1)	<0.0025					
1/18/2017	0.00097 (J)				0.00040 ( 1)	0.0022 (1)	<0.000E
1/27/2017		-0.0005		0.00070 (1)	0.00049 (J)	0.0022 (J)	<0.0025
2/6/2017		<0.0025	0.00072 (1)	0.00072 (J)			
2/9/2017	0.0005		0.00073 (J)				
3/14/2017	<0.0025	0.0005	0.0005	0.00000 (1)	0.0000470	0.0040 (1)	.0.000
3/15/2017		<0.0025	<0.0025	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025
4/11/2017	.0.005		<0.0025				
4/25/2017	<0.0025						
4/26/2017	.0.005	<0.0025	<0.0025	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025
8/8/2017	<0.0025						
8/9/2017							0.0004 (J)
8/10/2017		<0.0025	<0.0025	<0.0025	0.0011 (J)	0.00049 (J)	
3/28/2018	<0.0025						
3/29/2018		0.00066 (J)	<0.0025		<0.0025	0.0008 (J)	0.0008 (J)
3/30/2018				0.0035			
6/14/2018	<0.0025	0.0011 (J)	<0.0025	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)
10/3/2018	<0.0025						
10/4/2018		<0.0025	<0.0025	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025
2/26/2019	0.00017 (J)						
2/27/2019		0.0019 (J)		0.0005 (J)	0.0022 (J)	0.0006 (J)	0.00013 (J)
2/28/2019			<0.0025				
4/2/2019	<0.0025						
4/3/2019		0.0037	<0.0025		0.00081 (J)	0.00043 (J)	<0.0025
4/4/2019				0.0017 (J)			
9/18/2019	0.0002 (J)						<0.0025
9/19/2019		0.0028	<0.0025	0.0023	<0.0025	0.00028 (J)	
2/5/2020	0.00021 (J)		<0.0025	0.0013	0.00026 (J)	0.00058	<0.0025
2/7/2020		0.0011					
3/17/2020	0.00065 (J)						
3/18/2020				0.0012 (J)	0.00069 (J)	0.00071 (J)	
3/19/2020		0.00092 (J)	<0.0025				<0.0025
9/22/2020	0.00015 (J)	0.00065 (J)					
9/23/2020			<0.0025	0.00062 (J)		0.00039 (J)	
9/24/2020					<0.0025		0.00032 (J)
2/2/2021	<0.0025						
2/3/2021		0.00014 (J)			0.00072 (J)	0.00017 (J)	
2/4/2021			<0.0025	0.00059 (J)			<0.0025
3/10/2021	<0.0025						
3/11/2021		0.00043 (J)		0.00058 (J)			<0.0025
3/12/2021			<0.0025		0.0022 (J)	0.00042 (J)	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.0025	0.0069	0.00245 (J)	
7/19/2016		<0.0025	0.012		
7/20/2016				0.0018 (J)	
9/14/2016		<0.0025	0.013	0.0014 (J)	
11/10/2016		<0.0025	0.016	0.0016 (J)	
11/11/2016					<0.0025
1/20/2017				0.0014 (J)	
1/24/2017		<0.0025	0.015		
2/6/2017					0.00058 (J)
2/8/2017	0.0051				
2/23/2017	0.014				
3/14/2017		<0.0025		0.0023 (J)	
3/15/2017			0.014		0.00045 (J)
3/17/2017	0.013				
4/11/2017	0.016				<0.0025
4/25/2017		<0.0025	0.014	0.0023 (J)	
4/26/2017	0.01				<0.0025
5/17/2017	0.011				
6/7/2017	0.01				<0.0025
7/11/2017	0.0085				<0.0025
8/9/2017		<0.0025	0.016	0.0011 (J)	
8/10/2017					0.00049 (J)
3/29/2018	0.015		0.0092		<0.0025
3/30/2018		<0.0025		0.0016 (J)	
6/14/2018	0.011	<0.0025	0.0035	0.00055 (J)	<0.0025
10/3/2018		<0.0025			
10/4/2018	0.0055		0.0078	0.00041 (J)	<0.0025
2/26/2019				0.00086 (J)	
2/27/2019	0.0049	<0.0025	0.00084 (J)		
2/28/2019					0.00019 (J)
4/2/2019					<0.0025
4/3/2019	0.0056				
4/4/2019		<0.0025	0.00077 (J)	<0.0025	
9/18/2019	0.005	<0.0025	0.00011 (J)	0.00018 (J)	0.00045 (J)
2/5/2020	0.0044				
2/7/2020		<0.0025	0.00016 (J)	0.00077	0.00024 (J)
3/18/2020		<0.0025	0.00016 (J)	0.00052 (J)	
3/19/2020	0.0039				
5/4/2020					0.00018 (J)
9/23/2020		<0.0025	<0.0025	0.0009 (J)	0.00024 (J)
9/24/2020	0.0035				
2/3/2021					0.00025 (J)
2/4/2021	0.0041	0.00015 (J)	0.00026 (J)	0.00042 (J)	
3/11/2021	0.0037		0.00013 (J)	0.00035 (J)	0.00022 (J)
3/12/2021		<0.0025			

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				•		•	
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.0525 (U)	0.184 (U)	0.13 (U)				
5/18/2016				0.025 (U)	1.04	0.325 (U)	8
7/19/2016	7.25 (O)	0.27 (U)	0.121 (U)			0.433 (U)	7.69
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		6.98
11/9/2016	0.221 (U)	0.219 (U)	0.217 (U)				8.78
11/10/2016				0.421	1.13		
1/17/2017	0.295 (U)		0.595				
1/18/2017				0.434 (U)	1.76		10.4
1/19/2017		0.0745 (U)				0.216 (U)	
3/13/2017	-0.13 (U)		-0.147 (U)				
3/14/2017		0.194 (U)		0.167 (U)	0.788	0.119 (U)	0.589 (O)
4/24/2017	0.36 (U)		0.367				
4/25/2017		0.109 (U)		0.224 (U)	1.13	0.105 (U)	8.22
8/8/2017	0.382	0.0842 (U)	0.402	0.127 (U)			7.21
8/9/2017					1.31	0.385 (U)	
3/27/2018	0.475		0.453				
3/28/2018		0.424		0.15 (U)	1.32	0.492	7.52
6/13/2018	-0.0181 (U)	0.401				0.275 (U)	8.77
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					
10/2/2018							8.72
10/3/2018				0.178 (U)	0.943	0.72	
2/25/2019	0.394		0.44				
2/26/2019		0.307 (U)		0.179 (U)	0.65	0.113 (U)	8.93
4/1/2019	0.169 (U)		-0.00216 (U)				
4/2/2019		0.0436 (U)		0.361	0.602	0.255 (U)	7.8
9/16/2019	0.31 (U)					0.318 (U)	8.55
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	0.198 (U)	8.3
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	0.207 (U)	8.88
9/21/2020			0.418 (U)	0.0688 (U)	1.07		
9/22/2020	0.729	0.557 (U)				0.954	7.65
2/2/2021	0.243 (U)	0.354 (U)	0.202 (U)	0.182 (U)	1.05		
2/3/2021						-0.314 (U)	9.99
3/10/2021		0.218 (U)	0.378 (U)	-0.177 (U)	1.47	0.144 (U)	
3/11/2021	0.046 (U)						9.2

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,			
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	0.268 (U)			0.182 (U)			
5/19/2016		0.711 (U)	0.209 (U)		0.431 (U)	0.0698 (U)	0.219 (U)
7/19/2016	0.369 (U)						
7/20/2016		1.14	-0.084 (U)	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)
9/13/2016	0.527 (U)						
9/14/2016			0.42 (U)	0.311 (U)	0.13 (U)	0.199 (U)	0.692
9/15/2016		1.26					
11/10/2016	0.871						1
11/11/2016				0.542	0.0257 (U)	0.467	
11/14/2016		0.749					
1/18/2017	0.213 (U)						
1/27/2017					0.898	0.836	0.668
2/6/2017		1.05		0.104 (U)			
2/9/2017			0.393				
3/14/2017	0.0192 (U)						
3/15/2017		1.32	0.271 (U)	0.523	0.121 (U)	0.254 (U)	0.847
4/11/2017			0.488 (U)				
4/25/2017	0.0872 (U)						
4/26/2017		1.07	0.14 (U)	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)
8/8/2017	0.219 (U)						
8/9/2017							0.816
8/10/2017		1.88	0.379	0.189 (U)	0.326 (U)	0.912	
3/28/2018	0.315 (U)						
3/29/2018		2.31	0.278 (U)		0.461	0.419	0.51
3/30/2018				0.575			
6/14/2018	0.41	1.86	0.157 (U)	0.523	0.275 (U)	-0.263 (U)	0.463
10/3/2018	0.65						
10/4/2018		2.44	0.48	0.84	1.18	1.29	0.99
2/26/2019	0.395						
2/27/2019		2.42		0.236 (U)	0.374	0.415	1.08
2/28/2019			0.271 (U)				
4/2/2019	0.182 (U)						
4/3/2019		1.55	0.0621 (U)		0.187 (U)	0.264 (U)	0.446
4/4/2019				0.233 (U)			
9/18/2019	0.299 (U)						0.392
9/19/2019		2.06	0.537	0.124 (U)	0.338 (U)	0.329 (U)	
2/5/2020	-0.0263 (U)		-0.137 (U)	0.0961 (U)	0.163 (U)	0.225 (U)	0.609
2/7/2020		1.66					
3/17/2020	0.258 (U)						
3/18/2020				0.461 (U)	0.866	-0.0262 (U)	
3/19/2020		1.21	0.23 (U)				0.47
9/22/2020	0.0523 (U)	1.75					
9/23/2020			0.0587 (U)	0.442 (U)		0.785	
9/24/2020					1.2		1.02
2/2/2021	0.167 (U)						
2/3/2021		2			0.718	0.322 (U)	
2/4/2021			0.353 (U)	0.0332 (U)			0.139 (U)
3/10/2021	0.224 (U)						
3/11/2021		2.38	0.004	0.42 (U)	0.0700 (1.1)	0.000	0.473
3/12/2021			0.831		0.0729 (U)	0.633	

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/11/2021 2:39 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		0.569	1.03	0.116 (U)	
7/19/2016		0.29 (U)	2.39		
7/20/2016				0.247 (U)	
9/14/2016		0.412 (U)	3.05	0.594	
11/10/2016		0.709	2.87	0.431	
11/11/2016					-0.11 (U)
1/20/2017				1.35	
1/24/2017		0.779	2.68		
2/6/2017					0.471
2/8/2017	0.958				
2/23/2017	0.771				
3/14/2017		0.247 (U)		-0.107 (U)	
3/15/2017			1.64		0.255 (U)
3/17/2017	1.7				
4/11/2017	0.901				0.19 (U)
4/25/2017		0.515	0.878	0.228 (U)	
4/26/2017	0.434				0.22 (U)
5/17/2017	0.632				
6/7/2017	1.06				0.126 (U)
7/11/2017	0.716				0.511
8/9/2017		1.7	2.5	-0.0246 (U)	
8/10/2017					0.882
3/29/2018	0.58		1.6		0.252 (U)
3/30/2018		0.0985 (U)		0.135 (U)	
6/14/2018	0.55	0.171 (U)	1.09	-0.373 (U)	0.0458 (U)
10/3/2018		0.766			
10/4/2018	0.563		1.99	0.775	0.381
2/26/2019				0.431	
2/27/2019	0.538	0.363 (U)	0.721		
2/28/2019					0.254 (U)
4/2/2019					0.209 (U)
4/3/2019	0.497				
4/4/2019		0.418	0.632	0.386	
9/18/2019	0.376 (U)	0.484	0.278 (U)	0.167 (U)	0.403 (U)
2/5/2020	0.5				
2/7/2020		0.125 (U)	0.797	0.244 (U)	0.2 (U)
3/18/2020		0.303 (U)	0.437	0.0655 (U)	
3/19/2020	0.376 (U)				
5/4/2020					0.0697 (U)
9/23/2020		0.448 (U)	0.276 (U)	0.643	1.18
9/24/2020	0.796				
2/3/2021					0.684
2/4/2021	0.564	0.488 (U)	0.727	0.438 (U)	
3/11/2021	0.764		0.942	0.247 (U)	0.286 (U)
3/12/2021		0.591			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.0131 (J)	0.284 (J)	0.0538 (J)				
5/18/2016	(-)	(-)	(-,	0.029 (J)	0.164 (J)	0.014 (J)	0.106 (J)
	.0.4	0.04		0.023 (0)	0.104 (0)		
7/19/2016	<0.1	0.21	<0.1			<0.1	0.11 (J)
7/20/2016				<0.1	0.17 (J)		
9/13/2016	<0.1	0.15 (J)	<0.1	<0.1	0.15 (J)		0.11 (J)
9/14/2016						0.095 (J)	
11/9/2016	<0.1	<0.1	0.085 (J)				0.1 (J)
11/10/2016				<0.1	0.12 (J)		
1/17/2017	<0.1		<0.1		(-)		
	<b>~0.1</b>		<b>~0.1</b>	-0.1	0.45 (1)		0.11 (1)
1/18/2017				<0.1	0.15 (J)		0.11 (J)
1/19/2017		0.087 (J)				<0.1	
3/13/2017	<0.1		<0.1				
3/14/2017		<0.1		<0.1	0.13 (J)	<0.1	<0.1
4/24/2017	<0.1		<0.1				
4/25/2017		<0.1		<0.1	0.12 (J)	<0.1	<0.1
8/8/2017	<0.1	0.087 (J)	<0.1	<0.1	(-)		0.099 (J)
	<b>~0.1</b>	0.067 (3)	<b>~0.1</b>	<b>~0.1</b>	0.11(1)		0.099 (3)
8/9/2017					0.14 (J)	<0.1	
10/10/2017	<0.1		0.18 (J)				
10/11/2017		0.09 (J)		<0.1	0.14 (J)	<0.1	0.098 (J)
3/27/2018	<0.1		<0.1				
3/28/2018		0.11 (J)		<0.1	0.12 (J)	<0.1	0.088 (J)
6/13/2018	<0.1	0.085 (J)				<0.1	0.093 (J)
6/14/2018		0.000 (0)	<0.1	<0.1	0.12 (1)	0	0.000 (0)
				<b>~</b> 0.1	0.12 (J)		
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	0.13 (J)	<0.1	
2/25/2019	<0.1		0.032 (J)				
2/26/2019		0.23	(-)	<0.1	0.14 (J)	<0.1	0.074 (J)
4/1/2019	<0.1	0.20	0.061 (1)	-0.1	0.14 (0)	-0.1	0.074 (0)
	<0.1		0.061 (J)				
4/2/2019		0.21		0.039 (J)	0.14 (J)	<0.1	0.09 (J)
9/16/2019	0.03 (J)					<0.1	0.1 (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	<0.1	0.13
2/5/2020		0.12		0.001 (0)	0.10	-0.1	0.10
	0.040 (1)	0.12	0.050 (1)				
3/16/2020	0.042 (J)		0.052 (J)				
3/17/2020		<0.1		0.04 (J)	0.11	<0.1	0.037 (J)
9/21/2020			0.037 (J)	<0.1	0.091 (J)		
9/22/2020	<0.1	0.1				<0.1	0.068 (J)
2/2/2021	0.028 (J)	0.071 (J)	0.065 (J)	0.035 (J)	0.15		
2/3/2021	` '	. ,	. ,	. ,		<0.1	0.088 (J)
3/10/2021		0.046 (J)	0.045 (J)	<0.1	0.12	<0.1	(3)
	-0.1	0.040 (0)	J.J-J (J)	50.1	0.12	50.1	0.002 ( 1)
3/11/2021	<0.1						0.092 (J)

				WGWC-8	WGWC-9		WGWC-11	WGWC-12	WGWC-13
Principal   Prin			0.018 (J)	0.204	1.50	0.206	0.000 (1)	0.40 (1)	0.204
1			-0.1	0.304	1.56		0.039 (3)	0.12 (J)	0.364
Section   Sect			<0.1	0.27	2	0.22	-0.1	0.11 (1)	0.24
Principal			<0.1	0.27	2	0.23	<b>~0.1</b>	0.11 (3)	0.54
Minimarian   Min			<b>~0.1</b>		1.8	0.17 ( 1)	<0.1	0.095 (1)	0.31
111120016					1.0	0.17 (3)	<b>~0.1</b>	0.093 (3)	0.31
1114/2016			<0.1	0.24					0.26
114201			10.1			0.14 ( 1)	<0.1	<0.1	0.20
1880/7   1870/7   1870   187				0.2		0.14 (0)	-0.1	-0.1	
Note			<0.1						
202017							<0.1	<0.1	0.28
140017   171018   1				0.27		0.15 (J)			
3142077   30.1   3152077   30.1   3.2   3.3   3.6   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0   3.6   3.0					1.3	· /			
14   17   17   18   18   18   18   18   18			<0.1						
A   12207				0.25	1.3	0.16 (J)	<0.1	<0.1	0.3
47852017   0.1						. ,			
8882017   \$0.1   \$0.1   \$0.2   \$0.2   \$0.1   \$0.2   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.1   \$0.2   \$0.1   \$0.0			<0.1						
880217	4	1/26/2017		0.31	1.5	0.17 (J)	<0.1	<0.1	0.33
8/10/2017	8	3/8/2017	<0.1						
1011 2017   0.1   0.1   0.3   1.5   0.14   J   0.14   J   0.14   J   0.091   J   0.28     3028/2018   0.36   1.4   0.13   J   0.28     3039/2018   0.36   1.4   0.13   J   0.29     5039/2018   0.1   0.56   1.4   0.15   J   0.14   J   0.18     614/2018   0.1   0.56   1.4   0.15   J   0.14   J   0.12   J     103/2018   0.1   0.27   1.4   0.18   J   0.12   J   0.23     2262/2019   0.1   J   0.24   J   0.24   0.24   0.25     2262/2019   0.1   J   0.24   J   0.24   0.25     2262/2019   0.1   J   0.24   J   0.24   J   0.24     41/2019   0.1   J   0.24   J   0.24   J   0.24     41/2019   0.027   J   0.25   J   0.24   J   0.24   J   0.24     41/2019   0.027   J   0.25   J   0.25   J   0.25     91/82019   0.027   J   0.25   J   0.25   J   0.25     91/82019   0.027   J   0.25   J   0.25   J   0.25   J   0.25     91/82019   0.027   J   0.25   J   0.25   J   0.25   J   0.25     91/82019   0.027   J   0.25   J	8	3/9/2017							0.32
1012/2017	8	3/10/2017		0.37	1.6	0.2	<0.1	0.11 (J)	
3/28/2018	1	10/11/2017	<0.1						
3/29/2018	1	10/12/2017		0.35	1.5	0.14 (J)	<0.1	0.091 (J)	0.28
330/2018	3	3/28/2018	<0.1						
61442018   0.1   0.56   1.4   0.15   0.15   0.1   0.1   0.1   0.1   0.27     103/2018   0.1   0.27   1.4   0.18   0.18   0.12   0.12   0.23     2265/2019   0.1   0.25   0.25     2287/2019   0.1   0.24   0.24   0.24   0.25     2287/2019   0.1   1.4   0.21   0.047   0.06   0.06   0.25     2288/2019   0.1   1.4   0.13   0.048   0.06   0.06   0.25     2288/2019   0.1   0.27   0.1   0.27   0.13   0.037   0.084   0.084   0.25     41/2019   0.27   0.27   0.27   0.13   0.13   0.13   0.037   0.093   0.093   0.25     91/192019   0.027   0.1   1.3   0.13   0.13   0.037   0.093   0.093   0.25     27/2020   0.026   0.25   1.3   0.13   0.14   0.045   0.098   0.25     27/72020   0.026   0.25   1.3   0.14   0.045   0.098   0.098   0.25     31/172020   0.044   0.15   0.052   0.0	3	3/29/2018		0.36	1.4		<0.1	0.089 (J)	0.27
10/3/2018   0.1   1.4   0.18   3.18	3	3/30/2018				0.13 (J)			
1014/2018	6	6/14/2018	<0.1	0.56	1.4	0.15 (J)	<0.1	0.1 (J)	0.27
2/26/2019   <0.1	1	10/3/2018	<0.1						
2/27/2019       0.054 (J)       0.21       0.047 (J)       0.06 (J)       0.25         2/28/2019       1.4	1	10/4/2018		0.27	1.4	0.18 (J)	<0.1	0.12 (J)	0.23
2/28/2019        1.4         4/2/2019        0.1         4/3/2019        0.5       1.3       0.048 (J)       0.24         4/4/2019        0.027 (J)       0.13 (J)       0.22         9/19/2019       0.027 (J)       1.3       0.13 (J)       0.037 (J)       0.093 (J)         2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.044 (J)       0.25       0.25       0.044 (J)       0.057 (J)       1       0.052 (J)       0.15       0.15         9/22/2020        0.057 (J)       1       0.052 (J)       0.18       0.064 (J)       0.15         9/24/2020        0.14       0.18       0.064 (J)       0.01       0.01         2/2/2021        0.15       0.027 (J)       0.082 (J)       0.16         2/2/2021        0.16       0.91       0.15       0.027 (J)       0.082 (J)       0.16         3/11/2021        0.16       0.15       0.15       0.16       0.18 </td <td>2</td> <td>2/26/2019</td> <td>&lt;0.1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	2	2/26/2019	<0.1						
4/2/2019   0.5   1.3   0.048   J   0.084   J   0.24   J   0.25	2	2/27/2019		0.054 (J)		0.21	0.047 (J)	0.06 (J)	0.25
4/3/2019       0.5       1.3       0.048 (J)       0.24         4/4/2019       0.027 (J)       0.22       0.13 (J)       0.022         9/18/2019       0.42       1.3       0.13 (J)       0.037 (J)       0.093 (J)         2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.044 (J)       0.25       0.052 (J)       0.052 (J)       0.033 (J)       0.15         3/18/2020       0.057 (J)       1       0.052 (J)       0.01       0.033 (J)       0.15         9/22/2020       0.1       0.14       0.052 (J)       0.18       0.15       0.15         9/22/2020       0.1       0.14       0.09 (J)       0.18       0.064 (J)       0.1         2/2/2021       0.1       0.15       0.027 (J)       0.082 (J)       0.062 (J)         2/4/2021       0.16       0.16       0.15       0.15       0.15         3/11/2021       0.16       0.15       0.15       0.15       0.16	2	2/28/2019			1.4				
4/4/2019       0.027 (J)       0.22         9/18/2019       0.027 (J)       0.42       1.3       0.13 (J)       0.093 (J)         2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.044 (J)       0.05       0.052 (J)       <0.1	4	1/2/2019	<0.1						
9/18/2019       0.027 (J)       0.22         9/19/2019       0.026 (J)       1.3       0.13 (J)       0.093 (J)       0.22         2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.044 (J)       0.25	4	1/3/2019		0.5	1.3		0.048 (J)	0.084 (J)	0.24
9/19/2019       0.42       1.3       0.13 (J)       0.093 (J)       0.093 (J)         2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         3/17/2020       0.044 (J)	4	1/4/2019				0.13 (J)			
2/5/2020       0.026 (J)       1.3       0.14       0.045 (J)       0.098 (J)       0.2         2/7/2020       0.025       0.044 (J)       0.044 (J)       0.044 (J)       0.057 (J)       0.052 (J)       0.01       0.033 (J)         3/19/2020       0.057 (J)       1       0.052 (J)       0.015       0.15         9/22/2020       0.01       0.14       0.82       0.09 (J)       0.084 (J)       0.064 (J)         9/24/2020       0.1       0.15       0.18       0.064 (J)       0.01         2/2/2021       0.1       0.15       0.027 (J)       0.082 (J)       0.16         2/4/2021       0.1       0.16       0.15       0.15       0.15         3/11/2021       0.16       0.15       0.15       0.15       0.15			0.027 (J)						0.22
277/2020       0.25         3/17/2020       0.044 (J)         3/18/2020       0.057 (J)       1       0.052 (J)       0.033 (J)         3/19/2020       0.057 (J)       1       0.052 (J)       0.15         9/22/2020       0.1       0.14       0.064 (J)       0.064 (J)         9/24/2020       0.1       0.82       0.09 (J)       0.18       0.1         2/2/2021       0.1       0.15       0.027 (J)       0.082 (J)         2/4/2021       0.1       0.91       0.12       0.027 (J)       0.082 (J)         3/10/2021       0.1       0.16       0.15       0.15       0.15									
3/17/2020 0.044 (J) 3/18/2020 0.057 (J) 1 0.052 (J) <0.1 0.033 (J) 3/19/2020 <0.1 0.14  9/23/2020 <0.1 0.14  9/24/2020			0.026 (J)		1.3	0.14	0.045 (J)	0.098 (J)	0.2
3/18/2020				0.25					
3/19/2020			0.044 (J)						
9/22/2020       <0.1						0.052 (J)	<0.1	0.033 (J)	
9/23/2020     0.82     0.09 (J)     0.064 (J)       9/24/2020     0.18     <0.1					1				0.15
9/24/2020     0.18     <0.1			<0.1						
2/2/2021     <0.1					0.82	0.09 (J)		0.064 (J)	
2/3/2021 0.15 0.027 (J) 0.082 (J) 2/4/2021 0.91 0.12 0.16 3/10/2021 <0.1 3/11/2021 0.16 0.15 0.18							0.18		<0.1
2/4/2021     0.91     0.12     0.16       3/10/2021     <0.1			<0.1	0.15			0.007 (1)	0.000 (1)	
3/10/2021 <0.1 3/11/2021 0.16 0.15 0.18					0.01	0.12	U.U27 (J)	U.U82 (J)	0.16
3/11/2021 0.16 0.15 0.18			-0.1		U. <b>9</b> 1	0.12			U. 10
			<u. i<="" td=""><td>0.16</td><td></td><td>0.15</td><td></td><td></td><td>0.10</td></u.>	0.16		0.15			0.10
3/12/2021 0.30 0.044 (J) 0.030 (J)					0.08	0.15	0.044 ( 1)	0.006 (1)	U. 10
		) 12/2U2			0.30		0.044 (J)	0.090 (3)	

				,	,		
	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		0.779	0.1 (J)	0.121 (J)			
7/19/2016		0.97	0.14 (J)				
7/20/2016				0.16 (J)			
9/14/2016		0.89	0.18 (J)	0.19 (J)			
11/10/2016		0.88	0.11 (J)	0.15 (J)			
11/11/2016			. ,	. ,	0.32		
1/20/2017				0.18 (J)			
1/24/2017		0.92	0.15 (J)	( )			
2/6/2017			(5)		0.45		
2/8/2017	<0.1				0.40		
2/23/2017	<0.1						
3/14/2017	30.1	0.77		0.11 (J)			
3/15/2017		0.77	0.1 (J)	0.11(3)	0.37		
	-0.1		0.1 (3)		0.37		
3/17/2017	<0.1				0.07		
4/11/2017	<0.1	0.05	0.40.4%	0.40 / "	0.37		
4/25/2017		0.95	0.13 (J)	0.13 (J)			
4/26/2017	<0.1				0.4		
5/17/2017	<0.1						
6/7/2017	<0.1				0.35		
7/11/2017	<0.1				0.39		
8/9/2017		0.91	0.18 (J)	0.19 (J)			
8/10/2017					0.42		
10/11/2017	<0.1	0.88	<0.1	0.14 (J)			
10/12/2017					0.36		
3/29/2018	<0.1		0.13 (J)		0.34		
3/30/2018		0.79		0.095 (J)			
6/14/2018	<0.1	0.79	<0.1	0.11 (J)	0.35		
10/3/2018		0.79					
10/4/2018	<0.1		0.85 (J)	0.11 (J)	0.35		
2/26/2019			\-/	0.068 (J)			
2/27/2019	<0.1	0.81	0.47	(0)			
2/28/2019	<del></del>				0.28		
4/2/2019					0.28		
	0.048 ( 1)				0.55		
4/3/2019	0.048 (J)	0.79	0.0971	0.087 / 1)			
4/4/2019	0.005 ( ))	0.78	0.08 (J)	0.087 (J)	0.00		
9/18/2019	0.035 (J)	0.81	0.058 (J)	0.066 (J)	0.32		
2/5/2020	0.04 (J)						
2/7/2020		0.79	0.072 (J)	0.079 (J)	0.35		
3/18/2020		0.71	0.084 (J)	<0.1			
3/19/2020	<0.1						
5/4/2020					0.36		
9/23/2020		0.63	0.049 (J)	0.05 (J)	0.25		
9/24/2020	0.028 (J)						
2/3/2021					0.3		
2/4/2021	0.033 (J)	0.69	0.052 (J)	0.064 (J)			
3/8/2021						1.8	
3/9/2021							1.7
3/11/2021	0.04 (J)		0.061 (J)	0.05 (J)	0.31		
3/12/2021	/	0.88	V-7	V-7			
4/7/2021							1.6
4/8/2021						1.7	
7/0/2021						1.7	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				<0.1
3/9/2021	1.1	0.092 (J)	1	
4/7/2021		0.093 (J)	1.1	
4/8/2021	1.4			0.028 (J)

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	<0.001	<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		<0.001
9/14/2016						<0.001	
11/9/2016	<0.001	<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		<0.001
1/19/2017		<0.001				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		<0.001		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		<0.001		<0.001	<0.001	<0.001	<0.001
2/25/2019	<0.001		0.00019 (J)				
2/26/2019		<0.001		<0.001	0.00046 (J)	0.00028 (J)	0.00037 (J)
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	<0.001					<0.001	<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)	0.00024 (J)	<0.001
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)	<0.001	0.00017 (J)
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	0.00015 (J)	<0.001	0.00015 (J)	<0.001	<0.001		
2/3/2021						0.00019 (J)	<0.001
3/10/2021		<0.001	0.00019 (J)	<0.001	<0.001	<0.001	
3/11/2021	<0.001						<0.001

				•	. ,	•	
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.001			<0.001			
5/19/2016		<0.001	<0.001		<0.001	<0.001	<0.001
7/19/2016	<0.001						
7/20/2016		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/13/2016	<0.001						
9/14/2016			<0.001	<0.001	<0.001	<0.001	0.00055 (J)
9/15/2016		<0.001					
11/10/2016	<0.001						0.00047 (J)
11/11/2016				<0.001	<0.001	<0.001	
11/14/2016		<0.001					
1/18/2017	<0.001						
1/27/2017					<0.001	<0.001	<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	<0.001	<0.001	<0.001
4/11/2017			<0.001				
4/25/2017	<0.001						
4/26/2017		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001						
8/9/2017							<0.001
8/10/2017		<0.001	<0.001	<0.001	<0.001	<0.001	
3/28/2018	<0.001						
3/29/2018		<0.001	<0.001		<0.001	<0.001	<0.001
3/30/2018				<0.001			
2/26/2019	<0.001						
2/27/2019		0.00017 (J)		0.00023 (J)	0.00058 (J)	<0.001	0.00068 (J)
2/28/2019			0.00014 (J)				
4/2/2019	<0.001						
4/3/2019		<0.001	<0.001		<0.001	<0.001	0.00047 (J)
4/4/2019				<0.001			
9/18/2019	<0.001						0.00045 (J)
9/19/2019		<0.001	<0.001	0.00041 (J)	<0.001	<0.001	
2/5/2020	<0.001		<0.001	0.00016 (J)	<0.001	<0.001	0.00045 (J)
2/7/2020		<0.001					
3/17/2020	<0.001						
3/18/2020				0.00021 (J)	<0.001	<0.001	
3/19/2020		0.00016 (J)	<0.001				0.0006 (J)
9/22/2020	<0.001	0.00013 (J)					
9/23/2020			<0.001	0.00013 (J)		<0.001	
9/24/2020					0.00037 (J)		<0.001
2/2/2021	<0.001	0.00040 ( 1)			.0.004	.0.004	
2/3/2021		0.00013 (J)	-0.001	0.00010 ( ))	<0.001	<0.001	0.00000 (1)
2/4/2021	-0.001		<0.001	0.00019 (J)			0.00038 (J)
3/10/2021	<0.001	-0.001		0.00022 ( 1)			0.00075 (1)
3/11/2021		<0.001	<0.001	0.00032 (J)	0.00038 ( !)	~0.001	0.00075 (J)
3/12/2021			<0.001		0.00038 (J)	<0.001	

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	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.001	<0.001	<0.001	
7/19/2016		<0.001	<0.001		
7/20/2016				<0.001	
9/14/2016		<0.001	<0.001	<0.001	
11/10/2016		<0.001	<0.001	<0.001	
11/11/2016					<0.001
1/20/2017				<0.001	
1/24/2017		<0.001	<0.001		
2/6/2017					<0.001
2/8/2017	<0.001				
2/23/2017	<0.001				
3/14/2017		<0.001		<0.001	
3/15/2017			<0.001		<0.001
3/17/2017	<0.001				
4/11/2017	<0.001				<0.001
4/25/2017		<0.001	<0.001	<0.001	
4/26/2017	<0.001				<0.001
5/17/2017	<0.001				
6/7/2017	<0.001				<0.001
7/11/2017	<0.001				<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
3/30/2018		<0.001		<0.001	
2/26/2019				0.00033 (J)	
2/27/2019	<0.001	<0.001	0.00014 (J)		
2/28/2019					<0.001
4/2/2019					<0.001
4/3/2019	<0.001				
4/4/2019		<0.001	<0.001	<0.001	
9/18/2019	<0.001	<0.001	<0.001	<0.001	<0.001
2/5/2020	<0.001				
2/7/2020		<0.001	<0.001	<0.001	<0.001
3/18/2020		<0.001	<0.001	0.0002 (J)	
3/19/2020	0.00017 (J)				
5/4/2020					<0.001
9/23/2020		<0.001	<0.001	<0.001	<0.001
9/24/2020	0.00018 (J)				
2/3/2021					<0.001
2/4/2021	0.00013 (J)	0.0003 (J)	0.00013 (J)	<0.001	
3/11/2021	0.00031 (J)		<0.001	<0.001	<0.001
3/12/2021		<0.001			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
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	<0.005	<0.005	0.005			<0.005	0.0043 (J)
7/20/2016				<0.005	0.0041 (J)		
9/13/2016	<0.005	<0.005	0.0075	<0.005	0.0042 (J)		0.0045 (J)
9/14/2016						<0.005	
11/9/2016	0.0032 (J)	<0.005	0.0078				0.0036 (J)
11/10/2016				<0.005	0.0048 (J)		
1/17/2017	<0.005		0.009				
1/18/2017				<0.005	0.0033 (J)		0.0046 (J)
1/19/2017		<0.005				<0.005	
3/13/2017	<0.005		0.0069				
3/14/2017		<0.005		<0.005	0.0033 (J)	<0.005	0.0038 (J)
4/24/2017	<0.005		0.0049 (J)				
4/25/2017		<0.005		<0.005	0.0037 (J)	<0.005	<0.005
8/8/2017	0.0032 (J)	<0.005	0.0075	<0.005			0.0043 (J)
8/9/2017					0.0042 (J)	<0.005	
3/27/2018	0.0045 (J)		0.0081				
3/28/2018		0.0012 (J)		0.0013 (J)	0.0056	<0.005	0.0064
6/13/2018	0.0033 (J)	<0.005				<0.005	0.0041 (J)
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)					
10/2/2018							0.0038 (J)
10/3/2018				0.0012 (J)	0.005	<0.005	
2/25/2019	0.0049 (J)		0.0072				
2/26/2019		<0.005		<0.005	0.0069	<0.005	0.0068
4/1/2019	0.0044 (J)		0.0055				
4/2/2019		0.0012 (J)		<0.005	0.0036 (J)	0.0016 (J)	0.0052
9/16/2019	0.004 (J)					0.028 (O)	0.032 (O)
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	<0.005	0.0053
2/5/2020		<0.005					
3/16/2020	0.0053		0.0083				
3/17/2020		<0.005		<0.005	0.0059	<0.005	0.0055
9/21/2020			0.0075	<0.005	0.005		
9/22/2020	0.0036 (J)	<0.005				<0.005	0.0049 (J)
2/2/2021	<0.005	<0.005	0.0065	<0.005	0.0039 (J)		
2/3/2021						<0.005	0.0047 (J)
3/10/2021		<0.005	0.0075	<0.005	0.0049 (J)	<0.005	
3/11/2021	0.0039 (J)						0.005

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.05 (O)			0.032			
5/19/2016		0.0215	0.0335		<0.005	<0.005	<0.005
7/19/2016	<0.005						
7/20/2016		0.026	0.024	0.021	<0.005	0.0057	<0.005
9/13/2016	<0.005						
9/14/2016			0.039	0.02	<0.005	0.0077	<0.005
9/15/2016		0.057					
11/10/2016	<0.005						0.0038 (J)
11/11/2016				0.017	<0.005	0.007	
11/14/2016		0.017					
1/18/2017	<0.005						
1/27/2017					<0.005	0.0074	<0.005
2/6/2017		0.012		0.016			
2/9/2017			0.04				
3/14/2017	<0.005						
3/15/2017		0.014	0.035	0.014	<0.005	0.0077	<0.005
4/11/2017			0.034				
4/25/2017	<0.005						
4/26/2017		0.0091	0.029	0.011	<0.005	0.0011	<0.005
8/8/2017	<0.005						
8/9/2017							<0.005
8/10/2017		0.013	0.038	0.011	<0.005	0.0064	
3/28/2018	0.0014 (J)						
3/29/2018		0.018	0.048		0.0018 (J)	0.01	0.0022 (J)
3/30/2018				0.016			
6/14/2018	<0.005	0.015	0.034	0.0084	0.0011 (J)	0.0062	0.0018 (J)
10/3/2018	<0.005						
10/4/2018		0.013	0.039	0.0085	0.0014 (J)	0.0066	0.0025 (J)
2/26/2019	<0.005						
2/27/2019		0.014		0.0068	<0.005	0.0068	<0.005
2/28/2019			0.037				
4/2/2019	<0.005						
4/3/2019		0.015	0.035		<0.005	0.0075	<0.005
4/4/2019				0.0059			
9/18/2019	<0.005						<0.005
9/19/2019		0.014	0.036	0.0075	<0.005	0.0067	
2/5/2020	<0.005		0.034	0.0061	<0.005	0.0063	<0.005
2/7/2020		0.014					
3/17/2020	<0.005						
3/18/2020				0.0071	<0.005	0.0081	
3/19/2020		0.015	0.039				<0.005
9/22/2020	<0.005	0.013					
9/23/2020			0.033	0.0054		0.007	
9/24/2020					<0.005		<0.005
2/2/2021	<0.005						
2/3/2021		0.014			<0.005	0.0075	
2/4/2021			0.035	0.0049 (J)			<0.005
3/10/2021	<0.005						
3/11/2021		0.013		0.0051			0.0037 (J)
3/12/2021			0.034		<0.005	0.0089	

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	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		<0.005	<0.005	<0.005			
7/19/2016		0.0036 (J)	0.0091				
7/20/2016				0.0042 (J)			
9/14/2016		<0.005	0.012	0.0058			
11/10/2016		0.0064	0.013	0.0066			
11/11/2016					0.045		
1/20/2017				0.0044 (J)			
1/24/2017		0.0075	0.011				
2/6/2017					0.05		
2/8/2017	0.0039 (J)						
2/23/2017	<0.005						
3/14/2017		0.0057		0.0048 (J)			
3/15/2017			0.01		0.052		
3/17/2017	<0.005						
4/11/2017	<0.005				0.048		
4/25/2017		0.0059	0.0081	0.0049 (J)			
4/26/2017	<0.005			(0)	0.044		
5/17/2017	0.0033 (J)						
6/7/2017	<0.005				0.047		
7/11/2017	<0.005				0.045		
8/9/2017		0.0068	0.013	0.0067			
8/10/2017		0.0000	0.0.0	0.0007	0.056		
3/29/2018	0.0025 (J)		0.015		0.072		
3/30/2018	0.0020 (0)	0.0077	0.0.0	0.0067	0.072		
6/14/2018	0.0018 (J)	0.0052	0.009	0.0046 (J)	0.048		
10/3/2018	0.0010(0)	0.006	0.000	0.00.10 (0)	0.0.0		
10/4/2018	0.0016 (J)	0.000	0.012	0.005	0.062		
2/26/2019	0.0010(0)		0.0.2	0.0063	0.002		
2/27/2019	<0.005	0.0055	0.0075	0.0000			
2/28/2019	0.000	0.0000	0.0070		0.045		
4/2/2019					0.052		
4/3/2019	0.0015 (J)				0.002		
4/4/2019	0.0010 (0)	0.0054	0.0077	0.0042 (J)			
9/18/2019	<0.005	0.0054	0.0056	0.0042 (U) 0.0047 (J)	0.052		
2/5/2020	<0.005	0.0004	0.0000	0.0047 (0)	0.002		
2/7/2020	10.003	0.0068	0.0053	0.0045 (J)	0.044		
3/18/2020		0.0086	0.0057	0.0054	0.044		
3/19/2020	<0.005	0.0000	0.0037	0.0054			
5/4/2020	10.005				0.049		
9/23/2020		0.0071	0.0059	0.0056	0.056		
	<0.00E	0.0071	0.0039	0.0030	0.030		
9/24/2020 2/3/2021	<0.005				0.06		
2/4/2021	<0.005	0.0086	0.0051	0.0047 (J)	0.00		
3/8/2021	~U.UUU	0.0000	0.0031	0.0047 (3)		0.11	
3/8/2021						0.11	0.022
3/9/2021	0.0035 (J)		0.005	0.004071	0.051		V.V&
	U.UU35 (J)	0.0006	0.003	0.0049 (J)	0.001		
3/12/2021		0.0096					0.021
4/7/2021						0.11	0.031
4/8/2021						0.11	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				0.0046 (J)
3/9/2021	0.011	<0.005	0.0084	
4/7/2021		<0.005	0.0077	
4/8/2021	0.0081			0.0044 (J)

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0002	<0.0002	<0.0002				
5/18/2016				<0.0002	<0.0002	<0.0002	<0.0002
7/19/2016	<0.0002	8.2E-05 (J)	8.1E-05 (J)			8.5E-05 (J)	8.4E-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		<0.0002
9/14/2016						<0.0002	
11/9/2016	<0.0002	<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		<0.0002
1/19/2017		<0.0002				<0.0002	
3/13/2017	<0.0002		<0.0002				
3/14/2017		7.1E-05 (J)		<0.0002	<0.0002	<0.0002	<0.0002
4/24/2017	<0.0002		<0.0002				
4/25/2017		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
8/9/2017					<0.0002	<0.0002	
3/27/2018	<0.0002		<0.0002				
3/28/2018		<0.0002		<0.0002	<0.0002	8.9E-05 (J)	<0.0002
6/13/2018	<0.0002	<0.0002				<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					
10/2/2018							<0.0002
10/3/2018				<0.0002	<0.0002	<0.0002	
2/25/2019	<0.0002		<0.0002				
2/26/2019		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
2/3/2020	<0.0002		<0.0002				
2/4/2020				0.00016 (J)	0.00011 (J)	<0.0002	<0.0002
2/5/2020		<0.0002					
3/16/2020	<0.0002		<0.0002				
3/17/2020		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
9/21/2020			<0.0002	<0.0002	<0.0002		
9/22/2020	<0.0002	<0.0002				<0.0002	<0.0002
2/2/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/3/2021						<0.0002	<0.0002

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	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.0002			<0.0002			
5/19/2016		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
7/19/2016	7.2E-05 (J)						
7/20/2016		<0.0002	<0.0002	8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)
9/13/2016	<0.0002						
9/14/2016			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
9/15/2016		0.00011 (J)					
11/10/2016	8.7E-05 (J)						8.3E-05 (J)
11/11/2016				8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)	
11/14/2016		<0.0002					
1/18/2017	<0.0002						
1/27/2017					<0.0002	<0.0002	<0.0002
2/6/2017		7.8E-05 (J)		8.3E-05 (J)			
2/9/2017			<0.0002				
3/14/2017	<0.0002						
3/15/2017		0.00013 (J)	0.00013 (J)	0.00013 (J)	<0.0002	0.00018 (J)	<0.0002
4/11/2017			<0.0002				
4/25/2017	<0.0002						
4/26/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017	<0.0002						
8/9/2017							<0.0002
8/10/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
3/28/2018	<0.0002						
3/29/2018		<0.0002	<0.0002		<0.0002	0.00011 (J)	<0.0002
3/30/2018				<0.0002			
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/3/2018	<0.0002						
10/4/2018		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/26/2019	<0.0002						
2/27/2019		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
2/28/2019			<0.0002				
2/5/2020	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/7/2020		<0.0002					
3/17/2020	<0.0002						
3/18/2020				<0.0002	<0.0002	<0.0002	
3/19/2020		<0.0002	<0.0002				<0.0002
9/22/2020	<0.0002	<0.0002					
9/23/2020			<0.0002	<0.0002		<0.0002	
9/24/2020					<0.0002		<0.0002
2/2/2021	<0.0002						
2/3/2021		<0.0002			<0.0002	<0.0002	
2/4/2021			<0.0002	<0.0002			<0.0002

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.0002	<0.0002	<0.0002	
7/19/2016		9.3E-05 (J)	<0.0002		
7/20/2016				7.4E-05 (J)	
9/14/2016		<0.0002	<0.0002	<0.0002	
11/10/2016		8.5E-05 (J)	0.00012 (J)	<0.0002	
11/11/2016					7.6E-05 (J)
1/20/2017				<0.0002	
1/24/2017		<0.0002	7E-05 (J)		
2/6/2017					0.00012 (J)
2/8/2017	<0.0002				
2/23/2017	<0.0002				
3/14/2017		7.1E-05 (J)		<0.0002	
3/15/2017			<0.0002		<0.0002
3/17/2017	0.00013 (J)				
4/11/2017	<0.0002				<0.0002
4/25/2017		<0.0002	0.00019 (J)	<0.0002	
4/26/2017	<0.0002				<0.0002
5/17/2017	<0.0002				
6/7/2017	<0.0002				<0.0002
7/11/2017	<0.0002				<0.0002
8/9/2017		<0.0002	<0.0002	<0.0002	
8/10/2017					<0.0002
3/29/2018	<0.0002		<0.0002		<0.0002
3/30/2018		8.6E-05 (J)		<0.0002	
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
2/26/2019				<0.0002	
2/27/2019	<0.0002	<0.0002	<0.0002		
2/28/2019					<0.0002
2/5/2020	<0.0002				
2/7/2020		<0.0002	<0.0002	<0.0002	<0.0002
3/18/2020		<0.0002	<0.0002	<0.0002	
3/19/2020	<0.0002				
5/4/2020					<0.0002
9/23/2020		<0.0002	<0.0002	<0.0002	<0.0002
9/24/2020	<0.0002				
2/3/2021					<0.0002
2/4/2021	<0.0002	<0.0002	<0.0002	<0.0002	

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.015	0.00367 (J)	<0.015				
5/18/2016				<0.015	<0.015	<0.015	<0.015
7/19/2016	<0.015	0.002 (J)	<0.015			<0.015	<0.015
7/20/2016				<0.015	<0.015		
9/13/2016	<0.015	0.0014 (J)	<0.015	<0.015	<0.015		<0.015
9/14/2016						0.016 (O)	
11/9/2016	<0.015	<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		<0.015
1/19/2017		<0.015				<0.015	
3/13/2017	<0.015		<0.015				
3/14/2017		0.0072 (J)		0.00087 (J)	<0.015	<0.015	<0.015
4/24/2017	<0.015		<0.015				
4/25/2017		0.0036 (J)		0.00098 (J)	<0.015	<0.015	<0.015
8/8/2017	0.0017 (J)	<0.015	<0.015	<0.015			<0.015
8/9/2017					<0.015	<0.015	
3/27/2018	<0.015		<0.015				
3/28/2018		0.00089 (J)		<0.015	<0.015	<0.015	<0.015
6/13/2018	<0.015	<0.015				<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					
10/2/2018							<0.015
10/3/2018				<0.015	<0.015	<0.015	
2/25/2019	<0.015		<0.015				
2/26/2019		0.0019 (J)		<0.015	<0.015	<0.015	<0.015
4/1/2019	<0.015		<0.015				
4/2/2019		<0.015		<0.015	<0.015	<0.015	<0.015
9/16/2019	<0.015					0.001 (J)	0.001 (J)
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	<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	<0.015	<0.015
9/21/2020			<0.015	<0.015	<0.015		
9/22/2020	<0.015	0.00097 (J)				0.0025 (J)	<0.015
2/2/2021	<0.015	<0.015	<0.015	<0.015	<0.015		
2/3/2021						<0.015	<0.015
3/10/2021		<0.015	<0.015	<0.015	<0.015	<0.015	
3/11/2021	<0.015						<0.015

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.015			<0.015			
5/19/2016		<0.015	0.00762 (J)		<0.015	<0.015	0.00491 (J)
7/19/2016	<0.015						
7/20/2016		<0.015	0.0084 (J)	<0.015	<0.015	0.00095 (J)	0.0025 (J)
9/13/2016	<0.015						
9/14/2016			0.0071 (J)	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)
9/15/2016		<0.015					
11/10/2016	<0.015						0.0016 (J)
11/11/2016				<0.015	<0.015	<0.015	
11/14/2016		<0.015					
1/18/2017	0.001 (J)						
1/27/2017					<0.015	<0.015	0.0023 (J)
2/6/2017		<0.015		<0.015			
2/9/2017			0.018				
3/14/2017	0.0014 (J)						
3/15/2017		<0.015	0.0057 (J)	<0.015	<0.015	<0.015	0.0022 (J)
4/11/2017			0.0047 (J)				
4/25/2017	<0.015						
4/26/2017		<0.015	0.004 (J)	<0.015	<0.015	<0.015	0.0019 (J)
8/8/2017	<0.015						
8/9/2017							0.0028 (J)
8/10/2017		<0.015	0.0046 (J)	0.00093 (J)	0.0011 (J)	0.0046 (J)	
3/28/2018	<0.015						
3/29/2018		<0.015	0.0048 (J)		<0.015	<0.015	0.0028 (J)
3/30/2018				<0.015			
6/14/2018	<0.015	<0.015	0.0046 (J)	<0.015	<0.015	<0.015	0.0018 (J)
10/3/2018	<0.015	.0.015	0.000 (1)	.0.045	.0.045	.0.045	.0.045
10/4/2018	.0.045	<0.015	0.003 (J)	<0.015	<0.015	<0.015	<0.015
2/26/2019	<0.015	10.015		-0.015	-0.015	0.00000 (1)	0.0010 (1)
2/27/2019		<0.015	0.0053	<0.015	<0.015	0.00063 (J)	0.0019 (J)
2/28/2019 4/2/2019	<0.015		0.0053				
4/3/2019	<0.015	<0.015	0.0026 (J)		<0.015	<0.015	<0.015
4/3/2019		<0.015	0.0020 (3)	<0.015	<0.015	<0.015	<0.015
9/18/2019	<0.015			<b>~0.013</b>			0.0021 (J)
9/19/2019	10.015	<0.015	0.0048 (J)	<0.015	<0.015	0.00073 (J)	0.0021 (0)
2/5/2020	<0.015	-0.010	0.0044 (J)	<0.015	<0.015	<0.015	0.0012 (J)
2/7/2020	-0.010	<0.015	0.0044 (0)	-0.010	10.010	-0.010	0.0012 (0)
3/17/2020	<0.015	0.010					
3/18/2020				<0.015	<0.015	<0.015	
3/19/2020		<0.015	0.0042 (J)				0.0018 (J)
9/22/2020	<0.015	<0.015	(-)				(0)
9/23/2020			0.0027 (J)	<0.015		<0.015	
9/24/2020			\-'\		0.0017 (J)		<0.015
2/2/2021	<0.015				\-\frac{\cdot}{2}		-
2/3/2021		<0.015			<0.015	<0.015	
2/4/2021			0.003 (J)	<0.015			0.0012 (J)
3/10/2021	<0.015		. ,				ν-,
3/11/2021		<0.015		<0.015			0.0013 (J)
3/12/2021			0.003 (J)		<0.015	0.00062 (J)	.,
						• •	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		0.0153	<0.015	0.00526 (J)	
7/19/2016		0.0093 (J)	<0.015		
7/20/2016				0.0066 (J)	
9/14/2016		0.012 (J)	<0.015	0.0081 (J)	
11/10/2016		0.0065 (J)	<0.015	0.0076 (J)	
11/11/2016					<0.015
1/20/2017				0.0094 (J)	
1/24/2017		0.0049 (J)	<0.015		
2/6/2017					0.001 (J)
2/8/2017	<0.015				
2/23/2017	<0.015				
3/14/2017		0.0034 (J)		0.0044 (J)	
3/15/2017			<0.015		<0.015
3/17/2017	<0.015				
4/11/2017	<0.015				<0.015
4/25/2017		0.004 (J)	<0.015	0.0074 (J)	
4/26/2017	<0.015				<0.015
5/17/2017	<0.015				
6/7/2017	0.001 (J)				0.0015 (J)
7/11/2017	<0.015				<0.015
8/9/2017		0.0042 (J)	<0.015	0.0066 (J)	
8/10/2017					0.0016 (J)
3/29/2018	<0.015		<0.015		0.0012 (J)
3/30/2018		0.0049 (J)		0.0024 (J)	
6/14/2018	<0.015	0.0056 (J)	<0.015	0.0026 (J)	0.0014 (J)
10/3/2018		0.0041 (J)			
10/4/2018	<0.015		<0.015	0.00085 (J)	<0.015
2/26/2019				0.0032 (J)	
2/27/2019	<0.015	0.0061	<0.015		
2/28/2019					0.0013 (J)
4/2/2019					<0.015
4/3/2019	<0.015				
4/4/2019		0.0039 (J)	<0.015	0.002 (J)	
9/18/2019	<0.015	0.0052	<0.015	0.0026 (J)	0.0011 (J)
2/5/2020	<0.015				
2/7/2020		0.0024 (J)	<0.015	0.0025 (J)	0.0014 (J)
3/18/2020		0.002 (J)	<0.015	0.0024 (J)	
3/19/2020	<0.015				
5/4/2020					0.0013 (J)
9/23/2020		0.0031 (J)	<0.015	0.0027 (J)	0.0013 (J)
9/24/2020	<0.015				
2/3/2021					0.0013 (J)
2/4/2021	<0.015	0.0022 (J)	<0.015	0.0025 (J)	
3/11/2021	<0.015		<0.015	0.0022 (J)	0.0012 (J)
3/12/2021		0.0019 (J)			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	5.24	7.81	6.23				
5/18/2016				5.55	7.23	5.47	7.92
7/18/2016	5.434038						
7/19/2016			6.285413			5.336672	7.154587
7/20/2016				5.656628	7.281557		
9/13/2016	5.22	7.18	6.3	5.63	7.15		7.96
9/14/2016						7.29	
11/9/2016	5.57	6.03	6.26				7.27
11/10/2016				5.61	6.33		
1/17/2017	5.48		6.8				
1/18/2017				5.81	6.94		7.72
1/19/2017		6.71				6.59	
3/13/2017	5.4		6.18				
3/14/2017		6.45		5.53	6.75	5.86	
4/24/2017	5.4		6.35				
4/25/2017		6.93		5.59	6.84	5.35	7.73
8/8/2017	5.32	6.72	6.23	5.52			7.74
8/9/2017					6.67	5.25	
8/25/2017						5.44	
10/10/2017	5.26		6.32				
10/11/2017		6.75		5.51	6.75	6.99	7.71
3/27/2018	5.39		6.14				
3/28/2018		6.84		5.6	6.79	5.95	7.28
6/13/2018	5.33	6.31				5.13	7.78
6/14/2018			6.02	5.58	6.67		
9/24/2018			6.1				
9/27/2018	5.33						
9/28/2018		6.26					
10/2/2018							7.52
10/3/2018				5.45	6.92	5.22	
2/25/2019	5.25		6.02				
2/26/2019		7.66		5.6	6.74	5.21	7.87
4/1/2019	5.31		6.09				
4/2/2019		7.53		5.69	6.81	5.25	7.94
9/16/2019	5.28					6.94	7.55
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	5.31	7.74
2/5/2020		6.73					
3/16/2020	5.29		6.01				
3/17/2020		6.36		5.61	6.83	5.34	7.96
9/21/2020			6.05	5.35	6.81		
9/22/2020	5.09	7.18				6.78	7.4
2/2/2021	5.36	6.48	6.1	5.78	6.61		
2/3/2021						5.3	7.76
3/10/2021		5.8	6.11	5.49	7.19	5.22	
3/11/2021	5.26						7.93

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	5.5			8.96			
5/19/2016		5.99	6.31		5.93	6.91	6.85
7/18/2016					5.9661		
7/19/2016	5.43						
7/20/2016		6.194334	6.345061	8.56774		6.962608	6.705264
9/1/2016						6.96	
9/13/2016	5.57						
9/14/2016			6.33				6.7
9/15/2016		6.38					
11/10/2016	6.93						6.5
11/11/2016				6.96	6.03	6.76	
11/14/2016		5.7					
1/18/2017	7.16						
1/27/2017					6.21	6.66	6.47
2/6/2017		5.66		6.93			
3/14/2017	5.82						
3/15/2017		5.77	5.99	6.82	5.97	6.3	6.75
4/25/2017	5.57						
4/26/2017		5.39	6.03	6.73	6.17	6.67	6.57
8/8/2017	5.6						
8/9/2017							6.55
8/10/2017		5.59	5.86	6.66	6.05	6.7	
10/11/2017	5.43						
10/12/2017		5.46	6.09	6.67	6.89	6.89	6.67
3/28/2018	5.29						
3/29/2018		5.43	5.89		6.85	7.08	6.99
3/30/2018		0.10	0.00	6.98	0.00	7.00	
6/14/2018	5.39	5.76	6.47	6.56	5.89	6.73	6.39
10/3/2018	5.33						
10/4/2018	0.00	5.39	6.17	6.4	5.81	6.79	6.5
2/26/2019	5.62	0.00	0.17	0	0.01	0.70	
2/27/2019	0.02			6.23	5.78	6.7	6.47
2/28/2019			6.045 (D)	0.20	0.70	0.7	от <i>,</i>
4/2/2019	5.6		0.040 (B)				
4/3/2019	0.0	5.55	6.1		6.07	6.91	6.47
4/4/2019		0.00	0.1	6.46	0.07	0.01	0.47
9/18/2019	5.6			0.40			6.46
9/19/2019	3.0	5.39	6.38	6.45	5.82	6.63	0.40
2/5/2020	5.54		6.54	6.42	5.89	6.76	6.44
2/7/2020	3.34	5.38	0.54	0.42	5.69	0.70	0.44
3/17/2020	5.32	5.56					
3/18/2020	5.32			6.4	5.89	6.94	
3/19/2020		6.43	6.64	0.4	5.69	0.94	6.56
	F 26		0.04				0.50
9/22/2020 9/23/2020	5.36	5.17	5.8	6.14		6.42	
			5.6	0.14	E E	0.42	6.30
9/24/2020	E 9.1				5.5		6.29
2/2/2021	5.84	E 00			E 21	6 15	
2/3/2021		5.08	6.22	6.21	5.21	6.15	6.24
2/4/2021	4.06		6.22	6.21			6.34
3/10/2021	4.96	E 2E		6.56			F 0F
3/11/2021		5.35	E 00	6.56	E 46	6 66	5.95
3/12/2021			5.88		5.46	6.66	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		7.75	6.06	6.41			
7/18/2016			5.884339				
7/19/2016		7.876073					
7/20/2016				6.662463			
9/14/2016		7.79	5.89	6.7			
11/10/2016		7.76	5.6	6.51			
11/11/2016					6.93		
1/20/2017				6.55			
1/24/2017		7.71	5.54				
2/6/2017					6.8		
2/8/2017	5.81						
2/23/2017	5.8						
3/14/2017		7.57		6.27			
3/15/2017			5.39		6.78		
3/17/2017	5.97						
4/11/2017	6.18				6.79		
4/25/2017		7.47	5.28	6.26			
4/26/2017	6.09				6.82		
5/17/2017	6.26				0.02		
6/7/2017	6.21				6.76		
7/11/2017	6				6.99		
8/9/2017	•	7.37	5.46	6.47	0.00		
8/10/2017		7.57	3.40	0.47	6.59		
10/11/2017	6.97	7.42	5.45	6.47	0.59		
10/11/2017	0.97	7.42	3.43	0.47	6.7		
	C E1		F 22				
3/29/2018	6.51	7.40	5.33	6.71	6.88		
3/30/2018	E 76	7.48	E 25	6.71	6.70		
6/14/2018	5.76	7.5	5.35	6.15	6.72		
10/3/2018	5.07	7.11	5.00	0.14	0.07		
10/4/2018	5.97		5.28	6.14	6.67		
2/26/2019	5.70	7.4	5.00	6.17			
2/27/2019	5.73	7.4	5.08				
2/28/2019					6.98		
4/2/2019					6.75		
4/3/2019	5.68						
4/4/2019		7.58	5.19	6.16			
9/18/2019	5.5	7.8	5.19	6.17	6.71		
2/5/2020	5.52						
2/7/2020		7.66	5.17	6.34	7.08		
3/18/2020		7.73	5.08	6.28			
3/19/2020	5.49						
5/4/2020					6.9		
9/23/2020		7.35	5.05	5.89	6.59		
9/24/2020	5.16						
2/3/2021					6.75		
2/4/2021	5.76	7.77	5.42	6.31			
3/8/2021						5.54	
3/9/2021							7.29
3/11/2021	5.1		5.21	5.96	7.12		
3/12/2021		7.72					
4/7/2021							7.05
4/8/2021						5.6	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				5.36
3/9/2021	5.56	5.81	4.29	
4/7/2021		5.57	4.43	
4/8/2021	6.01			5.39

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.005	<0.005	<0.005				
5/18/2016				<0.005	<0.005	<0.005	<0.005
7/19/2016	<0.005	<0.005	<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		<0.005
9/14/2016						<0.005	
11/9/2016	<0.005	<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		<0.005
1/19/2017		<0.005				<0.005	
3/13/2017	<0.005		<0.005				
3/14/2017		0.0028		0.00026 (J)	<0.005	<0.005	<0.005
4/24/2017	<0.005		<0.005				
4/25/2017		0.0018		0.00035 (J)	<0.005	<0.005	<0.005
8/8/2017	0.0013	<0.005	<0.005	<0.005			<0.005
8/9/2017					<0.005	<0.005	
3/27/2018	0.00055 (J)		<0.005				
3/28/2018		<0.005		<0.005	<0.005	<0.005	<0.005
6/13/2018	<0.005	<0.005				0.00025 (J)	<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					
10/2/2018							<0.005
10/3/2018				<0.005	<0.005	<0.005	
2/25/2019	<0.005		<0.005				
2/26/2019		<0.005		<0.005	<0.005	<0.005	<0.005
4/1/2019	<0.005		<0.005				
4/2/2019		<0.005		<0.005	<0.005	<0.005	<0.005
9/16/2019	<0.005					<0.005	<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	<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	<0.005	<0.005
9/21/2020			<0.005	<0.005	<0.005		
9/22/2020	<0.005	<0.005				<0.005	<0.005
2/2/2021	<0.005	<0.005	<0.005	<0.005	<0.005		
2/3/2021						<0.005	<0.005
3/10/2021		<0.005	<0.005	<0.005	<0.005	<0.005	
3/11/2021	<0.005						<0.005

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.005			<0.005			
5/19/2016		0.00518	0.00228		<0.005	<0.005	<0.005
7/19/2016	<0.005						
7/20/2016		0.0038	0.0016	<0.005	<0.005	<0.005	<0.005
9/13/2016	<0.005						
9/14/2016			0.0024	<0.005	<0.005	<0.005	<0.005
9/15/2016		0.0034					
11/10/2016	<0.005						<0.005
11/11/2016				<0.005	<0.005	<0.005	
11/14/2016		0.0033					
1/18/2017	<0.005						
1/27/2017					<0.005	<0.005	<0.005
2/6/2017		0.0033		<0.005			
2/9/2017			0.0023				
3/14/2017	<0.005						
3/15/2017		0.003	0.0031	<0.005	<0.005	<0.005	<0.005
4/11/2017			0.0023				
4/25/2017	<0.005						
4/26/2017		0.0032	0.0019	<0.005	<0.005	<0.005	<0.005
8/8/2017	<0.005						
8/9/2017							<0.005
8/10/2017		0.0031	0.0021	0.00031 (J)	0.00049 (J)	0.0021	
3/28/2018	<0.005						
3/29/2018		0.0034	0.0021		<0.005	<0.005	<0.005
3/30/2018				<0.005			
6/14/2018	<0.005	0.0031	0.0025	<0.005	<0.005	<0.005	<0.005
10/3/2018	<0.005						
10/4/2018		0.0033	0.002	<0.005	<0.005	<0.005	<0.005
2/26/2019	<0.005						
2/27/2019		0.0035		<0.005	<0.005	<0.005	<0.005
2/28/2019			0.0027				
4/2/2019	<0.005						
4/3/2019		0.0031	0.0019		<0.005	<0.005	<0.005
4/4/2019				<0.005			
9/18/2019	<0.005						<0.005
9/19/2019		0.0021 (J)	0.0026 (J)	<0.005	<0.005	<0.005	
2/5/2020	<0.005		0.0033 (J)	<0.005	<0.005	<0.005	<0.005
2/7/2020		0.0048 (J)					
3/17/2020	<0.005						
3/18/2020				<0.005	<0.005	<0.005	
3/19/2020		0.0037 (J)	0.0033 (J)				<0.005
9/22/2020	<0.005	0.0039 (J)					
9/23/2020			0.0029 (J)	<0.005		<0.005	
9/24/2020					<0.005		<0.005
2/2/2021	<0.005						
2/3/2021		0.0036 (J)			<0.005	<0.005	
2/4/2021			0.003 (J)	<0.005			<0.005
3/10/2021	<0.005						
3/11/2021		0.0038 (J)		<0.005			<0.005
3/12/2021			0.0034 (J)		<0.005	<0.005	

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19
5/18/2016		<0.005	0.00735	<0.005	
7/19/2016		<0.005	0.0075		
7/20/2016				<0.005	
9/14/2016		<0.005	0.0091	<0.005	
11/10/2016		<0.005	0.0056	<0.005	
11/11/2016					<0.005
1/20/2017				<0.005	
1/24/2017		<0.005	0.012		
2/6/2017					<0.005
2/8/2017	<0.005				
2/23/2017	<0.005				
3/14/2017		<0.005		<0.005	
3/15/2017			0.012		<0.005
3/17/2017	<0.005				
4/11/2017	<0.005				<0.005
4/25/2017		<0.005	0.013	<0.005	
4/26/2017	<0.005				<0.005
5/17/2017	<0.005				
6/7/2017	<0.005				<0.005
7/11/2017	<0.005				<0.005
8/9/2017		<0.005	0.016	<0.005	
8/10/2017					0.00036 (J)
3/29/2018	0.0003 (J)		0.016		<0.005
3/30/2018		<0.005		<0.005	
6/14/2018	<0.005	0.0005 (J)	0.012	<0.005	<0.005
10/3/2018		<0.005			
10/4/2018	<0.005		0.013	<0.005	<0.005
2/26/2019				<0.005	
2/27/2019	<0.005	<0.005	0.0081		
2/28/2019					<0.005
4/2/2019					<0.005
4/3/2019	<0.005				
4/4/2019		<0.005	0.0091	<0.005	
9/18/2019	<0.005	<0.005	0.0044 (J)	<0.005	<0.005
2/5/2020	<0.005				
2/7/2020		<0.005	0.0036 (J)	<0.005	<0.005
3/18/2020		<0.005	0.0046 (J)	<0.005	
3/19/2020	<0.005				
5/4/2020					<0.005
9/23/2020		<0.005	0.0028 (J)	<0.005	<0.005
9/24/2020	<0.005				0.005
2/3/2021	.0.005	.0.005	0.0000 ( "	.0.005	<0.005
2/4/2021	<0.005	<0.005	0.0023 (J)	<0.005	0.005
3/11/2021	<0.005	<0.00E	0.0023 (J)	<0.005	<0.005
3/12/2021		<0.005			

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<1	19.9	1.14				
5/18/2016				0.821 (J)	5.32	0.955 (J)	8.88
7/19/2016	<1	14	1.4			0.76 (J)	9
7/20/2016				0.82 (J)	6.5		
9/13/2016	<1	11	1.1	0.81 (J)	5.6		8.5
9/14/2016						3.4	
11/9/2016	<1	6.3	1.1				8.2
11/10/2016				0.73 (J)	5.4		
1/17/2017	<1		2.1				
1/18/2017				0.99 (J)	5.1		9.4
1/19/2017		7.4				21	
3/13/2017	<1		0.97 (J)				
3/14/2017		10		0.83 (J)	4.6	1.4	2
4/24/2017	<1		0.75 (J)				
4/25/2017		10		0.7 (J)	6.6	0.89 (J)	8.2
8/8/2017	<1	12	1.1	0.82 (J)			8.5
8/9/2017					7.3	0.75 (J)	
10/10/2017	<1		1.3				
10/11/2017		11		0.72 (J)	6.8	<1	8.3
6/13/2018	<1	8.2				<1	8.3
6/14/2018			0.84 (J)	<1	6.9		
9/24/2018			0.79 (J)				
9/27/2018	<1						
9/28/2018		7.6					
10/2/2018							8.3
10/3/2018				0.73 (J)	7	<1	
4/1/2019	<1		1				
4/2/2019		11		1.1	8.1	0.94 (J)	8.5
9/16/2019	0.49 (J)					2.2	8.9
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	4	12
9/21/2020			1.1	0.77 (J)	7.7		
9/22/2020	<1	9				1.5	8
3/10/2021		7.1	0.9 (J)	0.91 (J)	8.1	<1	
3/11/2021	<1						8.4

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	0.368 (J)			2.84			
5/19/2016		146	35.9		1.83	15.8	19.2
7/19/2016	<1						
7/20/2016		150	37	2.8	1.6	16	11
9/13/2016	<1						
9/14/2016			39	2.8	1.5	16	8.6
9/15/2016		140					
11/10/2016	<1						5.7
11/11/2016				2.6	1.4	14	
11/14/2016		160					
1/18/2017	1.4						
1/27/2017					2.5	15	6.8
2/6/2017		180		2.7			
2/9/2017			60				
3/14/2017	<1						
3/15/2017		170	44	2.7	2.5	17	11
4/11/2017			36				
4/25/2017	<1						
4/26/2017		180	37	2.5	2.2	15	8.1
8/8/2017	<1						
8/9/2017							8.1
8/10/2017		180	38	2.2	2.3	16	
10/11/2017	<1						
10/12/2017		180	37	1.9	1.9	14	6.1
6/14/2018	<1	170	37	2	1.7	14	5
10/3/2018	<1						
10/4/2018		780	38	1.9	1.6	14	4.3
4/2/2019	0.4 (J)						
4/3/2019		180	41		1.9	13	3.8
4/4/2019				2.2			
9/18/2019	<1						3.9
9/19/2019		190	42	2.1	1.3	14	
3/17/2020	0.86 (J)						
3/18/2020				2.1	1.6	12	
3/19/2020		200	45				4
9/22/2020	0.38 (J)	200					
9/23/2020			54	1.8		12	
9/24/2020					2.7		0.63 (J)
3/10/2021	<1						
3/11/2021		220		2.8			2.9
3/12/2021			62		2	14	

				-		-	
	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		50.7	388	32.1			
7/19/2016		62	460				
7/20/2016				9.7			
9/14/2016		79	500	6.6			
11/10/2016		61	530	5.2			
11/11/2016					3.4		
1/20/2017				5.3			
1/24/2017		34	600				
2/6/2017					3.7		
2/8/2017	4.3						
2/23/2017	16						
3/14/2017		43		9.6			
3/15/2017			610		3.6		
3/17/2017	22						
4/11/2017	13				3.2		
4/25/2017		39	620	20			
4/26/2017	20				3.3		
5/17/2017	12						
6/7/2017	8.1				3.8		
7/11/2017	17				3.3		
8/9/2017		35	780	6.5			
8/10/2017					3.7		
10/11/2017	3.4	48	720	13			
10/12/2017					3.6		
6/14/2018	5.8	44	620	16	3.5		
10/3/2018		49					
10/4/2018	2.8		560	15	4.6		
4/2/2019					3.8		
4/3/2019	3.8						
4/4/2019		41	250	9.1			
9/18/2019	1.7	37	130	7.3	3.6		
3/18/2020		17	120	4.2			
3/19/2020	1.5						
5/4/2020					4.5		
9/23/2020		21	85	4.4	3		
9/24/2020	1.2						
3/8/2021						240	
3/9/2021							230
3/11/2021	1.7		64	3.9	4		
3/12/2021		19					
4/7/2021							190
4/8/2021						240	

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				4.7
3/9/2021	80	14	140	
4/7/2021		5.1	160	
4/8/2021	60			5.8

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	<0.001	<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		<0.001
9/14/2016						9E-05 (J)	
11/9/2016	<0.001	<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		<0.001
1/19/2017		<0.001				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		<0.001		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		<0.001		<0.001	<0.001	<0.001	<0.001
6/13/2018	<0.001	<0.001				<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					
10/2/2018							<0.001
10/3/2018				<0.001	<0.001	<0.001	
2/25/2019	<0.001		<0.001				
2/26/2019		<0.001		<0.001	<0.001	<0.001	<0.001
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	0.00016 (J)					<0.001	0.00062 (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	<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	<0.001	<0.001
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	<0.001	<0.001	0.0004 (J)	<0.001	<0.001		
2/3/2021						0.00042 (J)	<0.001
3/10/2021		<0.001	0.00073 (J)	0.00028 (J)	0.00017 (J)	<0.001	
3/11/2021	0.00045 (J)						<0.001

	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	<0.001			<0.001			
5/19/2016		<0.001	<0.001		<0.001	<0.001	<0.001
7/19/2016	<0.001						
7/20/2016		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
9/13/2016	<0.001						
9/14/2016			<0.001	<0.001	<0.001	<0.001	<0.001
9/15/2016		<0.001					
11/10/2016	<0.001						<0.001
11/11/2016				<0.001	<0.001	<0.001	
11/14/2016		<0.001					
1/18/2017	<0.001						
1/27/2017					<0.001	<0.001	<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	<0.001	<0.001	<0.001
4/11/2017			<0.001				
4/25/2017	<0.001						
4/26/2017		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001						
8/9/2017							<0.001
8/10/2017		<0.001	<0.001	<0.001	<0.001	<0.001	
3/28/2018	<0.001						
3/29/2018		<0.001	<0.001		<0.001	<0.001	<0.001
3/30/2018				8.5E-05 (J)			
6/14/2018	<0.001	<0.001	<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	<0.001	<0.001
2/26/2019	<0.001						
2/27/2019		<0.001		<0.001	<0.001	<0.001	<0.001
2/28/2019			<0.001				
4/2/2019	<0.001						
4/3/2019		<0.001	<0.001		<0.001	<0.001	<0.001
4/4/2019				<0.001			
9/18/2019	<0.001						<0.001
9/19/2019		<0.001	<0.001	<0.001	<0.001	<0.001	
2/5/2020	0.00026 (J)		<0.001	<0.001	<0.001	<0.001	<0.001
2/7/2020		<0.001					
3/17/2020	<0.001						
3/18/2020				<0.001	<0.001	<0.001	
3/19/2020		<0.001	<0.001				<0.001
9/22/2020	<0.001	<0.001					
9/23/2020			<0.001	<0.001		<0.001	
9/24/2020					<0.001		<0.001
2/2/2021	<0.001						
2/3/2021		<0.001			0.00016 (J)	<0.001	
2/4/2021			<0.001	<0.001			<0.001
3/10/2021	<0.001						
3/11/2021		<0.001		<0.001			<0.001
3/12/2021			<0.001		<0.001	<0.001	

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		WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	
	5/18/2016		<0.001	<0.001	<0.001		
	7/19/2016		<0.001	8.5E-05 (J)			
	7/20/2016				<0.001		
	9/14/2016		<0.001	0.00017 (J)	<0.001		
	11/10/2016		<0.001	0.00017 (J)	<0.001		
	11/11/2016			• •		<0.001	
	1/20/2017				<0.001		
	1/24/2017		<0.001	0.00023 (J)			
	2/6/2017					<0.001	
	2/8/2017	0.00011 (J)					
	2/23/2017	0.00012 (J)					
	3/14/2017		<0.001		<0.001		
	3/15/2017			0.00021 (J)		<0.001	
	3/17/2017	<0.001					
	4/11/2017	<0.001				<0.001	
	4/25/2017		<0.001	0.00024 (J)	<0.001		
	4/26/2017	<0.001				<0.001	
	5/17/2017	<0.001					
	6/7/2017	<0.001				<0.001	
	7/11/2017	<0.001				<0.001	
	8/9/2017		<0.001	0.0002 (J)	<0.001		
	8/10/2017					<0.001	
	3/29/2018	0.0002 (J)		0.00019 (J)		<0.001	
	3/30/2018		<0.001		<0.001		
	6/14/2018	0.00014 (J)	<0.001	0.00017 (J)	<0.001	<0.001	
	10/3/2018		<0.001				
	10/4/2018	0.00013 (J)		0.00015 (J)	<0.001	<0.001	
	2/26/2019				<0.001		
	2/27/2019	0.00016 (J)	<0.001	0.00015 (J)			
	2/28/2019					<0.001	
	4/2/2019					<0.001	
	4/3/2019	0.00012 (J)					
	4/4/2019		<0.001	9.5E-05 (J)	<0.001		
	9/18/2019	<0.001	<0.001	<0.001	<0.001	<0.001	
	2/5/2020	0.00022 (J)					
	2/7/2020		<0.001	<0.001	<0.001	<0.001	
	3/18/2020		<0.001	<0.001	<0.001		
	3/19/2020	0.00017 (J)					
	5/4/2020					<0.001	
	9/23/2020		<0.001	<0.001	<0.001	<0.001	
	9/24/2020	<0.001					
	2/3/2021					0.00018 (J)	
	2/4/2021	0.00021 (J)	<0.001	<0.001	<0.001		
	3/11/2021	0.00019 (J)		<0.001	<0.001	<0.001	
	3/12/2021		<0.001				

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<10	112	100				
5/18/2016				29	101	33	113
7/19/2016	14	80	84			<10	92
7/20/2016				<10	86		
9/13/2016	50	120	70	12	28		100
9/14/2016						150	
11/9/2016	22	76	110				130
11/10/2016				30	110		
1/17/2017	8		120				
1/18/2017				22	98		120
1/19/2017		36				34	
3/13/2017	<10		58				
3/14/2017		70		22	110	32	110
4/24/2017	10		94				
4/25/2017		70		22	86	22	100
8/8/2017	<10	72	62	4 (J)			90
8/9/2017					92	20	
10/10/2017	44		140				
10/11/2017		90		10	110	4 (J)	98
6/13/2018	24	38				<10	110
6/14/2018			80	26	92		
9/24/2018			76				
9/27/2018	28						
9/28/2018		68					
10/2/2018							130
10/3/2018				50	100	24	
4/1/2019	<10		63				
4/2/2019		100		28	100	25	110
9/16/2019	27					41	110
9/17/2019		76	120		120		
9/18/2019				36			
3/16/2020	23		90				
3/17/2020		81		20	100	18	120
9/21/2020			100	22	92		
9/22/2020	24	96				190	130
3/10/2021		72	100	20	100	19	
3/11/2021	24						110

### **Time Series**

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				-		-	
	WGWA-7 (bg)	WGWC-8	WGWC-9	WGWC-10	WGWC-11	WGWC-12	WGWC-13
5/18/2016	31			70			
5/19/2016		311	134		39	101	127
7/19/2016	<10						
7/20/2016		290	120	42	<10	76	88
9/13/2016	<10						
9/14/2016			140	40	24	96	92
9/15/2016		270					
11/10/2016	44						100
11/11/2016				72	42	100	
11/14/2016		320					
1/18/2017	50						
1/27/2017					18	50	80
2/6/2017		330		24			
2/9/2017			180				
3/14/2017	26						
3/15/2017		370	160	78	54	120	100
4/11/2017			120				
4/25/2017	10						
4/26/2017		380	140	48	42	100	92
8/8/2017	<10						
8/9/2017							120
8/10/2017		380	130	38	30	96	
10/11/2017	42						
10/12/2017		450	120	72	54	100	110
6/14/2018	14	410	120	40	16	94	88
10/3/2018	6						
10/4/2018		520	140	60	56	110	100
4/2/2019	15						
4/3/2019		430	120		<10	66	72
4/4/2019				30			
9/18/2019	35						110
9/19/2019		440	130	52	27	89	
3/17/2020	19						
3/18/2020				58	26	73	
3/19/2020		540	160				95
9/22/2020	15	600					
9/23/2020			150	50		90	
9/24/2020					60		21
3/10/2021	20						
3/11/2021		530		52			63
3/12/2021			130		27	78	

### **Time Series**

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-14A	WGWC-15	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21
5/18/2016		190	1080	107			
7/19/2016		180	1200				
7/20/2016				78			
9/14/2016		230	1300	82			
11/10/2016		210	1400	98			
11/11/2016					98		
1/20/2017				82			
1/24/2017		140	1300				
2/6/2017					36		
2/8/2017	54						
2/23/2017	78						
3/14/2017		220		120			
3/15/2017			1500		120		
3/17/2017	56						
4/11/2017	76				68		
4/25/2017		180	1700	120			
4/26/2017	76				76		
5/17/2017	68						
6/7/2017	72				74		
7/11/2017	68				70		
8/9/2017		180	1900	92			
8/10/2017					66		
10/11/2017	68	200	1900	74			
10/12/2017					100		
6/14/2018	52	170	1500	100	74		
10/3/2018		260					
10/4/2018	130		1700	98	100		
4/2/2019					88		
4/3/2019	31						
4/4/2019		170	710	89			
9/18/2019	33	160	520	79	96		
3/18/2020		160	370	98			
3/19/2020	18						
5/4/2020					110		
9/23/2020		150	250	60	94		
9/24/2020	24						
3/8/2021						590	
3/9/2021							610
3/11/2021	24		190	75	100		
3/12/2021		130					
4/7/2021							520
4/8/2021						540	

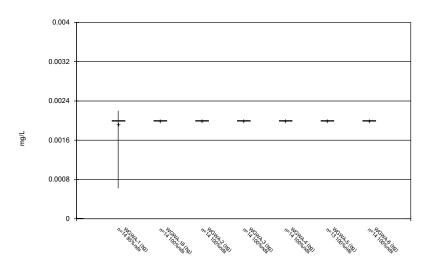
### **Time Series**

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/11/2021 2:39 PM Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-22	WGWC-23	WGWC-24	WGWC-25
3/8/2021				220
3/9/2021	200	79	370	
4/7/2021		66	510	
4/8/2021	170			180

# FIGURE B.

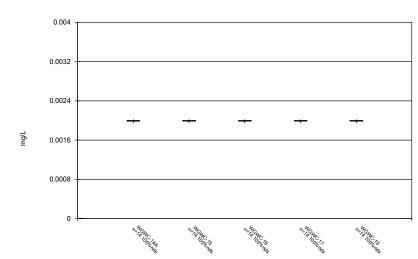
### Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

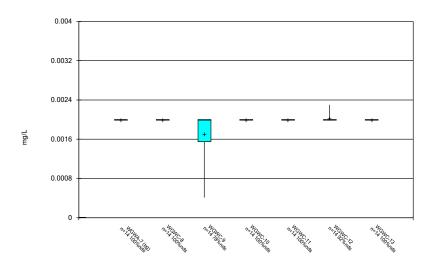
### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

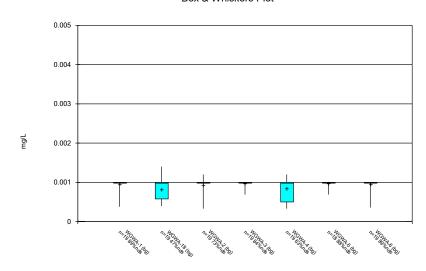
Box & Whiskers Plot



Constituent: Antimony Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

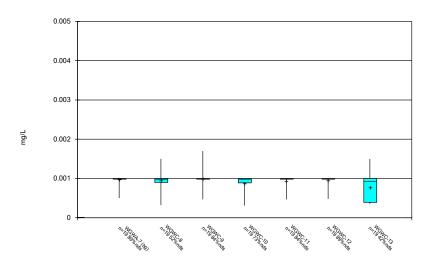
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

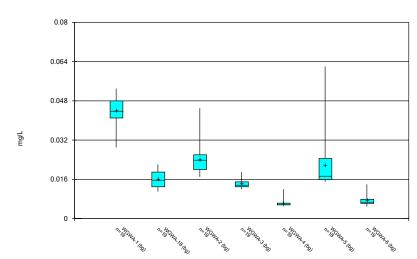
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

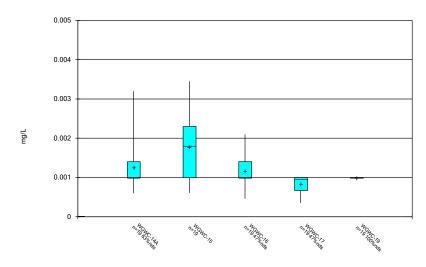
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

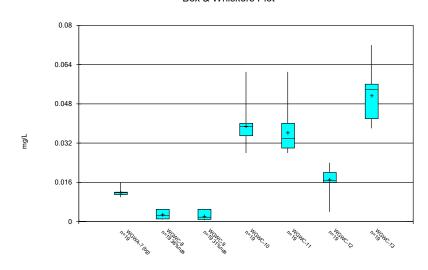


Constituent: Arsenic Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

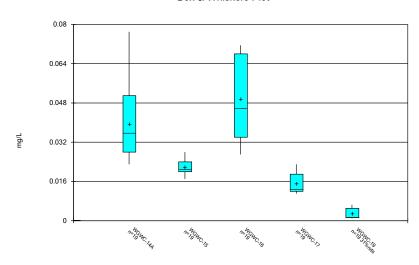
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Barium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

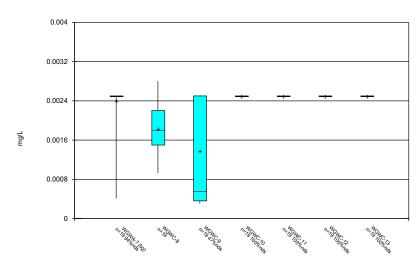
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

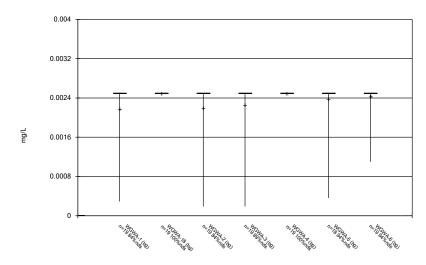
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

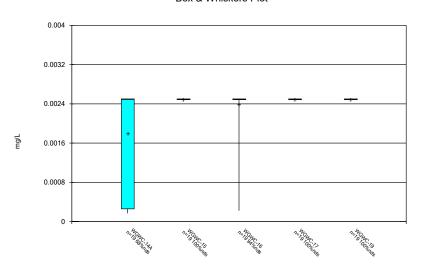
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

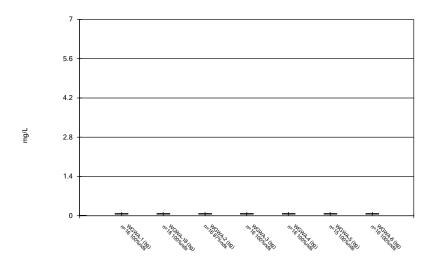
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



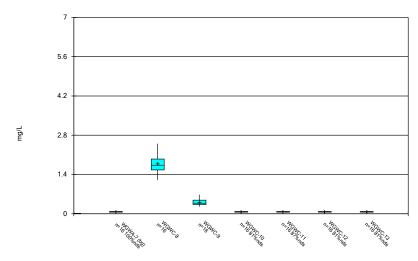
Constituent: Beryllium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



Constituent: Boron, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

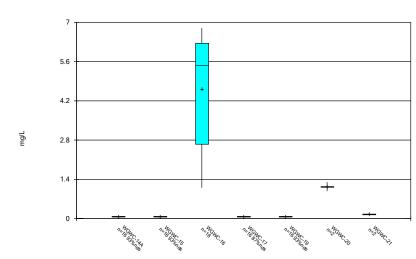
Box & Whiskers Plot



Constituent: Boron, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

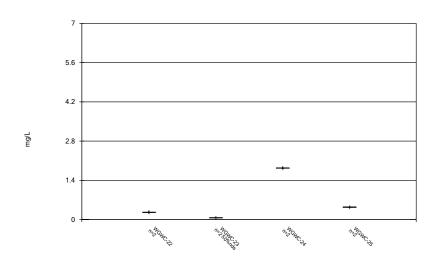


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

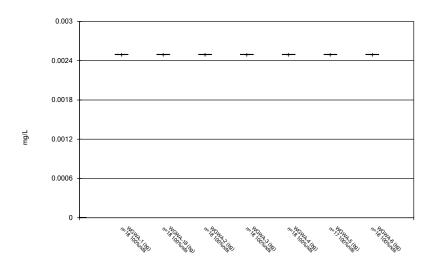
Box & Whiskers Plot



Constituent: Boron, total Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

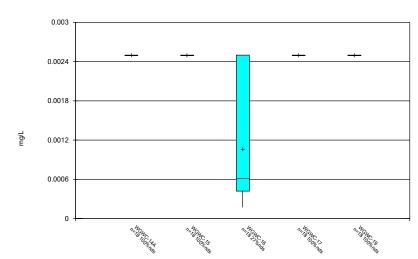
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

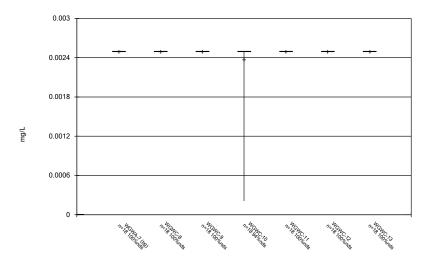
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

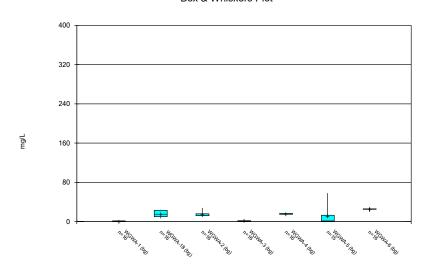
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

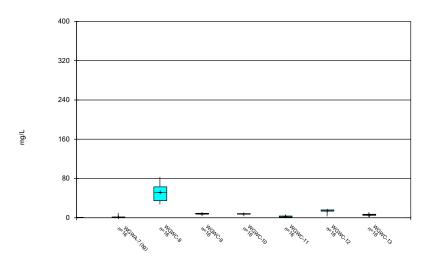
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

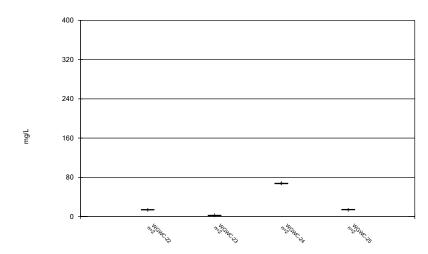
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 $Sanitas^{\text{\tiny{TM}}} \ v.9.6.28 \ Groundwater \ Stats \ Consulting. \ UG$ 

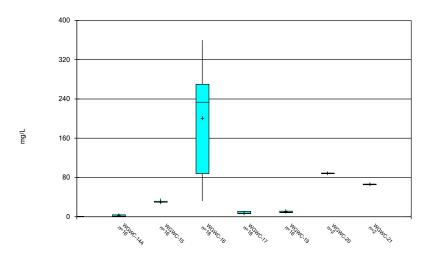
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

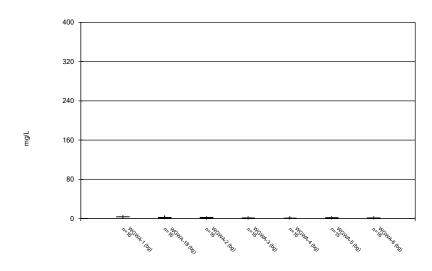
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

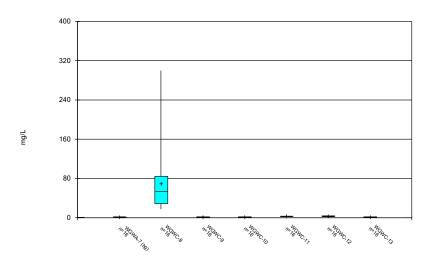
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

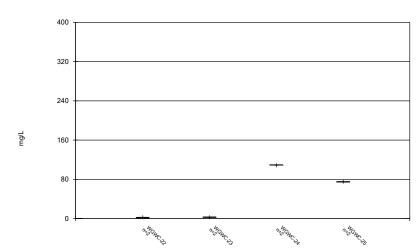
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

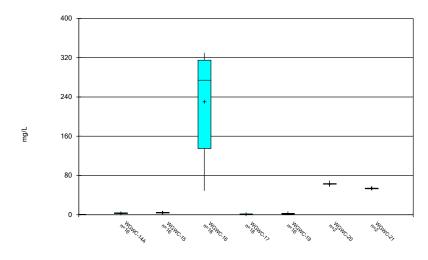
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

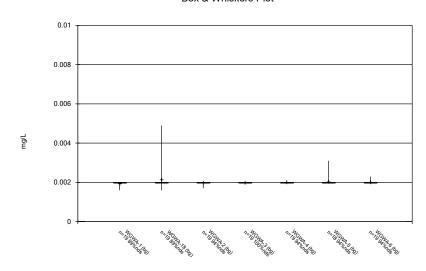
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/11/2021 2:40 PM
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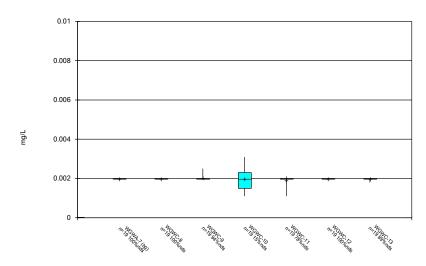
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

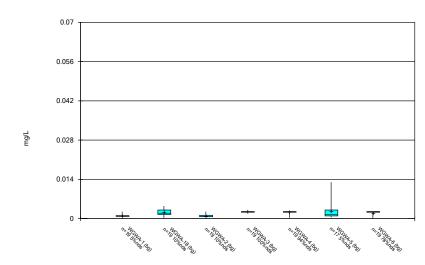




Constituent: Chromium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

### Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

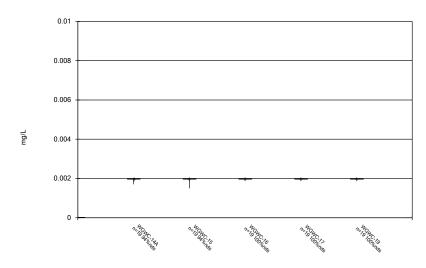
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

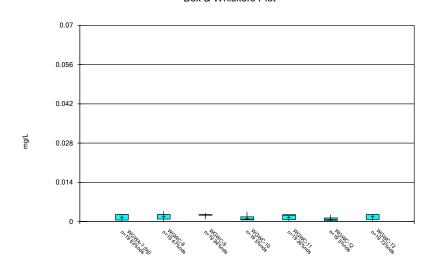
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

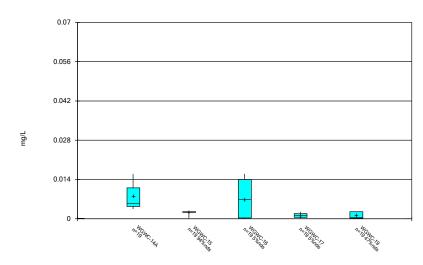
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

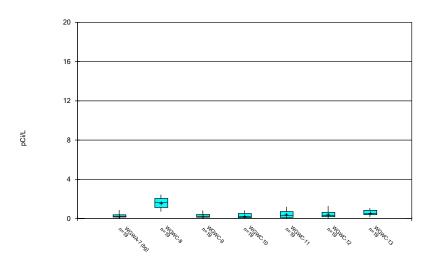
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

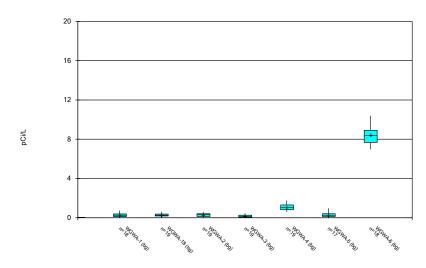
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

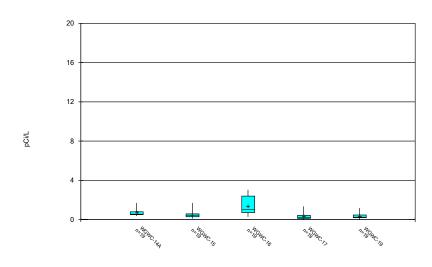


Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

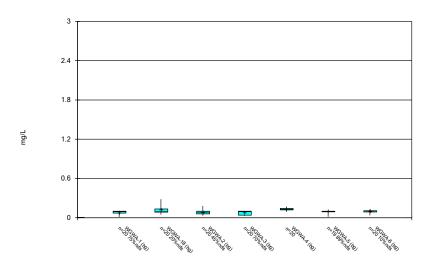
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

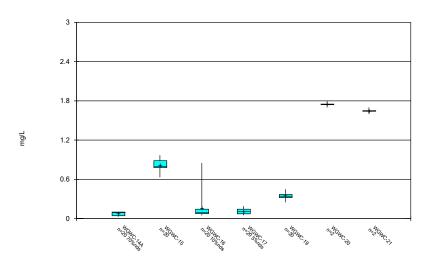
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas  $^{\text{\tiny TM}}$  v.9.6.28 Groundwater Stats Consulting. UG

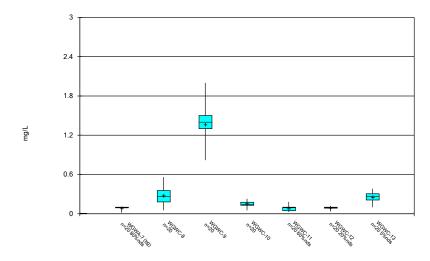
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

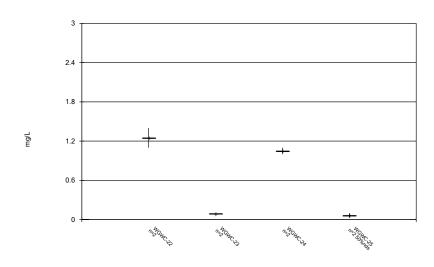
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

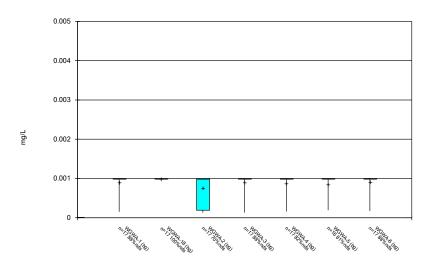
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

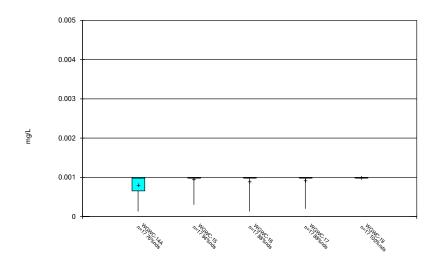
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

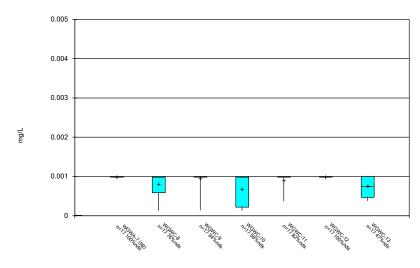
 $Sanitas^{\text{\tiny{TM}}} \ v.9.6.28 \ Groundwater \ Stats \ Consulting. \ UG$ 

Box & Whiskers Plot



Constituent: Lead Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

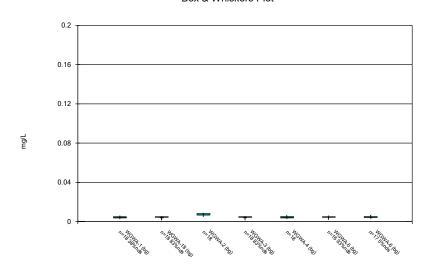
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

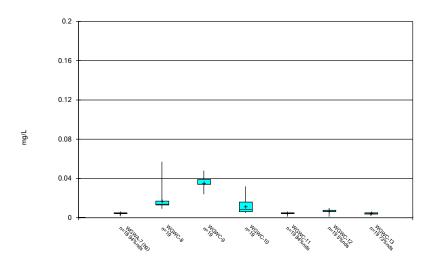
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

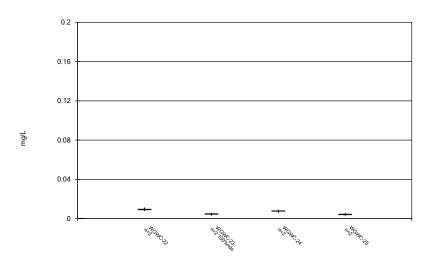
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

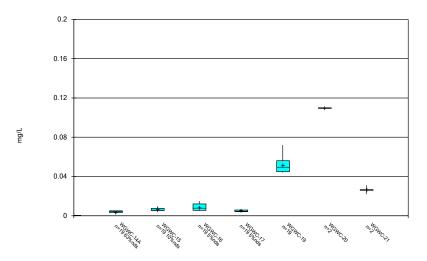
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/11/2021 2:40 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

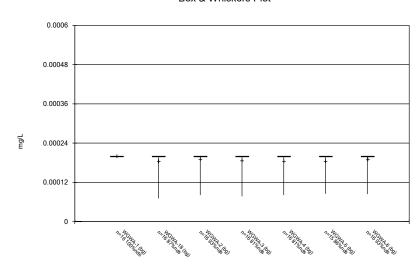
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

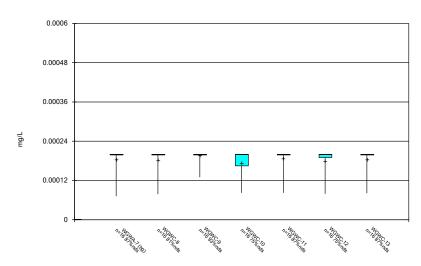
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

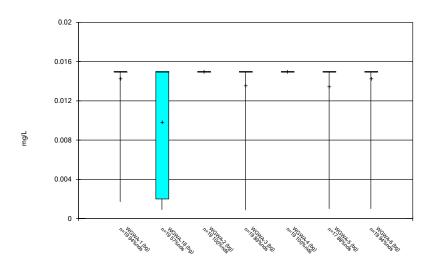
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

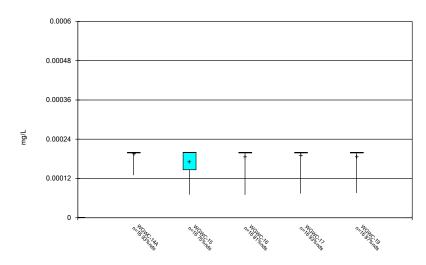
Sanitas<sup>™</sup> v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

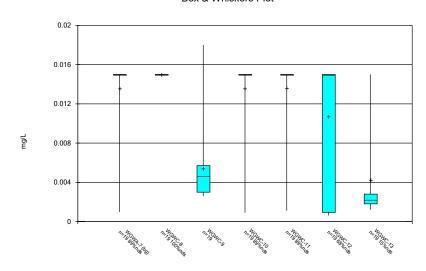
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

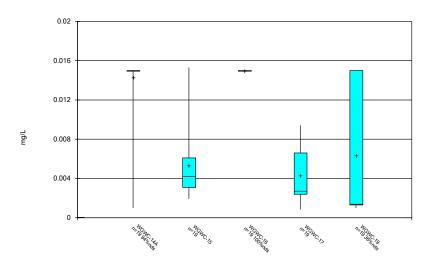
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

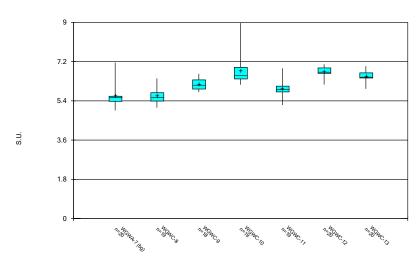
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/11/2021 2:40 PM
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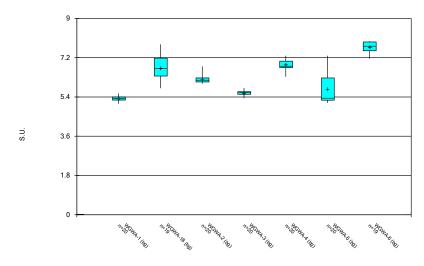
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

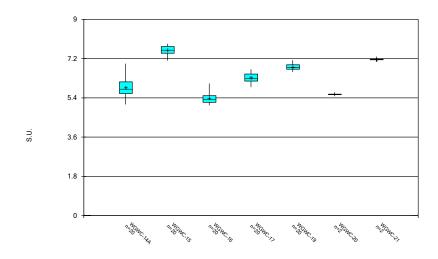
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

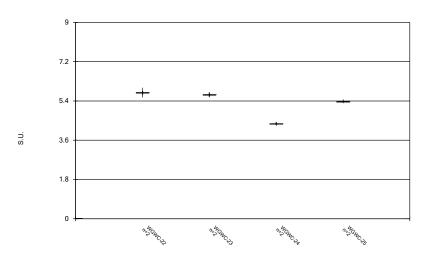
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

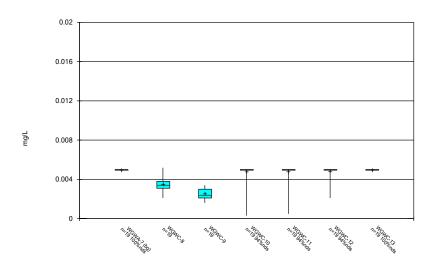
Box & Whiskers Plot



Constituent: pH, Field Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

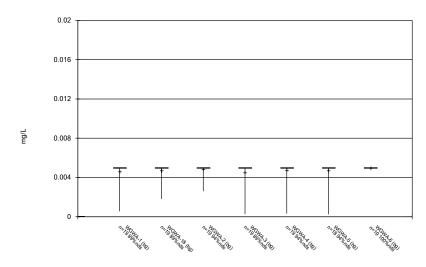
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

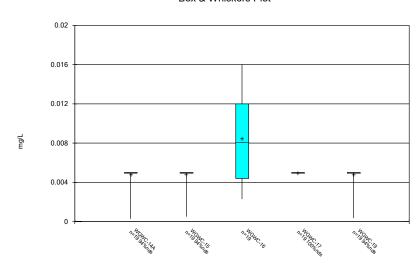
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

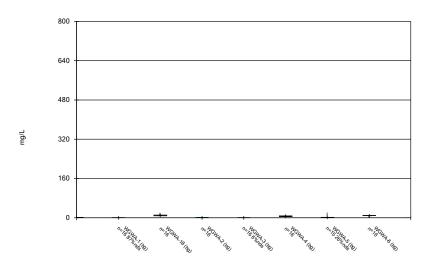
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



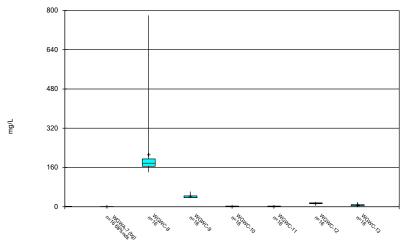
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

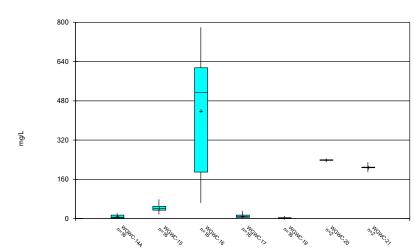
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

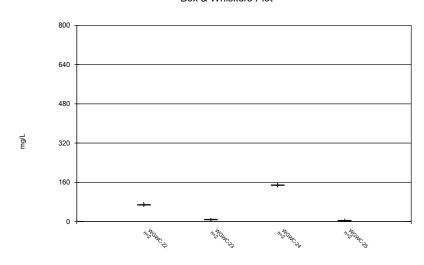
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:40 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

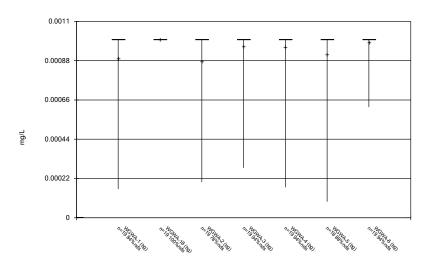
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

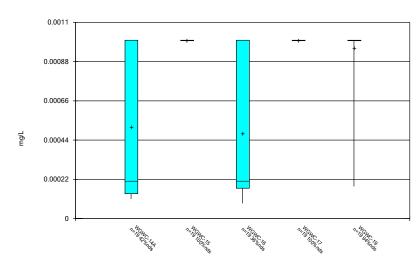
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

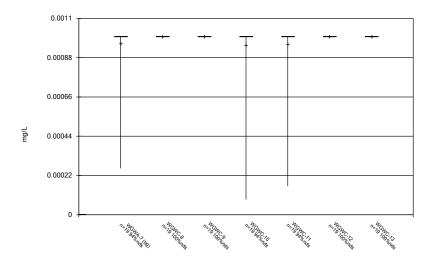
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

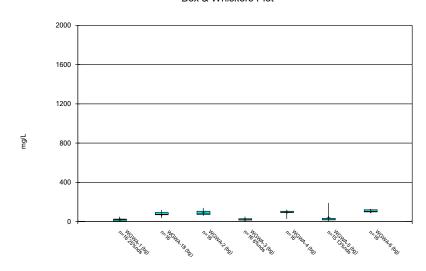
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

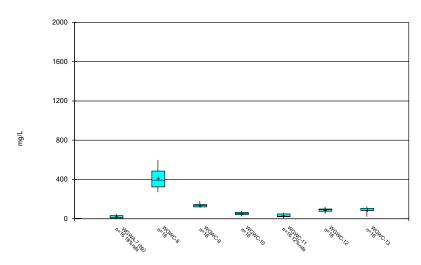


Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:41 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

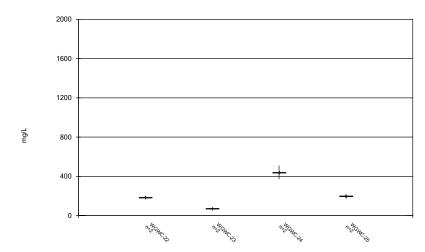
Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

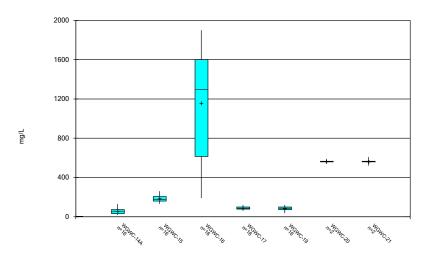


Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:41 PM

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/11/2021 2:41 PM
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# FIGURE C.

### **Outlier Summary**

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 12:13 PM

	wgwa-5 <sup>C</sup>	Cobalt (mg/L) WGWA-1 C	<sub>Combined</sub> Radi WGWA-6 C	<sub>um</sub> 226 + 228 ombined Radi WGWA-1 Li	(pCi/L) um 226 + 228 <sub>tthium</sub> (mg/L) WGWA-18 I	(pCi/L) <sub>.ithium</sub> (mg/L) WGWA-2 Li	ithium (mg/L) WGWA-3 Li	<sub>ithium</sub> (mg/L) WGWA-4 L	<sub>ithium</sub> (mg/L) WGWA-5 Li	<sub>ithium</sub> (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

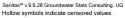
		Plant Wans	sley Client:	Southern C	ompany [	Data: Wans	ey Ash Pond	Printed 5/1	1/2021, 1:04 PM			
Constituent	Well	Upper Lin	n. Lower Lim	. Date	Observ.	Sig. Bg	N Bg Mean	Std. Dev.	%NDs ND Adj.	Transform	n <u>Alpha</u>	<u>Method</u>
Boron (mg/L)	WGWC-16	0.08	n/a	3/11/2021	1.1	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	0.08	n/a	3/11/2021	2.4	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	0.08	n/a	3/12/2021	0.64	Yes 127	n/a	n/a	98.43 n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	3/11/2021	83	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	3/11/2021	49	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	3/11/2021	110	Yes 127	n/a	n/a	0 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/12/2021	0.88	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-19	0.284	n/a	3/11/2021	0.31	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-9	0.284	n/a	3/12/2021	0.98	Yes 159	n/a	n/a	48.43 n/a	n/a	0.00007753	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	3/11/2021	64	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	3/11/2021	220	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	3/12/2021	62	Yes 127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	3/11/2021	530	Yes 127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2

# Appendix III Interwell Prediction Limits - All Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:04 PM

		Plant Wans	ey Client:	Southern C	ompany [	Data: V	Vansle	y Ash Pond	Printed 5/1	1/2021,	1:04 PM			
Constituent	Well	Upper Lim	Lower Lim	<u>Date</u>	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	n <u>Alpha</u>	Method
Boron (mg/L)	WGWC-10	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-11	0.08	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-12	0.08	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-13	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-14A	0.08	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-15	80.0	n/a	3/12/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-16	80.0	n/a	3/11/2021	1.1	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-17	80.0	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-19	80.0	n/a	3/11/2021	0.08ND	No	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-8	80.0	n/a	3/11/2021	2.4	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Boron (mg/L)	WGWC-9	80.0	n/a	3/12/2021	0.64	Yes	127	n/a	n/a	98.43	n/a	n/a	0.0001223	NP Inter (NDs) 1 of 2
Calcium (mg/L)	WGWC-10	58	n/a	3/11/2021	7.9	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-11	58	n/a	3/12/2021	1.6	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-12	58	n/a	3/12/2021	15	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-13	58	n/a	3/11/2021	4	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-14A	58	n/a	3/11/2021	0.79	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-15	58	n/a	3/12/2021	31	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-16	58	n/a	3/11/2021	32	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-17	58	n/a	3/11/2021	5.7	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-19	58	n/a	3/11/2021	15	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-8	58	n/a	3/11/2021	83	Yes	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Calcium (mg/L)	WGWC-9	58	n/a	3/12/2021	11	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-10	6.05	n/a	3/11/2021	1.7	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-11	6.05	n/a	3/12/2021	3.6	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-12	6.05	n/a	3/12/2021	3.5	No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-13	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-14A	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-15	6.05	n/a	3/12/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-16	6.05	n/a	3/11/2021			127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-17	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-19	6.05	n/a	3/11/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-8	6.05	n/a	3/11/2021			127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Chloride (mg/L)	WGWC-9	6.05	n/a	3/12/2021		No	127	n/a	n/a	0	n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-10	0.284	n/a	3/11/2021		No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-11	0.284	n/a	3/12/2021				n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-12	0.284	n/a	3/12/2021	0.096J	No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-13	0.284	n/a	3/11/2021		No		n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-14A	0.284	n/a	3/11/2021		No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-15	0.284	n/a	3/12/2021			159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-16	0.284	n/a	3/11/2021		No		n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-17	0.284	n/a	3/11/2021		No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-19	0.284	n/a	3/11/2021			159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-8	0.284	n/a	3/11/2021		No	159	n/a	n/a	48.43		n/a	0.00007753	NP Inter (normality) 1 of 2
Fluoride (mg/L)	WGWC-10	<b>0.284</b> 7.96	n/a 4.06	3/12/2021 3/11/2021			159	n/a n/a	n/a n/a	<b>48.43</b> 0		n/a	<b>0.00007753</b> 0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
pH (S.U.)			4.96			No	158				n/a	n/a		` , , , , , , , , , , , , , , , , , , ,
pH (S.U.)	WGWC-11 WGWC-12	7.96 7.96	4.96 4.96	3/12/2021 3/12/2021		No No	158 158	n/a n/a	n/a n/a	0	n/a	n/a	0.0001574 0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-12 WGWC-13	7.96		3/12/2021				n/a n/a	n/a n/a	0	n/a	n/a	0.0001574	, ,,
pH (S.U.) pH (S.U.)	WGWC-13	7.96	4.96 4.96	3/11/2021		No No	158 158	n/a	n/a	0	n/a n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
	WGWC-14A WGWC-15	7.96	4.96	3/11/2021		No	158	n/a n/a	n/a n/a	0			0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-15	7.96	4.96	3/12/2021		No	158	n/a n/a	n/a n/a	0	n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
pH (S.U.)	WGWC-16 WGWC-17	7.96	4.96	3/11/2021		No	158	n/a n/a	n/a n/a	0	n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
pH (S.U.) pH (S.U.)	WGWC-17 WGWC-19	7.96	4.96	3/11/2021		No	158	n/a n/a	n/a n/a	0	n/a n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
рн (S.U.) pH (S.U.)	WGWC-19	7.96	4.96	3/11/2021		No	158	n/a n/a	n/a n/a	0	n/a n/a	n/a n/a	0.0001574	NP Inter (normality) 1 of 2  NP Inter (normality) 1 of 2
рн (S.U.)	WGWC-9	7.96	4.96	3/12/2021			158		n/a	0	n/a	n/a	0.0001574	NP Inter (normality) 1 of 2
p. ( (O.O.)	*******	1.30	7.50	0, 12,12021	0.00	140	100	1114	11/4	•	. 1/ G	11/G	0.0001074	mor (normancy) rorz

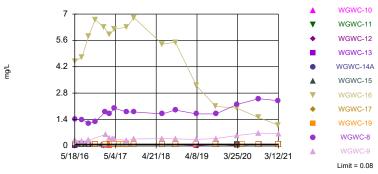
## Appendix III Interwell Prediction Limits - All Results

		Plant Wansl	ey Client:	Southern Co	ompany [	Data: \	Vansle	y Ash Pond	Printed 5/1	1/2021, 1:04 PM			
Constituent	Well	Upper Lim	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transforn	n <u>Alpha</u>	Method
Sulfate (mg/L)	WGWC-10	21	n/a	3/11/2021	2.8	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-11	21	n/a	3/12/2021	2	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-12	21	n/a	3/12/2021	14	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-13	21	n/a	3/11/2021	2.9	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-14A	21	n/a	3/11/2021	1.7	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-15	21	n/a	3/12/2021	19	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-16	21	n/a	3/11/2021	64	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-17	21	n/a	3/11/2021	3.9	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-19	21	n/a	3/11/2021	4	No	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-8	21	n/a	3/11/2021	220	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Sulfate (mg/L)	WGWC-9	21	n/a	3/12/2021	62	Yes	127	n/a	n/a	23.62 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-10	190	n/a	3/11/2021	52	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-11	190	n/a	3/12/2021	27	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-12	190	n/a	3/12/2021	78	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-13	190	n/a	3/11/2021	63	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-14A	190	n/a	3/11/2021	24	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-15	190	n/a	3/12/2021	130	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-16	190	n/a	3/11/2021	190	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-17	190	n/a	3/11/2021	75	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-19	190	n/a	3/11/2021	100	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-8	190	n/a	3/11/2021	530	Yes	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	WGWC-9	190	n/a	3/12/2021	130	No	127	n/a	n/a	7.874 n/a	n/a	0.0001223	NP Inter (normality) 1 of 2



Exceeds Limit: WGWC-16, WGWC-8, WGWC-9

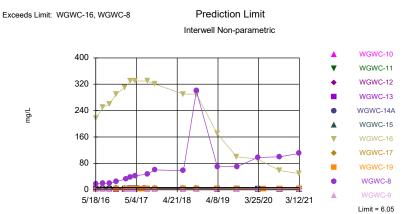
## Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 127 background values. 98.43% NDs. Annual per-constituent alpha = 0.002686. Individual comparison alpha = 0.0001223 (1 of 2). Comparing 11 points to limit.

Constituent: Boron Analysis Run 5/11/2021 1:03 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

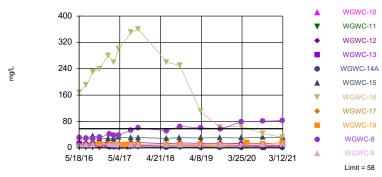
### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG



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 127 background values. Annual per-constituent alpha = 0.002686. Individual comparison alpha = 0.002123 (1 of 2). Comparing 11 points to limit.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG





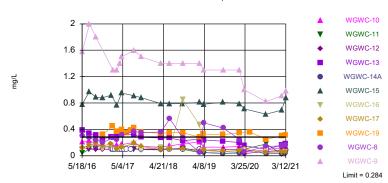
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 127 background values. Annual per-constituent alpha = 0.002686. Individual comparison alpha = 0.0001223 (1 of 2). Comparing 11 points to limit.

Constituent: Calcium Analysis Run 5/11/2021 1:03 PM View: Appendix III

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 ${\it Sanitas^{\rm TM}}~v.9.6.28~{\it Groundwater}~{\it Stats}~{\it Consulting}.~{\it UG}~{\it Hollow}~{\it symbols}~{\it indicate}~{\it censored}~{\it values}.$ 

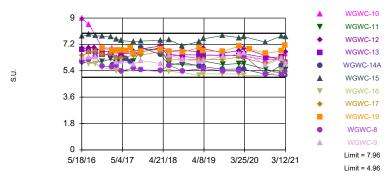
Exceeds Limit: WGWC-15, WGWC-19, Prediction Limit
WGWC-9
Interwell Non-parametric



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 159 background values. 48.43% NDs. Annual perconstituent alpha = 0.001704. Individual comparison alpha = 0.00007753 (1 of 2). Comparing 11 points to limit.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Within Limits Prediction Limit
Interwell Non-parametric

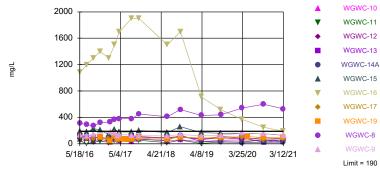


Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 158 background values. Annual perconstituent alpha = 0.003459. Individual comparison alpha = 0.0001574 (1 of 2). Comparing 11 points to limit.

Constituent: pH Analysis Run 5/11/2021 1:03 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

 $Sanitas^{\text{\tiny TM}} \text{ v.9.6.28 Groundwater Stats Consulting. UG} \\ Hollow symbols indicate censored values.$ 

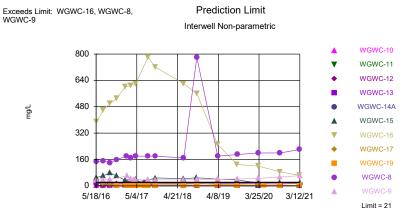
Exceeds Limit: WGWC-8 Prediction Limit
Interwell Non-parametric



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 127 background values. 7.874% NDs. Annual perconstituent alpha = 0.002686. Individual comparison alpha = 0.0001223 (1 of 2). Comparing 11 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:03 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 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 127 background values. 23.62% NDs. Annual perconstituent alpha = 0.002686. Individual comparison alpha = 0.0001223 (1 of 2). Comparing 11 points to limit.

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
5/17/2016	<0.08	<0.08	<0.08						
5/18/2016				<0.08	<0.08	4.48	<0.08	<0.08	<0.08
5/19/2016									
7/19/2016	<0.08	<0.08	<0.08	<0.08		4.7	<0.08		
7/20/2016					<0.08			<0.08	<0.08
9/13/2016	<0.08	<0.08	<0.08	<0.08	<0.08		<0.08		<0.08
9/14/2016						5.8		<0.08	
9/15/2016									
11/9/2016	<0.08	<0.08	<0.08	<0.08					
11/10/2016					<0.08	6.7	<0.08	<0.08	<0.08
11/11/2016									
11/14/2016									
1/17/2017	<0.08	<0.08							
1/18/2017				<0.08	<0.08		<0.08		<0.08
1/19/2017			<0.08						
1/20/2017								<0.08	
1/24/2017						6.3			
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<0.08	<0.08							
3/14/2017	10.00	10.00	<0.08	<0.08	<0.08		<0.08	<0.08	<0.08
3/15/2017			-0.00	-0.00	10.00	5.9	10.00	-0.00	-0.00
3/17/2017						3.5			
4/11/2017									
4/11/2017	<0.08	<0.08							
4/24/2017	<0.06	<0.06	<0.08	<0.08	<0.08	6.2	<0.08	<0.08	<0.08
			<0.08	<0.08	<b>\0.08</b>	0.2	<b>~</b> 0.08	<0.08	V0.06
4/26/2017 5/17/2017									
6/7/2017									
7/11/2017	-0.00	-0.00	-0.00	-0.00	-0.00		-0.00		
8/8/2017	<0.08	<0.08	<0.08	<0.08	<0.08	6.3	<0.08	<0.09	<b>-0.00</b>
8/9/2017						6.3		<0.08	<0.08
8/10/2017	-0.00	-0.00							
10/10/2017	<0.08	<0.08	<b>~0.00</b>	<0.00	<0.08	6.9	<0.08	<0.00	<b>-0.00</b>
10/11/2017			<0.08	<0.08	<0.08	6.8	<0.08	<0.08	<0.08
10/12/2017				0.00					
6/13/2018	<0.08		<0.08	<0.08					
6/14/2018		<0.08			<0.08	5.4	<0.08	<0.08	<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		<0.08
10/4/2018						5.5		<0.08	
4/1/2019	<0.08	<0.08							
4/2/2019			<0.08	<0.08	<0.08		<0.08		<0.08
4/3/2019									
4/4/2019						3.2		0.049 (J)	
9/16/2019	<0.08			<0.08					

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
9/17/2019		<0.08	<0.08						<0.08
9/18/2019					<0.08	2.1	<0.08	<0.08	
9/19/2019									
3/16/2020	<0.08	0.048 (J)							
3/17/2020			<0.08	<0.08	<0.08		<0.08		<0.08
3/18/2020						2		0.049 (J)	
3/19/2020									
5/4/2020									
9/21/2020		<0.08			<0.08				<0.08
9/22/2020	<0.08		<0.08	<0.08			<0.08		
9/23/2020						1.5		<0.08	
9/24/2020									
3/10/2021		0.039 (J)	<0.08		<0.08		<0.08		<0.08
3/11/2021	<0.08			<0.08		1.1		<0.08	
3/12/2021									

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
5/17/2016									
5/18/2016	<0.08	<0.08	<0.08						
5/19/2016				1.42	0.0252 (J)	<0.08	0.314	<0.08	
7/19/2016		<0.08	<0.08						
7/20/2016	<0.08			1.4	<0.08	<0.08	0.25	<0.08	
9/13/2016									
9/14/2016	<0.08	<0.08	<0.08		<0.08	<0.08	0.3	<0.08	
9/15/2016				1.2					
11/9/2016									
11/10/2016		<0.08			<0.08				
11/11/2016	<0.08					<0.08		<0.08	<0.08
11/14/2016	0.00			1.3		0.00		0.00	0.00
1/17/2017				1.0					
1/18/2017									
1/19/2017			<0.08						
1/20/2017			10.00						
1/24/2017		<0.08							
1/27/2017		<b>~0.00</b>			0.033 (1)	0.047 (J)		0.021 (J)	
2/6/2017	<0.08			1.8	0.033 (J)	0.047 (3)		0.021 (3)	<0.08
2/8/2017	<b>~0.00</b>			1.0					<b>\0.00</b>
2/9/2017							0.61		
							0.01		
2/23/2017									
3/13/2017 3/14/2017		<0.08	-0.09						
	0.000 (1)	<0.08	<0.08	4.7	-0.00	0.004 (1)	0.40	0.050	0.004 ( 1)
3/15/2017	0.032 (J)			1.7	<0.08	0.024 (J)	0.42	0.058	0.034 (J)
3/17/2017							0.27		<b>-0.00</b>
4/11/2017							0.37		<0.08
4/24/2017		0.00	.0.00						
4/25/2017		<0.08	<0.08						
4/26/2017	<0.08			2	<0.08	<0.08	0.38	<0.08	<0.08
5/17/2017									
6/7/2017									<0.08
7/11/2017									<0.08
8/8/2017		0.00	.0.00						
8/9/2017		<0.08	<0.08		<0.08				
8/10/2017	<0.08			1.8		<0.08	0.29	<0.08	<0.08
10/10/2017									
10/11/2017		<0.08	<0.08						
10/12/2017	<0.08			1.8	<0.08	<0.08	0.36	<0.08	<0.08
6/13/2018			<0.08						
6/14/2018	<0.08	<0.08		1.7	<0.08	<0.08	0.39	<0.08	<0.08
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		<0.08	<0.08						
10/4/2018	<0.08			1.9	<0.08	<0.08	0.37	<0.08	<0.08
4/1/2019									
4/2/2019			<0.08						<0.08
4/3/2019				1.7	<0.08	<0.08	0.35	<0.08	
4/4/2019	0.024 (J)	<0.08							
9/16/2019			<0.08						

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
9/17/2019									
9/18/2019		<0.08			<0.08				<0.08
9/19/2019	<0.08			1.7		<0.08	0.39	<0.08	
3/16/2020									
3/17/2020			<0.08						
3/18/2020	0.049 (J)	0.071 (J)				0.039 (J)		<0.08	
3/19/2020				2.2	0.053 (J)		0.55		
5/4/2020									<0.08
9/21/2020									
9/22/2020			<0.08	2.5					
9/23/2020	<0.08	<0.08				<0.08	0.68		<0.08
9/24/2020					<0.08			<0.08	
3/10/2021			<0.08						
3/11/2021	<0.08			2.4	<0.08				<0.08
3/12/2021		<0.08				<0.08	0.64	<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
3/10/2021	
3/11/2021	<0.08
3/12/2021	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
5/17/2016	0.927	12.2	23.7						
5/18/2016				27	2.1	168	1.36	8.24	17.9
5/19/2016									
7/19/2016	1	13	23	23		190	0.88		
7/20/2016					1.7			11	15
9/13/2016	0.44	13	23	25	1.3		0.93		16
9/14/2016						230		12	
9/15/2016									
11/9/2016	1.1	19	6.7	25					
11/10/2016					1.6	240	6.1	11	15
11/11/2016									
11/14/2016									
1/17/2017	1.4	28							
1/18/2017				26	1.7		10		17
1/19/2017			8.5						
1/20/2017								10	
1/24/2017						280			
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	1.1	14							
3/14/2017			13	20	1.8		1.3	8.8	17
3/15/2017						260			
3/17/2017									
4/11/2017									
4/24/2017	1.1	12							
4/25/2017			23	28	2	300	1.9	12	17
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.1	18	24	26	2		4.8		
8/9/2017						350		11	15
8/10/2017									
10/10/2017	1.2	21							
10/11/2017			23	29	2.1	360	0.93	10	17
10/12/2017									
6/13/2018	1.1		11	25					
6/14/2018		12			2	260	0.94	6.2	15
9/24/2018		11							
9/27/2018	1.2								
9/28/2018			11						
10/2/2018				26					
10/3/2018					1.8		1.2		16
10/4/2018						250		6.4	
4/1/2019	1	12							
4/2/2019			20	25	1.8		1.1		15
4/3/2019									
4/4/2019						110		5.6	
9/16/2019	1.3			25					

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
9/17/2019		13	10						16
9/18/2019					1.6	62	1.5	5.5	
9/19/2019									
3/16/2020	1.1	10							
3/17/2020			10	26	1.7		0.82		15
3/18/2020						66		6.3	
3/19/2020									
5/4/2020									
9/21/2020		13			1.8				16
9/22/2020	1.2		19	25			0.89		
9/23/2020						43		5.9	
9/24/2020									
3/10/2021		11	7.7		1.9		0.89		16
3/11/2021	1.3			26		32		5.7	
3/12/2021									

		WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
!	5/17/2016									
!	5/18/2016	7.17	32.5	1.7						
	5/19/2016				31.4	11.4	15.8	8.53	1.95	
	7/19/2016		30	1.5						
	7/20/2016	7			28	7.1	14	8.2	1.5	
!	9/13/2016									
:	9/14/2016	7.7	37	52		7.4	16	8.8	1.8	
!	9/15/2016				27					
	11/9/2016									
	11/10/2016		29			6.4				
	11/11/2016	8.2					15		1.7	12
	11/14/2016				32					
	1/17/2017									
	1/18/2017									
	1/19/2017			13						
	1/20/2017									
	1/24/2017		28							
	1/27/2017					6.2	16		3.5	
:	2/6/2017	9.1			41					11
:	2/8/2017									
:	2/9/2017							10		
:	2/23/2017									
;	3/13/2017									
:	3/14/2017		29	1.6						
:	3/15/2017	9			38	6.7	16	8.6	3.8	10
;	3/17/2017									
	4/11/2017							8.6		11
	4/24/2017									
	4/25/2017		32	1.5						
	4/26/2017	8.1			39	6.5	3	7.1	4	8.4
	5/17/2017									
	6/7/2017									9
	7/11/2017									9.5
	8/8/2017									
:	8/9/2017		30	1.3		7				
	8/10/2017	8.1			53		15	7.5	3.5	8.8
	10/10/2017									
	10/11/2017		31	1.5						
	10/12/2017	8.6			60	7	16	8.2	2.7	9.5
	6/13/2018			1.2						
	6/14/2018	7.7	29		52	5.5	13	7.5	2.2	8.9
	9/24/2018									
	9/27/2018									
	9/28/2018									
	10/2/2018									
	10/3/2018		31	1.4						
	10/4/2018	8.5			65	5.9	15	8	2	10
	4/1/2019									
	4/2/2019			1.1						11
	4/3/2019				61	4.7	14	7.2	1.7	
	4/4/2019	7.9	30							
	9/16/2019			36						

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
9/17/2019									
9/18/2019		31			4.9				8.8
9/19/2019	7.5			57		14	8.1	1.4	
3/16/2020									
3/17/2020			1.4						
3/18/2020	7.5	30				14		1.6	
3/19/2020				79	5		9.3		
5/4/2020									15
9/21/2020									
9/22/2020			58	81					
9/23/2020	7.7	32				13	10		13
9/24/2020					1.4			5.2	
3/10/2021			1.3						
3/11/2021	7.9			83	4				15
3/12/2021		31				15	11	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	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
3/10/2021	
3/11/2021	0.79
3/12/2021	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
5/17/2016	3.8	2.5	6.05	1.50	1.00	017	2.00	0.70	1.45
5/18/2016				1.58	1.92	217	2.06	2.72	1.45
5/19/2016	0.0	0.0		4.0		050	0.1		
7/19/2016	3.9	2.6	4	1.6		250	2.1		
7/20/2016					1.8		_	1.9	1.4
9/13/2016	3.6	2.4	3.1	1.4	1.7		2		1.4
9/14/2016						260		1.6	
9/15/2016									
11/9/2016	3.9	2.3	2.3	1.5					
11/10/2016					1.6	290	1.8	1.6	1.3
11/11/2016									
11/14/2016									
1/17/2017	3.8	2.3							
1/18/2017				1.5	1.7		1.8		1.3
1/19/2017			2						
1/20/2017								1.5	
1/24/2017						310			
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	3.4	2.2							
3/14/2017			1.9	2.5	1.6		1.8	1.5	1.2
3/15/2017						330			
3/17/2017									
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017			1.9	1.3	1.6	330	1.8	1.8	1.2
4/26/2017									
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2	1.4	1.7		1.9		
8/9/2017						330		1.4	1.2
8/10/2017									
10/10/2017	3.6	2.5							
10/11/2017			1.9	1.3	1.6	320	1.8	1.5	1.2
10/12/2017									
6/13/2018	3.8		2	1.4					
6/14/2018		2.3			1.6	290	1.7	1.5	1.2
9/24/2018		2.4							
9/27/2018	4								
9/28/2018			2.1						
10/2/2018				1.4					
10/3/2018					1.6		1.8		1.2
10/4/2018						290		1.5	
4/1/2019	4	2.4							
4/2/2019			2.6	1.5	1.7		1.9		1.2
4/3/2019									
4/4/2019						170		1.4	
9/16/2019	4			1.5					

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
9/17/2019	1	2.4	2						1.2
9/18/2019	)				1.7	100	2	1.5	
9/19/2019	)								
3/16/2020	4.3	2.7							
3/17/2020	1		2.3	1.7	1.8		2.2		1.4
3/18/2020	)					93		1.5	
3/19/2020	)								
5/4/2020									
9/21/2020	1	2.5			1.5				1.2
9/22/2020	4		2.1	1.4			1.8		
9/23/2020	1					58		1.2	
9/24/2020	1								
3/10/2021		2.6	1.9		1.8		1.9		1.2
3/11/2021	4.5			1.5		49		1.3	
3/12/2021									

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
5/17/2016									
5/18/2016	1.45	4.59	2.14						
5/19/2016				17.5	2.26	3.8	1.46	3.21	
7/19/2016		5.9	2.4						
7/20/2016	1.6			19	1.9	3.8	1.5	3.4	
9/13/2016									
9/14/2016	1.5	7.9	2.1		1.6	3.7	1.4	3.1	
9/15/2016				19					
11/9/2016									
11/10/2016		6.5			1.4				
11/11/2016	1.5	0.0				3.5		3.2	2.6
11/14/2016	1.0			25		0.0		0.2	2.0
1/17/2017				23					
1/18/2017									
1/19/2017			1.8						
1/20/2017			1.0						
1/24/2017		4.1							
1/27/2017		7.1			1.4	3.1		3.4	
2/6/2017	1.4			33	1.4	5.1		5.4	2.6
2/8/2017	1.4			33					2.0
2/9/2017							1.5		
2/23/2017							1.5		
3/13/2017									
3/13/2017		4.4	2						
3/15/2017	1.4	4.4	2	38	1.4	3.2	1.3	3.1	2.4
3/17/2017	1.4			36	1.4	3.2	1.3	3.1	2.4
4/11/2017							1.2		2.3
4/11/2017							1.2		2.3
		4	1.0						
4/25/2017	1.2	4	1.8	40	1.2	2.2	10	2.1	2.2
4/26/2017 5/17/2017	1.3			42	1.3	3.2	1.2	3.1	2.3
6/7/2017									2.5
7/11/2017									2.3
8/8/2017									2.3
8/9/2017		3.6	1.9		1.4				
8/10/2017	1.4	3.0	1.9	48	1.4	3.4	1.3	3.1	2.5
10/10/2017	1.4			40		3.4	1.3	3.1	2.5
10/10/2017		5	2.1						
10/11/2017	1.3	3	2.1	60	1.2	3.1	1.4	3	2.3
6/13/2018	1.5		1.7	00	1.2	5.1	1.4	3	2.3
6/14/2018	1.3	4.3	1.7	58	1.2	3	1.2	2	2.4
9/24/2018	1.3	4.3		36	1.2	3	1.2	3	2.4
9/27/2018									
9/28/2018									
10/2/2018		4.0	1.0						
10/3/2018	1.0	4.8	1.8	200	1.0	0.4	1.0	2.1	0.0
10/4/2018	1.3			300	1.2	3.1	1.2	3.1	2.6
4/1/2019			1.7						2.5
4/2/2019			1.7	70	1.2	3	2	3 3	2.5
4/3/2019	1.4	3 7		70	1.4	3	2	3.3	
4/4/2019 9/16/2019	1.4	3.7	1.8						
3/10/2013			1.0						

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
9/17/2019									
9/18/2019		3.2			1.2				2.7
9/19/2019	1.5			70		3.2	1.5	3.2	
3/16/2020									
3/17/2020			1.6						
3/18/2020	1.5	1.7				3.2		3.2	
3/19/2020				98	1.3		2.1		
5/4/2020									2.8
9/21/2020									
9/22/2020			1.5	100					
9/23/2020	1.3	1.5				2.8	2.4		2.6
9/24/2020					1.6			1	
3/10/2021			1.8						
3/11/2021	1.7			110	1.2				2.9
3/12/2021		1.6				3.5	3.4	3.6	

		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				
2/23/2017	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
3/10/2021	
3/11/2021	2.6
3/12/2021	

	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	0.0131 (J)	0.0538 (J)	0.284 (J)	0.000	0.010 ( 1)	0.770	0.100 (1)	0.170	0.404 (1)
5/18/2016				0.206	0.018 (J)	0.779	0.106 (J)	0.1 (J)	0.121 (J)
5/19/2016 7/19/2016	<0.1	<0.1	0.21		<0.1	0.97	0.11 (J)	0.14 ( 1)	
7/20/2016	<0.1	<b>~</b> 0.1	0.21	0.23	<b>~</b> 0.1	0.97	0.11(3)	0.14 (J)	0.16 (J)
9/13/2016	<0.1	<0.1	0.15 (J)	0.23	<0.1		0.11 (J)		0.10 (3)
9/14/2016	<b>~</b> 0.1	<b>~</b> 0.1	0.13 (3)	0.17 (J)	<b>~</b> 0.1	0.89	0.11(3)	0.18 (J)	0.19 (J)
9/15/2016				0.17 (3)		0.03		0.18 (3)	0.13 (3)
11/9/2016	<0.1	0.085 (J)	<0.1				0.1 (J)		
11/10/2016	40.1	0.003 (3)	30.1		<0.1	0.88	0.1 (0)	0.11 (J)	0.15 (J)
11/11/2016				0.14 (J)	-0.1	0.00		0.11(0)	0.10 (0)
11/14/2016				0.14 (0)					
1/17/2017	<0.1	<0.1							
1/18/2017					<0.1		0.11 (J)		
1/19/2017			0.087 (J)				(5)		
1/20/2017									0.18 (J)
1/24/2017						0.92		0.15 (J)	(-)
1/27/2017								(-)	
2/6/2017				0.15 (J)					
2/8/2017				( )					
2/9/2017									
2/23/2017									
3/13/2017	<0.1	<0.1							
3/14/2017			<0.1		<0.1	0.77	<0.1		0.11 (J)
3/15/2017				0.16 (J)				0.1 (J)	
3/17/2017									
4/11/2017									
4/24/2017	<0.1	<0.1							
4/25/2017			<0.1		<0.1	0.95	<0.1	0.13 (J)	0.13 (J)
4/26/2017				0.17 (J)					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<0.1	<0.1	0.087 (J)		<0.1		0.099 (J)		
8/9/2017						0.91		0.18 (J)	0.19 (J)
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	0.14 (J)
10/12/2017				0.14 (J)					
3/27/2018	<0.1	<0.1							
3/28/2018			0.11 (J)		<0.1		0.088 (J)		
3/29/2018								0.13 (J)	
3/30/2018				0.13 (J)		0.79			0.095 (J)
6/13/2018	<0.1		0.085 (J)				0.093 (J)		
6/14/2018		<0.1		0.15 (J)	<0.1	0.79		<0.1	0.11 (J)
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			
10/4/2018				0.18 (J)				0.85 (J)	0.11 (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	WGWC-17
2/26/2019			0.23		<0.1		0.074 (J)		0.068 (J)
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)		
4/3/2019									
4/4/2019				0.13 (J)		0.78		0.08 (J)	0.087 (J)
9/16/2019	0.03 (J)						0.1 (J)		
9/17/2019		0.061 (J)	0.079 (J)						
9/18/2019					0.027 (J)	0.81		0.058 (J)	0.066 (J)
9/19/2019				0.13 (J)					
2/3/2020	0.032 (J)	0.061 (J)					0.40		
2/4/2020			0.40	0.14	0.000 (1)		0.13		
2/5/2020			0.12	0.14	0.026 (J)	0.70		0.070 (1)	0.070 (1)
2/7/2020	0.040 (1)	0.050 (1)				0.79		0.072 (J)	0.079 (J)
3/16/2020	0.042 (J)	0.052 (J)	<0.1		0.04471)		0.027 (1)		
3/17/2020			<0.1	0.052 (1)	0.044 (J)	0.71	0.037 (J)	0.08471)	<0.1
3/18/2020 3/19/2020				0.052 (J)		0.71		0.084 (J)	<0.1
5/4/2020									
9/21/2020		0.037 (J)							
9/22/2020	<0.1	0.037 (3)	0.1		<0.1		0.068 (J)		
9/23/2020	<b>~0.1</b>		0.1	0.09 (J)	<b>~0.1</b>	0.63	0.008 (3)	0.049 (J)	0.05 (J)
9/24/2020				0.03 (0)		0.03		0.043 (0)	0.03 (3)
2/2/2021	0.028 (J)	0.065 (J)	0.071 (J)		<0.1				
2/3/2021	0.020 (0)	0.000 (0)	0.071 (0)				0.088 (J)		
2/4/2021				0.12		0.69	0.000 (0)	0.052 (J)	0.064 (J)
3/10/2021		0.045 (J)	0.046 (J)	- <del>-</del>	<0.1			(-)	· (-/
3/11/2021	<0.1	- (-)	- (-)	0.15			0.092 (J)	0.061 (J)	0.05 (J)
3/12/2021				•		0.88	(-)	(-)	- \-/

	WGWA-4 (bg)	WGWA-3 (bg)	WGWA-5 (bg)	WGWC-13	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-19
5/17/2016									
5/18/2016	0.164 (J)	0.029 (J)	0.014 (J)						
5/19/2016				0.384	0.12 (J)	0.039 (J)	0.304	1.58	
7/19/2016			<0.1						
7/20/2016	0.17 (J)	<0.1		0.34	0.11 (J)	<0.1	0.27	2	
9/13/2016	0.15 (J)	<0.1							
9/14/2016			0.095 (J)	0.31	0.095 (J)	<0.1		1.8	
9/15/2016							0.24		
11/9/2016									
11/10/2016	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						
1/20/2017									
1/24/2017									
1/27/2017				0.28	<0.1	<0.1			
2/6/2017							0.27		0.45
2/8/2017									
2/9/2017								1.3	
2/23/2017									
3/13/2017									
3/14/2017	0.13 (J)	<0.1	<0.1						
3/15/2017				0.3	<0.1	<0.1	0.25	1.3	0.37
3/17/2017									
4/11/2017								1.4	0.37
4/24/2017									
4/25/2017	0.12 (J)	<0.1	<0.1						
4/26/2017				0.33	<0.1	<0.1	0.31	1.5	0.4
5/17/2017									
6/7/2017									0.35
7/11/2017									0.39
8/8/2017		<0.1							
8/9/2017	0.14 (J)		<0.1	0.32					
8/10/2017					0.11 (J)	<0.1	0.37	1.6	0.42
10/10/2017									
10/11/2017	0.14 (J)	<0.1	<0.1						
10/12/2017				0.28	0.091 (J)	<0.1	0.35	1.5	0.36
3/27/2018									
3/28/2018	0.12 (J)	<0.1	<0.1						
3/29/2018				0.27	0.089 (J)	<0.1	0.36	1.4	0.34
3/30/2018									
6/13/2018			<0.1						
6/14/2018	0.12 (J)	<0.1		0.27	0.1 (J)	<0.1	0.56	1.4	0.35
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	0.13 (J)	<0.1	<0.1		- 1- 10				
10/4/2018				0.23	0.12 (J)	<0.1	0.27	1.4	0.35
2/25/2019									

	WGWA-4 (bg)	WGWA-3 (bg)	WGWA-5 (bg)	WGWC-13	WGWC-12	WGWC-11	WGWC-8	WGWC-9	WGWC-19
2/26/2019	0.14 (J)	<0.1	<0.1						
2/27/2019				0.25	0.06 (J)	0.047 (J)	0.054 (J)		
2/28/2019								1.4	0.28
4/1/2019									
4/2/2019	0.14 (J)	0.039 (J)	<0.1						0.33
4/3/2019				0.24	0.084 (J)	0.048 (J)	0.5	1.3	
4/4/2019									
9/16/2019			<0.1						
9/17/2019	0.14 (J)								
9/18/2019		0.033 (J)		0.22					0.32
9/19/2019					0.093 (J)	0.037 (J)	0.42	1.3	
2/3/2020									
2/4/2020	0.13	0.031 (J)	<0.1						
2/5/2020				0.2	0.098 (J)	0.045 (J)		1.3	
2/7/2020							0.25		0.35
3/16/2020									
3/17/2020	0.11	0.04 (J)	<0.1						
3/18/2020					0.033 (J)	<0.1			
3/19/2020				0.15			0.057 (J)	1	
5/4/2020									0.36
9/21/2020	0.091 (J)	<0.1							
9/22/2020			<0.1				0.14		
9/23/2020					0.064 (J)			0.82	0.25
9/24/2020				<0.1		0.18			
2/2/2021	0.15	0.035 (J)							
2/3/2021			<0.1		0.082 (J)	0.027 (J)	0.15		0.3
2/4/2021				0.16				0.91	
3/10/2021	0.12	<0.1	<0.1						
3/11/2021				0.18			0.16		0.31
3/12/2021					0.096 (J)	0.044 (J)		0.98	

		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)
2/2/2021	
2/3/2021	
2/4/2021	0.033 (J)
3/10/2021	
3/11/2021	0.04 (J)
3/12/2021	

	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			G 1						0.00
1/24/2017						7.71		5.54	
1/27/2017						7.71		3.54	
2/6/2017				6.93					
2/8/2017				0.93					
2/23/2017									
3/13/2017	E 4	6.18							
	5.4	0.10	6.45		E 92	7.57			5.86
3/14/2017			0.45	0.00	5.82	7.57		F 20	5.60
3/15/2017				6.82				5.39	
3/17/2017									
4/11/2017	5.4	0.05							
4/24/2017	5.4	6.35							
4/25/2017			6.93	0.70	5.57	7.47	7.73	5.28	5.35
4/26/2017				6.73					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	5.32	6.23	6.72		5.6		7.74		
8/9/2017						7.37		5.46	5.25
8/10/2017				6.66					
8/25/2017									5.44
10/10/2017	5.26	6.32							
10/11/2017			6.75		5.43	7.42	7.71	5.45	6.99
10/12/2017				6.67					
3/27/2018	5.39	6.14							
3/28/2018			6.84		5.29		7.28		5.95
3/29/2018								5.33	
3/30/2018				6.98		7.48			
6/13/2018	5.33		6.31				7.78		5.13
6/14/2018		6.02		6.56	5.39	7.5		5.35	
9/24/2018		6.1							
9/27/2018	5.33								
9/28/2018			6.26						
10/2/2018							7.52		
10/3/2018					5.33	7.11			5.22

	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									
9/21/2020		6.05							
9/22/2020	5.09		7.18		5.36		7.4		6.78
9/23/2020				6.14		7.35		5.05	
9/24/2020									
2/2/2021	5.36	6.1	6.48		5.84				
2/3/2021							7.76		5.3
2/4/2021				6.21		7.77		5.42	
3/10/2021		6.11	5.8		4.96				5.22
3/11/2021	5.26			6.56			7.93	5.21	
3/12/2021						7.72			

	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	6.41	7.23	5.55						
5/19/2016				5.93	6.85	5.99	6.31	6.91	
7/18/2016				5.9661					
7/19/2016									
7/20/2016	6.662463	7.281557	5.656628		6.705264	6.194334	6.345061	6.962608	
9/1/2016								6.96	
9/13/2016		7.15	5.63						
9/14/2016	6.7				6.7		6.33		
9/15/2016						6.38			
11/9/2016									
11/10/2016	6.51	6.33	5.61		6.5				
11/11/2016				6.03				6.76	6.93
11/14/2016						5.7			
1/17/2017									
1/18/2017		6.94	5.81						
1/19/2017									
1/20/2017	6.55								
1/24/2017									
1/27/2017				6.21	6.47			6.66	
2/6/2017						5.66			6.8
2/8/2017									
2/23/2017									
3/13/2017									
3/14/2017	6.27	6.75	5.53						
3/15/2017				5.97	6.75	5.77	5.99	6.3	6.78
3/17/2017									
4/11/2017									6.79
4/24/2017									
4/25/2017	6.26	6.84	5.59						
4/26/2017				6.17	6.57	5.39	6.03	6.67	6.82
5/17/2017									
6/7/2017									6.76
7/11/2017									6.99
8/8/2017			5.52						
8/9/2017	6.47	6.67			6.55				
8/10/2017				6.05		5.59	5.86	6.7	6.59
8/25/2017									
10/10/2017									
10/11/2017	6.47	6.75	5.51						
10/12/2017				6.89	6.67	5.46	6.09	6.89	6.7
3/27/2018									
3/28/2018		6.79	5.6						
3/29/2018				6.85	6.99	5.43	5.89	7.08	6.88
3/30/2018	6.71								
6/13/2018									
6/14/2018	6.15	6.67	5.58	5.89	6.39	5.76	6.47	6.73	6.72
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		6.92	5.45						

	WGWC-17	WGWA-4 (bg)	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
10/4/2018	6.14			5.81	6.5	5.39	6.17	6.79	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	6.1	6.91	
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	6.38	6.63	
2/3/2020									
2/4/2020		7.29	5.66						
2/5/2020				5.89	6.44		6.54	6.76	
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
9/21/2020		6.81	5.35						
9/22/2020						5.17			
9/23/2020	5.89						5.8	6.42	6.59
9/24/2020				5.5	6.29				
2/2/2021		6.61	5.78						
2/3/2021				5.21		5.08		6.15	6.75
2/4/2021	6.31				6.34		6.22		
3/10/2021		7.19	5.49						
3/11/2021	5.96				5.95	5.35			7.12
3/12/2021				5.46			5.88	6.66	

		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	0.07			
10/11/2017	6.97			
10/12/2017				
3/27/2018				
3/28/2018	0.54			
3/29/2018	6.51			
3/30/2018				
6/13/2018	5.70			
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
2/2/2021	
2/3/2021	
2/4/2021	5.76
3/10/2021	
3/11/2021	5.1
3/12/2021	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
5/17/2016	<1	1.14	19.9						
5/18/2016				8.88	0.821 (J)	388	0.368 (J)	32.1	5.32
5/19/2016									
7/19/2016	<1	1.4	14	9		460	<1		
7/20/2016					0.82 (J)			9.7	6.5
9/13/2016	<1	1.1	11	8.5	0.81 (J)		<1		5.6
9/14/2016						500		6.6	
9/15/2016									
11/9/2016	<1	1.1	6.3	8.2					
11/10/2016					0.73 (J)	530	<1	5.2	5.4
11/11/2016									
11/14/2016									
1/17/2017	<1	2.1							
1/18/2017				9.4	0.99 (J)		1.4		5.1
1/19/2017			7.4						
1/20/2017								5.3	
1/24/2017						600			
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<1	0.97 (J)							
3/14/2017			10	2	0.83 (J)		<1	9.6	4.6
3/15/2017						610			
3/17/2017									
4/11/2017									
4/24/2017	<1	0.75 (J)							
4/25/2017			10	8.2	0.7 (J)	620	<1	20	6.6
4/26/2017					, ,				
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<1	1.1	12	8.5	0.82 (J)		<1		
8/9/2017					(-)	780		6.5	7.3
8/10/2017									
10/10/2017	<1	1.3							
10/11/2017			11	8.3	0.72 (J)	720	<1	13	6.8
10/12/2017					, ,				
6/13/2018	<1		8.2	8.3					
6/14/2018		0.84 (J)			<1	620	<1	16	6.9
9/24/2018		0.79 (J)							
9/27/2018	<1	( )							
9/28/2018			7.6						
10/2/2018				8.3					
10/3/2018				-	0.73 (J)		<1		7
10/4/2018					- \-/	560		15	
4/1/2019	<1	1				- y <del>-</del>		*	
4/2/2019			11	8.5	1.1		0.4 (J)		8.1
4/3/2019			•	- <del>-</del>	-		- ' \-'/		-
4/4/2019						250		9.1	
9/16/2019	0.49 (J)			8.9		_30			
	(-)			- <del>-</del>					

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
9/17/2019		1.3	8						8.1
9/18/2019					0.78 (J)	130	<1	7.3	
9/19/2019									
3/16/2020	0.42 (J)	1.3							
3/17/2020			8.5	12	1.2		0.86 (J)		12
3/18/2020						120		4.2	
3/19/2020									
5/4/2020									
9/21/2020		1.1			0.77 (J)				7.7
9/22/2020	<1		9	8			0.38 (J)		
9/23/2020						85		4.4	
9/24/2020									
3/10/2021		0.9 (J)	7.1		0.91 (J)		<1		8.1
3/11/2021	<1			8.4		64		3.9	
3/12/2021									

		WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
5/17/2	2016									
5/18/2	2016	2.84	50.7	0.955 (J)						
5/19/2	2016				146	19.2	15.8	35.9	1.83	
7/19/2	2016		62	0.76 (J)						
7/20/2	2016	2.8			150	11	16	37	1.6	
9/13/2	2016									
9/14/2	2016	2.8	79	3.4		8.6	16	39	1.5	
9/15/2	2016				140					
11/9/2										
11/10			61			5.7				
11/11	/2016	2.6					14		1.4	3.4
11/14	/2016				160					
1/17/2										
1/18/2										
1/19/2				21						
1/20/2										
1/24/2			34							
1/27/2			04			6.8	15		2.5	
2/6/20		2.7			180	0.0	13		2.5	3.7
2/8/20		2.7			100					5.7
2/9/20								60		
2/23/2								00		
3/13/2			40	4.4						
3/14/2		0.7	43	1.4	470		47		0.5	0.0
3/15/2		2.7			170	11	17	44	2.5	3.6
3/17/2								00		0.0
4/11/2								36		3.2
4/24/2										
4/25/2			39	0.89 (J)						
4/26/2		2.5			180	8.1	15	37	2.2	3.3
5/17/2										
6/7/20										3.8
7/11/2										3.3
8/8/20										
8/9/20			35	0.75 (J)		8.1				
8/10/2		2.2			180		16	38	2.3	3.7
10/10/										
10/11			48	<1						
10/12		1.9			180	6.1	14	37	1.9	3.6
6/13/2				<1						
6/14/2		2	44		170	5	14	37	1.7	3.5
9/24/2										
9/27/2										
9/28/2	2018									
10/2/2										
10/3/2			49	<1						
10/4/2	2018	1.9			780	4.3	14	38	1.6	4.6
4/1/20	019									
4/2/20	019			0.94 (J)						3.8
4/3/20	019				180	3.8	13	41	1.9	
4/4/20	019	2.2	41							
9/16/2	2019			2.2						

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
9/17/2019									
9/18/2019		37			3.9				3.6
9/19/2019	2.1			190		14	42	1.3	
3/16/2020									
3/17/2020			4						
3/18/2020	2.1	17				12		1.6	
3/19/2020				200	4		45		
5/4/2020									4.5
9/21/2020									
9/22/2020			1.5	200					
9/23/2020	1.8	21				12	54		3
9/24/2020					0.63 (J)			2.7	
3/10/2021			<1						
3/11/2021	2.8			220	2.9				4
3/12/2021		19				14	62	2	

		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	4.2			
2/8/2017	4.3			
2/9/2017	10			
2/23/2017	16			
3/13/2017				
3/14/2017				
3/15/2017	00			
3/17/2017	22			
4/11/2017	13			
4/24/2017				
4/25/2017	00			
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				
10/10/2017	3.4			
10/11/2017	5.4			
6/13/2018				
6/14/2018	5.8			
9/24/2018	3.6			
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
3/10/2021	
3/11/2021	1.7
3/12/2021	

	WGWA-1 (bg)			WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
5/17/2016	<10	100	112						
5/18/2016				113	29	1080	31	107	101
5/19/2016									
7/19/2016	14	84	80	92		1200	<10		
7/20/2016					<10			78	86
9/13/2016	50	70	120	100	12		<10		28
9/14/2016						1300		82	
9/15/2016									
11/9/2016	22	110	76	130					
11/10/2016					30	1400	44	98	110
11/11/2016									
11/14/2016									
1/17/2017	8	120							
1/18/2017				120	22		50		98
1/19/2017			36						
1/20/2017								82	
1/24/2017						1300			
1/27/2017									
2/6/2017									
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<10	58							
3/14/2017			70	110	22		26	120	110
3/15/2017						1500			
3/17/2017									
4/11/2017									
4/24/2017	10	94							
4/25/2017			70	100	22	1700	10	120	86
4/26/2017			7.0	100		1700	10	120	
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	<10	62	72	90	4 (J)		<10		
8/9/2017	<10	02	72	90	4 (3)	1900	<10	92	92
						1900		32	52
8/10/2017	44	140							
10/10/2017	44	140	00	09	10	1000	40	74	110
10/11/2017			90	98	10	1900	42	74	110
10/12/2017	0.4		00	110					
6/13/2018	24		38	110					•
6/14/2018		80			26	1500	14	100	92
9/24/2018		76							
9/27/2018	28								
9/28/2018			68						
10/2/2018				130			_		
10/3/2018					50		6		100
10/4/2018						1700		98	
4/1/2019	<10	63							
4/2/2019			100	110	28		15		100
4/3/2019									
4/4/2019						710		89	
9/16/2019	27			110					

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWA-6 (bg)	WGWA-3 (bg)	WGWC-16	WGWA-7 (bg)	WGWC-17	WGWA-4 (bg)
9/17/2019		120	76						120
9/18/2019					36	520	35	79	
9/19/2019									
3/16/2020	23	90							
3/17/2020			81	120	20		19		100
3/18/2020						370		98	
3/19/2020									
5/4/2020									
9/21/2020		100			22				92
9/22/2020	24		96	130			15		
9/23/2020						250		60	
9/24/2020									
3/10/2021		100	72		20		20		100
3/11/2021	24			110		190		75	
3/12/2021									

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
5/17/2016									
5/18/2016	70	190	33						
5/19/2016				311	127	101	134	39	
7/19/2016		180	<10						
7/20/2016	42			290	88	76	120	<10	
9/13/2016									
9/14/2016	40	230	150		92	96	140	24	
9/15/2016				270					
11/9/2016									
11/10/2016		210			100				
11/11/2016	72					100		42	98
11/14/2016				320					
1/17/2017									
1/18/2017									
1/19/2017			34						
1/20/2017									
1/24/2017		140							
1/27/2017					80	50		18	
2/6/2017	24			330					36
2/8/2017									
2/9/2017							180		
2/23/2017							.00		
3/13/2017									
3/14/2017		220	32						
3/15/2017	78	220	<u> </u>	370	100	120	160	54	120
3/17/2017	70			070	100	120	100	04	120
4/11/2017							120		68
4/24/2017							.20		
4/25/2017		180	22						
4/26/2017	48	100	22	380	92	100	140	42	76
5/17/2017	40			300	32	100	140	72	70
6/7/2017									74
7/11/2017									70
8/8/2017									70
8/9/2017		180	20		120				
8/10/2017	38	100	20	380	120	96	130	30	66
10/10/2017	00			000		00	100	00	00
10/11/2017		200	4 (J)						
10/12/2017	72	200	. (0)	450	110	100	120	54	100
6/13/2018	,_		<10	.00			.20	· .	
6/14/2018	40	170		410	88	94	120	16	74
9/24/2018		.,,				•	.20		, ,
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		260	24						
10/4/2018	60	200	2-7	520	100	110	140	56	100
4/1/2019				020	100		140	00	.00
4/2/2019			25						88
4/3/2019			20	430	72	66	120	<10	
4/4/2019	30	170		700		00	120	-10	
9/16/2019		170	41						
5, 15,2015			71						

	WGWC-10	WGWC-15	WGWA-5 (bg)	WGWC-8	WGWC-13	WGWC-12	WGWC-9	WGWC-11	WGWC-19
9/17/2019									
9/18/2019		160			110				96
9/19/2019	52			440		89	130	27	
3/16/2020									
3/17/2020			18						
3/18/2020	58	160				73		26	
3/19/2020				540	95		160		
5/4/2020									110
9/21/2020									
9/22/2020			190	600					
9/23/2020	50	150				90	150		94
9/24/2020					21			60	
3/10/2021			19						
3/11/2021	52			530	63				100
3/12/2021		130				78	130	27	

		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	70			
4/26/2017	76			
5/17/2017 6/7/2017	68 72			
7/11/2017	68			
8/8/2017	08			
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
3/10/2021	
3/11/2021	24
3/12/2021	

# FIGURE E.

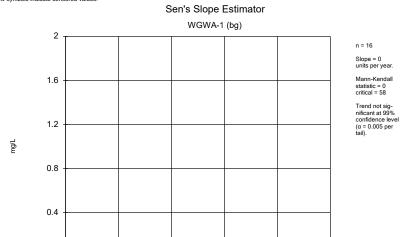
# Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:08 PM

	Plant Wansley Client: Southern Compan	y Data: Wan	sley Ash F	ond Prin	ted 5/	11/2021	, 1:08 P	М			
Constituent	Well	Slope	Calc.	Critical	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron (mg/L)	WGWC-8	0.199	63	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8	12.18	98	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)	-0.1281	-63	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8	19.96	106	58	Yes	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19	-0.01821	-89	-81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9	-0.1359	-117	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)	0.7157	79	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8	13.18	84	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWC-8	61.15	99	58	Yes	16	0	n/a	n/a	0.01	NP

# Appendix III Trend Tests - Prediction Limits Exceedances - All Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:08 PM

	Plant Wansley	Client: Southern Compan	Company Data: Wansley Ash Pond Printed 5/11/2021, 1:08 PM									
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	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-18 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-2 (bg)		0	-27	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-3 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-4 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-5 (bg)		0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-6 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWA-7 (bg)		0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-16		-0.8188	-51	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-8		0.199	63	58	Yes	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	WGWC-9		0.04945	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-1 (bg)		0.05215	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-18 (bg)		-1.185	-38	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-2 (bg)		-0.5121	-36	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-3 (bg)		0	8	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-4 (bg)		0	-19	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-5 (bg)		-0.07827	-28	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-6 (bg)		0	7	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWA-7 (bg)		-0.09755	-32	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	WGWC-8		12.18	98	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-1 (bg)		0.1237	56	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-18 (bg)		-0.1056	-32	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-2 (bg)		0.03627	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-3 (bg)		0	-14	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-4 (bg)		-0.01807	-51	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-5 (bg)		-0.1281	-63	-53	Yes	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-6 (bg)		0	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWA-7 (bg)		0	-7	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-16		-35.21	-42	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	WGWC-8		19.96	106	58	Yes	16	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-1 (bg)		0	-27	-81	No	20	75	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-18 (bg)		-0.01055	-72	-81	No	20	20	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-2 (bg)		-0.01627	-73	-81	No	20	45	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-3 (bg)		0	-33	-81	No	20	70	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-4 (bg)		-0.005875	-62	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-5 (bg)		0	33	74	No	19	89.47	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-6 (bg)		-0.005996	-75	-81	No	20	10	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWA-7 (bg)		0	-10	-81	No	20	80	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-15		-0.0422	-76	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-19		-0.01821	-89	-81	Yes	20	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	WGWC-9		-0.1359	-117	-81	Yes	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-1 (bg)		0	-21	-58	No	16	87.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-18 (bg)		-0.8514	-38	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-2 (bg)		-0.04053	-21	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-3 (bg)		0.01618	14	58	No	16	6.25	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-4 (bg)		0.7157	79	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-5 (bg)		0.02834	15	53	No	15	26.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-6 (bg)		0	-3	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWA-7 (bg)		0	-19	-58	No	16	68.75	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-16		-77.41	-29	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-8		13.18	84	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	WGWC-9		2.074	57	58	No	16 16	0	n/a	n/a	0.01	NP ND
Total Dissolved Solids (mg/L)	WGWA-1 (bg)		1.837	21	58	No	16	25	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-18 (bg)		-1.093	-5	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-2 (bg)		1.593	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	WGWA-4 (bg)		1.928	11 17	58 58	No No	16 16	6.25 0	n/a	n/a	0.01	NP NP
Total Dissolved Solids (mg/L)	WGWA-4 (bg)		0.7703	17	58	No	16 15		n/a	n/a	0.01	NP NP
Total Dissolved Solids (mg/L) Total Dissolved Solids (mg/L)	WGWA-5 (bg) WGWA-6 (bg)		-0.7739 2.648	-6 21	-53 58	No No	15 16	13.33 0	n/a	n/a	0.01	
Total Dissolved Solids (mg/L)  Total Dissolved Solids (mg/L)	WGWA-6 (bg) WGWA-7 (bg)		0.7294	21 6	58 58	No No	16	18.75	n/a	n/a n/a	0.01 0.01	NP NP
Total Dissolved Solids (mg/L)  Total Dissolved Solids (mg/L)	WGWA-7 (bg)		61.15	99	58 58	Yes	16	0	n/a n/a		0.01 <b>0.01</b>	NP NP
. Juli Dissolved Jolius (Ilig/L)	*********		31.13	33	33	168	.0	v	ii/d	n/a	0.01	141

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



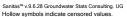
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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3/24/20

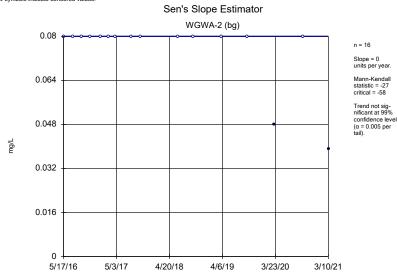
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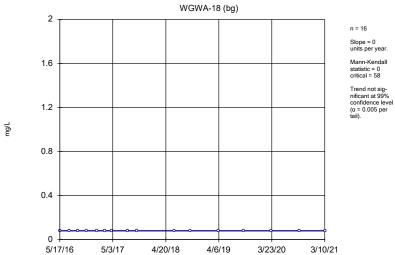
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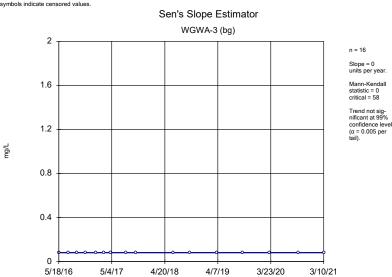
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# Sen's Slope Estimator



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



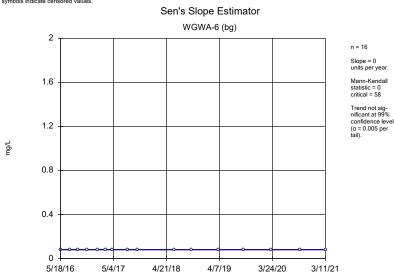
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



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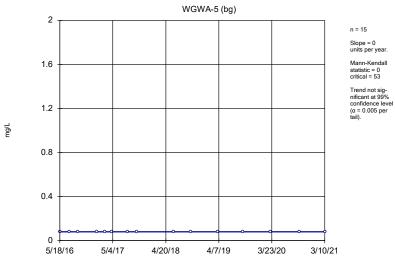




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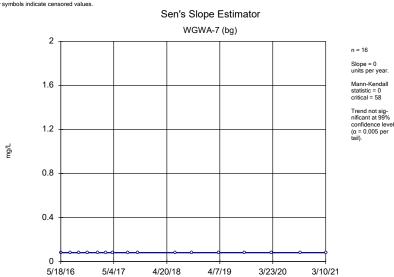
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# Sen's Slope Estimator

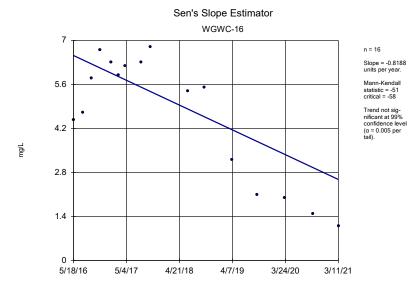


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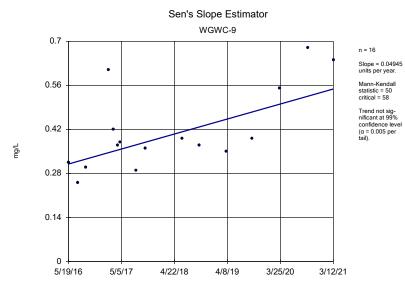
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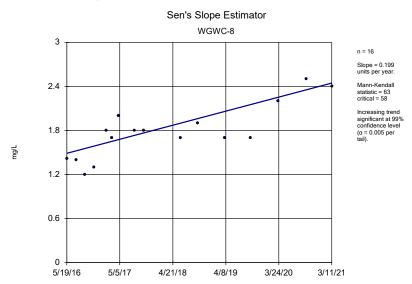
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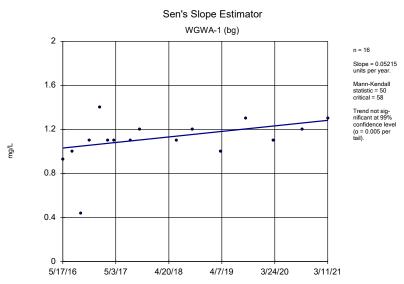
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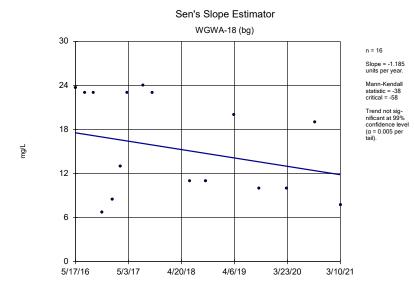
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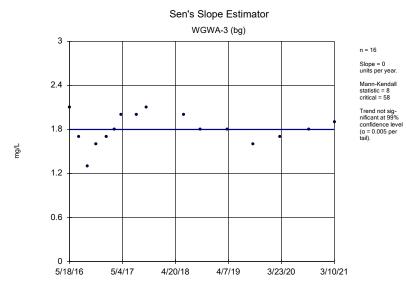
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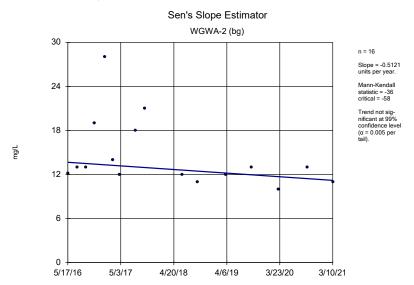
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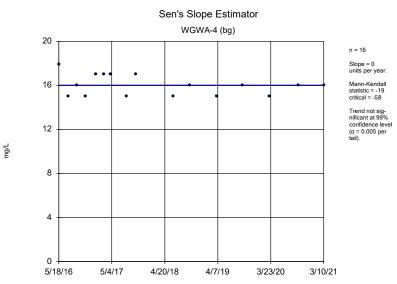
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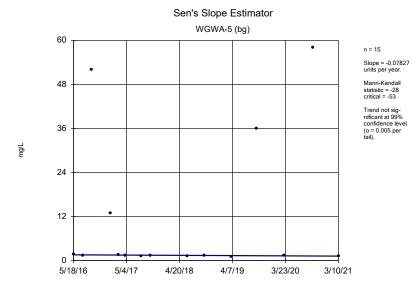
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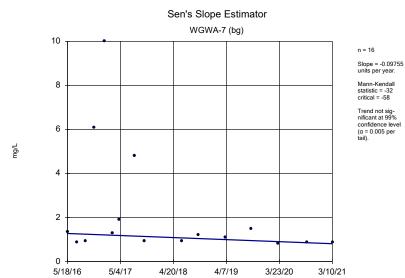
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



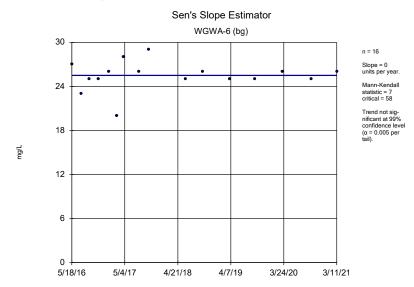
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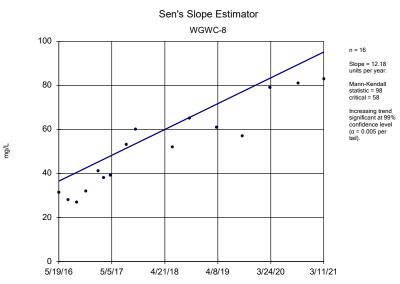
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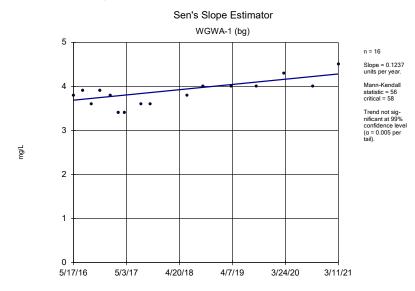
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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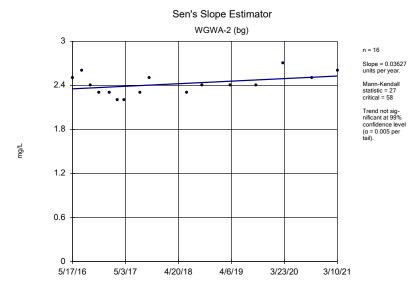


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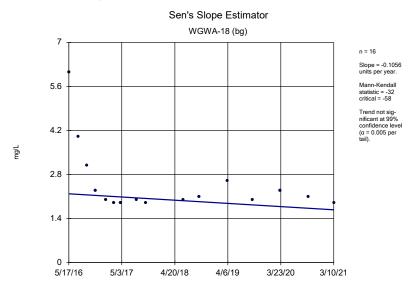


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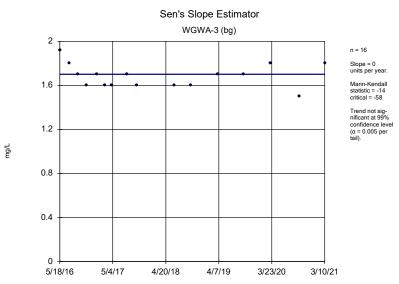




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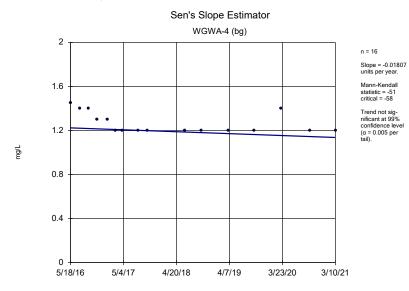


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



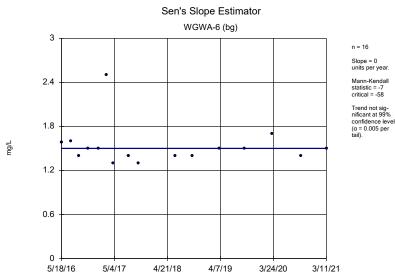
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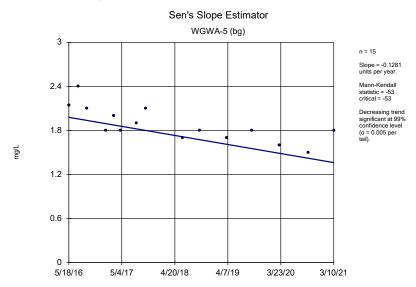


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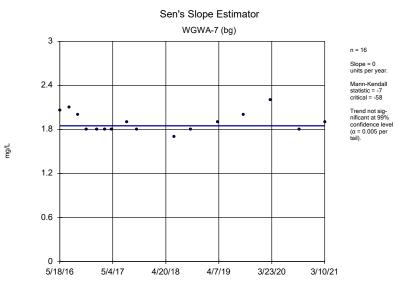
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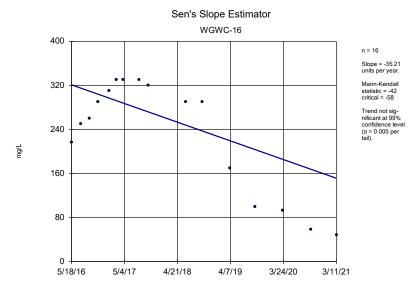
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



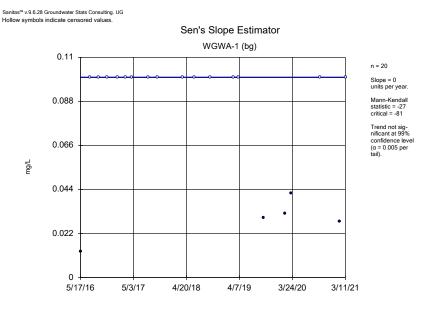
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



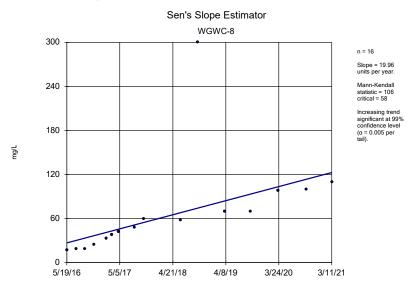
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



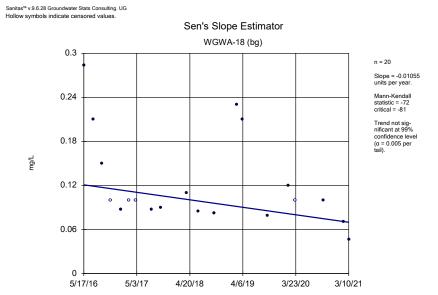
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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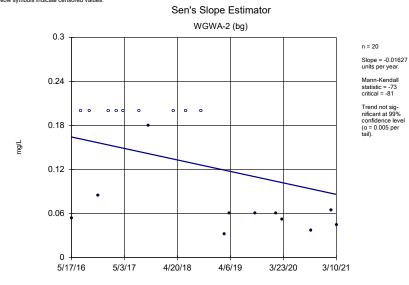


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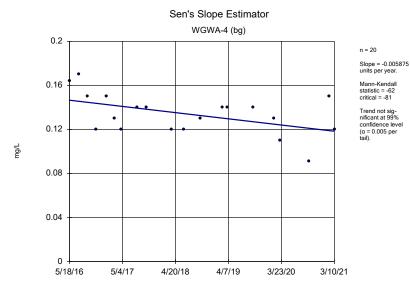


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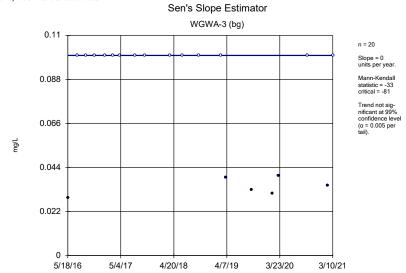
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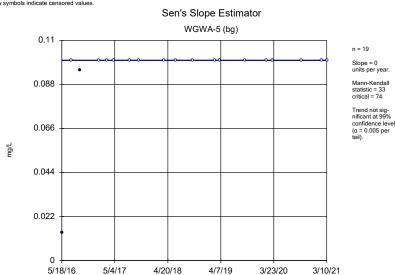


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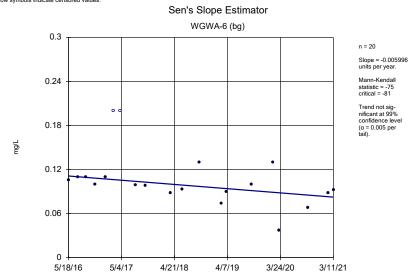


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#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

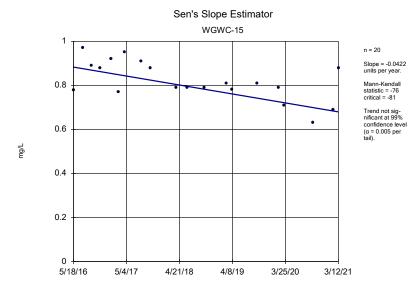


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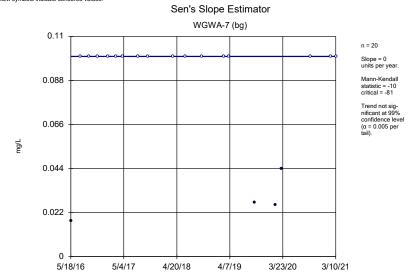
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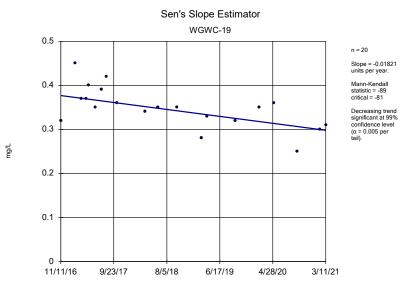


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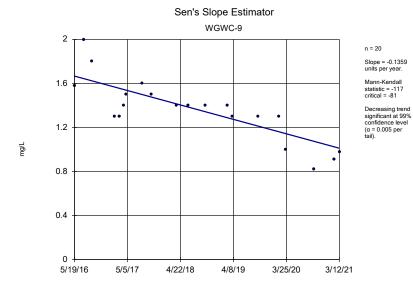
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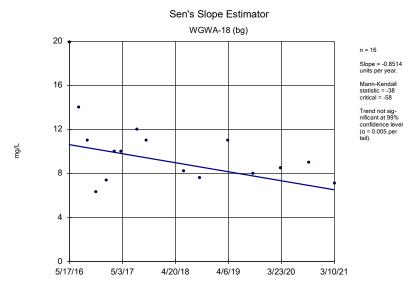
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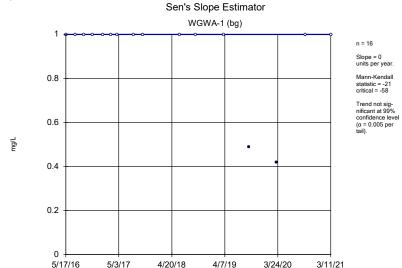
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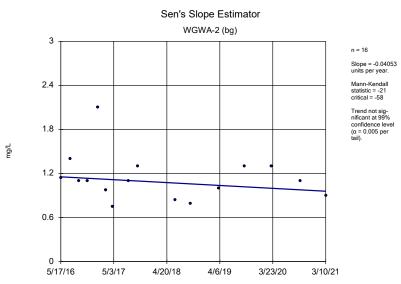
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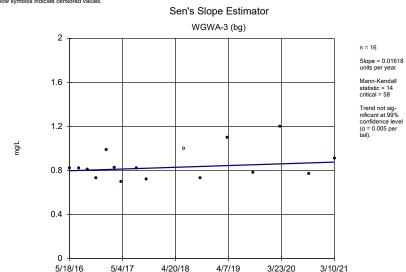
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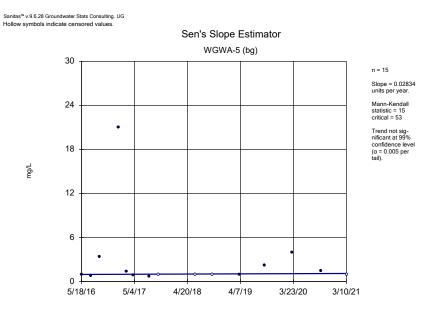
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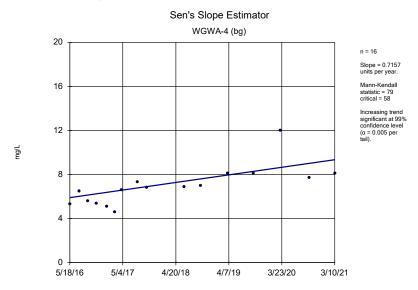
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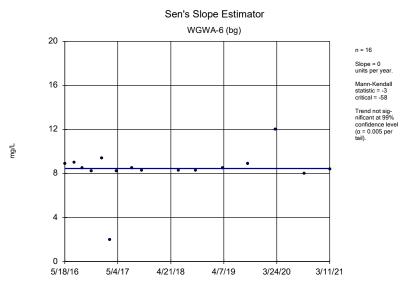
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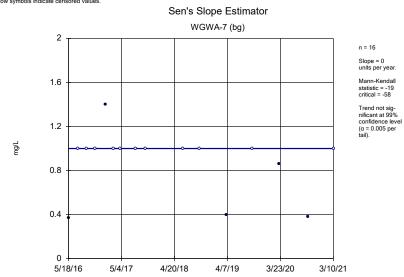
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



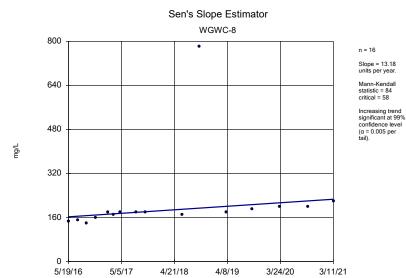
Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



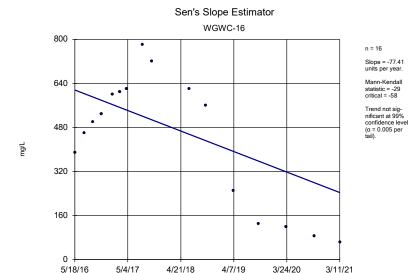
Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



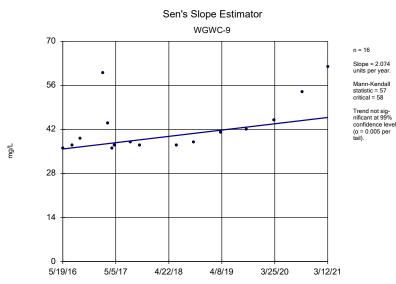
Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



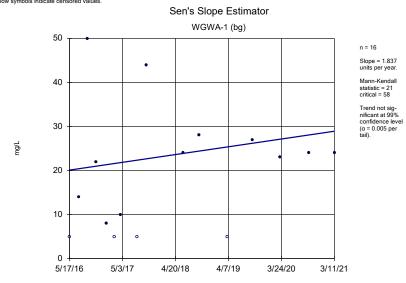
Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



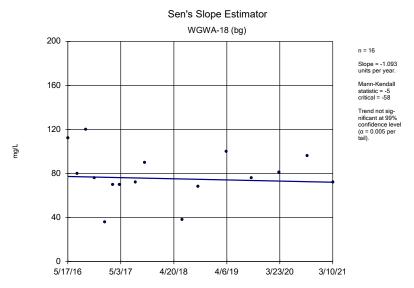
Constituent: Sulfate Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



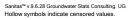
Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

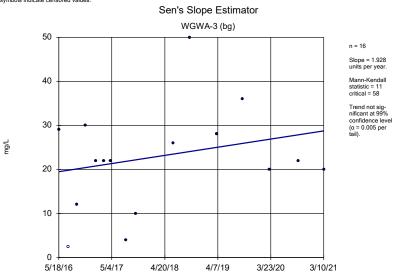
# Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Sen's Slope Estimator WGWA-2 (bg) 200 Slope = 1.593 units per year. 160 Mann-Kendall critical = 58 Trend not sig-nificant at 99% confidence level 120 (α = 0.005 per tail). 80 40 5/17/16 5/3/17 4/20/18 4/6/19 3/23/20 3/10/21

Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



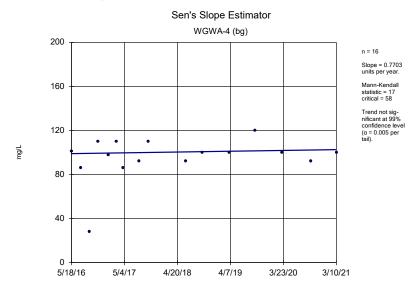
Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





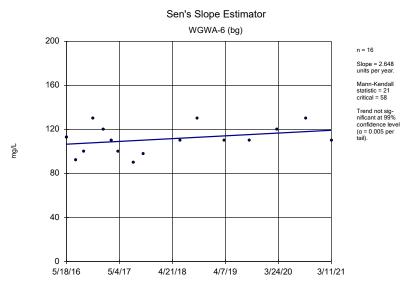
Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

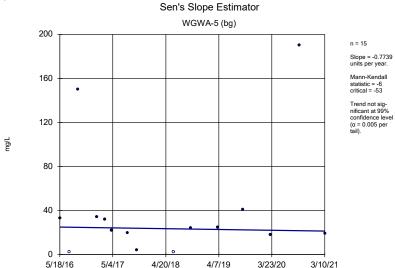


Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



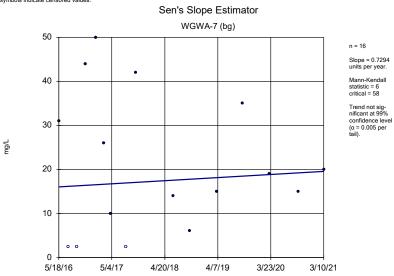


Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



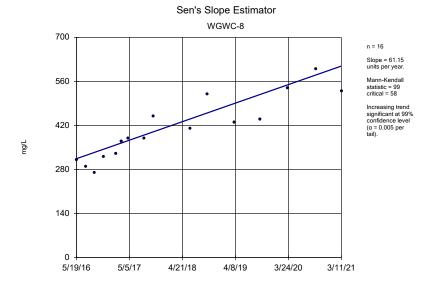
Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids Analysis Run 5/11/2021 1:06 PM View: Appendix III - Trend Tests
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# FIGURE F.

# **Upper Tolerance Limits Summary Table**

Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:09 PM Constituent Upper Lim. Lower Lim. Sig. Bg N Bg Mean Std. Dev. %NDs ND Adj. <u>Alpha</u> Method 0.0022 98.2 0.003368 Antimony (mg/L) n/a n/a 111 n/a n/a n/a n/a NP Inter(NDs) 0.0004328 NP Inter(NDs) Arsenic (mg/L) 0.0014 n/a n/a 151 n/a n/a 78.15 n/a n/a Barium (mg/L) 0.062 n/a 151 0 0.0004328 NP Inter(normality) n/a n/a n/a n/a n/a Beryllium (mg/L) 0.0025 n/a 151 92.72 n/a 0.0004328 NP Inter(NDs) NP Inter(NDs) Cadmium (mg/L) 0.0025 n/a n/a 143 n/a n/a 100 n/a 0.0006523 n/a Chromium (mg/L) 0.0049 n/a 151 n/a 94.7 n/a 0.0004328 NP Inter(NDs) Cobalt (mg/L) 0.0004556 NP Inter(normality) 0.013 n/a 46.67 n/a n/a n/a 150 n/a n/a Combined Radium 226 + 228 (pCi/L) 10.4 148 0 0.0005048 NP Inter(normality) 48.43 0.0002871 NP Inter(normality) Fluoride (mg/L) 0.284 n/a n/a 159 n/a n/a n/a n/a Lead (mg/L) 0.001 135 87.41 n/a 0.0009833 NP Inter(NDs) NP Inter(normality) Lithium (mg/L) 0.009 49.65 n/a 0.0007228 n/a n/a 141 n/a n/a n/a Mercury (mg/L) 0.0002 127 88.98 0.001482 NP Inter(NDs) Molybdenum (mg/L) 0.0004556 NP Inter(NDs) 0.015 n/a n/a 150 n/a n/a 89.33 n/a n/a Selenium (mg/L) 0.005 n/a 151 94.04 n/a 0.0004328 NP Inter(NDs) NP Inter(NDs) Thallium (mg/L) 0.001 91.39 n/a 0.0004328 n/a n/a 151 n/a n/a n/a

# FIGURE G.

WANSLEY AP GWPS												
		CCR-Rule		Federal	State							
Constituent Name	MCL	Specified	Background	<b>GWPS</b>	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

 $\label{thm:lighted} \textit{Highlighted cells indicate background is higher than established limit.}$ 

# FIGURE H.

# Federal Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:19 PM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance
 Sig.
 N
 Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.05511
 0.04727
 0.04
 Yes
 19
 0.05147
 0.007214
 0
 None
 In(x)
 0.01
 Param.

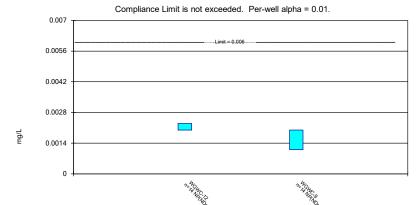
# Federal Confidence Intervals - All Results

Data: Wansley Ash Pond Printed 5/11/2021, 1:19 PM Client: Southern Company Std. Dev. Constituent Well Compliance N %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method Upper Lim. Lower Lim. Sig. WGWC-12 0.0023 0.006 14 0.002021 0.00008018 92.86 0.01 NP (NDs) Antimony (mg/L) No None No WGWC-9 0.0005998 78.57 NP (NDs) Antimony (mg/L) 0.002 0.0011 0.006 No 14 0.001709 None No 0.01 WGWC-10 0.001 0.0005 0.01 0.0008647 0.0002579 73.68 0.01 NP (NDs) Arsenic (ma/L) No 19 None No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 19 0.0009221 0.0001852 84.21 No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 19 0.0009474 0.0001578 89.47 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 No 19 0.0007705 0.0003275 42.11 No 0.01 NP (normality) None WGWC-14A 0.0017 0.00095 0.001255 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 0.0005979 63.16 None No Arsenic (mg/L) WGWC-15 0.002218 0.001316 0.01 19 0.001767 0.0007698 0 0.01 Arsenic (mg/L) WGWC-16 0.0014 0.0009 0.01 Nο 19 0.001166 0.000338 47.37 None No 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00058 0.01 No 0.0008316 0.0002108 47.37 None No 0.01 NP (normality) WGWC-8 0.0011 0.00071 0.0009447 0.000273 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 52.63 None No WGWC-9 0.0017 0.00078 0.01 0.0009974 0.01 NP (NDs) Arsenic (mg/L) No 19 0.0002133 84.21 0 WGWC-10 0.041 0.035 2 19 0.0389 0.006385 0.01 NP (normality) Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.04001 0.03165 2 No 0.03632 0.008138 0 None In(x) 0.01 Param Barium (mg/L) WGWC-12 0.0214 0.015 2 Nο 19 0.01718 0.004267 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-13 0.046 2 No 19 0.05132 0.009074 0 0.01 Param None No Barium (mg/L) WGWC-14A 0.04655 0.03101 2 No 19 0.03947 0.01419 0 None sqrt(x) 0.01 Param Barium (mg/L) WGWC-15 0.02388 0.01998 2 0.02193 0.003332 0 No 0.01 Param No 19 None Barium (mg/L) WGWC-16 0.068 0.034 2 No 19 0.04971 0.01622 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-17 0.019 0.011 2 No 19 0.01515 0.004036 n No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0012 2 No 19 0.002804 0.001937 31.58 None No 0.01 NP (normality) WGWC-8 0.005 2 0.01 Barium (mg/L) 0.001 19 0.002962 0.001771 36.84 NP (normality) No None No 0.005 Barium (mg/L) WGWC-9 0.00076 2 19 0.002486 0.001832 0.01 NP (normality) No 31.58 None No WGWC-14A 0.001788 0.01 NP (NDs) Beryllium (mg/L) 0.0025 0.00025 0.004 No 19 0.001076 68.42 None No Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 19 0.00238 0.0005231 94.74 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002122 0.001547 0.004 19 0.001834 0.0004906 0 0.01 Param No None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 19 0.001387 0.001086 47.37 0.01 NP (normality) No No WGWC-10 0.002055 0.001385 0.001989 0.0005705 15.79 0.01 Chromium (mg/L) 0.1 19 Kaplan-Meier Param. No No Chromium (mg/L) WGWC-11 0.0021 0.0002749 78.95 0.01 NP (NDs) 0.0017 0.1 No 19 0.0019 Kaplan-Meier WGWC-13 0.002 NP (NDs) Chromium (ma/L) 0.0019 0.1 No 19 0.001984 0.00005015 89.47 Kaplan-Meier No 0.01 Chromium (ma/L) WGWC-14A 0.002 0.0017 0.1 No 0.001984 0.00006882 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-15 0.001974 0.0001147 94.74 0.01 NP (NDs) Chromium (mg/L) 0.002 0.0015 0.1 Nο 19 Kaplan-Meier Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 0.002026 0.0001147 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-10 0.001624 0.0007953 0.013 0.001274 0.0008063 5.263 0.01 Cobalt (mg/L) No 19 None sart(x) Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 19 0.001612 0.0009174 36.84 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001165 0.0004782 0.013 No 19 0.0008879 0.0006689 5.263 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 19 0.001957 0.0009403 73.68 None No 0.01 NP (NDs) Cobalt (mg/L) WGWC-14A 0.013 0.0041 0.013 19 0.008116 0.004234 0 None No 0.01 NP (normality) No 0.01 NP (NDs) Cobalt (mg/L) WGWC-15 0.0025 0.00015 0.013 19 0.002376 0.0005391 94.74 No None No Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 19 0.006965 0.006383 5.263 No 0.01 NP (normality) None Cobalt (mg/L) WGWC-17 0.001683 0.0007808 0.013 0.001232 0.0007708 5.263 0.01 Param. No 19 None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 19 0.001357 0.001119 47.37 Nο 0.01 NP (normality) No None Cobalt (mg/L) WGWC-8 0.0028 0.00066 0.013 19 0.001889 0.0009969 47.37 0.01 NP (normality) No No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 19 0.002407 0.0004061 94.74 No 0.01 NP (NDs) None 0 Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4447 0.1625 0.3036 0.241 0.01 Param 10.4 19 No None No Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6324 0.4028 0 0.01 0.1607 10.4 No 19 0.3966 No Param Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6056 0.1662 19 0.3859 0.3752 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-13 0.776 0.4499 No 0.2785 0 No 0.01 Param 10.4 19 0.6129 None Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8302 0.5225 10.4 19 0.6987 0.3093 0 x^(1/3) 0.01 Param No None Combined Radium 226 + 228 (pCi/L) 0.3527 0 WGWC-15 0.6444 0.2927 10.4 No 19 0.4988 sqrt(x) 0.01 Param 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-16 0.9186 1.819 0.7854 10.4 No 19 1.396 None sqrt(x) Param Combined Radium 226 + 228 (pCi/L) 0.5319 0.09894 10.4 No 19 0.3154 0.3697 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) WGWC-19 0.511 0.126 10.4 No 19 0.3426 0.3052 0 None No 0.01 NP (normality) Combined Radium 226 + 228 (pCi/L) 0 1.951 1.293 10.4 19 1.622 0.5619 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4151 0 1467 19 0.2809 0 2292 n 0.01 104 Nο None Nο Param

# Federal Confidence Intervals - All Results

	r caciai Comiachoc michvais - 7 in racsaits												
Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:19 PM													
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	<u>%NDs</u>	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride (mg/L)	WGWC-10	0.176	0.1288	4	No	20	0.1524	0.04163	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.045	4	No	20	0.08335	0.03667	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.09725	0.07366	4	No	20	0.09225	0.0206	20	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.2939	0.2135	4	No	20	0.2537	0.07082	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.04	4	No	20	0.0812	0.02968	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.871	0.7709	4	No	20	0.821	0.08822	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.1736	0.07849	4	No	20	0.1598	0.1859	10	None	In(x)	0.01	Param.
Fluoride (mg/L)	WGWC-17	0.1379	0.08713	4	No	20	0.1125	0.04468	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.375	0.322	4	No	20	0.3485	0.0466	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3489	0.1996	4	No	20	0.2743	0.1315	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.521	1.198	4	No	20	1.36	0.2849	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.015	No	17	0.0006853	0.0003923	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	17	0.0009018	0.0002227	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.015	No	17	0.0007529	0.0002551	47.06	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.015	No	17	0.0008112	0.0003525	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.015	No	17	0.0009588	0.0001698	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	17	0.0008982	0.0002873	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	17	0.0009135	0.0002452	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.015	No	17	0.0007994	0.0003729	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	17	0.0009494	0.0002086	94.12	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01493	0.007503	0.04	No	19	0.01177	0.007138	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No	19	0.004437	0.001341	84.21	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007846	0.006125	0.04	No	19	0.006821	0.001782	5.263	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0037	0.04	No	19	0.004421	0.001082	73.68	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-14A	0.005	0.0025	0.04	No	19	0.004111	0.001325	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-15	0.007289	0.005532	0.04	No	19	0.006411	0.001501	10.53	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01057	0.006798	0.04	No	19	0.008684	0.003222	5.263	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005639	0.004704	0.04	No	19	0.005211	0.0008379	5.263	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-19	0.05511	0.04727	0.04	Yes	19	0.05147	0.007214	0	None	ln(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.018	0.013	0.04	No	19	0.01724	0.0103	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03842	0.03279	0.04	No	19	0.03561	0.004809	0	None	No	0.01	Param.
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No	19	0.01352	0.004439	89.47	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0017	0.1	No	19	0.01357	0.004289	89.47	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.0009	0.1	No	19	0.01071	0.006545	68.42	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0016	0.1	No	19	0.004216	0.004868	15.79	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No	19	0.01426	0.003212	94.74	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.006785	0.003297	0.1	No	19	0.005316	0.003485	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.005469	0.002641	0.1	No	19	0.004279	0.002553	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No	19	0.006347	0.006791	36.84	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.0071	0.003	0.1	No	19	0.005396	0.003456	0	None	No	0.01	NP (normality)
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No	19	0.004753	0.001076	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No	19	0.004763	0.001035	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No	19	0.004847	0.0006653	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No	19	0.004753	0.001078	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No	19	0.004763	0.001032	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.0111	0.005817	0.05	No	19	0.008461	0.004514	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05	No	19	0.004756	0.001064	94.74	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.003858	0.003102	0.05	No	19	0.003504	0.0006592	0	None	x^(1/3)	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002823	0.002196	0.05	No	19	0.002509	0.0005347	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002	No	19	0.0009518	0.0002099	94.74	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-11	0.001	0.00016	0.002	No	19	0.0009558	0.0001927	94.74	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00013	0.002	No	19	0.0005142	0.0004267	42.11	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00015	0.002	No	19	0.0004768	0.0004122	36.84	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-19	0.001	0.00018	0.002	No	19	0.0009568	0.0001881	94.74	None	No	0.01	NP (NDs)

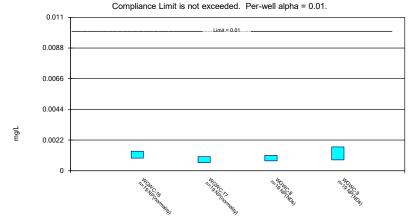
## Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Non-Parametric Confidence Interval

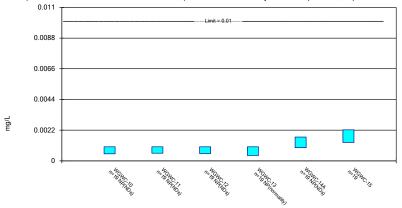


Constituent: Arsenic Analysis Run 5/11/2021 1:15 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Parametric and Non-Parametric (NP) Confidence Interval

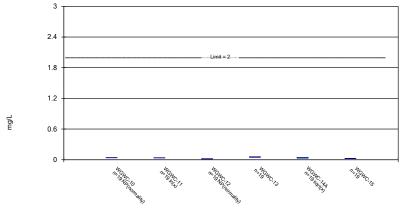
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

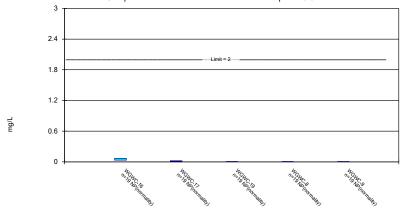
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval



## Non-Parametric Confidence Interval

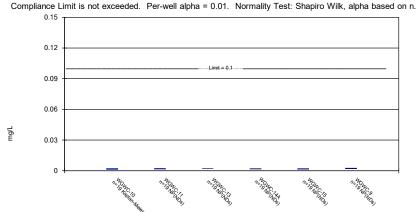
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Barium Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval

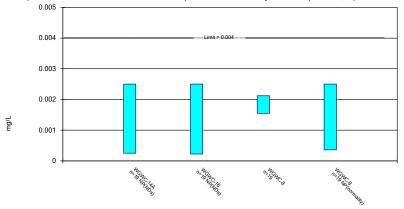


Constituent: Chromium Analysis Run 5/11/2021 1:15 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Parametric and Non-Parametric (NP) Confidence Interval

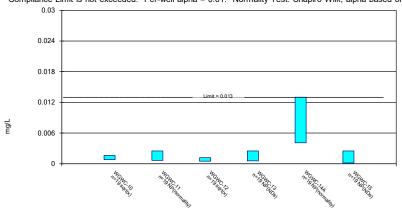
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



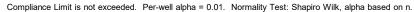
Constituent: Beryllium Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

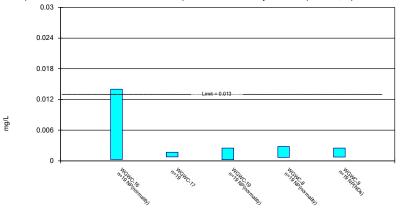
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval



# Parametric and Non-Parametric (NP) Confidence Interval



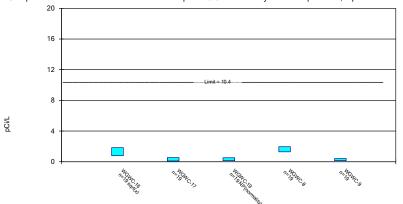


Constituent: Cobalt Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

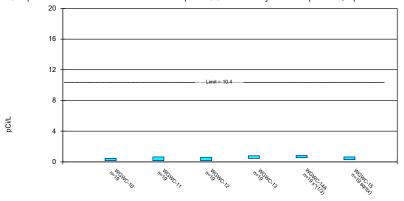
# Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



## Parametric Confidence Interval

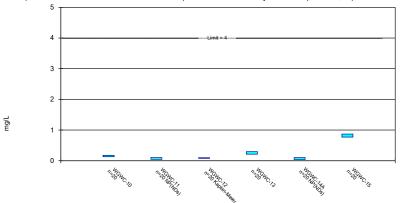
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 1:15 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

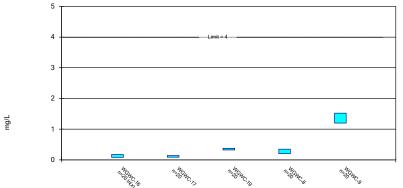
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval



## Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



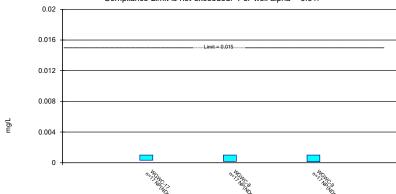
Constituent: Fluoride Analysis Run 5/11/2021 1:16 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

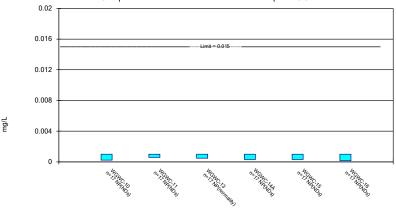


Constituent: Lead Analysis Run 5/11/2021 1:16 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Non-Parametric Confidence Interval

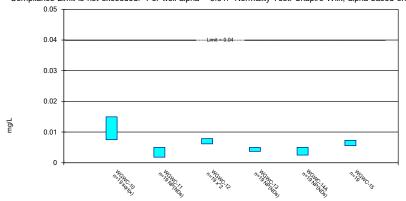
Compliance Limit is not exceeded. Per-well alpha = 0.01.



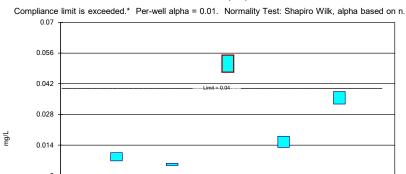
Constituent: Lead Analysis Run 5/11/2021 1:16 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval



# Parametric and Non-Parametric (NP) Confidence Interval

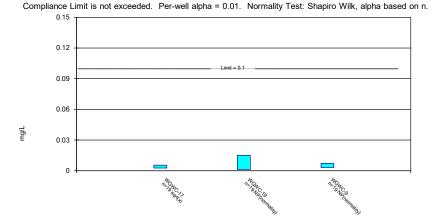


Constituent: Lithium Analysis Run 5/11/2021 1:16 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

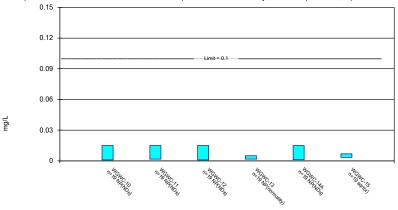
# Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Molybdenum Analysis Run 5/11/2021 1:16 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

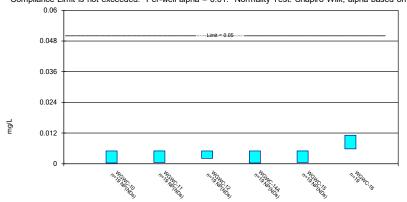
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/11/2021 1:16 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

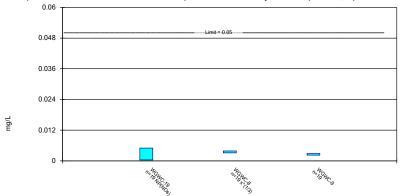
## Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# 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.

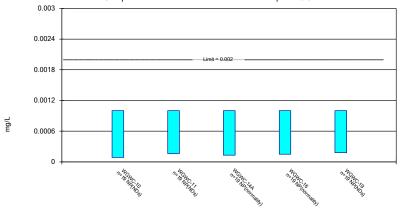


Constituent: Selenium Analysis Run 5/11/2021 1:16 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/11/2021 1:16 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# FIGURE I.

# State Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 5/11/2021, 1:14 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Lithium (mg/L)	WGWC-19	0.05511	0.04727	0.009	Yes	19	0.05147	0.007214	0	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-8	0.018	0.013	0.009	Yes	19	0.01724	0.0103	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03842	0.03279	0.009	Yes	19	0.03561	0.004809	0	None	No	0.01	Param.

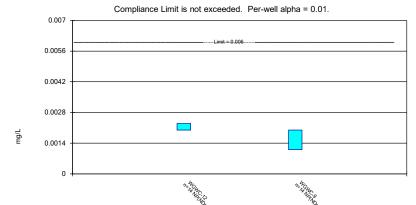
# State Confidence Intervals - All Results

Data: Wansley Ash Pond Client: Southern Company Std. Dev. Constituent Well Compliance %NDs ND Adj. <u>Transform</u> <u>Alpha</u> Method Upper Lim. Lower Lim. Sig. N WGWC-12 0.0023 0.006 14 0.002021 0.00008018 92.86 0.01 NP (NDs) Antimony (mg/L) No None No Antimony (mg/L) WGWC-9 0.0005998 78.57 NP (NDs) 0.002 0.0011 0.006 No 14 0.001709 None No 0.01 WGWC-10 0.001 0.0005 0.01 0.0008647 0.0002579 73.68 0.01 Arsenic (ma/L) NP (NDs) No 19 None No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 19 0.0009221 0.0001852 84.21 No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 19 0.0009474 0.0001578 89.47 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 No 19 0.0007705 0.0003275 42.11 No 0.01 NP (normality) None WGWC-14A 0.0017 0.00095 0.001255 0.01 NP (NDs) Arsenic (mg/L) 0.01 No 19 0.0005979 63.16 None No Arsenic (mg/L) WGWC-15 0.002218 0.001316 0.01 19 0.001767 0.0007698 0 0.01 Arsenic (mg/L) WGWC-16 0.0014 0.0009 0.01 Nο 19 0.001166 0.000338 47.37 None No 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00058 0.01 No 0.0008316 0.0002108 47.37 None No 0.01 NP (normality) WGWC-8 0.0011 0.000273 0.01 NP (NDs) Arsenic (mg/L) 0.00071 0.01 No 19 0.0009447 52.63 None No WGWC-9 0.0017 0.01 0.0009974 0.01 NP (NDs) Arsenic (mg/L) 0.00078 No 19 0.0002133 84.21 0 WGWC-10 0.041 0.035 2 19 0.0389 0.006385 0.01 NP (normality) Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.04001 0.03165 2 No 0.03632 0.008138 0 None In(x) 0.01 Param Barium (mg/L) WGWC-12 0.0214 0.015 2 Nο 19 0.01718 0.004267 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-13 0.05663 0.046 2 19 0.05132 0.009074 0 0.01 Param No None No Barium (mg/L) WGWC-14A 0.04655 0.03101 2 No 19 0.03947 0.01419 0 None sqrt(x) 0.01 Param Barium (mg/L) WGWC-15 0.02388 0.01998 2 0.02193 0.003332 0 No 0.01 Param No 19 None Barium (mg/L) WGWC-16 0.068 0.034 2 No 19 0.04971 0.01622 0 None Nο 0.01 NP (normality) Barium (mg/L) WGWC-17 0.019 0.011 2 No 19 0.01515 0.004036 0 No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0012 2 No 19 0.002804 0.001937 31.58 None No 0.01 NP (normality) WGWC-8 0.005 2 0.01 Barium (mg/L) 0.001 19 0.002962 0.001771 36.84 NP (normality) No None No 0.005 Barium (mg/L) WGWC-9 0.00076 2 19 0.002486 0.001832 0.01 NP (normality) No 31.58 None No WGWC-14A 0.001788 0.01 NP (NDs) Beryllium (mg/L) 0.0025 0.00025 0.004 No 19 0.001076 68.42 None No Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 19 0.00238 0.0005231 94.74 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002122 0.001547 0.004 0.001834 0.0004906 0 0.01 Param No 19 None No Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 19 0.001387 0.001086 47.37 0.01 NP (normality) No No Chromium (mg/L) WGWC-10 0.002055 0.001385 0.001989 0.0005705 15.79 0.01 0.1 19 Kaplan-Meier Param. No No Chromium (mg/L) WGWC-11 0.0021 0.0002749 78.95 0.01 NP (NDs) 0.0017 0.1 No 19 0.0019 Kaplan-Meier WGWC-13 0.002 NP (NDs) Chromium (ma/L) 0.0019 0.1 No 19 0.001984 0.00005015 89.47 Kaplan-Meier No 0.01 Chromium (ma/L) WGWC-14A 0.002 0.0017 0.1 No 0.001984 0.00006882 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-15 0.001974 0.0001147 94.74 0.01 NP (NDs) Chromium (mg/L) 0.002 0.0015 0.1 Nο 19 Kaplan-Meier Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 0.002026 0.0001147 94.74 Kaplan-Meier 0.01 NP (NDs) WGWC-10 0.001624 0.0007953 0.001274 0.0008063 5.263 0.01 Cobalt (mg/L) 0.013 No 19 None sart(x) Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 19 0.001612 0.0009174 36.84 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001165 0.0004782 0.013 No 19 0.0008879 0.0006689 5.263 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-13 0.0025 0.00054 0.013 No 19 0.001957 0.0009403 73.68 None No 0.01 NP (NDs) Cobalt (mg/L) WGWC-14A 0.013 0.0041 0.013 19 0.008116 0.004234 0 No 0.01 NP (normality) No None 0.01 NP (NDs) Cobalt (mg/L) WGWC-15 0.0025 0.00015 0.013 19 0.002376 0.0005391 94.74 No None No Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 19 0.006965 0.006383 5.263 0.01 NP (normality) None No Cobalt (mg/L) WGWC-17 0.001683 0.0007808 0.013 0.001232 0.0007708 5.263 0.01 Param. No 19 None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 19 0.001357 0.001119 47.37 Nο 0.01 NP (normality) No None Cobalt (mg/L) WGWC-8 0.0028 0.00066 0.013 19 0.001889 0.0009969 47.37 0.01 NP (normality) No No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 19 0.002407 0.0004061 94.74 No 0.01 NP (NDs) None 0 Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4447 0.1625 0.241 0.01 Param 10.4 19 0.3036 No None No Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6324 0.4028 0 0.01 0.1607 10.4 No 19 0.3966 No Param Combined Radium 226 + 228 (pCi/L) WGWC-12 0.6056 0.1662 19 0.3859 0.3752 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-13 0.776 No 0.2785 0 0.01 Param 0.4499 10.4 19 0.6129 None No Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8302 0.5225 10.4 19 0.6987 0.3093 0 x^(1/3) 0.01 Param No None Combined Radium 226 + 228 (pCi/L) 0.3527 0 WGWC-15 0.6444 0.2927 10.4 No 19 0.4988 sqrt(x) 0.01 Param 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-16 0.9186 1.819 0.7854 10.4 Nο 19 1.396 None sqrt(x) Param Combined Radium 226 + 228 (pCi/L) 0.5319 0.09894 10.4 No 19 0.3154 0.3697 0 None No 0.01 Param Combined Radium 226 + 228 (pCi/L) WGWC-19 0.511 0.126 10.4 No 19 0.3426 0.3052 0 None Nο 0.01 NP (normality) Combined Radium 226 + 228 (pCi/L) 0 1.951 1.293 10.4 19 1.622 0.5619 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4151 0 1467 19 0.2809 0 2292 n 0.01 104 Nο None Nο Param

# State Confidence Intervals - All Results

	e intervais - Ali Nesults												
	Plant Wansle	y Client: Se	outhern Comp	any	Data:	Wansley Ash	Pond Prin	ited 5/11/20	)21, 1:14 PM				
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	<u>N</u>	Mean	Std. Dev.	<u>%NDs</u>	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride (mg/L)	WGWC-10	0.176	0.1288	4	No	20	0.1524	0.04163	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-11	0.1	0.045	4	No	20	0.08335	0.03667	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-12	0.09725	0.07366	4	No	20	0.09225	0.0206	20	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	WGWC-13	0.2939	0.2135	4	No	20	0.2537	0.07082	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-14A	0.1	0.04	4	No	20	0.0812	0.02968	70	None	No	0.01	NP (NDs)
Fluoride (mg/L)	WGWC-15	0.871	0.7709	4	No	20	0.821	0.08822	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-16	0.1736	0.07849	4	No	20	0.1598	0.1859	10	None	In(x)	0.01	Param.
Fluoride (mg/L)	WGWC-17	0.1379	0.08713	4	No	20	0.1125	0.04468	5	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-19	0.375	0.322	4	No	20	0.3485	0.0466	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-8	0.3489	0.1996	4	No	20	0.2743	0.1315	0	None	No	0.01	Param.
Fluoride (mg/L)	WGWC-9	1.521	1.198	4	No	20	1.36	0.2849	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.001	No	17	0.0006853	0.0003923	58.82	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No	17	0.0009018	0.0002227	82.35	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00047	0.001	No	17	0.0007529	0.0002551	47.06	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.001	No	17	0.0008112	0.0003525	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.001	No	17	0.0009588	0.0001698	94.12	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No	17	0.0008982	0.0002873	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No	17	0.0009135	0.0002452	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00017	0.001	No	17	0.0007994	0.0003729	76.47	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No	17	0.0009494	0.0002086	94.12	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01493	0.007503	0.009	No	19	0.01177	0.007138	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No	19	0.004437	0.001341	84.21	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.007846	0.006125	0.009	No	19	0.006821	0.001782	5.263	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0037	0.009	No	19	0.004421	0.001082	73.68	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-14A	0.005	0.0025	0.009	No	19	0.004111	0.001325	63.16	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-15	0.007289	0.005532	0.009	No	19	0.006411		10.53	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01057	0.006798	0.009		19	0.008684		5.263	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005639	0.004704	0.009			0.005211		5.263	None	In(x)	0.01	Param.
Lithium (mg/L)	WGWC-19	0.05511	0.04727	0.009	Yes	19	0.05147	0.007214	0				Param.
										None	In(x)	0.01	
Lithium (mg/L)	WGWC-8	0.018	0.013	0.009		19	0.01724	0.0103	0	None	No	0.01	NP (normality)
Lithium (mg/L) Lithium (mg/L)	WGWC-8 WGWC-9	0.018 0.03842	0.013 0.03279	0.009	Yes	19 19	0.01724 0.03561	0.0103 0.004809	0 0	None None	No No	0.01 0.01	NP (normality) Param.
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-9 WGWC-10	<b>0.018 0.03842</b> 0.015	<b>0.013 0.03279</b> 0.00093	<b>0.009</b> 0.015	<b>Yes</b> No	<b>19</b> <b>19</b> 19	<b>0.01724 0.03561</b> 0.01352	<b>0.0103 0.004809</b> 0.004439	0 0 89.47	None None	No No	<b>0.01 0.01</b> 0.01	NP (normality) Param. NP (NDs)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11	0.018 0.03842 0.015 0.015	<b>0.013 0.03279</b> 0.00093 0.0017	<b>0.009</b> 0.015 0.015	Yes No No	<b>19</b> <b>19</b> 19	<b>0.01724 0.03561</b> 0.01352 0.01357	0.0103 0.004809 0.004439 0.004289	0 0 89.47 89.47	None None None	No No No	0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-9 WGWC-10 WGWC-11	0.018 0.03842 0.015 0.015 0.015	0.013 0.03279 0.00093 0.0017 0.0009	0.009 0.015 0.015 0.015	Yes No No No	19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071	0.0103 0.004809 0.004439 0.004289 0.006545	0 0 89.47 89.47 68.42	None None None None None	No No No No	0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13	0.018 0.03842 0.015 0.015 0.015 0.00491	0.013 0.03279 0.00093 0.0017 0.0009 0.0016	0.009 0.015 0.015 0.015 0.015	Yes No No No No	19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868	0 89.47 89.47 68.42 15.79	None None None None None None	No No No No No	0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (normality)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001	0.009 0.015 0.015 0.015 0.015 0.015	Yes No No No No	19 19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212	0 89.47 89.47 68.42 15.79 94.74	None None None None None None None None	No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297	0.009 0.015 0.015 0.015 0.015 0.015 0.015	Yes No No No No No No No No No	19 19 19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485	0 89.47 89.47 68.42 15.79 94.74	None None None None None None None None	No No No No No No No No sqrt(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs) Param.
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015	Yes No	19 19 19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553	0 0 89.47 89.47 68.42 15.79 94.74 0	None None None None None None None None	No No No No No No No o sqrt(x) sqrt(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param.  NP (NDs) NP (NDs) NP (NDs) NP (nDs) NP (normality) NP (NDs) Param. Param.
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	Yes No	19 19 19 19 19 19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791	0 89.47 89.47 68.42 15.79 94.74 0 0	None None None None None None None None	No No No No No No No No sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (nDs) NP (NDs) Param. Param. NP (normality)
Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9	0.018 0.03842 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84	None None None None None None None None	No sqrt(x) No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10	0.018 0.03842 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753	0.0103 0.004809 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0	None None None None None None None None	No sqrt(x) No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (normality) NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763	0.0103 0.004409 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74	None None None None None None None None	No No No No No No No Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (normality) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.005 0.005469 0.015 0.0071 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74	None None None None None None None None	No No No No No No No No No Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-14A	0.018 0.03842 0.015 0.015 0.00491 0.005 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0003	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763	0.0103 0.004409 0.004439 0.004289 0.006545 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74	None None None None None None None None	No No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param.  NP (NDs) NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) NP (normality) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.005 0.005469 0.015 0.0071 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004847 0.004753	0.0103 0.004409 0.004439 0.004289 0.006545 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74	None None None None None None None None	No No No No No No No No No Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-14A	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0003	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004847 0.004763	0.0103 0.004809 0.004439 0.004289 0.006545 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74	None None None None None None None None	No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (normality) NP (normality) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-13 WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-15 WGWC-15	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.0005817	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763	0.0103 0.004809 0.004439 0.004289 0.006545 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74	None None None None None None None None	No No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) NP (normality) NP (NDs) Param.
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-16 WGWC-19	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.0005817 0.00036	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74 0	None None None None None None None None	No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-19 WGWC-19	0.018 0.03842 0.015 0.015 0.015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.005 0.0111 0.005 0.003858	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.0003102	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.01426 0.005316 0.004279 0.006347 0.005396 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003253 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064 0.001064	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74 0 94.74	None None None None None None None None	No N	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs) Param. NP (NDs) Param.
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-19 WGWC-19 WGWC-19 WGWC-19 WGWC-8	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.0011 0.005 0.00111 0.005 0.003858 0.003858	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.0003102 0.0003102	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 94.74 0 94.74 0 94.74	None None None None None None None None	No N	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs) Param. NP (NDs) Param. NP (NDs) Param. Param.
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-8 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-11 WGWC-11 WGWC-15 WGWC-16 WGWC-19 WGWC-8 WGWC-9 WGWC-9 WGWC-9	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.0011 0.005 0.0011 0.005 0.00111 0.005 0.003858 0.002823 0.001	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.0002196 0.0002196	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347 0.0002099	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 94.74 0 94.74 0 94.74	None None None None None None None None	No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Thallium (mg/L)  Thallium (mg/L)	WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-9 WGWC-19 WGWC-9 WGWC-9 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.005 0.0011 0.005 0.003858 0.002823 0.001	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.002196 0.000085 0.00016	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.00509 0.005504 0.002509 0.0009518 0.0009558	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347 0.0002099 0.0001927	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 94.74 0 94.74 0 94.74 0	None None None None None None None None	No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param.  NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Thallium (mg/L)  Thallium (mg/L)  Thallium (mg/L)	WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-15 WGWC-15 WGWC-16 WGWC-19 WGWC-9 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-11	0.018 0.03842 0.015 0.015 0.0015 0.00491 0.015 0.006785 0.005469 0.015 0.0071 0.005 0.005 0.005 0.005 0.005 0.005 0.0011 0.005 0.003858 0.002823 0.001 0.001	0.013 0.03279 0.00093 0.0017 0.0009 0.0016 0.001 0.003297 0.002641 0.0012 0.003 0.00031 0.00049 0.0021 0.0003 0.0005 0.005817 0.00036 0.003102 0.002196 0.000085 0.00016 0.00013	0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	Yes No	19 19 19 19 19 19 19 19 19 19 19 19 19 1	0.01724 0.03561 0.01352 0.01357 0.01071 0.004216 0.004279 0.006347 0.005396 0.004753 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.004763 0.00509 0.00509 0.005508 0.0005518	0.0103 0.004439 0.004289 0.006545 0.004868 0.003212 0.003485 0.002553 0.006791 0.003456 0.001076 0.001035 0.0006653 0.001078 0.001032 0.004514 0.001064 0.0006592 0.0005347 0.0002099 0.0001927 0.0004267	0 89.47 89.47 68.42 15.79 94.74 0 0 36.84 0 94.74 94.74 94.74 0 94.74 0 94.74 0 94.74 0 94.74 0 94.74	None None None None None None None None	No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (normality) Param. NP (NDs) NP (NDs) NP (NDs) NP (NDs) NP (NDs) Param. Param. NP (normality) NP (NDs) Param. NP (NDs)

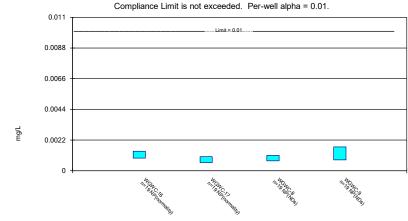
#### Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

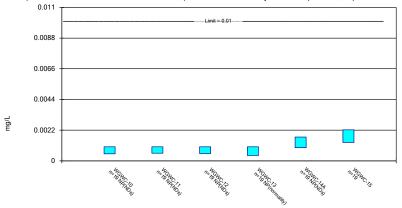
# Non-Parametric Confidence Interval



Constituent: Arsenic Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

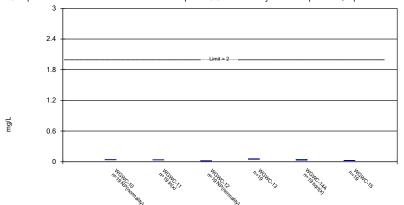
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

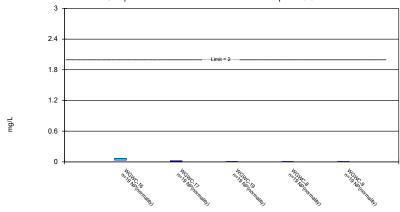
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



#### Non-Parametric Confidence Interval

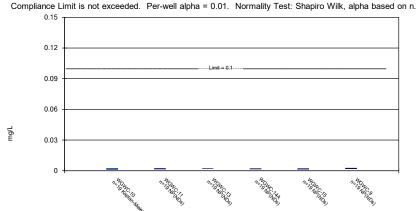
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Barium Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

# Parametric and Non-Parametric (NP) Confidence Interval

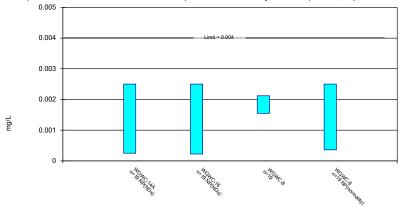


Constituent: Chromium Analysis Run 5/11/2021 1:13 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

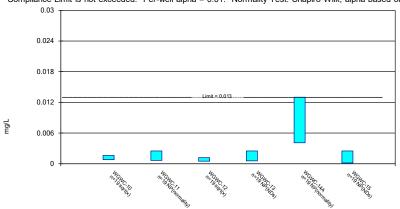
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



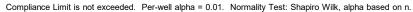
Constituent: Beryllium Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

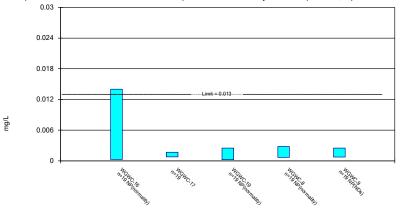
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



## Parametric and Non-Parametric (NP) Confidence Interval



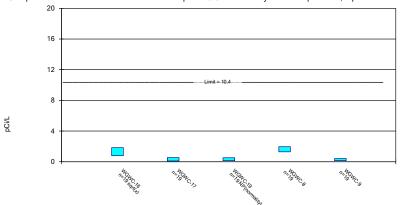


Constituent: Cobalt Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

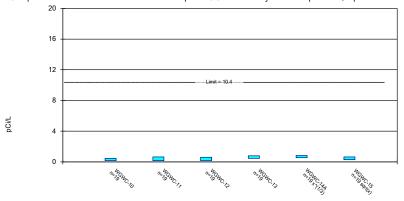
# Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



## Parametric Confidence Interval

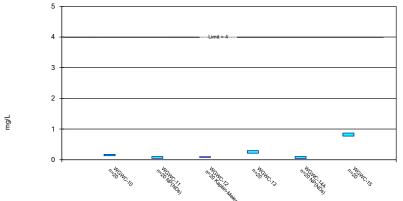
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

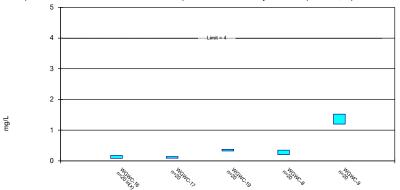
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



#### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



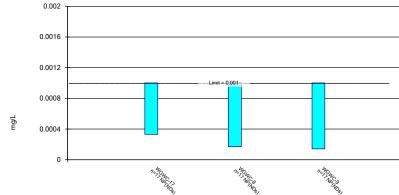
Constituent: Fluoride Analysis Run 5/11/2021 1:13 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

#### Non-Parametric Confidence Interval

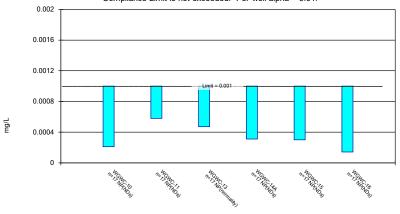
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Non-Parametric Confidence Interval

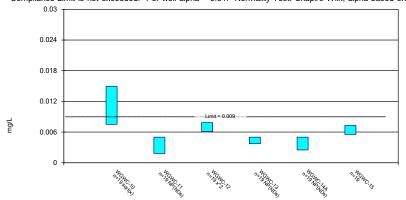
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

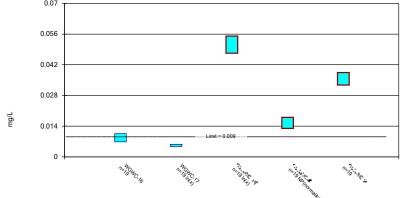
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



## Parametric and Non-Parametric (NP) Confidence Interval

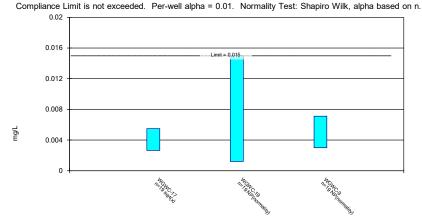




Constituent: Lithium Analysis Run 5/11/2021 1:13 PM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

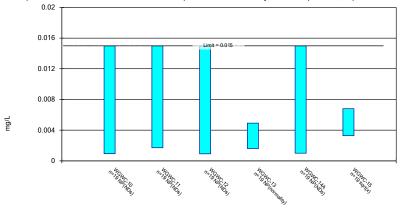
# Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Molybdenum Analysis Run 5/11/2021 1:13 PM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

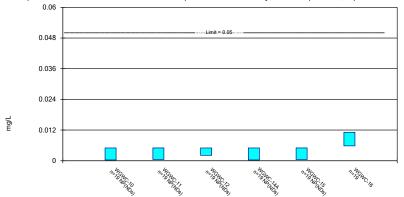
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 5/11/2021 1:13 PM View: Appendix IV Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

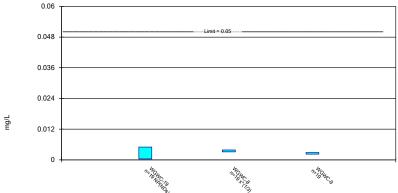
## Parametric and Non-Parametric (NP) Confidence Interval



Sanitas™ v.9.6.28 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.

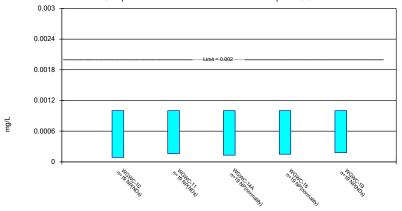


Constituent: Selenium Analysis Run 5/11/2021 1:13 PM View: Appendix IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 5/11/2021 1:13 PM View: Appendix IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# **GROUNDWATER STATS** CONSULTING

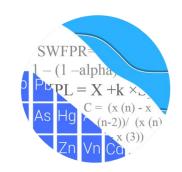
January 31, 2022

Southern Company Services Attn: Ms. Kristen Jurinko 241 Ralph McGill Blvd NE, Bin 10160 Atlanta, Georgia 30308

Re: Plant Wansley Ash Pond

August 2021 Statistical Analysis

Dear Ms. Jurinko,



Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August 2021 Groundwater Detection and Assessment Monitoring Statistical summary 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 except for those discussed below. The monitoring well network, as provided by Southern Company Services, consists of the following:

- o Upgradient wells: WGWA-1, WGWA-2, WGWA-3, WGWA-4, WGWA-5, WGWA-6, WGWA-7, and WGWA-18
- o **Downgradient wells:** WGWC-8, WGWC-9, WGWC-10, WGWC-11, WGWC-12, WGWC-13, WGWC-14A, WGWC-15, WGWC-16, WGWC-17, WGWC-19, WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25

Note that wells WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25 were first sampled in March 2021. These wells have been sampled for Appendix III parameters and lithium a maximum of 3 times and for other Appendix IV parameters a maximum of 1 time. These wells will be evaluated with prediction limits for Appendix III parameters once a minimum of 8 samples is available and with confidence intervals for Appendix IV parameters once a minimum of 4 samples is available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager 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 Coal Combustion Residuals (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, box plots are 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 Appendix IV downgradient well/constituent pairs with 100% non-detects 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 events. During the annual Scan event conducted in February 2021, cadmium and mercury were not detected; therefore, these constituents were not required to be sampled during the August 2021 event. The only wells sampled for cadmium and mercury were the new downgradient wells WGWC-20, WGWC-21, WGWC-22, WGWC-23, WGWC-24, and WGWC-25. Data from these wells are plotted on 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 non-detect 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 non-detects, 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. Non-detects are handled as follows:

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the most recent reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.</li>

- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

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 – August 2021

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**

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through August 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August 2021 sample from each downgradient well is compared to the background limit to determine whether statistically significant increases (SSIs) are present. 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; therefore, it 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. A summary table of the background prediction limits and exceedances follows this letter. Exceedances were identified for the following well/constituent pairs:

• Boron: WGWC-8, WGWC-9, and WGWC-16

• Calcium: WGWC-8

Chloride: WGWC-8 and WGWC-16

Fluoride: WGWC-9, WGWC-15, and WGWC-19
 Sulfate: WGWC-8, WGWC-9, and WGWC-16

TDS: WGWC-8 and WGWC-16

# <u>Trend Test Evaluation – Appendix III</u>

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 Appendix III trend test results follows this letter. Statistically significant trends were noted for the following well/constituent pairs:

## Increasing trends:

Boron: WGWC-8Calcium: WGWC-8

• Chloride: WGWA-1 (upgradient) and WGWC-8

• Sulfate: WGWA-4 (upgradient), WGWC-8, and WGWC-9

• TDS: WGWC-8

## Decreasing trends:

Boron: WGWC-16

• Fluoride: WGWC-9 and WGWC-15

## **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 (Maximum Contaminant Limits 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 – August 2021

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. Downgradient well/constituent pairs that have 100% non-detects do not require analysis. Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis prior to constructing statistical limits. No new values were flagged during this analysis and a complete list of flagged outliers follows this report (Figure C).

# **Interwell Upper Tolerance Limits**

First, interwell upper tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through August 2021 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% non-detects 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 Federal 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 State GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

## **Groundwater Protection Standards**

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 August 2021 sample event (Figure G). Note that a GWPS is established for cadmium and mercury; however, since these constituents were not sampled at wells that were eligible for being evaluated with confidence intervals during the August 2021 sampling event, no statistical comparison with confidence intervals was required.

## Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in all downgradient wells. 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 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,

Andrew T. Collins

Alollins

Project Manager

Tristan Clark

**Groundwater Analyst** 

Tristan Clark

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

# 100% Non-Detects: Appendix IV Downgradient

Analysis Run 10/18/2021 10:42 AM View: Confidence Intervals
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

Lead (mg/L)

WGWC-12, WGWC-19

Molybdenum (mg/L)

WGWC-16, WGWC-8

Selenium (mg/L)

WGWC-13, WGWC-17

Thallium (mg/L)

WGWC-12, WGWC-13, WGWC-15, WGWC-17, WGWC-8, WGWC-9

# Interwell Prediction Limits - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM Constituent Well Upper Lim. Lower Lim. Date Observ. Sig. Bg N %NDs Transform Method WGWC-16 8/25/2021 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 Boron, total (mg/L) 0.89 0.1 n/a Boron, total (mg/L) WGWC-8 0.1 n/a 8/26/2021 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 Boron, total (mg/L) WGWC-9 0.1 n/a 8/26/2021 0.56 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 8/26/2021 Yes 135 0 0.0001087 NP Inter (normality) 1 of 2 Calcium, total (mg/L) WGWC-8 58 85 n/a n/a Chloride, Total (mg/L) WGWC-16 6.05 n/a 8/25/2021 Yes 135 0 n/a 0.0001087 NP Inter (normality) 1 of 2 Chloride, Total (mg/L) WGWC-8 6.05 n/a 8/26/2021 110 Yes 135 0 n/a 0.0001087 NP Inter (normality) 1 of 2 Fluoride, total (mg/L) WGWC-15 0.284 8/26/2021 0.77 Yes 167 46.11 n/a 0.00007106 NP Inter (normality) 1 of 2 n/a Fluoride, total (mg/L) WGWC-19 0.284 8/26/2021 Yes 167 46.11 0.00007106 NP Inter (normality) 1 of 2 n/a Fluoride, total (mg/L) WGWC-9 0.284 n/a 8/26/2021 Yes 167 46.11 0.00007106 NP Inter (normality) 1 of 2 Sulfate as SO4 (mg/L) WGWC-16 21 8/25/2021 63 Yes 135 23.7 0.0001087 NP Inter (normality) 1 of 2 n/a n/a WGWC-8 8/26/2021 220 Yes 135 23.7 NP Inter (normality) 1 of 2 Sulfate as SO4 (mg/L) 21 n/a n/a 0.0001087 Sulfate as SO4 (mg/L) WGWC-9 21 n/a 8/26/2021 52 Yes 135 23.7 n/a 0.0001087 NP Inter (normality) 1 of 2 WGWC-16 Total Dissolved Solids [TDS] (mg/L) 190 n/a 8/25/2021 220 Yes 135 7.407 n/a 0.0001087 NP Inter (normality) 1 of 2 8/26/2021 Yes 135 7.407 n/a Total Dissolved Solids [TDS] (mg/L) WGWC-8 0.0001087 NP Inter (normality) 1 of 2

190

n/a

# Interwell Prediction Limits - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM

		Plant Wansle	y Client: So	outhern Compa	ny Data: Wans	ley Ash	Pond Pr	nted 10/13/2021	, 2:34 PM	
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N %NE	s <u>Transform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWC-10	0.1	n/a	8/26/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-11	0.1	n/a	8/25/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-12	0.1	n/a	8/25/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-13	0.1	n/a	8/25/2021	0.063J	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-14A	0.1	n/a	8/25/2021	0.043J	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-15	0.1	n/a	8/26/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-16	0.1	n/a	8/25/2021	0.89	Yes			0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-17	0.1	n/a	8/25/2021	0.08ND	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-19	0.1	n/a	8/26/2021	0.08ND	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-8	0.1	n/a	8/26/2021	2.4	Yes			0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-9	0.1	n/a	8/26/2021	0.56		135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	WGWC-10	58	n/a	8/26/2021	7.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-11	58	n/a	8/25/2021	1.5	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-12 WGWC-13	58 58	n/a n/a	8/25/2021 8/25/2021	14 4	No No	135 0 135 0	n/a n/a	0.0001087 0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)										NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-14A	58	n/a	8/25/2021	0.7 31	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-15	58	n/a	8/26/2021		No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-16	58	n/a	8/25/2021	27	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-17 WGWC-19	58 58	n/a n/a	8/25/2021 8/26/2021	6 10	No No	135 0 135 0	n/a n/a	0.0001087 0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)  Calcium, total (mg/L)	WGWC-19	<b>58</b>	n/a	8/26/2021	8 <b>5</b>	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-9	58	n/a	8/26/2021	9.3	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-9	6.05	n/a	8/26/2021	1.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L) Chloride, Total (mg/L)	WGWC-10	6.05	n/a	8/25/2021	3.5	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-11	6.05	n/a	8/25/2021	3.7	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-12	6.05	n/a	8/25/2021	1.2	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-14A	6.05	n/a	8/25/2021	2.8	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-15	6.05	n/a	8/26/2021	1.4	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-16	6.05	n/a	8/25/2021	45	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-17	6.05	n/a	8/25/2021	1.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-19	6.05	n/a	8/26/2021	3.3	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-8	6.05	n/a	8/26/2021	110	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-9	6.05	n/a	8/26/2021	3.1	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-10	0.284	n/a	8/26/2021	0.16	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-11	0.284	n/a	8/25/2021	0.056J	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-12	0.284	n/a	8/25/2021	0.14	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-13	0.284	n/a	8/25/2021	0.2	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-14A	0.284	n/a	8/25/2021	0.071J	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-15	0.284	n/a	8/26/2021	0.77	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-16	0.284	n/a	8/25/2021	0.099J	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-17	0.284	n/a	8/25/2021	0.093J	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-19	0.284	n/a	8/26/2021	0.38	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-8	0.284	n/a	8/26/2021	0.21	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-9	0.284	n/a	8/26/2021	1	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-10	7.96	4.96	8/26/2021	6.31	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-11	7.96	4.96	8/25/2021	5.66	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-12	7.96	4.96	8/25/2021	6.69	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-13	7.96	4.96	8/25/2021	6.27	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-14A	7.96	4.96	8/25/2021	5.39	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-15	7.96	4.96	8/26/2021	7.58	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-16	7.96	4.96	8/25/2021	5.25	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-17	7.96	4.96	8/25/2021	6.09	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-19	7.96	4.96	8/26/2021	6.66	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-8	7.96	4.96	8/26/2021	5.36	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-9	7.96	4.96	8/26/2021	5.84	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-10	21	n/a	8/26/2021	1.8	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-11	21	n/a	8/25/2021	1.1	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-12	21	n/a	8/25/2021	13	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-13	21	n/a	8/25/2021	1.8	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-14A	21	n/a	8/25/2021	0.5ND	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-15	21	n/a	8/26/2021	16	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-16	21	n/a	8/25/2021	63	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-17	21	n/a	8/25/2021	3.3	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-19	21	n/a	8/26/2021	3.5	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-8	21	n/a	8/26/2021	220		135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-9	21	n/a	8/26/2021	52		135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-10	190	n/a	8/26/2021	60	No	135 7.40		0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-11	190	n/a	8/25/2021	32	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2

# Interwell Prediction Limits - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM

Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N %NE	s <u>Transform</u>	<u>Alpha</u>	Method
Total Dissolved Solids [TDS] (mg/L)	WGWC-12	190	n/a	8/25/2021	110	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-13	190	n/a	8/25/2021	53	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-14A	190	n/a	8/25/2021	30	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-15	190	n/a	8/26/2021	150	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-16	190	n/a	8/25/2021	220	Yes	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-17	190	n/a	8/25/2021	84	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-19	190	n/a	8/26/2021	94	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-8	190	n/a	8/26/2021	550	Yes	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-9	190	n/a	8/26/2021	170	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2

# Appendix III Trend Test - Significant Results

	Plant Wansley	Client: Southern Compa	any Data:	Wansley Ash	Pond	Printed	10/14/202	21, 2:21 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWC-16	-0.8908	-67	-63	Yes	17	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWC-8	0.1894	76	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWC-8	11.35	114	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-1 (bg)	0.1576	72	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-8	19.27	119	63	Yes	17	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-15	-0.03558	-89	-87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-9	-0.1308	-130	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-4 (bg)	0.6018	87	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-8	13.18	97	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-9	2.415	67	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWC-8	56.43	113	63	Yes	17	0	n/a	n/a	0.01	NP

# Appendix III Trend Test - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/14/2021, 2:21 PM											
	Plant Wansley	Client: Southern Compa	any Data:	wansiey Asr	Pona	Printed	10/14/20	21, 2:21 PM			
Constituent	<u>Well</u>	Slope	Calc.	Critical	Sig.	<u>N</u>	<u>%NDs</u>	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWA-1 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-18 (bg)	0	16	63	No	17	94.12	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-2 (bg)	0	-25	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-3 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-4 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-5 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-6 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-7 (bg)	0	0 <b>-67</b>	63	No	17 <b>17</b>	100 <b>0</b>	n/a	n/a	0.01 <b>0.01</b>	NP <b>NP</b>
Boron, total (mg/L) Boron, total (mg/L)	WGWC-16 WGWC-8	-0.8908 0.1894	-6 <i>7</i> 76	-63 63	Yes Yes	17	0	n/a n/a	n/a n/a	0.01	NP NP
Boron, total (mg/L)	WGWC-9	0.04945	60	63	No	17	0	n/a	n/a	0.01	NP NP
Calcium, total (mg/L)	WGWA-1 (bg)	0.04943	57	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-1 (bg)	-1.185	-38	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-10 (bg) WGWA-2 (bg)	-0.395	-34	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-2 (bg) WGWA-3 (bg)	0	1	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-4 (bg)	0	-29	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-5 (bg)	-0.04844	-17	-58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-6 (bg)	0	12	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-7 (bg)	-0.06577	-24	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWC-8	11.35	114	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-1 (bg)	0.1576	72	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-18 (bg)	-0.07462	-26	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-2 (bg)	0.05277	43	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-3 (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-4 (bg)	0	-35	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-5 (bg)	-0.08802	-54	-58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-6 (bg)	0	7	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-7 (bg)	0	-4	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-16	-40.74	-58	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-8	19.27	119	63	Yes	17	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-1 (bg)	0	-37	-87	No	21	71.43	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-18 (bg)	-0.008559	-62	-87	No	21	19.05	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-2 (bg)	-0.01627	-73	-87	No	21	42.86	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-3 (bg)	0	-41	-87	No	21	66.67	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-4 (bg)	-0.004045	-43	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-5 (bg)	0	16	81	No	20	85	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-6 (bg)	-0.005197	-59	-87	No	21	9.524	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-7 (bg)	0	-22	-87	No	21	76.19	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-15	-0.03558	-89	-87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-19	-0.01576	-77	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-9	-0.1308	-130	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-1 (bg)	0	-19	-63	No	17	88.24	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-18 (bg)	-0.7373	-43	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-2 (bg)	-0.004597	-12	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-3 (bg)	0.01065	10	63	No	17	5.882	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-4 (bg)	0.6018	87	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-5 (bg)	0.05912	24	58	No	16	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-6 (bg)	0	6	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-7 (bg)	0	-16	-63	No	17	70.59	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-16	-81.66	-45	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-8	13.18	97	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-9	2.415	67	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWA-1 (bg)	2.425	33	63	No	17	23.53	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWA-18 (bg)	0.1365	3	63	No	17 17	0	n/a	n/a	0.01	NP ND
Total Dissolved Solids [TDS] (mg/L)	WGWA-2 (bg)	2.696	17	63	No	17 17	0	n/a	n/a	0.01	NP ND
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-3 (bg) WGWA-4 (bg)	0.347 1.733	7 28	63 63	No No	17 17	5.882 0	n/a n/a	n/a n/a	0.01 0.01	NP NP
Total Dissolved Solids [TDS] (mg/L)  Total Dissolved Solids [TDS] (mg/L)	WGWA-4 (bg) WGWA-5 (bg)	1.733	6	63 58	No	16	12.5	n/a n/a	n/a n/a	0.01	NP NP
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-5 (bg) WGWA-6 (bg)	2.921	29	63	No	17	0	n/a n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-6 (bg) WGWA-7 (bg)	1.224	10	63	No	17	17.65	n/a n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)  Total Dissolved Solids [TDS] (mg/L)	WGWA-7 (bg) WGWC-16	-216	-40	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWC-8	56.43	113	63	Yes	17	0	n/a	n/a	0.01	NP
. 5 2.0001104 001140 [1.00] (mg/L)		33.70		30		••	·			0.01	

# Upper Tolerance Limit Summary Table

		Plant Wa	nsley Cli	ent: South	ern Compan	y Data: Wan	sley Ash Pond	Printed 10/18/2021, 1	0:38 AM		
Constituent	Well	Upper Lim.	<u>Date</u>	Observ	. Sig. Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transfor	m Alpha	Method
Antimony (mg/L)	n/a	0.0022	n/a	n/a	n/a 119	n/a	n/a	98.32 n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a 159	n/a	n/a	79.25 n/a	n/a	0.0002871	NP Inter(NDs)
Barium (mg/L)	n/a	0.062	n/a	n/a	n/a 159	n/a	n/a	0 n/a	n/a	0.0002871	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a 159	n/a	n/a	93.08 n/a	n/a	0.0002871	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a 143	n/a	n/a	100 n/a	n/a	0.0006523	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0049	n/a	n/a	n/a 159	n/a	n/a	94.97 n/a	n/a	0.0002871	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	n/a	n/a 158	n/a	n/a	46.2 n/a	n/a	0.0003022	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	10.4	n/a	n/a	n/a 156	n/a	n/a	0 n/a	n/a	0.0003349	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.284	n/a	n/a	n/a 167	n/a	n/a	46.11 n/a	n/a	0.0001905	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a 143	n/a	n/a	87.41 n/a	n/a	0.0006523	NP Inter(NDs)
Lithium (mg/L)	n/a	0.009	n/a	n/a	n/a 149	n/a	n/a	50.34 n/a	n/a	0.0004795	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a 127	n/a	n/a	88.98 n/a	n/a	0.001482	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a 158	n/a	n/a	89.87 n/a	n/a	0.0003022	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a 159	n/a	n/a	94.34 n/a	n/a	0.0002871	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a 159	n/a	n/a	91.82 n/a	n/a	0.0002871	NP Inter(NDs)

WANSLEY AP GWPS														
CCR-Rule Federal State  Constituent Name MCI Specified Background GWPS GWPS														
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

Highlighted cells indicate background is higher than established limit.

# Federal Confidence Intervals - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/18/2021, 10:45 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.0558
 0.0477
 0.04
 Yes 20
 0.05175
 0.007129
 0
 None
 No
 0.01
 Param.

# Federal Confidence Intervals - All Results

		Plant Wansley	Client: Southe	rn Company	Data	a: W	/ansley Ash Po	nd Printed 10/	18/2021, 1	0:45 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	<u>e Sig. 1</u>	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	WGWC-12	0.0023	0.002	0.006	No 1	15	0.00202	0.00007746	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.0011	0.006	No 1	15	0.001728	0.0005829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.00089	0.01	No 2	20	0.0008715	0.0002529	75	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No 2	20	0.000926	0.0001811	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No 2	20	0.00095	0.000154	90	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00039	0.01	No 2	20	0.000782	0.0003229	45	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0014	0.00095	0.01	No 2	20	0.001243	0.0005847	65	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.00217	0.001307	0.01	No 2	20	0.001739	0.00076	0	None	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.0014	0.001	0.01	No 2	20	0.001158	0.0003311	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-17	0.001	0.00067	0.01	No 2	20	0.00084	0.0002086	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0008798	0.0005162	0.01	No 2	20	0.0009625	0.0002774	50	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No 2	20	0.0009975	0.0002076	85	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No 2	20	0.03856	0.006403	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0405	0.03202	2	No 2	20	0.0365	0.007964	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	WGWC-12	0.01954	0.0154	2	No 2	20	0.01712	0.004162	0	None	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05611	0.04599	2	No 2	20	0.05105	0.008912	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.04693	0.03107	2	No 2	20	0.039	0.01397	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02433	0.02023	2	No 2	20	0.02228	0.003608	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.05813	0.03982	2	No 2	20	0.04898	0.01613	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-17	0.019	0.011	2	No 2	20	0.01495	0.004036	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-19	0.005	0.0013	2	No 2	20	0.002913	0.001948	35	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.0011	2	No 2	20	0.003064	0.001783	40	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.001567	0.0008775	2			0.002611	0.00187	35	Kaplan-Meier		0.01	Param.
Beryllium (mg/L)	WGWC-14A	0.0025	0.00026	0.004	No 2		0.001824	0.00106	70	None	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004			0.002386	0.0005098	95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002114	0.001571	0.004	No 2		0.001843	0.000479	0	None	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No 2		0.001337	0.00108	45	None	No	0.01	NP (normality)
Chromium (mg/L)	WGWC-10	0.00233	0.00169	0.1			0.00201	0.0005628	15	None	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0017	0.1	No 2		0.001905	0.0002685	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0019	0.1	No 2		0.00197	0.00008013	85	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No 2		0.001985	0.00006708	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0017	0.1	No 2		0.001975	0.0001118	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.0025	0.0013	0.1	No 2		0.002025	0.0001118	95	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.0025	0.0007636	0.013	No 2		0.002023	0.0008066	5	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-10	0.001503	0.0007030	0.013			0.001252	0.00093	35	None	No No	0.01	NP (normality)
	WGWC-11	0.0023	0.000479	0.013		20	0.0008685	0.0006568	5	None		0.01	Param.
Cobalt (mg/L)  Cobalt (mg/L)	WGWC-12 WGWC-13	0.001120	0.000479	0.013	No 2		0.0008083	0.0009233	75	None	sqrt(x) No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-13	0.0023	0.005423	0.013	No 2		0.007855	0.0009233	0	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-14A WGWC-15	0.01029	0.003423	0.013	No 2		0.007833	0.004283				0.01	NP (NDs)
Cobalt (mg/L)	WGWC-15	0.0023	0.00013	0.013	No 2		0.002362	0.006293	95 10	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-16 WGWC-17	0.0014	0.00026	0.013			0.006741	0.000293	5	None None	No No	0.01	Param.
Cobalt (mg/L)	WGWC-17 WGWC-19	0.00163	0.0007332			20	0.001191	0.0007719					NP (normality)
, ,				0.013			0.0013		45	None	No	0.01	, .,
Cobalt (mg/L)	WGWC-8	0.0025	0.00066	0.013				0.001019	45	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013		20	0.002411	0.0003958	95	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4377	0.1713	10.4		20	0.3045	0.2346	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6194	0.1742	10.4		20	0.3968	0.392	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.5963	0.1813	10.4		20	0.3888	0.3654	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7865	0.4694	10.4		20	0.628	0.2793	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8335	0.5318	10.4		20	0.6991	0.3011	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6472	0.3074	10.4		20	0.5077	0.3456	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-16	1.872	0.8325	10.4			1.352	0.9154	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-17	0.5347	0.1211	10.4		20	0.3279	0.3641	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-19	0.5435	0.187	10.4		20	0.3653	0.3139	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-8	2.033	1.336	10.4		20	1.685	0.614	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4374	0.1644	10.4	No 2	20	0.3009	0.2404	0	None	No	0.01	Param.

# Federal Confidence Intervals - All Results

r caciai Comiachoc intervals - 7 in results													
Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/18/2021, 10:45 AM													
Constituent	Well	Upper Lim.	Lower Lim.	Complianc	e <u>Sig.</u>	N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride, total (mg/L)	WGWC-10	0.1752	0.1304	4	No :	21	0.1528	0.04061	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-11	0.056	0.045	4	No :	21	0.05348	0.02964	57.14	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-12	0.1009	0.07516	4	No :	21	0.085	0.0284	19.05	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-13	0.2907	0.2068	4	No	21	0.2488	0.076	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-14A	0.05	0.04	4	No	21	0.04738	0.008657	66.67	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-15	0.8664	0.7707	4	No :	21	0.8185	0.0867	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-16	0.15	0.058	4	No :	21	0.1521	0.1838	9.524	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-17	0.1344	0.08396	4	No :	21	0.1092	0.04573	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-19	0.3753	0.3247	4	No	21	0.35	0.04593	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-8	0.3423	0.2001	4	No :	21	0.2712	0.1289	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-9	1.502	1.183	4	No :	21	1.342	0.2886	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.015	No	18	0.0006617	0.0003936	55.56	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	18	0.0008644	0.0002679	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00045	0.015	No	18	0.000725	0.0002744	44.44	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.015	No	18	0.0007889	0.0003548	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.015	No	18	0.0009611	0.000165	94.44	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	18	0.0009039	0.0002797	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	18	0.0009183	0.0002387	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00016	0.015	No	18	0.0007628	0.0003937	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	18	0.0009522	0.0002027	94.44	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01439	0.007231	0.04	No :	20	0.01141	0.007141	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No :	20	0.004465	0.001312	85	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.00777	0.006121	0.04	No :	20	0.006785	0.001742	5	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0038	0.04	No :	20	0.00445	0.001062	75	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0033	0.04	No :	20	0.004155	0.001305	65	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.007217	0.005553	0.04	No :	20	0.006385	0.001465	10	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01033	0.006625	0.04	No :	20	0.00848	0.003266	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005656	0.004724	0.04	No :	20	0.00519	0.0008207	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-19	0.0558	0.0477	0.04	Yes	20	0.05175	0.007129	0	None	No	0.01	Param.
Lithium (mg/L)	WGWC-8	0.017	0.013	0.04	No :	20	0.01703	0.01007	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03808	0.03257	0.04	No :	20	0.03533	0.004846	0	None	No	0.01	Param.
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No :	20	0.01359	0.004334	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0017	0.1	No :	20	0.01364	0.004187	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.00095	0.1	No :	20	0.01092	0.006442	70	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0016	0.1	No :	20	0.004051	0.004795	15	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No :	20	0.0143	0.00313	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.006568	0.003266	0.1	No :	20	0.005195	0.003435	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.005288	0.002606	0.1	No :	20	0.004176	0.002528	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No :	20	0.006085	0.006713	35	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.006065	0.003563	0.1	No :	20	0.005266	0.003413	0	None	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No :	20	0.004765	0.001049	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No :	20	0.004774	0.001008	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No :	20	0.004855	0.0006485	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No :	20	0.004765	0.001051	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No :	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01076	0.005502	0.05			0.008133	0.004632	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05			0.004768	0.001038	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.003879	0.003149	0.05			0.003514	0.0006431	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002822	0.002226	0.05			0.002524	0.0005245	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002			0.0009543	0.0002046	95	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-11	0.001	0.00016	0.002			0.000958	0.0001878	95	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00014	0.002			0.0005385	0.0004292	45	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00017	0.002			0.000503	0.0004232	40	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-19	0.001	0.00017	0.002			0.000959	0.0001175	95	None	No	0.01	NP (NDs)
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# State Confidence Intervals - Significant Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/18/2021, 10:49 AM

	Plant Warisley Client. Southern Company Data. Warisley Ash Politic Printed 10/10/2021, 10:49 AW											
<u>Constituent</u> <u>Well</u>	Upper Lim. Lower Lim.	. Compliance Sig. N M	Mean Std. Dev. %	NDs ND Adj.	<u>Transform</u> <u>Alpha</u>	Method						
Lithium (mg/L) WGWC-19	0.0558 0.0477	0.009 Yes 20 0	0.05175 0.007129 0	None	No 0.01	Param.						
Lithium (mg/L) WGWC-8	0.017 0.013	0.009 Yes 20 0	0.01703 0.01007 0	None	No 0.01	NP (normality)						
Lithium (mg/L) WGWC-9	0.03808 0.03257	0.009 Yes 20 0	0.03533 0.004846 0	None	No 0.01	Param.						

## State Confidence Intervals - All Results

Client: Southern Company Data: Wansley Ash Pond Plant Wansley Method Constituent Well Std. Dev. %NDs ND Adj <u>Alpha</u> Upper Lim. Lower Lim. Compliance Sig. N WGWC-12 0.0023 0.002 0.006 0.00202 0.00007746 93.33 NP (NDs) Antimony (mg/L) No 15 None No 0.01 NP (NDs) Antimony (mg/L) WGWC-9 0.002 0.0011 0.006 No 15 0.001728 0.0005829 80 None No 0.01 WGWC-10 0.001 0.00089 0.01 0.0008715 0.0002529 0.01 Arsenic (ma/L) No 20 75 None NP (normality) No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 20 0.000926 0.0001811 85 None No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 20 0.00095 0.000154 90 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 20 0.000782 0.0003229 45 0.01 NP (normality) No None No WGWC-14A 0.0014 0.00095 20 0.001243 0.0005847 NP (normality) Arsenic (mg/L) 0.01 No 65 None No 0.01 Arsenic (mg/L) WGWC-15 0.00217 0.001307 0.01 No 20 0.001739 0.00076 0 0.01 0.001158 Arsenic (mg/L) WGWC-16 0.0014 0.001 0.01 Nο 20 0.0003311 50 None Nο 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00067 0.01 No 20 0.00084 0.0002086 50 None 0.01 NP (normality) WGWC-8 20 0.0009625 0.0002774 Param. Arsenic (mg/L) 0.0008798 0.0005162 0.01 No 50 Kaplan-Meier No 0.01 WGWC-9 0.0017 0.00078 20 0.0009975 0.0002076 0.01 NP (NDs) Arsenic (mg/L) 0.01 85 Kaplan-Meier 0.03856 0.006403 NP (normality) WGWC-10 0.041 0.035 2 20 0 0.01 Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.0405 0.03202 2 20 0.0365 0.007964 0 None sart(x) 0.01 Param. Barium (mg/L) WGWC-12 0.01954 0.0154 2 Nο 20 0.01712 0.004162 n None x^2 0.01 Param Barium (mg/L) WGWC-13 0.05611 0.04599 2 No 20 0.05105 0.008912 0 0.01 Param. None No 2 Barium (mg/L) WGWC-14A 0.04693 0.03107 Nο 20 0.039 0.01397 0 None No 0.01 Param. Barium (mg/L) WGWC-15 0.02433 0.02023 2 20 0.02228 0.003608 0 0.01 Param. No None No Barium (mg/L) WGWC-16 0.05813 0.03982 2 No 20 0.04898 0.01613 0 None No 0.01 Param. Barium (mg/L) WGWC-17 0.019 0.011 2 No 20 0.01495 0.004036 0 No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0013 2 Nο 20 0.002913 0.001948 35 None No 0.01 NP (normality) WGWC-8 2 20 0.003064 0.001783 NP (normality) Barium (mg/L) 0.005 0.0011 No 40 No 0.01 None Barium (mg/L) WGWC-9 0.001567 0.0008775 2 No 20 0.002611 0.00187 35 0.01 Kaplan-Meier In(x) Param WGWC-14A 0.0025 0.00026 0.001824 0.00106 70 Beryllium (mg/L) 0.004 No 20 None No 0.01 NP (normality) Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 20 0.002386 0.0005098 95 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002114 0.001571 0.004 Nο 20 0.001843 0.000479 0 0.01 Param. None Nο Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 No 20 0.001337 0.00108 45 0.01 NP (normality) No WGWC-10 0.00233 0.00169 20 0.00201 0.0005628 0.01 Chromium (mg/L) 0.1 15 Param. No None No Chromium (mg/L) WGWC-11 0.0021 0.0017 20 0.001905 0.0002685 NP (NDs) 0.1 80 None No 0.01 0.002 20 Chromium (mg/L) WGWC-13 0.0019 0.1 No 0.00197 0.00008013 85 None No 0.01 NP (NDs) Chromium (ma/L) WGWC-14A 0.002 0.0017 20 0.001985 0.00006708 95 0.01 NP (NDs) WGWC-15 0.002 0.0015 20 0.001975 0.0001118 0.01 NP (NDs) Chromium (mg/L) 0.1 Nο 95 None Nο Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 20 0.002025 0.0001118 95 None No 0.01 NP (NDs) WGWC-10 0.001563 0.0007636 20 0.001232 0.0008066 Cobalt (mg/L) 0.013 Nο 5 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 20 0.001554 0.00093 35 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001126 0.000479 0.013 No 20 0.0008685 0.0006568 5 None sqrt(x) 0.01 Param. Cobalt (mg/L) WGWC-13 0.0025 0.0008 0.013 No 20 0.001984 0.0009233 75 None Nο 0.01 NP (normality) Cobalt (mg/L) WGWC-14A 0.01029 0.005423 0.013 No 20 0.007855 0.004283 0 0.01 Param None WGWC-15 0.0025 0.00015 0.0005255 Cobalt (mg/L) 0.013 No 20 0.002382 95 0.01 NP (NDs) No None Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 20 0.006741 0.006293 10 0.01 NP (normality) None No Cobalt (mg/L) WGWC-17 0.00163 0.0007532 0.013 20 0.001191 0.0007719 5 0.01 Param. No None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 No 20 0.0013 0.001118 45 0.01 NP (normality) None No Cobalt (mg/L) WGWC-8 0.0025 0.00066 0.013 No 20 0.00182 0.001019 45 0.01 NP (normality) No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 20 0.002411 0.0003958 95 No 0.01 NP (NDs) None Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4377 0.1713 10.4 20 0.3045 0.2346 0 0.01 Param. No None No 0.1742 0.3968 Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6194 20 10.4 No 0.392 0 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-12 0.5963 0.1813 20 0.3888 0.3654 0 0.01 10.4 No None No Param. Combined Radium 226 + 228 (pCi/L) WGWC-13 0.7865 0.4694 20 0.628 0.2793 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8335 0.5318 10.4 Nο 20 0.6991 0.3011 0 0.01 Param. None sart(x) Combined Radium 226 + 228 (pCi/L) WGWC-15 0.6472 0.3074 10.4 20 0.5077 0.3456 0 sqrt(x) 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-16 20 0 1.872 0.8325 10.4 Nο 1.352 0.9154 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-17 0.5347 0.1211 10.4 No 20 0.3279 0.3641 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-19 0.5435 0.187 10.4 No 20 0.3653 0.3139 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) 2.033 WGWC-8 1.336 10.4 20 1.685 0.614 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4374 0 1644 10 4 20 0.3009 0 2404 0.01 Param Nο n None Nο

# State Confidence Intervals - All Results

	P	lant Wansley	Client: Southe	rn Company	Data	ı: W	ansley Ash Por	nd Printed 10/18	3/2021, 1	0:49 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	<u> </u>	Mean	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride, total (mg/L)	WGWC-10	0.1752	0.1304	4	No 2	21	0.1528	0.04061	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-11	0.056	0.045	4	No 2	21	0.05348	0.02964	57.14	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-12	0.1009	0.07516	4	No 2	21	0.085	0.0284	19.05	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-13	0.2907	0.2068	4	No 2	21	0.2488	0.076	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-14A	0.05	0.04	4	No 2	21	0.04738	0.008657	66.67	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-15	0.8664	0.7707	4	No 2	21	0.8185	0.0867	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-16	0.15	0.058	4	No 2	21	0.1521	0.1838	9.524	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-17	0.1344	0.08396	4	No 2	21	0.1092	0.04573	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-19	0.3753	0.3247	4	No 2	21	0.35	0.04593	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-8	0.3423	0.2001	4	No 2	21	0.2712	0.1289	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-9	1.502	1.183	4	No 2	21	1.342	0.2886	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.001	No 1	18	0.0006617	0.0003936	55.56	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No 1	18	0.0008644	0.0002679	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00045	0.001	No 1	18	0.000725	0.0002744	44.44	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.001	No 1	18	0.0007889	0.0003548	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.001	No 1	18	0.0009611	0.000165	94.44	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No 1	18	0.0009039	0.0002797	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No 1	18	0.0009183	0.0002387	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00016	0.001	No 1	18	0.0007628	0.0003937	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No 1	18	0.0009522	0.0002027	94.44	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01439	0.007231	0.009	No 2	20	0.01141	0.007141	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No 2	20	0.004465	0.001312	85	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.00777	0.006121	0.009	No 2	20	0.006785	0.001742	5	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0038	0.009	No 2	20	0.00445	0.001062	75	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0033	0.009	No 2	20	0.004155	0.001305	65	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.007217	0.005553	0.009	No 2	20	0.006385	0.001465	10	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01033	0.006625	0.009	No 2	20	0.00848	0.003266	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005656	0.004724	0.009	No 2	20	0.00519	0.0008207	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-19	0.0558	0.0477	0.009	Yes 2	20	0.05175	0.007129	0	None	No	0.01	Param.
Lithium (mg/L)	WGWC-8	0.017	0.013	0.009	Yes 2	20	0.01703	0.01007	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03808	0.03257	0.009	Yes 2	20	0.03533	0.004846	0	None	No	0.01	Param.
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.015	No 2	20	0.01359	0.004334	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0017	0.015	No 2	20	0.01364	0.004187	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.00095	0.015	No 2	20	0.01092	0.006442	70	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0016	0.015	No 2	20	0.004051	0.004795	15	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.015	No 2	20	0.0143	0.00313	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.006568	0.003266	0.015	No 2	20	0.005195	0.003435	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.005288	0.002606	0.015	No 2	20	0.004176	0.002528	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.015	No 2	20	0.006085	0.006713	35	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.006065	0.003563	0.015	No 2	20	0.005266	0.003413	0	None	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No 2	20	0.004765	0.001049	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No 2	20	0.004774	0.001008	95	None	No	0.01	NP (NDs)
Selenium (mg/L)													NP (NDs)
	WGWC-12	0.005	0.0021	0.05	No 2	20	0.004855	0.0006485	95	None	No	0.01	INI (INDS)
Selenium (mg/L)	WGWC-12 WGWC-14A	0.005 0.005	0.0021 0.0003	0.05 0.05			0.004855 0.004765	0.0006485 0.001051	95 95	None None	No No	0.01	NP (NDs)
Selenium (mg/L) Selenium (mg/L)					No 2	20							
, ,	WGWC-14A	0.005	0.0003	0.05	No 2	20 20	0.004765	0.001051	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A WGWC-15	0.005 0.005	0.0003 0.0005	0.05 0.05	No 2 No 2 No 2	20 20 20	0.004765 0.004775	0.001051 0.001006	95 95	None None	No No	0.01 0.01	NP (NDs) NP (NDs)
Selenium (mg/L) Selenium (mg/L)	WGWC-14A WGWC-15 WGWC-16	0.005 0.005 0.01076	0.0003 0.0005 0.005502	0.05 0.05 0.05	No 2 No 2 No 2 No 2	20 20 20 20	0.004765 0.004775 0.008133	0.001051 0.001006 0.004632	95 95 0	None None	No No No	0.01 0.01 0.01	NP (NDs) NP (NDs) Param.
Selenium (mg/L) Selenium (mg/L) Selenium (mg/L)	WGWC-14A WGWC-15 WGWC-16 WGWC-19	0.005 0.005 0.01076 0.005	0.0003 0.0005 0.005502 0.00036	0.05 0.05 0.05 0.05	No 2 No 2 No 2 No 2 No 2	20 20 20 20 20	0.004765 0.004775 0.008133 0.004768	0.001051 0.001006 0.004632 0.001038	95 95 0 95	None None None	No No No	0.01 0.01 0.01 0.01	NP (NDs) NP (NDs) Param. NP (NDs)
Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L)	WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-8	0.005 0.005 0.01076 0.005 0.003879	0.0003 0.0005 0.005502 0.00036 0.003149	0.05 0.05 0.05 0.05 0.05	No 2	20 20 20 20 20 20	0.004765 0.004775 0.008133 0.004768 0.003514	0.001051 0.001006 0.004632 0.001038 0.0006431	95 95 0 95 0	None None None None	No No No No	0.01 0.01 0.01 0.01 0.01	NP (NDs) NP (NDs) Param. NP (NDs) Param.
Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L)	WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-8 WGWC-9	0.005 0.005 0.01076 0.005 0.003879 0.002822	0.0003 0.0005 0.005502 0.00036 0.003149 0.002226	0.05 0.05 0.05 0.05 0.05 0.05	No 2	20 20 20 20 20 20 20	0.004765 0.004775 0.008133 0.004768 0.003514 0.002524	0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245	95 95 0 95 0	None None None None None	No No No No No	0.01 0.01 0.01 0.01 0.01 0.01	NP (NDs) NP (NDs) Param. NP (NDs) Param. Param.
Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Thallium (mg/L)	WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-8 WGWC-9	0.005 0.005 0.01076 0.005 0.003879 0.002822 0.001	0.0003 0.0005 0.005502 0.00036 0.003149 0.002226 0.000085	0.05 0.05 0.05 0.05 0.05 0.05 0.05	No 2	20 20 20 20 20 20 20 20 20	0.004765 0.004775 0.008133 0.004768 0.003514 0.002524 0.0009543	0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245 0.0002046	95 95 0 95 0 0 95	None None None None None None None	No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01	NP (NDs) NP (NDs) Param. NP (NDs) Param. Param. NP (NDs)
Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Selenium (mg/L) Thallium (mg/L) Thallium (mg/L)	WGWC-14A WGWC-15 WGWC-16 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11	0.005 0.005 0.01076 0.005 0.003879 0.002822 0.001	0.0003 0.0005 0.005502 0.00036 0.003149 0.002226 0.000085 0.00016	0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.002	No 2	20 20 20 20 20 20 20 20 20	0.004765 0.004775 0.008133 0.004768 0.003514 0.002524 0.0009543 0.000958	0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245 0.0002046 0.0001878	95 95 0 95 0 0 95 95	None None None None None None None None	No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01	NP (NDs) Param. NP (NDs) Param. Param. NP (NDs) NP (NDs) NP (NDs)

# Appendix IV Trend Test - All Results (No Significant)

	Plant Wansley	ey Client: Southern Company		Data: Wansley Ash Pond		Printed	10/14/20	21, 2:17 PM			
Constituent	Well	Slope	Calc.	<u>Critical</u>	Sig.	<u>N</u>	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Lithium (mg/L)	WGWA-1 (bg)	0	-2	-74	No	19	42.11	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-18 (bg)	0	0	74	No	19	84.21	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-2 (bg)	0.00006772	9	74	No	19	0	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-3 (bg)	0	4	74	No	19	84.21	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-4 (bg)	0.0001559	36	74	No	19	0	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-5 (bg)	0	-4	-63	No	17	94.12	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-6 (bg)	0.0001185	33	68	No	18	5.556	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWA-7 (bg)	0	4	74	No	19	94.74	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWC-19	0.001479	47	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWC-8	-0.0008117	-59	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	WGWC-9	-0.0003057	-18	-81	No	20	0	n/a	n/a	0.01	NP

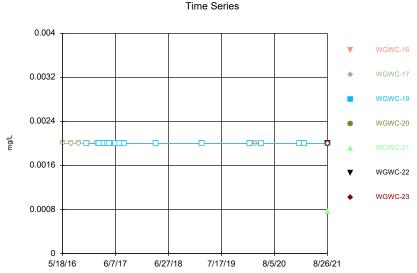
# FIGURE A.



Constituent: Antimony Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

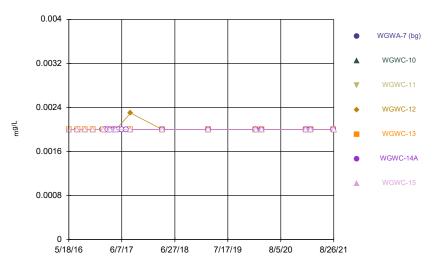
## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.



Constituent: Antimony Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Time Series

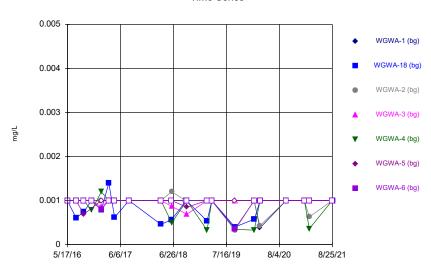


Constituent: Antimony Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

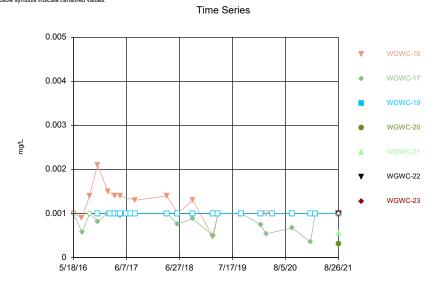
## Time Series 0.004 WGWC-24 0.0032 WGWC-25 WGWC-8 0.0024 WGWC-9 0.0016 0.0008 5/19/16 6/8/17 6/28/18 7/18/19 8/6/20 8/26/21

Constituent: Antimony Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



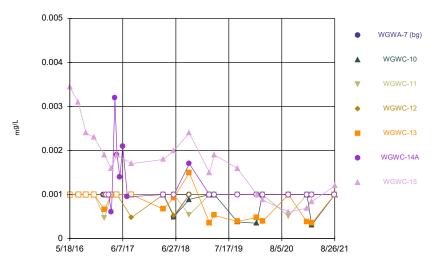
Constituent: Arsenic Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



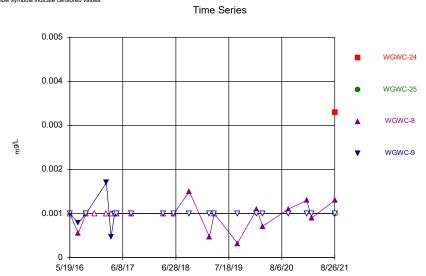
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Time Series

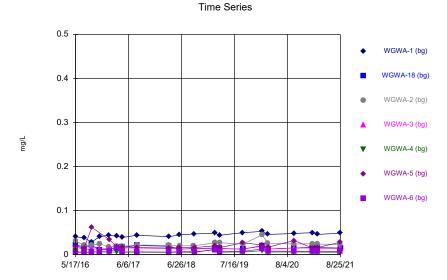


Constituent: Arsenic Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

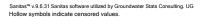
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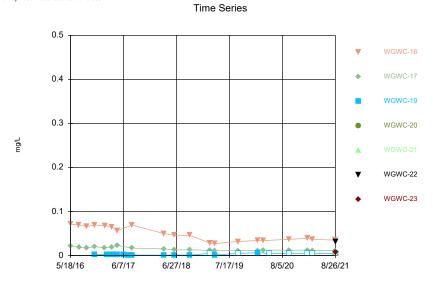


Constituent: Arsenic Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

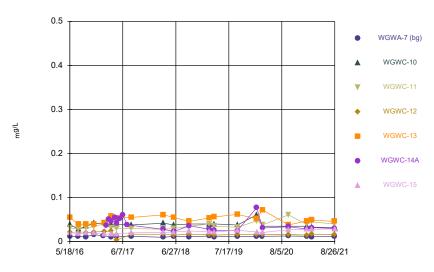


Constituent: Barium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



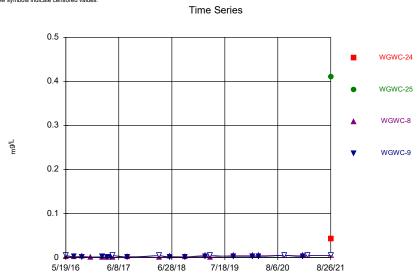


Constituent: Barium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

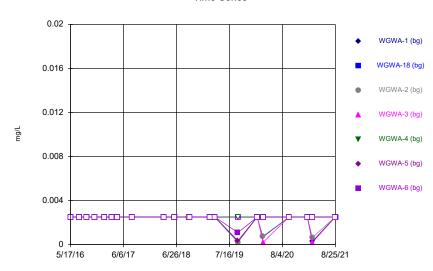


Constituent: Barium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

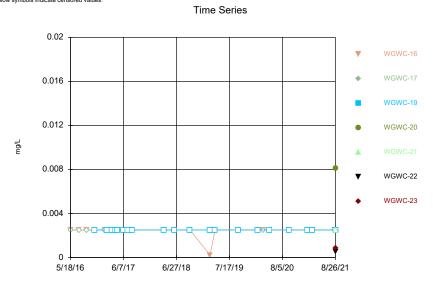


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



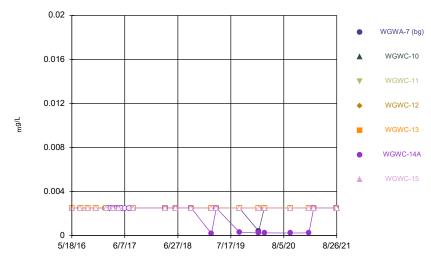
Constituent: Beryllium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Beryllium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Time Series

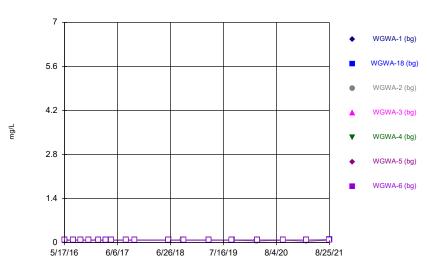


Constituent: Beryllium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

## Time Series 0.02 WGWC-24 0.016 WGWC-25 WGWC-8 0.012 WGWC-9 0.008 0.004 5/19/16 6/8/17 6/28/18 7/18/19 8/6/20 8/26/21

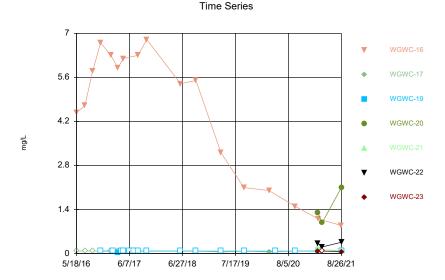
Constituent: Beryllium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Plant Wansley Client: Southern Company Data: Wansley Ash Pond

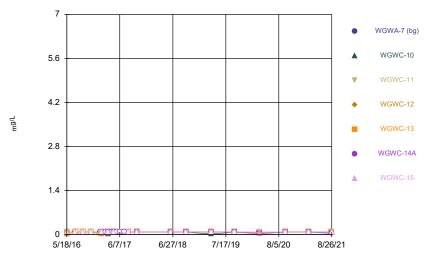
Constituent: Boron, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV

# Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Boron, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Time Series

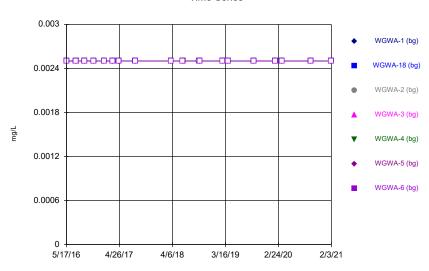


Constituent: Boron, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

# Time Series WGWC-24 5.6 WGWC-25 4.2 WGWC-9 2.8 WGWC-9

Constituent: Boron, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Cadmium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Time Series

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

5/18/16

6/7/17

Constituent: Cadmium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

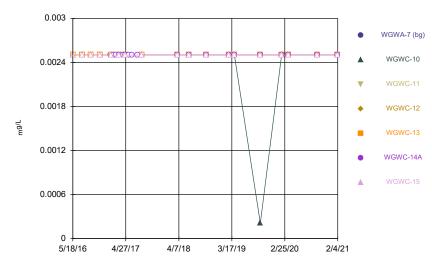
7/17/19

8/5/20

8/26/21

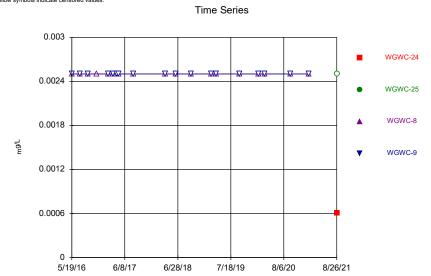
6/27/18

#### Time Series

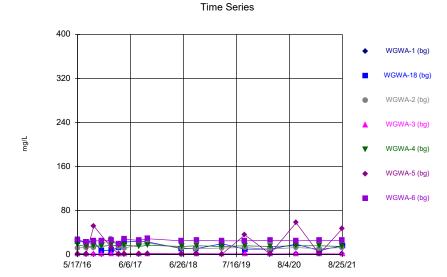


Constituent: Cadmium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

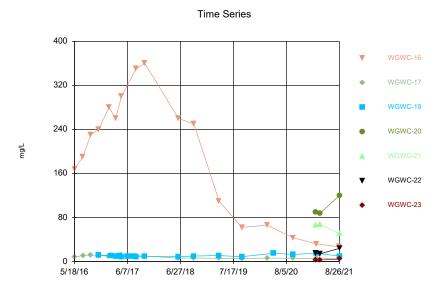


Constituent: Cadmium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



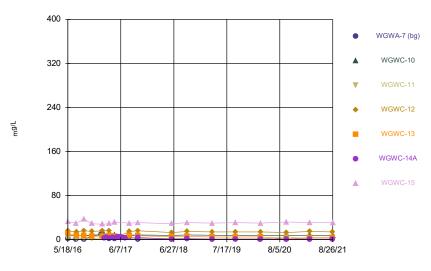
Constituent: Calcium, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG



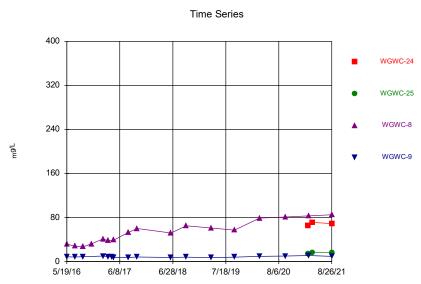
Constituent: Calcium, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

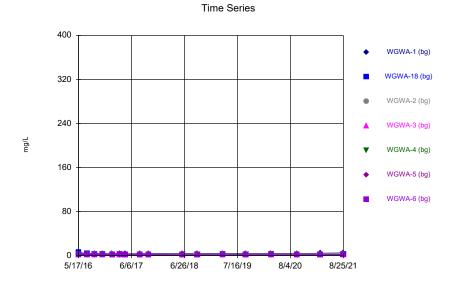


Constituent: Calcium, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

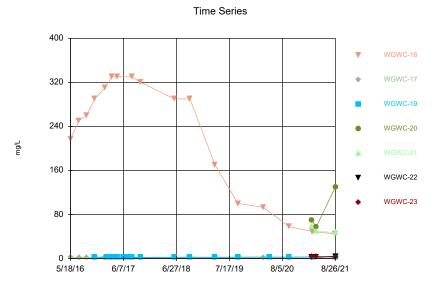


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



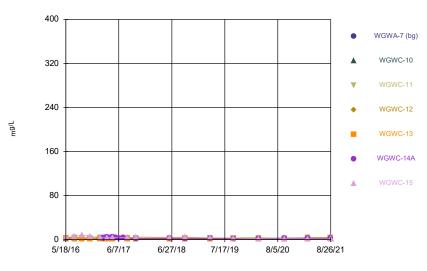
Constituent: Chloride, Total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG



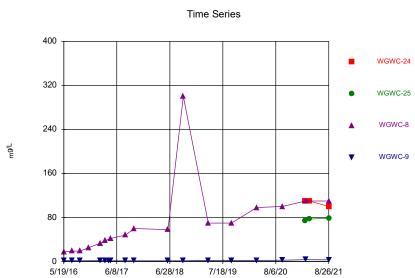
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



Constituent: Chloride, Total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

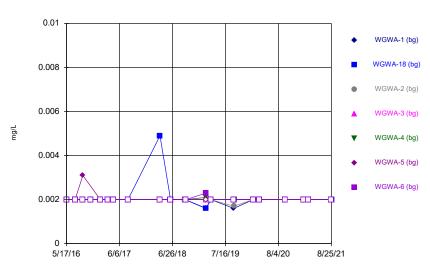
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG



Constituent: Chloride, Total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV

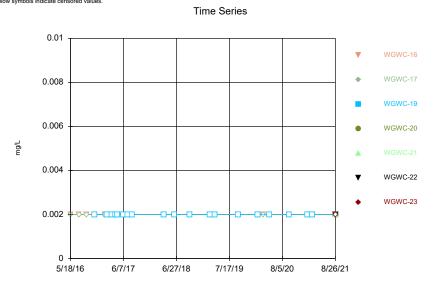
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





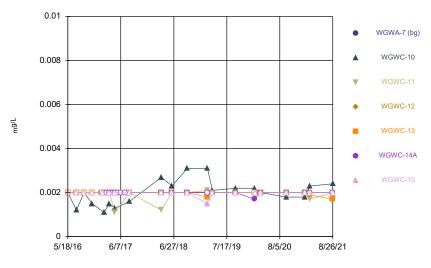
Constituent: Chromium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



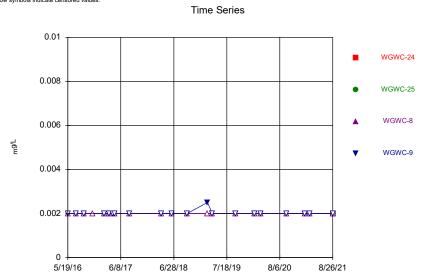
Constituent: Chromium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

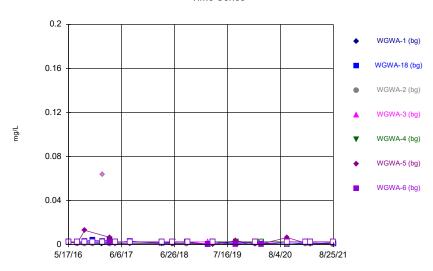


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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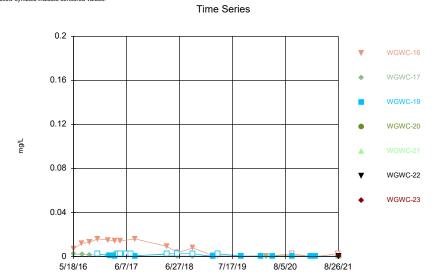


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



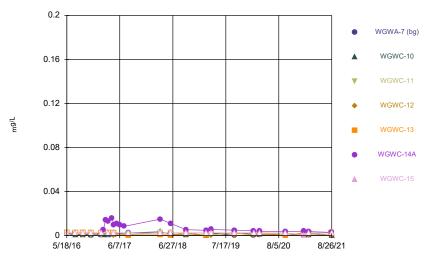
Constituent: Cobalt Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



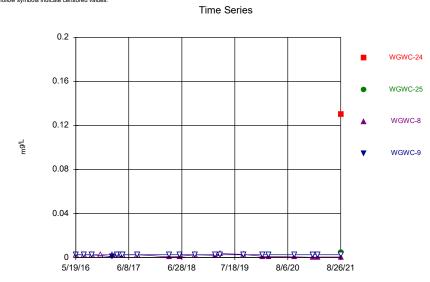
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

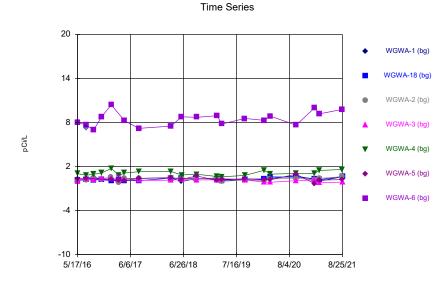


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

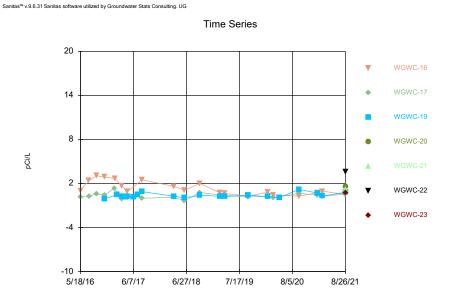
## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



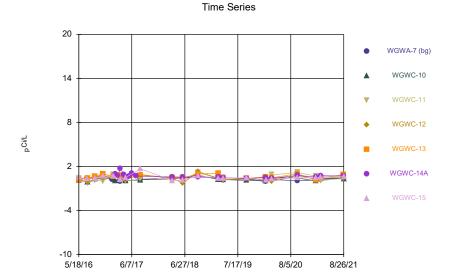
Constituent: Cobalt Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Combined Radium 226 + 228 Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

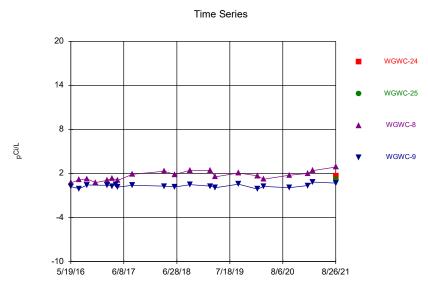


Constituent: Combined Radium 226 + 228 Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



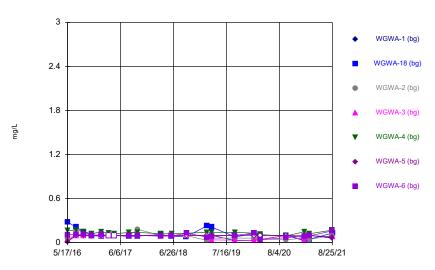
Constituent: Combined Radium 226 + 228 Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG



Constituent: Combined Radium 226 + 228 Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

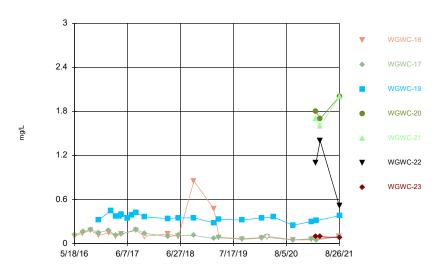


Constituent: Fluoride, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

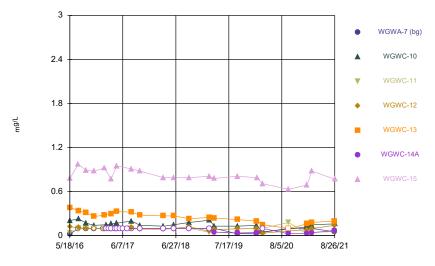
Hollow symbols indicate censored values.





Constituent: Fluoride, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

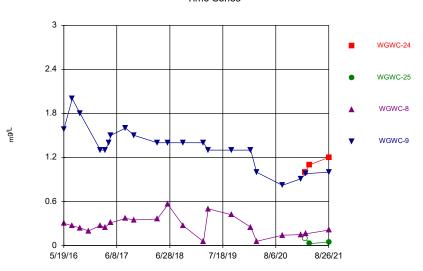
#### Time Series



Constituent: Fluoride, total Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

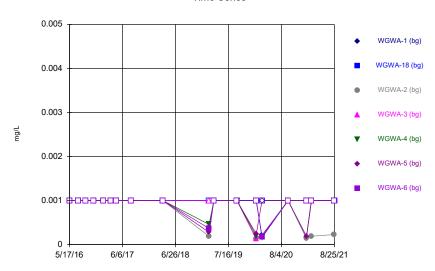
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#### Time Series



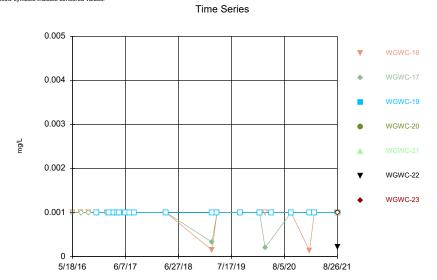
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



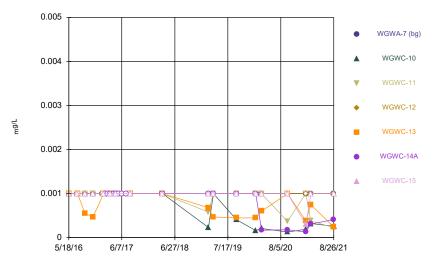
Constituent: Lead Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



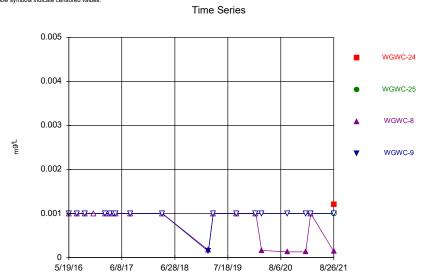
Constituent: Lead Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

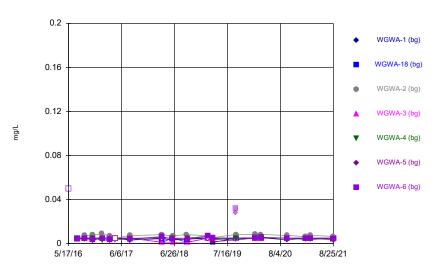


Constituent: Lead Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

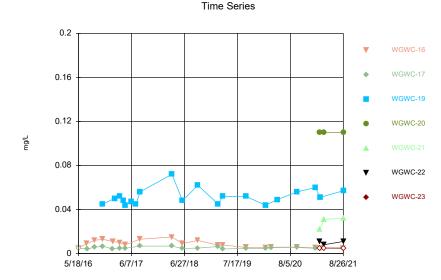


Constituent: Lead Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



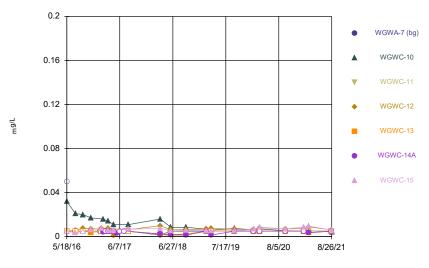
Constituent: Lithium Analysis Run 10/15/2021 4:18 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



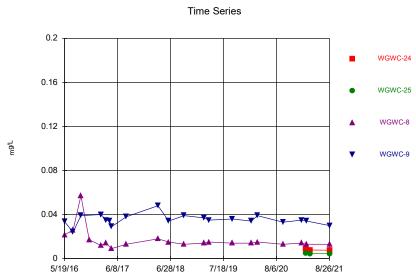
Constituent: Lithium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

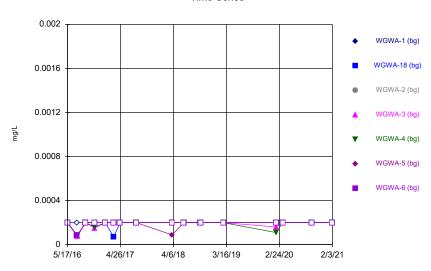


Constituent: Lithium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

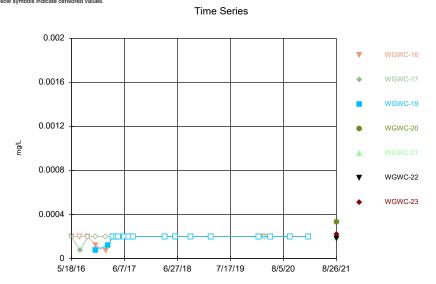


Constituent: Lithium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



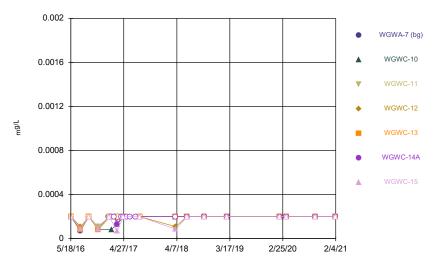
Constituent: Mercury Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



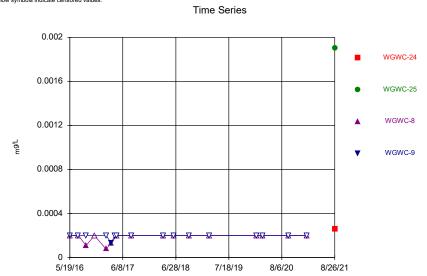
Constituent: Mercury Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series

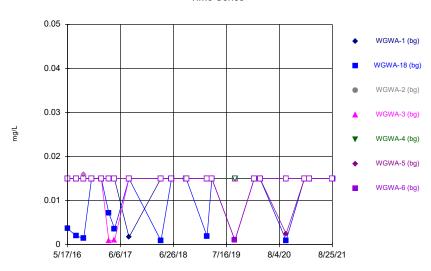


Constituent: Mercury Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



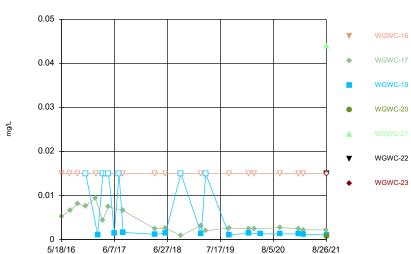
Constituent: Mercury Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Molybdenum Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

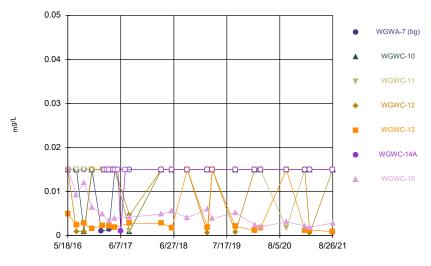
Time Series

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



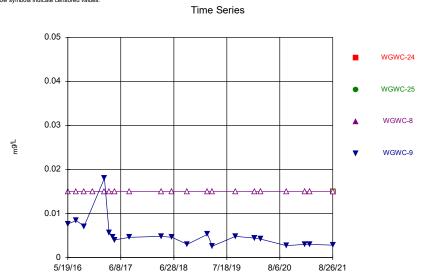
Constituent: Molybdenum Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



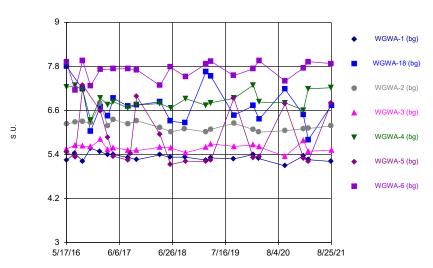
Constituent: Molybdenum Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Molybdenum Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





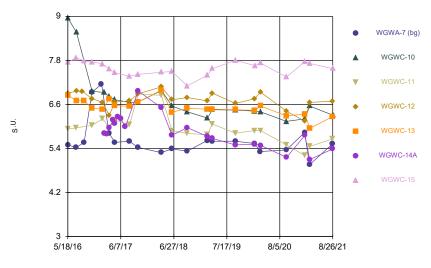
Constituent: pH, Field Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

## Time Series WGWC-16 WGWC-17 7.8 WGWC-19 WGWC-20 5.4 WGWC-22 WGWC-23 4.2 5/18/16 6/7/17 6/27/18 7/17/19 8/5/20 8/26/21

Constituent: pH, Field Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

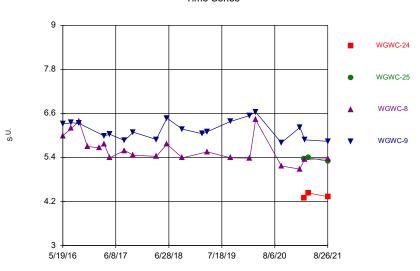
#### Time Series



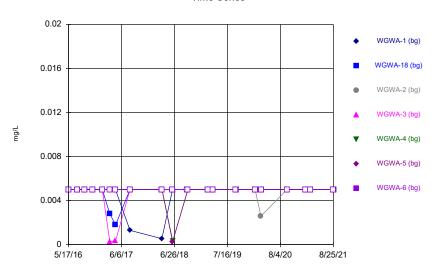
Constituent: pH, Field Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Time Series

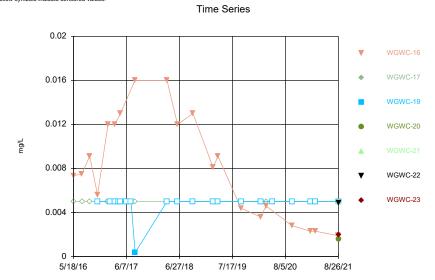


Constituent: pH, Field Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



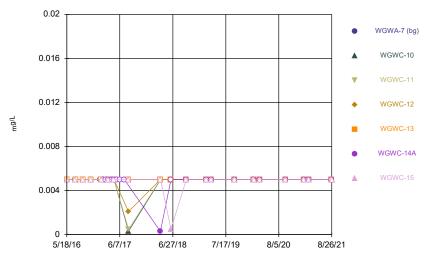
Constituent: Selenium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



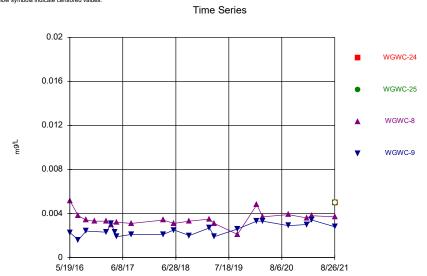
Constituent: Selenium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



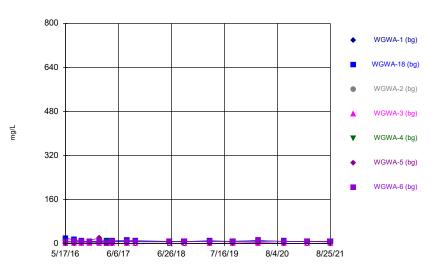
Constituent: Selenium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Selenium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond





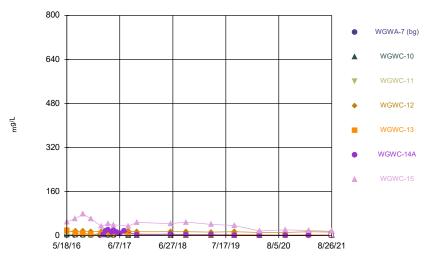
Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

### Time Series 800 WGWC-16 WGWC-17 640 WGWC-19 480 WGWC-20 mg/L 320 WGWC-22 WGWC-23 160 5/18/16 6/7/17 6/27/18 7/17/19 8/5/20 8/26/21

Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



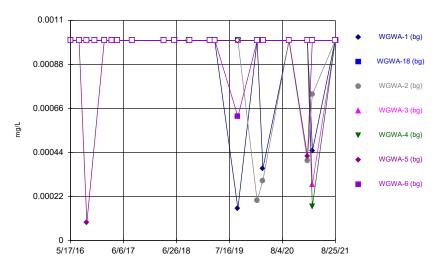
Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

# Time Series 800 640 WGWC-24 WGWC-25 WGWC-9 320 160 5/19/16 6/8/17 6/28/18 7/18/19 8/6/20 8/26/21

Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Thallium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

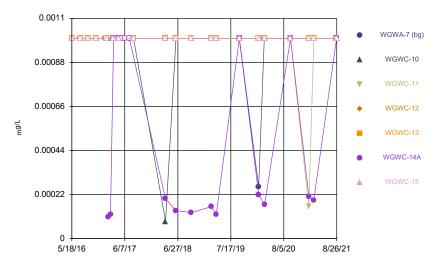
Time Series

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

## 0.0011 WGWC-16 WGWC-17 0.00088 WGWC-19 0.00066 WGWC-20 0.00044 WGWC-22 WGWC-23 0.00022 5/18/16 6/7/17 6/27/18 7/17/19 8/5/20 8/26/21

Constituent: Thallium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

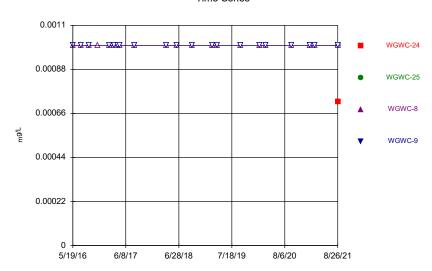
#### Time Series



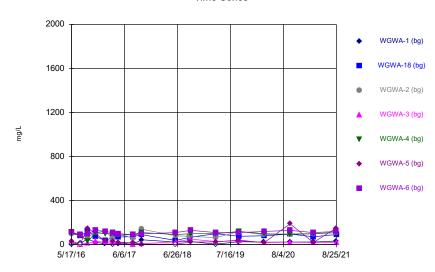
Constituent: Thallium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

#### Time Series



Constituent: Thallium Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



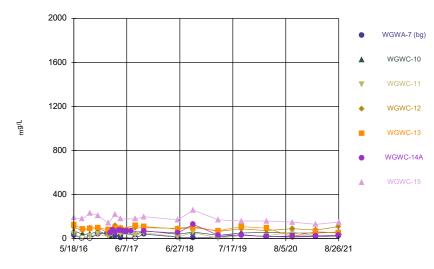
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

### Time Series 2000 WGWC-16 WGWC-17 1600 WGWC-19 1200 WGWC-20 mg/L 800 WGWC-22 WGWC-23 400 5/18/16 6/7/17 6/27/18 7/17/19 8/5/20 8/26/21

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

# Time Series 2000 WGWC-24 1600 WGWC-25 WGWC-8 WGWC-9

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:19 PM View: Appendix III & IV

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.002	<0.002	<0.002				
5/18/2016				<0.002	<0.002	<0.002	<0.002
7/19/2016	<0.002	<0.002	<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		<0.002
9/14/2016						<0.002	
11/9/2016	<0.002	<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		<0.002
1/19/2017		<0.002				<0.002	
3/13/2017	<0.002		<0.002				
3/14/2017		<0.002		<0.002	<0.002	<0.002	<0.002
4/24/2017	<0.002		<0.002				
4/25/2017		<0.002		<0.002	<0.002	<0.002	<0.002
8/8/2017	0.0022 (J)	<0.002	<0.002	<0.002			<0.002
8/9/2017					<0.002	<0.002	
3/27/2018	<0.002		<0.002				
3/28/2018		<0.002		<0.002	<0.002	<0.002	<0.002
2/25/2019	<0.002		<0.002				
2/26/2019		<0.002		<0.002	<0.002	<0.002	<0.002
2/3/2020	<0.002		<0.002				
2/4/2020				<0.002	<0.002	<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	<0.002	<0.002
2/2/2021	0.00062 (J)	<0.002	<0.002	<0.002	<0.002		
2/3/2021						<0.002	<0.002
3/10/2021		<0.002	<0.002	<0.002	<0.002	<0.002	
3/11/2021	<0.002						<0.002
8/23/2021			<0.002				
8/24/2021	<0.002				<0.002	<0.002	<0.002
8/25/2021		<0.002		<0.002			

				·			
	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.002	<0.002					<0.002
5/19/2016			<0.002	<0.002	<0.002		
7/19/2016	<0.002						<0.002
7/20/2016		<0.002	<0.002	<0.002	<0.002		
9/13/2016	<0.002						
9/14/2016		<0.002	<0.002	<0.002	<0.002		<0.002
11/10/2016	<0.002				<0.002		<0.002
11/11/2016		<0.002	<0.002	<0.002			
1/18/2017	<0.002						
1/24/2017							<0.002
1/27/2017			<0.002	<0.002	<0.002		
2/6/2017		<0.002					
2/8/2017						<0.002	
2/23/2017						<0.002	
3/14/2017	<0.002						<0.002
3/15/2017		<0.002	<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	<0.002	<0.002	
5/17/2017						<0.002	
6/7/2017						<0.002	
7/11/2017						<0.002	
8/8/2017	<0.002						
8/9/2017					<0.002		<0.002
8/10/2017		<0.002	<0.002	0.0023 (J)			
3/28/2018	<0.002						
3/29/2018			<0.002	<0.002	<0.002	<0.002	
3/30/2018		<0.002					<0.002
2/26/2019	<0.002						
2/27/2019		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2/5/2020	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
2/7/2020							<0.002
3/17/2020	<0.002						
3/18/2020		<0.002	<0.002	<0.002			<0.002
3/19/2020					<0.002	<0.002	
2/2/2021	<0.002						
2/3/2021			<0.002	<0.002			
2/4/2021		<0.002			<0.002	<0.002	<0.002
3/10/2021	<0.002						
3/11/2021		<0.002			<0.002	<0.002	
3/12/2021			<0.002	<0.002			<0.002
8/24/2021	<0.002						
8/25/2021		.0.000	<0.002	<0.002	<0.002	<0.002	0.000
8/26/2021		<0.002					<0.002

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.002	<0.002					
7/19/2016	<0.002						
7/20/2016		<0.002					
9/14/2016	<0.002	<0.002					
11/10/2016	<0.002	<0.002					
11/11/2016			<0.002				
1/20/2017		<0.002					
1/24/2017	<0.002						
2/6/2017			<0.002				
3/14/2017		<0.002					
3/15/2017	<0.002		<0.002				
4/11/2017			<0.002				
4/25/2017	<0.002	<0.002					
4/26/2017			<0.002				
6/7/2017			<0.002				
7/11/2017			<0.002				
8/9/2017	<0.002	<0.002					
8/10/2017			<0.002				
3/29/2018	<0.002		<0.002				
3/30/2018		<0.002					
2/26/2019		<0.002					
2/27/2019	<0.002						
2/28/2019			<0.002				
2/7/2020	<0.002	<0.002	<0.002				
3/18/2020	<0.002	<0.002					
5/4/2020			<0.002				
2/3/2021			<0.002				
2/4/2021	<0.002	<0.002					
3/11/2021	<0.002	<0.002	<0.002				
8/25/2021	<0.002	<0.002					
8/26/2021			<0.002	<0.002	0.00076 (J)	<0.002	<0.002

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.002	<0.002
7/20/2016			<0.002	<0.002
9/14/2016				<0.002
9/15/2016			<0.002	
11/14/2016			<0.002	
2/6/2017			<0.002	
2/9/2017				<0.002
3/15/2017			<0.002	0.0011 (J)
4/11/2017				<0.002
4/26/2017			<0.002	<0.002
8/10/2017			<0.002	<0.002
3/29/2018			<0.002	<0.002
2/27/2019			<0.002	
2/28/2019				<0.002
2/5/2020				<0.002
2/7/2020			<0.002	
3/19/2020			<0.002	0.00041 (J)
2/3/2021			<0.002	
2/4/2021				0.00041 (J)
3/11/2021			<0.002	
3/12/2021				<0.002
8/26/2021	<0.002	<0.002	<0.002	<0.002

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	0.00061 (J)	<0.001			<0.001	<0.001
7/20/2016				<0.001	<0.001		
9/13/2016	<0.001	0.00074 (J)	<0.001	<0.001	<0.001		<0.001
9/14/2016						0.00069 (J)	
11/9/2016	<0.001	<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)		0.0008 (J)
1/19/2017		0.00079 (J)				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		0.0014		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		0.00062 (J)		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		0.00046 (J)		<0.001	<0.001	<0.001	<0.001
6/13/2018	0.001 (J)	0.00057 (J)				<0.001	<0.001
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					
10/2/2018							<0.001
10/3/2018				0.00069 (J)	<0.001	0.00085 (J)	
2/25/2019	<0.001		<0.001				
2/26/2019		0.00054 (J)		<0.001	0.00033 (J)	<0.001	<0.001
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	<0.001					<0.001	0.00036 (J)
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)	<0.001	<0.001
2/5/2020		0.00058 (J)					
3/16/2020	0.00038 (J)		0.00043 (J)				
3/17/2020		<0.001		<0.001	<0.001	<0.001	<0.001
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	<0.001	<0.001	<0.001	<0.001	<0.001	.0.004	
2/3/2021		-0.001	0.00000 ( 1)	-0.001	0.00000 ( 1)	<0.001	<0.001
3/10/2021	-0.001	<0.001	0.00063 (J)	<0.001	0.00036 (J)	<0.001	-0.001
3/11/2021	<0.001		-0.001				<0.001
8/23/2021	-0.001		<0.001		<0.001	-0.001	-0.001
8/24/2021	<0.001	-0.001		-0.001	<0.001	<0.001	<0.001
8/25/2021		<0.001		<0.001			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001	<0.001					0.00345
5/19/2016			<0.001	<0.001	<0.001		
7/19/2016	<0.001						0.0031
7/20/2016		<0.001	<0.001	<0.001	<0.001		
9/13/2016	<0.001						
9/14/2016		<0.001	<0.001	<0.001	<0.001		0.0024
11/10/2016	<0.001				<0.001		0.0023
11/11/2016		<0.001	<0.001	<0.001			
1/18/2017	0.001 (J)						
1/24/2017							0.0019
1/27/2017		.0.004	0.00047 (J)	<0.001	0.00066 (J)		
2/6/2017		<0.001				.0.004	
2/8/2017						<0.001	
2/23/2017						<0.001	
3/14/2017	<0.001						0.0016
3/15/2017		<0.001	<0.001	<0.001	<0.001	0.0000 ( 1)	
3/17/2017						0.0006 (J)	
4/11/2017	-0.001					0.0032	0.0010
4/25/2017	<0.001	<0.001	-0.001	-0.001	<0.001	0.0010	0.0019
4/26/2017		<0.001	<0.001	<0.001	<0.001	0.0019	
5/17/2017 6/7/2017						0.0014 0.0021	
7/11/2017						0.0021 0.00095 (J)	
8/8/2017	<0.001					0.00095 (3)	
8/9/2017	<b>~0.001</b>				<0.001		0.0017
8/10/2017		<0.001	<0.001	0.00048 (J)	<b>\0.001</b>		0.0017
3/28/2018	<0.001	<b>~0.001</b>	<b>~0.001</b>	0.00048 (3)			
3/29/2018	10.001		<0.001	<0.001	0.00067 (J)	<0.001	
3/30/2018		<0.001	40.001	10.001	0.00007 (0)	10.001	0.0018
6/14/2018	0.0005 (J)	0.0005 (J)	<0.001	0.00052 (J)	0.00093 (J)	<0.001	0.002
10/3/2018	<0.001	0.0000 (0)	10.001	0.00002 (0)	0.00000 (0)	-0.001	0.0024
10/4/2018	0.001	0.00089 (J)	0.00054 (J)	<0.001	0.0015	0.0017	0.0021
2/26/2019	<0.001	0.00000 (0)	0.0000 (0)	0.001	0.0010	0.0017	
2/27/2019	0.001	<0.001	<0.001	<0.001	0.00036 (J)	<0.001	0.0015
4/2/2019	<0.001				(-)		
4/3/2019			<0.001	<0.001	0.00053 (J)	<0.001	
4/4/2019		<0.001			(-,		0.0019
9/18/2019	<0.001				0.00039 (J)	<0.001	0.0016
9/19/2019		0.00038 (J)	<0.001	<0.001	(-,		
2/5/2020	<0.001	0.00035 (J)	<0.001	<0.001	0.00048 (J)	<0.001	
2/7/2020		. ,			( )		0.001
3/17/2020	<0.001						
3/18/2020		<0.001	<0.001	<0.001			0.00088 (J)
3/19/2020					0.00039 (J)	<0.001	, ,
9/22/2020	<0.001				. ,		
9/23/2020		<0.001		<0.001			0.00061 (J)
9/24/2020			0.00051 (J)		<0.001	<0.001	.,
2/2/2021	<0.001		• •				
2/3/2021			<0.001	<0.001			
2/4/2021		<0.001			0.00038 (J)	<0.001	0.00069 (J)
3/10/2021	<0.001						
3/11/2021		0.00031 (J)			0.00035 (J)	<0.001	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.001	<0.001			0.00084 (J)
8/24/2021	<0.001						
8/25/2021			<0.001	<0.001	<0.001	<0.001	
8/26/2021		<0.001					0.0012

		WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/	18/2016	<0.001	<0.001					
7/	19/2016	0.0009 (J)						
7/2	20/2016		0.00058 (J)					
9/	14/2016	0.0014	<0.001					
11	/10/2016	0.0021	0.00082 (J)					
11	/11/2016			<0.001				
1/2	20/2017		<0.001					
1/2	24/2017	0.0015						
2/6	6/2017			<0.001				
3/	14/2017		<0.001					
3/	15/2017	0.0014		<0.001				
4/	11/2017			<0.001				
4/2	25/2017	0.0014	0.00095 (J)					
4/2	26/2017			<0.001				
6/7	7/2017			<0.001				
7/	11/2017			<0.001				
8/9	9/2017	0.0013	<0.001					
8/	10/2017			<0.001				
3/2	29/2018	0.0014		<0.001				
3/3	30/2018		<0.001					
6/	14/2018	<0.001	0.00076 (J)	<0.001				
10	)/4/2018	0.0013	0.00088 (J)	<0.001				
2/2	26/2019		0.0005 (J)					
2/2	27/2019	0.00046 (J)						
2/2	28/2019			<0.001				
4/2	2/2019			<0.001				
4/4	4/2019	<0.001	<0.001					
9/	18/2019	<0.001	<0.001	<0.001				
2/7	7/2020	<0.001	0.00075 (J)	<0.001				
3/	18/2020	<0.001	0.00054 (J)					
5/4	4/2020			<0.001				
9/2	23/2020	<0.001	0.00067 (J)	<0.001				
2/3	3/2021			<0.001				
2/4	4/2021	<0.001	0.00035 (J)					
3/	11/2021	<0.001	<0.001	<0.001				
8/2	25/2021	<0.001	<0.001					
8/2	26/2021			<0.001	0.00031 (J)	0.00057 (J)	<0.001	<0.001

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.001	<0.001
7/20/2016			0.00055 (J)	0.00078 (J)
9/14/2016				<0.001
9/15/2016			<0.001	
11/14/2016			<0.001	
2/6/2017			<0.001	
2/9/2017				0.0017
3/15/2017			<0.001	0.00047 (J)
4/11/2017				<0.001
4/26/2017			<0.001	<0.001
8/10/2017			<0.001	<0.001
3/29/2018			<0.001	<0.001
6/14/2018			<0.001	<0.001
10/4/2018			0.0015	<0.001
2/27/2019			0.00047 (J)	
2/28/2019				<0.001
4/3/2019			<0.001	<0.001
9/19/2019			0.00032 (J)	<0.001
2/5/2020				<0.001
2/7/2020			0.0011	
3/19/2020			0.00071 (J)	<0.001
9/22/2020			0.0011	
9/23/2020				<0.001
2/3/2021			0.0013	
2/4/2021				<0.001
3/11/2021			0.0009 (J)	
3/12/2021				<0.001
8/26/2021	0.0033	<0.001	0.0013	<0.001

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.041	0.0221	0.0308				
5/18/2016				0.0174	0.00723	0.0198	0.00518
7/19/2016	0.038	0.018	0.022			0.015	0.0049
7/20/2016				0.012	0.0051		
9/13/2016	0.029	0.021	0.021	0.013	0.0058		0.006
9/14/2016						0.062	
11/9/2016	0.041	0.011	0.025				0.0066
11/10/2016				0.013	0.0063		
1/17/2017	0.044		0.017				
1/18/2017				0.014	0.0059		0.007
1/19/2017		0.012				0.034	
3/13/2017	0.042		0.019				
3/14/2017		0.017		0.014	0.0058	0.018	0.014
4/24/2017	0.039		0.019				
4/25/2017		0.017		0.015	0.0056	0.018	0.0062
8/8/2017	0.044	0.021	0.022	0.015			0.0065
8/9/2017					0.0056	0.016	
3/27/2018	0.041		0.021				
3/28/2018		0.019		0.014	0.0052	0.015	0.0059
6/13/2018	0.045	0.013				0.016	0.0067
6/14/2018			0.02	0.013	0.0057		
9/24/2018			0.02				
9/27/2018	0.047						
9/28/2018		0.014					
10/2/2018							0.0066
10/3/2018				0.014	0.0054	0.016	
2/25/2019	0.049		0.027				
2/26/2019		0.015		0.014	0.012	0.02	0.011
4/1/2019	0.044		0.027				
4/2/2019		0.014		0.014	0.0056	0.016	0.0069
9/16/2019	0.05					0.027	0.0073 (J)
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)	0.022	0.013
2/5/2020		0.02					
3/16/2020	0.046		0.026				
3/17/2020		0.013		0.013	0.0059 (J)	0.017	0.0081 (J)
9/21/2020			0.024	0.015	0.006 (J)		
9/22/2020	0.048	0.015				0.032	0.0079 (J)
2/2/2021	0.05	0.017	0.025	0.015	0.006 (J)		
2/3/2021						0.015	0.0079 (J)
3/10/2021		0.016	0.024	0.014	0.0057 (J)	0.016	
3/11/2021	0.046						0.0077 (J)
8/23/2021			0.023				
8/24/2021	0.049				0.0055 (J)	0.028	0.0074 (J)
8/25/2021		0.015		0.014			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0114	0.0391					0.0206
5/19/2016			0.031	0.0214	0.055		
7/19/2016	0.012						0.019
7/20/2016		0.028	0.029	0.019	0.039		
9/13/2016	0.011						
9/14/2016		0.035	0.031	0.02	0.04		0.02
11/10/2016	0.016				0.04		0.02
11/11/2016		0.042	0.034	0.022			
1/18/2017	0.013						
1/24/2017							0.017
1/27/2017			0.042	0.023	0.042		
2/6/2017		0.041					
2/8/2017						0.037	
2/23/2017						0.051	
3/14/2017	0.01						0.018
3/15/2017		0.04	0.032	0.024	0.058		
3/17/2017						0.046	
4/11/2017						0.055	
4/25/2017	0.012						0.018
4/26/2017		0.039	0.03	0.004	0.054	0.042	
5/17/2017						0.052	
6/7/2017						0.06	
7/11/2017						0.038	
8/8/2017	0.012						
8/9/2017					0.055		0.02
8/10/2017		0.038	0.03	0.017			
3/28/2018	0.01						
3/29/2018			0.028	0.017	0.061	0.028	
3/30/2018		0.042					0.021
6/14/2018	0.012	0.038	0.03	0.015	0.055	0.023	0.022
10/3/2018	0.011	0.04	0.005	0.017	0.040	0.000	0.024
10/4/2018	0.040	0.04	0.035	0.017	0.046	0.036	
2/26/2019	0.013	0.04	0.04	0.010	0.054	0.000	0.000
2/27/2019	0.011	0.04	0.04	0.016	0.054	0.028	0.023
4/2/2019	0.011		0.035	0.015	0.056	0.006	
4/3/2019		0.04	0.035	0.015	0.056	0.026	0.022
4/4/2019	0.012	0.04			0.062	0.025	
9/18/2019 9/19/2019	0.012	0.038	0.033	0.016	0.062	0.025	0.026
2/5/2020	0.012	0.061	0.047	0.016	0.052	0.077	
2/7/2020	0.012	0.001	0.047	0.010	0.032	0.077	0.022
3/17/2020	0.012						0.022
3/17/2020	0.012	0.035	0.038	0.016			0.021
3/19/2020		0.033	0.036	0.010	0.072	0.031	0.021
9/22/2020	0.013				0.072	0.031	
9/23/2020	0.015	0.035		0.016			0.027
9/24/2020		0.000	0.061	0.010	0.038	0.034	0.027
2/2/2021	0.012		0.001		0.000	0.034	
2/3/2021	V.V12		0.039	0.015			
2/4/2021		0.035	0.000	0.010	0.047	0.029	0.028
3/10/2021	0.011	0.000			0.047	0.020	0.020
3/11/2021	5.5. ·	0.033			0.049	0.032	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			0.045	0.017			0.028
8/24/2021	0.012						
8/25/2021			0.04	0.016	0.046	0.03	
8/26/2021		0.032					0.029

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	0.0715	0.0219					
7/19/2016	0.069						
7/20/2016		0.019					
9/14/2016	0.066	0.017					
11/10/2016	0.069	0.02					
11/11/2016			0.0022 (J)				
1/20/2017		0.018					
1/24/2017	0.068						
2/6/2017			0.0018 (J)				
3/14/2017		0.019					
3/15/2017	0.065		0.0015 (J)				
4/11/2017			0.0014 (J)				
4/25/2017	0.057	0.023					
4/26/2017			0.0014 (J)				
6/7/2017			0.0014 (J)				
7/11/2017			0.0013 (J)				
8/9/2017	0.069	0.017					
8/10/2017			0.0012 (J)				
3/29/2018	0.05		0.00097 (J)				
3/30/2018		0.015					
6/14/2018	0.046	0.013	0.0011 (J)				
10/4/2018	0.046		0.0012 (J)				
2/26/2019		0.012					
2/27/2019	0.028						
2/28/2019			<0.01				
4/2/2019			0.0013 (J)				
4/4/2019	0.027	0.011					
9/18/2019	0.032	0.011	<0.01				
2/7/2020	0.034	0.011	0.0065 (J)				
3/18/2020	0.034	0.012					
5/4/2020			<0.01				
9/23/2020	0.037	0.012	<0.01				
2/3/2021			<0.01				
2/4/2021	0.039	0.012					
3/11/2021	0.037	0.011	<0.01				
8/25/2021	0.035	0.011					
8/26/2021			<0.01	<0.01	0.0086 (J)	0.031	0.0078 (J)

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			0.0026	<0.01
7/20/2016			0.0017 (J)	0.0014 (J)
9/14/2016				0.00092 (J)
9/15/2016			0.0039	
11/14/2016			0.00085 (J)	
2/6/2017			0.0011 (J)	
2/9/2017				0.0015 (J)
3/15/2017			0.0013 (J)	0.00054 (J)
4/11/2017				0.0007 (J)
4/26/2017			0.00098 (J)	<0.01
8/10/2017			0.0025	0.00053 (J)
3/29/2018			0.00085 (J)	<0.01
6/14/2018			0.0028	0.00088 (J)
10/4/2018			0.0017 (J)	0.00076 (J)
2/27/2019			<0.01	
2/28/2019				0.0023 (J)
4/3/2019			0.001 (J)	<0.01
9/19/2019			<0.01	0.0018 (J)
2/5/2020				0.0022 (J)
2/7/2020			<0.01	
3/19/2020			<0.01	0.0021 (J)
9/22/2020			<0.01	
9/23/2020				<0.01
2/3/2021			<0.01	
2/4/2021				0.0016 (J)
3/11/2021			<0.01	
3/12/2021				<0.01
8/26/2021	0.042	0.41	<0.01	<0.01

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	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025	<0.0025	<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		<0.0025
9/14/2016						<0.0025	
11/9/2016	<0.0025	<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		<0.0025
1/19/2017		<0.0025				<0.0025	
3/13/2017	<0.0025		<0.0025				
3/14/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025				
4/25/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025
8/9/2017					<0.0025	<0.0025	
3/27/2018	<0.0025		<0.0025				
3/28/2018		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025				<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					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	<0.0025	
2/25/2019	<0.0025		<0.0025				
2/26/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025				
4/2/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/16/2019	0.00032 (J)					0.00036 (J)	0.0011
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	<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	<0.0025	<0.0025
9/21/2020			<0.0025	<0.0025	<0.0025		
9/22/2020	<0.0025	<0.0025				<0.0025	<0.0025
2/2/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		
2/3/2021						<0.0025	<0.0025
3/10/2021		<0.0025	0.00065 (J)	0.00019 (J)	<0.0025	<0.0025	
3/11/2021	0.00029 (J)						<0.0025
8/23/2021			<0.0025				
8/24/2021	<0.0025				<0.0025	<0.0025	<0.0025
8/25/2021		<0.0025		<0.0025			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025	<0.0025					<0.0025
5/19/2016			<0.0025	<0.0025	<0.0025		
7/19/2016	<0.0025						<0.0025
7/20/2016		<0.0025	<0.0025	<0.0025	<0.0025		
9/13/2016	<0.0025						
9/14/2016		<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016	<0.0025				<0.0025		<0.0025
11/11/2016		<0.0025	<0.0025	<0.0025			
1/18/2017	<0.0025						
1/24/2017							<0.0025
1/27/2017			<0.0025	<0.0025	<0.0025		
2/6/2017		<0.0025					
2/8/2017						<0.0025	
2/23/2017						<0.0025	
3/14/2017	<0.0025						<0.0025
3/15/2017		<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017						<0.0025	
4/11/2017						<0.0025	
4/25/2017	<0.0025						<0.0025
4/26/2017		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2017						<0.0025	
6/7/2017						<0.0025	
7/11/2017	-0.0005					<0.0025	
8/8/2017	<0.0025				-0.0005		-0.0005
8/9/2017		-0.0005	-0.0005	-0.0005	<0.0025		<0.0025
8/10/2017	<0.000E	<0.0025	<0.0025	<0.0025			
3/28/2018	<0.0025		<0.000E	<0.000E	<0.000E	<0.002E	
3/29/2018		<0.002E	<0.0025	<0.0025	<0.0025	<0.0025	<0.000E
3/30/2018	-0.0005	<0.0025	-0.0005	-0.0005	-0.0005	-0.0005	<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018	<0.0025	<0.002E	<0.000E	<0.000E	<0.000E	<0.002E	<0.0025
10/4/2018	<0.000E	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
2/26/2019	<0.0025	<0.002E	<0.000E	<0.0025	<0.000E	0.00017 (1)	<0.000E
2/27/2019 4/2/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.00017 (J)	<0.0025
4/3/2019	<b>~0.0023</b>		<0.0025	<0.0025	<0.0025	<0.0025	
4/4/2019		<0.0025	<b>~0.0023</b>	<b>~0.0023</b>	<b>~</b> 0.0023	<b>~0.0023</b>	<0.0025
9/18/2019	<0.0025	10.0025			<0.0025	0.00032 (J)	<0.0025
9/19/2019	<b>~0.0023</b>	<0.0025	<0.0025	<0.0025	<b>~</b> 0.0023	0.00032 (3)	<0.0025
2/5/2020	0.00041 (J)	<0.0025	<0.0025	<0.0025	<0.0025	0.00024 (J)	
2/7/2020	0.00041 (0)	10.0025	10.0023	10.0023	10.0023	0.00024 (0)	<0.0025
3/17/2020	<0.0025						<0.0023
3/18/2020	-0.0020	<0.0025	<0.0025	<0.0025			<0.0025
3/19/2020		10.0025	10.0023	10.0023	<0.0025	0.00025 (J)	10.0025
9/22/2020	<0.0025				10.0023	0.00023 (0)	
9/23/2020	0.0020	<0.0025		<0.0025			<0.0025
9/24/2020		0.0020	<0.0025	0.0020	<0.0025	0.00024 (J)	0.0020
2/2/2021	<0.0025		-0.0020		-0.0020	0.00024 (0)	
2/3/2021	0.0020		<0.0025	<0.0025			
2/4/2021		<0.0025	0.0020	0.0020	<0.0025	0.00026 (J)	<0.0025
3/10/2021	<0.0025					(0)	2.3020
3/11/2021		<0.0025			<0.0025	<0.0025	
5/LUL I		0.0020			0.0020	3.3320	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.0025	<0.0025			<0.0025
8/24/2021	<0.0025						
8/25/2021			<0.0025	<0.0025	<0.0025	<0.0025	
8/26/2021		<0.0025					<0.0025

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.0025	<0.0025					
7/19/2016	<0.0025						
7/20/2016		<0.0025					
9/14/2016	<0.0025	<0.0025					
11/10/2016	<0.0025	<0.0025					
11/11/2016			<0.0025				
1/20/2017		<0.0025					
1/24/2017	<0.0025						
2/6/2017			<0.0025				
3/14/2017		<0.0025					
3/15/2017	<0.0025		<0.0025				
4/11/2017			<0.0025				
4/25/2017	<0.0025	<0.0025					
4/26/2017			<0.0025				
6/7/2017			<0.0025				
7/11/2017			<0.0025				
8/9/2017	<0.0025	<0.0025					
8/10/2017			<0.0025				
3/29/2018	<0.0025		<0.0025				
3/30/2018		<0.0025					
6/14/2018	<0.0025	<0.0025	<0.0025				
10/4/2018	<0.0025	<0.0025	<0.0025				
2/26/2019		<0.0025					
2/27/2019	0.00022 (J)						
2/28/2019			<0.0025				
4/2/2019			<0.0025				
4/4/2019	<0.0025	<0.0025					
9/18/2019	<0.0025	<0.0025	<0.0025				
2/7/2020	<0.0025	<0.0025	<0.0025				
3/18/2020	<0.0025	<0.0025					
5/4/2020			<0.0025				
9/23/2020	<0.0025	<0.0025	<0.0025				
2/3/2021			<0.0025				
2/4/2021	<0.0025	<0.0025					
3/11/2021	<0.0025	<0.0025	<0.0025				
8/25/2021	<0.0025	<0.0025					
8/26/2021			<0.0025	0.0081	<0.0025	0.00053 (J)	0.00089 (J)

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			0.00102 (J)	<0.0025
7/20/2016			0.0014 (J)	<0.0025
9/14/2016				<0.0025
9/15/2016			0.00093 (J)	
11/14/2016			0.0014 (J)	
2/6/2017			0.0017 (J)	
2/9/2017				0.00041 (J)
3/15/2017			0.0016 (J)	<0.0025
4/11/2017				<0.0025
4/26/2017			0.0017 (J)	<0.0025
8/10/2017			0.0017 (J)	0.00034 (J)
3/29/2018			0.0018 (J)	<0.0025
6/14/2018			0.0015 (J)	<0.0025
10/4/2018			0.0019 (J)	0.00036 (J)
2/27/2019			0.0021 (J)	
2/28/2019				0.00031 (J)
4/3/2019			0.0019 (J)	<0.0025
9/19/2019			0.0019	0.00041 (J)
2/5/2020				0.0004 (J)
2/7/2020			0.0023	
3/19/2020			0.0028	0.00056 (J)
9/22/2020			0.0025	
9/23/2020				0.00034 (J)
2/3/2021			0.0025	
2/4/2021				0.00039 (J)
3/11/2021			0.0022 (J)	
3/12/2021				0.00034 (J)
8/26/2021	0.014	0.00028 (J)	0.002 (J)	0.00038 (J)

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	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.08	<0.08	<0.08				
5/18/2016				<0.08	<0.08	<0.08	<0.08
7/19/2016	<0.08	<0.08	<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		<0.08
9/14/2016						<0.08	
11/9/2016	<0.08	<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		<0.08
1/19/2017		<0.08				<0.08	
3/13/2017	<0.08		<0.08				
3/14/2017		<0.08		<0.08	<0.08	<0.08	<0.08
4/24/2017	<0.08		<0.08				
4/25/2017		<0.08		<0.08	<0.08	<0.08	<0.08
8/8/2017	<0.08	<0.08	<0.08	<0.08			<0.08
8/9/2017					<0.08	<0.08	
10/10/2017	<0.08		<0.08				
10/11/2017		<0.08		<0.08	<0.08	<0.08	<0.08
6/13/2018	<0.08	<0.08				<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					
10/2/2018							<0.08
10/3/2018				<0.08	<0.08	<0.08	
4/1/2019	<0.08		<0.08				
4/2/2019		<0.08		<0.08	<0.08	<0.08	<0.08
9/16/2019	<0.08					<0.08	<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	<0.08	<0.08
9/21/2020			<0.08	<0.08	<0.08		
9/22/2020	<0.08	<0.08				<0.08	<0.08
3/10/2021		<0.08	0.039 (J)	<0.08	<0.08	<0.08	
3/11/2021	<0.08						<0.08
8/23/2021			<0.08				
8/24/2021	<0.08				<0.08	<0.08	<0.08
8/25/2021		0.1		<0.08			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.08	<0.08					<0.08
5/19/2016			<0.08	<0.08	0.0252 (J)		
7/19/2016	<0.08						<0.08
7/20/2016		<0.08	<0.08	<0.08	<0.08		
9/13/2016	<0.08						
9/14/2016		<0.08	<0.08	<0.08	<0.08		<0.08
11/10/2016	<0.08				<0.08		<0.08
11/11/2016		<0.08	<0.08	<0.08			
1/18/2017	<0.08						
1/24/2017							<0.08
1/27/2017			0.021 (J)	0.047 (J)	0.033 (J)		
2/6/2017		<0.08					
2/8/2017						<0.08	
2/23/2017						<0.08	
3/14/2017	<0.08						<0.08
3/15/2017		0.032 (J)	0.058	0.024 (J)	<0.08		
3/17/2017						<0.08	
4/11/2017						<0.08	
4/25/2017	<0.08						<0.08
4/26/2017		<0.08	<0.08	<0.08	<0.08	<0.08	
5/17/2017						<0.08	
6/7/2017						<0.08	
7/11/2017						<0.08	
8/8/2017	<0.08						
8/9/2017					<0.08		<0.08
8/10/2017		<0.08	<0.08	<0.08			
10/11/2017	<0.08					<0.08	<0.08
10/12/2017		<0.08	<0.08	<0.08	<0.08		
6/14/2018	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
10/3/2018	<0.08						<0.08
10/4/2018		<0.08	<0.08	<0.08	<0.08	<0.08	
4/2/2019	<0.08						
4/3/2019			<0.08	<0.08	<0.08	<0.08	
4/4/2019		0.024 (J)					<0.08
9/18/2019	<0.08				<0.08	<0.08	<0.08
9/19/2019		<0.08	<0.08	<0.08			
3/17/2020	<0.08						
3/18/2020		0.049 (J)	<0.08	0.039 (J)			0.071 (J)
3/19/2020					0.053 (J)	0.039 (J)	
9/22/2020	<0.08						
9/23/2020		<0.08		<0.08			<0.08
9/24/2020			<0.08		<0.08	<0.08	
3/10/2021	<0.08						
3/11/2021		<0.08			<0.08	<0.08	
3/12/2021			<0.08	<0.08			<0.08
8/24/2021	<0.08						
8/25/2021			<0.08	<0.08	0.063 (J)	0.043 (J)	
8/26/2021		<0.08					<0.08

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	4.48	<0.08					
7/19/2016	4.7						
7/20/2016		<0.08					
9/14/2016	5.8	<0.08					
11/10/2016	6.7	<0.08					
11/11/2016			<0.08				
1/20/2017		<0.08					
1/24/2017	6.3						
2/6/2017			<0.08				
3/14/2017		<0.08					
3/15/2017	5.9		0.034 (J)				
4/11/2017			<0.08				
4/25/2017	6.2	<0.08					
4/26/2017			<0.08				
6/7/2017			<0.08				
7/11/2017			<0.08				
8/9/2017	6.3	<0.08					
8/10/2017			<0.08				
10/11/2017	6.8	<0.08					
10/12/2017			<0.08				
6/14/2018	5.4	<0.08	<0.08				
10/4/2018	5.5	<0.08	<0.08				
4/2/2019			<0.08				
4/4/2019	3.2	0.049 (J)					
9/18/2019	2.1	<0.08	<0.08				
3/18/2020	2	0.049 (J)					
5/4/2020			<0.08				
9/23/2020	1.5	<0.08	<0.08				
3/8/2021				1.3			
3/9/2021					0.19	0.33	0.073 (J)
3/11/2021	1.1	<0.08	<0.08				
4/7/2021					0.13		<0.08
4/8/2021				0.98		0.21	
8/25/2021	0.89	<0.08					
8/26/2021			<0.08	2.1	0.087	0.36	0.052 (J)

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			1.42	0.314
7/20/2016			1.4	0.25
9/14/2016				0.3
9/15/2016			1.2	
11/14/2016			1.3	
2/6/2017			1.8	
2/9/2017				0.61
3/15/2017			1.7	0.42
4/11/2017				0.37
4/26/2017			2	0.38
8/10/2017			1.8	0.29
10/12/2017			1.8	0.36
6/14/2018			1.7	0.39
10/4/2018			1.9	0.37
4/3/2019			1.7	0.35
9/19/2019			1.7	0.39
3/19/2020			2.2	0.55
9/22/2020			2.5	
9/23/2020				0.68
3/8/2021		0.48		
3/9/2021	1.8			
3/11/2021			2.4	
3/12/2021				0.64
4/7/2021	1.9			
4/8/2021		0.43		
8/26/2021	2.1	0.7	2.4	0.56

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	<0.0025	<0.0025	<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		<0.0025
9/14/2016						<0.0025	
11/9/2016	<0.0025	<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		<0.0025
1/19/2017		<0.0025				<0.0025	
3/13/2017	<0.0025		<0.0025				
3/14/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/24/2017	<0.0025		<0.0025				
4/25/2017		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
8/8/2017	<0.0025	<0.0025	<0.0025	<0.0025			<0.0025
8/9/2017					<0.0025	<0.0025	
3/27/2018	<0.0025		<0.0025				
3/28/2018		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
6/13/2018	<0.0025	<0.0025				<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					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	<0.0025	
2/25/2019	<0.0025		<0.0025				
2/26/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
4/1/2019	<0.0025		<0.0025				
4/2/2019		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/16/2019	<0.0025					<0.0025	<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	<0.0025	<0.0025
2/5/2020		<0.0025					
3/16/2020	<0.0025		<0.0025				
3/17/2020		<0.0025		<0.0025	<0.0025	<0.0025	<0.0025
9/21/2020			<0.0025	<0.0025	<0.0025		
9/22/2020	<0.0025	<0.0025				<0.0025	<0.0025
2/2/2021	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		
2/3/2021						<0.0025	<0.0025

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025	<0.0025					<0.0025
5/19/2016			<0.0025	<0.0025	<0.0025		
7/19/2016	<0.0025						<0.0025
7/20/2016		<0.0025	<0.0025	<0.0025	<0.0025		
9/13/2016	<0.0025						
9/14/2016		<0.0025	<0.0025	<0.0025	<0.0025		<0.0025
11/10/2016	<0.0025				<0.0025		<0.0025
11/11/2016		<0.0025	<0.0025	<0.0025			
1/18/2017	<0.0025						
1/24/2017							<0.0025
1/27/2017			<0.0025	<0.0025	<0.0025		
2/6/2017		<0.0025					
2/8/2017						<0.0025	
2/23/2017						<0.0025	
3/14/2017	<0.0025						<0.0025
3/15/2017		<0.0025	<0.0025	<0.0025	<0.0025		
3/17/2017						<0.0025	
4/11/2017						<0.0025	
4/25/2017	<0.0025						<0.0025
4/26/2017		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
5/17/2017						<0.0025	
6/7/2017						<0.0025	
7/11/2017						<0.0025	
8/8/2017	<0.0025						
8/9/2017					<0.0025		<0.0025
8/10/2017		<0.0025	<0.0025	<0.0025			
3/28/2018	<0.0025						
3/29/2018			<0.0025	<0.0025	<0.0025	<0.0025	
3/30/2018		<0.0025					<0.0025
6/14/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
10/3/2018	<0.0025						<0.0025
10/4/2018		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
2/26/2019	<0.0025						
2/27/2019		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
4/2/2019	<0.0025						
4/3/2019			<0.0025	<0.0025	<0.0025	<0.0025	
4/4/2019		<0.0025					<0.0025
9/18/2019	<0.0025				<0.0025	<0.0025	<0.0025
9/19/2019		0.00021 (J)	<0.0025	<0.0025			
2/5/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	
2/7/2020							<0.0025
3/17/2020	<0.0025						
3/18/2020		<0.0025	<0.0025	<0.0025			<0.0025
3/19/2020					<0.0025	<0.0025	
9/22/2020	<0.0025						
9/23/2020		<0.0025		<0.0025			<0.0025
9/24/2020			<0.0025		<0.0025	<0.0025	
2/2/2021	<0.0025						
2/3/2021			<0.0025	<0.0025			
2/4/2021		<0.0025			<0.0025	<0.0025	<0.0025

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	0.000362 (J)	<0.0025					
7/19/2016	<0.0025						
7/20/2016		<0.0025					
9/14/2016	0.00037 (J)	<0.0025					
11/10/2016	<0.0025	<0.0025					
11/11/2016			<0.0025				
1/20/2017		<0.0025					
1/24/2017	0.00055 (J)						
2/6/2017			<0.0025				
3/14/2017		<0.0025					
3/15/2017	0.00067 (J)		<0.0025				
4/11/2017			<0.0025				
4/25/2017	0.00058 (J)	<0.0025					
4/26/2017			<0.0025				
6/7/2017			<0.0025				
7/11/2017			<0.0025				
8/9/2017	0.00054 (J)	<0.0025					
8/10/2017			<0.0025				
3/29/2018	0.00082 (J)		<0.0025				
3/30/2018		<0.0025					
6/14/2018	0.0007 (J)	<0.0025	<0.0025				
10/4/2018	0.00065 (J)	<0.0025	<0.0025				
2/26/2019		<0.0025					
2/27/2019	0.00055 (J)						
2/28/2019			<0.0025				
4/2/2019			<0.0025				
4/4/2019	0.00047 (J)	<0.0025					
9/18/2019	0.00017 (J)	<0.0025	<0.0025				
2/7/2020	<0.0025	<0.0025	<0.0025				
3/18/2020	0.00022 (J)	<0.0025					
5/4/2020			<0.0025				
9/23/2020	<0.0025	<0.0025	<0.0025				
2/3/2021			<0.0025				
2/4/2021	<0.0025	<0.0025					
8/26/2021				<0.0025	<0.0025	<0.0025	<0.0025

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.0025	<0.0025
7/20/2016			<0.0025	<0.0025
9/14/2016				<0.0025
9/15/2016			<0.0025	
11/14/2016			<0.0025	
2/6/2017			<0.0025	
2/9/2017				<0.0025
3/15/2017			<0.0025	<0.0025
4/11/2017				<0.0025
4/26/2017			<0.0025	<0.0025
8/10/2017			<0.0025	<0.0025
3/29/2018			<0.0025	<0.0025
6/14/2018			<0.0025	<0.0025
10/4/2018			<0.0025	<0.0025
2/27/2019			<0.0025	
2/28/2019				<0.0025
4/3/2019			<0.0025	<0.0025
9/19/2019			<0.0025	<0.0025
2/5/2020				<0.0025
2/7/2020			<0.0025	
3/19/2020			<0.0025	<0.0025
9/22/2020			<0.0025	
9/23/2020				<0.0025
2/3/2021			<0.0025	
2/4/2021				<0.0025
8/26/2021	0.00061 (J)	<0.0025		

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.927	23.7	12.2				
5/18/2016				2.1	17.9	1.7	27
7/19/2016	1	23	13			1.5	23
7/20/2016				1.7	15		
9/13/2016	0.44	23	13	1.3	16		25
9/14/2016						52	
11/9/2016	1.1	6.7	19				25
11/10/2016				1.6	15		
1/17/2017	1.4		28				
1/18/2017				1.7	17		26
1/19/2017		8.5				13	
3/13/2017	1.1		14				
3/14/2017		13		1.8	17	1.6	20
4/24/2017	1.1		12				
4/25/2017		23		2	17	1.5	28
8/8/2017	1.1	24	18	2			26
8/9/2017					15	1.3	
10/10/2017	1.2		21				
10/11/2017		23		2.1	17	1.5	29
6/13/2018	1.1	11				1.2	25
6/14/2018			12	2	15		
9/24/2018			11				
9/27/2018	1.2						
9/28/2018		11					
10/2/2018							26
10/3/2018				1.8	16	1.4	
4/1/2019	1		12				
4/2/2019		20		1.8	15	1.1	25
9/16/2019	1.3					36	25
9/17/2019		10	13		16		
9/18/2019				1.6			
3/16/2020	1.1		10				
3/17/2020		10		1.7	15	1.4	26
9/21/2020			13	1.8	16		
9/22/2020	1.2	19				58	25
3/10/2021		7.7	11	1.9	16	1.3	
3/11/2021	1.3						26
8/23/2021			13				
8/24/2021	1.2				15	47	26
8/25/2021		16		1.7			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	1.36	7.17					32.5
5/19/2016			1.95	15.8	11.4		
7/19/2016	0.88						30
7/20/2016		7	1.5	14	7.1		
9/13/2016	0.93						
9/14/2016		7.7	1.8	16	7.4		37
11/10/2016	6.1				6.4		29
11/11/2016		8.2	1.7	15			
1/18/2017	10						
1/24/2017							28
1/27/2017			3.5	16	6.2		
2/6/2017		9.1					
2/8/2017						3.2	
2/23/2017						4.1	
3/14/2017	1.3						29
3/15/2017		9	3.8	16	6.7		
3/17/2017						2.4	
4/11/2017						4.1	
4/25/2017	1.9						32
4/26/2017		8.1	4	3	6.5	2.5	
5/17/2017						5.2	
6/7/2017						5.2	
7/11/2017						2.3	
8/8/2017	4.8						
8/9/2017					7		30
8/10/2017		8.1	3.5	15			
10/11/2017	0.93					3.8	31
10/12/2017		8.6	2.7	16	7		
6/14/2018	0.94	7.7	2.2	13	5.5	1.1	29
10/3/2018	1.2						31
10/4/2018		8.5	2	15	5.9	2	
4/2/2019	1.1						
4/3/2019			1.7	14	4.7	0.84	
4/4/2019		7.9					30
9/18/2019	1.5				4.9	0.85	31
9/19/2019		7.5	1.4	14			
3/17/2020	0.82						
3/18/2020		7.5	1.6	14			30
3/19/2020					5	0.89	
9/22/2020	0.89						
9/23/2020		7.7		13			32
9/24/2020			5.2		1.4	0.99	
3/10/2021	0.89						
3/11/2021		7.9			4	0.79	
3/12/2021			1.6	15			31
8/24/2021	1.7						
8/25/2021			1.5	14	4	0.7	
8/26/2021		7.6					31

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	168	8.24					
7/19/2016	190						
7/20/2016		11					
9/14/2016	230	12					
11/10/2016	240	11					
11/11/2016			12				
1/20/2017		10					
1/24/2017	280						
2/6/2017			11				
3/14/2017		8.8					
3/15/2017	260		10				
4/11/2017			11				
4/25/2017	300	12					
4/26/2017			8.4				
6/7/2017			9				
7/11/2017			9.5				
8/9/2017	350	11					
8/10/2017			8.8				
10/11/2017	360	10					
10/12/2017			9.5				
6/14/2018	260	6.2	8.9				
10/4/2018	250	6.4	10				
4/2/2019			11				
4/4/2019	110	5.6					
9/18/2019	62	5.5	8.8				
3/18/2020	66	6.3					
5/4/2020			15				
9/23/2020	43	5.9	13				
3/8/2021				90			
3/9/2021					66	15	3.2
3/11/2021	32	5.7	15				
4/7/2021					67		2.7
4/8/2021				88		14	
8/25/2021	27	6					
8/26/2021			10	120	51	24	4.6

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			31.4	8.53
7/20/2016			28	8.2
9/14/2016				8.8
9/15/2016			27	
11/14/2016			32	
2/6/2017			41	
2/9/2017				10
3/15/2017			38	8.6
4/11/2017				8.6
4/26/2017			39	7.1
8/10/2017			53	7.5
10/12/2017			60	8.2
6/14/2018			52	7.5
10/4/2018			65	8
4/3/2019			61	7.2
9/19/2019			57	8.1
3/19/2020			79	9.3
9/22/2020			81	
9/23/2020				10
3/8/2021		14		
3/9/2021	65			
3/11/2021			83	
3/12/2021				11
4/7/2021	71			
4/8/2021		16		
8/26/2021	69	16	85	9.3

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	3.8	6.05	2.5				
5/18/2016				1.92	1.45	2.14	1.58
7/19/2016	3.9	4	2.6			2.4	1.6
7/20/2016				1.8	1.4		
9/13/2016	3.6	3.1	2.4	1.7	1.4		1.4
9/14/2016						2.1	
11/9/2016	3.9	2.3	2.3				1.5
11/10/2016				1.6	1.3		
1/17/2017	3.8		2.3				
1/18/2017				1.7	1.3		1.5
1/19/2017		2				1.8	
3/13/2017	3.4		2.2				
3/14/2017		1.9		1.6	1.2	2	2.5
4/24/2017	3.4		2.2				
4/25/2017		1.9		1.6	1.2	1.8	1.3
8/8/2017	3.6	2	2.3	1.7			1.4
8/9/2017					1.2	1.9	
10/10/2017	3.6		2.5				
10/11/2017		1.9		1.6	1.2	2.1	1.3
6/13/2018	3.8	2				1.7	1.4
6/14/2018			2.3	1.6	1.2		
9/24/2018			2.4				
9/27/2018	4						
9/28/2018		2.1					
10/2/2018							1.4
10/3/2018				1.6	1.2	1.8	
4/1/2019	4		2.4				
4/2/2019		2.6		1.7	1.2	1.7	1.5
9/16/2019	4					1.8	1.5
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	1.6	1.7
9/21/2020			2.5	1.5	1.2		
9/22/2020	4	2.1				1.5	1.4
3/10/2021		1.9	2.6	1.8	1.2	1.8	
3/11/2021	4.5						1.5
8/23/2021			3.3				
8/24/2021	5.1				1.5	2.1	1.8
8/25/2021		2.3		1.9			

5/18/2016	WGWA-7 (bg) 2.06	WGWC-10 1.45	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15 4.59
5/19/2016			3.21	3.8	2.26		
7/19/2016	2.1		0.2.	0.0	2.20		5.9
7/20/2016		1.6	3.4	3.8	1.9		0.0
9/13/2016	2		0	0.0			
9/14/2016	-	1.5	3.1	3.7	1.6		7.9
11/10/2016	1.8		0.1	···	1.4		6.5
11/11/2016		1.5	3.2	3.5			0.0
1/18/2017	1.8		0.2	0.0			
1/24/2017							4.1
1/27/2017			3.4	3.1	1.4		
2/6/2017		1.4					
2/8/2017						2.5	
2/23/2017						4.3	
3/14/2017	1.8						4.4
3/15/2017		1.4	3.1	3.2	1.4		
3/17/2017			0.1	0.2		4.8	
4/11/2017						3.8	
4/25/2017	1.8					0.0	4
4/26/2017		1.3	3.1	3.2	1.3	4.8	·
5/17/2017						3.9	
6/7/2017						3.2	
7/11/2017						4.1	
8/8/2017	1.9						
8/9/2017					1.4		3.6
8/10/2017		1.4	3.1	3.4			0.0
10/11/2017	1.8					2.2	5
10/12/2017		1.3	3	3.1	1.2		
6/14/2018	1.7	1.3	3	3	1.2	2.8	4.3
10/3/2018	1.8						4.8
10/4/2018		1.3	3.1	3.1	1.2	2.2	
4/2/2019	1.9						
4/3/2019			3.3	3	1.2	2.4	
4/4/2019		1.4					3.7
9/18/2019	2				1.2	2.2	3.2
9/19/2019		1.5	3.2	3.2			
3/17/2020	2.2						
3/18/2020		1.5	3.2	3.2			1.7
3/19/2020					1.3	1.9	
9/22/2020	1.8						
9/23/2020		1.3		2.8			1.5
9/24/2020			1		1.6	3.1	
3/10/2021	1.9						
3/11/2021		1.7			1.2	2.6	
3/12/2021			3.6	3.5		-	1.6
8/24/2021	1.9						
8/25/2021			3.5	3.7	1.2	2.8	
8/26/2021		1.6					1.4

				,	' '	•	
	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	217	2.72					
7/19/2016	250						
7/20/2016		1.9					
9/14/2016	260	1.6					
11/10/2016	290	1.6					
11/11/2016			2.6				
1/20/2017		1.5					
1/24/2017	310						
2/6/2017			2.6				
3/14/2017		1.5					
3/15/2017	330		2.4				
4/11/2017			2.3				
4/25/2017	330	1.8					
4/26/2017			2.3				
6/7/2017			2.5				
7/11/2017			2.3				
8/9/2017	330	1.4					
8/10/2017			2.5				
10/11/2017	320	1.5					
10/12/2017			2.3				
6/14/2018	290	1.5	2.4				
10/4/2018	290	1.5	2.6				
4/2/2019			2.5				
4/4/2019	170	1.4					
9/18/2019	100	1.5	2.7				
3/18/2020	93	1.5					
5/4/2020			2.8				
9/23/2020	58	1.2	2.6				
3/8/2021				70			
3/9/2021					58	2.9	3.5
3/11/2021	49	1.3	2.9				
4/7/2021					50		3.7
4/8/2021				57		2.4	
8/25/2021	45	1.6					
8/26/2021			3.3	130	47	4.2	3.3

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			17.5	1.46
7/20/2016			19	1.5
9/14/2016				1.4
9/15/2016			19	
11/14/2016			25	
2/6/2017			33	
2/9/2017				1.5
3/15/2017			38	1.3
4/11/2017				1.2
4/26/2017			42	1.2
8/10/2017			48	1.3
10/12/2017			60	1.4
6/14/2018			58	1.2
10/4/2018			300	1.2
4/3/2019			70	2
9/19/2019			70	1.5
3/19/2020			98	2.1
9/22/2020			100	
9/23/2020				2.4
3/8/2021		74		
3/9/2021	110			
3/11/2021			110	
3/12/2021				3.4
4/7/2021	110			
4/8/2021		77		
8/26/2021	100	79	110	3.1

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.002	<0.002	<0.002				
5/18/2016				<0.002	<0.002	<0.002	<0.002
7/19/2016	<0.002	<0.002	<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		<0.002
9/14/2016						0.0031	
11/9/2016	<0.002	<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		<0.002
1/19/2017		<0.002				<0.002	
3/13/2017	<0.002		<0.002				
3/14/2017		<0.002		<0.002	<0.002	<0.002	<0.002
4/24/2017	<0.002		<0.002				
4/25/2017		<0.002		<0.002	<0.002	<0.002	<0.002
8/8/2017	<0.002	<0.002	<0.002	<0.002			<0.002
8/9/2017					<0.002	<0.002	
3/27/2018	<0.002		<0.002				
3/28/2018		0.0049		<0.002	<0.002	<0.002	<0.002
6/13/2018	<0.002	<0.002				<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					
10/2/2018							<0.002
10/3/2018				<0.002	<0.002	<0.002	
2/25/2019	0.0016 (J)		<0.002				
2/26/2019		0.0016 (J)		<0.002	0.0021 (J)	<0.002	0.0023 (J)
4/1/2019	<0.002		<0.002				
4/2/2019		<0.002		<0.002	<0.002	<0.002	<0.002
9/16/2019	0.0016 (J)					<0.002	<0.002
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	<0.002	<0.002
2/5/2020		<0.002					
3/16/2020	<0.002	.0.000	<0.002	.0.000	0.000	0.000	0.000
3/17/2020		<0.002		<0.002	<0.002	<0.002	<0.002
9/21/2020			<0.002	<0.002	<0.002		
9/22/2020	<0.002	<0.002				<0.002	<0.002
2/2/2021	<0.002	<0.002	<0.002	<0.002	<0.002	0.000	0.000
2/3/2021		<b>-0.000</b>	-0.002	z0.000	<0.000	<0.002	<0.002
3/10/2021	<0.000	<0.002	<0.002	<0.002	<0.002	<0.002	<b>-0.000</b>
3/11/2021	<0.002		<0.002				<0.002
8/23/2021	<0.002		<0.002		<0.002	<0.002	<0.002
8/24/2021	<0.002	<0.002		<0.002	<0.002	<0.002	<0.002
8/25/2021		<0.002		<0.002			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.002	<0.002					<0.002
5/19/2016			<0.002	<0.002	<0.002		
7/19/2016	<0.002						<0.002
7/20/2016		0.0012 (J)	<0.002	<0.002	<0.002		
9/13/2016	<0.002						
9/14/2016		<0.002	<0.002	<0.002	<0.002		<0.002
11/10/2016	<0.002				<0.002		<0.002
11/11/2016		0.0015 (J)	<0.002	<0.002			
1/18/2017	<0.002						
1/24/2017							<0.002
1/27/2017			<0.002	<0.002	<0.002		
2/6/2017		0.0011 (J)					
2/8/2017						<0.002	
2/23/2017						<0.002	
3/14/2017	<0.002						<0.002
3/15/2017		0.0015 (J)	<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		0.0013 (J)	0.0011 (J)	<0.002	<0.002	<0.002	
5/17/2017						<0.002	
6/7/2017						<0.002	
7/11/2017						<0.002	
8/8/2017	<0.002						
8/9/2017					<0.002		<0.002
8/10/2017		0.0016 (J)	<0.002	<0.002			
3/28/2018	<0.002						
3/29/2018			0.0012 (J)	<0.002	<0.002	<0.002	
3/30/2018		0.0027					<0.002
6/14/2018	<0.002	0.0023 (J)	<0.002	<0.002	<0.002	<0.002	<0.002
10/3/2018	<0.002						<0.002
10/4/2018		0.0031	<0.002	<0.002	<0.002	<0.002	
2/26/2019	<0.002						
2/27/2019		0.0031	0.0021 (J)	<0.002	0.0018 (J)	<0.002	0.0015 (J)
4/2/2019	<0.002						
4/3/2019			<0.002	<0.002	<0.002	<0.002	
4/4/2019		0.0021 (J)					<0.002
9/18/2019	<0.002				<0.002	<0.002	<0.002
9/19/2019		0.0022	<0.002	<0.002			
2/5/2020	<0.002	0.0022	<0.002	<0.002	<0.002	0.0017 (J)	
2/7/2020							<0.002
3/17/2020	<0.002						
3/18/2020		<0.002	<0.002	<0.002			<0.002
3/19/2020					<0.002	<0.002	
9/22/2020	<0.002						
9/23/2020		0.0018 (J)		<0.002			<0.002
9/24/2020		. ,	<0.002		<0.002	<0.002	
2/2/2021	<0.002						
2/3/2021			<0.002	<0.002			
2/4/2021		0.0018 (J)			<0.002	<0.002	<0.002
3/10/2021	<0.002	.,					
3/11/2021		0.0023			0.0019 (J)	<0.002	
					(-/		

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			0.0017 (J)	<0.002			<0.002
8/24/2021	<0.002						
8/25/2021			<0.002	<0.002	0.0017 (J)	<0.002	
8/26/2021		0.0024					<0.002

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.002	<0.002					
7/19/2016	<0.002						
7/20/2016		<0.002					
9/14/2016	<0.002	<0.002					
11/10/2016	<0.002	<0.002					
11/11/2016			<0.002				
1/20/2017		<0.002					
1/24/2017	<0.002						
2/6/2017			<0.002				
3/14/2017		<0.002					
3/15/2017	<0.002		<0.002				
4/11/2017			<0.002				
4/25/2017	<0.002	<0.002					
4/26/2017			<0.002				
6/7/2017			<0.002				
7/11/2017			<0.002				
8/9/2017	<0.002	<0.002					
8/10/2017			<0.002				
3/29/2018	<0.002		<0.002				
3/30/2018		<0.002					
6/14/2018	<0.002	<0.002	<0.002				
10/4/2018	<0.002	<0.002	<0.002				
2/26/2019		<0.002					
2/27/2019	<0.002						
2/28/2019			<0.002				
4/2/2019			<0.002				
4/4/2019	<0.002	<0.002					
9/18/2019	<0.002	<0.002	<0.002				
2/7/2020	<0.002	<0.002	<0.002				
3/18/2020	<0.002	<0.002					
5/4/2020			<0.002				
9/23/2020	<0.002	<0.002	<0.002				
2/3/2021			<0.002				
2/4/2021	<0.002	<0.002					
3/11/2021	<0.002	<0.002	<0.002				
8/25/2021	<0.002	<0.002					
8/26/2021			<0.002	<0.002	<0.002	<0.002	<0.002

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.002	<0.002
7/20/2016			<0.002	<0.002
9/14/2016				<0.002
9/15/2016			<0.002	
11/14/2016			<0.002	
2/6/2017			<0.002	
2/9/2017				<0.002
3/15/2017			<0.002	<0.002
4/11/2017				<0.002
4/26/2017			<0.002	<0.002
8/10/2017			<0.002	<0.002
3/29/2018			<0.002	<0.002
6/14/2018			<0.002	<0.002
10/4/2018			<0.002	<0.002
2/27/2019			<0.002	
2/28/2019				0.0025
4/3/2019			<0.002	<0.002
9/19/2019			<0.002	<0.002
2/5/2020				<0.002
2/7/2020			<0.002	
3/19/2020			<0.002	<0.002
9/22/2020			<0.002	
9/23/2020				<0.002
2/3/2021			<0.002	
2/4/2021				<0.002
3/11/2021			<0.002	
3/12/2021				<0.002
8/26/2021	<0.002	<0.002	<0.002	<0.002

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0025	<0.0025	<0.0025				
5/18/2016				<0.0025	<0.0025	<0.0025	<0.0025
7/19/2016	0.0014 (J)	0.0019 (J)	0.00086 (J)			0.0014 (J)	<0.0025
7/20/2016				<0.0025	<0.0025		
9/13/2016	0.0015 (J)	0.0032	0.00095 (J)	<0.0025	<0.0025		<0.0025
9/14/2016						0.013	
11/9/2016	0.0012 (J)	0.0039	0.0011 (J)				<0.0025
11/10/2016				<0.0025	<0.0025		
1/17/2017	0.001 (J)		<0.0025				
1/18/2017				<0.0025	<0.0025		<0.0025
1/19/2017		0.0032				0.064 (O)	
3/13/2017	0.0011 (J)		0.00087 (J)				
3/14/2017		0.0045		<0.0025	<0.0025	0.0066	0.0018 (J)
4/24/2017	0.001 (J)		0.0014 (J)				
4/25/2017		0.002 (J)		<0.0025	<0.0025	0.0026	<0.0025
8/8/2017	0.0011 (J)	0.0031	0.0012 (J)	<0.0025			<0.0025
8/9/2017					<0.0025	0.0025	
3/27/2018	0.00091 (J)		0.0012 (J)				
3/28/2018		0.0013 (J)		<0.0025	<0.0025	0.0015 (J)	<0.0025
6/13/2018	0.00094 (J)	0.0021 (J)				0.0011 (J)	<0.0025
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)					
10/2/2018							<0.0025
10/3/2018				<0.0025	<0.0025	0.0013 (J)	
2/25/2019	0.00085 (J)		0.00083 (J)				
2/26/2019		0.00026 (J)		<0.0025	0.00029 (J)	0.0006 (J)	0.00031 (J)
4/1/2019	0.00079 (J)		0.00082 (J)				
4/2/2019		<0.0025		<0.0025	<0.0025	0.00046 (J)	<0.0025
9/16/2019	0.00082					0.0035	9.1E-05 (J)
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	0.00082	<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	0.00066 (J)	0.00014 (J)
9/21/2020			0.00054 (J)	<0.0025	<0.0025		
9/22/2020	0.00072 (J)	0.00033 (J)				0.0065	<0.0025
2/2/2021	0.00082 (J)	0.0018 (J)	0.00069 (J)	<0.0025	<0.0025		
2/3/2021						0.0015 (J)	<0.0025
3/10/2021		0.0015 (J)	0.00073 (J)	<0.0025	<0.0025	0.0011 (J)	
3/11/2021	0.00081 (J)						<0.0025
8/23/2021			0.00049 (J)				
8/24/2021	0.0016 (J)				<0.0025	0.00079 (J)	<0.0025
8/25/2021		0.00084 (J)		<0.0025			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0025	0.00201 (J)					<0.0025
5/19/2016			<0.0025	<0.0025	<0.0025		
7/19/2016	<0.0025						<0.0025
7/20/2016		0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/13/2016	<0.0025						
9/14/2016		0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016	0.00055 (J)				<0.0025		<0.0025
11/11/2016		0.001 (J)	0.00052 (J)	0.0017 (J)			
1/18/2017	0.00097 (J)						
1/24/2017							<0.0025
1/27/2017		0.00070 (1)	0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017		0.00072 (J)				0.0051	
2/8/2017						0.0051	
2/23/2017	.0.005					0.014	0.0005
3/14/2017	<0.0025	0.00000 ( 1)	0.00004 (1)	0.0040 ( 1)	.0.005		<0.0025
3/15/2017		0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025	0.010	
3/17/2017						0.013	
4/11/2017	-0.0005					0.016	-0.0005
4/25/2017	<0.0025	0.001471)	0.001 (1)	0.00006 (1)	<0.000E	0.01	<0.0025
4/26/2017		0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01 0.011	
5/17/2017 6/7/2017						0.011	
7/11/2017 8/8/2017	<0.0025					0.0085	
	<0.0025				0.0004 ( 1)		<0.0025
8/9/2017		<0.000E	0.0011 / 1)	0.00040 (1)	0.0004 (J)		<0.0025
8/10/2017 3/28/2018	<0.0025	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018	<b>\0.0025</b>		<0.0025	0.0008 (1)	0.0008 ( 1)	0.015	
3/30/2018		0.0035	<0.0025	0.0008 (J)	0.0008 (J)	0.015	<0.0025
6/14/2018	<0.0025		<0.0025	0.00067 (1)	0.000E4 ( I)	0.011	<0.0025
10/3/2018	<0.0025	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
10/3/2018	<b>~0.0023</b>	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025	0.0055	<b>\0.0023</b>
2/26/2019	0.00017 (J)	0.00080 (3)	<b>10.0023</b>	0.00079 (3)	<b>10.0023</b>	0.0033	
2/27/2019	0.00017 (3)	0.0005 (J)	0.0022 (J)	0.0006 (J)	0.00013 (J)	0.0049	<0.0025
4/2/2019	<0.0025	0.0003 (3)	0.0022 (3)	0.0000 (3)	0.00013 (3)	0.0049	<b>\0.0023</b>
4/3/2019	10.0025		0.00081 (J)	0.00043 (J)	<0.0025	0.0056	
4/4/2019		0.0017 (J)	0.00001 (0)	0.00040 (0)	-0.0020	0.0000	<0.0025
9/18/2019	0.0002 (J)	0.0017 (0)			<0.0025	0.005	<0.0025
9/19/2019	0.0002 (0)	0.0023	<0.0025	0.00028 (J)	0.0020	0.000	0.0020
2/5/2020	0.00021 (J)	0.0013	0.00026 (J)	0.00058	<0.0025	0.0044	
2/7/2020	0.0002. (0)	0.0010	0.00020 (0)	0.0000	0.0020	0.0011	<0.0025
3/17/2020	0.00065 (J)						0.0020
3/18/2020	0.0000 (0)	0.0012 (J)	0.00069 (J)	0.00071 (J)			<0.0025
3/19/2020		0.0012 (0)	0.00000 (0)	0.0007 1 (0)	<0.0025	0.0039	0.0020
9/22/2020	0.00015 (J)				0.0020	0.0000	
9/23/2020		0.00062 (J)		0.00039 (J)			<0.0025
9/24/2020		(-)	<0.0025	(-/	0.00032 (J)	0.0035	
2/2/2021	<0.0025				(0)		
2/3/2021	··		0.00072 (J)	0.00017 (J)			
2/4/2021		0.00059 (J)	(-)	· · · ( <del>-</del> /	<0.0025	0.0041	0.00015 (J)
3/10/2021	<0.0025	(-/			<del></del>		(0)
3/11/2021	-	0.00058 (J)			<0.0025	0.0037	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			0.0022 (J)	0.00042 (J)			<0.0025
8/24/2021	0.00017 (J)						
8/25/2021			0.00045 (J)	0.0005 (J)	<0.0025	0.0029	
8/26/2021		0.00044 (J)					<0.0025

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	0.0069	0.00245 (J)					
7/19/2016	0.012						
7/20/2016		0.0018 (J)					
9/14/2016	0.013	0.0014 (J)					
11/10/2016	0.016	0.0016 (J)					
11/11/2016			<0.0025				
1/20/2017		0.0014 (J)					
1/24/2017	0.015						
2/6/2017			0.00058 (J)				
3/14/2017		0.0023 (J)					
3/15/2017	0.014		0.00045 (J)				
4/11/2017			<0.0025				
4/25/2017	0.014	0.0023 (J)					
4/26/2017			<0.0025				
6/7/2017			<0.0025				
7/11/2017			<0.0025				
8/9/2017	0.016	0.0011 (J)					
8/10/2017			0.00049 (J)				
3/29/2018	0.0092		<0.0025				
3/30/2018		0.0016 (J)					
6/14/2018	0.0035	0.00055 (J)	<0.0025				
10/4/2018	0.0078	0.00041 (J)	<0.0025				
2/26/2019		0.00086 (J)					
2/27/2019	0.00084 (J)						
2/28/2019			0.00019 (J)				
4/2/2019			<0.0025				
4/4/2019	0.00077 (J)	<0.0025					
9/18/2019	0.00011 (J)	0.00018 (J)	0.00045 (J)				
2/7/2020	0.00016 (J)	0.00077	0.00024 (J)				
3/18/2020	0.00016 (J)	0.00052 (J)					
5/4/2020			0.00018 (J)				
9/23/2020	<0.0025	0.0009 (J)	0.00024 (J)				
2/3/2021			0.00025 (J)				
2/4/2021	0.00026 (J)	0.00042 (J)					
3/11/2021	0.00013 (J)	0.00035 (J)	0.00022 (J)				
8/25/2021	<0.0025	0.00042 (J)					
8/26/2021			0.00022 (J)	0.00046 (J)	0.00042 (J)	0.00038 (J)	0.00017 (J)

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.0025	<0.0025
7/20/2016			<0.0025	<0.0025
9/14/2016				<0.0025
9/15/2016			<0.0025	
11/14/2016			<0.0025	
2/6/2017			<0.0025	
2/9/2017				0.00073 (J)
3/15/2017			<0.0025	<0.0025
4/11/2017				<0.0025
4/26/2017			<0.0025	<0.0025
8/10/2017			<0.0025	<0.0025
3/29/2018			0.00066 (J)	<0.0025
6/14/2018			0.0011 (J)	<0.0025
10/4/2018			<0.0025	<0.0025
2/27/2019			0.0019 (J)	
2/28/2019				<0.0025
4/3/2019			0.0037	<0.0025
9/19/2019			0.0028	<0.0025
2/5/2020				<0.0025
2/7/2020			0.0011	
3/19/2020			0.00092 (J)	<0.0025
9/22/2020			0.00065 (J)	
9/23/2020				<0.0025
2/3/2021			0.00014 (J)	
2/4/2021				<0.0025
3/11/2021			0.00043 (J)	
3/12/2021				<0.0025
8/26/2021	0.13	0.005	0.0005 (J)	<0.0025

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.0525 (U)	0.184 (U)	0.13 (U)				
5/18/2016				0.025 (U)	1.04	0.325 (U)	8
7/19/2016	7.25 (O)	0.27 (U)	0.121 (U)			0.433 (U)	7.69
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		6.98
11/9/2016	0.221 (U)	0.219 (U)	0.217 (U)				8.78
11/10/2016				0.421	1.13		
1/17/2017	0.295 (U)		0.595				
1/18/2017				0.434 (U)	1.76		10.4
1/19/2017		0.0745 (U)				0.216 (U)	
3/13/2017	-0.13 (U)		-0.147 (U)				
3/14/2017		0.194 (U)		0.167 (U)	0.788	0.119 (U)	0.589 (O)
4/24/2017	0.36 (U)		0.367				
4/25/2017		0.109 (U)		0.224 (U)	1.13	0.105 (U)	8.22
8/8/2017	0.382	0.0842 (U)	0.402	0.127 (U)		, ,	7.21
8/9/2017		(-,		(-)	1.31	0.385 (U)	
3/27/2018	0.475		0.453			(1)	
3/28/2018	00	0.424	0.100	0.15 (U)	1.32	0.492	7.52
6/13/2018	-0.0181 (U)	0.401		0.10 (0)	1.02	0.275 (U)	8.77
6/14/2018	0.0101 (0)	0.401	0.402	0.258 (U)	0.857	0.270 (0)	0.77
9/24/2018			0.318	0.200 (0)	0.007		
9/27/2018	0.342		0.510				
9/28/2018	0.342	0.381					
10/2/2018		0.361					8.72
				0.170 (11)	0.042	0.70	0.72
10/3/2018	0.204		0.44	0.178 (U)	0.943	0.72	
2/25/2019	0.394	0.207 (11)	0.44	0.170 (11)	0.65	0.112 (11)	9.03
2/26/2019	0.100 (11)	0.307 (U)	0.00010 (11)	0.179 (U)	0.65	0.113 (U)	8.93
4/1/2019	0.169 (U)	0.0400 (11)	-0.00216 (U)	0.001	0.000	0.055 (11)	7.0
4/2/2019	0.01 (1)	0.0436 (U)		0.361	0.602	0.255 (U)	7.8
9/16/2019	0.31 (U)	0.000 (1.1)	0.405 (11)		0.700	0.318 (U)	8.55
9/17/2019		0.263 (U)	0.165 (U)	0.400 (11)	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	0.198 (U)	8.3
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	0.207 (U)	8.88
9/21/2020			0.418 (U)	0.0688 (U)	1.07		
9/22/2020	0.729	0.557 (U)				0.954	7.65
2/2/2021	0.243 (U)	0.354 (U)	0.202 (U)	0.182 (U)	1.05		
2/3/2021						-0.314 (U)	9.99
3/10/2021		0.218 (U)	0.378 (U)	-0.177 (U)	1.47	0.144 (U)	
3/11/2021	0.046 (U)						9.2
8/23/2021			0.632				
8/24/2021	0.598				1.61	0.226 (U)	9.78
8/25/2021		0.645		-0.121 (U)			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.268 (U)	0.182 (U)					0.569
5/19/2016			0.431 (U)	0.0698 (U)	0.219 (U)		
7/19/2016	0.369 (U)						0.29 (U)
7/20/2016		-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		
9/13/2016	0.527 (U)						
9/14/2016		0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016	0.871				1		0.709
11/11/2016		0.542	0.0257 (U)	0.467			
1/18/2017	0.213 (U)						
1/24/2017							0.779
1/27/2017			0.898	0.836	0.668		
2/6/2017		0.104 (U)					
2/8/2017						0.958	
2/23/2017						0.771	
3/14/2017	0.0192 (U)						0.247 (U)
3/15/2017	, ,	0.523	0.121 (U)	0.254 (U)	0.847		•
3/17/2017			, ,	, ,		1.7	
4/11/2017						0.901	
4/25/2017	0.0872 (U)						0.515
4/26/2017	(-)	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017		(2)	(-)	(2)	(2)	0.632	
6/7/2017						1.06	
7/11/2017						0.716	
8/8/2017	0.219 (U)					0.710	
8/9/2017	0.210 (0)				0.816		1.7
8/10/2017		0.189 (U)	0.326 (U)	0.912	0.010		1.7
3/28/2018	0.315 (U)	0.169 (0)	0.320 (0)	0.512			
3/29/2018	0.515 (0)		0.461	0.419	0.51	0.58	
3/30/2018		0.575	0.401	0.413	0.51	0.50	0.0985 (U)
6/14/2018	0.41	0.523	0.275 (11)	0.363 (11)	0.463	0.55	
10/3/2018	0.41	0.525	0.275 (U)	-0.263 (U)	0.403	0.55	0.171 (U) 0.766
10/3/2018	0.05	0.84	1.18	1.29	0.99	0.563	0.766
2/26/2019	0.395	0.64	1.10	1.29	0.99	0.505	
2/27/2019	0.393	0.226 (11)	0.374	0.415	1.08	0.538	0.363 (11)
4/2/2019	0.182 (U)	0.236 (U)	0.374	0.415	1.00	0.556	0.363 (U)
4/3/2019	0.102 (0)		0.107 (11)	0.264 (U)	0.446	0.497	
4/4/2019		0.233 (U)	0.187 (U)	0.204 (0)	0.440	0.437	0.418
	0.299 (U)	0.233 (0)			0.202	0.376 (U)	
9/18/2019 9/19/2019	0.299 (0)	0.124 (U)	0.338 (11)	0.329 (U)	0.392	0.376 (0)	0.484
2/5/2020	0.0363 (11)		0.338 (U)		0.600	0.5	
	-0.0263 (U)	0.0961 (U)	0.163 (U)	0.225 (U)	0.609	0.5	0.405 (1)
2/7/2020	0.050 (11)						0.125 (U)
3/17/2020	0.258 (U)	0.404 (11)	0.000	0.0000 (11)			0.202.(1)
3/18/2020		0.461 (U)	0.866	-0.0262 (U)			0.303 (U)
3/19/2020					0.47	0.376 (U)	
9/22/2020	0.0523 (U)						
9/23/2020		0.442 (U)		0.785			0.448 (U)
9/24/2020			1.2		1.02	0.796	
2/2/2021	0.167 (U)						
2/3/2021			0.718	0.322 (U)			
2/4/2021		0.0332 (U)			0.139 (U)	0.564	0.488 (U)
3/10/2021	0.224 (U)						
3/11/2021		0.42 (U)			0.473	0.764	

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# **Time Series**

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			0.0729 (U)	0.633			0.591
8/24/2021	0.465 (U)						
8/25/2021			0.401	0.443 (U)	0.913	0.705	
8/26/2021		0.321 (U)					0.678

						,	
	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	1.03	0.116 (U)					
7/19/2016	2.39						
7/20/2016		0.247 (U)					
9/14/2016	3.05	0.594					
11/10/2016	2.87	0.431					
11/11/2016			-0.11 (U)				
1/20/2017		1.35					
1/24/2017	2.68						
2/6/2017			0.471				
3/14/2017		-0.107 (U)					
3/15/2017	1.64		0.255 (U)				
4/11/2017			0.19 (U)				
4/25/2017	0.878	0.228 (U)					
4/26/2017			0.22 (U)				
6/7/2017			0.126 (U)				
7/11/2017			0.511				
8/9/2017	2.5	-0.0246 (U)					
8/10/2017			0.882				
3/29/2018	1.6		0.252 (U)				
3/30/2018		0.135 (U)					
6/14/2018	1.09	-0.373 (U)	0.0458 (U)				
10/4/2018	1.99	0.775	0.381				
2/26/2019		0.431					
2/27/2019	0.721						
2/28/2019			0.254 (U)				
4/2/2019			0.209 (U)				
4/4/2019	0.632	0.386					
9/18/2019	0.278 (U)	0.167 (U)	0.403 (U)				
2/7/2020	0.797	0.244 (U)	0.2 (U)				
3/18/2020	0.437	0.0655 (U)					
5/4/2020			0.0697 (U)				
9/23/2020	0.276 (U)	0.643	1.18				
2/3/2021			0.684				
2/4/2021	0.727	0.438 (U)					
3/11/2021	0.942	0.247 (U)	0.286 (U)				
8/25/2021	0.518	0.565					
8/26/2021			0.796	1.6	1.17	3.54	0.703

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			0.711 (U)	0.209 (U)
7/20/2016			1.14	-0.084 (U)
9/14/2016				0.42 (U)
9/15/2016			1.26	
11/14/2016			0.749	
2/6/2017			1.05	
2/9/2017				0.393
3/15/2017			1.32	0.271 (U)
4/11/2017				0.488 (U)
4/26/2017			1.07	0.14 (U)
8/10/2017			1.88	0.379
3/29/2018			2.31	0.278 (U)
6/14/2018			1.86	0.157 (U)
10/4/2018			2.44	0.48
2/27/2019			2.42	
2/28/2019				0.271 (U)
4/3/2019			1.55	0.0621 (U)
9/19/2019			2.06	0.537
2/5/2020				-0.137 (U)
2/7/2020			1.66	
3/19/2020			1.21	0.23 (U)
9/22/2020			1.75	
9/23/2020				0.0587 (U)
2/3/2021			2	
2/4/2021				0.353 (U)
3/11/2021			2.38	
3/12/2021				0.831
8/26/2021	1.63	1.12	2.87	0.681

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	0.0131 (J)	0.284 (J)	0.0538 (J)				
5/18/2016				0.029 (J)	0.164 (J)	0.014 (J)	0.106 (J)
7/19/2016	<0.1	0.21	<0.1			<0.1	0.11 (J)
7/20/2016				<0.1	0.17 (J)		
9/13/2016	<0.1	0.15 (J)	<0.1	<0.1	0.15 (J)		0.11 (J)
9/14/2016						0.095 (J)	
11/9/2016	<0.1	<0.1	0.085 (J)				0.1 (J)
11/10/2016				<0.1	0.12 (J)		
1/17/2017	<0.1		<0.1				
1/18/2017				<0.1	0.15 (J)		0.11 (J)
1/19/2017		0.087 (J)				<0.1	
3/13/2017	<0.1		<0.1				
3/14/2017		<0.1		<0.1	0.13 (J)	<0.1	<0.1
4/24/2017	<0.1		<0.1				
4/25/2017		<0.1		<0.1	0.12 (J)	<0.1	<0.1
8/8/2017	<0.1	0.087 (J)	<0.1	<0.1			0.099 (J)
8/9/2017					0.14 (J)	<0.1	
10/10/2017	<0.1		0.18 (J)				
10/11/2017		0.09 (J)		<0.1	0.14 (J)	<0.1	0.098 (J)
3/27/2018	<0.1		<0.1				
3/28/2018		0.11 (J)		<0.1	0.12 (J)	<0.1	0.088 (J)
6/13/2018	<0.1	0.085 (J)				<0.1	0.093 (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)					
10/2/2018							0.13 (J)
10/3/2018				<0.1	0.13 (J)	<0.1	
2/25/2019	<0.1		0.032 (J)				
2/26/2019		0.23		<0.1	0.14 (J)	<0.1	0.074 (J)
4/1/2019	<0.1		0.061 (J)				
4/2/2019		0.21		0.039 (J)	0.14 (J)	<0.1	0.09 (J)
9/16/2019	0.03 (J)					<0.1	0.1 (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	<0.1	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	<0.1	0.037 (J)
9/21/2020			0.037 (J)	<0.1	0.091 (J)		
9/22/2020	<0.1	0.1				<0.1	0.068 (J)
2/2/2021	0.028 (J)	0.071 (J)	0.065 (J)	0.035 (J)	0.15		
2/3/2021						<0.1	0.088 (J)
3/10/2021		0.046 (J)	0.045 (J)	<0.1	0.12	<0.1	
3/11/2021	<0.1						0.092 (J)
8/23/2021			0.097 (J)				
8/24/2021	0.062 (J)				0.17	0.073 (J)	0.16
8/25/2021		0.13		0.077 (J)			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.018 (J)	0.206					0.779
5/19/2016			0.039 (J)	0.12 (J)	0.384		
7/19/2016	<0.1						0.97
7/20/2016		0.23	<0.1	0.11 (J)	0.34		
9/13/2016	<0.1						
9/14/2016		0.17 (J)	<0.1	0.095 (J)	0.31		0.89
11/10/2016	<0.1				0.26		0.88
11/11/2016		0.14 (J)	<0.1	<0.1			
1/18/2017	<0.1						
1/24/2017							0.92
1/27/2017			<0.1	<0.1	0.28		
2/6/2017		0.15 (J)					
2/8/2017						<0.1	
2/23/2017						<0.1	
3/14/2017	<0.1						0.77
3/15/2017		0.16 (J)	<0.1	<0.1	0.3		
3/17/2017						<0.1	
4/11/2017						<0.1	
4/25/2017	<0.1						0.95
4/26/2017		0.17 (J)	<0.1	<0.1	0.33	<0.1	
5/17/2017						<0.1	
6/7/2017						<0.1	
7/11/2017						<0.1	
8/8/2017	<0.1						
8/9/2017					0.32		0.91
8/10/2017		0.2	<0.1	0.11 (J)			
10/11/2017	<0.1					<0.1	0.88
10/12/2017		0.14 (J)	<0.1	0.091 (J)	0.28		
3/28/2018	<0.1						
3/29/2018			<0.1	0.089 (J)	0.27	<0.1	
3/30/2018		0.13 (J)					0.79
6/14/2018	<0.1	0.15 (J)	<0.1	0.1 (J)	0.27	<0.1	0.79
10/3/2018	<0.1						0.79
10/4/2018		0.18 (J)	<0.1	0.12 (J)	0.23	<0.1	
2/26/2019	<0.1						
2/27/2019		0.21	0.047 (J)	0.06 (J)	0.25	<0.1	0.81
4/2/2019	<0.1						
4/3/2019			0.048 (J)	0.084 (J)	0.24	0.048 (J)	
4/4/2019		0.13 (J)					0.78
9/18/2019	0.027 (J)				0.22	0.035 (J)	0.81
9/19/2019		0.13 (J)	0.037 (J)	0.093 (J)			
2/5/2020	0.026 (J)	0.14	0.045 (J)	0.098 (J)	0.2	0.04 (J)	
2/7/2020							0.79
3/17/2020	0.044 (J)						
3/18/2020		0.052 (J)	<0.1	0.033 (J)			0.71
3/19/2020					0.15	<0.1	
9/22/2020	<0.1						
9/23/2020		0.09 (J)		0.064 (J)			0.63
9/24/2020			0.18		<0.1	0.028 (J)	
2/2/2021	<0.1						
2/3/2021			0.027 (J)	0.082 (J)			
2/4/2021		0.12			0.16	0.033 (J)	0.69

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/10/2021	<0.1						
3/11/2021		0.15			0.18	0.04 (J)	
3/12/2021			0.044 (J)	0.096 (J)			0.88
8/24/2021	0.054 (J)						
8/25/2021			0.056 (J)	0.14	0.2	0.071 (J)	
8/26/2021		0.16					0.77

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	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23	
5/18/2016	0.1 (J)	0.121 (J)						
7/19/2016	0.14 (J)							
7/20/2016		0.16 (J)						
9/14/2016	0.18 (J)	0.19 (J)						
11/10/2016	0.11 (J)	0.15 (J)						
11/11/2016			0.32					
1/20/2017		0.18 (J)						
1/24/2017	0.15 (J)							
2/6/2017			0.45					
3/14/2017		0.11 (J)						
3/15/2017	0.1 (J)		0.37					
4/11/2017			0.37					
4/25/2017	0.13 (J)	0.13 (J)						
4/26/2017			0.4					
6/7/2017			0.35					
7/11/2017			0.39					
8/9/2017	0.18 (J)	0.19 (J)						
8/10/2017			0.42					
10/11/2017	<0.1	0.14 (J)						
10/12/2017			0.36					
3/29/2018	0.13 (J)		0.34					
3/30/2018		0.095 (J)						
6/14/2018	<0.1	0.11 (J)	0.35					
10/4/2018	0.85 (J)	0.11 (J)	0.35					
2/26/2019		0.068 (J)						
2/27/2019	0.47							
2/28/2019			0.28					
4/2/2019			0.33					
4/4/2019	0.08 (J)	0.087 (J)						
9/18/2019	0.058 (J)	0.066 (J)	0.32					
2/7/2020	0.072 (J)	0.079 (J)	0.35					
3/18/2020	0.084 (J)	<0.1						
5/4/2020			0.36					
9/23/2020	0.049 (J)	0.05 (J)	0.25					
2/3/2021			0.3					
2/4/2021	0.052 (J)	0.064 (J)						
3/8/2021				1.8				
3/9/2021					1.7	1.1	0.092 (J)	
3/11/2021	0.061 (J)	0.05 (J)	0.31					
4/7/2021					1.6		0.093 (J)	
4/8/2021				1.7		1.4		
8/25/2021	0.099 (J)	0.093 (J)						
8/26/2021			0.38	2	2	0.51	0.081 (J)	

			i lant wan	Siey Gient. Southern Sompany Buta. Wallstey / Siri Gila
	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			0.304	1.58
7/20/2016			0.27	2
9/14/2016				1.8
9/15/2016			0.24	
11/14/2016			0.2	
2/6/2017			0.27	
2/9/2017				1.3
3/15/2017			0.25	1.3
4/11/2017				1.4
4/26/2017			0.31	1.5
8/10/2017			0.37	1.6
10/12/2017			0.35	1.5
3/29/2018			0.36	1.4
6/14/2018			0.56	1.4
10/4/2018			0.27	1.4
2/27/2019			0.054 (J)	
2/28/2019				1.4
4/3/2019			0.5	1.3
9/19/2019			0.42	1.3
2/5/2020				1.3
2/7/2020			0.25	
3/19/2020			0.057 (J)	1
9/22/2020			0.14	
9/23/2020				0.82
2/3/2021			0.15	
2/4/2021				0.91
3/8/2021		<0.1		
3/9/2021	1			
3/11/2021			0.16	
3/12/2021				0.98
4/7/2021	1.1			
4/8/2021		0.028 (J)		
8/26/2021	1.2	0.047 (J)	0.21	1

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	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	<0.001	<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		<0.001
9/14/2016						<0.001	
11/9/2016	<0.001	<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		<0.001
1/19/2017		<0.001				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		<0.001		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		<0.001		<0.001	<0.001	<0.001	<0.001
2/25/2019	<0.001		0.00019 (J)				
2/26/2019		<0.001		<0.001	0.00046 (J)	0.00028 (J)	0.00037 (J)
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	<0.001					<0.001	<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)	0.00024 (J)	<0.001
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)	<0.001	0.00017 (J)
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	0.00015 (J)	<0.001	0.00015 (J)	<0.001	<0.001		
2/3/2021						0.00019 (J)	<0.001
3/10/2021		<0.001	0.00019 (J)	<0.001	<0.001	<0.001	
3/11/2021	<0.001						<0.001
8/23/2021			0.00023 (J)				
8/24/2021	<0.001				<0.001	<0.001	<0.001
8/25/2021		<0.001		<0.001			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001	<0.001					<0.001
5/19/2016			<0.001	<0.001	<0.001		
7/19/2016	<0.001						<0.001
7/20/2016		<0.001	<0.001	<0.001	<0.001		
9/13/2016	<0.001						
9/14/2016		<0.001	<0.001	<0.001	0.00055 (J)		<0.001
11/10/2016	<0.001				0.00047 (J)		<0.001
11/11/2016		<0.001	<0.001	<0.001			
1/18/2017	<0.001						
1/24/2017							<0.001
1/27/2017			<0.001	<0.001	<0.001		
2/6/2017		<0.001					
2/8/2017						<0.001	
2/23/2017						<0.001	
3/14/2017	<0.001						<0.001
3/15/2017		<0.001	<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	<0.001	<0.001	
5/17/2017						<0.001	
6/7/2017						<0.001	
7/11/2017						<0.001	
8/8/2017	<0.001						
8/9/2017					<0.001		<0.001
8/10/2017		<0.001	<0.001	<0.001			
3/28/2018	<0.001						
3/29/2018			<0.001	<0.001	<0.001	<0.001	
3/30/2018		<0.001					<0.001
2/26/2019	<0.001						
2/27/2019		0.00023 (J)	0.00058 (J)	<0.001	0.00068 (J)	<0.001	<0.001
4/2/2019	<0.001						
4/3/2019			<0.001	<0.001	0.00047 (J)	<0.001	
4/4/2019		<0.001					<0.001
9/18/2019	<0.001				0.00045 (J)	<0.001	<0.001
9/19/2019		0.00041 (J)	<0.001	<0.001			
2/5/2020	<0.001	0.00016 (J)	<0.001	<0.001	0.00045 (J)	<0.001	
2/7/2020							<0.001
3/17/2020	<0.001						
3/18/2020		0.00021 (J)	<0.001	<0.001			<0.001
3/19/2020					0.0006 (J)	0.00017 (J)	
9/22/2020	<0.001						
9/23/2020		0.00013 (J)		<0.001			<0.001
9/24/2020			0.00037 (J)		<0.001	0.00018 (J)	
2/2/2021	<0.001						
2/3/2021			<0.001	<0.001			
2/4/2021		0.00019 (J)			0.00038 (J)	0.00013 (J)	0.0003 (J)
3/10/2021	<0.001						
3/11/2021		0.00032 (J)			0.00075 (J)	0.00031 (J)	
3/12/2021			0.00038 (J)	<0.001			<0.001
8/24/2021	<0.001						
8/25/2021			0.00023 (J)	<0.001	0.00025 (J)	0.00041 (J)	

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## **Time Series**

Constituent: Lead (mg/L) Analysis Run 10/15/2021 4:21 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

WGWA-7 (bg) WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 8/26/2021 0.00026 (J) <0.001

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.001	<0.001					
7/19/2016	<0.001						
7/20/2016		<0.001					
9/14/2016	<0.001	<0.001					
11/10/2016	<0.001	<0.001					
11/11/2016			<0.001				
1/20/2017		<0.001					
1/24/2017	<0.001						
2/6/2017			<0.001				
3/14/2017		<0.001					
3/15/2017	<0.001		<0.001				
4/11/2017			<0.001				
4/25/2017	<0.001	<0.001					
4/26/2017			<0.001				
6/7/2017			<0.001				
7/11/2017			<0.001				
8/9/2017	<0.001	<0.001					
8/10/2017			<0.001				
3/29/2018	<0.001		<0.001				
3/30/2018		<0.001					
2/26/2019		0.00033 (J)					
2/27/2019	0.00014 (J)						
2/28/2019			<0.001				
4/2/2019			<0.001				
4/4/2019	<0.001	<0.001					
9/18/2019	<0.001	<0.001	<0.001				
2/7/2020	<0.001	<0.001	<0.001				
3/18/2020	<0.001	0.0002 (J)					
5/4/2020			<0.001				
9/23/2020	<0.001	<0.001	<0.001				
2/3/2021			<0.001				
2/4/2021	0.00013 (J)	<0.001					
3/11/2021	<0.001	<0.001	<0.001				
8/25/2021	<0.001	<0.001					
8/26/2021			<0.001	<0.001	<0.001	0.00022 (J)	<0.001

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.001	<0.001
7/20/2016			<0.001	<0.001
9/14/2016				<0.001
9/15/2016			<0.001	
11/14/2016			<0.001	
2/6/2017			<0.001	
2/9/2017				<0.001
3/15/2017			<0.001	<0.001
4/11/2017				<0.001
4/26/2017			<0.001	<0.001
8/10/2017			<0.001	<0.001
3/29/2018			<0.001	<0.001
2/27/2019			0.00017 (J)	
2/28/2019				0.00014 (J)
4/3/2019			<0.001	<0.001
9/19/2019			<0.001	<0.001
2/5/2020				<0.001
2/7/2020			<0.001	
3/19/2020			0.00016 (J)	<0.001
9/22/2020			0.00013 (J)	
9/23/2020				<0.001
2/3/2021			0.00013 (J)	
2/4/2021				<0.001
3/11/2021			<0.001	
3/12/2021				<0.001
8/26/2021	0.0012	<0.001	0.00014 (J)	<0.001

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
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	<0.005	<0.005	0.005			<0.005	0.0043 (J)
7/20/2016				<0.005	0.0041 (J)		
9/13/2016	<0.005	<0.005	0.0075	<0.005	0.0042 (J)		0.0045 (J)
9/14/2016						<0.005	
11/9/2016	0.0032 (J)	<0.005	0.0078				0.0036 (J)
11/10/2016				<0.005	0.0048 (J)		
1/17/2017	<0.005		0.009				
1/18/2017				<0.005	0.0033 (J)		0.0046 (J)
1/19/2017		<0.005				<0.005	
3/13/2017	<0.005		0.0069				
3/14/2017		<0.005		<0.005	0.0033 (J)	<0.005	0.0038 (J)
4/24/2017	<0.005		0.0049 (J)				
4/25/2017		<0.005		<0.005	0.0037 (J)	<0.005	<0.005
8/8/2017	0.0032 (J)	<0.005	0.0075	<0.005			0.0043 (J)
8/9/2017					0.0042 (J)	<0.005	
3/27/2018	0.0045 (J)		0.0081				
3/28/2018		0.0012 (J)		0.0013 (J)	0.0056	<0.005	0.0064
6/13/2018	0.0033 (J)	<0.005				<0.005	0.0041 (J)
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)					
10/2/2018							0.0038 (J)
10/3/2018				0.0012 (J)	0.005	<0.005	
2/25/2019	0.0049 (J)		0.0072				
2/26/2019		<0.005		<0.005	0.0069	<0.005	0.0068
4/1/2019	0.0044 (J)		0.0055				
4/2/2019		0.0012 (J)		<0.005	0.0036 (J)	0.0016 (J)	0.0052
9/16/2019	0.004 (J)					0.028 (O)	0.032 (O)
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	<0.005	0.0053
2/5/2020		<0.005					
3/16/2020	0.0053		0.0083				
3/17/2020		<0.005		<0.005	0.0059	<0.005	0.0055
9/21/2020			0.0075	<0.005	0.005		
9/22/2020	0.0036 (J)	<0.005				<0.005	0.0049 (J)
2/2/2021	<0.005	<0.005	0.0065	<0.005	0.0039 (J)		
2/3/2021						<0.005	0.0047 (J)
3/10/2021		<0.005	0.0075	<0.005	0.0049 (J)	<0.005	
3/11/2021	0.0039 (J)						0.005
8/23/2021			0.0066				
8/24/2021	<0.005				0.0036 (J)	<0.005	0.0041 (J)
8/25/2021		<0.005		<0.005			

WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
<0.05 (O)	0.032					<0.005
		<0.005	<0.005	<0.005		
<0.005						0.0036 (J)
	0.021	<0.005	0.0057	<0.005		
<0.005						
	0.02	<0.005	0.0077	<0.005		<0.005
<0.005				0.0038 (J)		0.0064
	0.017	<0.005	0.007			
<0.005						
						0.0075
		<0.005	0.0074	<0.005		
	0.016					
					<0.005	
<0.005						0.0057
	0.014	<0.005	0.0077	<0.005		
					<0.005	
<0.005						0.0059
	0.011	<0.005	0.0011	<0.005		
					<0.005	
<0.005						
				<0.005		0.0068
	0.011	<0.005	0.0064			
0.0014 (J)						
		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
						0.0077
	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
<0.005						0.006
	0.0085	0.0014 (J)	0.0066	0.0025 (J)	0.0016 (J)	
<0.005						
.0.005	0.0068	<0.005	0.0068	<0.005	<0.005	0.0055
<0.005						
		<0.005	0.0075	<0.005	0.0015 (J)	
.0.005	0.0059			.0.005	.0.005	0.0054
<0.005				<0.005	<0.005	0.0054
<0.005	0.0061	<0.005	0.0063	<0.005	<0.005	
.0.005						0.0068
<0.005	0.0074	.0.005	0.0004			0.0000
	0.0071	<0.005	0.0081			0.0086
.0.005				<0.005	<0.005	
<0.005	0.0054		0.007			0.0074
	0.0054	-0.005	0.007	-0.005	-0.005	0.0071
-0.005		<0.005		<0.005	<0.005	
<0.005		<0.00F	0.0075			
	0.0040.75	<0.005	0.0075	-0.005	<b>-0.00</b> F	0.0000
<0.00E	0.0049 (J)			<0.005	<0.005	0.0086
<0.005	0.0051			0.0027 ( 1)	0.0035 (1)	
	0.0051			U.UU37 (J)	U.UU35 (J)	
	<0.05 (O)	<ul> <li>&lt;0.05 (O)</li> <li>0.032</li> <li>&lt;0.005</li> <li>0.02</li> <li>&lt;0.005</li> <li>0.017</li> <li>&lt;0.005</li> <li>0.016</li> <li>&lt;0.005</li> <li>0.011</li> <li>&lt;0.005</li> <li>0.011</li> <li>&lt;0.005</li> <li>0.011</li> <li>&lt;0.005</li> <li>0.0084</li> <li>&lt;0.005</li> <li>&lt;0.0088</li> <li>&lt;0.005</li> <li>&lt;0.0068</li> <li>&lt;0.005</li> <li>&lt;0.0075</li> <li>&lt;0.0071</li> <li>&lt;0.005</li> <li>&lt;0.0071</li> <li>&lt;0.0054</li> <li>&lt;0.005</li> <li>&lt;0.0054</li> </ul>	<0.05 (O)	County   C		

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.005	0.0089			0.0096
8/24/2021	<0.005						
8/25/2021			<0.005	0.0061	<0.005	<0.005	
8/26/2021		0.0044 (J)					0.0059

				-		-		
	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23	
5/18/2016	<0.005	<0.005						
7/19/2016	0.0091							
7/20/2016		0.0042 (J)						
9/14/2016	0.012	0.0058						
11/10/2016	0.013	0.0066						
11/11/2016			0.045					
1/20/2017		0.0044 (J)						
1/24/2017	0.011							
2/6/2017			0.05					
3/14/2017		0.0048 (J)						
3/15/2017	0.01		0.052					
4/11/2017			0.048					
4/25/2017	0.0081	0.0049 (J)						
4/26/2017			0.044					
6/7/2017			0.047					
7/11/2017			0.045					
8/9/2017	0.013	0.0067						
8/10/2017			0.056					
3/29/2018	0.015		0.072					
3/30/2018		0.0067						
6/14/2018	0.009	0.0046 (J)	0.048					
10/4/2018	0.012	0.005	0.062					
2/26/2019		0.0063						
2/27/2019	0.0075							
2/28/2019			0.045					
4/2/2019			0.052					
4/4/2019	0.0077	0.0042 (J)						
9/18/2019	0.0056	0.0047 (J)	0.052					
2/7/2020	0.0053	0.0045 (J)	0.044					
3/18/2020	0.0057	0.0054						
5/4/2020			0.049					
9/23/2020	0.0059	0.0056	0.056					
2/3/2021			0.06					
2/4/2021	0.0051	0.0047 (J)						
3/8/2021				0.11				
3/9/2021					0.022	0.011	<0.005	
3/11/2021	0.005	0.0049 (J)	0.051					
4/7/2021					0.031		<0.005	
4/8/2021				0.11		0.0081		
8/25/2021	0.0046 (J)	0.0048 (J)						
8/26/2021			0.057	0.11	0.032	0.011	<0.005	

			Flatit Walls	siey Client. Southern Company	Data: Wallsley Asii Foliu
	WGWC-24	WGWC-25	WGWC-8	WGWC-9	
5/19/2016			0.0215	0.0335	
7/20/2016			0.026	0.024	
9/14/2016				0.039	
9/15/2016			0.057		
11/14/2016			0.017		
2/6/2017			0.012		
2/9/2017				0.04	
3/15/2017			0.014	0.035	
4/11/2017				0.034	
4/26/2017			0.0091	0.029	
8/10/2017			0.013	0.038	
3/29/2018			0.018	0.048	
6/14/2018			0.015	0.034	
10/4/2018			0.013	0.039	
2/27/2019			0.014		
2/28/2019				0.037	
4/3/2019			0.015	0.035	
9/19/2019			0.014	0.036	
2/5/2020				0.034	
2/7/2020			0.014		
3/19/2020			0.015	0.039	
9/22/2020			0.013		
9/23/2020				0.033	
2/3/2021			0.014		
2/4/2021				0.035	
3/8/2021		0.0046 (J)			
3/9/2021	0.0084				
3/11/2021			0.013		
3/12/2021				0.034	
4/7/2021	0.0077				
4/8/2021		0.0044 (J)			
8/26/2021	0.0076	0.0044 (J)	0.013	0.03	

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.0002	<0.0002	<0.0002				
5/18/2016				<0.0002	<0.0002	<0.0002	<0.0002
7/19/2016	<0.0002	8.2E-05 (J)	8.1E-05 (J)			8.5E-05 (J)	8.4E-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		<0.0002
9/14/2016						<0.0002	
11/9/2016	<0.0002	<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		<0.0002
1/19/2017		<0.0002				<0.0002	
3/13/2017	<0.0002		<0.0002				
3/14/2017		7.1E-05 (J)		<0.0002	<0.0002	<0.0002	<0.0002
4/24/2017	<0.0002		<0.0002				
4/25/2017		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
8/8/2017	<0.0002	<0.0002	<0.0002	<0.0002			<0.0002
8/9/2017					<0.0002	<0.0002	
3/27/2018	<0.0002		<0.0002				
3/28/2018		<0.0002		<0.0002	<0.0002	8.9E-05 (J)	<0.0002
6/13/2018	<0.0002	<0.0002				<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					
10/2/2018							<0.0002
10/3/2018				<0.0002	<0.0002	<0.0002	
2/25/2019	<0.0002		<0.0002				
2/26/2019		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
2/3/2020	<0.0002		<0.0002				
2/4/2020				0.00016 (J)	0.00011 (J)	<0.0002	<0.0002
2/5/2020		<0.0002					
3/16/2020	<0.0002		<0.0002				
3/17/2020		<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
9/21/2020			<0.0002	<0.0002	<0.0002		
9/22/2020	<0.0002	<0.0002				<0.0002	<0.0002
2/2/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002		
2/3/2021						<0.0002	<0.0002

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.0002	<0.0002					<0.0002
5/19/2016			<0.0002	<0.0002	<0.0002		
7/19/2016	7.2E-05 (J)						9.3E-05 (J)
7/20/2016		8.2E-05 (J)	8.2E-05 (J)	0.00011 (J)	8.1E-05 (J)		
9/13/2016	<0.0002						
9/14/2016		<0.0002	<0.0002	<0.0002	<0.0002		<0.0002
11/10/2016	8.7E-05 (J)				8.3E-05 (J)		8.5E-05 (J)
11/11/2016		8.5E-05 (J)	0.00011 (J)	7.9E-05 (J)			
1/18/2017	<0.0002						
1/24/2017							<0.0002
1/27/2017			<0.0002	<0.0002	<0.0002		
2/6/2017		8.3E-05 (J)					
2/8/2017						<0.0002	
2/23/2017						<0.0002	
3/14/2017	<0.0002						7.1E-05 (J)
3/15/2017		0.00013 (J)	<0.0002	0.00018 (J)	<0.0002		
3/17/2017						0.00013 (J)	
4/11/2017						<0.0002	
4/25/2017	<0.0002						<0.0002
4/26/2017		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
5/17/2017						<0.0002	
6/7/2017						<0.0002	
7/11/2017						<0.0002	
8/8/2017	<0.0002						
8/9/2017					<0.0002		<0.0002
8/10/2017		<0.0002	<0.0002	<0.0002			
3/28/2018	<0.0002						
3/29/2018			<0.0002	0.00011 (J)	<0.0002	<0.0002	
3/30/2018		<0.0002					8.6E-05 (J)
6/14/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
10/3/2018	<0.0002						<0.0002
10/4/2018		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/26/2019	<0.0002						
2/27/2019		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
2/5/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
2/7/2020							<0.0002
3/17/2020	<0.0002						
3/18/2020		<0.0002	<0.0002	<0.0002			<0.0002
3/19/2020					<0.0002	<0.0002	
9/22/2020	<0.0002						
9/23/2020		<0.0002		<0.0002			<0.0002
9/24/2020			<0.0002		<0.0002	<0.0002	
2/2/2021	<0.0002						
2/3/2021			<0.0002	<0.0002	0.0000	.0.000	0.0000
2/4/2021		<0.0002			<0.0002	<0.0002	<0.0002

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.0002	<0.0002					
7/19/2016	<0.0002						
7/20/2016		7.4E-05 (J)					
9/14/2016	<0.0002	<0.0002					
11/10/2016	0.00012 (J)	<0.0002					
11/11/2016			7.6E-05 (J)				
1/20/2017		<0.0002					
1/24/2017	7E-05 (J)						
2/6/2017			0.00012 (J)				
3/14/2017		<0.0002					
3/15/2017	<0.0002		<0.0002				
4/11/2017			<0.0002				
4/25/2017	0.00019 (J)	<0.0002					
4/26/2017			<0.0002				
6/7/2017			<0.0002				
7/11/2017			<0.0002				
8/9/2017	<0.0002	<0.0002					
8/10/2017			<0.0002				
3/29/2018	<0.0002		<0.0002				
3/30/2018		<0.0002					
6/14/2018	<0.0002	<0.0002	<0.0002				
10/4/2018	<0.0002	<0.0002	<0.0002				
2/26/2019		<0.0002					
2/27/2019	<0.0002						
2/28/2019			<0.0002				
2/7/2020	<0.0002	<0.0002	<0.0002				
3/18/2020	<0.0002	<0.0002					
5/4/2020			<0.0002				
9/23/2020	<0.0002	<0.0002	<0.0002				
2/3/2021			<0.0002				
2/4/2021	<0.0002	<0.0002					
8/26/2021				0.00033	0.0002	0.00018 (J)	0.00022

		WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2	2016			<0.0002	<0.0002
7/20/2	2016			<0.0002	<0.0002
9/14/2	2016				<0.0002
9/15/2	2016			0.00011 (J)	
11/14/	/2016			<0.0002	
2/6/20	017			7.8E-05 (J)	
2/9/20	017				<0.0002
3/15/2	2017			0.00013 (J)	0.00013 (J)
4/11/2	2017				<0.0002
4/26/2	2017			<0.0002	<0.0002
8/10/2	2017			<0.0002	<0.0002
3/29/2	2018			<0.0002	<0.0002
6/14/2	2018			<0.0002	<0.0002
10/4/2	2018			<0.0002	<0.0002
2/27/2	2019			<0.0002	
2/28/2	2019				<0.0002
2/5/20	020				<0.0002
2/7/20	020			<0.0002	
3/19/2	2020			<0.0002	<0.0002
9/22/2	2020			<0.0002	
9/23/2	2020				<0.0002
2/3/20	021			<0.0002	
2/4/20	021				<0.0002
8/26/2	2021	0.00026	0.0019		

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.015	0.00367 (J)	<0.015				
5/18/2016				<0.015	<0.015	<0.015	<0.015
7/19/2016	<0.015	0.002 (J)	<0.015			<0.015	<0.015
7/20/2016				<0.015	<0.015		
9/13/2016	<0.015	0.0014 (J)	<0.015	<0.015	<0.015		<0.015
9/14/2016						0.016 (O)	
11/9/2016	<0.015	<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		<0.015
1/19/2017		<0.015				<0.015	
3/13/2017	<0.015		<0.015				
3/14/2017		0.0072 (J)		0.00087 (J)	<0.015	<0.015	<0.015
4/24/2017	<0.015		<0.015				
4/25/2017		0.0036 (J)		0.00098 (J)	<0.015	<0.015	<0.015
8/8/2017	0.0017 (J)	<0.015	<0.015	<0.015			<0.015
8/9/2017					<0.015	<0.015	
3/27/2018	<0.015		<0.015				
3/28/2018		0.00089 (J)		<0.015	<0.015	<0.015	<0.015
6/13/2018	<0.015	<0.015				<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					
10/2/2018							<0.015
10/3/2018				<0.015	<0.015	<0.015	
2/25/2019	<0.015		<0.015				
2/26/2019		0.0019 (J)		<0.015	<0.015	<0.015	<0.015
4/1/2019	<0.015		<0.015				
4/2/2019		<0.015		<0.015	<0.015	<0.015	<0.015
9/16/2019	<0.015					0.001 (J)	0.001 (J)
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	<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	<0.015	<0.015
9/21/2020			<0.015	<0.015	<0.015		
9/22/2020	<0.015	0.00097 (J)				0.0025 (J)	<0.015
2/2/2021	<0.015	<0.015	<0.015	<0.015	<0.015	0.045	0.045
2/3/2021		0.045	.0.045	0.045	0.045	<0.015	<0.015
3/10/2021		<0.015	<0.015	<0.015	<0.015	<0.015	
3/11/2021	<0.015		.0.045				<0.015
8/23/2021	.0.045		<0.015		0.045	0.045	0.045
8/24/2021	<0.015	0.045		0.045	<0.015	<0.015	<0.015
8/25/2021		<0.015		<0.015			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.015	<0.015					0.0153
5/19/2016			<0.015	<0.015	0.00491 (J)		
7/19/2016	<0.015						0.0093 (J)
7/20/2016		<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/13/2016	<0.015						
9/14/2016		0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016	<0.015				0.0016 (J)		0.0065 (J)
11/11/2016		<0.015	<0.015	<0.015			
1/18/2017	0.001 (J)						
1/24/2017							0.0049 (J)
1/27/2017			<0.015	<0.015	0.0023 (J)		
2/6/2017		<0.015					
2/8/2017						<0.015	
2/23/2017						<0.015	
3/14/2017	0.0014 (J)						0.0034 (J)
3/15/2017		<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017						<0.015	
4/11/2017						<0.015	
4/25/2017	<0.015						0.004 (J)
4/26/2017		<0.015	<0.015	<0.015	0.0019 (J)	<0.015	
5/17/2017						<0.015	
6/7/2017						0.001 (J)	
7/11/2017						<0.015	
8/8/2017	<0.015						
8/9/2017					0.0028 (J)		0.0042 (J)
8/10/2017		0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/28/2018	<0.015						
3/29/2018			<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018		<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
10/3/2018	<0.015						0.0041 (J)
10/4/2018		<0.015	<0.015	<0.015	<0.015	<0.015	
2/26/2019	<0.015						
2/27/2019		<0.015	<0.015	0.00063 (J)	0.0019 (J)	<0.015	0.0061
4/2/2019	<0.015						
4/3/2019			<0.015	<0.015	<0.015	<0.015	
4/4/2019		<0.015					0.0039 (J)
9/18/2019	<0.015				0.0021 (J)	<0.015	0.0052
9/19/2019		<0.015	<0.015	0.00073 (J)			
2/5/2020	<0.015	<0.015	<0.015	<0.015	0.0012 (J)	<0.015	
2/7/2020							0.0024 (J)
3/17/2020	<0.015						
3/18/2020		<0.015	<0.015	<0.015			0.002 (J)
3/19/2020					0.0018 (J)	<0.015	
9/22/2020	<0.015						
9/23/2020		<0.015		<0.015			0.0031 (J)
9/24/2020			0.0017 (J)		<0.015	<0.015	
2/2/2021	<0.015						
2/3/2021			<0.015	<0.015			
2/4/2021		<0.015			0.0012 (J)	<0.015	0.0022 (J)
3/10/2021	<0.015						
3/11/2021		<0.015			0.0013 (J)	<0.015	

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# **Time Series**

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.015	0.00062 (J)			0.0019 (J)
8/24/2021	<0.015						
8/25/2021			<0.015	<0.015	0.00092 (J)	<0.015	
8/26/2021		<0.015					0.0029 (J)

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.015	0.00526 (J)					
7/19/2016	<0.015						
7/20/2016		0.0066 (J)					
9/14/2016	<0.015	0.0081 (J)					
11/10/2016	<0.015	0.0076 (J)					
11/11/2016			<0.015				
1/20/2017		0.0094 (J)					
1/24/2017	<0.015						
2/6/2017			0.001 (J)				
3/14/2017		0.0044 (J)					
3/15/2017	<0.015		<0.015				
4/11/2017			<0.015				
4/25/2017	<0.015	0.0074 (J)					
4/26/2017			<0.015				
6/7/2017			0.0015 (J)				
7/11/2017			<0.015				
8/9/2017	<0.015	0.0066 (J)					
8/10/2017			0.0016 (J)				
3/29/2018	<0.015		0.0012 (J)				
3/30/2018		0.0024 (J)					
6/14/2018	<0.015	0.0026 (J)	0.0014 (J)				
10/4/2018	<0.015	0.00085 (J)	<0.015				
2/26/2019		0.0032 (J)					
2/27/2019	<0.015						
2/28/2019			0.0013 (J)				
4/2/2019			<0.015				
4/4/2019	<0.015	0.002 (J)					
9/18/2019	<0.015	0.0026 (J)	0.0011 (J)				
2/7/2020	<0.015	0.0025 (J)	0.0014 (J)				
3/18/2020	<0.015	0.0024 (J)					
5/4/2020			0.0013 (J)				
9/23/2020	<0.015	0.0027 (J)	0.0013 (J)				
2/3/2021			0.0013 (J)				
2/4/2021	<0.015	0.0025 (J)					
3/11/2021	<0.015	0.0022 (J)	0.0012 (J)				
8/25/2021	<0.015	0.0022 (J)					
8/26/2021			0.0011 (J)	0.00079 (J)	0.044	<0.015	<0.015

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.015	0.00762 (J)
7/20/2016			<0.015	0.0084 (J)
9/14/2016				0.0071 (J)
9/15/2016			<0.015	
11/14/2016			<0.015	
2/6/2017			<0.015	
2/9/2017				0.018
3/15/2017			<0.015	0.0057 (J)
4/11/2017				0.0047 (J)
4/26/2017			<0.015	0.004 (J)
8/10/2017			<0.015	0.0046 (J)
3/29/2018			<0.015	0.0048 (J)
6/14/2018			<0.015	0.0046 (J)
10/4/2018			<0.015	0.003 (J)
2/27/2019			<0.015	
2/28/2019				0.0053
4/3/2019			<0.015	0.0026 (J)
9/19/2019			<0.015	0.0048 (J)
2/5/2020				0.0044 (J)
2/7/2020			<0.015	
3/19/2020			<0.015	0.0042 (J)
9/22/2020			<0.015	
9/23/2020				0.0027 (J)
2/3/2021			<0.015	
2/4/2021				0.003 (J)
3/11/2021			<0.015	
3/12/2021				0.003 (J)
8/26/2021	<0.015	<0.015	<0.015	0.0028 (J)

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	5.24	7.81	6.23				
5/18/2016				5.55	7.23	5.47	7.92
7/18/2016	5.434038						
7/19/2016			6.285413			5.336672	7.154587
7/20/2016				5.656628	7.281557		
9/13/2016	5.22	7.18	6.3	5.63	7.15		7.96
9/14/2016						7.29	
11/9/2016	5.57	6.03	6.26				7.27
11/10/2016				5.61	6.33		
1/17/2017	5.48		6.8				
1/18/2017				5.81	6.94		7.72
1/19/2017		6.71				6.59	
3/13/2017	5.4		6.18				
3/14/2017		6.45		5.53	6.75	5.86	
4/24/2017	5.4		6.35				
4/25/2017		6.93		5.59	6.84	5.35	7.73
8/8/2017	5.32	6.72	6.23	5.52			7.74
8/9/2017					6.67	5.25	
8/25/2017						5.44	
10/10/2017	5.26		6.32				
10/11/2017		6.75		5.51	6.75	6.99	7.71
3/27/2018	5.39		6.14				
3/28/2018		6.84		5.6	6.79	5.95	7.28
6/13/2018	5.33	6.31				5.13	7.78
6/14/2018			6.02	5.58	6.67		
9/24/2018			6.1				
9/27/2018	5.33						
9/28/2018		6.26					
10/2/2018							7.52
10/3/2018				5.45	6.92	5.22	
2/25/2019	5.25		6.02				
2/26/2019		7.66		5.6	6.74	5.21	7.87
4/1/2019	5.31		6.09				
4/2/2019		7.53		5.69	6.81	5.25	7.94
9/16/2019	5.28					6.94	7.55
9/17/2019		6.47	6.25		6.93		
9/18/2019		0	0.20	5.62	0.00		
2/3/2020	5.4		6.09	0.02			
2/4/2020	<b>.</b>		0.00	5.66	7.29	5.31	7.74
2/5/2020		6.73		0.00	7.23	0.01	,,,-
3/16/2020	5.29	0.70	6.01				
3/17/2020	0.20	6.36	0.01	5.61	6.83	5.34	7.96
9/21/2020		0.00	6.05	5.35	6.81	0.04	7.55
9/22/2020	5.09	7.18	0.03	3.33	0.01	6.78	7.4
2/2/2021	5.36	6.48	6.1	5.78	6.61	5.70	···
2/3/2021	2.00	5.70	5.1	5.70	5.01	5.3	7.76
3/10/2021		5.8	6.11	5.49	7.19	5.22	
3/11/2021	5.26	5.0	J. 1 1	5.75	7.10	J.22	7.93
8/23/2021	5.20		6.18				7.00
8/24/2021	5.21		0.10		7.22	6.8	7.88
8/25/2021	J.Z I	6.74		5.52	1.44	0.0	7.00
512512U2 I		5.74		J.J2			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	5.5	8.96					7.75
5/19/2016			5.93	6.91	6.85		
7/18/2016			5.9661				
7/19/2016	5.43						7.876073
7/20/2016		8.56774		6.962608	6.705264		
9/1/2016				6.96			
9/13/2016	5.57						
9/14/2016					6.7		7.79
11/10/2016	6.93				6.5		7.76
11/11/2016		6.96	6.03	6.76			
1/18/2017	7.16						
1/24/2017							7.71
1/27/2017			6.21	6.66	6.47		
2/6/2017		6.93					
2/8/2017						5.81	
2/23/2017						5.8	
3/14/2017	5.82						7.57
3/15/2017		6.82	5.97	6.3	6.75		
3/17/2017						5.97	
4/11/2017						6.18	
4/25/2017	5.57						7.47
4/26/2017		6.73	6.17	6.67	6.57	6.09	
5/17/2017						6.26	
6/7/2017						6.21	
7/11/2017						6	
8/8/2017	5.6						
8/9/2017					6.55		7.37
8/10/2017		6.66	6.05	6.7			
10/11/2017	5.43					6.97	7.42
10/12/2017		6.67	6.89	6.89	6.67		
3/28/2018	5.29						
3/29/2018			6.85	7.08	6.99	6.51	
3/30/2018		6.98					7.48
6/14/2018	5.39	6.56	5.89	6.73	6.39	5.76	7.5
10/3/2018	5.33						7.11
10/4/2018		6.4	5.81	6.79	6.5	5.97	
2/26/2019	5.62						
2/27/2019		6.23	5.78	6.7	6.47	5.73	7.4
4/2/2019	5.6						
4/3/2019			6.07	6.91	6.47	5.68	
4/4/2019		6.46					7.58
9/18/2019	5.6	0.10			6.46	5.5	7.8
9/19/2019	0.0	6.45	5.82	6.63	0.10	0.0	
2/5/2020	5.54	6.42	5.89	6.76	6.44	5.52	
2/7/2020	3.34	0.42	3.03	0.70	0.44	0.02	7.66
3/17/2020	5.32						7.00
3/18/2020	0.02	6.4	5.89	6.94			7.73
3/19/2020		<b>U.</b> 7	0.00	0.04	6.56	5.49	
9/22/2020	5.36				0.50	5.75	
9/23/2020	0.00	6.14		6.42			7.35
9/24/2020		0.14	5.5	0.72	6.29	5.16	7.00
2/2/2021	5.84		J.J		0.29	3.10	
21212021	J.U <del>T</del>						

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
2/3/2021			5.21	6.15			
2/4/2021		6.21			6.34	5.76	7.77
3/10/2021	4.96						
3/11/2021		6.56			5.95	5.1	
3/12/2021			5.46	6.66			7.72
8/24/2021	5.53						
8/25/2021			5.66	6.69	6.27	5.39	
8/26/2021		6.31					7.58

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	6.06	6.41					
7/18/2016	5.884339						
7/20/2016		6.662463					
9/14/2016	5.89	6.7					
11/10/2016	5.6	6.51					
11/11/2016			6.93				
1/20/2017		6.55					
1/24/2017	5.54						
2/6/2017			6.8				
3/14/2017		6.27					
3/15/2017	5.39		6.78				
4/11/2017			6.79				
4/25/2017	5.28	6.26					
4/26/2017			6.82				
6/7/2017			6.76				
7/11/2017			6.99				
8/9/2017	5.46	6.47					
8/10/2017			6.59				
10/11/2017	5.45	6.47					
10/12/2017			6.7				
3/29/2018	5.33		6.88				
3/30/2018		6.71					
6/14/2018	5.35	6.15	6.72				
10/4/2018	5.28	6.14	6.67				
2/26/2019		6.17					
2/27/2019	5.08						
2/28/2019			6.98				
4/2/2019			6.75				
4/4/2019	5.19	6.16					
9/18/2019	5.19	6.17	6.71				
2/7/2020	5.17	6.34	7.08				
3/18/2020 5/4/2020	5.08	6.28	6.9				
9/23/2020	5.05	5.89	6.59				
2/3/2021	3.03	3.69	6.75				
2/4/2021	5.42	6.31	0.70				
3/8/2021	0.42	0.01		5.54			
3/9/2021				0.04	7.29	5.56	5.81
3/11/2021	5.21	5.96	7.12		0		
4/7/2021			· · <del>-</del>		7.05		5.57
4/8/2021				5.6		6.01	
8/25/2021	5.25	6.09		- · <del>-</del>			
8/26/2021	-		6.66	5.37	6.88	5.4	5.8

				·
	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			5.99	6.31
7/20/2016			6.194334	6.345061
9/14/2016				6.33
9/15/2016			6.38	
11/14/2016			5.7	
2/6/2017			5.66	
3/15/2017			5.77	5.99
4/26/2017			5.39	6.03
8/10/2017			5.59	5.86
10/12/2017			5.46	6.09
3/29/2018			5.43	5.89
6/14/2018			5.76	6.47
10/4/2018			5.39	6.17
2/28/2019				6.045 (D)
4/3/2019			5.55	6.1
9/19/2019			5.39	6.38
2/5/2020				6.54
2/7/2020			5.38	
3/19/2020			6.43	6.64
9/22/2020			5.17	
9/23/2020				5.8
2/3/2021			5.08	
2/4/2021				6.22
3/8/2021		5.36		
3/9/2021	4.29			
3/11/2021			5.35	
3/12/2021				5.88
4/7/2021	4.43			
4/8/2021		5.39		
8/26/2021	4.33	5.3	5.36	5.84

					. ,	,	
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.005	<0.005	<0.005				
5/18/2016				<0.005	<0.005	<0.005	<0.005
7/19/2016	<0.005	<0.005	<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		<0.005
9/14/2016						<0.005	
11/9/2016	<0.005	<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		<0.005
1/19/2017		<0.005				<0.005	
3/13/2017	<0.005		<0.005				
3/14/2017		0.0028		0.00026 (J)	<0.005	<0.005	<0.005
4/24/2017	<0.005		<0.005				
4/25/2017		0.0018		0.00035 (J)	<0.005	<0.005	<0.005
8/8/2017	0.0013	<0.005	<0.005	<0.005			<0.005
8/9/2017					<0.005	<0.005	
3/27/2018	0.00055 (J)		<0.005				
3/28/2018		<0.005		<0.005	<0.005	<0.005	<0.005
6/13/2018	<0.005	<0.005				0.00025 (J)	<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					
10/2/2018							<0.005
10/3/2018				<0.005	<0.005	<0.005	
2/25/2019	<0.005		<0.005				
2/26/2019		<0.005		<0.005	<0.005	<0.005	<0.005
4/1/2019	<0.005		<0.005				
4/2/2019		<0.005		<0.005	<0.005	<0.005	<0.005
9/16/2019	<0.005					<0.005	<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	<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	<0.005	<0.005
9/21/2020			<0.005	<0.005	<0.005		
9/22/2020	<0.005	<0.005				<0.005	<0.005
2/2/2021	<0.005	<0.005	<0.005	<0.005	<0.005		
2/3/2021						<0.005	<0.005
3/10/2021		<0.005	<0.005	<0.005	<0.005	<0.005	
3/11/2021	<0.005						<0.005
8/23/2021			<0.005				
8/24/2021	<0.005				<0.005	<0.005	<0.005
8/25/2021		<0.005		<0.005			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.005	<0.005					<0.005
5/19/2016			<0.005	<0.005	<0.005		
7/19/2016	<0.005						<0.005
7/20/2016		<0.005	<0.005	<0.005	<0.005		
9/13/2016	<0.005						
9/14/2016		<0.005	<0.005	<0.005	<0.005		<0.005
11/10/2016	<0.005				<0.005		<0.005
11/11/2016		<0.005	<0.005	<0.005			
1/18/2017	<0.005						
1/24/2017							<0.005
1/27/2017			<0.005	<0.005	<0.005		
2/6/2017		<0.005					
2/8/2017						<0.005	
2/23/2017						<0.005	
3/14/2017	<0.005						<0.005
3/15/2017		<0.005	<0.005	<0.005	<0.005		
3/17/2017						<0.005	
4/11/2017						<0.005	
4/25/2017	<0.005						<0.005
4/26/2017		<0.005	<0.005	<0.005	<0.005	<0.005	
5/17/2017						<0.005	
6/7/2017						<0.005	
7/11/2017						<0.005	
8/8/2017	<0.005						
8/9/2017					<0.005		<0.005
8/10/2017		0.00031 (J)	0.00049 (J)	0.0021			
3/28/2018	<0.005						
3/29/2018			<0.005	<0.005	<0.005	0.0003 (J)	
3/30/2018		<0.005					<0.005
6/14/2018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0005 (J)
10/3/2018	<0.005	-0.005	-0.005	-0.005	10.005	-0.005	<0.005
10/4/2018	.0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
2/26/2019	<0.005	-0.005	-0.005	-0.005	10.005	-0.005	-0.005
2/27/2019	-0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
4/2/2019	<0.005		-0.005	-0.005	10.005	-0.005	
4/3/2019		-0.005	<0.005	<0.005	<0.005	<0.005	-0.005
4/4/2019	<0.00E	<0.005			<0.00E	<0.00E	<0.005
9/18/2019 9/19/2019	<0.005	-0.005	-0.005	-0.005	<0.005	<0.005	<0.005
	<0.00E	<0.005	<0.005	<0.005	<0.00E	<0.00E	
2/5/2020	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-0.005
2/7/2020 3/17/2020	<0.005						<0.005
	<0.005	<0.00E	<0.00E	<0.00E			<0.00E
3/18/2020		<0.005	<0.005	<0.005	<0.00E	<0.00E	<0.005
3/19/2020	<0.00E				<0.005	<0.005	
9/22/2020 9/23/2020	<0.005	<0.005		<0.005			<0.005
9/23/2020		~U.UUU	<0.005	<b>~</b> 0.000	<0.005	<0.005	~0.000
9/24/2020 2/2/2021	<0.005		<b>~</b> 0.005		<0.005	\U.UU3	
2/3/2021	C00.07		<0.005	<0.005			
2/4/2021		<0.005	~U.UU3	~U.UU3	<0.005	<0.005	<0.005
3/10/2021	<0.005	·0.000			-0.000	-0.003	-0.003
3/11/2021	-0.000	<0.005			<0.005	<0.005	
J/ 1 1/2021		-0.003			50.000	-0.003	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.005	<0.005			<0.005
8/24/2021	<0.005						
8/25/2021			<0.005	<0.005	<0.005	<0.005	
8/26/2021		<0.005					<0.005

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	0.00735	<0.005					
7/19/2016	0.0075						
7/20/2016		<0.005					
9/14/2016	0.0091	<0.005					
11/10/2016	0.0056	<0.005					
11/11/2016			<0.005				
1/20/2017		<0.005					
1/24/2017	0.012						
2/6/2017			<0.005				
3/14/2017		<0.005					
3/15/2017	0.012		<0.005				
4/11/2017			<0.005				
4/25/2017	0.013	<0.005					
4/26/2017			<0.005				
6/7/2017			<0.005				
7/11/2017			<0.005				
8/9/2017	0.016	<0.005					
8/10/2017			0.00036 (J)				
3/29/2018	0.016		<0.005				
3/30/2018		<0.005					
6/14/2018	0.012	<0.005	<0.005				
10/4/2018	0.013	<0.005	<0.005				
2/26/2019		<0.005					
2/27/2019	0.0081						
2/28/2019			<0.005				
4/2/2019			<0.005				
4/4/2019	0.0091	<0.005					
9/18/2019	0.0044 (J)	<0.005	<0.005				
2/7/2020	0.0036 (J)	<0.005	<0.005				
3/18/2020	0.0046 (J)	<0.005					
5/4/2020			<0.005				
9/23/2020	0.0028 (J)	<0.005	<0.005				
2/3/2021			<0.005				
2/4/2021	0.0023 (J)	<0.005					
3/11/2021	0.0023 (J)	<0.005	<0.005				
8/25/2021	0.0019 (J)	<0.005					
8/26/2021			<0.005	0.0016 (J)	<0.005	0.0049 (J)	0.002 (J)

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			0.00518	0.00228
7/20/2016			0.0038	0.0016
9/14/2016				0.0024
9/15/2016			0.0034	
11/14/2016			0.0033	
2/6/2017			0.0033	
2/9/2017				0.0023
3/15/2017			0.003	0.0031
4/11/2017				0.0023
4/26/2017			0.0032	0.0019
8/10/2017			0.0031	0.0021
3/29/2018			0.0034	0.0021
6/14/2018			0.0031	0.0025
10/4/2018			0.0033	0.002
2/27/2019			0.0035	
2/28/2019				0.0027
4/3/2019			0.0031	0.0019
9/19/2019			0.0021 (J)	0.0026 (J)
2/5/2020				0.0033 (J)
2/7/2020			0.0048 (J)	
3/19/2020			0.0037 (J)	0.0033 (J)
9/22/2020			0.0039 (J)	
9/23/2020				0.0029 (J)
2/3/2021			0.0036 (J)	
2/4/2021				0.003 (J)
3/11/2021			0.0038 (J)	
3/12/2021				0.0034 (J)
8/26/2021	<0.005	<0.005	0.0037 (J)	0.0028 (J)

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<1	19.9	1.14				
5/18/2016				0.821 (J)	5.32	0.955 (J)	8.88
7/19/2016	<1	14	1.4			0.76 (J)	9
7/20/2016				0.82 (J)	6.5		
9/13/2016	<1	11	1.1	0.81 (J)	5.6		8.5
9/14/2016						3.4	
11/9/2016	<1	6.3	1.1				8.2
11/10/2016				0.73 (J)	5.4		
1/17/2017	<1		2.1				
1/18/2017				0.99 (J)	5.1		9.4
1/19/2017		7.4				21	
3/13/2017	<1		0.97 (J)				
3/14/2017		10		0.83 (J)	4.6	1.4	2
4/24/2017	<1		0.75 (J)				
4/25/2017		10		0.7 (J)	6.6	0.89 (J)	8.2
8/8/2017	<1	12	1.1	0.82 (J)			8.5
8/9/2017					7.3	0.75 (J)	
10/10/2017	<1		1.3				
10/11/2017		11		0.72 (J)	6.8	<1	8.3
6/13/2018	<1	8.2				<1	8.3
6/14/2018			0.84 (J)	<1	6.9		
9/24/2018			0.79 (J)				
9/27/2018	<1						
9/28/2018		7.6					
10/2/2018							8.3
10/3/2018				0.73 (J)	7	<1	
4/1/2019	<1		1				
4/2/2019		11		1.1	8.1	0.94 (J)	8.5
9/16/2019	0.49 (J)					2.2	8.9
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	4	12
9/21/2020			1.1	0.77 (J)	7.7		
9/22/2020	<1	9				1.5	8
3/10/2021		7.1	0.9 (J)	0.91 (J)	8.1	<1	
3/11/2021	<1						8.4
8/23/2021			1.3				
8/24/2021	<1				7.9	2.8	8.9
8/25/2021		8.2		0.79 (J)			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.368 (J)	2.84					50.7
5/19/2016			1.83	15.8	19.2		
7/19/2016	<1						62
7/20/2016		2.8	1.6	16	11		
9/13/2016	<1						
9/14/2016		2.8	1.5	16	8.6		79
11/10/2016	<1				5.7		61
11/11/2016		2.6	1.4	14			
1/18/2017	1.4						
1/24/2017							34
1/27/2017			2.5	15	6.8		
2/6/2017		2.7					
2/8/2017						4.3	
2/23/2017						16	
3/14/2017	<1						43
3/15/2017		2.7	2.5	17	11		
3/17/2017						22	
4/11/2017						13	
4/25/2017	<1						39
4/26/2017		2.5	2.2	15	8.1	20	
5/17/2017						12	
6/7/2017						8.1	
7/11/2017						17	
8/8/2017	<1						
8/9/2017					8.1		35
8/10/2017		2.2	2.3	16			
10/11/2017	<1					3.4	48
10/12/2017		1.9	1.9	14	6.1		
6/14/2018	<1	2	1.7	14	5	5.8	44
10/3/2018	<1						49
10/4/2018		1.9	1.6	14	4.3	2.8	
4/2/2019	0.4 (J)						
4/3/2019			1.9	13	3.8	3.8	
4/4/2019		2.2					41
9/18/2019	<1				3.9	1.7	37
9/19/2019		2.1	1.3	14			
3/17/2020	0.86 (J)						
3/18/2020		2.1	1.6	12			17
3/19/2020					4	1.5	
9/22/2020	0.38 (J)						
9/23/2020		1.8		12			21
9/24/2020			2.7		0.63 (J)	1.2	
3/10/2021	<1						
3/11/2021		2.8			2.9	1.7	
3/12/2021			2	14			19
8/24/2021	<1						
8/25/2021			1.1	13	1.8	<1	
8/26/2021		1.8					16

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	388	32.1					
7/19/2016	460						
7/20/2016		9.7					
9/14/2016	500	6.6					
11/10/2016	530	5.2					
11/11/2016			3.4				
1/20/2017		5.3					
1/24/2017	600						
2/6/2017			3.7				
3/14/2017		9.6					
3/15/2017	610		3.6				
4/11/2017			3.2				
4/25/2017	620	20					
4/26/2017			3.3				
6/7/2017			3.8				
7/11/2017			3.3				
8/9/2017	780	6.5					
8/10/2017			3.7				
10/11/2017	720	13					
10/12/2017			3.6				
6/14/2018	620	16	3.5				
10/4/2018	560	15	4.6				
4/2/2019			3.8				
4/4/2019	250	9.1					
9/18/2019	130	7.3	3.6				
3/18/2020	120	4.2					
5/4/2020			4.5				
9/23/2020	85	4.4	3				
3/8/2021				240			
3/9/2021					230	80	14
3/11/2021	64	3.9	4				
4/7/2021					190		5.1
4/8/2021				240		60	
8/25/2021	63	3.3					
8/26/2021			3.5	290	190	100	7.5

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			146	35.9
7/20/2016			150	37
9/14/2016				39
9/15/2016			140	
11/14/2016			160	
2/6/2017			180	
2/9/2017				60
3/15/2017			170	44
4/11/2017				36
4/26/2017			180	37
8/10/2017			180	38
10/12/2017			180	37
6/14/2018			170	37
10/4/2018			780	38
4/3/2019			180	41
9/19/2019			190	42
3/19/2020			200	45
9/22/2020			200	
9/23/2020				54
3/8/2021		4.7		
3/9/2021	140			
3/11/2021			220	
3/12/2021				62
4/7/2021	160			
4/8/2021		5.8		
8/26/2021	170	13	220	52

	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<0.001	<0.001	<0.001				
5/18/2016				<0.001	<0.001	<0.001	<0.001
7/19/2016	<0.001	<0.001	<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		<0.001
9/14/2016						9E-05 (J)	
11/9/2016	<0.001	<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		<0.001
1/19/2017		<0.001				<0.001	
3/13/2017	<0.001		<0.001				
3/14/2017		<0.001		<0.001	<0.001	<0.001	<0.001
4/24/2017	<0.001		<0.001				
4/25/2017		<0.001		<0.001	<0.001	<0.001	<0.001
8/8/2017	<0.001	<0.001	<0.001	<0.001			<0.001
8/9/2017					<0.001	<0.001	
3/27/2018	<0.001		<0.001				
3/28/2018		<0.001		<0.001	<0.001	<0.001	<0.001
6/13/2018	<0.001	<0.001				<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					
10/2/2018							<0.001
10/3/2018				<0.001	<0.001	<0.001	
2/25/2019	<0.001		<0.001				
2/26/2019		<0.001		<0.001	<0.001	<0.001	<0.001
4/1/2019	<0.001		<0.001				
4/2/2019		<0.001		<0.001	<0.001	<0.001	<0.001
9/16/2019	0.00016 (J)					<0.001	0.00062 (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	<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	<0.001	<0.001
9/21/2020			<0.001	<0.001	<0.001		
9/22/2020	<0.001	<0.001				<0.001	<0.001
2/2/2021	<0.001	<0.001	0.0004 (J)	<0.001	<0.001		
2/3/2021						0.00042 (J)	<0.001
3/10/2021		<0.001	0.00073 (J)	0.00028 (J)	0.00017 (J)	<0.001	
3/11/2021	0.00045 (J)						<0.001
8/23/2021			<0.001				
8/24/2021	<0.001				<0.001	<0.001	<0.001
8/25/2021		<0.001		<0.001			

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001	<0.001					<0.001
5/19/2016			<0.001	<0.001	<0.001		
7/19/2016	<0.001						<0.001
7/20/2016		<0.001	<0.001	<0.001	<0.001		
9/13/2016	<0.001						
9/14/2016		<0.001	<0.001	<0.001	<0.001		<0.001
11/10/2016	<0.001				<0.001		<0.001
11/11/2016		<0.001	<0.001	<0.001			
1/18/2017	<0.001						
1/24/2017							<0.001
1/27/2017			<0.001	<0.001	<0.001		
2/6/2017		<0.001					
2/8/2017						0.00011 (J)	
2/23/2017						0.00012 (J)	
3/14/2017	<0.001						<0.001
3/15/2017		<0.001	<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	<0.001	<0.001	
5/17/2017						<0.001	
6/7/2017						<0.001	
7/11/2017						<0.001	
8/8/2017	<0.001						
8/9/2017					<0.001		<0.001
8/10/2017		<0.001	<0.001	<0.001			
3/28/2018	<0.001						
3/29/2018			<0.001	<0.001	<0.001	0.0002 (J)	
3/30/2018		8.5E-05 (J)					<0.001
6/14/2018	<0.001	<0.001	<0.001	<0.001	<0.001	0.00014 (J)	<0.001
10/3/2018	<0.001						<0.001
10/4/2018		<0.001	<0.001	<0.001	<0.001	0.00013 (J)	
2/26/2019	<0.001						
2/27/2019		<0.001	<0.001	<0.001	<0.001	0.00016 (J)	<0.001
4/2/2019	<0.001						
4/3/2019			<0.001	<0.001	<0.001	0.00012 (J)	
4/4/2019		<0.001					<0.001
9/18/2019	<0.001				<0.001	<0.001	<0.001
9/19/2019		<0.001	<0.001	<0.001			
2/5/2020	0.00026 (J)	<0.001	<0.001	<0.001	<0.001	0.00022 (J)	
2/7/2020							<0.001
3/17/2020	<0.001						
3/18/2020		<0.001	<0.001	<0.001			<0.001
3/19/2020					<0.001	0.00017 (J)	
9/22/2020	<0.001						
9/23/2020		<0.001	-0.001	<0.001	10.001	-0.004	<0.001
9/24/2020	-0.004		<0.001		<0.001	<0.001	
2/2/2021	<0.001		0.00010 / "	-0.004			
2/3/2021		<0.004	0.00016 (J)	<0.001	-0.004	0.00004 ( ))	40 00d
2/4/2021	-0.004	<0.001			<0.001	0.00021 (J)	<0.001
3/10/2021	<0.001	<0.001			<0.001	0.00010 ( 1)	
3/11/2021		<0.001			<0.001	0.00019 (J)	

	WGWA-7 (bg)	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
3/12/2021			<0.001	<0.001			<0.001
8/24/2021	<0.001						
8/25/2021			<0.001	<0.001	<0.001	<0.001	
8/26/2021		<0.001					<0.001

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	<0.001	<0.001					
7/19/2016	8.5E-05 (J)						
7/20/2016		<0.001					
9/14/2016	0.00017 (J)	<0.001					
11/10/2016	0.00017 (J)	<0.001					
11/11/2016			<0.001				
1/20/2017		<0.001					
1/24/2017	0.00023 (J)						
2/6/2017			<0.001				
3/14/2017		<0.001					
3/15/2017	0.00021 (J)		<0.001				
4/11/2017			<0.001				
4/25/2017	0.00024 (J)	<0.001					
4/26/2017			<0.001				
6/7/2017			<0.001				
7/11/2017			<0.001				
8/9/2017	0.0002 (J)	<0.001					
8/10/2017			<0.001				
3/29/2018	0.00019 (J)		<0.001				
3/30/2018		<0.001					
6/14/2018	0.00017 (J)	<0.001	<0.001				
10/4/2018	0.00015 (J)	<0.001	<0.001				
2/26/2019		<0.001					
2/27/2019	0.00015 (J)						
2/28/2019			<0.001				
4/2/2019			<0.001				
4/4/2019	9.5E-05 (J)	<0.001					
9/18/2019	<0.001	<0.001	<0.001				
2/7/2020	<0.001	<0.001	<0.001				
3/18/2020	<0.001	<0.001					
5/4/2020			<0.001				
9/23/2020	<0.001	<0.001	<0.001				
2/3/2021			0.00018 (J)				
2/4/2021	<0.001	<0.001					
3/11/2021	<0.001	<0.001	<0.001				
8/25/2021	<0.001	<0.001					
8/26/2021			<0.001	<0.001	<0.001	<0.001	<0.001

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			<0.001	<0.001
7/20/2016			<0.001	<0.001
9/14/2016				<0.001
9/15/2016			<0.001	
11/14/2016			<0.001	
2/6/2017			<0.001	
2/9/2017				<0.001
3/15/2017			<0.001	<0.001
4/11/2017				<0.001
4/26/2017			<0.001	<0.001
8/10/2017			<0.001	<0.001
3/29/2018			<0.001	<0.001
6/14/2018			<0.001	<0.001
10/4/2018			<0.001	<0.001
2/27/2019			<0.001	
2/28/2019				<0.001
4/3/2019			<0.001	<0.001
9/19/2019			<0.001	<0.001
2/5/2020				<0.001
2/7/2020			<0.001	
3/19/2020			<0.001	<0.001
9/22/2020			<0.001	
9/23/2020				<0.001
2/3/2021			<0.001	
2/4/2021				<0.001
3/11/2021			<0.001	
3/12/2021				<0.001
8/26/2021	0.00072 (J)	<0.001	<0.001	<0.001

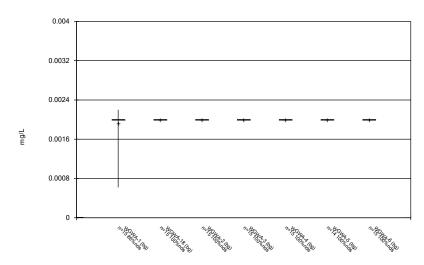
	WGWA-1 (bg)	WGWA-18 (bg)	WGWA-2 (bg)	WGWA-3 (bg)	WGWA-4 (bg)	WGWA-5 (bg)	WGWA-6 (bg)
5/17/2016	<10	112	100				
5/18/2016				29	101	33	113
7/19/2016	14	80	84			<10	92
7/20/2016				<10	86		
9/13/2016	50	120	70	12	28		100
9/14/2016						150	
11/9/2016	22	76	110				130
11/10/2016				30	110		
1/17/2017	8		120				
1/18/2017				22	98		120
1/19/2017		36				34	
3/13/2017	<10		58				
3/14/2017		70		22	110	32	110
4/24/2017	10		94				
4/25/2017		70		22	86	22	100
8/8/2017	<10	72	62	4 (J)			90
8/9/2017					92	20	
10/10/2017	44		140				
10/11/2017		90		10	110	4 (J)	98
6/13/2018	24	38				<10	110
6/14/2018			80	26	92		
9/24/2018			76				
9/27/2018	28						
9/28/2018		68					
10/2/2018							130
10/3/2018				50	100	24	
4/1/2019	<10		63				
4/2/2019		100		28	100	25	110
9/16/2019	27					41	110
9/17/2019		76	120		120		
9/18/2019				36			
3/16/2020	23		90				
3/17/2020		81		20	100	18	120
9/21/2020			100	22	92		
9/22/2020	24	96				190	130
3/10/2021		72	100	20	100	19	
3/11/2021	24						110
8/23/2021			110				
8/24/2021	32				110	150	120
8/25/2021		92		21			

NGWA-7 (bg)	
5/19/2016	
7/19/2016       <10	
7/20/2016       42       <10	
9/13/2016       <10	
9/13/2016       <10	
9/14/2016       40       24       96       92       230         11/10/2016       44       72       42       100       210         1/18/2017       50       140       140         1/24/2017       18       50       80         2/6/2017       24       54       54         2/8/2017       78       54       78         3/14/2017       26       78       54       100         3/15/2017       78       54       120       100         3/17/2017       56       56	
11/10/2016       44       100       210         11/11/2016       72       42       100         1/18/2017       50       140         1/24/2017       18       50       80         2/6/2017       24         2/8/2017       54       54         2/23/2017       78       54       120         3/14/2017       78       54       120         3/17/2017       56       56	
11/11/2016       72       42       100         1/18/2017       50       140         1/27/2017       18       50       80         2/6/2017       24       54         2/8/2017       54       54         2/23/2017       78       54       120       100         3/15/2017       78       54       120       56	
1/18/2017       50         1/24/2017       18       50       80         2/6/2017       24         2/8/2017       54       54         2/23/2017       78       54       120         3/14/2017       78       54       120         3/17/2017       56       56	
1/24/2017       18       50       80         2/6/2017       24         2/8/2017       54         2/23/2017       78       78         3/14/2017       78       54         3/15/2017       78       54         3/17/2017       56	
1/27/2017     18     50     80       2/6/2017     24       2/8/2017     54       2/23/2017     78       3/14/2017     26     220       3/15/2017     78     54     120     100       3/17/2017     56	
2/6/2017       24         2/8/2017       54         2/23/2017       78         3/14/2017       26       220         3/15/2017       78       54       120       100         3/17/2017       56	
2/8/2017     54       2/23/2017     78       3/14/2017     26       3/15/2017     78     54     120     100       3/17/2017     56	
2/23/2017     78       3/14/2017     26     220       3/15/2017     78     54     120     100       3/17/2017     56	
3/14/2017     26     220       3/15/2017     78     54     120     100       3/17/2017     56	
3/15/2017 78 54 120 100 3/17/2017 56	
3/17/2017 56	
4/11/2017 76	
4/25/2017 10 180	
4/26/2017 48 42 100 92 76	
5/17/2017 68	
6/7/2017 72	
7/11/2017 68	
8/8/2017 <10	
8/9/2017 120 180	
8/10/2017 38 30 96	
10/11/2017 42 68 200	
10/12/2017 72 54 100 110	
6/14/2018 14 40 16 94 88 52 170	
10/3/2018 6 260	
10/4/2018 60 56 110 100 130	
4/2/2019 15	
4/3/2019 <10 66 72 31	
4/4/2019 30 170	
9/18/2019 35 110 33 160	
9/19/2019 52 27 89	
3/17/2020 19	
3/18/2020 58 26 73 160	
3/19/2020 95 18	
9/22/2020 15	
9/23/2020 50 90 150	
9/24/2020 60 21 24	
3/10/2021 20	
3/12/2021 27 78 130	
8/24/2021 24	
8/25/2021 32 110 53 30	
8/26/2021 60 150	

	WGWC-16	WGWC-17	WGWC-19	WGWC-20	WGWC-21	WGWC-22	WGWC-23
5/18/2016	1080	107					
7/19/2016	1200						
7/20/2016		78					
9/14/2016	1300	82					
11/10/2016	1400	98					
11/11/2016			98				
1/20/2017		82					
1/24/2017	1300						
2/6/2017			36				
3/14/2017		120					
3/15/2017	1500		120				
4/11/2017			68				
4/25/2017	1700	120					
4/26/2017			76				
6/7/2017			74				
7/11/2017			70				
8/9/2017	1900	92					
8/10/2017			66				
10/11/2017	1900	74					
10/12/2017			100				
6/14/2018	1500	100	74				
10/4/2018	1700	98	100				
4/2/2019			88				
4/4/2019	710	89					
9/18/2019	520	79	96				
3/18/2020	370	98					
5/4/2020			110				
9/23/2020	250	60	94				
3/8/2021				590			
3/9/2021					610	200	79
3/11/2021	190	75	100				
4/7/2021					520		66
4/8/2021				540		170	
8/25/2021	220	84					
8/26/2021			94	720	480	240	88

	WGWC-24	WGWC-25	WGWC-8	WGWC-9
5/19/2016			311	134
7/20/2016			290	120
9/14/2016				140
9/15/2016			270	
11/14/2016			320	
2/6/2017			330	
2/9/2017				180
3/15/2017			370	160
4/11/2017				120
4/26/2017			380	140
8/10/2017			380	130
10/12/2017			450	120
6/14/2018			410	120
10/4/2018			520	140
4/3/2019			430	120
9/19/2019			440	130
3/19/2020			540	160
9/22/2020			600	
9/23/2020				150
3/8/2021		220		
3/9/2021	370			
3/11/2021			530	
3/12/2021				130
4/7/2021	510			
4/8/2021		180		
8/26/2021	420	200	550	170

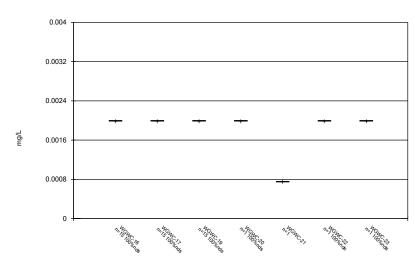
# FIGURE B.



Constituent: Antimony Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

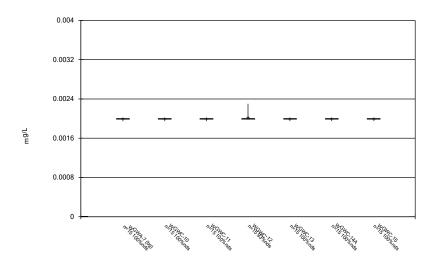
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



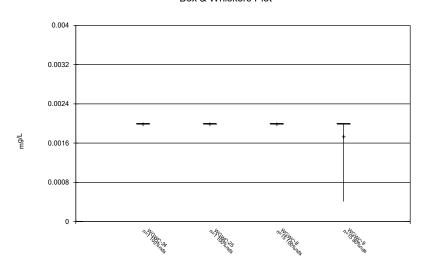
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

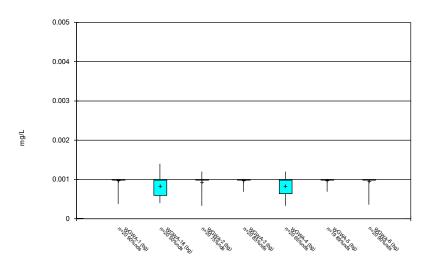


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



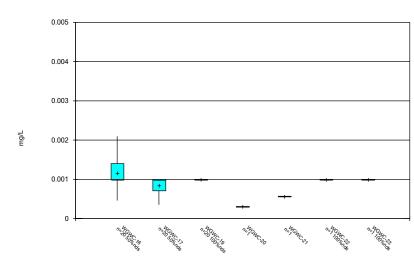
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Arsenic Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

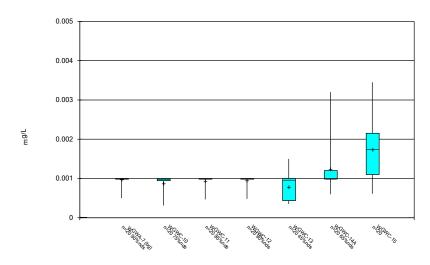
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



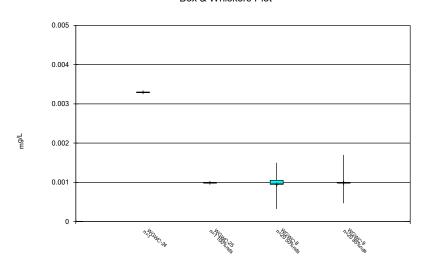
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

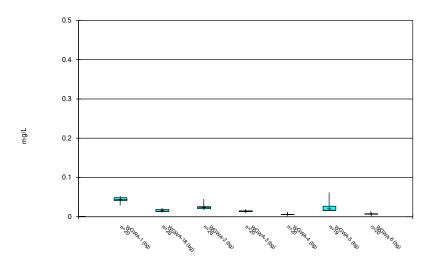


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



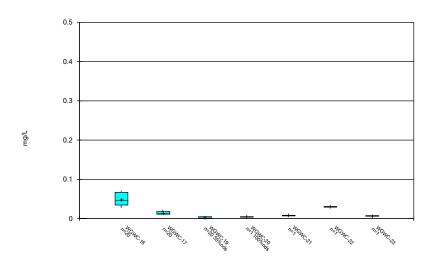
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Barium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

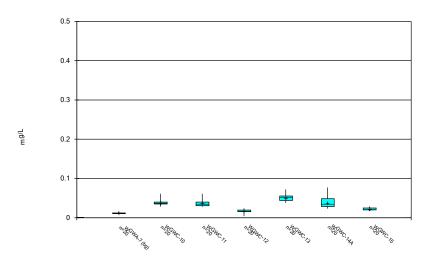
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



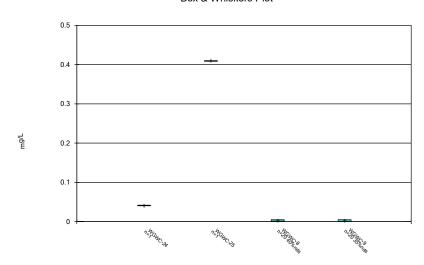
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

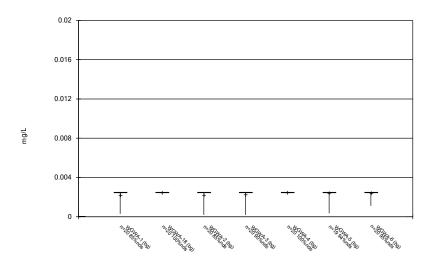


Constituent: Barium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



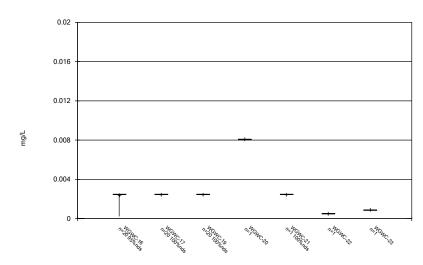
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Beryllium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

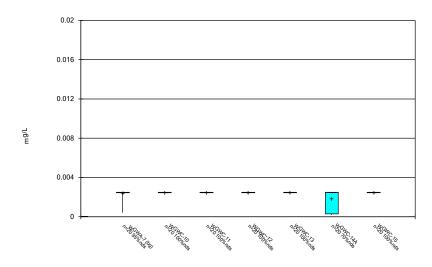
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



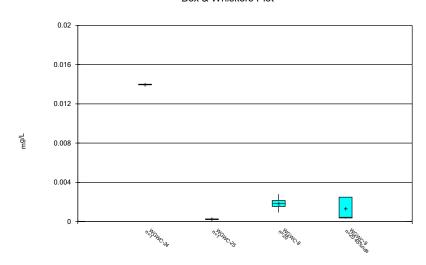
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

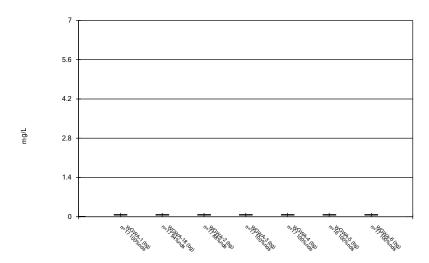


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



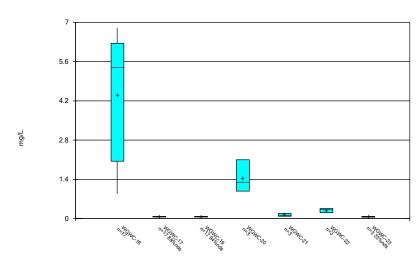
Constituent: Beryllium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Boron, total Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

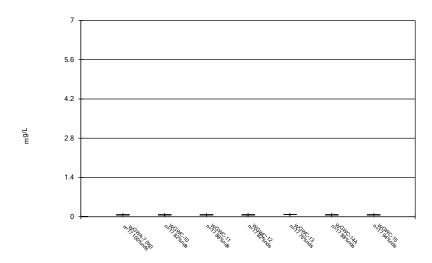
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Boron, total Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

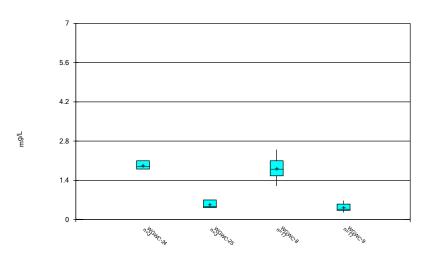
Box & Whiskers Plot



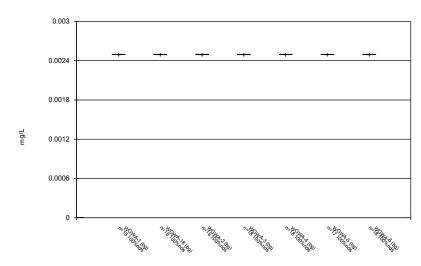
Constituent: Boron, total Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



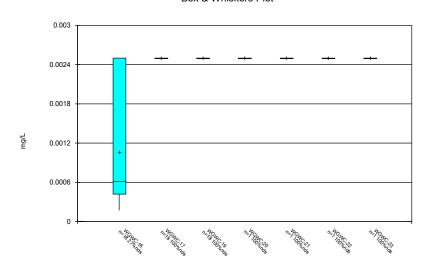
Constituent: Boron, total Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Cadmium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

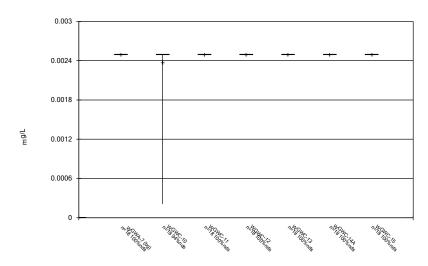
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



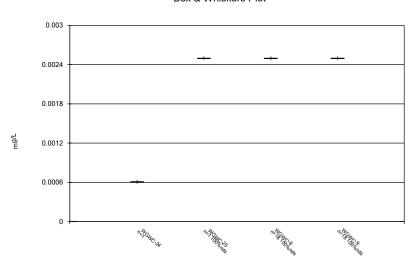
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Box & Whiskers Plot

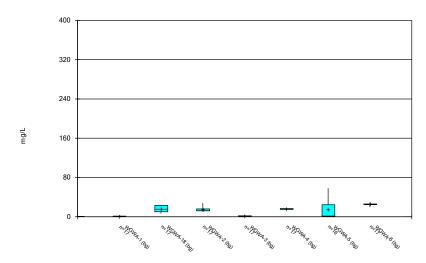


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



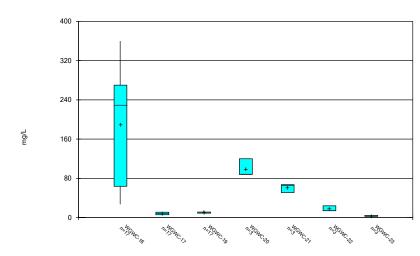
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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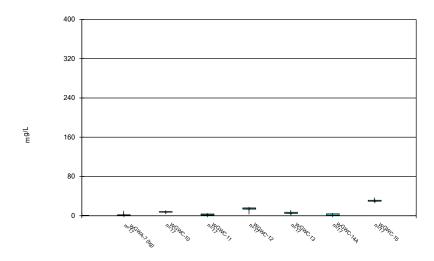
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#### Box & Whiskers Plot



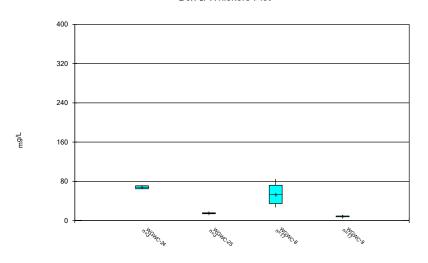
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Box & Whiskers Plot

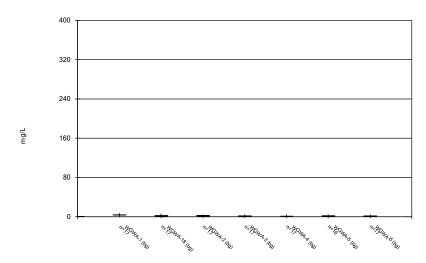


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



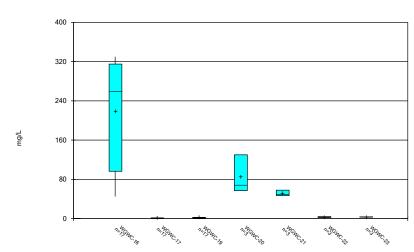
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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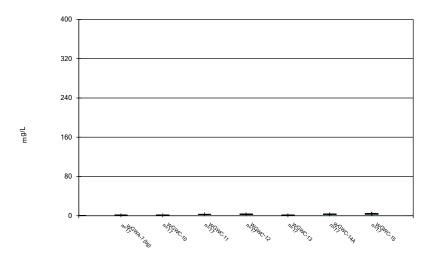
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#### Box & Whiskers Plot



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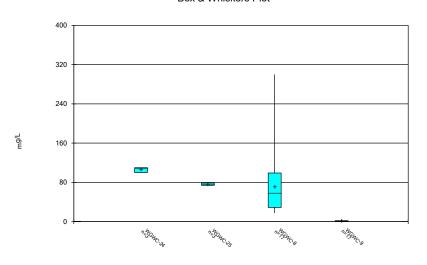
Box & Whiskers Plot



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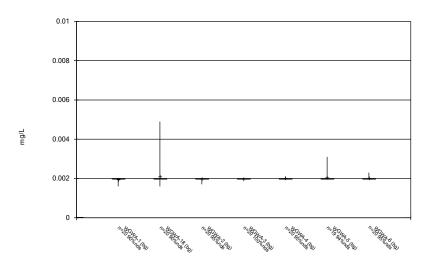
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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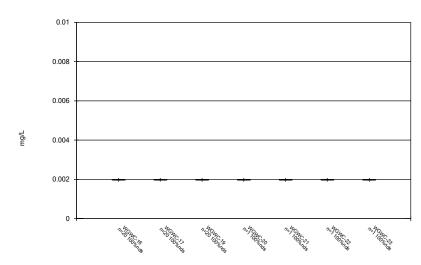
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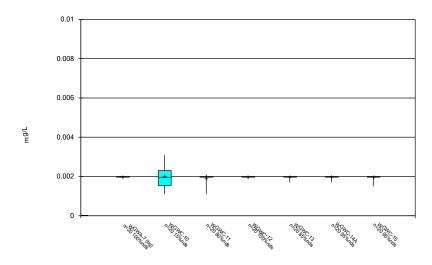
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#### Box & Whiskers Plot



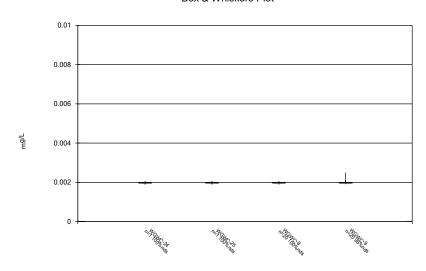
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Box & Whiskers Plot

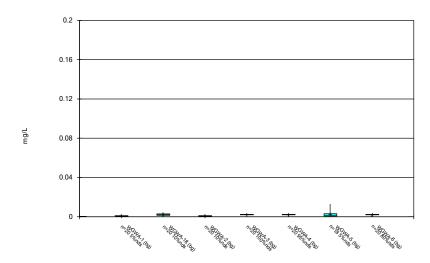


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Box & Whiskers Plot



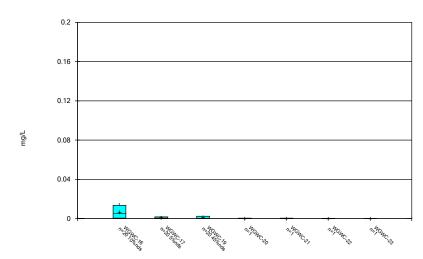
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

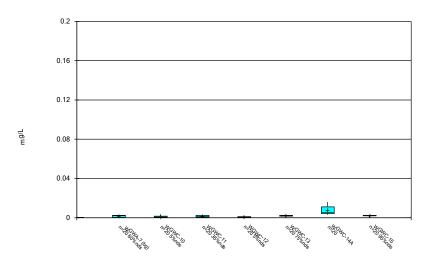
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



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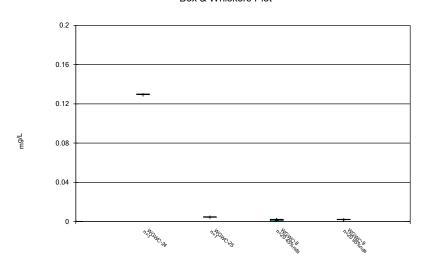
Box & Whiskers Plot



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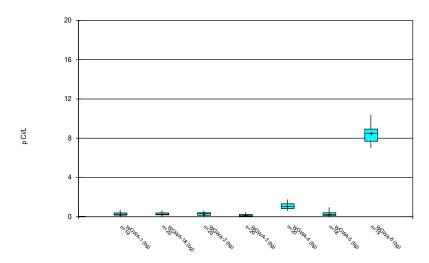
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

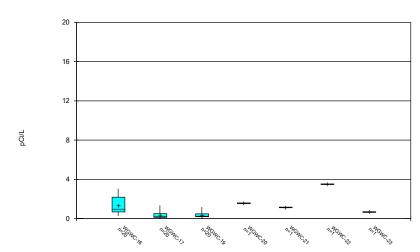




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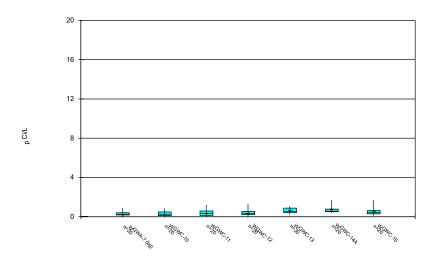
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#### Box & Whiskers Plot



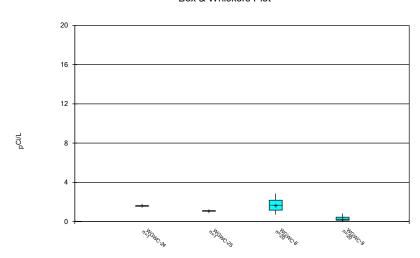
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Box & Whiskers Plot

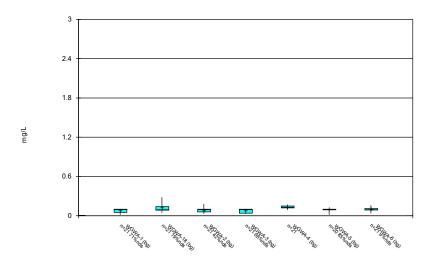


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Box & Whiskers Plot



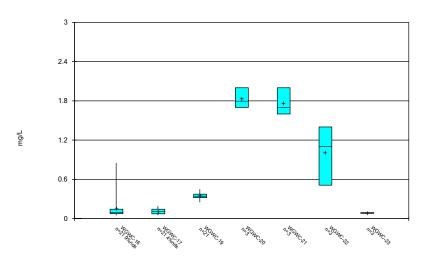
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Fluoride, total Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

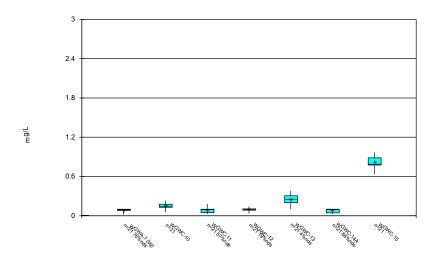
 ${\sf Sanitas^{\text{\tiny{IN}}}} \ {\sf v.9.6.31} \ {\sf Sanitas} \ {\sf software} \ {\sf utilized} \ {\sf by} \ {\sf Groundwater} \ {\sf Stats} \ {\sf Consulting.} \ {\sf UG}$ 

Box & Whiskers Plot



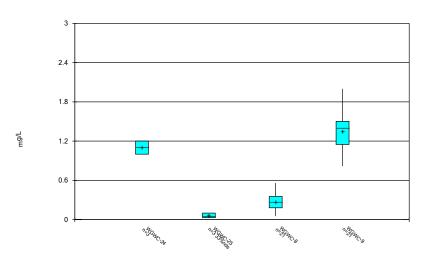
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Box & Whiskers Plot



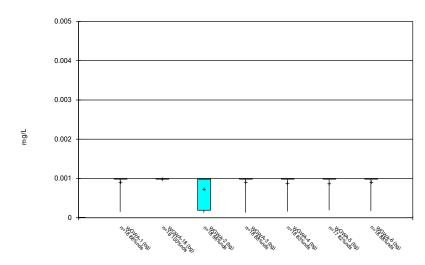
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Box & Whiskers Plot



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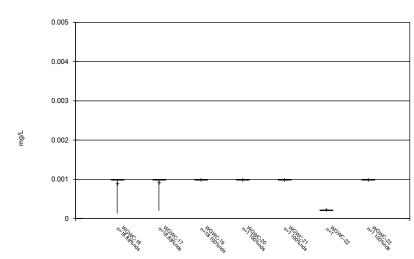
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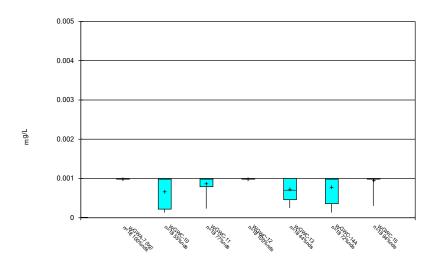
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



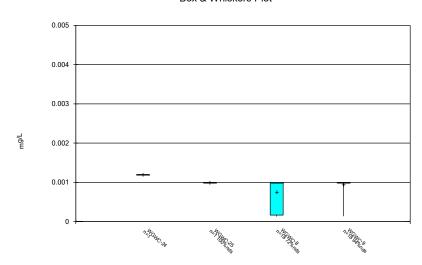
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot

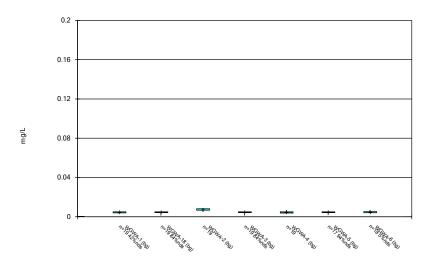


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



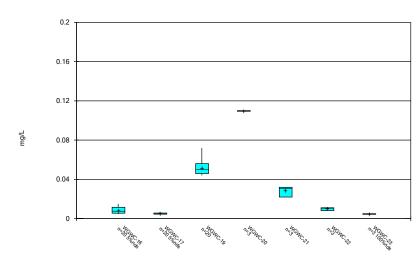
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Lithium Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
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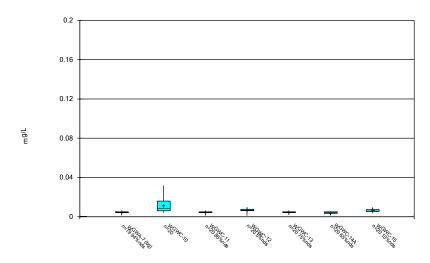
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



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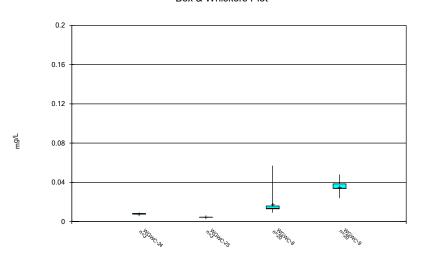
Box & Whiskers Plot



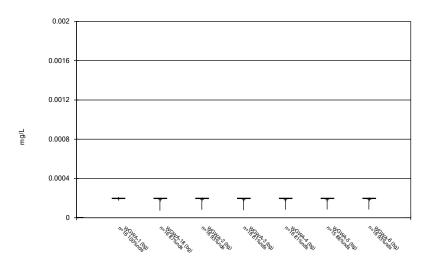
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Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



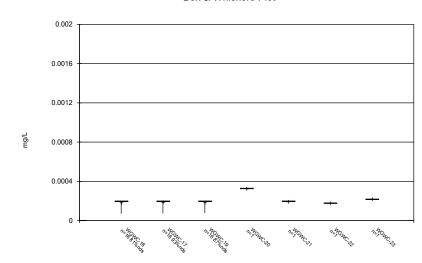
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



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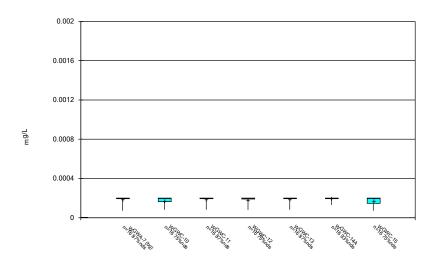
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



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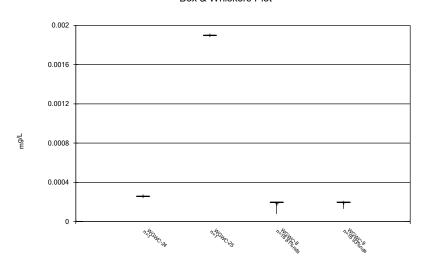
Box & Whiskers Plot



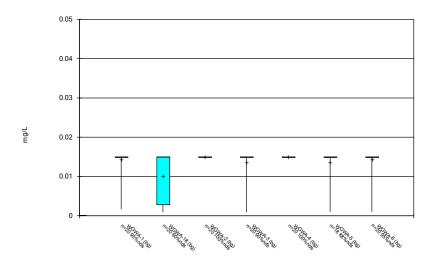
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



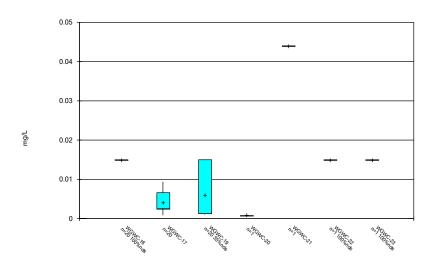
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Molybdenum Analysis Run 10/15/2021 4:22 PM View: Appendix III & IV
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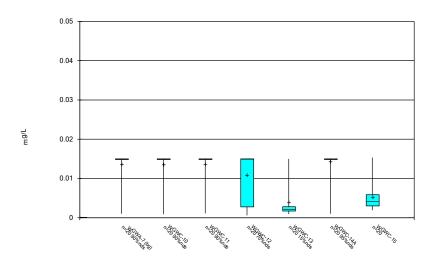
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

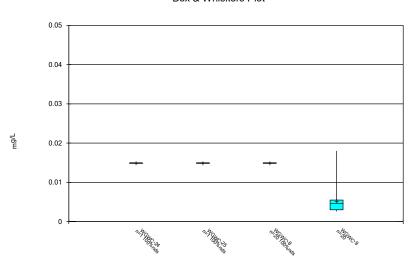
Box & Whiskers Plot



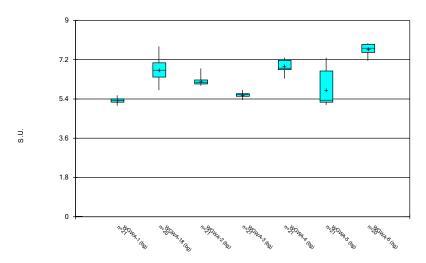
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



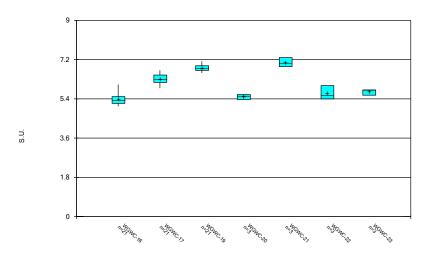
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: pH, Field Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
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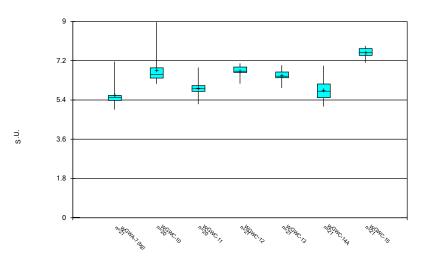
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#### Box & Whiskers Plot



Constituent: pH, Field Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

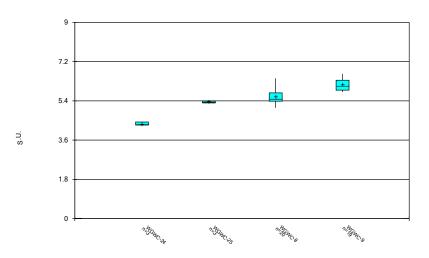
Box & Whiskers Plot



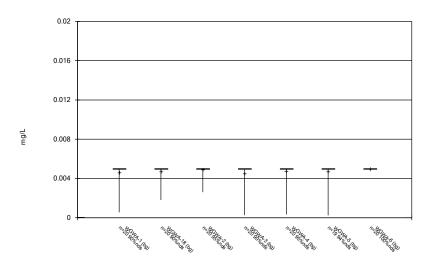
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



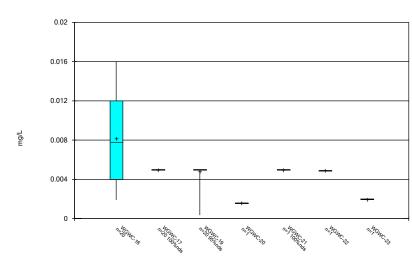
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Selenium Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
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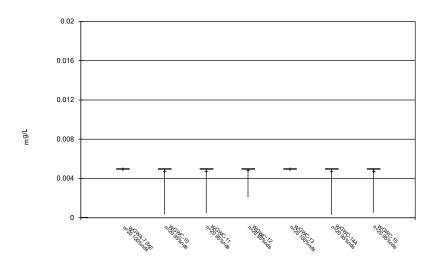
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



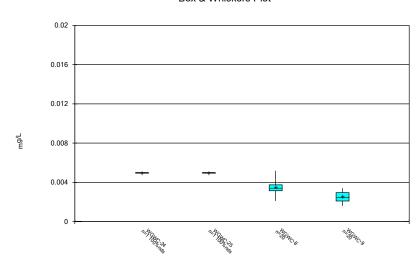
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Box & Whiskers Plot

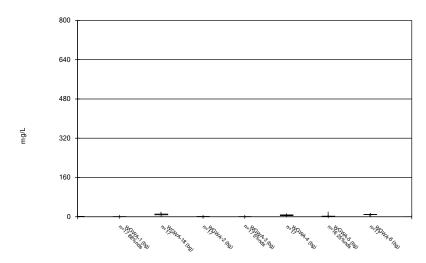


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



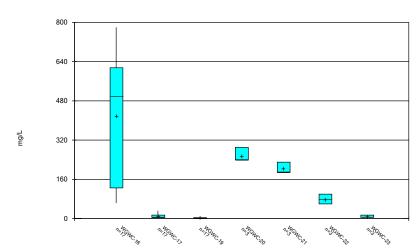
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

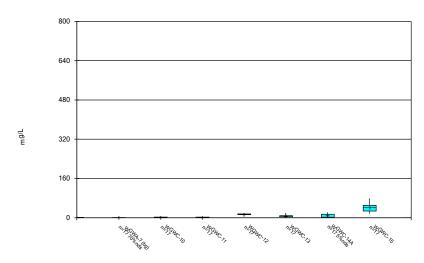
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

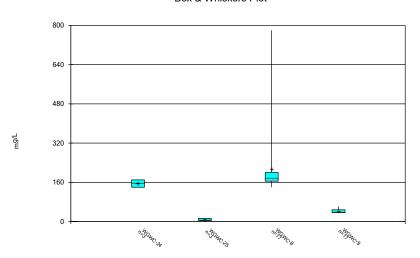
Box & Whiskers Plot



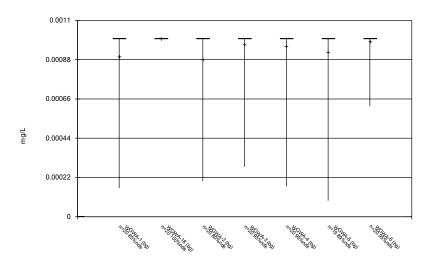
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



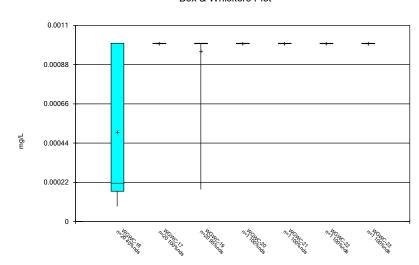
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Thallium Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

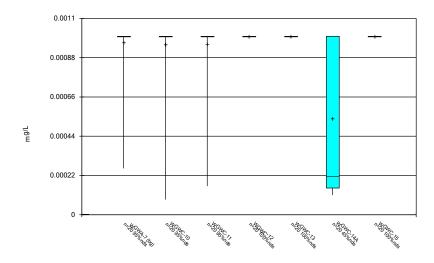
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

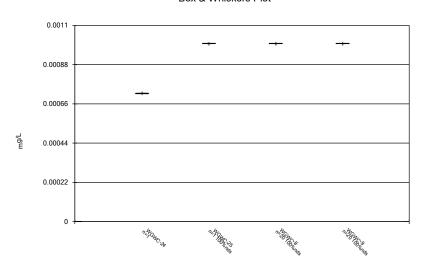
#### Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

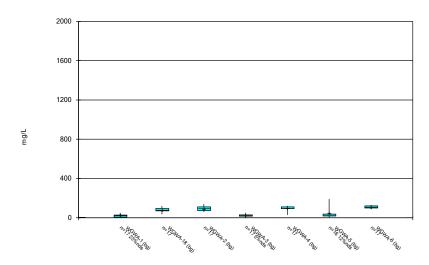
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

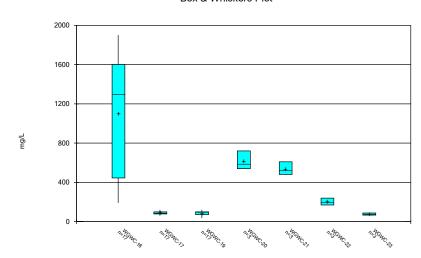




Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

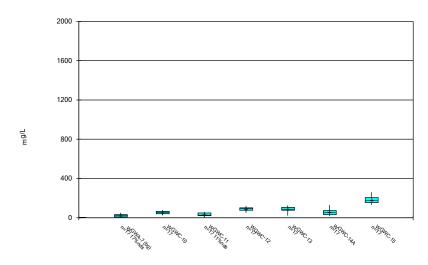
#### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

#### Box & Whiskers Plot



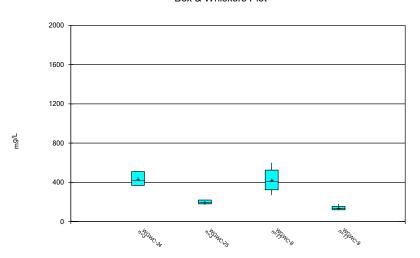
Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/15/2021 4:23 PM View: Appendix III & IV
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# FIGURE C.

# **Outlier Summary**

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 6:46 PM

26 + 228 (pCilL)

WGWA-5 Cobalt (mg/L)
WGWA-1 Combined Radium 226 + 228 (pCilL)

WGWA-1 Combined Radium 226 + 228 (pCilL)
WGWA-1 Lithium (mg/L)
WGWA-1 Lithium (mg/L)
WGWA-2 Lithium (mg/L)
WGWA-3 Lithium (mg/L)
WGWA-3 Lithium (mg/L)
WGWA-4 Lithium (mg/L)
WGWA-4 Lithium (mg/L)
WGWA-5 Lithium (mg/L)
WGWA-6 Lit

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.

# Interwell Prediction Limits - Significant Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM Constituent Well Upper Lim. Lower Lim. Date Observ. Sig. Bg N %NDs Transform Method WGWC-16 8/25/2021 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 Boron, total (mg/L) 0.89 0.1 n/a Boron, total (mg/L) WGWC-8 0.1 n/a 8/26/2021 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 Boron, total (mg/L) WGWC-9 0.1 n/a 8/26/2021 0.56 Yes 135 97.78 n/a 0.0001087 NP Inter (NDs) 1 of 2 8/26/2021 Yes 135 0 0.0001087 NP Inter (normality) 1 of 2 Calcium, total (mg/L) WGWC-8 58 85 n/a n/a Chloride, Total (mg/L) WGWC-16 6.05 n/a 8/25/2021 Yes 135 0 n/a 0.0001087 NP Inter (normality) 1 of 2 Chloride, Total (mg/L) WGWC-8 6.05 n/a 8/26/2021 110 Yes 135 0 n/a 0.0001087 NP Inter (normality) 1 of 2 Fluoride, total (mg/L) WGWC-15 0.284 8/26/2021 0.77 Yes 167 46.11 n/a 0.00007106 NP Inter (normality) 1 of 2 n/a Fluoride, total (mg/L) WGWC-19 0.284 8/26/2021 Yes 167 46.11 0.00007106 NP Inter (normality) 1 of 2 n/a Fluoride, total (mg/L) WGWC-9 0.284 n/a 8/26/2021 Yes 167 46.11 0.00007106 NP Inter (normality) 1 of 2 Sulfate as SO4 (mg/L) WGWC-16 21 8/25/2021 63 Yes 135 23.7 0.0001087 NP Inter (normality) 1 of 2 n/a n/a WGWC-8 8/26/2021 220 Yes 135 23.7 NP Inter (normality) 1 of 2 Sulfate as SO4 (mg/L) 21 n/a n/a 0.0001087 Sulfate as SO4 (mg/L) WGWC-9 21 n/a 8/26/2021 52 Yes 135 23.7 n/a 0.0001087 NP Inter (normality) 1 of 2 WGWC-16 Total Dissolved Solids [TDS] (mg/L) 190 n/a 8/25/2021 220 Yes 135 7.407 n/a 0.0001087 NP Inter (normality) 1 of 2 8/26/2021 Yes 135 7.407 n/a Total Dissolved Solids [TDS] (mg/L) WGWC-8 0.0001087 NP Inter (normality) 1 of 2

190

n/a

# Interwell Prediction Limits - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM

		Plant Wansle	y Client: So	outhern Compa	ny Data: Wans	ley Ash	Pond Pr	nted 10/13/2021	, 2:34 PM	
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N %NE	s <u>Transform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWC-10	0.1	n/a	8/26/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-11	0.1	n/a	8/25/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-12	0.1	n/a	8/25/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-13	0.1	n/a	8/25/2021	0.063J	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-14A	0.1	n/a	8/25/2021	0.043J	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-15	0.1	n/a	8/26/2021	0.08ND	No	135 97.78	n/a	0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-16	0.1	n/a	8/25/2021	0.89	Yes			0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-17	0.1	n/a	8/25/2021	0.08ND	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-19	0.1	n/a	8/26/2021	0.08ND	No	135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-8	0.1	n/a	8/26/2021	2.4	Yes			0.0001087	NP Inter (NDs) 1 of 2
Boron, total (mg/L)	WGWC-9	0.1	n/a	8/26/2021	0.56		135 97.78		0.0001087	NP Inter (NDs) 1 of 2
Calcium, total (mg/L)	WGWC-10	58	n/a	8/26/2021	7.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-11	58	n/a	8/25/2021	1.5	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-12 WGWC-13	58 58	n/a n/a	8/25/2021 8/25/2021	14 4	No No	135 0 135 0	n/a n/a	0.0001087 0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)										NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-14A	58	n/a	8/25/2021	0.7 31	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-15	58	n/a	8/26/2021		No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-16	58	n/a	8/25/2021	27	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2 NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-17 WGWC-19	58 58	n/a n/a	8/25/2021 8/26/2021	6 10	No No	135 0 135 0	n/a n/a	0.0001087 0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)  Calcium, total (mg/L)	WGWC-19	<b>58</b>	n/a	8/26/2021	8 <b>5</b>	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Calcium, total (mg/L)	WGWC-9	58	n/a	8/26/2021	9.3	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-9	6.05	n/a	8/26/2021	1.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L) Chloride, Total (mg/L)	WGWC-10	6.05	n/a	8/25/2021	3.5	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-11	6.05	n/a	8/25/2021	3.7	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-12	6.05	n/a	8/25/2021	1.2	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-14A	6.05	n/a	8/25/2021	2.8	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-15	6.05	n/a	8/26/2021	1.4	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-16	6.05	n/a	8/25/2021	45	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-17	6.05	n/a	8/25/2021	1.6	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-19	6.05	n/a	8/26/2021	3.3	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-8	6.05	n/a	8/26/2021	110	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	WGWC-9	6.05	n/a	8/26/2021	3.1	No	135 0	n/a	0.0001087	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-10	0.284	n/a	8/26/2021	0.16	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-11	0.284	n/a	8/25/2021	0.056J	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-12	0.284	n/a	8/25/2021	0.14	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-13	0.284	n/a	8/25/2021	0.2	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-14A	0.284	n/a	8/25/2021	0.071J	No	167 46.1		0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-15	0.284	n/a	8/26/2021	0.77	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-16	0.284	n/a	8/25/2021	0.099J	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-17	0.284	n/a	8/25/2021	0.093J	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-19	0.284	n/a	8/26/2021	0.38	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-8	0.284	n/a	8/26/2021	0.21	No	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
Fluoride, total (mg/L)	WGWC-9	0.284	n/a	8/26/2021	1	Yes	167 46.1	n/a	0.00007106	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-10	7.96	4.96	8/26/2021	6.31	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-11	7.96	4.96	8/25/2021	5.66	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-12	7.96	4.96	8/25/2021	6.69	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-13	7.96	4.96	8/25/2021	6.27	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-14A	7.96	4.96	8/25/2021	5.39	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-15	7.96	4.96	8/26/2021	7.58	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-16	7.96	4.96	8/25/2021	5.25	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-17	7.96	4.96	8/25/2021	6.09	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-19	7.96	4.96	8/26/2021	6.66	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-8	7.96	4.96	8/26/2021	5.36	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
pH, Field (S.U.)	WGWC-9	7.96	4.96	8/26/2021	5.84	No	166 0	n/a	0.0001437	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-10	21	n/a	8/26/2021	1.8	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-11	21	n/a	8/25/2021	1.1	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-12	21	n/a	8/25/2021	13	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-13	21	n/a	8/25/2021	1.8	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-14A	21	n/a	8/25/2021	0.5ND	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-15	21	n/a	8/26/2021	16	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-16	21	n/a	8/25/2021	63	Yes		n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-17	21	n/a	8/25/2021	3.3	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-19	21	n/a	8/26/2021	3.5	No	135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-8	21	n/a	8/26/2021	220		135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	WGWC-9	21	n/a	8/26/2021	52		135 23.7	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-10	190	n/a	8/26/2021	60	No	135 7.40		0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-11	190	n/a	8/25/2021	32	No	135 7.40	n/a	0.0001087	NP Inter (normality) 1 of 2

# Interwell Prediction Limits - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/13/2021, 2:34 PM

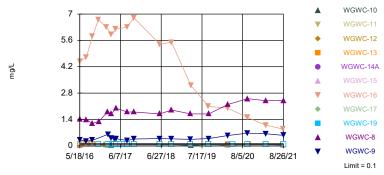
Constituent	Well	Upper Lim.	Lower Lim.	<u>Date</u>	Observ.	Sig.	Bg N %ND	<u>Transform</u>	<u>Alpha</u>	Method
Total Dissolved Solids [TDS] (mg/L)	WGWC-12	190	n/a	8/25/2021	110	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-13	190	n/a	8/25/2021	53	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-14A	190	n/a	8/25/2021	30	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-15	190	n/a	8/26/2021	150	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-16	190	n/a	8/25/2021	220	Yes	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-17	190	n/a	8/25/2021	84	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-19	190	n/a	8/26/2021	94	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-8	190	n/a	8/26/2021	550	Yes	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	WGWC-9	190	n/a	8/26/2021	170	No	135 7.407	n/a	0.0001087	NP Inter (normality) 1 of 2

Hollow symbols indicate censored values

Exceeds Limit: WGWC-16, WGWC-8, WGWC-9

#### Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 135 background values. 97.78% NDs. Annual per-constituent alpha = 0.0003262. Individual comparison alpha = 0.0001087 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

> Constituent: Boron, total Analysis Run 10/13/2021 2:32 PM View: Appendix III Plant Wansley Client: Southern Company Data: Wansley Ash Pond

> > Prediction Limit

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Exceeds Limit: WGWC-16, WGWC-8

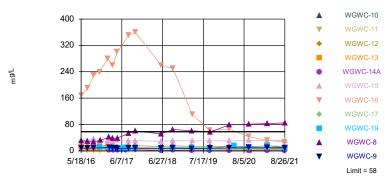
Interwell Non-parametric WGWC-10 400 WGWC-11 WGWC-12 320 WGWC-13 240 WGWC-14A 160 WGWC-17 80 WGWC-19 WGWC-8 WGWC-9 5/18/16 6/7/17 6/27/18 7/17/19 8/5/20 8/26/21

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. Annual per-constituent alpha = 0.0003262. Individual comparison alpha = 0.0001087 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

Limit = 6.05

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

**Prediction Limit** Exceeds Limit: WGWC-8 Interwell Non-parametric



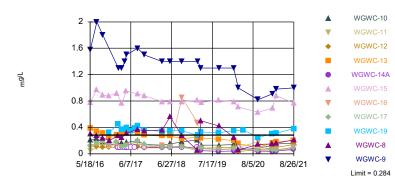
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. Annual per-constituent alpha = 0.0003262. Individual comparison alpha = 0.0001087 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

> Constituent: Calcium, total Analysis Run 10/13/2021 2:32 PM View: Appendix III Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Exceeds Limit: WGWC-15, WGWC-19, WGWC-9

Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 167 background values. 46.11% NDs. Annual perconstituent alpha = 0.0002132. Individual comparison alpha = 0.00007106 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Within Limits Prediction Limit
Interwell Non-parametric

WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-16 3.6 WGWC-17 WGWC-19 1.8 WGWC-8 WGWC-9 Limit = 7.96 6/7/17 6/27/18 7/17/19 8/26/21 5/18/16 8/5/20 Limit = 4.96

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 166 background values. Annual perconstituent alpha = 0.0004311. Individual comparison alpha = 0.0001437 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

Constituent: pH, Field Analysis Run 10/13/2021 2:32 PM View: Appendix III

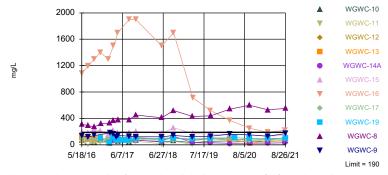
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

Exceeds Limit: WGWC-16, WGWC-8

#### Prediction Limit

#### Interwell Non-parametric



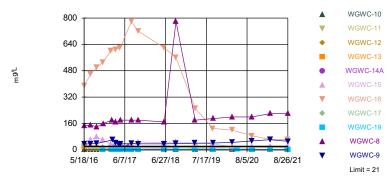
Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 7.407% NDs. Annual perconstituent alpha = 0.0003262. Individual comparison alpha = 0.0001087 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids [TDS] Analysis Run 10/13/2021 2:32 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

niow symbols indicate censored values.

Exceeds Limit: WGWC-16, WGWC-8, Prediction Limit
WGWC-9
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 135 background values. 23.7% NDs. Annual perconstituent alpha = 0.0003262. Individual comparison alpha = 0.0001087 (1 of 2). Comparing 11 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Sulfate as SO4 Analysis Run 10/13/2021 2:32 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# **Prediction Limit**

Constituent: Boron, total (mg/L) Analysis Run 10/13/2021 2:34 PM View: Appendix III
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	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							<0.08		
10/3/2018					<0.08	<0.08			<0.08
10/4/2018				<0.08				5.5	
4/1/2019	<0.08	<0.08							
4/2/2019			<0.08		<0.08		<0.08		<0.08
4/3/2019									
4/4/2019				0.024 (J)		<0.08		3.2	
9/16/2019	<0.08						<0.08		<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)
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									
3/10/2021		0.039 (J)	<0.08		<0.08				<0.08
3/11/2021	<0.08			<0.08			<0.08	1.1	
3/12/2021						<0.08			
8/23/2021		<0.08							
8/24/2021	<0.08				<0.08		<0.08		<0.08
8/25/2021			0.1					0.89	
8/26/2021				<0.08		<0.08			

	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	<0.08	<0.08	<0.08						
5/19/2016				<0.08	0.0252 (J)	1.42	0.314	<0.08	
7/19/2016									
7/20/2016	<0.08	<0.08	<0.08	<0.08	<0.08	1.4	0.25	<0.08	
9/13/2016		<0.08	<0.08						
9/14/2016	<0.08			<0.08	<0.08		0.3	<0.08	
9/15/2016						1.2			
11/9/2016									
11/10/2016	<0.08	<0.08	<0.08		<0.08				
11/11/2016				<0.08				<0.08	<0.08
11/14/2016						1.3			
1/17/2017									
1/18/2017		<0.08	<0.08						
1/19/2017									
1/20/2017	<0.08								
1/24/2017									
1/27/2017				0.021 (J)	0.033 (J)			0.047 (J)	
2/6/2017						1.8			<0.08
2/8/2017									
2/9/2017							0.61		
2/23/2017									
3/13/2017									
3/14/2017	<0.08	<0.08	<0.08						
3/15/2017				0.058	<0.08	1.7	0.42	0.024 (J)	0.034 (J)
3/17/2017									
4/11/2017							0.37		<0.08
4/24/2017	0.00	0.00							
4/25/2017	<0.08	<0.08	<0.08				0.00	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			<b>~0.0</b> 9						<0.08
8/8/2017 8/9/2017	<0.08	<0.08	<0.08		<0.08				
8/10/2017	<b>\0.06</b>	<b>~</b> 0.06		<0.08	<b>\0.06</b>	1.8	0.29	<0.08	<0.08
10/10/2017				<b>~</b> 0.08		1.0	0.29	<b>~</b> 0.06	<b>V</b> 0.06
10/10/2017	<0.08	<0.08	<0.08						
10/11/2017	10.00	10.00	10.00	<0.08	<0.08	1.8	0.36	<0.08	<0.08
6/13/2018				10.00	10.00	1.0	0.00	10.00	10.00
6/14/2018	<0.08	<0.08	<0.08	<0.08	<0.08	1.7	0.39	<0.08	<0.08
9/24/2018	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018		<0.08	<0.08						
10/4/2018	<0.08			<0.08	<0.08	1.9	0.37	<0.08	<0.08
4/1/2019									
4/2/2019		<0.08	<0.08						<0.08
4/3/2019				<0.08	<0.08	1.7	0.35	<0.08	
4/4/2019	0.049 (J)								
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		<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				
3/10/2021		<0.08	<0.08						
3/11/2021	<0.08				<0.08	2.4			<0.08
3/12/2021				<0.08			0.64	<0.08	
8/23/2021									
8/24/2021		<0.08							
8/25/2021	<0.08		<0.08	<0.08	0.063 (J)			<0.08	
8/26/2021						2.4	0.56		<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
3/10/2021	
3/11/2021	<0.08
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	0.043 (J)
8/26/2021	

	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				9				260	
3/17/2017									
4/11/2017									
4/24/2017	1.1	12							
4/25/2017			23		1.9	32	28	300	1.5
4/26/2017				8.1					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	1.1	18	24		4.8		26		
8/9/2017						30		350	1.3
8/10/2017				8.1					
10/10/2017	1.2	21							
10/11/2017			23		0.93	31	29	360	1.5
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)	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									
3/10/2021		11	7.7		0.89				1.3
3/11/2021	1.3			7.9			26	32	
3/12/2021						31			
8/23/2021		13							
8/24/2021	1.2				1.7		26		47
8/25/2021			16					27	
8/26/2021				7.6		31			

	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	4.7	4.7	24	7.0		11
4/3/2019	5.0			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	4/2020									15
9/2	21/2020		16	1.8						
9/2	22/2020						81			
9/2	23/2020	5.9						10	13	13
9/2	24/2020				5.2	1.4				
3/	10/2021		16	1.9						
3/	11/2021	5.7				4	83			15
3/	12/2021				1.6			11	15	
8/2	23/2021									
8/2	24/2021		15							
8/2	25/2021	6		1.7	1.5	4			14	
8/2	26/2021						85	9.3		10

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016	nane			
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	7.1			
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
3/10/2021	
3/11/2021	0.79
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	0.7
8/26/2021	

	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		0.4		1.6	•				
9/13/2016	3.6	2.4	3.1	4.5	2	7.0	1.4	000	0.4
9/14/2016				1.5		7.9		260	2.1
9/15/2016	2.0	2.2	2.2				4.5		
11/9/2016 11/10/2016	3.9	2.3	2.3		1.8	6.6	1.5	290	
11/11/2016				1.5	1.0	6.5		290	
11/14/2016				1.5					
1/17/2017	3.8	2.3							
1/18/2017	3.0	2.5			1.8		1.5		
1/19/2017			2		1.0		1.5		1.8
1/20/2017			2						1.0
1/24/2017						4.1		310	
1/27/2017								0.0	
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				330	
3/17/2017									
4/11/2017									
4/24/2017	3.4	2.2							
4/25/2017			1.9		1.8	4	1.3	330	1.8
4/26/2017				1.3					
5/17/2017									
6/7/2017									
7/11/2017									
8/8/2017	3.6	2.3	2		1.9		1.4		
8/9/2017						3.6		330	1.9
8/10/2017				1.4					
10/10/2017	3.6	2.5							
10/11/2017			1.9		1.8	5	1.3	320	2.1
10/12/2017				1.3					
6/13/2018	3.8		2				1.4		1.7
6/14/2018		2.3		1.3	1.7	4.3		290	
9/24/2018		2.4							
9/27/2018	4								
9/28/2018			2.1						
10/2/2018							1.4		
10/3/2018					1.8	4.8			1.8
10/4/2018				1.3				290	
4/1/2019	4	2.4							
4/2/2019			2.6		1.9		1.5		1.7
4/3/2019						0.7		170	
4/4/2019	4			1.4		3.7	1.5	170	1.0
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									
3/10/2021		2.6	1.9		1.9				1.8
3/11/2021	4.5			1.7			1.5	49	
3/12/2021						1.6			
8/23/2021		3.3							
8/24/2021	5.1				1.9		1.8		2.1
8/25/2021			2.3					45	
8/26/2021				1.6		1.4			

	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									
2/9/2017							1.5		
2/23/2017									
3/13/2017									
3/14/2017	1.5	1.2	1.6						
3/15/2017				3.1	1.4	38	1.3	3.2	2.4
3/17/2017				· · ·				0.2	
4/11/2017							1.2		2.3
4/24/2017							1.2		2.0
4/25/2017	1.8	1.2	1.6						
4/26/2017	1.0	1.2	1.0	3.1	1.3	42	1.2	3.2	2.3
5/17/2017				3.1	1.5	42	1.2	3.2	2.3
6/7/2017									2.5
7/11/2017									2.3
8/8/2017			1.7						2.3
8/9/2017	1.4	1.2	1.7		1.4				
8/10/2017	1.4	1.2		3.1	1.4	48	1.3	3.4	2.5
10/10/2017				3.1		40	1.3	3.4	2.3
	1 5	1.2	1.6						
10/11/2017 10/12/2017	1.5	1.2	1.6	3	1.2	60	1.4	3.1	2.3
6/13/2018				3	1.2	00	1.4	3.1	2.3
	4.5	1.0	1.0	2	1.0	50	1.0	2	0.4
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				
3/10/2021		1.2	1.8						
3/11/2021	1.3				1.2	110			2.9
3/12/2021				3.6			3.4	3.5	
8/23/2021									
8/24/2021		1.5							
8/25/2021	1.6		1.9	3.5	1.2			3.7	
8/26/2021						110	3.1		3.3

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016	mane			
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	4.5			
3/14/2017				
3/15/2017				
3/17/2017	4.8			
4/11/2017	3.8			
4/24/2017	3.5			
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	7.1			
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	<del></del>			
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
3/10/2021	
3/11/2021	2.6
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	2.8
8/26/2021	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
5/17/2016	0.0131 (J)	0.0538 (J)	0.284 (J)						
5/18/2016				0.206	0.018 (J)	0.779	0.106 (J)	0.1 (J)	0.014 (J)
5/19/2016									
7/19/2016	<0.1	<0.1	0.21		<0.1	0.97	0.11 (J)	0.14 (J)	<0.1
7/20/2016				0.23					
9/13/2016	<0.1	<0.1	0.15 (J)		<0.1		0.11 (J)		
9/14/2016				0.17 (J)		0.89		0.18 (J)	0.095 (J)
9/15/2016									
11/9/2016	<0.1	0.085 (J)	<0.1				0.1 (J)		
11/10/2016					<0.1	0.88		0.11 (J)	
11/11/2016				0.14 (J)					
11/14/2016									
1/17/2017	<0.1	<0.1							
1/18/2017					<0.1		0.11 (J)		
1/19/2017			0.087 (J)						<0.1
1/20/2017									
1/24/2017						0.92		0.15 (J)	
1/27/2017									
2/6/2017				0.15 (J)					
2/8/2017									
2/9/2017									
2/23/2017									
3/13/2017	<0.1	<0.1							
3/14/2017			<0.1		<0.1	0.77	<0.1		<0.1
3/15/2017				0.16 (J)				0.1 (J)	
3/17/2017				,				,	
4/11/2017									
4/24/2017	<0.1	<0.1							
4/25/2017			<0.1		<0.1	0.95	<0.1	0.13 (J)	<0.1
4/26/2017			· · ·	0.17 (J)		0.00		0.10 (0)	<b></b>
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	<b>~</b> 0.1	<b>~</b> 0.1	0.087 (3)		<b>~0.1</b>	0.91	0.099 (3)	0.18 (J)	<0.1
8/10/2017				0.2		0.51		0.10 (3)	-0.1
10/10/2017	<0.1	0.1971)		0.2					
	<0.1	0.18 (J)	0.00 (1)		-0.1	0.00	0.008 ( 1)	-0.1	<0.1
10/11/2017 10/12/2017			0.09 (J)	0.14 ( 1)	<0.1	0.88	0.098 (J)	<0.1	<0.1
3/27/2018	-0.1	<0.1		0.14 (J)					
	<0.1	<0.1	0.4470		-0.4		0.000 (1)		-0.4
3/28/2018			0.11 (J)		<0.1		0.088 (J)	0.10 (1)	<0.1
3/29/2018				0.40 ( 1)		0.70		0.13 (J)	
3/30/2018	.0.4		0.005 (1)	0.13 (J)		0.79	0.000 (1)		.0.4
6/13/2018	<0.1		0.085 (J)	2.42.40			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)				- 4- 40		
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)							

0/00/0010	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 2/27/2019			0.23	0.21	<0.1	0.81	0.074 (J)	0.47	<0.1
2/28/2019				0.21		0.61		0.47	
4/1/2019	<0.1	0.061 (J)							
4/2/2019		0.001 (0)	0.21		<0.1		0.09 (J)		<0.1
4/3/2019							(0)		
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									
9/21/2020		0.037 (J)							
9/22/2020	<0.1		0.1		<0.1		0.068 (J)		<0.1
9/23/2020				0.09 (J)		0.63		0.049 (J)	
9/24/2020									
2/2/2021	0.028 (J)	0.065 (J)	0.071 (J)		<0.1				
2/3/2021							0.088 (J)		<0.1
2/4/2021				0.12		0.69		0.052 (J)	
3/10/2021		0.045 (J)	0.046 (J)		<0.1				<0.1
3/11/2021	<0.1			0.15		0.00	0.092 (J)	0.061 (J)	
3/12/2021		0.007 (1)				0.88			
8/23/2021	0.063 (1)	0.097 (J)			0.054 (J)		0.16		0.073 (J)
8/24/2021 8/25/2021	0.062 (J)		0.13		U.U34 (J)		U. 10	0.099 (J)	0.073 (3)
8/26/2021			0.13	0.16		0.77		0.099 (3)	
0/20/2021				0.10		0.77			

	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									
1/20/2017	0.18 (J)								
1/24/2017									
1/27/2017				<0.1	0.28			<0.1	
2/6/2017						0.27			0.45
2/8/2017									
2/9/2017							1.3		
2/23/2017									
3/13/2017									
3/14/2017	0.11 (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	0.047.(1)	0.05	0.054 (1)		0.00 (1)	
2/27/2019				0.047 (J)	0.25	0.054 (J)		0.06 (J)	0.00
2/28/2019							1.4		0.28
4/1/2019		0.4470	0.000 (1)						0.00
4/2/2019		0.14 (J)	0.039 (J)	0.040 (1)	0.04	0.5	1.0	0.004 (1)	0.33
4/3/2019	0.007 (1)			0.048 (J)	0.24	0.5	1.3	0.084 (J)	
4/4/2019	0.087 (J)								
9/16/2019		0.4470							
9/17/2019	0.000 (1)	0.14 (J)	0.000 (1)		0.00				0.00
9/18/2019	0.066 (J)		0.033 (J)	0.007 (1)	0.22	0.40	1.0	0.000 (1)	0.32
9/19/2019				0.037 (J)		0.42	1.3	0.093 (J)	
2/3/2020		0.10	0.001 (1)						
2/4/2020		0.13	0.031 (J)	0.045 (1)	0.0		1.0	0.000 (1)	
2/5/2020	0.070 (1)			0.045 (J)	0.2	0.05	1.3	0.098 (J)	0.05
2/7/2020	0.079 (J)					0.25			0.35
3/16/2020		0.11	0.04 (1)						
3/17/2020	-0.4	0.11	0.04 (J)	-0.1				0.000 (1)	
3/18/2020	<0.1			<0.1	0.15	0.057 (1)		0.033 (J)	
3/19/2020					0.15	0.057 (J)	1		0.00
5/4/2020		0.001 (1)	-0.4						0.36
9/21/2020 9/22/2020		0.091 (J)	<0.1			0.14			
	0.05 (1)					0.14	0.00	0.004 (1)	0.05
9/23/2020 9/24/2020	0.05 (J)			0.18	<0.1		0.82	0.064 (J)	0.25
2/2/2021		0.15	0.035 (J)	0.16	<0.1				
2/3/2021		0.15	0.035 (3)	0.027 (1)		0.15		0.082 (J)	0.2
2/4/2021	0.064 (J)			0.027 (J)	0.16	0.15	0.91	0.082 (3)	0.3
3/10/2021	0.004 (3)	0.12	<0.1		0.10		0.91		
3/10/2021	0.05 (J)	0.12	<0.1		0.18	0.16			0.31
3/11/2021	0.03 (3)			0.044 (J)	0.10	0.10	0.98	0.096 (J)	0.31
8/23/2021				0.044 (J)			0.30	0.030 (3)	
8/24/2021		0.17							
8/25/2021	0.093 (J)	0.17	0.077 (J)	0.056 (J)	0.2			0.14	
	0.093 (1)		0.077 (3)	0.036 (3)	U.Z	0.21	4	U. 14	0.38
8/26/2021						0.21	1		0.36

		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)
2/2/2021	
2/3/2021	
2/4/2021	0.033 (J)
3/10/2021	
3/11/2021	0.04 (J)
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	0.071 (J)
8/26/2021	

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-16
5/17/2016	5.24	6.23	7.81						
5/18/2016				8.96	5.5	7.75	7.92	5.47	6.06
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		7.29	5.89
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									
3/13/2017	5.4	6.18							
3/14/2017			6.45		5.82	7.57		5.86	
3/15/2017				6.82					5.39
3/17/2017									
4/11/2017									
4/24/2017	5.4	6.35							
4/25/2017	<b></b>	0.00	6.93		5.57	7.47	7.73	5.35	5.28
4/26/2017			0.00	6.73	0.07		,,,,	0.00	0.20
5/17/2017				0.70					
6/7/2017									
7/11/2017									
8/8/2017	5.32	6.23	6.72		5.6		7.74		
8/9/2017	0.02	0.20	0.72		0.0	7.37	7.74	5.25	5.46
8/10/2017				6.66		7.57		5.25	3.40
8/25/2017				0.00				5.44	
10/10/2017	5.26	6.32						5.44	
10/11/2017	5.20	0.32	6.75		5.43	7.42	7.71	6.99	5.45
10/11/2017			0.75	6.67	5.45	7.42	7.71	0.99	5.45
3/27/2018	E 20	6.14		0.07					
3/28/2018	5.39	0.14	6.84		5.29		7.28	5.95	
3/29/2018			0.64		5.29		7.20	5.95	5.33
				6.09		7.40			5.33
3/30/2018 6/13/2018	E 22		6 21	6.98		7.48	7 70	E 12	
	5.33	6.02	6.31	6 56	E 30	7.5	7.78	5.13	E 2E
6/14/2018		6.02		6.56	5.39	7.5			5.35
9/24/2018	F 22	6.1							
9/27/2018	5.33		6.00						
9/28/2018			6.26				7.50		
10/2/2018					F 22	711	7.52	F 22	
10/3/2018					5.33	7.11		5.22	

10/4/0010	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWA-5 (bg)	WGWC-16
10/4/2018 2/25/2019	5.25	6.02		6.4					5.28
2/26/2019	5.25	0.02	7.66		5.62		7.87	5.21	
2/27/2019			7.00	6.23	5.02	7.4	7.07	5.21	5.08
2/28/2019				0.23		7.4			5.00
4/1/2019	5.31	6.09							
4/2/2019	0.01	0.00	7.53		5.6		7.94	5.25	
4/3/2019			7.00		0.0		7.01	0.20	
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									
9/21/2020		6.05							
9/22/2020	5.09		7.18		5.36		7.4	6.78	
9/23/2020				6.14		7.35			5.05
9/24/2020									
2/2/2021	5.36	6.1	6.48		5.84				
2/3/2021							7.76	5.3	
2/4/2021				6.21		7.77			5.42
3/10/2021		6.11	5.8		4.96			5.22	
3/11/2021	5.26			6.56			7.93		5.21
3/12/2021						7.72			
8/23/2021		6.18							
8/24/2021	5.21				5.53		7.88	6.8	
8/25/2021			6.74						5.25
8/26/2021				6.31		7.58			

	WGWA-4 (bg)	WGWC-17	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
5/17/2016									
5/18/2016	7.23	6.41	5.55						
5/19/2016				5.93	6.85	5.99	6.31	6.91	
7/18/2016				5.9661					
7/19/2016									
7/20/2016	7.281557	6.662463	5.656628		6.705264	6.194334	6.345061	6.962608	
9/1/2016								6.96	
9/13/2016	7.15		5.63						
9/14/2016		6.7			6.7		6.33		
9/15/2016						6.38			
11/9/2016									
11/10/2016	6.33	6.51	5.61		6.5				
11/11/2016				6.03				6.76	6.93
11/14/2016						5.7			
1/17/2017									
1/18/2017	6.94		5.81						
1/19/2017									
1/20/2017		6.55							
1/24/2017									
1/27/2017				6.21	6.47			6.66	
2/6/2017						5.66			6.8
2/8/2017									
2/23/2017									
3/13/2017									
3/14/2017	6.75	6.27	5.53						
3/15/2017				5.97	6.75	5.77	5.99	6.3	6.78
3/17/2017									
4/11/2017									6.79
4/24/2017									
4/25/2017	6.84	6.26	5.59						
4/26/2017				6.17	6.57	5.39	6.03	6.67	6.82
5/17/2017									
6/7/2017									6.76
7/11/2017									6.99
8/8/2017			5.52						
8/9/2017	6.67	6.47			6.55				
8/10/2017				6.05		5.59	5.86	6.7	6.59
8/25/2017									
10/10/2017									
10/11/2017	6.75	6.47	5.51						
10/12/2017	0.70	0.17	0.01	6.89	6.67	5.46	6.09	6.89	6.7
3/27/2018				0.00	0.07	5.15	0.00	0.00	···
3/28/2018	6.79		5.6						
3/29/2018	0.75		0.0	6.85	6.99	5.43	5.89	7.08	6.88
3/30/2018		6.71		0.03	0.55	5.45	3.03	7.00	0.00
6/13/2018		±							
6/14/2018	6.67	6.15	5.58	5.89	6.39	5.76	6.47	6.73	6.72
9/24/2018	5.07	5.10	3.00	3.00	3.00	5.70	J. 77	5.75	V E
9/27/2018									
9/28/2018									
10/2/2018									
10/3/2018	6.92		5.45						
13/3/2010	V.J2		0.70						

	WGWA-4 (bg)	WGWC-17	WGWA-3 (bg)	WGWC-11	WGWC-13	WGWC-8	WGWC-9	WGWC-12	WGWC-19
10/4/2018		6.14		5.81	6.5	5.39	6.17	6.79	6.67
2/25/2019									
2/26/2019	6.74	6.17	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	6.1	6.91	
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	6.38	6.63	
2/3/2020									
2/4/2020	7.29		5.66						
2/5/2020				5.89	6.44		6.54	6.76	
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
9/21/2020	6.81		5.35						
9/22/2020						5.17			
9/23/2020		5.89					5.8	6.42	6.59
9/24/2020				5.5	6.29				
2/2/2021	6.61		5.78						
2/3/2021				5.21		5.08		6.15	6.75
2/4/2021		6.31			6.34		6.22		
3/10/2021	7.19		5.49						
3/11/2021		5.96			5.95	5.35			7.12
3/12/2021				5.46			5.88	6.66	
8/23/2021									
8/24/2021	7.22								
8/25/2021		6.09	5.52	5.66	6.27			6.69	
8/26/2021						5.36	5.84		6.66

		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	0.0			
3/14/2017				
3/15/2017				
3/17/2017	5.97			
4/11/2017	6.18			
4/24/2017	0.10			
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	Ç			
8/9/2017				
8/10/2017				
8/25/2017				
10/10/2017				
10/11/2017	6.97			
10/12/2017	0.07			
3/27/2018				
3/28/2018				
3/29/2018	6.51			
3/30/2018	0.01			
6/13/2018				
6/14/2018	5.76			
9/24/2018				
9/27/2018				
9/28/2018				
10/2/2018				
10/2/2018				
15/5/2010				

	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	3.02
3/16/2020	
3/17/2020	
3/18/2020	
3/19/2020	5.49
5/4/2020	J. <del>1</del> J
9/21/2020	
9/22/2020	
9/23/2020	
9/23/2020	5.16
2/2/2021	J. 10
2/3/2021	F 76
2/4/2021	5.76
3/10/2021	
3/11/2021	5.1
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	5.39
8/26/2021	

	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					
5/17/2017									
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	0.40 (1)			2.2		41	0.0	250	2.2
9/16/2019	0.49 (J)						8.9		2.2

	WGWA-1 (bg)	WGWA-2 (bg)	WGWA-18 (bg)	WGWC-10	WGWA-7 (bg)	WGWC-15	WGWA-6 (bg)	WGWC-16	WGWA-5 (bg)
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									
3/10/2021		0.9 (J)	7.1		<1				<1
3/11/2021	<1			2.8			8.4	64	
3/12/2021						19			
8/23/2021		1.3							
8/24/2021	<1				<1		8.9		2.8
8/25/2021			8.2					63	
8/26/2021				1.8		16			

	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									
11/10/2016	5.2	5.4	0.73 (J)		5.7				
11/11/2016				1.4				14	3.4
11/14/2016						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
10/10/2017									
10/11/2017	13	6.8	0.72 (J)						
10/12/2017				1.9	6.1	180	37	14	3.6
6/13/2018									
6/14/2018	16	6.9	<1	1.7	5	170	37	14	3.5
9/24/2018									
9/27/2018									
9/28/2018									
10/2/2018		_							
10/3/2018	45	7	0.73 (J)	1.0	4.0	700	20	4.4	4.0
10/4/2018	15			1.6	4.3	780	38	14	4.6
4/1/2019		0.1	1.1						2.0
4/2/2019		8.1	1.1	1.0	2.0	100	41	10	3.8
4/3/2019	0.1			1.9	3.8	180	41	13	
4/4/2019 9/16/2019	9.1								
3/10/2019									

	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)				
3/10/2021		8.1	0.91 (J)						
3/11/2021	3.9				2.9	220			4
3/12/2021				2			62	14	
8/23/2021									
8/24/2021		7.9							
8/25/2021	3.3		0.79 (J)	1.1	1.8			13	
8/26/2021						220	52		3.5

		Plant Wansley	Client: Southern Company	Data: Wansley Ash Pond
	WGWC-14A			
5/17/2016				
5/18/2016				
5/19/2016				
7/19/2016				
7/20/2016				
9/13/2016				
9/14/2016				
9/15/2016				
11/9/2016				
11/10/2016				
11/11/2016				
11/14/2016				
1/17/2017				
1/18/2017				
1/19/2017				
1/20/2017				
1/24/2017				
1/27/2017				
2/6/2017				
2/8/2017	4.3			
2/9/2017				
2/23/2017	16			
3/13/2017				
3/14/2017				
3/15/2017				
3/17/2017	22			
4/11/2017	13			
4/24/2017				
4/25/2017				
4/26/2017	20			
5/17/2017	12			
6/7/2017	8.1			
7/11/2017	17			
8/8/2017				
8/9/2017				
8/10/2017				
10/10/2017				
10/11/2017	3.4			
10/12/2017				
6/13/2018				
6/14/2018	5.8			
9/24/2018				
9/27/2018				
9/28/2018				
10/2/2018				
10/3/2018				
10/4/2018	2.8			
4/1/2019				
4/2/2019	2.0			
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
3/10/2021	
3/11/2021	1.7
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	<1
8/26/2021	

	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									
6/7/2017									
7/11/2017									
8/8/2017	<10	62	72		<10		90		
8/9/2017						180		1900	20
8/10/2017				38					
10/10/2017	44	140							
10/11/2017			90		42	200	98	1900	4 (J)
10/12/2017				72					(-)
6/13/2018	24		38				110		<10
6/14/2018		80		40	14	170		1500	
9/24/2018		76							
9/27/2018	28								
9/28/2018	20		68						
10/2/2018							130		
10/3/2018					6	260			24
10/4/2018				60	-			1700	
4/1/2019	<10	63							
4/2/2019			100		15		110		25
4/3/2019			.50				•		==
4/4/2019				30		170		710	
9/16/2019	27						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									
3/10/2021		100	72		20				19
3/11/2021	24			52			110	190	
3/12/2021						130			
8/23/2021		110							
8/24/2021	32				24		120		150
8/25/2021			92					220	
8/26/2021				60		150			

	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				
3/10/2021		100	20						
3/11/2021	75				63	530			100
3/12/2021				27			130	78	
8/23/2021									
8/24/2021		110							
8/25/2021	84		21	32	53			110	
8/26/2021						550	170		94

		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
3/10/2021	
3/11/2021	24
3/12/2021	
8/23/2021	
8/24/2021	
8/25/2021	30
8/26/2021	

# FIGURE E.

## Appendix III Trend Test - Significant Results

	Plant Wansley	Client: Southern Compa	ny Data:	Wansley Ash	Pond	Printed	10/14/202	21, 2:21 PM			
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWC-16	-0.8908	-67	-63	Yes	17	0	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWC-8	0.1894	76	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWC-8	11.35	114	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-1 (bg)	0.1576	72	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-8	19.27	119	63	Yes	17	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-15	-0.03558	-89	-87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-9	-0.1308	-130	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-4 (bg)	0.6018	87	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-8	13.18	97	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-9	2.415	67	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWC-8	56.43	113	63	Yes	17	0	n/a	n/a	0.01	NP

# Appendix III Trend Test - All Results

Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/14/2021, 2:21 PM											
	Plant Wansley	Client: Southern Compa	any Data:	Wansley Ash	Pona	Printed	10/14/20	21, 2:21 PM			
Constituent	<u>Well</u>	Slope	Calc.	<u>Critical</u>	Sig.	<u>N</u>	<u>%NDs</u>	Normality	<u>Xform</u>	<u>Alpha</u>	Method
Boron, total (mg/L)	WGWA-1 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-18 (bg)	0	16	63	No	17	94.12	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-2 (bg)	0	-25	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-3 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-4 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-5 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-6 (bg)	0	0	63	No	17	100	n/a	n/a	0.01	NP
Boron, total (mg/L)	WGWA-7 (bg)	0	0 <b>-67</b>	63	No	17 <b>17</b>	100 <b>0</b>	n/a	n/a	0.01 <b>0.01</b>	NP <b>NP</b>
Boron, total (mg/L) Boron, total (mg/L)	WGWC-16 WGWC-8	-0.8908 0.1894	-67 76	-63 63	Yes Yes	17	0	n/a n/a	n/a n/a	0.01	NP NP
Boron, total (mg/L)	WGWC-9	0.04945	60	63	No	17	0	n/a	n/a	0.01	NP NP
Calcium, total (mg/L)	WGWA-1 (bg)	0.04698	57	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-1 (bg) WGWA-18 (bg)	-1.185	-38	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-10 (bg) WGWA-2 (bg)	-0.395	-34	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-2 (bg) WGWA-3 (bg)	0	1	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-4 (bg)	0	-29	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-5 (bg)	-0.04844	-17	-58	No	16	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-6 (bg)	0	12	63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWA-7 (bg)	-0.06577	-24	-63	No	17	0	n/a	n/a	0.01	NP
Calcium, total (mg/L)	WGWC-8	11.35	114	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-1 (bg)	0.1576	72	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-18 (bg)	-0.07462	-26	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-2 (bg)	0.05277	43	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-3 (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-4 (bg)	0	-35	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-5 (bg)	-0.08802	-54	-58	No	16	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-6 (bg)	0	7	63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWA-7 (bg)	0	-4	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-16	-40.74	-58	-63	No	17	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	WGWC-8	19.27	119	63	Yes	17	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-1 (bg)	0	-37	-87	No	21	71.43	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-18 (bg)	-0.008559	-62	-87	No	21	19.05	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-2 (bg)	-0.01627	-73	-87	No	21	42.86	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-3 (bg)	0	-41	-87	No	21	66.67	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-4 (bg)	-0.004045	-43	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-5 (bg)	0	16	81	No	20	85	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-6 (bg)	-0.005197	-59	-87	No	21	9.524	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWA-7 (bg)	0	-22	-87	No	21	76.19	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-15	-0.03558	-89	-87	Yes	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-19	-0.01576	-77	-87	No	21	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	WGWC-9	-0.1308	-130	-87	Yes	21	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-1 (bg)	0	-19	-63	No	17	88.24	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-18 (bg)	-0.7373	-43	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-2 (bg)	-0.004597	-12	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-3 (bg)	0.01065	10	63	No	17	5.882	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-4 (bg)	0.6018	87	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-5 (bg)	0.05912	24	58	No	16	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-6 (bg)	0	6	63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWA-7 (bg)	0	-16	-63	No	17	70.59	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-16	-81.66	-45 - <b>-</b>	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-8	13.18	97	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	WGWC-9	2.415	67	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWA-1 (bg)	2.425	33	63	No	17	23.53	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWA-18 (bg)	0.1365	3	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWA-2 (bg)	2.696	17	63	No	17 17	0	n/a	n/a	0.01	NP ND
Total Dissolved Solids [TDS] (mg/L)	WGWA-3 (bg) WGWA-4 (bg)	0.347	7	63	No	17 17	5.882 0	n/a	n/a	0.01	NP ND
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-4 (bg) WGWA-5 (bg)	1.733 1.304	28 6	63 58	No No	17 16	12.5	n/a n/a	n/a n/a	0.01 0.01	NP NP
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-5 (bg) WGWA-6 (bg)		29		No No	16 17	12.5			0.01	NP NP
Total Dissolved Solids [TDS] (mg/L) Total Dissolved Solids [TDS] (mg/L)	WGWA-6 (bg) WGWA-7 (bg)	2.921 1.224	10	63 63	No No	17	17.65	n/a n/a	n/a n/a	0.01	NP NP
Total Dissolved Solids [TDS] (mg/L)  Total Dissolved Solids [TDS] (mg/L)	WGWA-7 (bg) WGWC-16	-216	-40	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	WGWC-10	56.43	113	<b>63</b>	Yes	17	0	n/a	n/a	0.01	NP
. 5 2.0001104 001140 [1.00] (mg/L)		JU.70		30		••	·			0.01	

Sen's Slope Estimator WGWA-1 (bg) 2 n = 17 Slope = 0 units per year Mann-Kendall 1.6 statistic = 0 critical = 63 Trend not sig-nificant at 99% confidence level 1.2 (α = 0.005 per tail). mg/L 0.8 0.4

6/26/18

Constituent: Boron, total Analysis Run 10/14/2021 2:19 PM View: Trend Test 

7/16/19

8/4/20

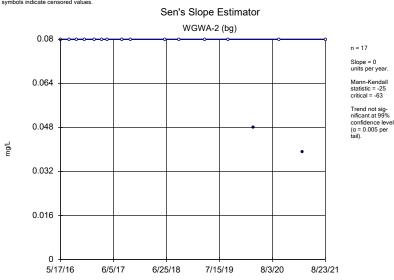
8/24/21

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

5/17/16

6/6/17

Hollow symbols indicate censored values.



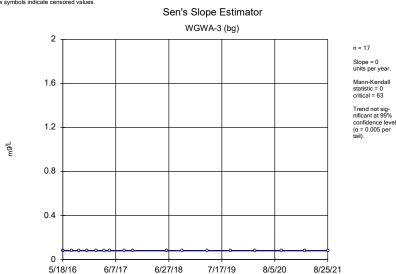
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Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



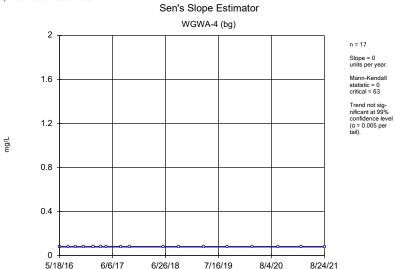
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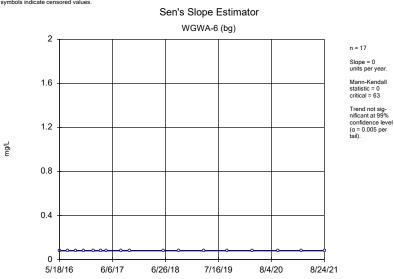
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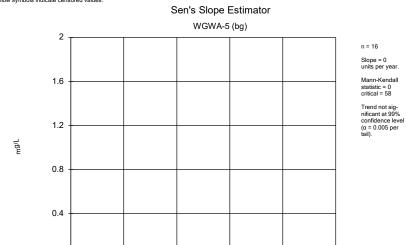
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.



Constituent: Boron, total Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

7/16/19

8/4/20

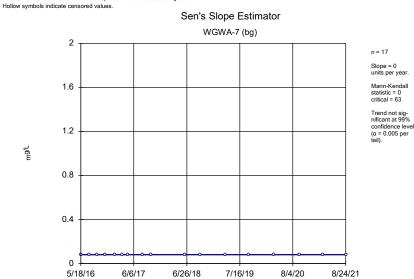
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8/24/21

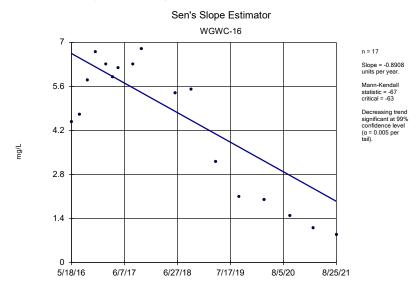
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5/18/16

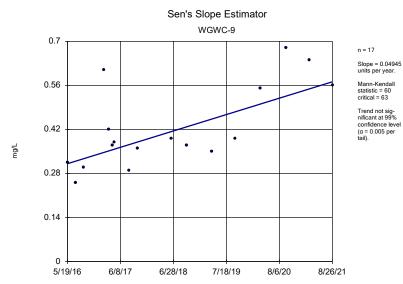
6/6/17



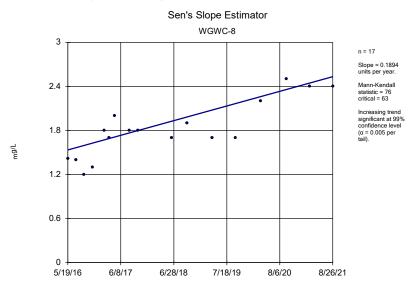
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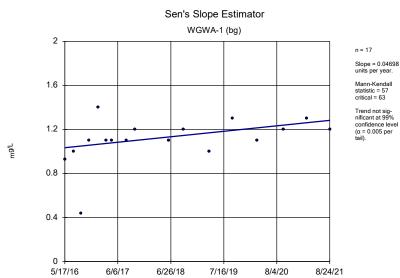
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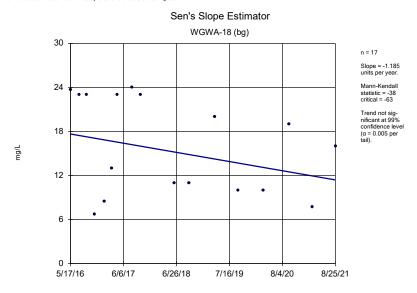
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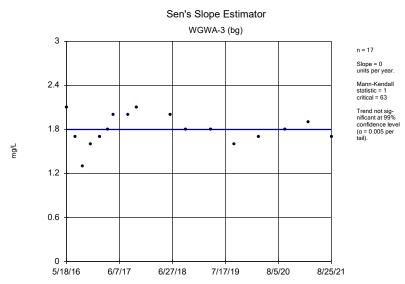
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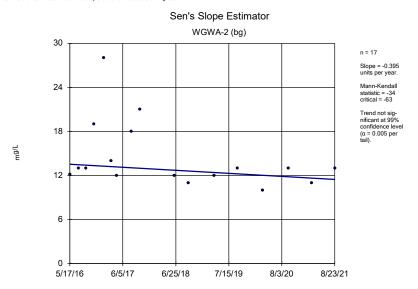
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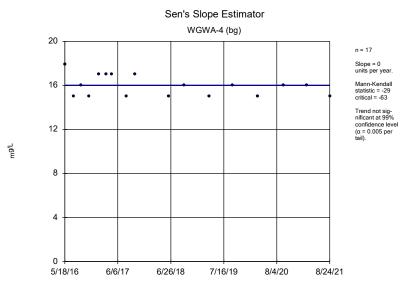
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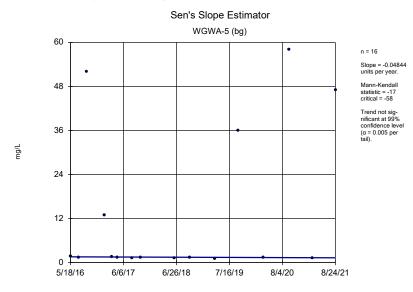
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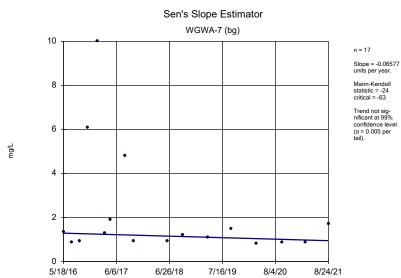
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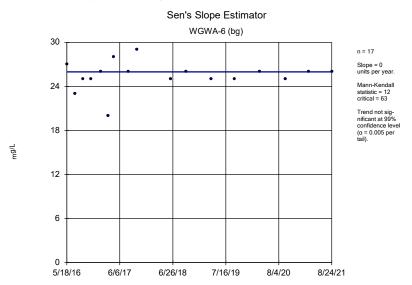
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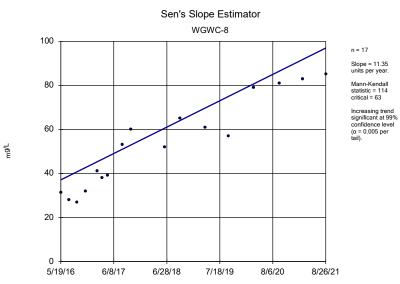
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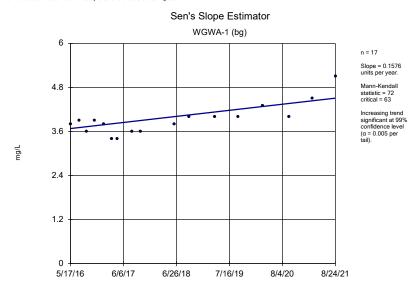
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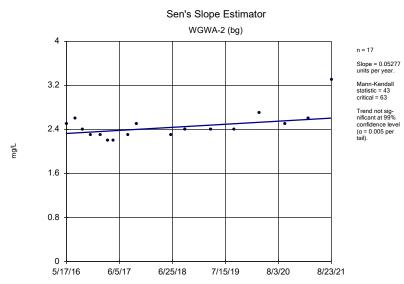
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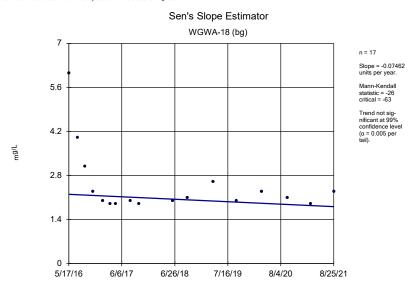
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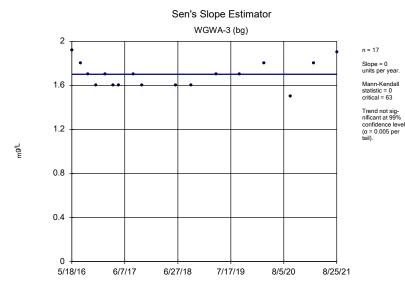
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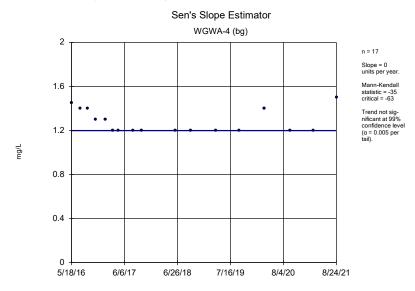
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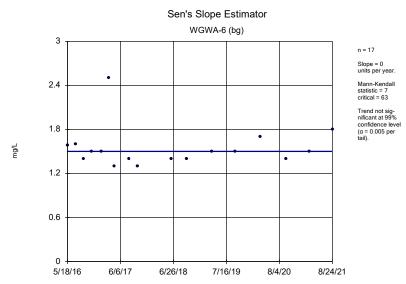
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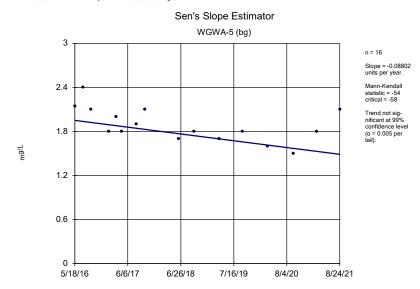
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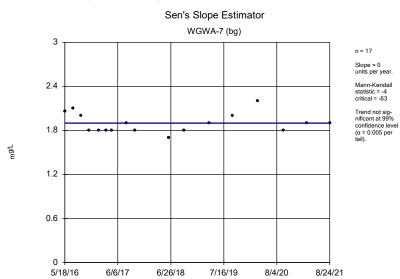
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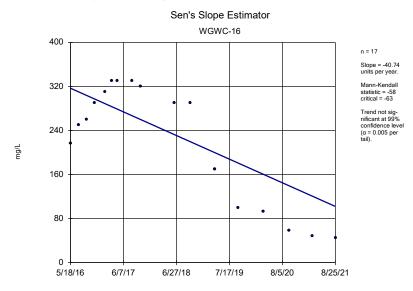
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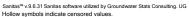
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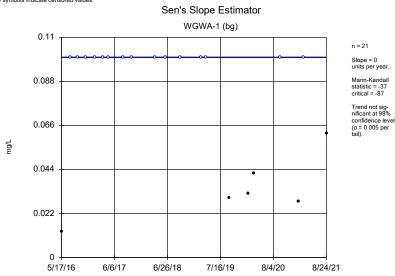


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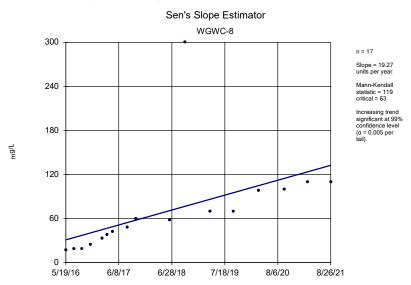


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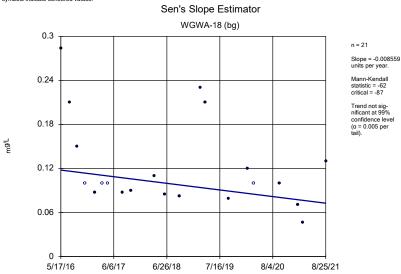


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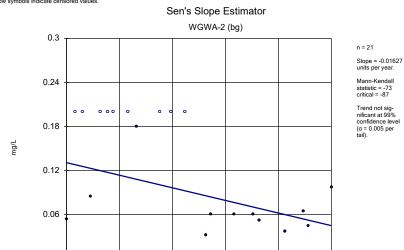


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### Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Fluoride, total Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Fluoride, total Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

7/15/19

6/25/18

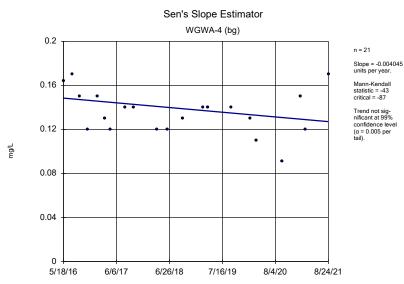
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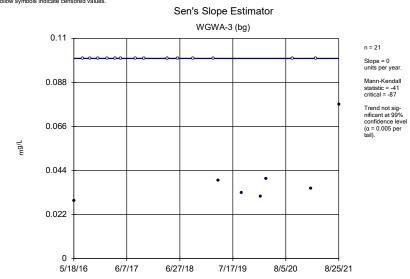
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6/5/17



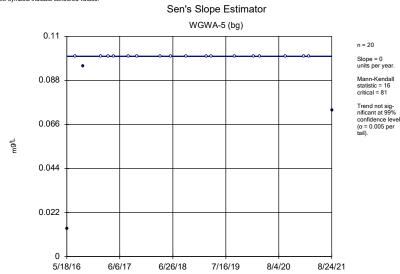
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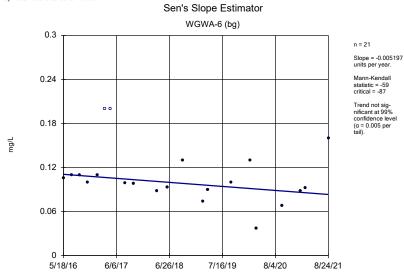
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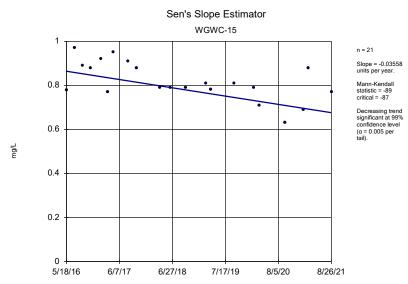
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Hollow symbols indicate censored values.



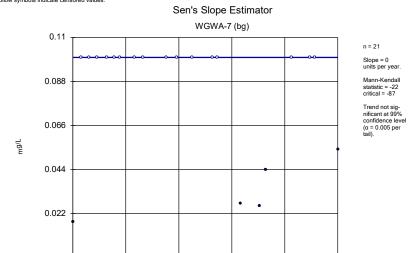
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Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG



Constituent: Fluoride, total Analysis Run 10/14/2021 2:19 PM View: Trend Test Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



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7/16/19

8/4/20

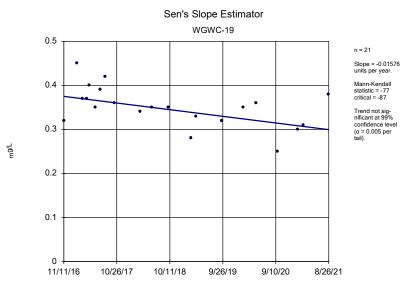
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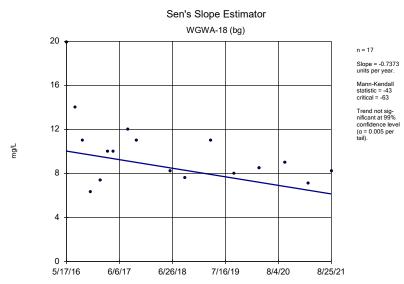
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6/6/17



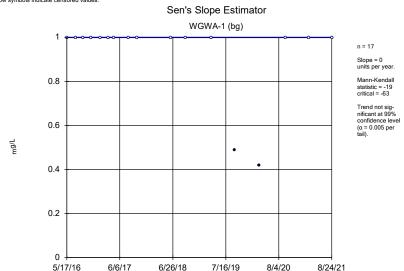
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

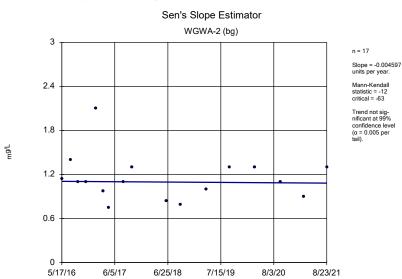


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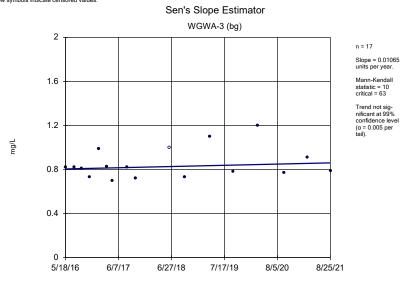


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Constituent: Sulfate as SO4 Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



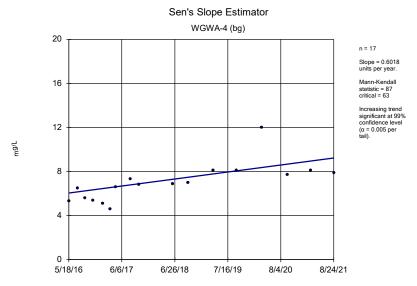


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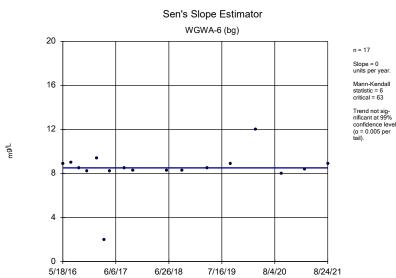
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Sen's Slope Estimator WGWA-5 (bg) 30 Slope = 0.05912 units per year. Mann-Kendall 24 statistic = 24 critical = 58 Trend not sig-nificant at 99% confidence level (α = 0.005 per tail). 12 5/18/16 6/6/17 6/26/18 7/16/19 8/4/20 8/24/21

Constituent: Sulfate as SO4 Analysis Run 10/14/2021 2:19 PM View: Trend Test Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate as SO4 Analysis Run 10/14/2021 2:19 PM View: Trend Test Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Sulfate as SO4 Analysis Run 10/14/2021 2:19 PM View: Trend Test Plant Wansley Client: Southern Company Data: Wansley Ash Pond

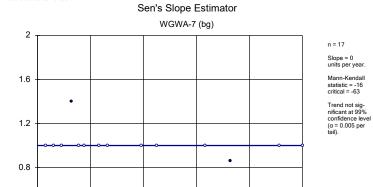
Hollow symbols indicate censored values.

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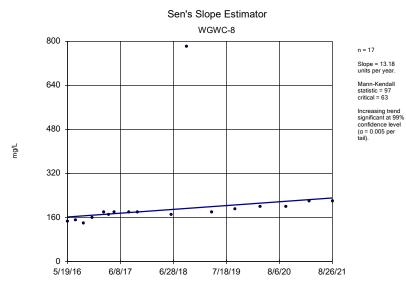
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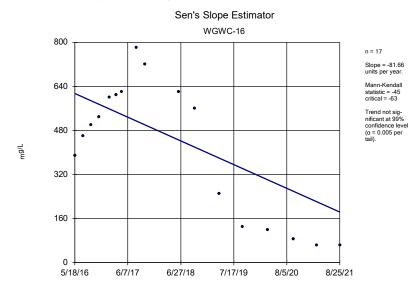
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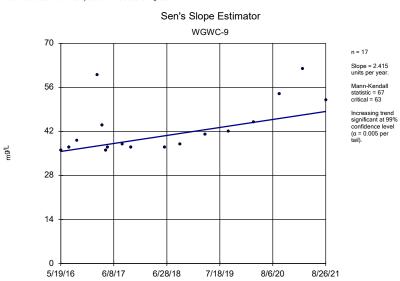


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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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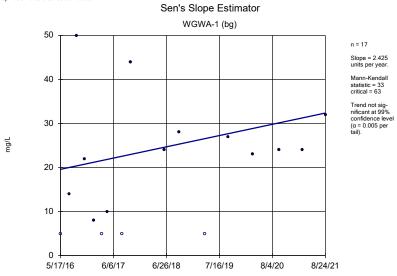


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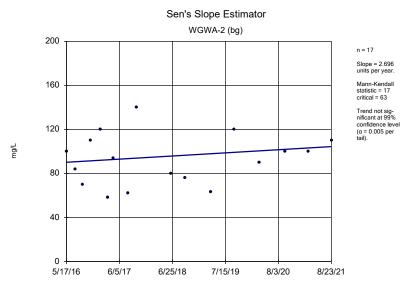
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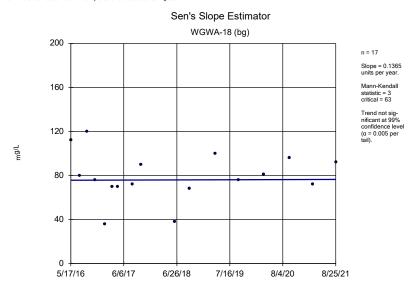


Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG

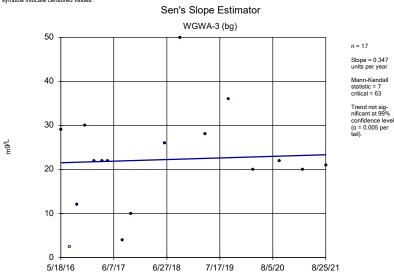


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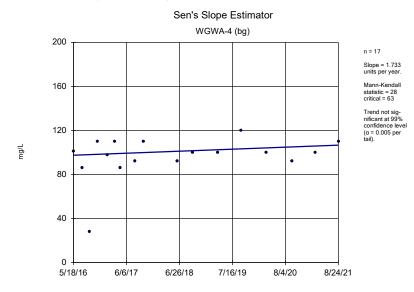


Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:19 PM View: Trend Test
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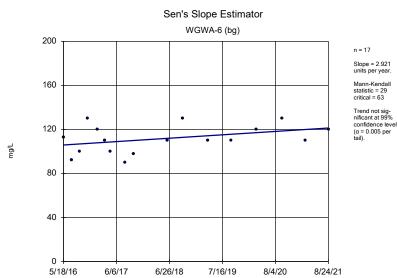
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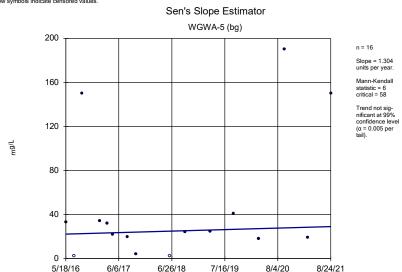


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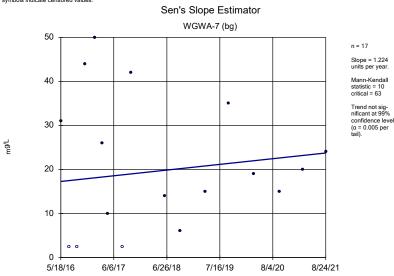
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Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.

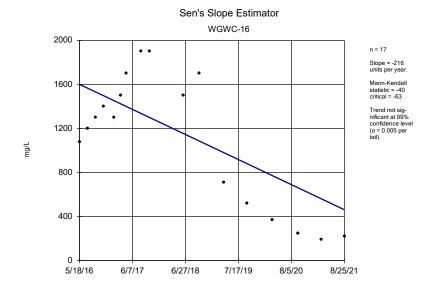


Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

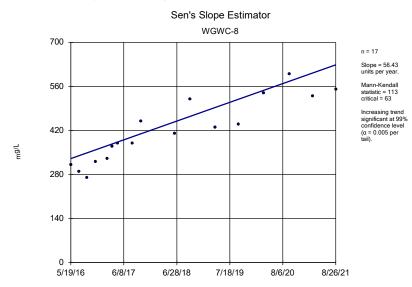
Sanitas™ v.9.6.31 Sanitas software utilized by Groundwater Stats Consulting. UG Hollow symbols indicate censored values.



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:19 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:20 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond



Constituent: Total Dissolved Solids [TDS] Analysis Run 10/14/2021 2:20 PM View: Trend Test
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

# FIGURE F.

# Upper Tolerance Limit Summary Table

		Plant Wa	nsley Cli	Client: Southern Company		y Data: Wan	sley Ash Pond	Printed 10/18/2021, 1	0:38 AM		
Constituent	Well	Upper Lim.	<u>Date</u>	Observ	. Sig. Bg N	Bg Mean	Std. Dev.	%NDs ND Adj.	Transfor	m Alpha	Method
Antimony (mg/L)	n/a	0.0022	n/a	n/a	n/a 119	n/a	n/a	98.32 n/a	n/a	0.002234	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0014	n/a	n/a	n/a 159	n/a	n/a	79.25 n/a	n/a	0.0002871	NP Inter(NDs)
Barium (mg/L)	n/a	0.062	n/a	n/a	n/a 159	n/a	n/a	0 n/a	n/a	0.0002871	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0025	n/a	n/a	n/a 159	n/a	n/a	93.08 n/a	n/a	0.0002871	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a 143	n/a	n/a	100 n/a	n/a	0.0006523	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0049	n/a	n/a	n/a 159	n/a	n/a	94.97 n/a	n/a	0.0002871	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.013	n/a	n/a	n/a 158	n/a	n/a	46.2 n/a	n/a	0.0003022	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	10.4	n/a	n/a	n/a 156	n/a	n/a	0 n/a	n/a	0.0003349	NP Inter(normality)
Fluoride, total (mg/L)	n/a	0.284	n/a	n/a	n/a 167	n/a	n/a	46.11 n/a	n/a	0.0001905	NP Inter(normality)
Lead (mg/L)	n/a	0.001	n/a	n/a	n/a 143	n/a	n/a	87.41 n/a	n/a	0.0006523	NP Inter(NDs)
Lithium (mg/L)	n/a	0.009	n/a	n/a	n/a 149	n/a	n/a	50.34 n/a	n/a	0.0004795	NP Inter(NDs)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a 127	n/a	n/a	88.98 n/a	n/a	0.001482	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.015	n/a	n/a	n/a 158	n/a	n/a	89.87 n/a	n/a	0.0003022	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a 159	n/a	n/a	94.34 n/a	n/a	0.0002871	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a 159	n/a	n/a	91.82 n/a	n/a	0.0002871	NP Inter(NDs)

# FIGURE G.

WANSLEY AP GWPS												
		CCR-Rule		Federal	State							
Constituent Name	MCL	Specified	Background	<b>GWPS</b>	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

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 10/18/2021, 10:45 AM

 Constituent
 Well
 Upper Lim.
 Lower Lim.
 Compliance Sig. N
 Mean
 Std. Dev.
 %NDs
 ND Adj.
 Transform
 Alpha
 Method

 Lithium (mg/L)
 WGWC-19
 0.0558
 0.0477
 0.04
 Yes 20
 0.05175
 0.007129
 0
 None
 No
 0.01
 Param.

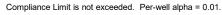
## Federal Confidence Intervals - All Results

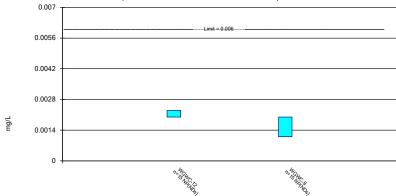
		Plant Wansley	Client: Southe	rn Company	Data	a: W	/ansley Ash Po	nd Printed 10/	8/2021, 1	0:45 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	e <u>Sig.</u> <u>1</u>	N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Antimony (mg/L)	WGWC-12	0.0023	0.002	0.006	No 1	15	0.00202	0.00007746	93.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	WGWC-9	0.002	0.0011	0.006	No 1	15	0.001728	0.0005829	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-10	0.001	0.00089	0.01	No 2	20	0.0008715	0.0002529	75	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-11	0.001	0.00054	0.01	No 2	20	0.000926	0.0001811	85	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-12	0.001	0.00052	0.01	No 2	20	0.00095	0.000154	90	None	No	0.01	NP (NDs)
Arsenic (mg/L)	WGWC-13	0.001	0.00039	0.01	No 2	20	0.000782	0.0003229	45	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-14A	0.0014	0.00095	0.01	No 2	20	0.001243	0.0005847	65	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-15	0.00217	0.001307	0.01	No 2	20	0.001739	0.00076	0	None	No	0.01	Param.
Arsenic (mg/L)	WGWC-16	0.0014	0.001	0.01	No 2	20	0.001158	0.0003311	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-17	0.001	0.00067	0.01	No 2	20	0.00084	0.0002086	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	WGWC-8	0.0008798	0.0005162	0.01	No 2	20	0.0009625	0.0002774	50	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	WGWC-9	0.0017	0.00078	0.01	No 2	20	0.0009975	0.0002076	85	Kaplan-Meier	No	0.01	NP (NDs)
Barium (mg/L)	WGWC-10	0.041	0.035	2	No 2	20	0.03856	0.006403	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-11	0.0405	0.03202	2	No 2	20	0.0365	0.007964	0	None	sqrt(x)	0.01	Param.
Barium (mg/L)	WGWC-12	0.01954	0.0154	2	No 2	20	0.01712	0.004162	0	None	x^2	0.01	Param.
Barium (mg/L)	WGWC-13	0.05611	0.04599	2	No 2	20	0.05105	0.008912	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-14A	0.04693	0.03107	2	No 2	20	0.039	0.01397	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-15	0.02433	0.02023	2	No 2	20	0.02228	0.003608	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-16	0.05813	0.03982	2	No 2	20	0.04898	0.01613	0	None	No	0.01	Param.
Barium (mg/L)	WGWC-17	0.019	0.011	2	No 2	20	0.01495	0.004036	0	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-19	0.005	0.0013	2	No 2	20	0.002913	0.001948	35	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-8	0.005	0.0011	2	No 2	20	0.003064	0.001783	40	None	No	0.01	NP (normality)
Barium (mg/L)	WGWC-9	0.001567	0.0008775	2	No 2	20	0.002611	0.00187	35	Kaplan-Meier	ln(x)	0.01	Param.
Beryllium (mg/L)	WGWC-14A	0.0025	0.00026	0.004	No 2	20	0.001824	0.00106	70	None	No	0.01	NP (normality)
Beryllium (mg/L)	WGWC-16	0.0025	0.00022	0.004	No 2	20	0.002386	0.0005098	95	None	No	0.01	NP (NDs)
Beryllium (mg/L)	WGWC-8	0.002114	0.001571	0.004	No 2	20	0.001843	0.000479	0	None	No	0.01	Param.
Beryllium (mg/L)	WGWC-9	0.0025	0.00036	0.004	No 2	20	0.001337	0.00108	45	None	No	0.01	NP (normality)
Chromium (mg/L)	WGWC-10	0.00233	0.00169	0.1	No 2	20	0.00201	0.0005628	15	None	No	0.01	Param.
Chromium (mg/L)	WGWC-11	0.0021	0.0017	0.1	No 2	20	0.001905	0.0002685	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-13	0.002	0.0019	0.1	No 2	20	0.00197	0.00008013	85	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-14A	0.002	0.0017	0.1	No 2	20	0.001985	0.00006708	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-15	0.002	0.0015	0.1	No 2	20	0.001975	0.0001118	95	None	No	0.01	NP (NDs)
Chromium (mg/L)	WGWC-9	0.0025	0.002	0.1	No 2	20	0.002025	0.0001118	95	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-10	0.001563	0.0007636	0.013	No 2	20	0.001232	0.0008066	5	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-11	0.0025	0.00064	0.013	No 2	20	0.001554	0.00093	35	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-12	0.001126	0.000479	0.013	No 2	20	0.0008685	0.0006568	5	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	WGWC-13	0.0025	0.0008	0.013	No 2	20	0.001984	0.0009233	75	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-14A	0.01029	0.005423	0.013	No 2	20	0.007855	0.004283	0	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-15	0.0025	0.00015	0.013	No 2	20	0.002382	0.0005255	95	None	No	0.01	NP (NDs)
Cobalt (mg/L)	WGWC-16	0.014	0.00026	0.013	No 2	20	0.006741	0.006293	10	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-17	0.00163	0.0007532	0.013	No 2	20	0.001191	0.0007719	5	None	No	0.01	Param.
Cobalt (mg/L)	WGWC-19	0.0025	0.00024	0.013	No 2	20	0.0013	0.001118	45	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-8	0.0025	0.00066	0.013	No 2	20	0.00182	0.001019	45	None	No	0.01	NP (normality)
Cobalt (mg/L)	WGWC-9	0.0025	0.00073	0.013		20	0.002411	0.0003958	95	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	WGWC-10	0.4377	0.1713	10.4		20	0.3045	0.2346	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-11	0.6194	0.1742	10.4		20	0.3968	0.392	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-12	0.5963	0.1813	10.4		20	0.3888	0.3654	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-13	0.7865	0.4694	10.4		20	0.628	0.2793	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-14A	0.8335	0.5318	10.4		20	0.6991	0.3011	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	WGWC-15	0.6472	0.3074	10.4		20	0.5077	0.3456	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)  Combined Radium 226 + 228 (pCi/L)	WGWC-15 WGWC-16	1.872	0.8325	10.4			1.352	0.9154	0	None	No No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)  Combined Radium 226 + 228 (pCi/L)	WGWC-10 WGWC-17	0.5347	0.0323	10.4		20	0.3279	0.3641	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)  Combined Radium 226 + 228 (pCi/L)	WGWC-17 WGWC-19	0.5435	0.1211	10.4		20	0.3653	0.3139	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)  Combined Radium 226 + 228 (pCi/L)	WGWC-19 WGWC-8	2.033	1.336	10.4		20	1.685	0.614	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)  Combined Radium 226 + 228 (pCi/L)	WGWC-9	0.4374	0.1644	10.4	No 2		0.3009	0.2404	0	None	No	0.01	Param.
33111011104 Madium 220 + 220 (pol/L)		U.TU! #	0.1077	10.7	140 2		3.0003	J.2-10-	5	110116	. 10	0.01	. uruitt.

## Federal Confidence Intervals - All Results

r cacial Commented microals - 7 in results													
	PI	ant Wansley	Client: Southe	rn Company	Data	a: V	Vansley Ash Po	nd Printed 10/18	3/2021, 1	0:45 AM			
Constituent	Well	Upper Lim.	Lower Lim.	Complianc	e <u>Sig.</u>	N	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride, total (mg/L)	WGWC-10	0.1752	0.1304	4	No	21	0.1528	0.04061	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-11	0.056	0.045	4	No	21	0.05348	0.02964	57.14	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-12	0.1009	0.07516	4	No	21	0.085	0.0284	19.05	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-13	0.2907	0.2068	4	No	21	0.2488	0.076	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-14A	0.05	0.04	4	No	21	0.04738	0.008657	66.67	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-15	0.8664	0.7707	4	No :	21	0.8185	0.0867	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-16	0.15	0.058	4	No :	21	0.1521	0.1838	9.524	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-17	0.1344	0.08396	4	No :	21	0.1092	0.04573	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-19	0.3753	0.3247	4	No	21	0.35	0.04593	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-8	0.3423	0.2001	4	No :	21	0.2712	0.1289	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-9	1.502	1.183	4	No :	21	1.342	0.2886	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.015	No	18	0.0006617	0.0003936	55.56	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.015	No	18	0.0008644	0.0002679	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00045	0.015	No	18	0.000725	0.0002744	44.44	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.015	No	18	0.0007889	0.0003548	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.015	No	18	0.0009611	0.000165	94.44	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.015	No	18	0.0009039	0.0002797	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.015	No	18	0.0009183	0.0002387	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00016	0.015	No	18	0.0007628	0.0003937	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.015	No	18	0.0009522	0.0002027	94.44	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01439	0.007231	0.04	No :	20	0.01141	0.007141	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.04	No :	20	0.004465	0.001312	85	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.00777	0.006121	0.04	No :	20	0.006785	0.001742	5	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0038	0.04	No :	20	0.00445	0.001062	75	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0033	0.04	No :	20	0.004155	0.001305	65	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.007217	0.005553	0.04	No :	20	0.006385	0.001465	10	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01033	0.006625	0.04	No :	20	0.00848	0.003266	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17	0.005656	0.004724	0.04	No :	20	0.00519	0.0008207	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-19	0.0558	0.0477	0.04	Yes	20	0.05175	0.007129	0	None	No	0.01	Param.
Lithium (mg/L)	WGWC-8	0.017	0.013	0.04	No :	20	0.01703	0.01007	0	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-9	0.03808	0.03257	0.04	No :	20	0.03533	0.004846	0	None	No	0.01	Param.
Molybdenum (mg/L)	WGWC-10	0.015	0.00093	0.1	No :	20	0.01359	0.004334	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-11	0.015	0.0017	0.1	No :	20	0.01364	0.004187	90	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-12	0.015	0.00095	0.1	No :	20	0.01092	0.006442	70	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-13	0.00491	0.0016	0.1	No :	20	0.004051	0.004795	15	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-14A	0.015	0.001	0.1	No :	20	0.0143	0.00313	95	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	WGWC-15	0.006568	0.003266	0.1	No :	20	0.005195	0.003435	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-17	0.005288	0.002606	0.1	No :	20	0.004176	0.002528	0	None	sqrt(x)	0.01	Param.
Molybdenum (mg/L)	WGWC-19	0.015	0.0012	0.1	No :	20	0.006085	0.006713	35	None	No	0.01	NP (normality)
Molybdenum (mg/L)	WGWC-9	0.006065	0.003563	0.1	No :	20	0.005266	0.003413	0	None	ln(x)	0.01	Param.
Selenium (mg/L)	WGWC-10	0.005	0.00031	0.05	No :	20	0.004765	0.001049	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-11	0.005	0.00049	0.05	No :	20	0.004774	0.001008	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-12	0.005	0.0021	0.05	No :	20	0.004855	0.0006485	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-14A	0.005	0.0003	0.05	No :	20	0.004765	0.001051	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-15	0.005	0.0005	0.05	No :	20	0.004775	0.001006	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-16	0.01076	0.005502	0.05			0.008133	0.004632	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-19	0.005	0.00036	0.05			0.004768	0.001038	95	None	No	0.01	NP (NDs)
Selenium (mg/L)	WGWC-8	0.003879	0.003149	0.05			0.003514	0.0006431	0	None	No	0.01	Param.
Selenium (mg/L)	WGWC-9	0.002822	0.002226	0.05			0.002524	0.0005245	0	None	No	0.01	Param.
Thallium (mg/L)	WGWC-10	0.001	0.000085	0.002			0.0009543	0.0002046	95	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-11	0.001	0.00016	0.002			0.000958	0.0001878	95	None	No	0.01	NP (NDs)
Thallium (mg/L)	WGWC-14A	0.001	0.00014	0.002			0.0005385	0.0004292	45	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-16	0.001	0.00017	0.002			0.000503	0.0004232	40	None	No	0.01	NP (normality)
Thallium (mg/L)	WGWC-19	0.001	0.00017	0.002			0.000959	0.0001175	95	None	No	0.01	NP (NDs)
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#### Non-Parametric Confidence Interval



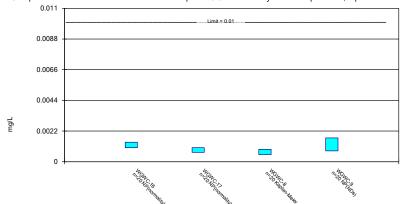


Constituent: Antimony Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval

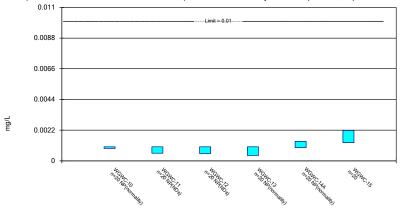
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Parametric and Non-Parametric (NP) Confidence Interval

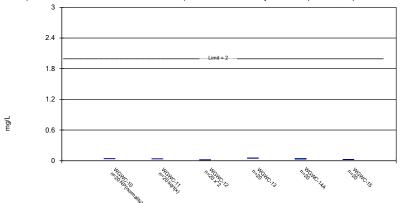
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

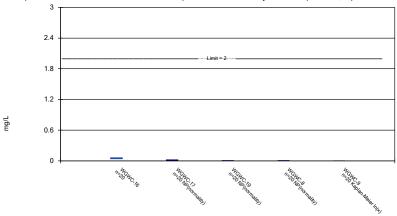
#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

#### 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.

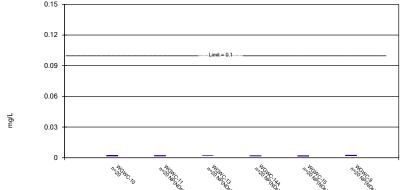


Constituent: Barium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

### Parametric and Non-Parametric (NP) Confidence Interval

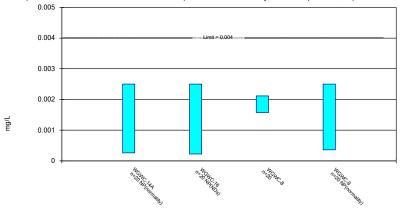
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n. 0.15



# Constituent: Chromium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Parametric and Non-Parametric (NP) Confidence Interval

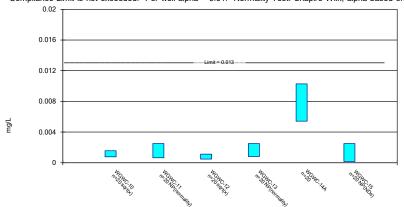
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



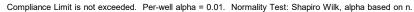
Constituent: Beryllium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

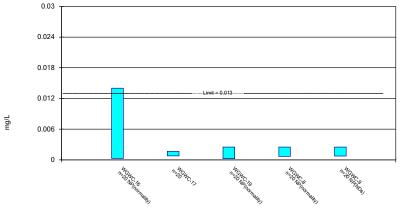
#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval



### Parametric and Non-Parametric (NP) Confidence Interval



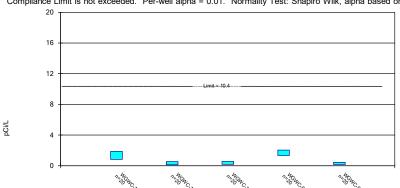


Constituent: Cobalt Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

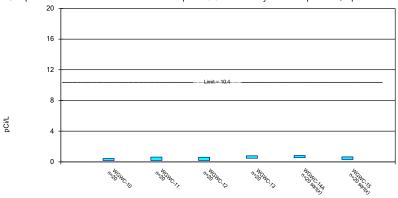
#### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



#### Parametric Confidence Interval

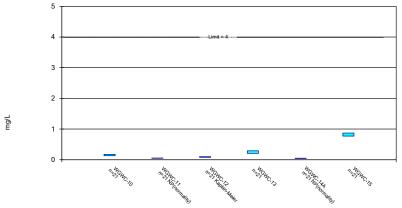
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

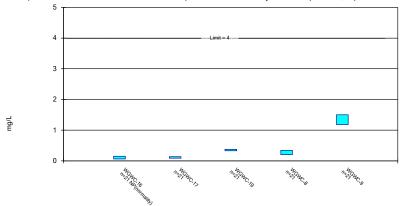
#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

#### 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.

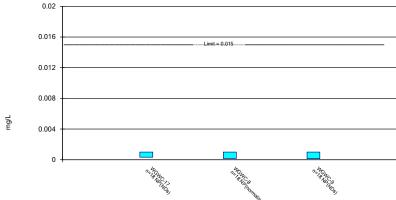


Constituent: Fluoride, total Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

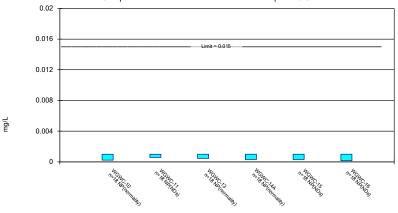


Constituent: Lead Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

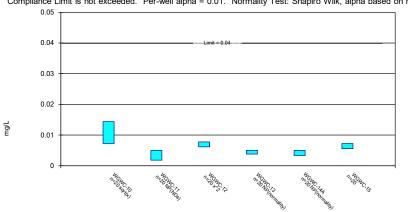


Constituent: Lead Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals

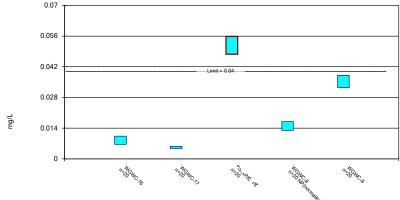
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

#### Parametric and Non-Parametric (NP) Confidence Interval



Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

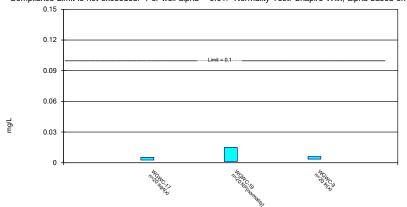


Constituent: Lithium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval

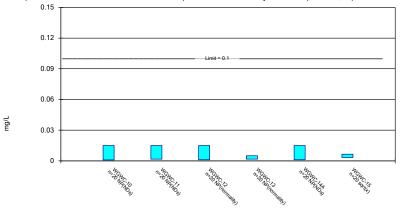
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

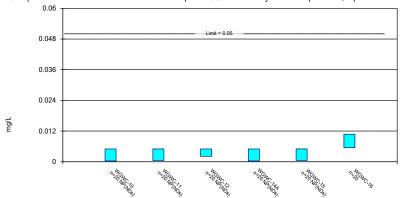
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

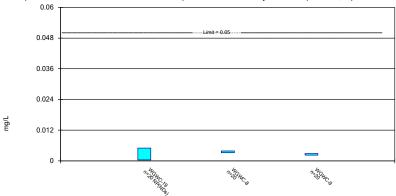
## Parametric and Non-Parametric (NP) Confidence Interval



Sanitas™ v.9.6.31 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.

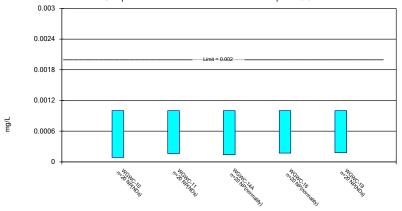


Constituent: Selenium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/18/2021 10:44 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Constituent: Antimony (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-12	WGWC-9
5/19/2016	<0.002	<0.002
7/20/2016	<0.002	<0.002
9/14/2016	<0.002	<0.002
11/11/2016	<0.002	
1/27/2017	<0.002	
2/9/2017		<0.002
3/15/2017	<0.002	0.0011 (J)
4/11/2017		<0.002
4/26/2017	<0.002	<0.002
8/10/2017	0.0023 (J)	<0.002
3/29/2018	<0.002	<0.002
2/27/2019	<0.002	
2/28/2019		<0.002
2/5/2020	<0.002	<0.002
3/18/2020	<0.002	
3/19/2020		0.00041 (J)
2/3/2021	<0.002	
2/4/2021		0.00041 (J)
3/12/2021	<0.002	<0.002
8/25/2021	<0.002	
8/26/2021		<0.002
Mean	0.00202	0.001728
Std. Dev.	7.746E-05	0.0005829
Upper Lim.	0.0023	0.002
Lower Lim.	0.002	0.0011

Constituent: Arsenic (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	,		
	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15	
5/18/2016	<0.001					0.00345	
5/19/2016		<0.001	<0.001	<0.001			
7/19/2016						0.0031	
7/20/2016	<0.001	<0.001	<0.001	<0.001			
9/14/2016	<0.001	<0.001	<0.001	<0.001		0.0024	
11/10/2016				<0.001		0.0023	
11/11/2016	<0.001	<0.001	<0.001				
1/24/2017						0.0019	
1/27/2017		0.00047 (J)	<0.001	0.00066 (J)			
2/6/2017	<0.001						
2/8/2017					<0.001		
2/23/2017					<0.001		
3/14/2017						0.0016	
3/15/2017	<0.001	<0.001	<0.001	<0.001			
3/17/2017					0.0006 (J)		
4/11/2017					0.0032		
4/25/2017						0.0019	
4/26/2017	<0.001	<0.001	<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	
8/10/2017	<0.001	<0.001	0.00048 (J)				
3/29/2018		<0.001	<0.001	0.00067 (J)	<0.001		
3/30/2018	<0.001					0.0018	
6/14/2018	0.0005 (J)	<0.001	0.00052 (J)	0.00093 (J)	<0.001	0.002	
10/3/2018						0.0024	
10/4/2018	0.00089 (J)	0.00054 (J)	<0.001	0.0015	0.0017		
2/27/2019	<0.001	<0.001	<0.001	0.00036 (J)	<0.001	0.0015	
4/3/2019		<0.001	<0.001	0.00053 (J)	<0.001		
4/4/2019	<0.001					0.0019	
9/18/2019				0.00039 (J)	<0.001	0.0016	
9/19/2019	0.00038 (J)	<0.001	<0.001				
2/5/2020	0.00035 (J)	<0.001	<0.001	0.00048 (J)	<0.001		
2/7/2020						0.001	
3/18/2020	<0.001	<0.001	<0.001			0.00088 (J)	
3/19/2020				0.00039 (J)	<0.001		
9/23/2020	<0.001		<0.001			0.00061 (J)	
9/24/2020		0.00051 (J)		<0.001	<0.001		
2/3/2021		<0.001	<0.001				
2/4/2021	<0.001			0.00038 (J)	<0.001	0.00069 (J)	
3/11/2021	0.00031 (J)			0.00035 (J)	<0.001		
3/12/2021		<0.001	<0.001			0.00084 (J)	
8/25/2021		<0.001	<0.001	<0.001	<0.001		
8/26/2021	<0.001					0.0012	
Mean	0.0008715	0.000926	0.00095	0.000782	0.001243	0.001739	
Std. Dev.	0.0002529	0.0001811	0.000154	0.0003229	0.0005847	0.00076	
Upper Lim.	0.001	0.001	0.001	0.001	0.0014	0.00217	
Lower Lim.	0.00089	0.00054	0.00052	0.00039	0.00095	0.001307	

Constituent: Arsenic (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-16	WGWC-17	WGWC-8	WGWC-9
5/18/2016	<0.001	<0.001		
5/19/2016			<0.001	<0.001
7/19/2016	0.0009 (J)			
7/20/2016		0.00058 (J)	0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.001		<0.001
9/15/2016			<0.001	
11/10/2016	0.0021	0.00082 (J)		
11/14/2016			<0.001	
1/20/2017		<0.001		
1/24/2017	0.0015			
2/6/2017			<0.001	
2/9/2017				0.0017
3/14/2017		<0.001		
3/15/2017	0.0014		<0.001	0.00047 (J)
4/11/2017				<0.001
4/25/2017	0.0014	0.00095 (J)		
4/26/2017			<0.001	<0.001
8/9/2017	0.0013	<0.001		
8/10/2017			<0.001	<0.001
3/29/2018	0.0014		<0.001	<0.001
3/30/2018		<0.001		
6/14/2018	<0.001	0.00076 (J)	<0.001	<0.001
10/4/2018	0.0013	0.00088 (J)	0.0015	<0.001
2/26/2019		0.0005 (J)		
2/27/2019	0.00046 (J)		0.00047 (J)	
2/28/2019				<0.001
4/3/2019			<0.001	<0.001
4/4/2019	<0.001	<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	<0.001	0.00075 (J)	0.0011	
3/18/2020	<0.001	0.00054 (J)		
3/19/2020			0.00071 (J)	<0.001
9/22/2020			0.0011	
9/23/2020	<0.001	0.00067 (J)		<0.001
2/3/2021			0.0013	
2/4/2021	<0.001	0.00035 (J)		<0.001
3/11/2021	<0.001	<0.001	0.0009 (J)	
3/12/2021				<0.001
8/25/2021	<0.001	<0.001		
8/26/2021			0.0013	<0.001
Mean	0.001158	0.00084	0.0009625	0.0009975
Std. Dev.	0.0003311	0.0002086	0.0002774	0.0002076
Upper Lim.	0.0014	0.001	0.0008798	0.0017
Lower Lim.	0.001	0.00067	0.0005162	0.00078

Constituent: Barium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.0391					0.0206
5/19/2016		0.031	0.0214	0.055		
7/19/2016						0.019
7/20/2016	0.028	0.029	0.019	0.039		
9/14/2016	0.035	0.031	0.02	0.04		0.02
11/10/2016				0.04		0.02
11/11/2016	0.042	0.034	0.022			
1/24/2017						0.017
1/27/2017		0.042	0.023	0.042		
2/6/2017	0.041					
2/8/2017					0.037	
2/23/2017					0.051	
3/14/2017						0.018
3/15/2017	0.04	0.032	0.024	0.058		
3/17/2017					0.046	
4/11/2017					0.055	
4/25/2017						0.018
4/26/2017	0.039	0.03	0.004	0.054	0.042	
5/17/2017					0.052	
6/7/2017					0.06	
7/11/2017					0.038	
8/9/2017				0.055		0.02
8/10/2017	0.038	0.03	0.017			
3/29/2018		0.028	0.017	0.061	0.028	
3/30/2018	0.042					0.021
6/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
10/3/2018						0.024
10/4/2018	0.04	0.035	0.017	0.046	0.036	
2/27/2019	0.04	0.04	0.016	0.054	0.028	0.023
4/3/2019		0.035	0.015	0.056	0.026	
4/4/2019	0.04					0.022
9/18/2019				0.062	0.025	0.026
9/19/2019	0.038	0.033	0.016			
2/5/2020	0.061	0.047	0.016	0.052	0.077	
2/7/2020						0.022
3/18/2020	0.035	0.038	0.016			0.021
3/19/2020				0.072	0.031	
9/23/2020	0.035		0.016			0.027
9/24/2020		0.061		0.038	0.034	
2/3/2021		0.039	0.015			
2/4/2021	0.035			0.047	0.029	0.028
3/11/2021	0.033			0.049	0.032	
3/12/2021		0.045	0.017			0.028
8/25/2021		0.04	0.016	0.046	0.03	
8/26/2021	0.032					0.029
Mean	0.03856	0.0365	0.01712	0.05105	0.039	0.02228
Std. Dev.	0.006403	0.007964	0.004162	0.008912	0.01397	0.003608
Upper Lim.	0.041	0.0405	0.01954	0.05611	0.04693	0.02433
Lower Lim.	0.035	0.03202	0.0154	0.04599	0.03107	0.02023

Constituent: Barium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	,
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.01
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.01
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.01
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
10/4/2018	0.046	0.013	0.0012 (J)	0.0017 (J)	0.00076 (J)
2/26/2019		0.012			
2/27/2019	0.028			<0.01	
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	0.027	0.011			
9/18/2019	0.032	0.011	<0.01		
9/19/2019				<0.01	0.0018 (J)
2/5/2020					0.0022 (J)
2/7/2020	0.034	0.011	0.0065 (J)	<0.01	
3/18/2020	0.034	0.012			
3/19/2020				<0.01	0.0021 (J)
5/4/2020			<0.01		
9/22/2020				<0.01	
9/23/2020	0.037	0.012	<0.01		<0.01
2/3/2021			<0.01	<0.01	
2/4/2021	0.039	0.012			0.0016 (J)
3/11/2021	0.037	0.011	<0.01	<0.01	
3/12/2021					<0.01
8/25/2021	0.035	0.011			
8/26/2021			<0.01	<0.01	<0.01
Mean	0.04898	0.01495	0.002913	0.003064	0.002611
Std. Dev.	0.01613	0.004036	0.001948	0.001783	0.00187
Upper Lim.	0.05813	0.019	0.005	0.005	0.001567
Lower Lim.	0.03982	0.011	0.0013	0.0011	0.0008775

Constituent: Beryllium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

		WGWC-14A	WGWC-16	WGWC-8	WGWC-9
5	5/18/2016		<0.0025		
5	5/19/2016			0.00102 (J)	<0.0025
7	//19/2016		<0.0025		
7	//20/2016			0.0014 (J)	<0.0025
9	9/14/2016		<0.0025		<0.0025
9	)/15/2016			0.00093 (J)	
1	1/10/2016		<0.0025		
1	1/14/2016			0.0014 (J)	
1	/24/2017		<0.0025		
2	2/6/2017			0.0017 (J)	
2	2/8/2017	<0.0025			
2	2/9/2017				0.00041 (J)
2	2/23/2017	<0.0025			
3	3/15/2017		<0.0025	0.0016 (J)	<0.0025
3	3/17/2017	<0.0025			
4	/11/2017	<0.0025			<0.0025
4	/25/2017		<0.0025		
4	/26/2017	<0.0025		0.0017 (J)	<0.0025
5	5/17/2017	<0.0025			
6	5/7/2017	<0.0025			
7	//11/2017	<0.0025			
8	3/9/2017		<0.0025		
8	3/10/2017			0.0017 (J)	0.00034 (J)
3	3/29/2018	<0.0025	<0.0025	0.0018 (J)	<0.0025
6	6/14/2018	<0.0025	<0.0025	0.0015 (J)	<0.0025
1	0/4/2018	<0.0025	<0.0025	0.0019 (J)	0.00036 (J)
2	2/27/2019	0.00017 (J)	0.00022 (J)	0.0021 (J)	
2	2/28/2019				0.00031 (J)
4	/3/2019	<0.0025		0.0019 (J)	<0.0025
4	/4/2019		<0.0025		
9	)/18/2019	0.00032 (J)	<0.0025		
	9/19/2019			0.0019	0.00041 (J)
	2/5/2020	0.00024 (J)			0.0004 (J)
	2/7/2020		<0.0025	0.0023	
	3/18/2020		<0.0025		
	3/19/2020	0.00025 (J)		0.0028	0.00056 (J)
	0/22/2020			0.0025	
	0/23/2020		<0.0025		0.00034 (J)
	0/24/2020	0.00024 (J)			
	2/3/2021			0.0025	
	2/4/2021	0.00026 (J)	<0.0025	0.0000 ( 1)	0.00039 (J)
	3/11/2021	<0.0025	<0.0025	0.0022 (J)	0.00004 (1)
	8/12/2021	10.0005	10.0005		0.00034 (J)
	8/25/2021	<0.0025	<0.0025	0.002 (1)	0.00038 ( 1)
	8/26/2021 4een	0.001924	0.002296	0.002 (J)	0.00038 (J) 0.001337
	Mean Std. Dov	0.001824	0.002386 0.0005098	0.001843	
	Std. Dev. Jpper Lim.	0.00106	0.0005098	0.000479 0.002114	0.00108
	ower Lim.	0.0025 0.00026	0.0025	0.002114	0.0025 0.00036
	OWEI LIIII.	0.00020	0.00022	0.001071	0.00030

Constituent: Chromium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					, , .	
	WGWC-10	WGWC-11	WGWC-13	WGWC-14A	WGWC-15	WGWC-9
5/18/2016	<0.002				<0.002	
5/19/2016		<0.002	<0.002			<0.002
7/19/2016					<0.002	
7/20/2016	0.0012 (J)	<0.002	<0.002			<0.002
9/14/2016	<0.002	<0.002	<0.002		<0.002	<0.002
11/10/2016			<0.002		<0.002	
11/11/2016	0.0015 (J)	<0.002				
1/24/2017					<0.002	
1/27/2017		<0.002	<0.002			
2/6/2017	0.0011 (J)					
2/8/2017				<0.002		
2/9/2017						<0.002
2/23/2017				<0.002		
3/14/2017					<0.002	
3/15/2017	0.0015 (J)	<0.002	<0.002			<0.002
3/17/2017				<0.002		
4/11/2017				<0.002		<0.002
4/25/2017					<0.002	
4/26/2017	0.0013 (J)	0.0011 (J)	<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	
8/10/2017	0.0016 (J)	<0.002				<0.002
3/29/2018		0.0012 (J)	<0.002	<0.002		<0.002
3/30/2018	0.0027				<0.002	
6/14/2018	0.0023 (J)	<0.002	<0.002	<0.002	<0.002	<0.002
10/3/2018					<0.002	
10/4/2018	0.0031	<0.002	<0.002	<0.002		<0.002
2/27/2019	0.0031	0.0021 (J)	0.0018 (J)	<0.002	0.0015 (J)	
2/28/2019						0.0025
4/3/2019		<0.002	<0.002	<0.002		<0.002
4/4/2019	0.0021 (J)				<0.002	
9/18/2019			<0.002	<0.002	<0.002	
9/19/2019	0.0022	<0.002				<0.002
2/5/2020	0.0022	<0.002	<0.002	0.0017 (J)		<0.002
2/7/2020					<0.002	
3/18/2020	<0.002	<0.002			<0.002	
3/19/2020			<0.002	<0.002		<0.002
9/23/2020	0.0018 (J)				<0.002	<0.002
9/24/2020		<0.002	<0.002	<0.002		
2/3/2021		<0.002				
2/4/2021	0.0018 (J)		<0.002	<0.002	<0.002	<0.002
3/11/2021	0.0023		0.0019 (J)	<0.002		
3/12/2021		0.0017 (J)			<0.002	<0.002
8/25/2021		<0.002	0.0017 (J)	<0.002		
8/26/2021	0.0024				<0.002	<0.002
Mean	0.00201	0.001905	0.00197	0.001985	0.001975	0.002025
Std. Dev.	0.0005628	0.0002685	8.013E-05	6.708E-05	0.0001118	0.0001118
Upper Lim.	0.00233	0.0021	0.002	0.002	0.002	0.0025
Lower Lim.	0.00169	0.0017	0.0019	0.0017	0.0015	0.002

Constituent: Cobalt (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
10/3/2018						<0.0025
10/4/2018	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025	0.0055	
2/27/2019	0.0005 (J)	0.0022 (J)	0.0006 (J)	0.00013 (J)	0.0049	<0.0025
4/3/2019		0.00081 (J)	0.00043 (J)	<0.0025	0.0056	
4/4/2019	0.0017 (J)					<0.0025
9/18/2019				<0.0025	0.005	<0.0025
9/19/2019	0.0023	<0.0025	0.00028 (J)			
2/5/2020	0.0013	0.00026 (J)	0.00058	<0.0025	0.0044	
2/7/2020						<0.0025
3/18/2020	0.0012 (J)	0.00069 (J)	0.00071 (J)			<0.0025
3/19/2020				<0.0025	0.0039	
9/23/2020	0.00062 (J)		0.00039 (J)			<0.0025
9/24/2020		<0.0025		0.00032 (J)	0.0035	
2/3/2021		0.00072 (J)	0.00017 (J)			
2/4/2021	0.00059 (J)			<0.0025	0.0041	0.00015 (J)
3/11/2021	0.00058 (J)			<0.0025	0.0037	
3/12/2021		0.0022 (J)	0.00042 (J)			<0.0025
8/25/2021		0.00045 (J)	0.0005 (J)	<0.0025	0.0029	
8/26/2021	0.00044 (J)					<0.0025
Mean	0.001232	0.001554	0.0008685	0.001984	0.007855	0.002382
Std. Dev.	0.0008066	0.00093	0.0006568	0.0009233	0.004283	0.0005255
Upper Lim.	0.001563	0.0025	0.001126	0.0025	0.01029	0.0025
Lower Lim.	0.0007636	0.00064	0.000479	0.0008	0.005423	0.00015

Constituent: Cobalt (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	, ,	
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9	
5/18/2016	0.0069	0.00245 (J)				
5/19/2016				<0.0025	<0.0025	
7/19/2016	0.012					
7/20/2016		0.0018 (J)		<0.0025	<0.0025	
9/14/2016	0.013	0.0014 (J)			<0.0025	
9/15/2016				<0.0025		
11/10/2016	0.016	0.0016 (J)				
11/11/2016			<0.0025			
11/14/2016				<0.0025		
1/20/2017		0.0014 (J)				
1/24/2017	0.015					
2/6/2017			0.00058 (J)	<0.0025		
2/9/2017					0.00073 (J)	
3/14/2017		0.0023 (J)				
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025	
4/11/2017			<0.0025		<0.0025	
4/25/2017	0.014	0.0023 (J)				
4/26/2017			<0.0025	<0.0025	<0.0025	
6/7/2017			<0.0025			
7/11/2017			<0.0025			
8/9/2017	0.016	0.0011 (J)				
8/10/2017			0.00049 (J)	<0.0025	<0.0025	
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025	
3/30/2018		0.0016 (J)				
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025	
10/4/2018	0.0078	0.00041 (J)	<0.0025	<0.0025	<0.0025	
2/26/2019		0.00086 (J)				
2/27/2019	0.00084 (J)			0.0019 (J)		
2/28/2019			0.00019 (J)		<0.0025	
4/2/2019			<0.0025			
4/3/2019				0.0037	<0.0025	
4/4/2019	0.00077 (J)	<0.0025				
9/18/2019	0.00011 (J)	0.00018 (J)	0.00045 (J)			
9/19/2019				0.0028	<0.0025	
2/5/2020					<0.0025	
2/7/2020	0.00016 (J)	0.00077	0.00024 (J)	0.0011		
3/18/2020	0.00016 (J)	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	<0.0025	0.0009 (J)	0.00024 (J)		<0.0025	
2/3/2021			0.00025 (J)	0.00014 (J)		
2/4/2021	0.00026 (J)	0.00042 (J)			<0.0025	
3/11/2021	0.00013 (J)	0.00035 (J)	0.00022 (J)	0.00043 (J)		
3/12/2021					<0.0025	
8/25/2021	<0.0025	0.00042 (J)				
8/26/2021			0.00022 (J)	0.0005 (J)	<0.0025	
Mean	0.006741	0.001191	0.0013	0.00182	0.002411	
Std. Dev.	0.006293	0.0007719	0.001118	0.001019	0.0003958	
Upper Lim.	0.014	0.00163	0.0025	0.0025	0.0025	
Lower Lim.	0.00026	0.0007532	0.00024	0.00066	0.00073	

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					,	
540,0040	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)	0.424 (11)	0.0608 (11)	0.210 (11)		0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		0.00 (11)
7/19/2016	0.125 (11)	0.262 (11)	0.0646 (11)	0.404 (11)		0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		0.440 (11)
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016	0.542	0.0357 (11)	0.467	1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			0.770
1/24/2017		0.808	0.836	0.668		0.779
1/27/2017 2/6/2017	0.104 (U)	0.898	0.836	0.008		
2/8/2017	0.104 (0)				0.958	
2/23/2017					0.771	0.247 (11)
3/14/2017	0.533	0.101 (11)	0.254 (11)	0.847		0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847	4.7	
3/17/2017					1.7	
4/11/2017					0.901	0.515
4/25/2017	0.000 (11)	0.0000 (11)	0.007.410	0.400.410	0.404	0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912	0.54	0.50	
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	0.275 (U)	-0.263 (U)	0.463	0.55	0.171 (U)
10/3/2018						0.766
10/4/2018	0.84	1.18	1.29	0.99	0.563	
2/27/2019	0.236 (U)	0.374	0.415	1.08	0.538	0.363 (U)
4/3/2019	0.000 (11)	0.187 (U)	0.264 (U)	0.446	0.497	0.440
4/4/2019	0.233 (U)			0.000	0.070 (11)	0.418
9/18/2019	0.404.410	0.000 (1.1)	0.000 (11)	0.392	0.376 (U)	0.484
9/19/2019	0.124 (U)	0.338 (U)	0.329 (U)	0.000	0.5	
2/5/2020	0.0961 (U)	0.163 (U)	0.225 (U)	0.609	0.5	0.105 (11)
2/7/2020	0.404.410	0.000	0.0000 (1.1)			0.125 (U)
3/18/2020	0.461 (U)	0.866	-0.0262 (U)	0.47	0.070 (11)	0.303 (U)
3/19/2020	0.440 (11)		0.705	0.47	0.376 (U)	0.440 (11)
9/23/2020	0.442 (U)	1.0	0.785	1.00	0.700	0.448 (U)
9/24/2020		1.2	0.222.41	1.02	0.796	
2/3/2021	0.0000 (11)	0.718	0.322 (U)	0.120 (11)	0.504	0.400 (11)
2/4/2021	0.0332 (U)			0.139 (U)	0.564	0.488 (U)
3/11/2021	0.42 (U)	0.0720 (11)	0.633	0.473	0.764	0.501
3/12/2021		0.0729 (U)	0.633	0.012	0.705	0.591
8/25/2021	0.224 (11)	0.401	0.443 (U)	0.913	0.705	0.670
8/26/2021 Maan	0.321 (U)	0.3069	0.3000	0.638	0.6001	0.678
Mean	0.3045	0.3968	0.3888	0.628	0.6991	0.5077
Std. Dev.	0.2346	0.392	0.3654	0.2793	0.3011	0.3456
Upper Lim.	0.4377	0.6194	0.5963	0.7865	0.8335	0.6472
Lower Lim.	0.1713	0.1742	0.1813	0.4694	0.5318	0.3074

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

			i idilit v	varisiey Client. Of	outhern Company
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	-0.373 (U)	0.0458 (U)	1.86	0.157 (U)
10/4/2018	1.99	0.775	0.381	2.44	0.48
2/26/2019		0.431			
2/27/2019	0.721			2.42	
2/28/2019			0.254 (U)		0.271 (U)
4/2/2019			0.209 (U)		
4/3/2019				1.55	0.0621 (U)
4/4/2019	0.632	0.386			
9/18/2019	0.278 (U)	0.167 (U)	0.403 (U)		
9/19/2019				2.06	0.537
2/5/2020					-0.137 (U)
2/7/2020	0.797	0.244 (U)	0.2 (U)	1.66	
3/18/2020	0.437	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	0.276 (U)	0.643	1.18		0.0587 (U)
2/3/2021			0.684	2	
2/4/2021	0.727	0.438 (U)			0.353 (U)
3/11/2021	0.942	0.247 (U)	0.286 (U)	2.38	
3/12/2021					0.831
8/25/2021	0.518	0.565			
8/26/2021			0.796	2.87	0.681
Mean	1.352	0.3279	0.3653	1.685	0.3009
Std. Dev.	0.9154	0.3641	0.3139	0.614	0.2404
Upper Lim.	1.872	0.5347	0.5435	2.033	0.4374
Lower Lim.	0.8325	0.1211	0.187	1.336	0.1644

Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206	Wawo-11	WGW0-12	Wawo-15	Wawo-14A	0.779
5/19/2016	0.200	0.039 (J)	0.12 (J)	0.384		0.779
7/19/2016		0.000 (0)	0.12 (0)	0.504		0.97
7/20/2016	0.23	<0.1	0.11 (J)	0.34		0.97
9/14/2016	0.23 0.17 (J)	<0.1	0.11 (J) 0.095 (J)	0.34		0.89
11/10/2016	0.17 (3)	<0.1	0.095 (3)	0.31		0.88
11/11/2016	0.14 (J)	<0.1	<0.1	0.20		0.00
1/24/2017	0.14 (0)	<b>30.1</b>	30.1			0.92
1/27/2017		<0.1	<0.1	0.28		0.92
2/6/2017	0.15 (J)	<0.1	<0.1	0.26		
2/8/2017	0.13 (3)				<0.1	
2/23/2017					<0.1	
3/14/2017					<0.1	0.77
3/15/2017	0.16 (J)	<0.1	<0.1	0.3		0.77
3/17/2017	0.10 (3)	<b>~0.1</b>	<b>~0.1</b>	0.5	<0.1	
					<0.1	
4/11/2017					<0.1	0.05
4/25/2017	0.1771)	<0.1	<0.1	0.22	<0.1	0.95
4/26/2017	0.17 (J)	<0.1	<0.1	0.33		
5/17/2017 6/7/2017					<0.1	
					<0.1	
7/11/2017				0.22	<0.1	0.01
8/9/2017	0.0	-0.1	0.44 (1)	0.32		0.91
8/10/2017	0.2	<0.1	0.11 (J)		-0.1	0.00
10/11/2017	0.1471)	-0.1	0.001 (1)	0.20	<0.1	0.88
10/12/2017	0.14 (J)	<0.1	0.091 (J)	0.28	-0.1	
3/29/2018	0.12 (1)	<0.1	0.089 (J)	0.27	<0.1	0.70
3/30/2018	0.13 (J)	-0.1	0.171)	0.27	-0.1	0.79
6/14/2018	0.15 (J)	<0.1	0.1 (J)	0.27	<0.1	0.79
10/3/2018	0.1971)	-0.1	0.12 (1)	0.22	-0.1	0.79
10/4/2018	0.18 (J)	<0.1	0.12 (J)	0.23	<0.1	0.91
2/27/2019	0.21	0.047 (J)	0.06 (J)	0.25	<0.1	0.81
4/3/2019	0.12 (1)	0.048 (J)	0.084 (J)	0.24	0.048 (J)	0.79
4/4/2019	0.13 (J)			0.22	0.035 (1)	0.78
9/18/2019	0.12 (1)	0.027 (1)	0.003 (1)	0.22	0.035 (J)	0.81
9/19/2019 2/5/2020	0.13 (J) 0.14	0.037 (J) 0.045 (J)	0.093 (J) 0.098 (J)	0.2	0.04 (J)	
2/7/2020	0.14	0.043 (3)	0.098 (3)	0.2	0.04 (3)	0.79
3/18/2020	0.052 (J)	<0.1	0.033 (J)			0.79
3/19/2020	0.032 (3)	<b>~0.1</b>	0.033 (3)	0.15	<0.1	0.71
	0.09 (J)		0.064 (1)	0.15	<0.1	0.63
9/23/2020 9/24/2020	0.09 (3)	0.10	0.064 (J)	-0.1	0.028 / 1)	0.03
		0.18	0.082 (1)	<0.1	0.028 (J)	
2/3/2021	0.12	0.027 (J)	0.082 (J)	0.16	0.022 (1)	0.60
2/4/2021	0.12			0.16	0.033 (J)	0.69
3/11/2021	0.15	0.044 (J)	0.006 ( 1)	0.18	0.04 (J)	0.88
3/12/2021		* *	0.096 (J)	0.2	0.071 / 1	0.88
8/25/2021	0.16	0.056 (J)	0.14	0.2	0.071 (J)	0.77
8/26/2021	0.16	0.05046	0.005	0.0400	0.04700	0.77
Mean	0.1528	0.05348	0.085	0.2488	0.04738	0.8185
Std. Dev.	0.04061	0.02964	0.0284	0.076	0.008657	0.0867
Upper Lim.	0.1752	0.056	0.1009	0.2907	0.05	0.8664
Lower Lim.	0.1304	0.045	0.07516	0.2068	0.04	0.7707

Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016		0.121 (J)	VVGVVC-19	vvGvvC-0	wGwc-9
	0.1 (J)	∪. I∠I (J)		0.304	1 50
5/19/2016	0.4475			0.304	1.58
7/19/2016	0.14 (J)	0.46 ( ))		0.07	0
7/20/2016	0.40 ( "	0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)		0.04	1.8
9/15/2016	0.4.4.5	0.4= 4.0		0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)				
2/6/2017			0.45	0.27	
2/9/2017					1.3
3/14/2017		0.11 (J)			
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017			0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)			
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<0.1	0.14 (J)			
10/12/2017		. ,	0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018	- \-/	0.095 (J)	•		
6/14/2018	<0.1	0.033 (3) 0.11 (J)	0.35	0.56	1.4
10/4/2018	0.85 (J)	0.11 (J)	0.35	0.27	1.4
2/26/2019	0.00 (0)	0.11 (J) 0.068 (J)	0.00	V.27	1.7
	0.47	0.000 (J)		0.05471	
2/27/2019	0.47		0.28	0.054 (J)	1.4
2/28/2019			0.28		1.4
4/2/2019			0.33	0.5	4.5
4/3/2019				0.5	1.3
4/4/2019	0.08 (J)	0.087 (J)			
9/18/2019	0.058 (J)	0.066 (J)	0.32	_	
9/19/2019				0.42	1.3
2/5/2020					1.3
2/7/2020	0.072 (J)	0.079 (J)	0.35	0.25	
3/18/2020	0.084 (J)	<0.1			
3/19/2020				0.057 (J)	1
5/4/2020			0.36		
9/22/2020				0.14	
9/23/2020	0.049 (J)	0.05 (J)	0.25		0.82
2/3/2021			0.3	0.15	
2/4/2021	0.052 (J)	0.064 (J)			0.91
3/11/2021	0.061 (J)	0.05 (J)	0.31	0.16	
3/12/2021					0.98
8/25/2021	0.099 (J)	0.093 (J)			
8/26/2021	(-)	(-)	0.38	0.21	1
Mean	0.1521	0.1092	0.35	0.2712	1.342
Std. Dev.	0.1838	0.04573	0.04593	0.1289	0.2886
Upper Lim.	0.15	0.04373	0.04593	0.1289	1.502
Opper Lini.	0.15	U. 1344	0.3733	U.J4Z3	1.302

Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
Lower Lim.	0.058	0.08396	0.3247	0.2001	1.183

Constituent: Lead (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				•	. ,	•
	WGWC-10	WGWC-11	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016	<0.001				<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	<0.001			
9/14/2016	<0.001	<0.001	0.00055 (J)		<0.001	<0.001
11/10/2016			0.00047 (J)		<0.001	<0.001
11/11/2016	<0.001	<0.001				
1/24/2017					<0.001	<0.001
1/27/2017		<0.001	<0.001			
2/6/2017	<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			<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	<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	<0.001				
3/29/2018		<0.001	<0.001	<0.001		<0.001
3/30/2018	<0.001				<0.001	
2/27/2019	0.00023 (J)	0.00058 (J)	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	<0.001
9/18/2019			0.00045 (J)	<0.001	<0.001	<0.001
9/19/2019	0.00041 (J)	<0.001				
2/5/2020	0.00016 (J)	<0.001	0.00045 (J)	<0.001		
2/7/2020					<0.001	<0.001
3/18/2020	0.00021 (J)	<0.001			<0.001	<0.001
3/19/2020			0.0006 (J)	0.00017 (J)		
9/23/2020	0.00013 (J)				<0.001	<0.001
9/24/2020		0.00037 (J)	<0.001	0.00018 (J)		
2/3/2021		<0.001				
2/4/2021	0.00019 (J)		0.00038 (J)	0.00013 (J)	0.0003 (J)	0.00013 (J)
3/11/2021	0.00032 (J)		0.00075 (J)	0.00031 (J)		<0.001
3/12/2021		0.00038 (J)			<0.001	
8/25/2021		0.00023 (J)	0.00025 (J)	0.00041 (J)		<0.001
8/26/2021	0.00026 (J)				<0.001	
Mean	0.0006617	0.0008644	0.000725	0.0007889	0.0009611	0.0009039
Std. Dev.	0.0003936	0.0002679	0.0002744	0.0003548	0.000165	0.0002797
Upper Lim.	0.001	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00021	0.00058	0.00045	0.00031	0.0003	0.00014

Constituent: Lead (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	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		
11/14/2016		<0.001	
1/20/2017	<0.001		
2/6/2017		<0.001	
2/9/2017			<0.001
3/14/2017	<0.001		
3/15/2017		<0.001	<0.001
4/11/2017			<0.001
4/25/2017	<0.001		
4/26/2017		<0.001	<0.001
8/9/2017	<0.001		
8/10/2017		<0.001	<0.001
3/29/2018		<0.001	<0.001
3/30/2018	<0.001		
2/26/2019	0.00033 (J)		
2/27/2019		0.00017 (J)	
2/28/2019			0.00014 (J)
4/3/2019		<0.001	<0.001
4/4/2019	<0.001		
9/18/2019	<0.001		
9/19/2019		<0.001	<0.001
2/5/2020			<0.001
2/7/2020	<0.001	<0.001	
3/18/2020	0.0002 (J)		
3/19/2020		0.00016 (J)	<0.001
9/22/2020		0.00013 (J)	
9/23/2020	<0.001		<0.001
2/3/2021		0.00013 (J)	
2/4/2021	<0.001		<0.001
3/11/2021	<0.001	<0.001	
3/12/2021			<0.001
8/25/2021	<0.001		
8/26/2021		0.00014 (J)	<0.001
Mean	0.0009183	0.0007628	0.0009522
Std. Dev.	0.0002387	0.0003937	0.0002027
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.00033	0.00016	0.00014

Constituent: Lithium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.005
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
10/3/2018						0.006
10/4/2018	0.0085	0.0014 (J)	0.0066	0.0025 (J)	0.0016 (J)	
2/27/2019	0.0068	<0.005	0.0068	<0.005	<0.005	0.0055
4/3/2019		<0.005	0.0075	<0.005	0.0015 (J)	
4/4/2019	0.0059					0.0054
9/18/2019				<0.005	<0.005	0.0054
9/19/2019	0.0075	<0.005	0.0067			
2/5/2020	0.0061	<0.005	0.0063	<0.005	<0.005	
2/7/2020						0.0068
3/18/2020	0.0071	<0.005	0.0081			0.0086
3/19/2020				<0.005	<0.005	
9/23/2020	0.0054		0.007			0.0071
9/24/2020		<0.005		<0.005	<0.005	
2/3/2021		<0.005	0.0075			
2/4/2021	0.0049 (J)			<0.005	<0.005	0.0086
3/11/2021	0.0051			0.0037 (J)	0.0035 (J)	
3/12/2021		<0.005	0.0089			0.0096
8/25/2021		<0.005	0.0061	<0.005	<0.005	
8/26/2021	0.0044 (J)					0.0059
Mean	0.01141	0.004465	0.006785	0.00445	0.004155	0.006385
Std. Dev.	0.007141	0.001312	0.001742	0.001062	0.001305	0.001465
Upper Lim.	0.01439	0.005	0.00777	0.005	0.005	0.007217
Lower Lim.	0.007231	0.0018	0.006121	0.0038	0.0033	0.005553

Constituent: Lithium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	, ,
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
10/4/2018	0.012	0.005	0.062	0.013	0.039
2/26/2019		0.0063			
2/27/2019	0.0075			0.014	
2/28/2019			0.045		0.037
4/2/2019			0.052		
4/3/2019				0.015	0.035
4/4/2019	0.0077	0.0042 (J)			
9/18/2019	0.0056	0.0047 (J)	0.052		
9/19/2019				0.014	0.036
2/5/2020					0.034
2/7/2020	0.0053	0.0045 (J)	0.044	0.014	
3/18/2020	0.0057	0.0054			
3/19/2020				0.015	0.039
5/4/2020			0.049		
9/22/2020				0.013	
9/23/2020	0.0059	0.0056	0.056		0.033
2/3/2021			0.06	0.014	
2/4/2021	0.0051	0.0047 (J)			0.035
3/11/2021	0.005	0.0049 (J)	0.051	0.013	
3/12/2021					0.034
8/25/2021	0.0046 (J)	0.0048 (J)			
8/26/2021			0.057	0.013	0.03
Mean	0.00848	0.00519	0.05175	0.01703	0.03533
Std. Dev.	0.003266	0.0008207	0.007129	0.01007	0.004846
Upper Lim.	0.01033	0.005656	0.0558	0.017	0.03808
Lower Lim.	0.006625	0.004724	0.0477	0.013	0.03257

Constituent: Molybdenum (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	,	
E/19/2016	WGWC-10 <0.015	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016 5/19/2016	<0.015	<0.015	<0.015	0.00401 (1)		0.0153
		<0.015	<0.015	0.00491 (J)		0.0003 (1)
7/19/2016 7/20/2016	<0.01E	-0.01E	0.00005 (1)	0.0025 (1)		0.0093 (J)
9/14/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		0.012 (1)
	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016 11/11/2016	<0.015	<0.015	<0.015	0.0016 (J)		0.0065 (J)
1/24/2017	<0.015	<0.015	<0.015			0.0040 (1)
1/27/2017		<0.015	<0.015	0.0023 (1)		0.0049 (J)
2/6/2017	<0.015	<b>~0.013</b>	<b>~0.013</b>	0.0023 (J)		
2/8/2017	10.013				<0.015	
2/23/2017					<0.015	
3/14/2017					<b>~0.013</b>	0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		0.0034 (3)
3/17/2017	<b>~0.013</b>	<b>~0.013</b>	<b>~0.013</b>	0.0022 (3)	<0.015	
4/11/2017					<0.015	
4/11/2017					<0.015	0.004 (J)
4/25/2017	<0.015	<0.015	<0.015	0.0019 (J)	<0.015	0.004 (3)
5/17/2017	<0.015	<0.015	<0.015	0.0019 (3)	<0.015	
6/7/2017					0.015 0.001 (J)	
7/11/2017					<0.001 (3)	
8/9/2017				0.0028 (1)	<0.015	0.0042 (1)
	0.00093 (J)	0.0011 (1)	0.0046 ( 1)	0.0028 (J)		0.0042 (J)
8/10/2017 3/29/2018	0.00093 (3)	0.0011 (J) <0.015	0.0046 (J) <0.015	0.0038 (1)	<0.015	
3/30/2018	<0.015	<0.015	<0.015	0.0028 (J)	<0.015	0.0040 (1)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0049 (J) 0.0056 (J)
10/3/2018	<b>~0.013</b>	<b>~0.013</b>	<b>~0.013</b>	0.0018 (3)	<b>~0.013</b>	0.0030 (J) 0.0041 (J)
10/4/2018	<0.015	<0.015	<0.015	<0.015	<0.015	0.0041 (3)
2/27/2019	<0.015	<0.015	0.00063 (J)	0.0019 (J)	<0.015	0.0061
4/3/2019	40.013	<0.015	<0.015	<0.015	<0.015	0.0001
4/4/2019	<0.015	10.015	10.013	40.013	40.015	0.0039 (J)
9/18/2019	40.013			0.0021 (J)	<0.015	0.0052
9/19/2019	<0.015	<0.015	0.00073 (J)	0.0021 (3)	40.015	0.0032
2/5/2020	<0.015	<0.015	<0.015	0.0012 (J)	<0.015	
2/7/2020	<b>~0.013</b>	<b>~0.013</b>	<b>~0.013</b>	0.0012 (3)	<b>~0.013</b>	0.0024 (J)
3/18/2020	<0.015	<0.015	<0.015			0.0024 (3) 0.002 (J)
3/19/2020	10.013	10.013	40.013	0.0018 (J)	<0.015	0.002 (3)
9/23/2020	<0.015		<0.015	0.0010(0)	40.015	0.0031 (J)
9/24/2020	-0.010	0.0017 (J)	-0.010	<0.015	<0.015	0.0001 (0)
2/3/2021		<0.015	<0.015	-0.010	10.010	
2/4/2021	<0.015	-0.010	-0.010	0.0012 (J)	<0.015	0.0022 (J)
3/11/2021	<0.015			0.0012 (J)	<0.015	0.0022 (0)
3/12/2021	0.0.0	<0.015	0.00062 (J)	0.0010(0)	0.0.0	0.0019 (J)
8/25/2021		<0.015	<0.015	0.00092 (J)	<0.015	0.00.0 (0)
8/26/2021	<0.015	-0.010	-0.010	0.00002 (0)	10.010	0.0029 (J)
Mean	0.01359	0.01364	0.01092	0.004051	0.0143	0.0023 (5)
Std. Dev.	0.01339	0.01304	0.01692	0.004031	0.0143	0.003195
Upper Lim.	0.004334	0.004187	0.005	0.004793	0.00515	0.005455
Lower Lim.	0.00093	0.0017	0.00095	0.00491	0.013	0.003366
Londi Liiii.	0.0000	0.0017	3.33300	5.55.0	5.55.	3.330200

Constituent: Molybdenum (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	WGWC-19	WGWC-9
5/18/2016	0.00526 (J)		
5/19/2016			0.00762 (J)
7/20/2016	0.0066 (J)		0.0084 (J)
9/14/2016	0.0081 (J)		0.0071 (J)
11/10/2016	0.0076 (J)		
11/11/2016		<0.015	
1/20/2017	0.0094 (J)		
2/6/2017		0.001 (J)	
2/9/2017			0.018
3/14/2017	0.0044 (J)		
3/15/2017		<0.015	0.0057 (J)
4/11/2017		<0.015	0.0047 (J)
4/25/2017	0.0074 (J)		
4/26/2017		<0.015	0.004 (J)
6/7/2017		0.0015 (J)	
7/11/2017		<0.015	
8/9/2017	0.0066 (J)		
8/10/2017		0.0016 (J)	0.0046 (J)
3/29/2018		0.0012 (J)	0.0048 (J)
3/30/2018	0.0024 (J)		
6/14/2018	0.0026 (J)	0.0014 (J)	0.0046 (J)
10/4/2018	0.00085 (J)	<0.015	0.003 (J)
2/26/2019	0.0032 (J)		
2/28/2019		0.0013 (J)	0.0053
4/2/2019		<0.015	
4/3/2019			0.0026 (J)
4/4/2019	0.002 (J)		
9/18/2019	0.0026 (J)	0.0011 (J)	
9/19/2019			0.0048 (J)
2/5/2020			0.0044 (J)
2/7/2020	0.0025 (J)	0.0014 (J)	
3/18/2020	0.0024 (J)		
3/19/2020			0.0042 (J)
5/4/2020		0.0013 (J)	
9/23/2020	0.0027 (J)	0.0013 (J)	0.0027 (J)
2/3/2021		0.0013 (J)	
2/4/2021	0.0025 (J)		0.003 (J)
3/11/2021	0.0022 (J)	0.0012 (J)	
3/12/2021			0.003 (J)
8/25/2021	0.0022 (J)		
8/26/2021		0.0011 (J)	0.0028 (J)
Mean	0.004176	0.006085	0.005266
Std. Dev.	0.002528	0.006713	0.003413
Upper Lim.	0.005288	0.015	0.006065
Lower Lim.	0.002606	0.0012	0.003563

Constituent: Selenium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					,	
	WGWC-10	WGWC-11	WGWC-12	WGWC-14A	WGWC-15	WGWC-16
5/18/2016	<0.005				<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	<0.005			
9/14/2016	<0.005	<0.005	<0.005		<0.005	0.0091
11/10/2016					<0.005	0.0056
11/11/2016	<0.005	<0.005	<0.005			
1/24/2017					<0.005	0.012
1/27/2017		<0.005	<0.005			
2/6/2017	<0.005					
2/8/2017				<0.005		
2/23/2017				<0.005		
3/14/2017					<0.005	
3/15/2017	<0.005	<0.005	<0.005			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	<0.005		
5/17/2017				<0.005		
6/7/2017				<0.005		
7/11/2017				<0.005		
8/9/2017					<0.005	0.016
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.005	<0.005	0.0003 (J)		0.016
3/30/2018	<0.005				<0.005	
6/14/2018	<0.005	<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	<0.005		0.013
2/27/2019	<0.005	<0.005	<0.005	<0.005	<0.005	0.0081
4/3/2019		<0.005	<0.005	<0.005		
4/4/2019	<0.005				<0.005	0.0091
9/18/2019				<0.005	<0.005	0.0044 (J)
9/19/2019	<0.005	<0.005	<0.005			
2/5/2020	<0.005	<0.005	<0.005	<0.005		
2/7/2020					<0.005	0.0036 (J)
3/18/2020	<0.005	<0.005	<0.005		<0.005	0.0046 (J)
3/19/2020				<0.005		
9/23/2020	<0.005		<0.005		<0.005	0.0028 (J)
9/24/2020		<0.005		<0.005		
2/3/2021		<0.005	<0.005			
2/4/2021	<0.005			<0.005	<0.005	0.0023 (J)
3/11/2021	<0.005			<0.005		0.0023 (J)
3/12/2021		<0.005	<0.005		<0.005	
8/25/2021		<0.005	<0.005	<0.005		0.0019 (J)
8/26/2021	<0.005				<0.005	
Mean	0.004765	0.004774	0.004855	0.004765	0.004775	0.008133
Std. Dev.	0.001049	0.001008	0.0006485	0.001051	0.001006	0.004632
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.01076
Lower Lim.	0.00031	0.00049	0.0021	0.0003	0.0005	0.005502

Constituent: Selenium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

			i idi
	WGWC-19	WGWC-8	WGWC-9
5/19/2016		0.00518	0.00228
7/20/2016		0.0038	0.0016
9/14/2016			0.0024
9/15/2016		0.0034	
11/11/2016	<0.005		
11/14/2016		0.0033	
2/6/2017	<0.005	0.0033	
2/9/2017			0.0023
3/15/2017	<0.005	0.003	0.0031
4/11/2017	<0.005		0.0023
4/26/2017	<0.005	0.0032	0.0019
6/7/2017	<0.005		
7/11/2017	<0.005		
8/10/2017	0.00036 (J)	0.0031	0.0021
3/29/2018	<0.005	0.0034	0.0021
6/14/2018	<0.005	0.0031	0.0025
10/4/2018	<0.005	0.0033	0.002
2/27/2019		0.0035	
2/28/2019	<0.005		0.0027
4/2/2019	<0.005		
4/3/2019		0.0031	0.0019
9/18/2019	<0.005		
9/19/2019		0.0021 (J)	0.0026 (J)
2/5/2020			0.0033 (J)
2/7/2020	<0.005	0.0048 (J)	
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		0.0029 (J)
2/3/2021	<0.005	0.0036 (J)	
2/4/2021			0.003 (J)
3/11/2021	<0.005	0.0038 (J)	
3/12/2021			0.0034 (J)
8/26/2021	<0.005	0.0037 (J)	0.0028 (J)
Mean	0.004768	0.003514	0.002524
Std. Dev.	0.001038	0.0006431	0.0005245
Upper Lim.	0.005	0.003879	0.002822
Lower Lim.	0.00036	0.003149	0.002226

Constituent: Thallium (mg/L) Analysis Run 10/18/2021 10:45 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	,
	WGWC-10	WGWC-11	WGWC-14A	WGWC-16	WGWC-19
5/18/2016	<0.001			<0.001	
5/19/2016		<0.001			
7/19/2016				8.5E-05 (J)	
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		0.00017 (J)	
11/10/2016				0.00017 (J)	
11/11/2016	<0.001	<0.001			<0.001
1/24/2017				0.00023 (J)	
1/27/2017		<0.001			
2/6/2017	<0.001				<0.001
2/8/2017			0.00011 (J)		
2/23/2017			0.00012 (J)		
3/15/2017	<0.001	<0.001		0.00021 (J)	<0.001
3/17/2017			<0.001		
4/11/2017			<0.001		<0.001
4/25/2017				0.00024 (J)	
4/26/2017	<0.001	<0.001	<0.001		<0.001
5/17/2017			<0.001		
6/7/2017			<0.001		<0.001
7/11/2017			<0.001		<0.001
8/9/2017				0.0002 (J)	
8/10/2017	<0.001	<0.001			<0.001
3/29/2018		<0.001	0.0002 (J)	0.00019 (J)	<0.001
3/30/2018	8.5E-05 (J)				
6/14/2018	<0.001	<0.001	0.00014 (J)	0.00017 (J)	<0.001
10/4/2018	<0.001	<0.001	0.00013 (J)	0.00015 (J)	<0.001
2/27/2019	<0.001	<0.001	0.00016 (J)	0.00015 (J)	
2/28/2019					<0.001
4/2/2019					<0.001
4/3/2019		<0.001	0.00012 (J)		
4/4/2019	<0.001			9.5E-05 (J)	
9/18/2019			<0.001	<0.001	<0.001
9/19/2019	<0.001	<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			0.00017 (J)		
5/4/2020					<0.001
9/23/2020	<0.001			<0.001	<0.001
9/24/2020		<0.001	<0.001		
2/3/2021		0.00016 (J)			0.00018 (J)
2/4/2021	<0.001		0.00021 (J)	<0.001	
3/11/2021	<0.001		0.00019 (J)	<0.001	<0.001
3/12/2021		<0.001			
8/25/2021		<0.001	<0.001	<0.001	
8/26/2021	<0.001				<0.001
Mean	0.0009543	0.000958	0.0005385	0.000503	0.000959
Std. Dev.	0.0002046	0.0001878	0.0004292	0.0004179	0.0001834
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	8.5E-05	0.00016	0.00014	0.00017	0.00018

# FIGURE I.

# State Confidence Intervals - Significant Results Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/18/2021, 10:49 AM

	Plant Wansley Client. South	nem Company Data. wa	insley Asii Pond Printed 10/16/20	121, 10.49 AW		
<u>Constituent</u> <u>Well</u>	Upper Lim. Lower Lim.	. Compliance Sig. N M	Mean Std. Dev. %	NDs ND Adj.	<u>Transform</u> <u>Alpha</u>	Method
Lithium (mg/L) WGWC-19	0.0558 0.0477	0.009 Yes 20 0	0.05175 0.007129 0	None	No 0.01	Param.
Lithium (mg/L) WGWC-8	0.017 0.013	0.009 Yes 20 0	0.01703 0.01007 0	None	No 0.01	NP (normality)
Lithium (mg/L) WGWC-9	0.03808 0.03257	0.009 Yes 20 0	0.03533 0.004846 0	None	No 0.01	Param.

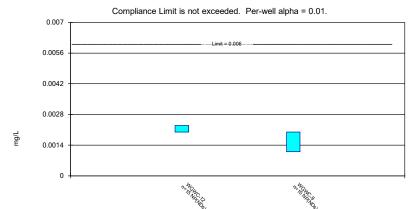
## State Confidence Intervals - All Results

Client: Southern Company Data: Wansley Ash Pond Plant Wansley Method Constituent Well Std. Dev. %NDs ND Adj <u>Alpha</u> Upper Lim. Lower Lim. Compliance Sig. N WGWC-12 0.0023 0.002 0.006 0.00202 0.00007746 93.33 NP (NDs) Antimony (mg/L) No 15 None No 0.01 NP (NDs) Antimony (mg/L) WGWC-9 0.002 0.0011 0.006 No 15 0.001728 0.0005829 80 None No 0.01 WGWC-10 0.001 0.00089 0.01 0.0008715 0.0002529 0.01 Arsenic (ma/L) No 20 75 None NP (normality) No Arsenic (mg/L) WGWC-11 0.001 0.00054 0.01 No 20 0.000926 0.0001811 85 None No 0.01 NP (NDs) Arsenic (mg/L) WGWC-12 0.001 0.00052 0.01 20 0.00095 0.000154 90 0.01 NP (NDs) No No None Arsenic (mg/L) WGWC-13 0.001 0.00039 0.01 20 0.000782 0.0003229 45 0.01 NP (normality) No None No WGWC-14A 0.0014 0.00095 20 0.001243 0.0005847 NP (normality) Arsenic (mg/L) 0.01 No 65 None No 0.01 Arsenic (mg/L) WGWC-15 0.00217 0.001307 0.01 No 20 0.001739 0.00076 0 0.01 0.001158 Arsenic (mg/L) WGWC-16 0.0014 0.001 0.01 Nο 20 0.0003311 50 None Nο 0.01 NP (normality) Arsenic (mg/L) WGWC-17 0.001 0.00067 0.01 No 20 0.00084 0.0002086 50 None 0.01 NP (normality) WGWC-8 20 0.0009625 0.0002774 Param. Arsenic (mg/L) 0.0008798 0.0005162 0.01 No 50 Kaplan-Meier No 0.01 WGWC-9 0.0017 0.00078 20 0.0009975 0.0002076 0.01 NP (NDs) Arsenic (mg/L) 0.01 85 Kaplan-Meier 0.03856 0.006403 NP (normality) WGWC-10 0.041 0.035 2 20 0 0.01 Barium (mg/L) No None No Barium (mg/L) WGWC-11 0.0405 0.03202 2 20 0.0365 0.007964 0 None sart(x) 0.01 Param. Barium (mg/L) WGWC-12 0.01954 0.0154 2 Nο 20 0.01712 0.004162 n None x^2 0.01 Param Barium (mg/L) WGWC-13 0.05611 0.04599 2 No 20 0.05105 0.008912 0 0.01 Param. None No 2 Barium (mg/L) WGWC-14A 0.04693 0.03107 Nο 20 0.039 0.01397 0 None No 0.01 Param. Barium (mg/L) WGWC-15 0.02433 0.02023 2 20 0.02228 0.003608 0 0.01 Param. No None No Barium (mg/L) WGWC-16 0.05813 0.03982 2 No 20 0.04898 0.01613 0 None No 0.01 Param. Barium (mg/L) WGWC-17 0.019 0.011 2 No 20 0.01495 0.004036 0 No 0.01 NP (normality) None Barium (mg/L) WGWC-19 0.005 0.0013 2 Nο 20 0.002913 0.001948 35 None No 0.01 NP (normality) WGWC-8 2 20 0.003064 0.001783 NP (normality) Barium (mg/L) 0.005 0.0011 No 40 No 0.01 None Barium (mg/L) WGWC-9 0.001567 0.0008775 2 No 20 0.002611 0.00187 35 0.01 Kaplan-Meier In(x) Param WGWC-14A 0.0025 0.00026 0.001824 0.00106 70 Beryllium (mg/L) 0.004 No 20 None No 0.01 NP (normality) Beryllium (mg/L) WGWC-16 0.0025 0.00022 0.004 No 20 0.002386 0.0005098 95 None No 0.01 NP (NDs) Beryllium (mg/L) WGWC-8 0.002114 0.001571 0.004 Nο 20 0.001843 0.000479 0 0.01 Param. None Nο Beryllium (mg/L) WGWC-9 0.0025 0.00036 0.004 No 20 0.001337 0.00108 45 0.01 NP (normality) No WGWC-10 0.00233 0.00169 20 0.00201 0.0005628 0.01 Chromium (mg/L) 0.1 15 Param. No None No Chromium (mg/L) WGWC-11 0.0021 0.0017 20 0.001905 0.0002685 NP (NDs) 0.1 80 None No 0.01 0.002 20 Chromium (mg/L) WGWC-13 0.0019 0.1 No 0.00197 0.00008013 85 None No 0.01 NP (NDs) Chromium (ma/L) WGWC-14A 0.002 0.0017 20 0.001985 0.00006708 95 0.01 NP (NDs) WGWC-15 0.002 0.0015 20 0.001975 0.0001118 0.01 NP (NDs) Chromium (mg/L) 0.1 Nο 95 None Nο Chromium (mg/L) WGWC-9 0.0025 0.002 0.1 No 20 0.002025 0.0001118 95 None No 0.01 NP (NDs) WGWC-10 0.001563 0.0007636 20 0.001232 0.0008066 Cobalt (mg/L) 0.013 Nο 5 None sqrt(x) 0.01 Param Cobalt (mg/L) WGWC-11 0.0025 0.00064 0.013 No 20 0.001554 0.00093 35 0.01 NP (normality) None No Cobalt (mg/L) WGWC-12 0.001126 0.000479 0.013 No 20 0.0008685 0.0006568 5 None sqrt(x) 0.01 Param. Cobalt (mg/L) WGWC-13 0.0025 0.0008 0.013 No 20 0.001984 0.0009233 75 None Nο 0.01 NP (normality) Cobalt (mg/L) WGWC-14A 0.01029 0.005423 0.013 No 20 0.007855 0.004283 0 0.01 Param None WGWC-15 0.0025 0.00015 0.0005255 Cobalt (mg/L) 0.013 No 20 0.002382 95 0.01 NP (NDs) No None Cobalt (mg/L) WGWC-16 0.014 0.00026 0.013 No 20 0.006741 0.006293 10 0.01 NP (normality) None No Cobalt (mg/L) WGWC-17 0.00163 0.0007532 0.013 20 0.001191 0.0007719 5 0.01 Param. No None No Cobalt (mg/L) WGWC-19 0.0025 0.00024 0.013 No 20 0.0013 0.001118 45 0.01 NP (normality) None No Cobalt (mg/L) WGWC-8 0.0025 0.00066 0.013 No 20 0.00182 0.001019 45 0.01 NP (normality) No None Cobalt (mg/L) WGWC-9 0.0025 0.00073 0.013 No 20 0.002411 0.0003958 95 No 0.01 NP (NDs) None Combined Radium 226 + 228 (pCi/L) WGWC-10 0.4377 0.1713 10.4 20 0.3045 0.2346 0 0.01 Param. No None No 0.1742 0.3968 Combined Radium 226 + 228 (pCi/L) WGWC-11 0.6194 20 10.4 No 0.392 0 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-12 0.5963 0.1813 20 0.3888 0.3654 0 0.01 10.4 No None No Param. Combined Radium 226 + 228 (pCi/L) WGWC-13 0.7865 0.4694 20 0.628 0.2793 0 0.01 10.4 No None No Param Combined Radium 226 + 228 (pCi/L) WGWC-14A 0.8335 0.5318 10.4 Nο 20 0.6991 0.3011 0 0.01 Param. None sart(x) Combined Radium 226 + 228 (pCi/L) WGWC-15 0.6472 0.3074 10.4 20 0.5077 0.3456 0 sqrt(x) 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-16 20 0 1.872 0.8325 10.4 Nο 1.352 0.9154 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-17 0.5347 0.1211 10.4 No 20 0.3279 0.3641 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) WGWC-19 0.5435 0.187 10.4 No 20 0.3653 0.3139 0 None No 0.01 Param. Combined Radium 226 + 228 (pCi/L) 2.033 WGWC-8 1.336 10.4 20 1.685 0.614 0 0.01 Combined Radium 226 + 228 (pCi/L) WGWC-9 0.4374 0 1644 10 4 20 0.3009 0 2404 0.01 Param Nο n None Nο

# State Confidence Intervals - All Results

Otate Commence intervals - 7 in Results												
Plant Wansley Client: Southern Company Data: Wansley Ash Pond Printed 10/18/2021, 10:49 AM												
Constituent	Well	Upper Lim.	Lower Lim.	Complianc	<u>e Sig.</u> <u>N</u>	<u>Mean</u>	Std. Dev.	%NDs	ND Adj.	Transform	<u>Alpha</u>	Method
Fluoride, total (mg/L)	WGWC-10	0.1752	0.1304	4	No 21	0.1528	0.04061	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-11	0.056	0.045	4	No 21	0.05348	0.02964	57.14	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-12	0.1009	0.07516	4	No 21	0.085	0.0284	19.05	Kaplan-Meier	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-13	0.2907	0.2068	4	No 21	0.2488	0.076	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-14A	0.05	0.04	4	No 21	0.04738	0.008657	66.67	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-15	0.8664	0.7707	4	No 21	0.8185	0.0867	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-16	0.15	0.058	4	No 21	0.1521	0.1838	9.524	None	No	0.01	NP (normality)
Fluoride, total (mg/L)	WGWC-17	0.1344	0.08396	4	No 21	0.1092	0.04573	4.762	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-19	0.3753	0.3247	4	No 21	0.35	0.04593	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-8	0.3423	0.2001	4	No 21	0.2712	0.1289	0	None	No	0.01	Param.
Fluoride, total (mg/L)	WGWC-9	1.502	1.183	4	No 21	1.342	0.2886	0	None	No	0.01	Param.
Lead (mg/L)	WGWC-10	0.001	0.00021	0.001	No 18	0.0006617	0.0003936	55.56	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-11	0.001	0.00058	0.001	No 18	0.0008644	0.0002679	77.78	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-13	0.001	0.00045	0.001	No 18	0.000725	0.0002744	44.44	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-14A	0.001	0.00031	0.001	No 18	0.0007889	0.0003548	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-15	0.001	0.0003	0.001	No 18	0.0009611	0.000165	94.44	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-16	0.001	0.00014	0.001	No 18	0.0009039	0.0002797	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-17	0.001	0.00033	0.001	No 18	0.0009183	0.0002387	88.89	None	No	0.01	NP (NDs)
Lead (mg/L)	WGWC-8	0.001	0.00016	0.001	No 18	0.0007628	0.0003937	72.22	None	No	0.01	NP (normality)
Lead (mg/L)	WGWC-9	0.001	0.00014	0.001	No 18	0.0009522	0.0002027	94.44	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-10	0.01439	0.007231	0.009	No 20	0.01141	0.007141	0	None	sqrt(x)	0.01	Param.
Lithium (mg/L)	WGWC-11	0.005	0.0018	0.009	No 20	0.004465	0.001312	85	None	No	0.01	NP (NDs)
Lithium (mg/L)	WGWC-12	0.00777	0.006121	0.009	No 20	0.006785	0.001742	5	None	x^2	0.01	Param.
Lithium (mg/L)	WGWC-13	0.005	0.0038	0.009	No 20	0.00445	0.001062	75	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-14A	0.005	0.0033	0.009	No 20	0.004155	0.001305	65	None	No	0.01	NP (normality)
Lithium (mg/L)	WGWC-15	0.007217	0.005553	0.009	No 20	0.006385	0.001465	10	None	No	0.01	Param.
Lithium (mg/L)	WGWC-16	0.01033	0.006625	0.009	No 20	0.00848	0.003266	5	None	No	0.01	Param.
Lithium (mg/L) Lithium (mg/L)	WGWC-16 WGWC-17	0.01033 0.005656	0.006625 0.004724	0.009		0.00848 0.00519	0.003266 0.0008207	5 5	None None	No No	0.01 0.01	Param.
, ,					No 20							
Lithium (mg/L)	WGWC-17	0.005656	0.004724	0.009	No 20 Yes 20	0.00519	0.0008207	5	None	No	0.01	Param.
Lithium (mg/L)	WGWC-17 WGWC-19	0.005656 <b>0.0558</b>	0.004724 <b>0.0477</b>	0.009 <b>0.009</b>	No 20 Yes 20 Yes 20	0.00519 <b>0.05175</b>	0.0008207 <b>0.007129</b>	5 <b>0</b>	None None	No No	0.01 <b>0.01</b>	Param.
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L)	WGWC-17 WGWC-19 WGWC-8	0.005656 0.0558 0.017	0.004724 0.0477 0.013	0.009 0.009 0.009	No 20 Yes 20 Yes 20 Yes 20	0.00519 0.05175 0.01703	0.0008207 0.007129 0.01007	5 0 0	None None	No No No	0.01 0.01 0.01	Param. Param. NP (normality)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9	0.005656 0.0558 0.017 0.03808	0.004724 0.0477 0.013 0.03257	0.009 0.009 0.009 0.009	No 20 Yes 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533	0.0008207 0.007129 0.01007 0.004846	5 0 0	None None None	No No No	0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9	0.005656 0.0558 0.017 0.03808 0.015	0.004724 0.0477 0.013 0.03257 0.00093	0.009 0.009 0.009 0.009 0.015	No 20 Yes 20 Yes 20 No 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359	0.0008207 0.007129 0.01007 0.004846 0.004334	5 0 0 0 90	None None None None	No No No No	0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-10 WGWC-11	0.005656 0.0558 0.017 0.03808 0.015 0.015	0.004724 0.0477 0.013 0.03257 0.00093 0.0017	0.009 0.009 0.009 0.009 0.015	No 20 Yes 20 Yes 20 No 20 No 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187	5 0 0 0 90	None None None None None	No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01	Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11	0.005656 0.0558 0.017 0.03808 0.015 0.015	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095	0.009 0.009 0.009 0.009 0.015 0.015	No 20 Yes 20 Yes 20 No 20 No 20 No 20 No 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442	5 0 0 0 90 90 70	None None None None None None None	No No No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.015	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016	0.009 0.009 0.009 0.009 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795	5 0 0 0 90 90 70 15	None None None None None None None None	No No No No No No No No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016	0.009 0.009 0.009 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313	5 0 0 90 90 70 15 95	None None None None None None None None	No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)  NP (NDs)
Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Lithium (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L) Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.015 0.00491 0.015 0.006568	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435	5 0 0 90 90 70 15 95	None None None None None None None None	No sqrt(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)  NP (NDs)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528	5 0 0 90 90 70 15 95 0	None None None None None None None None	No No No No No No No No No sqrt(x) sqrt(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713	5 0 0 90 90 70 15 95 0 0 35	None None None None None None None None	No No No No No No No No No sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.002606 0.0012 0.003563	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413	5 0 0 90 90 70 15 95 0 0 35	None None None None None None None None	No sqrt(x) sqrt(x) In(x)	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049	5 0 0 90 90 70 15 95 0 0 35 0 95	None None None None None None None None	No sqrt(x) sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (normality)  Param.  NP (normality)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-10	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765 0.004774	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.003413 0.001049 0.001008	5 0 0 90 90 70 15 95 0 0 35 0 95 95	None None None None None None None None	No sqrt(x) No ln(x) No No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param. Param. NP (normality) Param. NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) Param. NP (normality) Param. NP (NDs) NP (NDs) NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-9 WGWC-10 WGWC-11	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765 0.004774 0.004855	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485	5 0 0 90 90 70 15 95 0 0 35 0 95 95 95	None None None None None None None None	No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (NDs)  Param.  NP (NDs)  Param.  NP (NDs)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765 0.004774 0.004855 0.004765	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051	5 0 0 90 90 70 15 95 0 35 0 95 95 95 95	None None None None None None None None	No No No No No No No No Sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (NDs)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-17 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A	0.005656  0.0558  0.017  0.03808  0.015  0.015  0.015  0.00491  0.015  0.006568  0.005288  0.015  0.006065  0.005  0.005  0.005  0.005  0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.004765 0.004774 0.004855 0.004775	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051 0.001006	5 0 0 90 90 70 15 95 0 0 35 0 95 95 95 95 95	None None None None None None None None	No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-17 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-12 WGWC-14A	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005 0.005 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005 0.0005502	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.004765 0.004774 0.004855 0.004775 0.004775	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051 0.001006 0.004632	5 0 0 90 90 70 15 95 0 0 35 0 95 95 95 95 95	None None None None None None None None	No No No No No No No No No Sqrt(x) Sqrt(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (NDs)  Param.
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-16	0.005656  0.0558  0.017  0.03808  0.015  0.015  0.015  0.00491  0.015  0.006568  0.005288  0.015  0.006065  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005 0.005502 0.00036	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.004765 0.004774 0.004855 0.004775 0.008133 0.004768	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051 0.001006 0.004632 0.001038	5 0 0 90 90 70 15 95 0 95 95 95 95 95 95 95	None None None None None None None None	No Sqrt(x) Sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (normality)  Param.  NP (NDs)  Param.  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-15 WGWC-17 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-15 WGWC-16 WGWC-19 WGWC-19 WGWC-19	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005 0.005502 0.00036 0.0003149	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.004765 0.004774 0.004855 0.004765 0.004775 0.008133 0.004768 0.003514	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051 0.001006 0.004632 0.001038 0.0006431	5 0 0 90 90 70 15 95 0 35 0 95 95 95 95 95 95 95 95	None None None None None None None None	No No No No No No No No No Sqrt(x) Sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param. Param. NP (normality) Param. NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (normality) Param. NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-14A WGWC-15 WGWC-16 WGWC-16 WGWC-19 WGWC-8 WGWC-9	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005 0.005502 0.00036 0.003149 0.002226	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765 0.004774 0.004855 0.004765 0.004765 0.004765 0.004765 0.004765 0.004765 0.004765 0.004765 0.004765 0.004765	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.001052 0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245	5 0 0 90 90 70 15 95 0 35 0 95 95 95 95 95 95 95 95 95 95	None None None None None None None None	No No No No No No No No Sqrt(x) Sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param. Param. NP (normality) Param. NP (NDs) NP (NDs) NP (normality) NP (NDs) Param. Param. NP (NDs) Param. NP (NDs) NP (NDs) Param. NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-16 WGWC-16 WGWC-19	0.005656  0.0558  0.017  0.03808  0.015  0.015  0.015  0.00491  0.015  0.006568  0.005288  0.015  0.006065  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005  0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0003 0.0005 0.005502 0.00036 0.003149 0.002226 0.000085	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.004765 0.004765 0.004765 0.004775 0.008133 0.004768 0.003514 0.002524 0.0009543	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.001051 0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245 0.0002046	5 0 0 90 90 70 15 95 0 95 95 95 95 95 0 95 95 95 95 95 95 95 95 95 95	None None None None None None None None	No N	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (NDs)  Param.  NP (NDs)  NP (NDs)  Param.  NP (NDs)
Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Lithium (mg/L)  Molybdenum (mg/L)  Selenium (mg/L)  Thallium (mg/L)	WGWC-17 WGWC-19 WGWC-8 WGWC-9 WGWC-10 WGWC-11 WGWC-12 WGWC-13 WGWC-14A WGWC-15 WGWC-17 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-11 WGWC-12 WGWC-16 WGWC-16 WGWC-19 WGWC-19 WGWC-19 WGWC-19 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10 WGWC-10	0.005656 0.0558 0.017 0.03808 0.015 0.015 0.015 0.00491 0.015 0.006568 0.005288 0.015 0.006065 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005	0.004724 0.0477 0.013 0.03257 0.00093 0.0017 0.00095 0.0016 0.001 0.003266 0.002606 0.0012 0.003563 0.00031 0.00049 0.0021 0.0005 0.005502 0.00036 0.003149 0.002226 0.000085 0.000085	0.009 0.009 0.009 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.015 0.05 0.0	No 20 Yes 20 No 20	0.00519 0.05175 0.01703 0.03533 0.01359 0.01364 0.01092 0.004051 0.0143 0.005195 0.004176 0.006085 0.005266 0.004765 0.004775 0.004765 0.004775 0.008133 0.004768 0.003514 0.002524 0.0009543 0.000958	0.0008207 0.007129 0.01007 0.004846 0.004334 0.004187 0.006442 0.004795 0.00313 0.003435 0.002528 0.006713 0.003413 0.001049 0.001008 0.0006485 0.001051 0.001006 0.004632 0.001038 0.0006431 0.0005245 0.0002046 0.0001878	5 0 0 90 90 70 15 95 0 35 0 95 95 95 95 95 0 95 95 95 95 95 95 95 95 95 95	None None None None None None None None	No No No No No No No No Sqrt(x) No In(x) No	0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	Param.  Param.  NP (normality)  Param.  NP (NDs)  NP (NDs)  NP (normality)  NP (NDs)  Param.  Param.  NP (NDs)  Param.  NP (NDs)  NP (NDs)  NP (NDs)  NP (NDs)  Param.  NP (NDs)

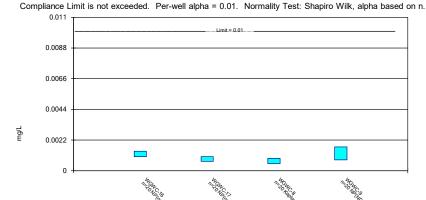
#### Non-Parametric Confidence Interval



Constituent: Antimony Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

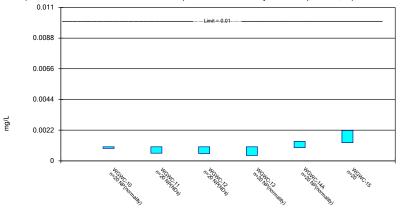
## Parametric and Non-Parametric (NP) Confidence Interval



Constituent: Arsenic Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

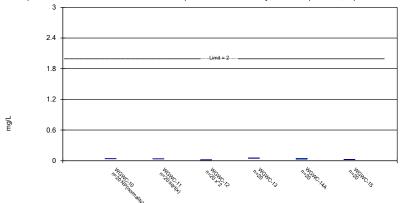
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



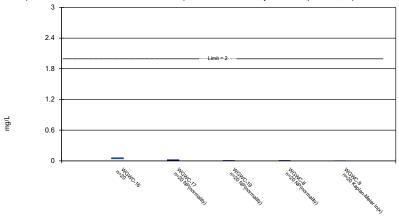
Constituent: Arsenic Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



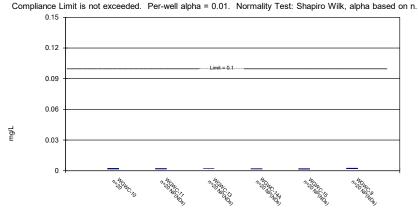
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

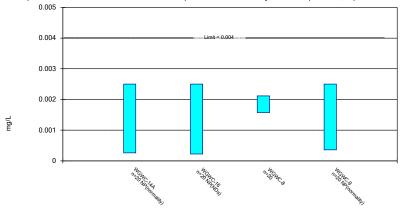
# Parametric and Non-Parametric (NP) Confidence Interval



# Constituent: Chromium Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

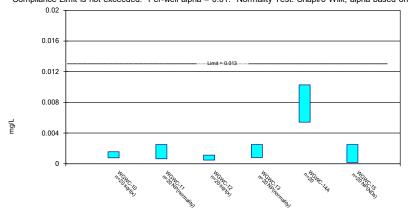
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



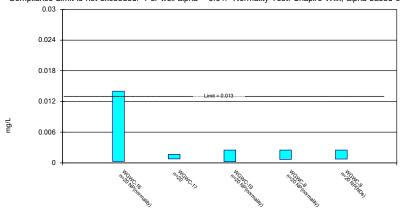
Constituent: Beryllium Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 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.



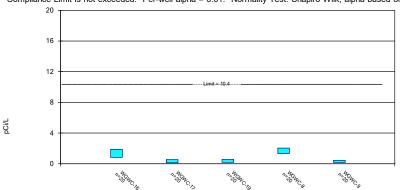
Constituent: Cobalt Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

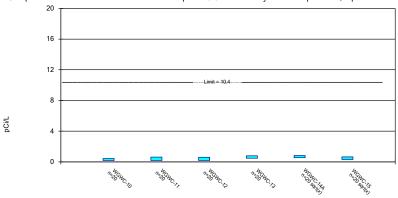
### Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



## Parametric Confidence Interval

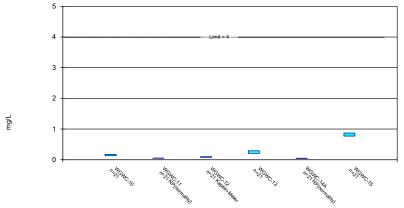
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



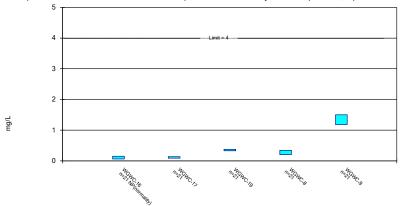
Constituent: Combined Radium 226 + 228 Analysis Run 10/18/2021 10:47 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 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.

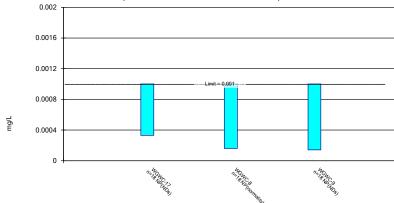


Constituent: Fluoride, total Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Non-Parametric Confidence Interval

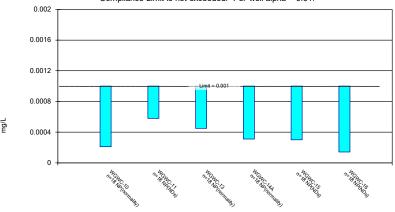
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Non-Parametric Confidence Interval

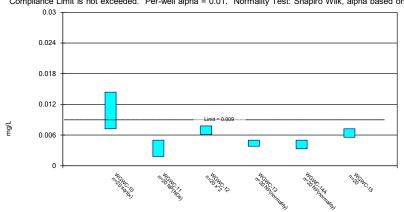
Compliance Limit is not exceeded. Per-well alpha = 0.01.



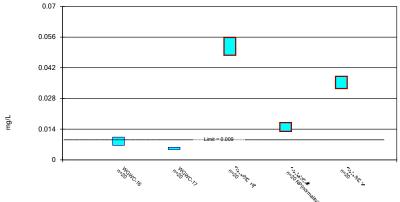
Constituent: Lead Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval



Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

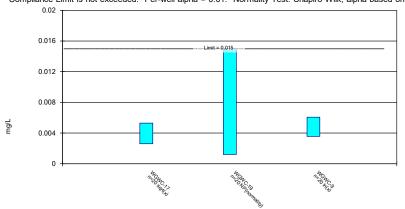


Constituent: Lithium Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Parametric and Non-Parametric (NP) Confidence Interval

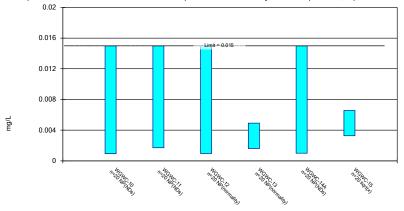
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

## Parametric and Non-Parametric (NP) Confidence Interval

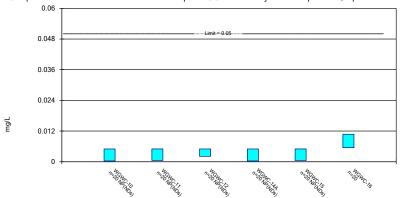
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

#### Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

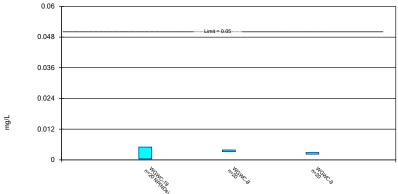
## Parametric and Non-Parametric (NP) Confidence Interval



Sanitas™ v.9.6.31 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.

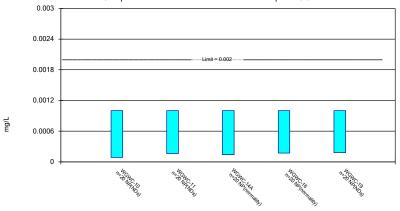


Constituent: Selenium Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

## Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 10/18/2021 10:48 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

Constituent: Antimony (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-12	WGWC-9
5/19/2016	<0.002	<0.002
7/20/2016	<0.002	<0.002
9/14/2016	<0.002	<0.002
11/11/2016	<0.002	
1/27/2017	<0.002	
2/9/2017		<0.002
3/15/2017	<0.002	0.0011 (J)
4/11/2017		<0.002
4/26/2017	<0.002	<0.002
8/10/2017	0.0023 (J)	<0.002
3/29/2018	<0.002	<0.002
2/27/2019	<0.002	
2/28/2019		<0.002
2/5/2020	<0.002	<0.002
3/18/2020	<0.002	
3/19/2020		0.00041 (J)
2/3/2021	<0.002	
2/4/2021		0.00041 (J)
3/12/2021	<0.002	<0.002
8/25/2021	<0.002	
8/26/2021		<0.002
Mean	0.00202	0.001728
Std. Dev.	7.746E-05	0.0005829
Upper Lim.	0.0023	0.002
Lower Lim.	0.002	0.0011

Constituent: Arsenic (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	,	
	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.001					0.00345
5/19/2016		<0.001	<0.001	<0.001		
7/19/2016						0.0031
7/20/2016	<0.001	<0.001	<0.001	<0.001		
9/14/2016	<0.001	<0.001	<0.001	<0.001		0.0024
11/10/2016				<0.001		0.0023
11/11/2016	<0.001	<0.001	<0.001			
1/24/2017						0.0019
1/27/2017		0.00047 (J)	<0.001	0.00066 (J)		
2/6/2017	<0.001					
2/8/2017					<0.001	
2/23/2017					<0.001	
3/14/2017						0.0016
3/15/2017	<0.001	<0.001	<0.001	<0.001		
3/17/2017					0.0006 (J)	
4/11/2017					0.0032	
4/25/2017						0.0019
4/26/2017	<0.001	<0.001	<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
8/10/2017	<0.001	<0.001	0.00048 (J)			
3/29/2018		<0.001	<0.001	0.00067 (J)	<0.001	
3/30/2018	<0.001					0.0018
6/14/2018	0.0005 (J)	<0.001	0.00052 (J)	0.00093 (J)	<0.001	0.002
10/3/2018						0.0024
10/4/2018	0.00089 (J)	0.00054 (J)	<0.001	0.0015	0.0017	
2/27/2019	<0.001	<0.001	<0.001	0.00036 (J)	<0.001	0.0015
4/3/2019		<0.001	<0.001	0.00053 (J)	<0.001	
4/4/2019	<0.001					0.0019
9/18/2019				0.00039 (J)	<0.001	0.0016
9/19/2019	0.00038 (J)	<0.001	<0.001			
2/5/2020	0.00035 (J)	<0.001	<0.001	0.00048 (J)	<0.001	
2/7/2020						0.001
3/18/2020	<0.001	<0.001	<0.001			0.00088 (J)
3/19/2020				0.00039 (J)	<0.001	
9/23/2020	<0.001		<0.001			0.00061 (J)
9/24/2020		0.00051 (J)		<0.001	<0.001	
2/3/2021		<0.001	<0.001			
2/4/2021	<0.001			0.00038 (J)	<0.001	0.00069 (J)
3/11/2021	0.00031 (J)			0.00035 (J)	<0.001	
3/12/2021		<0.001	<0.001			0.00084 (J)
8/25/2021		<0.001	<0.001	<0.001	<0.001	
8/26/2021	<0.001					0.0012
Mean	0.0008715	0.000926	0.00095	0.000782	0.001243	0.001739
Std. Dev.	0.0002529	0.0001811	0.000154	0.0003229	0.0005847	0.00076
Upper Lim.	0.001	0.001	0.001	0.001	0.0014	0.00217
Lower Lim.	0.00089	0.00054	0.00052	0.00039	0.00095	0.001307

Constituent: Arsenic (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,
	WGWC-16	WGWC-17	WGWC-8	WGWC-9
5/18/2016	<0.001	<0.001		
5/19/2016			<0.001	<0.001
7/19/2016	0.0009 (J)			
7/20/2016		0.00058 (J)	0.00055 (J)	0.00078 (J)
9/14/2016	0.0014	<0.001		<0.001
9/15/2016			<0.001	
11/10/2016	0.0021	0.00082 (J)		
11/14/2016			<0.001	
1/20/2017		<0.001		
1/24/2017	0.0015			
2/6/2017			<0.001	
2/9/2017				0.0017
3/14/2017		<0.001		
3/15/2017	0.0014		<0.001	0.00047 (J)
4/11/2017				<0.001
4/25/2017	0.0014	0.00095 (J)		
4/26/2017			<0.001	<0.001
8/9/2017	0.0013	<0.001		
8/10/2017			<0.001	<0.001
3/29/2018	0.0014		<0.001	<0.001
3/30/2018		<0.001		
6/14/2018	<0.001	0.00076 (J)	<0.001	<0.001
10/4/2018	0.0013	0.00088 (J)	0.0015	<0.001
2/26/2019		0.0005 (J)		
2/27/2019	0.00046 (J)		0.00047 (J)	
2/28/2019				<0.001
4/3/2019			<0.001	<0.001
4/4/2019	<0.001	<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	<0.001	0.00075 (J)	0.0011	
3/18/2020	<0.001	0.00054 (J)		
3/19/2020			0.00071 (J)	<0.001
9/22/2020	0.004	0.00007 (1)	0.0011	
9/23/2020	<0.001	0.00067 (J)	0.0040	<0.001
2/3/2021	-0.001	0.00005 (1)	0.0013	-0.004
2/4/2021	<0.001	0.00035 (J)	0.0000 ( 1)	<0.001
3/11/2021	<0.001	<0.001	0.0009 (J)	
3/12/2021	0.004	.0.004		<0.001
8/25/2021	<0.001	<0.001	0.0012	-0.004
8/26/2021	0.001150	0.00084	0.0013	<0.001
Mean	0.001158	0.00084	0.0009625	0.0009975
Std. Dev.	0.0003311	0.0002086	0.0002774	0.0002076
Upper Lim.	0.0014	0.001	0.0008798 0.0005162	0.0017
Lower Lim.	0.001	0.00067	0.0005102	0.00078

Constituent: Barium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

						, , .	
_	:11010010	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
	5/18/2016	0.0391	0.001	0.0014	0.055		0.0206
	5/19/2016		0.031	0.0214	0.055		0.010
	7/19/2016	0.000	0.000	0.010	0.000		0.019
	7/20/2016	0.028	0.029	0.019	0.039		0.00
	0/14/2016	0.035	0.031	0.02	0.04		0.02
	1/10/2016				0.04		0.02
	1/11/2016	0.042	0.034	0.022			0.017
	/24/2017		0.040	0.000	0.040		0.017
	/27/2017	0.044	0.042	0.023	0.042		
	2/6/2017	0.041				0.007	
	2/8/2017					0.037	
	2/23/2017					0.051	0.010
	3/14/2017						0.018
	3/15/2017	0.04	0.032	0.024	0.058		
	3/17/2017					0.046	
	/11/2017					0.055	
	/25/2017						0.018
	/26/2017	0.039	0.03	0.004	0.054	0.042	
	5/17/2017					0.052	
	5/7/2017					0.06	
	//11/2017					0.038	
	8/9/2017				0.055		0.02
	3/10/2017	0.038	0.03	0.017			
	3/29/2018		0.028	0.017	0.061	0.028	
3	3/30/2018	0.042					0.021
6	5/14/2018	0.038	0.03	0.015	0.055	0.023	0.022
1	0/3/2018						0.024
1	0/4/2018	0.04	0.035	0.017	0.046	0.036	
2	2/27/2019	0.04	0.04	0.016	0.054	0.028	0.023
4	/3/2019		0.035	0.015	0.056	0.026	
4	/4/2019	0.04					0.022
9	9/18/2019				0.062	0.025	0.026
9	9/19/2019	0.038	0.033	0.016			
2	2/5/2020	0.061	0.047	0.016	0.052	0.077	
2	2/7/2020						0.022
3	3/18/2020	0.035	0.038	0.016			0.021
3	3/19/2020				0.072	0.031	
9	0/23/2020	0.035		0.016			0.027
9	0/24/2020		0.061		0.038	0.034	
2	2/3/2021		0.039	0.015			
2	2/4/2021	0.035			0.047	0.029	0.028
3	3/11/2021	0.033			0.049	0.032	
3	3/12/2021		0.045	0.017			0.028
8	3/25/2021		0.04	0.016	0.046	0.03	
8	3/26/2021	0.032					0.029
N	<i>M</i> ean	0.03856	0.0365	0.01712	0.05105	0.039	0.02228
S	Std. Dev.	0.006403	0.007964	0.004162	0.008912	0.01397	0.003608
U	Jpper Lim.	0.041	0.0405	0.01954	0.05611	0.04693	0.02433
L	ower Lim.	0.035	0.03202	0.0154	0.04599	0.03107	0.02023

Constituent: Barium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					, ,
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0715	0.0219			
5/19/2016				0.0026	<0.01
7/19/2016	0.069				
7/20/2016		0.019		0.0017 (J)	0.0014 (J)
9/14/2016	0.066	0.017			0.00092 (J)
9/15/2016				0.0039	
11/10/2016	0.069	0.02			
11/11/2016			0.0022 (J)		
11/14/2016				0.00085 (J)	
1/20/2017		0.018			
1/24/2017	0.068				
2/6/2017			0.0018 (J)	0.0011 (J)	
2/9/2017					0.0015 (J)
3/14/2017		0.019			
3/15/2017	0.065		0.0015 (J)	0.0013 (J)	0.00054 (J)
4/11/2017			0.0014 (J)		0.0007 (J)
4/25/2017	0.057	0.023			
4/26/2017			0.0014 (J)	0.00098 (J)	<0.01
6/7/2017			0.0014 (J)		
7/11/2017			0.0013 (J)		
8/9/2017	0.069	0.017			
8/10/2017			0.0012 (J)	0.0025	0.00053 (J)
3/29/2018	0.05		0.00097 (J)	0.00085 (J)	<0.01
3/30/2018		0.015			
6/14/2018	0.046	0.013	0.0011 (J)	0.0028	0.00088 (J)
10/4/2018	0.046	0.013	0.0012 (J)	0.0017 (J)	0.00076 (J)
2/26/2019		0.012			
2/27/2019	0.028			<0.01	
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	0.027	0.011			
9/18/2019	0.032	0.011	<0.01		
9/19/2019				<0.01	0.0018 (J)
2/5/2020					0.0022 (J)
2/7/2020	0.034	0.011	0.0065 (J)	<0.01	
3/18/2020	0.034	0.012			
3/19/2020				<0.01	0.0021 (J)
5/4/2020			<0.01		
9/22/2020				<0.01	
9/23/2020	0.037	0.012	<0.01		<0.01
2/3/2021			<0.01	<0.01	
2/4/2021	0.039	0.012			0.0016 (J)
3/11/2021	0.037	0.011	<0.01	<0.01	
3/12/2021					<0.01
8/25/2021	0.035	0.011			
8/26/2021			<0.01	<0.01	<0.01
Mean	0.04898	0.01495	0.002913	0.003064	0.002611
Std. Dev.	0.01613	0.004036	0.001948	0.001783	0.00187
Upper Lim.	0.05813	0.019	0.005	0.005	0.001567
Lower Lim.	0.03982	0.011	0.0013	0.0011	0.0008775

Constituent: Beryllium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-14A	WGWC-16	WGWC-8	WGWC-9
5/18/2016		<0.0025		
5/19/2016			0.00102 (J)	<0.0025
7/19/2016		<0.0025		
7/20/2016			0.0014 (J)	<0.0025
9/14/2016		<0.0025		<0.0025
9/15/2016			0.00093 (J)	
11/10/2016		<0.0025		
11/14/2016			0.0014 (J)	
1/24/2017		<0.0025		
2/6/2017			0.0017 (J)	
2/8/2017	<0.0025			
2/9/2017				0.00041 (J)
2/23/2017	<0.0025			
3/15/2017		<0.0025	0.0016 (J)	<0.0025
3/17/2017	<0.0025			
4/11/2017	<0.0025			<0.0025
4/25/2017		<0.0025		
4/26/2017	<0.0025		0.0017 (J)	<0.0025
5/17/2017	<0.0025			
6/7/2017	<0.0025			
7/11/2017	<0.0025			
8/9/2017		<0.0025		
8/10/2017			0.0017 (J)	0.00034 (J)
3/29/2018	<0.0025	<0.0025	0.0018 (J)	<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)
2/27/2019	0.00017 (J)	0.00022 (J)	0.0021 (J)	
2/28/2019				0.00031 (J)
4/3/2019	<0.0025		0.0019 (J)	<0.0025
4/4/2019		<0.0025		
9/18/2019	0.00032 (J)	<0.0025		
9/19/2019			0.0019	0.00041 (J)
2/5/2020	0.00024 (J)			0.0004 (J)
2/7/2020		<0.0025	0.0023	
3/18/2020		<0.0025		
3/19/2020	0.00025 (J)		0.0028	0.00056 (J)
9/22/2020			0.0025	
9/23/2020		<0.0025		0.00034 (J)
9/24/2020	0.00024 (J)			
2/3/2021			0.0025	
2/4/2021	0.00026 (J)	<0.0025	0.0000 ( 1)	0.00039 (J)
3/11/2021	<0.0025	<0.0025	0.0022 (J)	0.0000470
3/12/2021				0.00034 (J)
8/25/2021	<0.0025	<0.0025	0.000 (1)	0.00000 / 12
8/26/2021	0.001924	0.002286	0.002 (J)	0.00038 (J)
Mean	0.001824	0.002386	0.001843	0.001337
Std. Dev.	0.00106	0.0005098	0.000479	0.00108
Upper Lim.	0.0025	0.0025	0.002114	0.0025
Lower Lim.	0.00026	0.00022	0.001571	0.00036

Constituent: Chromium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					,	
	WGWC-10	WGWC-11	WGWC-13	WGWC-14A	WGWC-15	WGWC-9
5/18/2016	<0.002				<0.002	
5/19/2016		<0.002	<0.002			<0.002
7/19/2016					<0.002	
7/20/2016	0.0012 (J)	<0.002	<0.002			<0.002
9/14/2016	<0.002	<0.002	<0.002		<0.002	<0.002
11/10/2016			<0.002		<0.002	
11/11/2016	0.0015 (J)	<0.002				
1/24/2017					<0.002	
1/27/2017		<0.002	<0.002			
2/6/2017	0.0011 (J)					
2/8/2017				<0.002		
2/9/2017						<0.002
2/23/2017				<0.002		
3/14/2017					<0.002	
3/15/2017	0.0015 (J)	<0.002	<0.002			<0.002
3/17/2017				<0.002		
4/11/2017				<0.002		<0.002
4/25/2017					<0.002	
4/26/2017	0.0013 (J)	0.0011 (J)	<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	
8/10/2017	0.0016 (J)	<0.002				<0.002
3/29/2018		0.0012 (J)	<0.002	<0.002		<0.002
3/30/2018	0.0027				<0.002	
6/14/2018	0.0023 (J)	<0.002	<0.002	<0.002	<0.002	<0.002
10/3/2018					<0.002	
10/4/2018	0.0031	<0.002	<0.002	<0.002		<0.002
2/27/2019	0.0031	0.0021 (J)	0.0018 (J)	<0.002	0.0015 (J)	
2/28/2019						0.0025
4/3/2019		<0.002	<0.002	<0.002		<0.002
4/4/2019	0.0021 (J)				<0.002	
9/18/2019			<0.002	<0.002	<0.002	
9/19/2019	0.0022	<0.002				<0.002
2/5/2020	0.0022	<0.002	<0.002	0.0017 (J)		<0.002
2/7/2020					<0.002	
3/18/2020	<0.002	<0.002			<0.002	
3/19/2020			<0.002	<0.002		<0.002
9/23/2020	0.0018 (J)				<0.002	<0.002
9/24/2020		<0.002	<0.002	<0.002		
2/3/2021		<0.002				
2/4/2021	0.0018 (J)		<0.002	<0.002	<0.002	<0.002
3/11/2021	0.0023		0.0019 (J)	<0.002		
3/12/2021		0.0017 (J)			<0.002	<0.002
8/25/2021		<0.002	0.0017 (J)	<0.002		
8/26/2021	0.0024				<0.002	<0.002
Mean	0.00201	0.001905	0.00197	0.001985	0.001975	0.002025
Std. Dev.	0.0005628	0.0002685	8.013E-05	6.708E-05	0.0001118	0.0001118
Upper Lim.	0.00233	0.0021	0.002	0.002	0.002	0.0025
Lower Lim.	0.00169	0.0017	0.0019	0.0017	0.0015	0.002

Constituent: Cobalt (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.00201 (J)					<0.0025
5/19/2016		<0.0025	<0.0025	<0.0025		
7/19/2016						<0.0025
7/20/2016	0.00066 (J)	0.0025	0.0013 (J)	<0.0025		
9/14/2016	0.00095 (J)	<0.0025	0.00098 (J)	<0.0025		<0.0025
11/10/2016				<0.0025		<0.0025
11/11/2016	0.001 (J)	0.00052 (J)	0.0017 (J)			
1/24/2017						<0.0025
1/27/2017		0.00049 (J)	0.0022 (J)	<0.0025		
2/6/2017	0.00072 (J)					
2/8/2017					0.0051	
2/23/2017					0.014	
3/14/2017						<0.0025
3/15/2017	0.00062 (J)	0.00064 (J)	0.0016 (J)	<0.0025		
3/17/2017					0.013	
4/11/2017					0.016	
4/25/2017						<0.0025
4/26/2017	0.0014 (J)	0.001 (J)	0.00026 (J)	<0.0025	0.01	
5/17/2017					0.011	
6/7/2017					0.01	
7/11/2017					0.0085	
8/9/2017				0.0004 (J)		<0.0025
8/10/2017	<0.0025	0.0011 (J)	0.00049 (J)			
3/29/2018		<0.0025	0.0008 (J)	0.0008 (J)	0.015	
3/30/2018	0.0035					<0.0025
6/14/2018	0.0012 (J)	<0.0025	0.00067 (J)	0.00054 (J)	0.011	<0.0025
10/3/2018						<0.0025
10/4/2018	0.00086 (J)	<0.0025	0.00079 (J)	<0.0025	0.0055	
2/27/2019	0.0005 (J)	0.0022 (J)	0.0006 (J)	0.00013 (J)	0.0049	<0.0025
4/3/2019		0.00081 (J)	0.00043 (J)	<0.0025	0.0056	
4/4/2019	0.0017 (J)					<0.0025
9/18/2019				<0.0025	0.005	<0.0025
9/19/2019	0.0023	<0.0025	0.00028 (J)			
2/5/2020	0.0013	0.00026 (J)	0.00058	<0.0025	0.0044	
2/7/2020						<0.0025
3/18/2020	0.0012 (J)	0.00069 (J)	0.00071 (J)			<0.0025
3/19/2020				<0.0025	0.0039	
9/23/2020	0.00062 (J)		0.00039 (J)			<0.0025
9/24/2020		<0.0025		0.00032 (J)	0.0035	
2/3/2021		0.00072 (J)	0.00017 (J)			
2/4/2021	0.00059 (J)			<0.0025	0.0041	0.00015 (J)
3/11/2021	0.00058 (J)			<0.0025	0.0037	
3/12/2021		0.0022 (J)	0.00042 (J)			<0.0025
8/25/2021		0.00045 (J)	0.0005 (J)	<0.0025	0.0029	
8/26/2021	0.00044 (J)					<0.0025
Mean	0.001232	0.001554	0.0008685	0.001984	0.007855	0.002382
Std. Dev.	0.0008066	0.00093	0.0006568	0.0009233	0.004283	0.0005255
Upper Lim.	0.001563	0.0025	0.001126	0.0025	0.01029	0.0025
Lower Lim.	0.0007636	0.00064	0.000479	0.0008	0.005423	0.00015

Constituent: Cobalt (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.0069	0.00245 (J)			
5/19/2016				<0.0025	<0.0025
7/19/2016	0.012				
7/20/2016		0.0018 (J)		<0.0025	<0.0025
9/14/2016	0.013	0.0014 (J)			<0.0025
9/15/2016				<0.0025	
11/10/2016	0.016	0.0016 (J)			
11/11/2016			<0.0025		
11/14/2016				<0.0025	
1/20/2017		0.0014 (J)			
1/24/2017	0.015				
2/6/2017			0.00058 (J)	<0.0025	
2/9/2017					0.00073 (J)
3/14/2017		0.0023 (J)			
3/15/2017	0.014		0.00045 (J)	<0.0025	<0.0025
4/11/2017			<0.0025		<0.0025
4/25/2017	0.014	0.0023 (J)			
4/26/2017			<0.0025	<0.0025	<0.0025
6/7/2017			<0.0025		
7/11/2017			<0.0025		
8/9/2017	0.016	0.0011 (J)			
8/10/2017			0.00049 (J)	<0.0025	<0.0025
3/29/2018	0.0092		<0.0025	0.00066 (J)	<0.0025
3/30/2018		0.0016 (J)			
6/14/2018	0.0035	0.00055 (J)	<0.0025	0.0011 (J)	<0.0025
10/4/2018	0.0078	0.00041 (J)	<0.0025	<0.0025	<0.0025
2/26/2019		0.00086 (J)			
2/27/2019	0.00084 (J)			0.0019 (J)	
2/28/2019			0.00019 (J)		<0.0025
4/2/2019			<0.0025		
4/3/2019				0.0037	<0.0025
4/4/2019	0.00077 (J)	<0.0025			
9/18/2019	0.00011 (J)	0.00018 (J)	0.00045 (J)		
9/19/2019				0.0028	<0.0025
2/5/2020					<0.0025
2/7/2020	0.00016 (J)	0.00077	0.00024 (J)	0.0011	
3/18/2020	0.00016 (J)	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	<0.0025	0.0009 (J)	0.00024 (J)		<0.0025
2/3/2021			0.00025 (J)	0.00014 (J)	
2/4/2021	0.00026 (J)	0.00042 (J)			<0.0025
3/11/2021	0.00013 (J)	0.00035 (J)	0.00022 (J)	0.00043 (J)	
3/12/2021					<0.0025
8/25/2021	<0.0025	0.00042 (J)			
8/26/2021			0.00022 (J)	0.0005 (J)	<0.0025
Mean	0.006741	0.001191	0.0013	0.00182	0.002411
Std. Dev.	0.006293	0.0007719	0.001118	0.001019	0.0003958
Upper Lim.	0.014	0.00163	0.0025	0.0025	0.0025
Lower Lim.	0.00026	0.0007532	0.00024	0.00066	0.00073

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

					,	
540,0040	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.182 (U)	0.424 (11)	0.0608 (11)	0.210 (11)		0.569
5/19/2016		0.431 (U)	0.0698 (U)	0.219 (U)		0.00 (11)
7/19/2016	0.125 (11)	0.262 (11)	0.0646 (11)	0.404 (11)		0.29 (U)
7/20/2016	-0.135 (U)	-0.263 (U)	-0.0646 (U)	0.404 (U)		0.440 (11)
9/14/2016	0.311 (U)	0.13 (U)	0.199 (U)	0.692		0.412 (U)
11/10/2016	0.542	0.0357 (11)	0.467	1		0.709
11/11/2016	0.542	0.0257 (U)	0.467			0.770
1/24/2017		0.808	0.836	0.668		0.779
1/27/2017 2/6/2017	0.104 (U)	0.898	0.836	0.008		
2/8/2017	0.104 (0)				0.958	
2/23/2017					0.771	0.247 (11)
3/14/2017	0.533	0.101 (11)	0.254 (11)	0.847		0.247 (U)
3/15/2017	0.523	0.121 (U)	0.254 (U)	0.847	4.7	
3/17/2017					1.7	
4/11/2017					0.901	0.515
4/25/2017	0.000 (11)	0.0000 (11)	0.007.410	0.400.410	0.404	0.515
4/26/2017	0.069 (U)	0.0309 (U)	0.267 (U)	0.408 (U)	0.434	
5/17/2017					0.632	
6/7/2017					1.06	
7/11/2017					0.716	
8/9/2017				0.816		1.7
8/10/2017	0.189 (U)	0.326 (U)	0.912	0.54	0.50	
3/29/2018		0.461	0.419	0.51	0.58	
3/30/2018	0.575					0.0985 (U)
6/14/2018	0.523	0.275 (U)	-0.263 (U)	0.463	0.55	0.171 (U)
10/3/2018						0.766
10/4/2018	0.84	1.18	1.29	0.99	0.563	
2/27/2019	0.236 (U)	0.374	0.415	1.08	0.538	0.363 (U)
4/3/2019	0.000 (11)	0.187 (U)	0.264 (U)	0.446	0.497	0.440
4/4/2019	0.233 (U)			0.000	0.070 (11)	0.418
9/18/2019	0.404.410	0.000 (1.1)	0.000 (11)	0.392	0.376 (U)	0.484
9/19/2019	0.124 (U)	0.338 (U)	0.329 (U)	0.000	0.5	
2/5/2020	0.0961 (U)	0.163 (U)	0.225 (U)	0.609	0.5	0.105 (11)
2/7/2020	0.404.410	0.000	0.0000 (1.1)			0.125 (U)
3/18/2020	0.461 (U)	0.866	-0.0262 (U)	0.47	0.070 (11)	0.303 (U)
3/19/2020	0.440 (11)		0.705	0.47	0.376 (U)	0.440 (11)
9/23/2020	0.442 (U)	1.0	0.785	1.00	0.700	0.448 (U)
9/24/2020		1.2	0.222.41	1.02	0.796	
2/3/2021	0.0000 (11)	0.718	0.322 (U)	0.120 (11)	0.504	0.400 (11)
2/4/2021	0.0332 (U)			0.139 (U)	0.564	0.488 (U)
3/11/2021	0.42 (U)	0.0720 (11)	0.633	0.473	0.764	0.501
3/12/2021		0.0729 (U)	0.633	0.012	0.705	0.591
8/25/2021	0.224 (11)	0.401	0.443 (U)	0.913	0.705	0.670
8/26/2021 Maan	0.321 (U)	0.3069	0.3000	0.638	0.6001	0.678
Mean	0.3045	0.3968	0.3888	0.628	0.6991	0.5077
Std. Dev.	0.2346	0.392	0.3654	0.2793	0.3011	0.3456
Upper Lim.	0.4377	0.6194	0.5963	0.7865	0.8335	0.6472
Lower Lim.	0.1713	0.1742	0.1813	0.4694	0.5318	0.3074

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

			-	,	,
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	1.03	0.116 (U)			
5/19/2016				0.711 (U)	0.209 (U)
7/19/2016	2.39				
7/20/2016		0.247 (U)		1.14	-0.084 (U)
9/14/2016	3.05	0.594			0.42 (U)
9/15/2016				1.26	
11/10/2016	2.87	0.431			
11/11/2016			-0.11 (U)		
11/14/2016				0.749	
1/20/2017		1.35			
1/24/2017	2.68				
2/6/2017			0.471	1.05	
2/9/2017					0.393
3/14/2017		-0.107 (U)			
3/15/2017	1.64		0.255 (U)	1.32	0.271 (U)
4/11/2017			0.19 (U)		0.488 (U)
4/25/2017	0.878	0.228 (U)			
4/26/2017			0.22 (U)	1.07	0.14 (U)
6/7/2017			0.126 (U)		
7/11/2017			0.511		
8/9/2017	2.5	-0.0246 (U)			
8/10/2017			0.882	1.88	0.379
3/29/2018	1.6		0.252 (U)	2.31	0.278 (U)
3/30/2018		0.135 (U)			
6/14/2018	1.09	-0.373 (U)	0.0458 (U)	1.86	0.157 (U)
10/4/2018	1.99	0.775	0.381	2.44	0.48
2/26/2019		0.431			
2/27/2019	0.721			2.42	
2/28/2019			0.254 (U)		0.271 (U)
4/2/2019			0.209 (U)		
4/3/2019				1.55	0.0621 (U)
4/4/2019	0.632	0.386			
9/18/2019	0.278 (U)	0.167 (U)	0.403 (U)		
9/19/2019				2.06	0.537
2/5/2020					-0.137 (U)
2/7/2020	0.797	0.244 (U)	0.2 (U)	1.66	
3/18/2020	0.437	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	0.276 (U)	0.643	1.18		0.0587 (U)
2/3/2021			0.684	2	
2/4/2021	0.727	0.438 (U)			0.353 (U)
3/11/2021	0.942	0.247 (U)	0.286 (U)	2.38	. ,
3/12/2021					0.831
8/25/2021	0.518	0.565			
8/26/2021			0.796	2.87	0.681
Mean	1.352	0.3279	0.3653	1.685	0.3009
Std. Dev.	0.9154	0.3641	0.3139	0.614	0.2404
Upper Lim.	1.872	0.5347	0.5435	2.033	0.4374
Lower Lim.	0.8325	0.1211	0.187	1.336	0.1644
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Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

E 14.0 10.0.4.0	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.206		2.42.43			0.779
5/19/2016		0.039 (J)	0.12 (J)	0.384		
7/19/2016						0.97
7/20/2016	0.23	<0.1	0.11 (J)	0.34		
9/14/2016	0.17 (J)	<0.1	0.095 (J)	0.31		0.89
11/10/2016				0.26		0.88
11/11/2016	0.14 (J)	<0.1	<0.1			
1/24/2017						0.92
1/27/2017		<0.1	<0.1	0.28		
2/6/2017	0.15 (J)					
2/8/2017					<0.1	
2/23/2017					<0.1	
3/14/2017						0.77
3/15/2017	0.16 (J)	<0.1	<0.1	0.3		
3/17/2017					<0.1	
4/11/2017					<0.1	
4/25/2017						0.95
4/26/2017	0.17 (J)	<0.1	<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
8/10/2017	0.2	<0.1	0.11 (J)			
10/11/2017					<0.1	0.88
10/12/2017	0.14 (J)	<0.1	0.091 (J)	0.28		
3/29/2018		<0.1	0.089 (J)	0.27	<0.1	
3/30/2018	0.13 (J)					0.79
6/14/2018	0.15 (J)	<0.1	0.1 (J)	0.27	<0.1	0.79
10/3/2018						0.79
10/4/2018	0.18 (J)	<0.1	0.12 (J)	0.23	<0.1	
2/27/2019	0.21	0.047 (J)	0.06 (J)	0.25	<0.1	0.81
4/3/2019		0.048 (J)	0.084 (J)	0.24	0.048 (J)	
4/4/2019	0.13 (J)					0.78
9/18/2019				0.22	0.035 (J)	0.81
9/19/2019	0.13 (J)	0.037 (J)	0.093 (J)			
2/5/2020	0.14	0.045 (J)	0.098 (J)	0.2	0.04 (J)	
2/7/2020						0.79
3/18/2020	0.052 (J)	<0.1	0.033 (J)			0.71
3/19/2020				0.15	<0.1	
9/23/2020	0.09 (J)		0.064 (J)			0.63
9/24/2020		0.18		<0.1	0.028 (J)	
2/3/2021		0.027 (J)	0.082 (J)			
2/4/2021	0.12			0.16	0.033 (J)	0.69
3/11/2021	0.15			0.18	0.04 (J)	
3/12/2021		0.044 (J)	0.096 (J)			0.88
8/25/2021		0.056 (J)	0.14	0.2	0.071 (J)	
8/26/2021	0.16					0.77
Mean	0.1528	0.05348	0.085	0.2488	0.04738	0.8185
Std. Dev.	0.04061	0.02964	0.0284	0.076	0.008657	0.0867
Upper Lim.	0.1752	0.056	0.1009	0.2907	0.05	0.8664
Lower Lim.	0.1304	0.045	0.07516	0.2068	0.04	0.7707

Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

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	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	0.1 (J)	0.121 (J)			
5/19/2016				0.304	1.58
7/19/2016	0.14 (J)				
7/20/2016		0.16 (J)		0.27	2
9/14/2016	0.18 (J)	0.19 (J)			1.8
9/15/2016				0.24	
11/10/2016	0.11 (J)	0.15 (J)			
11/11/2016			0.32		
11/14/2016				0.2	
1/20/2017		0.18 (J)			
1/24/2017	0.15 (J)	(,,			
2/6/2017	0.10 (0)		0.45	0.27	
2/9/2017			0.43	0.27	1.3
3/14/2017		0.11 (J)			1.0
	0.171)	0.11(3)	0.27	0.25	12
3/15/2017	0.1 (J)		0.37	0.25	1.3
4/11/2017	0.12 / 1	0.1271	0.37		1.4
4/25/2017	0.13 (J)	0.13 (J)	0.4	0.01	45
4/26/2017			0.4	0.31	1.5
6/7/2017			0.35		
7/11/2017			0.39		
8/9/2017	0.18 (J)	0.19 (J)			
8/10/2017			0.42	0.37	1.6
10/11/2017	<0.1	0.14 (J)			
10/12/2017			0.36	0.35	1.5
3/29/2018	0.13 (J)		0.34	0.36	1.4
3/30/2018		0.095 (J)			
6/14/2018	<0.1	0.11 (J)	0.35	0.56	1.4
10/4/2018	0.85 (J)	0.11 (J)	0.35	0.27	1.4
2/26/2019		0.068 (J)			
2/27/2019	0.47			0.054 (J)	
2/28/2019			0.28		1.4
4/2/2019			0.33		
4/3/2019				0.5	1.3
4/4/2019	0.08 (J)	0.087 (J)			
9/18/2019	0.058 (J)	0.066 (J)	0.32		
9/19/2019				0.42	1.3
2/5/2020					1.3
2/7/2020	0.072 (J)	0.079 (J)	0.35	0.25	
3/18/2020	0.084 (J)	<0.1			
3/19/2020	` '			0.057 (J)	1
5/4/2020			0.36	(-/	
9/22/2020				0.14	
9/23/2020	0.049 (J)	0.05 (J)	0.25		0.82
2/3/2021	5.545 (0)	5.55 (6)	0.23	0.15	
2/4/2021	0.052 (J)	0.064 (J)	0.5	0.13	0.91
3/11/2021		0.064 (3) 0.05 (J)	0.31	0.16	0.01
	0.061 (J)	0.03 (3)	0.31	0.16	0.08
3/12/2021	0.000 (1)	0.002 (1)			0.98
8/25/2021	0.099 (J)	0.093 (J)	0.20	0.01	
8/26/2021	0.4=0.	0.4000	0.38	0.21	1
Mean	0.1521	0.1092	0.35	0.2712	1.342
Std. Dev.	0.1838 0.15	0.04573 0.1344	0.04593 0.3753	0.1289 0.3423	0.2886 1.502
Upper Lim.					

Constituent: Fluoride, total (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
Lower Lim.	0.058	0.08396	0.3247	0.2001	1.183

Constituent: Lead (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,	' '	<u> </u>
	WGWC-10	WGWC-11	WGWC-13	WGWC-14A	WGWC-15	WGWC-16
5/18/2016	<0.001				<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	<0.001			
9/14/2016	<0.001	<0.001	0.00055 (J)		<0.001	<0.001
11/10/2016			0.00047 (J)		<0.001	<0.001
11/11/2016	<0.001	<0.001				
1/24/2017					<0.001	<0.001
1/27/2017		<0.001	<0.001			
2/6/2017	<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			<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	<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	<0.001				
3/29/2018		<0.001	<0.001	<0.001		<0.001
3/30/2018	<0.001				<0.001	
2/27/2019	0.00023 (J)	0.00058 (J)	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	<0.001
9/18/2019			0.00045 (J)	<0.001	<0.001	<0.001
9/19/2019	0.00041 (J)	<0.001				
2/5/2020	0.00016 (J)	<0.001	0.00045 (J)	<0.001		
2/7/2020					<0.001	<0.001
3/18/2020	0.00021 (J)	<0.001			<0.001	<0.001
3/19/2020			0.0006 (J)	0.00017 (J)		
9/23/2020	0.00013 (J)				<0.001	<0.001
9/24/2020		0.00037 (J)	<0.001	0.00018 (J)		
2/3/2021		<0.001				
2/4/2021	0.00019 (J)		0.00038 (J)	0.00013 (J)	0.0003 (J)	0.00013 (J)
3/11/2021	0.00032 (J)		0.00075 (J)	0.00031 (J)		<0.001
3/12/2021		0.00038 (J)			<0.001	
8/25/2021	0.00000 (1)	0.00023 (J)	0.00025 (J)	0.00041 (J)	.0.004	<0.001
8/26/2021	0.00026 (J)	0.0000011	0.000705	0.0007000	<0.001	0.0000000
Mean	0.0006617	0.0008644	0.000725	0.0007889	0.0009611	0.0009039
Std. Dev.	0.0003936	0.0002679 0.001	0.0002744	0.0003548	0.000165 0.001	0.0002797
Upper Lim. Lower Lim.	0.001 0.00021	0.001	0.001 0.00045	0.001 0.00031	0.0003	0.001 0.00014
LOWER LIIII.	0.00021	0.00030	0.00040	0.00001	0.0003	0.00014

Constituent: Lead (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-17	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		
11/14/2016		<0.001	
1/20/2017	<0.001		
2/6/2017		<0.001	
2/9/2017			<0.001
3/14/2017	<0.001		
3/15/2017		<0.001	<0.001
4/11/2017			<0.001
4/25/2017	<0.001		
4/26/2017		<0.001	<0.001
8/9/2017	<0.001		
8/10/2017		<0.001	<0.001
3/29/2018		<0.001	<0.001
3/30/2018	<0.001		
2/26/2019	0.00033 (J)		
2/27/2019		0.00017 (J)	
2/28/2019			0.00014 (J)
4/3/2019		<0.001	<0.001
4/4/2019	<0.001		
9/18/2019	<0.001		
9/19/2019		<0.001	<0.001
2/5/2020			<0.001
2/7/2020	<0.001	<0.001	
3/18/2020	0.0002 (J)		
3/19/2020		0.00016 (J)	<0.001
9/22/2020		0.00013 (J)	
9/23/2020	<0.001		<0.001
2/3/2021		0.00013 (J)	
2/4/2021	<0.001		<0.001
3/11/2021	<0.001	<0.001	
3/12/2021			<0.001
8/25/2021	<0.001		
8/26/2021		0.00014 (J)	<0.001
Mean	0.0009183	0.0007628	0.0009522
Std. Dev.	0.0002387	0.0003937	0.0002027
Upper Lim.	0.001	0.001	0.001
Lower Lim.	0.00033	0.00016	0.00014

Constituent: Lithium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	0.032					<0.005
5/19/2016		<0.005	<0.005	<0.005		
7/19/2016						0.0036 (J)
7/20/2016	0.021	<0.005	0.0057	<0.005		
9/14/2016	0.02	<0.005	0.0077	<0.005		<0.005
11/10/2016				0.0038 (J)		0.0064
11/11/2016	0.017	<0.005	0.007			
1/24/2017						0.0075
1/27/2017		<0.005	0.0074	<0.005		
2/6/2017	0.016					
2/8/2017					0.0039 (J)	
2/23/2017					<0.005	
3/14/2017						0.0057
3/15/2017	0.014	<0.005	0.0077	<0.005		
3/17/2017					<0.005	
4/11/2017					<0.005	
4/25/2017						0.0059
4/26/2017	0.011	<0.005	0.0011	<0.005	<0.005	
5/17/2017					0.0033 (J)	
6/7/2017					<0.005	
7/11/2017					<0.005	
8/9/2017				<0.005		0.0068
8/10/2017	0.011	<0.005	0.0064			
3/29/2018		0.0018 (J)	0.01	0.0022 (J)	0.0025 (J)	
3/30/2018	0.016					0.0077
6/14/2018	0.0084	0.0011 (J)	0.0062	0.0018 (J)	0.0018 (J)	0.0052
10/3/2018						0.006
10/4/2018	0.0085	0.0014 (J)	0.0066	0.0025 (J)	0.0016 (J)	
2/27/2019	0.0068	<0.005	0.0068	<0.005	<0.005	0.0055
4/3/2019		<0.005	0.0075	<0.005	0.0015 (J)	
4/4/2019	0.0059					0.0054
9/18/2019				<0.005	<0.005	0.0054
9/19/2019	0.0075	<0.005	0.0067			
2/5/2020	0.0061	<0.005	0.0063	<0.005	<0.005	
2/7/2020						0.0068
3/18/2020	0.0071	<0.005	0.0081			0.0086
3/19/2020				<0.005	<0.005	
9/23/2020	0.0054		0.007			0.0071
9/24/2020		<0.005		<0.005	<0.005	
2/3/2021		<0.005	0.0075			
2/4/2021	0.0049 (J)			<0.005	<0.005	0.0086
3/11/2021	0.0051			0.0037 (J)	0.0035 (J)	
3/12/2021		<0.005	0.0089			0.0096
8/25/2021		<0.005	0.0061	<0.005	<0.005	
8/26/2021	0.0044 (J)					0.0059
Mean	0.01141	0.004465	0.006785	0.00445	0.004155	0.006385
Std. Dev.	0.007141	0.001312	0.001742	0.001062	0.001305	0.001465
Upper Lim.	0.01439	0.005	0.00777	0.005	0.005	0.007217
Lower Lim.	0.007231	0.0018	0.006121	0.0038	0.0033	0.005553

Constituent: Lithium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

			-	,	, ,
	WGWC-16	WGWC-17	WGWC-19	WGWC-8	WGWC-9
5/18/2016	<0.005	<0.005			
5/19/2016				0.0215	0.0335
7/19/2016	0.0091				
7/20/2016		0.0042 (J)		0.026	0.024
9/14/2016	0.012	0.0058			0.039
9/15/2016				0.057	
11/10/2016	0.013	0.0066			
11/11/2016			0.045		
11/14/2016				0.017	
1/20/2017		0.0044 (J)			
1/24/2017	0.011				
2/6/2017			0.05	0.012	
2/9/2017					0.04
3/14/2017		0.0048 (J)			
3/15/2017	0.01		0.052	0.014	0.035
4/11/2017			0.048		0.034
4/25/2017	0.0081	0.0049 (J)			
4/26/2017			0.044	0.0091	0.029
6/7/2017			0.047		
7/11/2017			0.045		
8/9/2017	0.013	0.0067			
8/10/2017			0.056	0.013	0.038
3/29/2018	0.015		0.072	0.018	0.048
3/30/2018		0.0067			
6/14/2018	0.009	0.0046 (J)	0.048	0.015	0.034
10/4/2018	0.012	0.005	0.062	0.013	0.039
2/26/2019		0.0063			
2/27/2019	0.0075			0.014	
2/28/2019			0.045		0.037
4/2/2019			0.052		
4/3/2019				0.015	0.035
4/4/2019	0.0077	0.0042 (J)			
9/18/2019	0.0056	0.0047 (J)	0.052		
9/19/2019				0.014	0.036
2/5/2020					0.034
2/7/2020	0.0053	0.0045 (J)	0.044	0.014	
3/18/2020	0.0057	0.0054			
3/19/2020				0.015	0.039
5/4/2020			0.049		
9/22/2020				0.013	
9/23/2020	0.0059	0.0056	0.056		0.033
2/3/2021			0.06	0.014	
2/4/2021	0.0051	0.0047 (J)			0.035
3/11/2021	0.005	0.0049 (J)	0.051	0.013	
3/12/2021					0.034
8/25/2021	0.0046 (J)	0.0048 (J)			
8/26/2021			0.057	0.013	0.03
Mean	0.00848	0.00519	0.05175	0.01703	0.03533
Std. Dev.	0.003266	0.0008207	0.007129	0.01007	0.004846
Upper Lim.	0.01033	0.005656	0.0558	0.017	0.03808
Lower Lim.	0.006625	0.004724	0.0477	0.013	0.03257

Constituent: Molybdenum (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				,		,
	WGWC-10	WGWC-11	WGWC-12	WGWC-13	WGWC-14A	WGWC-15
5/18/2016	<0.015					0.0153
5/19/2016		<0.015	<0.015	0.00491 (J)		
7/19/2016						0.0093 (J)
7/20/2016	<0.015	<0.015	0.00095 (J)	0.0025 (J)		
9/14/2016	0.00091 (J)	<0.015	0.0009 (J)	0.0028 (J)		0.012 (J)
11/10/2016				0.0016 (J)		0.0065 (J)
11/11/2016	<0.015	<0.015	<0.015			
1/24/2017						0.0049 (J)
1/27/2017		<0.015	<0.015	0.0023 (J)		
2/6/2017	<0.015					
2/8/2017					<0.015	
2/23/2017					<0.015	
3/14/2017						0.0034 (J)
3/15/2017	<0.015	<0.015	<0.015	0.0022 (J)		
3/17/2017					<0.015	
4/11/2017					<0.015	
4/25/2017						0.004 (J)
4/26/2017	<0.015	<0.015	<0.015	0.0019 (J)	<0.015	
5/17/2017					<0.015	
6/7/2017					0.001 (J)	
7/11/2017					<0.015	
8/9/2017				0.0028 (J)		0.0042 (J)
8/10/2017	0.00093 (J)	0.0011 (J)	0.0046 (J)			
3/29/2018		<0.015	<0.015	0.0028 (J)	<0.015	
3/30/2018	<0.015					0.0049 (J)
6/14/2018	<0.015	<0.015	<0.015	0.0018 (J)	<0.015	0.0056 (J)
10/3/2018						0.0041 (J)
10/4/2018	<0.015	<0.015	<0.015	<0.015	<0.015	
2/27/2019	<0.015	<0.015	0.00063 (J)	0.0019 (J)	<0.015	0.0061
4/3/2019		<0.015	<0.015	<0.015	<0.015	
4/4/2019	<0.015					0.0039 (J)
9/18/2019				0.0021 (J)	<0.015	0.0052
9/19/2019	<0.015	<0.015	0.00073 (J)			
2/5/2020	<0.015	<0.015	<0.015	0.0012 (J)	<0.015	
2/7/2020						0.0024 (J)
3/18/2020	<0.015	<0.015	<0.015			0.002 (J)
3/19/2020				0.0018 (J)	<0.015	
9/23/2020	<0.015		<0.015			0.0031 (J)
9/24/2020		0.0017 (J)		<0.015	<0.015	
2/3/2021		<0.015	<0.015			
2/4/2021	<0.015			0.0012 (J)	<0.015	0.0022 (J)
3/11/2021	<0.015			0.0013 (J)	<0.015	
3/12/2021		<0.015	0.00062 (J)			0.0019 (J)
8/25/2021		<0.015	<0.015	0.00092 (J)	<0.015	
8/26/2021	<0.015					0.0029 (J)
Mean	0.01359	0.01364	0.01092	0.004051	0.0143	0.005195
Std. Dev.	0.004334	0.004187	0.006442	0.004795	0.00313	0.003435
Upper Lim.	0.015	0.015	0.015	0.00491	0.015	0.006568
Lower Lim.	0.00093	0.0017	0.00095	0.0016	0.001	0.003266

Constituent: Molybdenum (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

			Plant v
	WGWC-17	WGWC-19	WGWC-9
5/18/2016	0.00526 (J)		
5/19/2016			0.00762 (J)
7/20/2016	0.0066 (J)		0.0084 (J)
9/14/2016	0.0081 (J)		0.0071 (J)
11/10/2016	0.0076 (J)		
11/11/2016		<0.015	
1/20/2017	0.0094 (J)		
2/6/2017		0.001 (J)	
2/9/2017			0.018
3/14/2017	0.0044 (J)		
3/15/2017		<0.015	0.0057 (J)
4/11/2017		<0.015	0.0047 (J)
4/25/2017	0.0074 (J)		
4/26/2017		<0.015	0.004 (J)
6/7/2017		0.0015 (J)	
7/11/2017		<0.015	
8/9/2017	0.0066 (J)		
8/10/2017		0.0016 (J)	0.0046 (J)
3/29/2018		0.0012 (J)	0.0048 (J)
3/30/2018	0.0024 (J)		
6/14/2018	0.0026 (J)	0.0014 (J)	0.0046 (J)
10/4/2018	0.00085 (J)	<0.015	0.003 (J)
2/26/2019	0.0032 (J)		
2/28/2019		0.0013 (J)	0.0053
4/2/2019		<0.015	
4/3/2019	0.000 (1)		0.0026 (J)
4/4/2019	0.002 (J)	0.0014 (1)	
9/18/2019	0.0026 (J)	0.0011 (J)	0.004071
9/19/2019			0.0048 (J)
2/5/2020	0.0005 (1)	0.001471)	0.0044 (J)
2/7/2020	0.0025 (J)	0.0014 (J)	
3/18/2020 3/19/2020	0.0024 (J)		0.0042 (J)
		0.0012 (1)	0.0042 (3)
5/4/2020 9/23/2020	0.0027 (J)	0.0013 (J) 0.0013 (J)	0.0027 (J)
2/3/2021	0.0027 (3)	0.0013 (J)	0.0027 (3)
2/4/2021	0.0025 (J)	0.0013 (3)	0.003 (J)
3/11/2021	0.0023 (J)	0.0012 (J)	0.005 (3)
3/12/2021	0.0022 (0)	0.0012 (3)	0.003 (J)
8/25/2021	0.0022 (J)		0.000 (0)
8/26/2021	(0)	0.0011 (J)	0.0028 (J)
Mean	0.004176	0.006085	0.0020 (5)
Std. Dev.	0.002528	0.006713	0.003413
Upper Lim.	0.005288	0.015	0.006065
Lower Lim.	0.002606	0.0012	0.003563

Constituent: Selenium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

				, , , , , , , , , , , , , , , , , , , ,		
	WGWC-10	WGWC-11	WGWC-12	WGWC-14A	WGWC-15	WGWC-16
5/18/2016	<0.005				<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	<0.005			
9/14/2016	<0.005	<0.005	<0.005		<0.005	0.0091
11/10/2016					<0.005	0.0056
11/11/2016	<0.005	<0.005	<0.005			
1/24/2017					<0.005	0.012
1/27/2017		<0.005	<0.005			
2/6/2017	<0.005					
2/8/2017				<0.005		
2/23/2017				<0.005		
3/14/2017					<0.005	
3/15/2017	<0.005	<0.005	<0.005			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	<0.005		
5/17/2017				<0.005		
6/7/2017				<0.005		
7/11/2017				<0.005		
8/9/2017					<0.005	0.016
8/10/2017	0.00031 (J)	0.00049 (J)	0.0021			
3/29/2018		<0.005	<0.005	0.0003 (J)		0.016
3/30/2018	<0.005				<0.005	
6/14/2018	<0.005	<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	<0.005		0.013
2/27/2019	<0.005	<0.005	<0.005	<0.005	<0.005	0.0081
4/3/2019		<0.005	<0.005	<0.005		
4/4/2019	<0.005				<0.005	0.0091
9/18/2019				<0.005	<0.005	0.0044 (J)
9/19/2019	<0.005	<0.005	<0.005			
2/5/2020	<0.005	<0.005	<0.005	<0.005		
2/7/2020					<0.005	0.0036 (J)
3/18/2020	<0.005	<0.005	<0.005		<0.005	0.0046 (J)
3/19/2020				<0.005		
9/23/2020	<0.005		<0.005		<0.005	0.0028 (J)
9/24/2020		<0.005		<0.005		
2/3/2021		<0.005	<0.005			
2/4/2021	<0.005			<0.005	<0.005	0.0023 (J)
3/11/2021	<0.005			<0.005		0.0023 (J)
3/12/2021		<0.005	<0.005		<0.005	
8/25/2021		<0.005	<0.005	<0.005		0.0019 (J)
8/26/2021	<0.005				<0.005	
Mean	0.004765	0.004774	0.004855	0.004765	0.004775	0.008133
Std. Dev.	0.001049	0.001008	0.0006485	0.001051	0.001006	0.004632
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.01076
Lower Lim.	0.00031	0.00049	0.0021	0.0003	0.0005	0.005502

Constituent: Selenium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals
Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-19	WGWC-8	WGWC-9
5/19/2016		0.00518	0.00228
7/20/2016		0.0038	0.0016
9/14/2016			0.0024
9/15/2016		0.0034	
11/11/2016	<0.005		
11/14/2016		0.0033	
2/6/2017	<0.005	0.0033	
2/9/2017			0.0023
3/15/2017	<0.005	0.003	0.0031
4/11/2017	<0.005		0.0023
4/26/2017	<0.005	0.0032	0.0019
6/7/2017	<0.005		
7/11/2017	<0.005		
8/10/2017	0.00036 (J)	0.0031	0.0021
3/29/2018	<0.005	0.0034	0.0021
6/14/2018	<0.005	0.0031	0.0025
10/4/2018	<0.005	0.0033	0.002
2/27/2019		0.0035	
2/28/2019	<0.005		0.0027
4/2/2019	<0.005		
4/3/2019		0.0031	0.0019
9/18/2019	<0.005		
9/19/2019		0.0021 (J)	0.0026 (J)
2/5/2020			0.0033 (J)
2/7/2020	<0.005	0.0048 (J)	
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		0.0029 (J)
2/3/2021	<0.005	0.0036 (J)	
2/4/2021			0.003 (J)
3/11/2021	<0.005	0.0038 (J)	
3/12/2021			0.0034 (J)
8/26/2021	<0.005	0.0037 (J)	0.0028 (J)
Mean	0.004768	0.003514	0.002524
Std. Dev.	0.001038	0.0006431	0.0005245
Upper Lim.	0.005	0.003879	0.002822
Lower Lim.	0.00036	0.003149	0.002226

Constituent: Thallium (mg/L) Analysis Run 10/18/2021 10:49 AM View: Confidence Intervals

Plant Wansley Client: Southern Company Data: Wansley Ash Pond

	WGWC-10	WGWC-11	WGWC-14A	WGWC-16	WGWC-19
5/18/2016	<0.001			<0.001	
5/19/2016		<0.001			
7/19/2016				8.5E-05 (J)	
7/20/2016	<0.001	<0.001			
9/14/2016	<0.001	<0.001		0.00017 (J)	
11/10/2016				0.00017 (J)	
11/11/2016	<0.001	<0.001			<0.001
1/24/2017				0.00023 (J)	
1/27/2017		<0.001			
2/6/2017	<0.001				<0.001
2/8/2017			0.00011 (J)		
2/23/2017			0.00012 (J)		
3/15/2017	<0.001	<0.001		0.00021 (J)	<0.001
3/17/2017			<0.001		
4/11/2017			<0.001		<0.001
4/25/2017				0.00024 (J)	
4/26/2017	<0.001	<0.001	<0.001		<0.001
5/17/2017			<0.001		
6/7/2017			<0.001		<0.001
7/11/2017			<0.001		<0.001
8/9/2017				0.0002 (J)	
8/10/2017	<0.001	<0.001			<0.001
3/29/2018		<0.001	0.0002 (J)	0.00019 (J)	<0.001
3/30/2018	8.5E-05 (J)				
6/14/2018	<0.001	<0.001	0.00014 (J)	0.00017 (J)	<0.001
10/4/2018	<0.001	<0.001	0.00013 (J)	0.00015 (J)	<0.001
2/27/2019	<0.001	<0.001	0.00016 (J)	0.00015 (J)	
2/28/2019					<0.001
4/2/2019					<0.001
4/3/2019		<0.001	0.00012 (J)		
4/4/2019	<0.001			9.5E-05 (J)	
9/18/2019			<0.001	<0.001	<0.001
9/19/2019	<0.001	<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			0.00017 (J)		
5/4/2020					<0.001
9/23/2020	<0.001			<0.001	<0.001
9/24/2020		<0.001	<0.001		
2/3/2021		0.00016 (J)			0.00018 (J)
2/4/2021	<0.001		0.00021 (J)	<0.001	
3/11/2021	<0.001		0.00019 (J)	<0.001	<0.001
3/12/2021		<0.001			
8/25/2021		<0.001	<0.001	<0.001	
8/26/2021	<0.001				<0.001
Mean	0.0009543	0.000958	0.0005385	0.000503	0.000959
Std. Dev.	0.0002046	0.0001878	0.0004292	0.0004179	0.0001834
Upper Lim.	0.001	0.001	0.001	0.001	0.001
Lower Lim.	8.5E-05	0.00016	0.00014	0.00017	0.00018

# APPENDIX E

February 2021 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 ADDENDUMLITHIUM

PLANT WANSLEY ASH POND 1 (AP-1)

Prepared by



engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200 Kennesaw, Georgia 30144

Project Number GW7327

February 2021



#### ALTERNATE SOURCE DEMONSTRATION ADDENDUM - LITHIUM

Plant Wansley Ash Pond 1 (AP-1)

February 26, 2021

Herwig Goldemund, Ph.D.

Senior Scientist

Adria Reimer, P.G.

Project Manager

#### Certification Statement

# Alternate Source Demonstration Addendum - Lithium Plant Wansley Ash Pond 1 (AP-1) February 26, 2021

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.



Seel and Signature

02/26/2021

Date



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GW7327/GA200526 i February 2021



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Appendix A Select Boring Logs

Appendix B Laboratory Analytical Reports



#### LIST OF ACRONYMS

AP Ash Pond

ASD Alternate Source Demonstration
CCR Coal Combustion Residual
CFR Code of Federal Regulations
ft bgs feet below ground surface

NAVD88 North American Vertical Datum of 1988

GA EPD Environmental Protection Division
GWPS Groundwater Protection Standard

K<sub>d</sub> distribution coefficient

MCL Maximum Contaminant Level

mg/kg milligram per kilogram
mg/L milligram per liter
PWR partially weathered rock

SEP sequential extraction procedure

s.u. standard units

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 Basis of the Evaluation of Statistically Significant Level Exceedances

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 (Geosyntec, 2021). 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.

GW7327/GA200526 1 February 2021

	GWPS	Compliance Well			
Assessment Event	Exceedance for Lithium (1)	WGWC-8	WGWC-9	WGWC-10	WGWC-19
June 2018 (2)	Federal				X
Julie 2018 V	State	X	X	X	X
September 2018 (2)	Federal				X
September 2018	State	X	X	X	X
April 2019 (3)	Federal				X
April 2019 (*)	State	X	X	X	X
September 2019 (3)	Federal				X
September 2019	State	X	X		X
March 2020 (4)	Federal				X
March 2020 (7)	State	X	X		X
September 2020 (4)	Federal				X
September 2020	State	X	X		X

#### Notes:

- (1) A state statistically significant level (SSL) related constituent is determined by comparing the confidence intervals developed to either the constituent's maximum contaminant Level (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 if background is higher than either the MCL or RSL.
- (2) 2018 Annual Groundwater Monitoring and Corrective Action Report (ACC, 2019)
- (3) 2019 Annual Groundwater Monitoring and Corrective Action Report (ACC, 2020)
- (4) 2020 Annual Groundwater Monitoring and Corrective Action Report (Geosyntec, 2021)

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. The source of lithium in the groundwater at these locations is naturally derived from measurable lithium present in subsurface rock units southeast and south of AP-1 where wells WGWC-8, WGWC-9, WGWC-10, and WGWC-19 are



installed (**Figure 1**<sup>1</sup>). 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(**Figure 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 indicated naturally occurring lithium concentrations in the quartzite bedrock unit to be 30 milligrams per kilogram (mg/kg) and lithium concentrations as high as 116 mg/kg in the schist-amphibolite bedrock unit.
- 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 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.

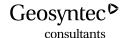
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<sup>&</sup>lt;sup>1</sup> Geologic map revised from those presented in the *Geologic and Hydrogeologic Report* (Golder, 2018), the 2018 ASD, and the *Hydrogeologic Assessment Report Revision 01* [*HAR Rev. 01*; Geosyntec, 2019], to reflect geologic data collected through December 2020, and as noted in Section 2.2.

- 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 correlation between lithium and boron at WGWC-9, and that there is a statistically significant negative correlation between lithium and boron at WGWC-8, indicating that these constituents are likely 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 (core sample of quartzite bedrock unit at location WGWC-8 and core sample of Long Island Gneiss bedrock unit at PB-3) to 130 mg/kg (core sample of schist-amphibolite bedrock unit at PB-7, near WGWC-10).
- 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 recalcitrant fractions that will liberate lithium through mineral weathering. Saprolite and partially weathered rock (PWR) derived through the weathering of the parent bedrock contains similar minerals and/or constituents as the parent bedrock. During the weathering process and as groundwater flows through saprolite, PWR, and bedrock fractures, the minerals/constituents can be liberated and partially dissolve into groundwater.
- Using a literature-derived distribution coefficient (K<sub>d</sub>) 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. The area southeast and south of AP-1 is underlain primarily by three lithologic units; (i) residual soils and



saprolite, (ii) partially weathered rock (PWR), and (iii) metamorphic crystalline bedrock. Geologic investigations and mapping performed by Golder Associates (Golder) in 2015 indicates that bedrock units present southeast and south of AP-1 consist primarily of schist, amphibolite, gneiss, and quartzite. Characteristics of the various bedrock units were described by Golder in the *Geologic and Hydrogeologic Report* (Golder, 2018). The bedrock units at the Site steeply dip to the east-southeast and are marked by three mapped faults (Golder, 2018).

A Hydrogeologic Assessment Report Revision 01 (HAR Rev. 01) prepared for AP-1 by Geosyntec (2019) provided an updated geologic map based on data collected during geologic investigations completed between 2016 and 2017. Additional geologic data collected by Geosyntec during borehole drilling and piezometer installation activities completed between September and November 2020 (Geosyntec, 2021) have been used to refine the site-specific geologic map. The locations of monitoring wells and piezometers relative to the geologic units underlying AP-1 based on data collected through November 2020 are shown on **Figure 1**.

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 between 2017 and 2021, and the *HAR Rev. 01* (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 related or from a common influence, while non-significant low correlations or negative r values indicate that the occurrence of two parameters are unrelated or potentially not originating from the same source. Results indicated that while boron had a positive correlation with some other Appendix III constituents at individual wells, lithium either did not significantly correlate with boron (WGWC-9) or showed a negative correlation between these two constituents (WGWC-8), suggesting potentially different sources for boron and lithium in groundwater. Further, due to insufficient detections of boron at WGWC-10 (a location which no longer constitutes an SSL for lithium) and at WGWC-19 (the location with the highest lithium concentrations in groundwater), no correlation analyses could be completed for boron.

This ASD Addendum updated the correlation evaluation to incorporate additional groundwater data collected after submittal of the 2018 ASD. 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 with the exception of a positive correlation with pH. This suggests a common source of boron, calcium, and TDS, but a different source for lithium and pH in this well. The explanation for the positive correlation between pH and lithium in this well is unclear, as lithium shows weak sorption that slightly increases with increasing pH (Robinson et al., 2018), which should result in less lithium in groundwater as pH increases, not more as the positive correlation would suggest.

- WGWC-9: Boron does not statistically correlate with lithium but does show statistically significant positive correlations with calcium, chloride, 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, chloride, 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, sulfate, and pH. This suggests a common source for these constituents in this well. The higher pH values (i.e., > 8.5 s.u.) measured in this well during the early phase of the monitoring program in 2016 might indicate lingering well installation effects that appear to correlate strongly with lithium concentrations. Given that boron concentrations were mostly non-detect and/or consistent with background conditions, concentrations of fluoride and sulfate were very low (and much lower compared to other wells), pH has shown a decreasing trend since 2016, and lithium has shown a decreasing trend since 2016 such that this constituent is no longer identified as an SSL at this well, this common source of constituents in this well is likely derived from weathering/dissolution of the natural formation and well installation effects rather than AP-1.
- 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 does not show a statistically significant correlation with Appendix III constituents. The mostly non-detect concentrations of boron and lack of statistically significant correlations between lithium and Appendix III constituents suggest that AP-1 is not the source of lithium at this location.

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. While pH was included in this correlation analysis, pH is not as useful for assessing lithium mobilization or immobilization as it is for other trace elements as lithium does not respond to changes in pH to the extent that many other trace elements do. 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 Laboratory Analytical Results of Rock Samples

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 from locations PB-8 and PB-9, and the button schist unit<sup>2</sup> from WGWC-19 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. Rock core samples from PB-3, PB-4, PB-7, PB-8, WGWC-8, and WGWC-19 were available. Cores from the following locations were selected for laboratory analyses:

- PB-3 and PB-4 are located in proximity to WGWC-9 (**Figure 1** and **Figure 2**) and cores were available at each location from the approximate screen interval of WGWC-9. Boring logs for PB-3 and PB-4 indicate quartzite present from just below ground surface to approximately 40 feet below ground surface (ft bgs) at PB-3 and from approximately 15 ft bgs to approximately 50 ft bgs at PB-4. Gneiss was encountered underlying the quartzite unit at an elevation of approximately 765 feet relative to the North American Vertical Datum of 1988 (ft NAVD88) at PB-3 and 759 ft NAVD88 at PB-4. WGWC-9 is screened from approximately 761 to 751 ft NAVD88 in PWR, indicating that the weathered rock unit within the WGWC-9 well screen interval consists of weathered gneiss of the same unit encountered at PB-3 and PB-4.
- PB-7 and PB-8 are located in proximity to WGWC-10 (**Figure 1** and **Figure 2**) and cores were available at each location from the approximate screen interval of WGWC-10. Samples representing schist of the schist-amphibolite bedrock unit

<sup>&</sup>lt;sup>2</sup> The 2018 ASD identified rock core samples collected at WGWC-19 between depths of 77 and 92 feet below ground surface (ft bgs) as representative of the schist-amphibolite bedrock unit. Review of the *Geologic and Hydrogeologic Report* (Golder, 2018) and the boring logs for WGWC-19, WAMW-1, and WAMW-2, indicates the core samples consisted of graywacke (samples collected between 77 and 86 ft bgs) and micaceous schist (samples collected between 88 and 92 ft bgs). The rock core descriptions and location of WGWC-19 are consistent with the button schist lithologic bedrock unit described in the *Geologic and Hydrogeologic Report* (Golder, 2018).



were collected. WGWC-10 is screened from approximately 674 to 664 ft NAVD88 in saprolite and PWR derived from the schist-amphibolite unit.

- Rock core samples from the approximate well screen interval of WGWC-8 were available.
- Rock core samples from the approximate well screen interval of WGWC-19 were available.

Boring logs for locations where rock cores were collected as part of the 2018 ASD and ASD Addendum evaluations, and boring logs for WGWC-9, WGWC-10, WAMW-1 and WAMW-2, 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<sub>d</sub> of 300 L/kg for lithium (Baes et al., 1984). This K<sub>d</sub> value is consistent with the value of 245 L/kg cited in Robinson et al. (2018) for geogenic lithium. 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 0.0054 mg/L in WGWC-10 to 0.056 mg/L in WGWC-19 during the September 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 80 in boring PB-7. This suggests that the range of 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:

- O 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.
- o 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 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.
- O 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<sub>d</sub> 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 2021 Semiannual Groundwater Monitoring and Corrective Action Report due to GA EPD in August 2021.

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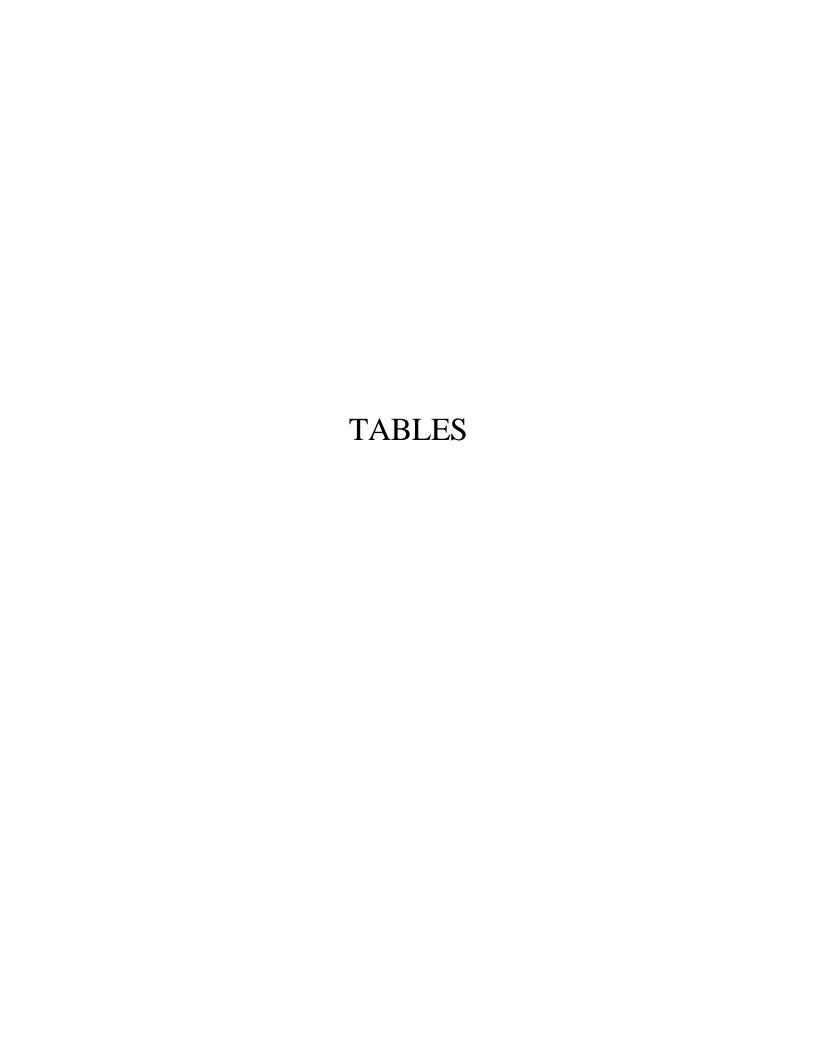


Table 1

Lithium and Appendix III Concentrations in Groundwater and Pearson's Correlation Coefficients
Plant Wansley AP-1, Carroll and Heard Counties, Georgia

Boron	WGWC-8																	
DOLOH	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS	pН											
1.4	0.0215	31.4	17.5	0.304	146	311	5.99											
1.4	0.0260	28	19	0.27	150	290	6.19											
1.2	0.0570	27	19	0.24	140	270	6.38											
1.3	0.0170	32	25	0.2	160	320	5.7											
1.8	0.0120	41	33	0.27	180	330	5.66											
1.7	0.0140	38	38	0.25	170	370	5.77											
2	0.0091	39	42	0.31	180	380	5.39											
1.8	0.0130	53	48	0.37	180	380	5.59											
1.8	0.0180	60	60	0.35	180	450	5.46											
1.7	0.0150	52	58	0.56	170	410	5.76											
1.9	0.0130	65	300	0.27	780	520	5.39											
1.7	0.0150	61	70	0.5	180	430	5.55											
1.7 2.2						0.0140	57	70	0.42	190	440	5.39						
						2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0.0150
2.5	0.0130	81	100	0.14	200	600	5.17											
	-0.60	0.84	0.44	-0.27	0.23	0.87	-0.47											
	0.0191	0.0009	0.1007	0.5504	0.4096	0.0003	0.0771											
		-0.47	-0.28	-0.13	-0.20	-0.50	0.63 0.0118											
	1.4 1.2 1.3 1.8 1.7 2 1.8 1.8 1.7 1.9 1.7 1.7 2.2 2.5	1.4     0.0260       1.2     0.0570       1.3     0.0170       1.8     0.0120       1.7     0.0140       2     0.0091       1.8     0.0130       1.8     0.0180       1.7     0.0150       1.9     0.0130       1.7     0.0150       1.7     0.0140       2.2     0.0150       2.5     0.0130        -0.60       0.0181	1.4     0.0260     28       1.2     0.0570     27       1.3     0.0170     32       1.8     0.0120     41       1.7     0.0140     38       2     0.0091     39       1.8     0.0130     53       1.8     0.0180     60       1.7     0.0150     52       1.9     0.0130     65       1.7     0.0150     61       1.7     0.0140     57       2.2     0.0150     79       2.5     0.0130     81         0.84       0.0181     0.0009	1.4     0.0260     28     19       1.2     0.0570     27     19       1.3     0.0170     32     25       1.8     0.0120     41     33       1.7     0.0140     38     38       2     0.0091     39     42       1.8     0.0130     53     48       1.8     0.0180     60     60       1.7     0.0150     52     58       1.9     0.0130     65     300       1.7     0.0150     61     70       1.7     0.0140     57     70       2.2     0.0150     79     98       2.5     0.0130     81     100        -0.60     0.84     0.44       0.0181     0.0009     0.1007	1.4       0.0260       28       19       0.27         1.2       0.0570       27       19       0.24         1.3       0.0170       32       25       0.2         1.8       0.0120       41       33       0.27         1.7       0.0140       38       38       0.25         2       0.0091       39       42       0.31         1.8       0.0130       53       48       0.37         1.8       0.0180       60       60       0.35         1.7       0.0150       52       58       0.56         1.9       0.0130       65       300       0.27         1.7       0.0150       61       70       0.5         1.7       0.0140       57       70       0.42         2.2       0.0150       79       98       0.057         2.5       0.0130       81       100       0.14          -0.60       0.84       0.44       -0.27         0.0181       0.0009       0.1007       0.3304	1.4     0.0260     28     19     0.27     150       1.2     0.0570     27     19     0.24     140       1.3     0.0170     32     25     0.2     160       1.8     0.0120     41     33     0.27     180       1.7     0.0140     38     38     0.25     170       2     0.0091     39     42     0.31     180       1.8     0.0130     53     48     0.37     180       1.8     0.0180     60     60     0.35     180       1.7     0.0150     52     58     0.56     170       1.9     0.0130     65     300     0.27     780       1.7     0.0140     57     70     0.42     190       2.2     0.0150     79     98     0.057     200       2.5     0.0130     81     100     0.14     200        -0.60     0.84     0.44     -0.27     0.23       -0.0181     0.0009     0.1007     0.3304     0.4096	1.4         0.0260         28         19         0.27         150         290           1.2         0.0570         27         19         0.24         140         270           1.3         0.0170         32         25         0.2         160         320           1.8         0.0120         41         33         0.27         180         330           1.7         0.0140         38         38         0.25         170         370           2         0.0091         39         42         0.31         180         380           1.8         0.0130         53         48         0.37         180         380           1.8         0.0180         60         60         0.35         180         450           1.7         0.0150         52         58         0.56         170         410           1.9         0.0130         65         300         0.27         780         520           1.7         0.0150         61         70         0.5         180         430           1.7         0.0140         57         70         0.42         190         440           2.5											

- (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

			WGW(	C-9										
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS	pН						
5/19/2016	0.31	0.0335	8.53	1.46	1.58	35.9	134	6.31						
7/20/2016	0.25	0.024	8.2	1.5	2.0	37	120	6.35						
9/14/2016	0.30	0.039	8.8	1.4	1.8	39	140	6.33						
2/9/2017	0.61	0.04	10	1.5	1.3	60	180	6.03						
3/15/2017	0.42	0.035	8.6	1.3	1.3	44	160	5.99						
4/11/2017	0.37	0.034	8.6	1.2	1.4	36	120	6.04						
4/26/2017	0.38	0.029	7.1	1.2	1.5	37	140	6.03						
8/10/2017	0.29	0.038	7.5	1.3	1.6	38	130	5.86						
10/12/2017	0.36	0.048	8.2	1.4	1.5	37	120	6.09						
6/14/2018	0.39 0.37 0.35 0.39 0.55	0.034	7.5	1.2	1.4	37	120	6.47						
10/4/2018		0.35 0.39	0.039	8.0	1.2	1.4	38	140	6.17					
4/3/2019			0.39	0.39	0.39	0.035	7.2	2.0	1.3	41	120	6.1		
9/19/2019								0.036	8.1	1.5	1.3	42	130	6.38
3/19/2020								0.55						
9/23/2020	0.68	0.033	10	2.4	0.8	54	150	5.8						
Pearson's Correlation														
Coefficient (r) - Boron		0.18	0.73	0.61	-0.85	0.87	0.71	-0.20						
p-value		0.5209	0.0020	0.0157	0.0001	2.50E-05	0.0030	0.4748						
Pearson's Correlation														
Coefficient (r) - Lithium			0.20	-0.02	-0.24	0.16	0.19	-0.04						
p-value			0.4748	0.9436	0.3889	0.5689	0.4976	0.8874						

- (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

			WGWC	C-10											
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS	pН							
5/18/2016	ND	0.0320	7.17	1.45	0.206	2.84	70	8.96							
7/20/2016	ND	0.0210	7	1.6	0.23	2.8	42	8.57							
9/14/2016	ND	0.0200	7.7	1.5	0.17	2.8	40	7.22							
11/11/2016	ND	0.0170	8.2	1.5	0.14	2.6	72	6.96							
2/6/2017	ND	0.0160	9.1	1.4	0.15	2.7	24	6.93							
3/15/2017	0.032	0.0140	9	1.4	0.16	2.7	78	6.82							
4/26/2017	ND	0.0110	8.1	1.3	0.17	2.5	48	6.73							
8/10/2017	ND	0.0110	8.1	1.4	0.2	2.2	38	6.66							
10/12/2017	ND	0.0160	8.6	1.3	0.14	1.9	72	6.67							
6/14/2018	ND	0.0084	7.7	1.3	0.15	2	40	6.56							
10/4/2018	ND 0.024 ND	0.024	0.0085	8.5	1.3	0.18	1.9	60	6.40						
4/4/2019									0.0059	7.9	1.4	0.13	2.2	30	6.46
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	6.40							
9/23/2020	ND	0.0054	7.7	1.3	0.090	1.8	50	6.14							
Pearson's Correlation Coefficient (r) - Boron p-value		Insufficie	Insufficient detections of boron to complete evaluation of correlation of boron to lithium, and boron to other Appendix III constituents												
Pearson's Correlation Coefficient (r) - Lithium			-0.18	0.41	0.62	0.76	0.27	0.91							
p-value			0.5209	0.1291	0.0137	0.0010	0.3304	1.00E-05							

- (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

			WGWC	-19												
	Boron	Lithium	Calcium	Chloride	Fluoride	Sulfate	TDS	pН								
								6.93								
11/11/2016	ND	0.0450	12	2.6	0.32	3.4	98	6.80								
2/6/2017	ND	0.0500	11	2.6	0.45	3.7	36	6.78								
3/15/2017	ND	0.0520	10	2.4	0.37	3.6	120	6.79								
4/11/2017	ND	0.0480	11	2.3	0.37	3.2	68	6.82								
4/26/2017	ND	0.0440	8.4	2.3	0.4	3.3	76	6.76								
6/7/2017	ND	0.0470	9	2.5	0.35	3.8	74	6.99								
7/11/2017	ND	0.0450	9.5	2.3	0.39	3.3	70	6.59								
8/10/2017	ND	0.0560	8.8	2.5	0.42	3.7	66	6.72								
6/14/2018	ND ND ND 0.024 ND	0.0480	8.9	2.4	0.35	3.5	74	6.67								
10/4/2018		ND 0.024	0.0620	10	2.6	0.35	4.6	100	6.75							
4/2/2019			0.024	0.024	0.0520	11	2.5	0.33	3.8	88	6.71					
9/18/2019					+				0.024	0.0520	8.8	2.7	0.32	3.6	96	6.9
5/4/2020								0.0490	15	2.8	0.36	4.5	110	7.11		
9/23/2020	ND	0.0560	13	2.6	0.25	3.0	94	6.59								
Pearson's Correlation Coefficient (r) - Boron p-value		Insufficie	Insufficient detections of boron to complete evaluation of correlation of boron to lithium, and boron to other Appendix III constituents													
Pearson's Correlation Coefficient (r) - Lithium p-value			0.06 0.8385	0.39 0.1680	-0.22 0.4498	0.44 0.1154	0.25 0.3887	-0.17 0.5612								

- (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 <sub>4</sub> ) 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 <sub>3</sub> -H <sub>2</sub> 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 <sub>3</sub> ), hydrochloric acid (HCl), and boric acid (H <sub>3</sub> BO <sub>3</sub> ).

(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

	PB-3 <sup>(1)</sup>	PB-3 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-7 <sup>(2)</sup>	PB-8 <sup>(2)</sup>	WGWC-8	WGWC-19	WGWC-19
Sample Location:										
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) (3):	NA	NA	NA	NA	NA	NA	NA	730 - 720	699 - 689	699 - 689
Adjacent Compliance Well and Approximate Screen Interval (ft NAVD88) (4):	WGWC-9 (761 - 751)	WGWC-10 (674 - 664)	WGWC-10 (674 - 664)	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 (Unit):	Gneiss (Long Island Creek Gneiss)	Schist (Schist-Amphibolite)	Schist (Schist-Amphibolite)	Quartzite	Schist (Button Schist)	Schist (Button Schist)				
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

1 of 1

# Notes:

ft bgs = feet below ground surface

ft NAVD88 = North American Vertical Datum of 1988.

mg/kg = milligram per kilogram

- (1) The well screen of WGWC-9 is set in weathered gneiss derived from the same bedrock gneiss unit encountered at PB-3 and PB-4.
- (2) The well screen of WGWC-10 is set in saprolite and weathered schist derived from the same bedrock schist-amphibolite unit encountered at PB-7 and PB-8.
- (3) Screen interval of compliance well shown for comparison to core sample collection interval. NA if core sample location is not a compliance well.
- (4) 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.

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Table 4

Comparison of Predicted and Measured Lithium Concentrations in Groundwater Plant Wansley AP-1, Carroll and Heard Counties, Georgia

Samuela I a anti-ma	PB-3 <sup>(1)</sup>	PB-3 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-4 <sup>(1)</sup>	PB-7 <sup>(2)</sup>	PB-8 <sup>(2)</sup>	WGWC-8	WGWC-19	WGWC-19
Sample Location:										
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):	758 - 753	748 - 744	760 - 750	745 - 741	736 - 729	673 - 663	712 - 702	731 - 721	694 - 693	692 - 691
Screen Interval of Compliance Well (ft NAVD88) (3):	NA	NA	NA	NA	NA	NA	NA	730 - 720	699 - 689	699 - 689
Adjacent Compliance Well and Approximate Screen Interval (ft NAVD88) <sup>(4)</sup> :	WGWC-9 (761 - 751)	WGWC-10 (674 - 664)	WGWC-10 (674 - 664)	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 (Unit):	Gneiss (Long Island Creek Gneiss)	Schist (Schist-Amphibolite)	Schist (Schist-Amphibolite)	Quartzite	Schist (Button Schist)	Schist (Button Schist)				
Total Lithium Concentration in Core (mg/kg)	22	17	36	43	36	130	53	17	86	70
Predicted Lithium in Groundwater (mg/L) (5)	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) <sup>(6)</sup>	0.033 (7)	0.033 (7)	0.033 (7)	0.033 (7)	0.033 (7)	0.0054 (8)	0.0054 (8)	0.013	0.056	0.056

1 of 1

### Notes:

ft bgs = feet below ground surface

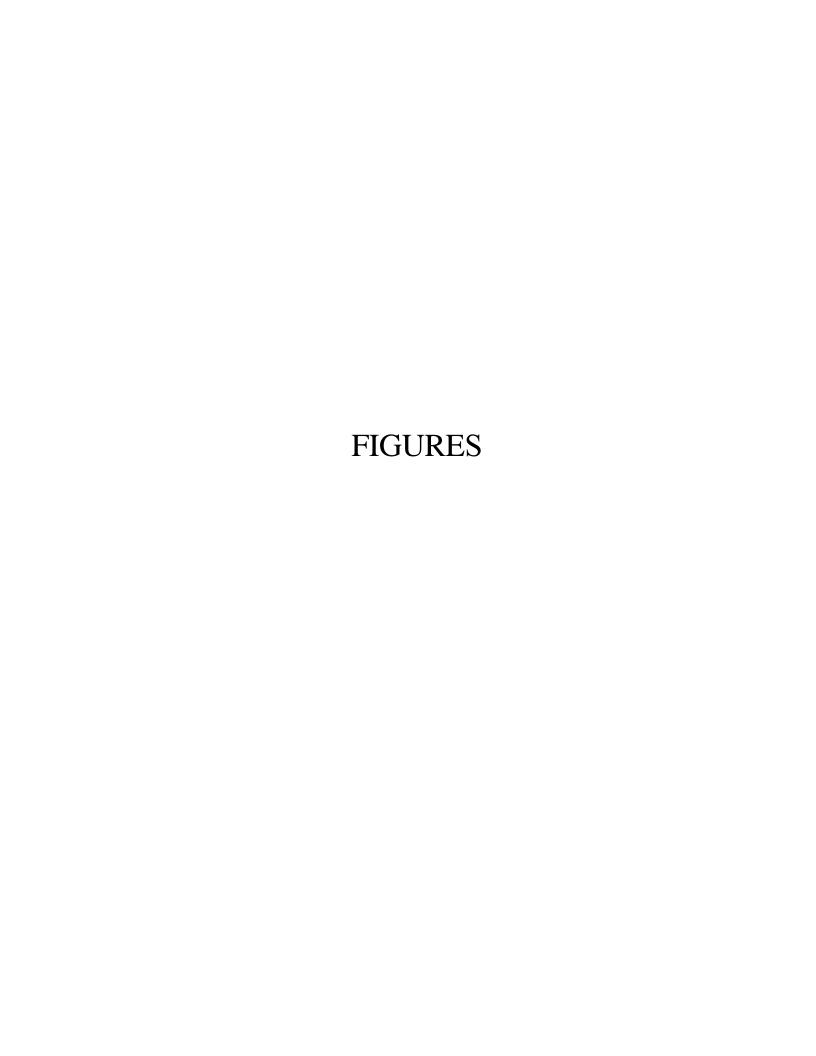
ft NAVD88 = North American Vertical Datum of 1988.

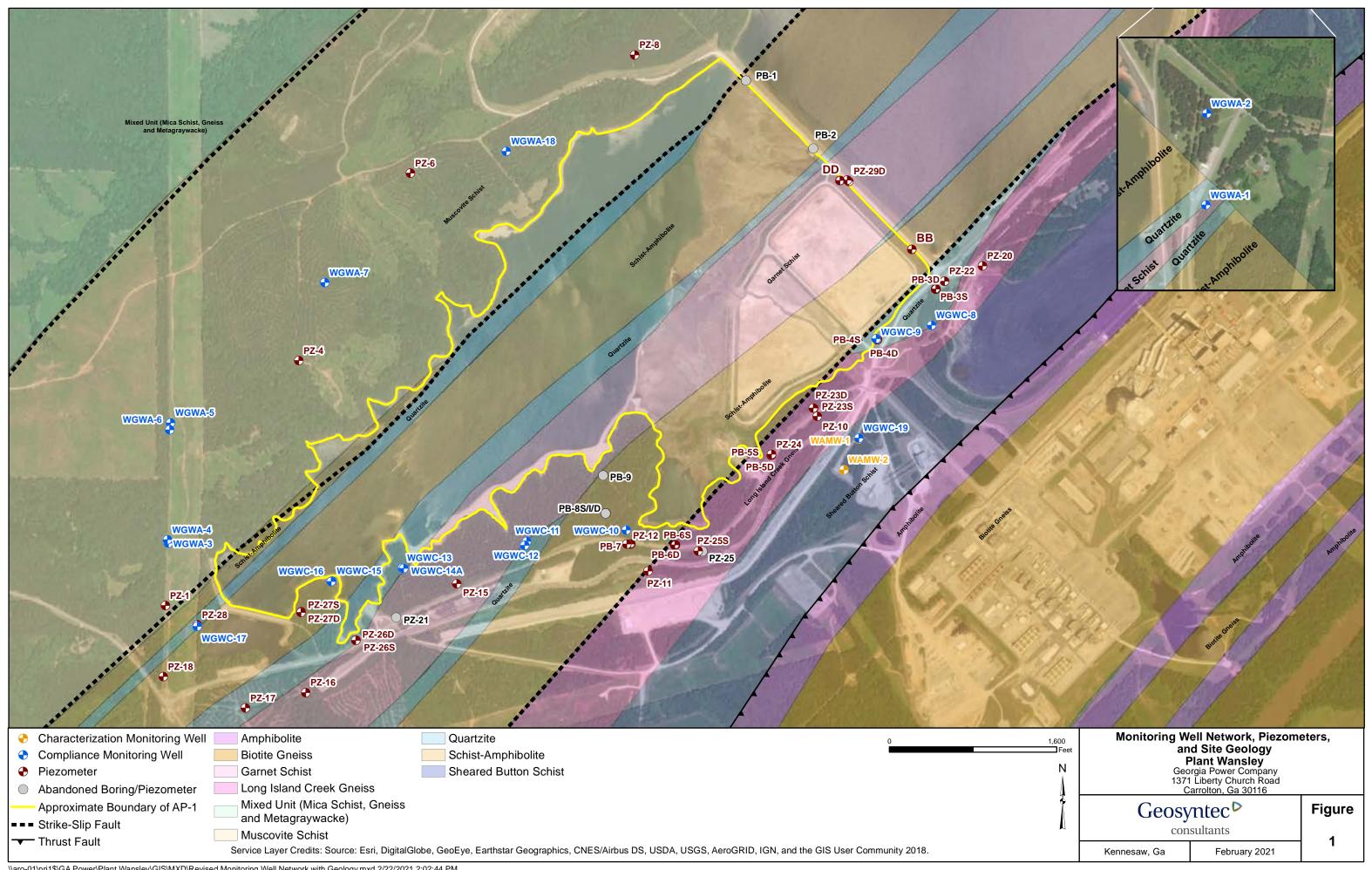
mg/kg = milligram per kilogram

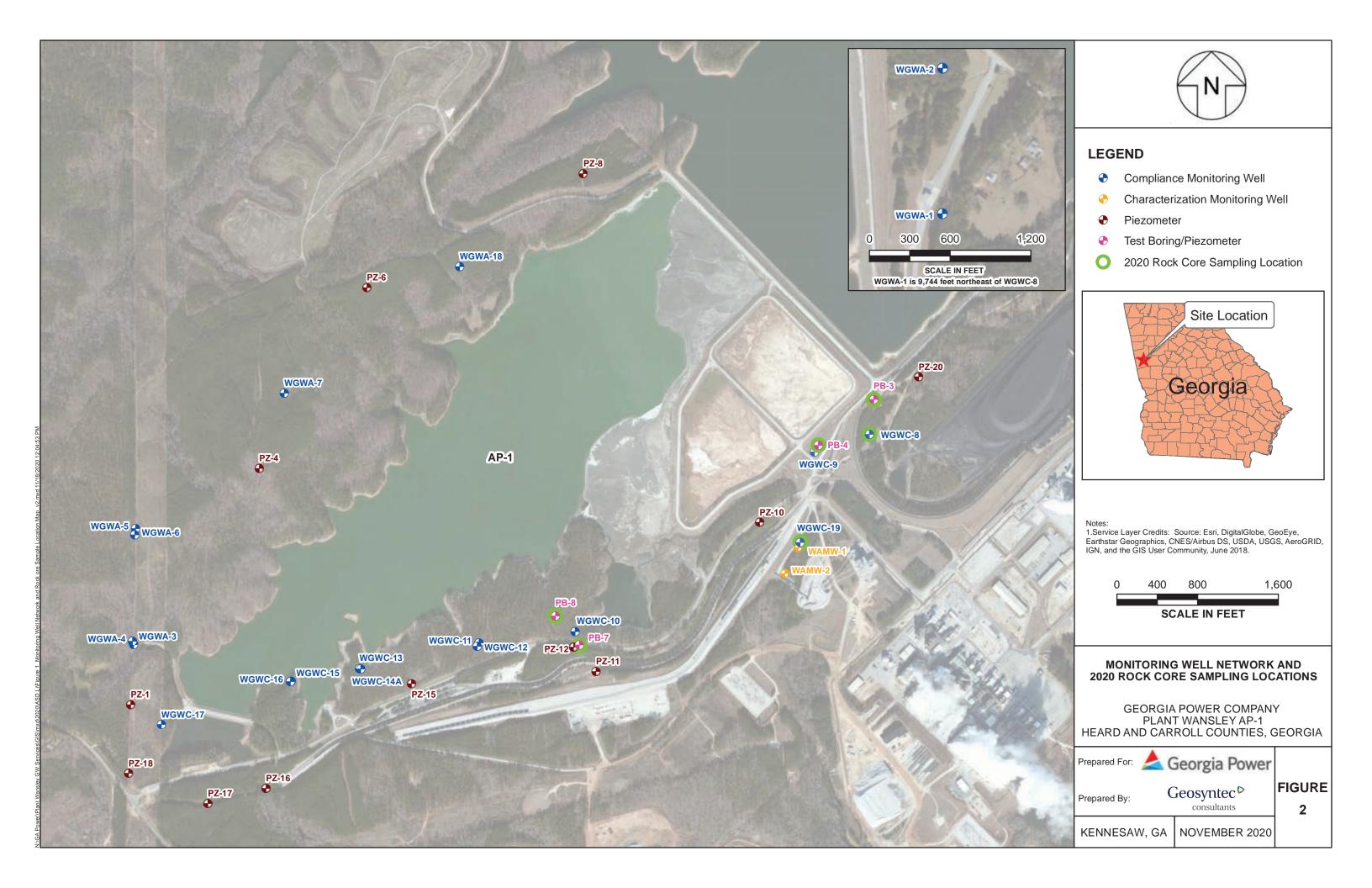
mg/L - milligram per liter

- (1) The well screen of WGWC-9 is set in weathered gneiss derived from the same bedrock gneiss unit encountered at PB-3 and PB-4.
- (2) The well screen of WGWC-10 is set in saprolite and weathered schist derived from the same bedrock schist-amphibolite unit encountered at PB-7 and PB-8.
- (3) Screen interval of compliance well shown for comparison to core sample collection interval. NA if core sample location is not a compliance well.
- (4) 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.
- (5) Predicted concentrations of lithium in groundwater based on distribution coefficent (K<sub>d)</sub> = 300 L/kg (Baes et al., 1984). Predicted concentrations calculated by dividing lithium concentrations in cores (mg/kg) by 300 L/kg.
- (6) Lithium concentration in compliance well detected during the September 2020 semiannual groundwater assessment event.
- (7) Lithium concentration in compliance well WGWC-9 during the September 2020 semiannual groundwater assessment event.
- (8) Lithium concentration in compliance well WGWC-10 during the September 2020 semiannual groundwater assessment event.

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# APPENDIX A

**Select Boring Logs** 



Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-3D/3S

Page: 1 of 4

 Drilling Start Date:
 2/23/2017
 Boring Depth (ft):
 63
 Well Depth (ft):
 (28-38) & (52-62)

 Drilling End Date:
 2/24/2017
 Boring Diameter (in):
 6" x 4"
 Well Diameter (in):
 1

Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01 Sonic/HQ Rock Coring **PVC** Drilling Method: DTW During Drilling (ft): Riser Material: **PVC** Full size truck DTW After Drilling (ft): Screen Material: Drilling Equipment:

Driller Name: V. Scott

Logged By: J. Ivanowski

Driv Atter Drilling (tr).

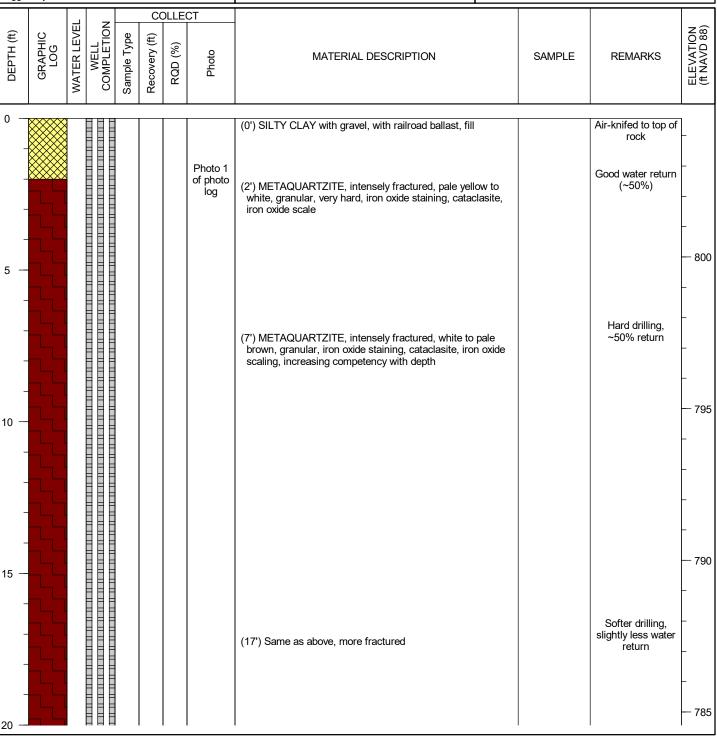
Ground Surface Elev. (ft): 804.57

Location (Y, X): 1243273.69, 2029686.62

Scel Material: FVC

Seal Material(s): Bentonite

Filter Pack: 20/40 silica sand



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-3D/3S

Page: 2 of 4

0.01

**PVC** 

Screen Slot (in):

Riser Material:

 Drilling Start Date:
 2/23/2017
 Boring Depth (ft):
 63
 Well Depth (ft):
 (28-38) & (52-62)

 Drilling End Date:
 2/24/2017
 Boring Diameter (in):
 6" x 4"
 Well Diameter (in):
 1

Drilling End Date: 2/24/2017 Boring Diameter (in): 6" x 4"

Drilling Company: Cascade
Drilling Method: Sonic/HQ Rock Coring

Boring Diameter (in): 6" x 4"

Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): --

Drilling Equipment: Full size truck
Driller Name: V. Scott

Logged By: J. Ivanowski

DTW After Drilling (ft): -Ground Surface Elev. (ft): 804.57
Location (Y, X): 1243273.69, 2029686.62

Screen Material: PVC
Seal Material(s): Bentonite
Filter Pack: 20/40 silica sand

			_		CC	OLLE	СТ				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
20 -							,				
25 —		Ţ						(20') METAQUARTZITE, intensely fractured, pale yellow to white, iron oxide staining, felsic cataclasite, iron oxide staining		Moderately hard drilling, water recovery ~30%	- - - 780 -
30 -							Photo 8 of photo log	(30') GNEISS, intensely fractured, pale blue to pink, weakly foliated, staining of fracture surfaces  (32') METAQUARTZITE, intensely fractured, pale brown to tan, cataclasite, gravelly, highly oxidized			775 - - -
35 —							Photo 11 of photo log	(36') Same rock as above, more competent, fewer natural fractures		Harder drilling, water return ~60%	770  - - - 765
40 –							ı			1	'



NOTE:

Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-3D/3S

Page: 3 of 4

 Drilling Start Date:
 2/23/2017
 Boring Depth (ft):
 63
 Well Depth (ft):
 (28-38) & (52-62)

 Drilling End Date:
 2/24/2017
 Boring Diameter (in):
 6" x 4"
 Well Diameter (in):
 1

Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Screen Slot (in): 0.01
Drilling Method: Sonic/HQ Rock Coring
Drilling Equipment: Full size truck Screen Material: PVC
DTW After Drilling (ft): -- Screen Material: PVC

Drilling Equipment: Full size truck

Driller Name: V. Scott

Logged By: J. Ivanowski

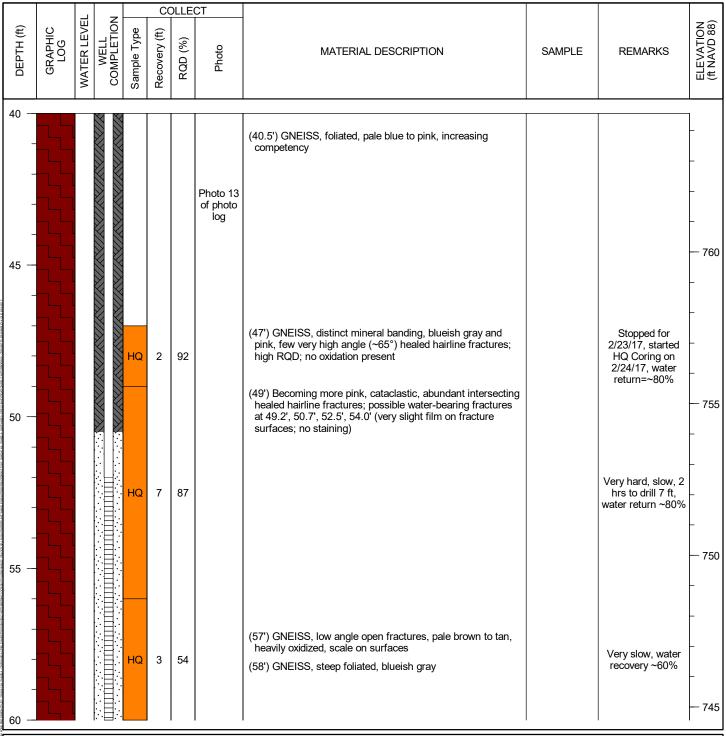
DTW After Drilling (ft): -
Ground Surface Elev. (ft): 804.57

Location (Y, X): 1243273.69, 2029686.62

Screen Material: PVC

Seal Material(s): Bentonite

Filter Pack: 20/40 silica sand



J. Ivanowski



Logged By:

**Southern Company Services** Client:

**Plant Wansley Pre-Design Investigation** Project: Address:

1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-3D/3S

Page: 4 of 4

(28-38) & (52-62) 2/23/2017 Boring Depth (ft): Well Depth (ft): Drilling Start Date:

Drilling End Date: 2/24/2017 Boring Diameter (in): 6" x 4" Drilling Company: Cascade Sampling Method(s): ST, SC, HQ

Drilling Method: Sonic/HQ Rock Coring DTW During Drilling (ft): Full size truck DTW After Drilling (ft): Drilling Equipment: Driller Name: V. Scott Ground Surface Elev. (ft):

804.57 Location (Y, X): 1243273.69, 2029686.62 Well Diameter (in):

Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** 20/40 silica sand Filter Pack:

Γ				_		CC	DLLE	СТ				
	DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
6	-		l L						(58') GNEISS, steep foliated, blueish gray(continued)			_

(63.0') Boring Terminated

NOTE:			



**Southern Company Services** Client: Project: **Plant Wansley Pre-Design Investigation** 

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-4D/4S

Page: 1 of 4

(25-35) & (63-73) Drilling Start Date: 2/21/2017 Boring Depth (ft): Well Depth (ft):

Drilling End Date: 2/22/2017 Boring Diameter (in): 6" x 4" Drilling Company: Sampling Method(s): ST, SC, HQ Cascade

Sonic/HQ Rock Coring Drilling Method: DTW During Drilling (ft): DTW After Drilling (ft): Full size truck Drilling Equipment: V. Scott Ground Surface Elev. (ft): Driller Name:

809.43 Location (Y, X): 1242790.61, 2029126.42 J. Ivanowski

Well Diameter (in):

Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material: **Bentonite** Seal Material(s): Filter Pack: 20/40 silica sand

Logged By: COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft NAVD 88) GRAPHIC LOG DEPTH (ft) Sample Type Recovery (ft) RQD (%) Photo MATERIAL DESCRIPTION **SAMPLE** REMARKS 0 (0') SANDY SILT with cobbles (ML) 0-10' removed by air knife 805 5 (8') Becomes very hard 800 10 (10') SILT with angular gravel (ML); very dense, wet, pale yellow to white, relict rock fabric, SAPROLITE PB-4 (11-12) Photo 2 ~75% water SC 8 of photo recovery log (14') PARTIALLY WEATHERED ROCK, hard, dry, Driller reporterd 795 Photo 4 fragments of gneiss very hard drilling of photo PB-4 (15-16) (15') SILT with angular gravel (ML); very dense, wet, pale 50% water log yellow to white, relict rock fabric, SAPROLITE recover (16.5') METAQUARTZITE, banded, pale gray to white (17.5') METAQUARTZITE, granular, intensely fractured rock, felsic gneiss to quartzite, abundant oxidation along fractures 790 20

NOTE:



Client: **Southern Company Services** Project: **Plant Wansley Pre-Design Investigation** 

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-4D/4S

Page: 2 of 4

0.01

**PVC** 

(25-35) & (63-73) Drilling Start Date: 2/21/2017 Boring Depth (ft): Well Depth (ft): Drilling End Date: 2/22/2017 Boring Diameter (in): 6" x 4" Well Diameter (in):

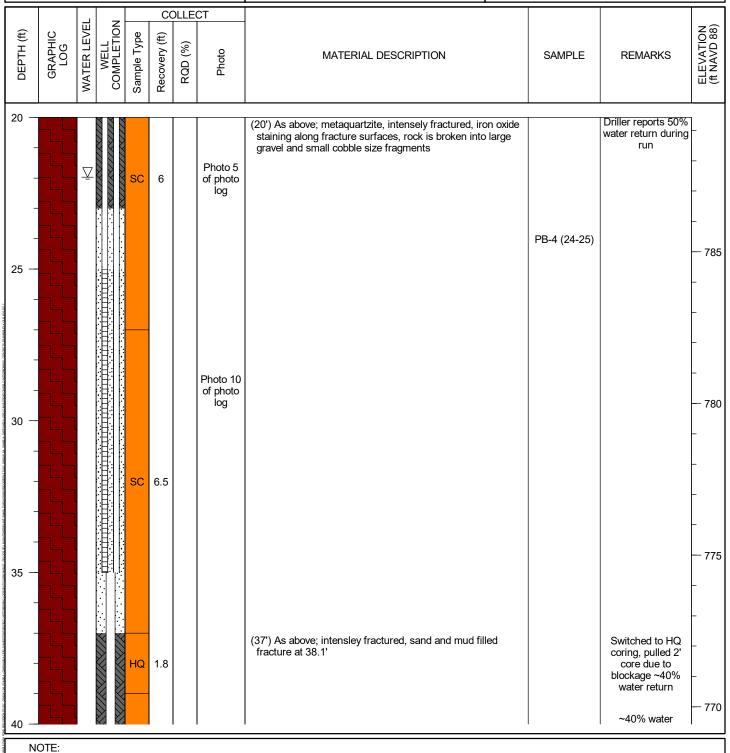
Drilling Company: Cascade Sampling Method(s): ST, SC, HQ

Sonic/HQ Rock Coring Drilling Method: DTW During Drilling (ft): Drilling Equipment: Full size truck DTW After Drilling (ft): V. Scott Ground Surface Elev. (ft): 809.43 Driller Name: Logged By: J. Ivanowski

**PVC** Screen Material: **Bentonite** Seal Material(s): Location (Y, X): 1242790.61, 2029126.42 20/40 silica sand Filter Pack:

Screen Slot (in):

Riser Material:





Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-4D/4S

Page: 3 of 4

Drilling Start Date: 2/21/2017 Boring Depth (ft): 80 Well Depth (ft): (25-35) & (63-73)

Drilling End Date: 2/22/2017

Drilling Company: Cascade

Boring Diameter (in): 6" x 4"

Sampling Method(s): ST, SC, HQ

Drilling Method: Sonic/HQ Rock Coring
Drilling Equipment: Full size truck
Driller Name: V. Scott

DTW During Drilling (ft): -DTW After Drilling (ft): -Ground Surface Elev. (ft):

Driller Name: V. Scott
Logged By: J. Ivanowski Ground Surface Elev. (ft): 809.43
Location (Y, X): 1242790.61, 2029126.42

Well Diameter (in): **1** 

Screen Slot (in):

Riser Material:

Screen Material:

Seal Material(s):

Filter Pack:

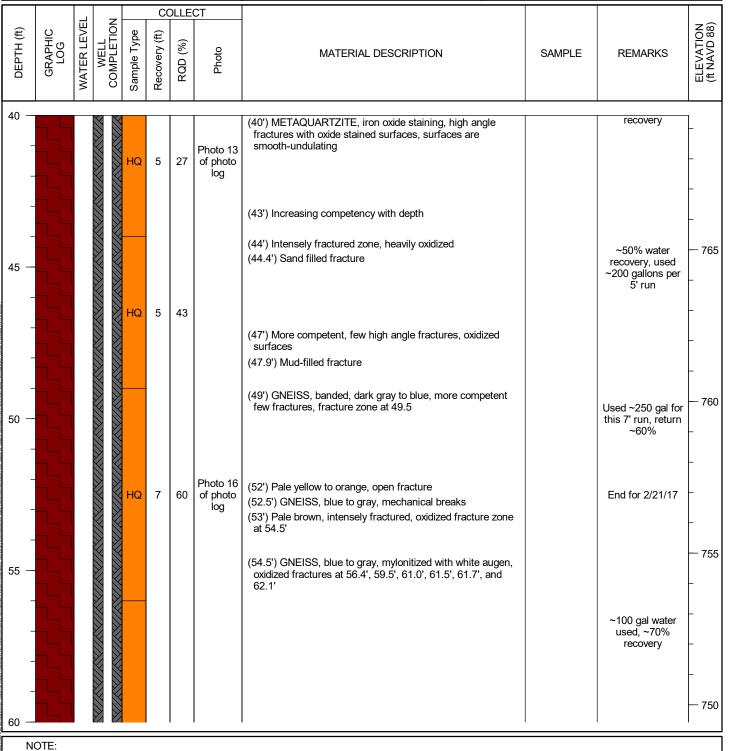
0.01

PVC

PVC

Bentonite

20/40 silica sand





**Southern Company Services** Client: Project: **Plant Wansley Pre-Design Investigation** 

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-4D/4S

Page: 4 of 4

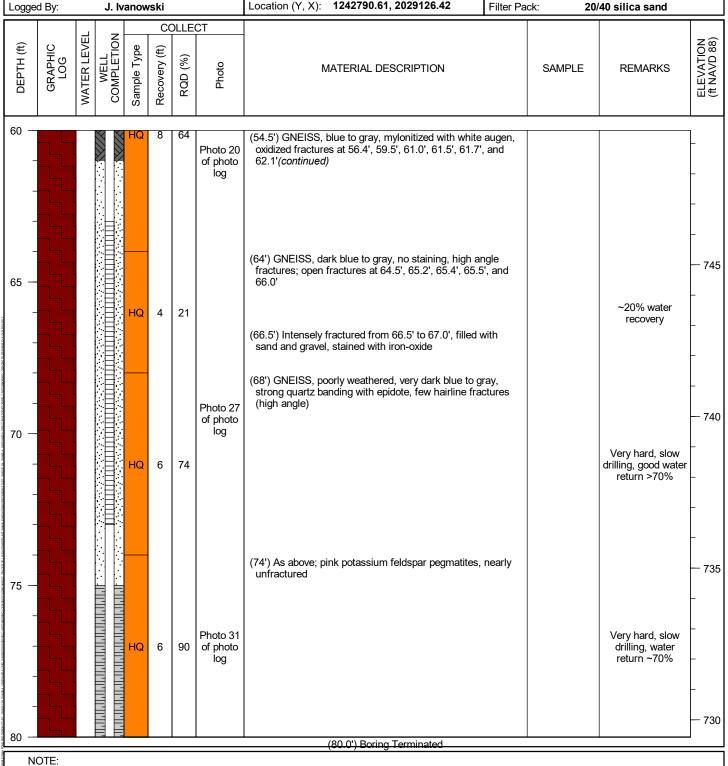
(25-35) & (63-73) Drilling Start Date: 2/21/2017 Boring Depth (ft): Well Depth (ft):

Drilling End Date: 2/22/2017 Boring Diameter (in): 6" x 4" Drilling Company: Cascade Sampling Method(s): ST, SC, HQ Sonic/HQ Rock Coring Drilling Method: DTW During Drilling (ft):

Drilling Equipment: Full size truck DTW After Drilling (ft): V. Scott Ground Surface Elev. (ft): Driller Name: J. Ivanowski

809.43 Location (Y, X): 1242790.61, 2029126.42 Well Diameter (in): Screen Slot (in):

0.01 Riser Material: **PVC PVC** Screen Material: **Bentonite** Seal Material(s): 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-7

Page: 1 of 9

3/23/2017 Drilling Start Date: Drilling End Date: 3/31/2017 Drilling Company: Cascade

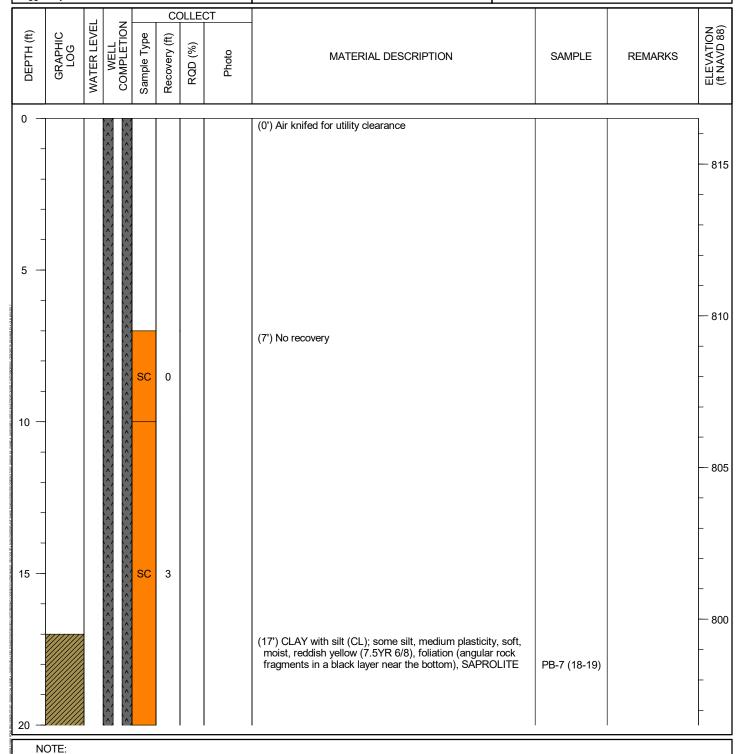
Sonic/HQ Rock Coring Drilling Method:

Drilling Equipment: **Terra Sonic** A. Blackwood Driller Name: 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): Ground Surface Elev. (ft): 816.51

Location (Y, X): 1240837.08, 2026768.14

(65-75)Well Depth (ft): Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: **Bentonite** Seal Material(s): 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 I

Drilling Equipment: Terra Sonic
Driller Name: A. Blackwoo
Logged By: N. Tilahun a

Cascade Sampling Method(s): S'
Sonic/HQ Rock Coring DTW During Drilling (ft): --

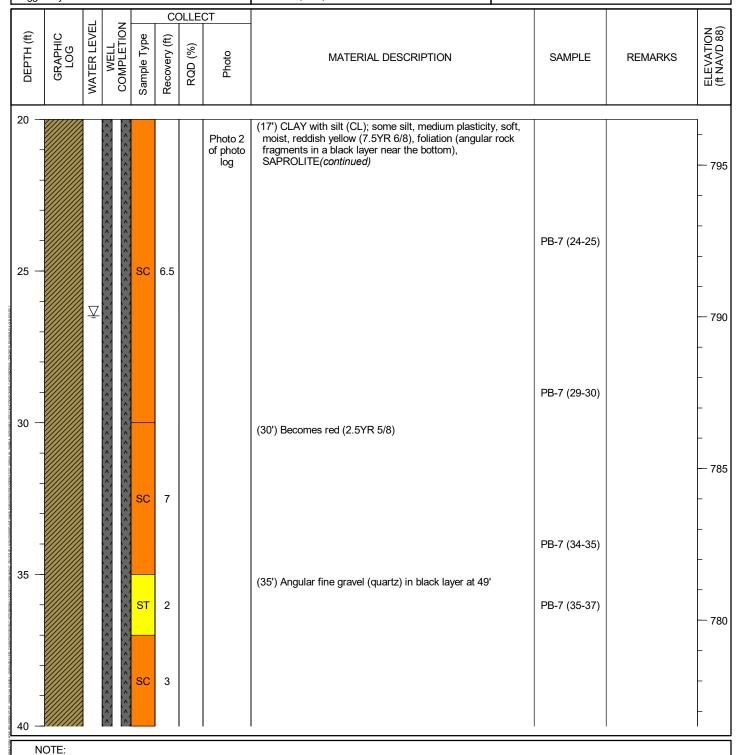
A. Blackwood N. Tilahun and J. Griffin

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW After Drilling (ft): -Ground Surface 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





Driller Name:

Logged By:

Client: **Southern Company Services Plant Wansley Pre-Design Investigation** Project:

167

6" x 4"

ST, SC, HQ

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-7

3 of 9

3/23/2017 Boring Depth (ft): Drilling Start Date: Drilling End Date: 3/31/2017 Boring Diameter (in): Drilling Company: Cascade Sampling Method(s): Drilling Method: Sonic/HQ Rock Coring DTW During Drilling (ft):

Drilling Equipment: Terra Sonic DTW After Drilling (ft): Ground Surface Elev. (ft): 816.51 A. Blackwood

Location (Y, X): 1240837.08, 2026768.14 N. Tilahun and J. Griffin

Well Depth (ft): (65-75)Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** Filter Pack: Sand Pack

Page:

	ou by.						,,,,,,,,	There		id i dok	
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	CT opold	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
45 -				SC	10			(35') Angular fine gravel (quartz) in black layer at 49'(continued)	PB-7 (44-45)		- 775 770 
50 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -					12			(51') As above, abundant white banding	PB-7 (54-55)		- - 765 - - - 760 -
T wasse trans-	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

3/23/2017 Drilling Start Date: Drilling End Date: 3/31/2017 Drilling Company: Cascade

Drilling Method:

Drilling Equipment: Terra Sonic Driller Name: Logged By:

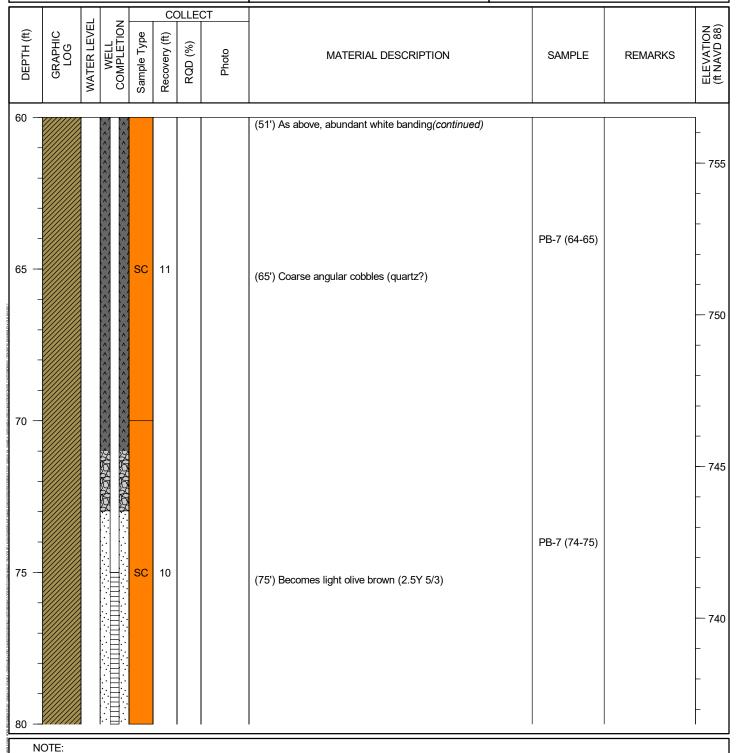
Sonic/HQ Rock Coring

A. Blackwood 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): Ground Surface Elev. (ft):

816.51 Location (Y, X): 1240837.08, 2026768.14

(65-75)Well Depth (ft): Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: **Bentonite** Seal Material(s): 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

5 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

Boring Depth (ft): 167
Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): -DTW After Drilling (ft): -Ground Surface 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

Page:

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft NAVD 88) GRAPHIC LOG DEPTH (ft) Recovery (ft) Sample Type RQD (%) Photo **SAMPLE REMARKS** MATERIAL DESCRIPTION 80 (80') Becomes brownish yellow (10YR 6/8) 735 PB-7 (83-84) PB-7 (84-85) Photo 9 85 SC 13.5 of photo log PB-7 (86-87) (86') Fine and coarse gravel (quartz?) layer, angular, up to 730 2" diameter PB-7 (90-91) 90 (90') CLAY with intact rock fragment (CL); olive (5Y 4/2), easily broken by hand, some fragments cannot be broken by hand, INTENSELY WEATHERED ROCK 725 PB-7 (94-95) Hard drilling, core barrel is advancing very slowly 720 Photo 10 of photo log 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-7 6 of 9

Page: Boring Depth (ft): 167 Well Depth (ft):

3/23/2017 Drilling Start Date: 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 Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft): 816.51

Location (Y, X): 1240837.08, 2026768.14

(65-75)Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** 

Filter Pack: Sand Pack

				COLLECT			СТ				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
100 —	7						1				, ]
-								(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 -
	71-H						Photo 11	(104) Becomes reddish yellow (7.51K 0/0)	(104-100)		-
105 —				SC	11.5		of photo log			Hard drilling	
-											
20 d to 4 to											<del>- 710</del>
CUITESWARE	1										
-	717								PB-7 (108-109)		
WITH DIACES									, ,		
ID NOT STORY	1										- 1
110 —											
or Breeze											
anor owed											<b>—</b> 705
-				90	4					Hard drilling	
- Company	7			SC	4						
ACCMENTANCE									PB-7		-
-	1								(114-115)		
115 —								(115') Becomes gray (7.5YR 5/1)			
плосовити	1,1,1,1							(113) Becomes gray (7.311\(\frac{3}{1}\))			-
and some space	4										<b>—</b> 700
was mean own									PB (117-119)		
MAZMILON	1			SC	6					Hard drilling	
HAR A COURT	7.1.1							(118') Becomes pinkish gray (7.5YR 6/2), dry			
- Comparing	1,1,1,1										
120 —	11			SC	1						
120											



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: 7 of 9

3/23/2017 Drilling Start Date: Drilling End Date: 3/31/2017 Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method:

Drilling Equipment: **Terra Sonic** A. Blackwood Driller Name: Logged By:

N. Tilahun and J. Griffin

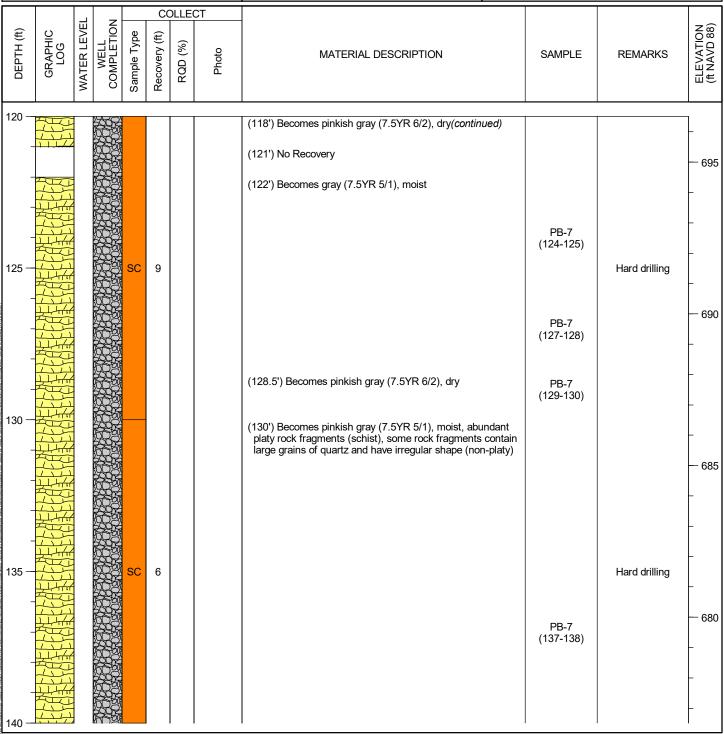
Boring Depth (ft): 167 Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft): 816.51

Location (Y, X): 1240837.08, 2026768.14

(65-75)Well Depth (ft): Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material:

Seal Material(s): **Bentonite** Filter Pack: Sand Pack



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

8 of 9

Drilling Start Date: 3/23/2017
Drilling End Date: 3/31/2017
Drilling Company: Cascade

ng Company: Cascade
Sonic/HQ Rock Coring

Drilling Method: Sonic/HQ Roci 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): -Ground Surface Elev. (ft):

Ground Surface 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

Page:

COLLECT WELL COMPLETION **WATER LEVEL** ELEVATION (ft NAVD 88) 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:



Address:

1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-7

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3/23/2017 Drilling Start Date: Drilling End Date: 3/31/2017 Drilling Company: Cascade

Sonic/HQ Rock Coring Drilling Method: Drilling Equipment: **Terra Sonic** 

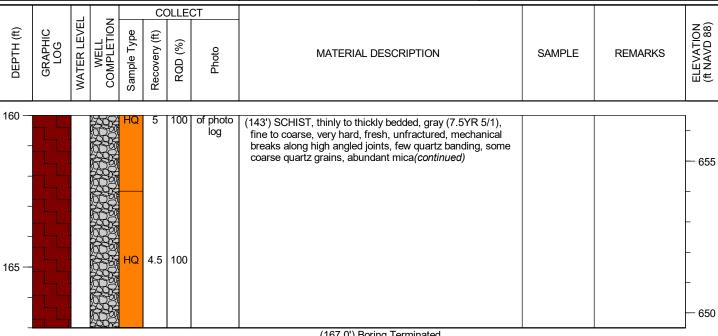
A. Blackwood Driller Name: Logged By: N. Tilahun and J. Griffin Boring Depth (ft): 167 Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft): 816.51

Location (Y, X): 1240837.08, 2026768.14

(65-75)Well Depth (ft): Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** 

Filter Pack: Sand Pack



(167.0') Boring Terminated

NOTE:			



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-8D/I/S

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** 

M. Hanson and J. Triepke Driller Name:

Logged By:

NOTE:

N. Tilahun

Boring Depth (ft): 147 Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

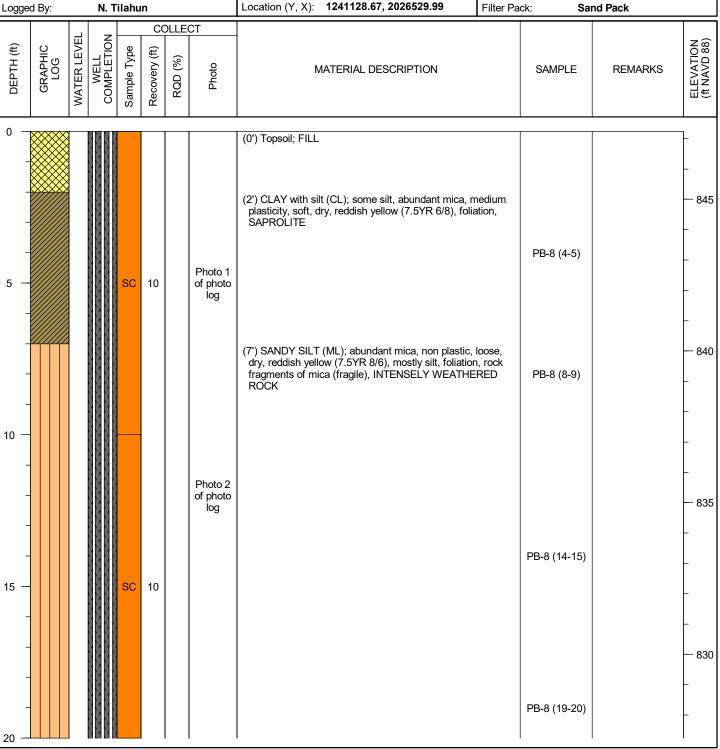
DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material:

**Bentonite** Seal Material(s): Sand Pack





Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-8D/I/S

Page: 2 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: N. Tilahun

Logged By:

NOTE:

Boring Depth (ft): 147 Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

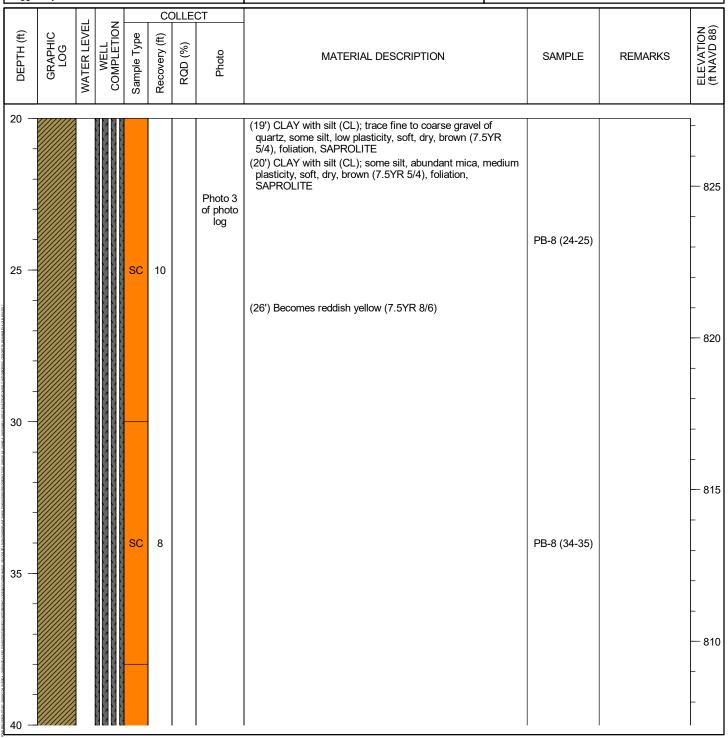
DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

Well Diameter (in): 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-8D/I/S

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: N. Tilahun

Logged By:

Boring Depth (ft): Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

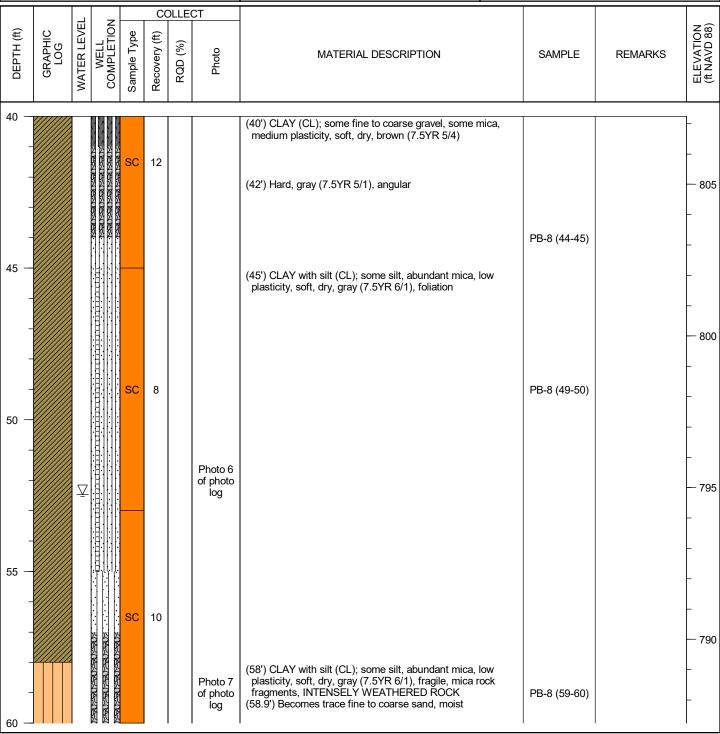
847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

**PVC** 

Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material:

Screen Material: **Bentonite** Seal Material(s): Filter Pack: Sand Pack



NOTE:



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-8D/I/S

Page: 4 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:

Logged By: N. Tilahun

M. Hanson and J. Triepke

Boring Depth (ft): Boring Diameter (in): 6" x 4" ST, SC, HQ

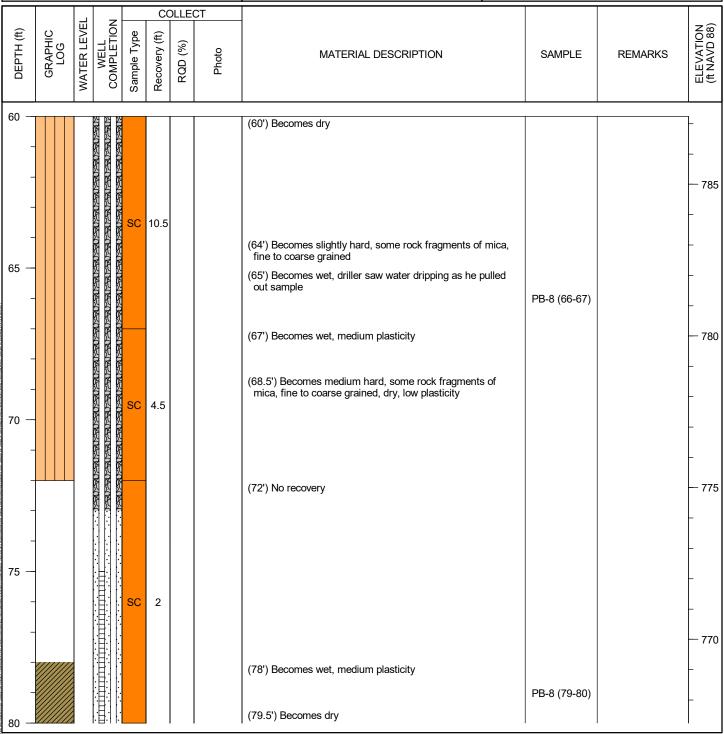
Sampling Method(s): DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material:

**Bentonite** Seal Material(s): Filter Pack: Sand Pack



NOTE:



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-8D/I/S

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:

NOTE:

N. Tilahun

147 Boring Depth (ft): Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

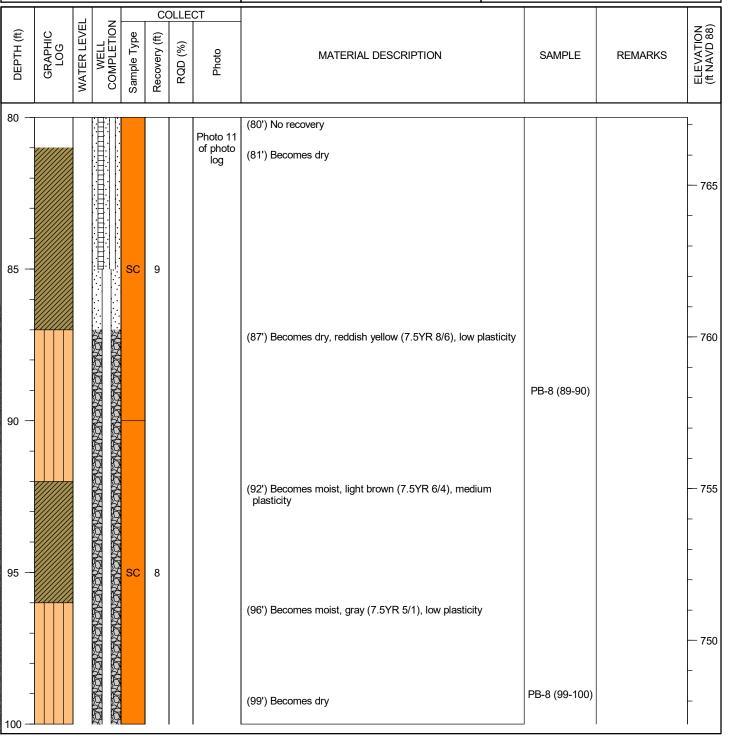
DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material: **Bentonite** Seal Material(s):

Filter Pack: Sand Pack





Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-8D/I/S

Page: 6 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:

Logged By: N. Tilahun

M. Hanson and J. Triepke

Boring Depth (ft): 147 Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft): Ground Surface Elev. (ft):

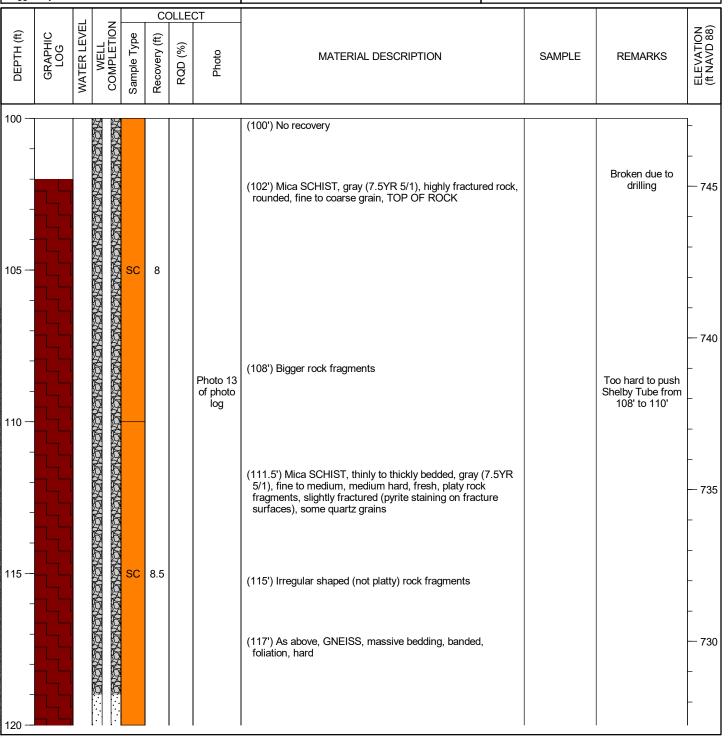
847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

**PVC** 

Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material:

Screen Material: **Bentonite** Seal Material(s): Filter Pack: Sand Pack



NOTE:



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Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-8D/I/S

Page: **7 of 8** 

 Drilling Start Date:
 4/12/2017
 Boring Depth (ft):
 147
 Well Depth (ft):
 (45-55) (75-85) (121-131)

 Drilling End Date:
 4/20/2017
 Boring Diameter (in):
 6" x 4"
 Well Diameter (in):
 N/A

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: Terra Sonic DTW After Drilling (ft): -- Screen Material: PVC

Screen Material: PVC

Screen Material: PVC

Screen Material: PVC

Screen Material: PVC

Driller Name: M. Hanson and J. Triepke
Logged By: N. Tilahun Ground Surface Elev. (ft): 847.24 Seal Material(s): Bentonite
Location (Y, X): 1241128.67, 2026529.99 Filter Pack: Sand Pack

		١,			CC	DLLE	СТ				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
120 —			P. I. P.								,
-				HQ	1.5	75	Photo 15 of photo log	(120') No recovery (120.5') GNEISS, massive, gray (7.5YR 5/1), medium to coarse, very hard, fresh, black and white (mafic and felsic) banding, abundant mica, pyrite fillings in tight/healed fractures (122') Mica SCHIST, thinly to thickly bedded, gray (7.5YR 5/1), fine to medium, hard, fresh, platy rock fragments, abundant mica, fracture zone from 122'-124', return water is clayey which indicated clay filled fractures		Sonic drilling ends at 120' (4/13/2017), HQ coring begins at 120' (4/20/2017)	- 725 -
125 —				HQ	5	87	9	(124') Massive mechanical breaks along tight fractures, slight banding			-
ATOMER DESCRIPTIONS OF COST COST TO IL DESCRIPTION OF A LOS OF DESCRIPTION OF COST COST COST COST COST COST COST COST								(127') As above, slight banding, fracture at 128'			- 720 -
130 — — — — — — — — — — — — — — — — — — —				HQ	5	90		(430) As shows freeture at 432 and 434, thin white			- 745
— 135 —				HQ	5	100		(132') As above, fracture at 133' and 134', thin white banding, ~4" quartz layer near bottom (137')			- 715 - -
MONELLINE EN SER A. AUMENAMENA, ESTE DE PARTE TOUTHOUSTRE DE FOTTE SENERAL COORDINGE.								(137') As above, fracture at 138.5' and 140', thin white banding, ~4" thich quartz layer near top (137')			- 710 -
140 —				HQ	5	100					

NOTE:



**Southern Company Services** Client:

**Plant Wansley Pre-Design Investigation** Project: Address: 1371 Liberty Church Rd. Carrollton, GA 30116

Boring No.PB-8D/I/S

Page: 8 of 8

**BORING LOG** 

4/12/2017 Drilling Start Date: 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

Boring Depth (ft): 147 Boring Diameter (in): 6" x 4" ST, SC, HQ

Sampling Method(s): DTW During Drilling (ft): DTW After Drilling (ft):

Ground Surface Elev. (ft): 847.24 Location (Y, X): 1241128.67, 2026529.99

(45-55) (75-85) (121-131) Well Depth (ft):

Well Diameter (in): Screen Slot (in): 0.01 Riser Material: **PVC PVC** Screen Material: Seal Material(s): **Bentonite** 

Filter Pack:

Sand Pack

$\overline{}$											
					CC	DLLE	СТ				
DEPTH (ft)	GRAPHIC LOG	WATER LEVE	WELL COMPLETION	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
140 —											
-								(137') As above, fracture at 138.5' and 140', thin white banding, ~4" thich quartz layer near top (137')(continued)			
_											
_								(142') As above, tight fractures at 143.5' and 144', thin white banding			— 705 —
_											
145 —				HQ	5	100					
_											-
27.4.0.B e16.001.7											_
SWI S								(147.0') Boring Terminated			

(147.0') Boring Terminated

NOTE:			



Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-9 Page:

1 of 4

4/13/2017 Drilling Start Date: Drilling End Date: 4/19/2017 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:

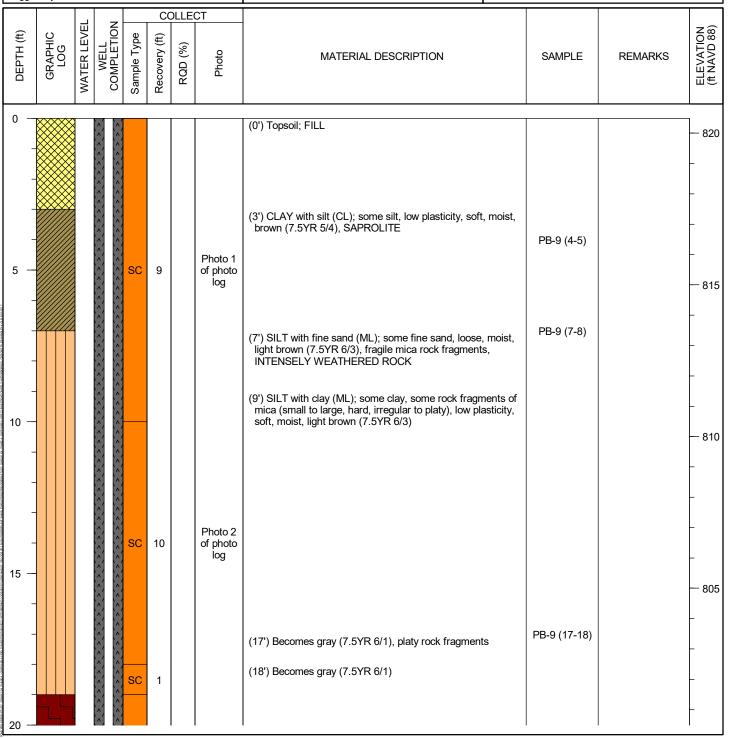
Boring Depth (ft): Boring Diameter (in): 6" x 4" Sampling Method(s): ST, SC, HQ

DTW During Drilling (ft): DTW After Drilling (ft):

Ground Surface Elev. (ft): 820.49 Location (Y, X): 1241490.28, 2026504.40

(60-70)Well Depth (ft): Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material:

**Bentonite** Seal Material(s): Filter Pack: Sand Pack





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Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

Address: 1371 Liberty Church Rd. Carrollton, GA 30116

BORING LOG Boring No.PB-9

Page: 2 of 4

Sand Pack

Drilling Start Date: 4/13/2017
Drilling End Date: 4/19/2017
Drilling Company: Cascade

Drilling Method:

Cascade Sonic/HQ Rock Coring

Drilling Equipment: Terra Sonic
Driller Name: M. Hanson a

Logged By: N. Tilahun

ne: M. Hanson and J. Triepke

Boring Diameter (in): 6" x 4"
Sampling Method(s): ST, SC, HQ
DTW During Drilling (ft): --

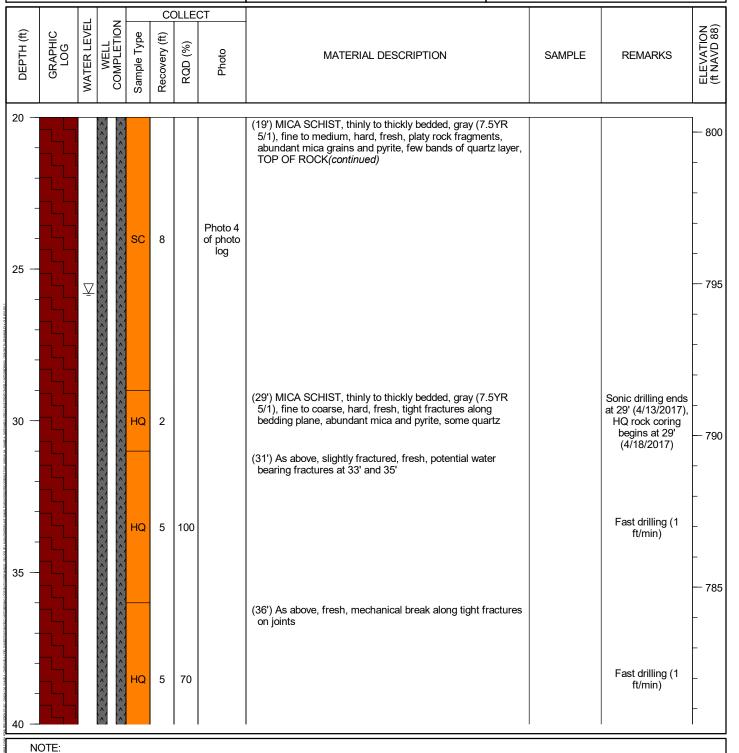
Boring Depth (ft):

DTW After Drilling (ft): -Ground Surface Elev. (ft): 820.49

Location (Y, X): 1241490.28, 2026504.40

Well Depth (ft): (60-70)
Well Diameter (in): 2
Screen Slot (in): 0.01
Riser Material: PVC
Screen Material: PVC
Seal Material(s): Bentonite

Filter Pack:





Address: 1371 Liberty Church Rd. Carrollton, GA 30116

**BORING LOG** Boring No.PB-9

Page: 3 of 4

Drilling Start Date: 4/13/2017 Drilling End Date: 4/19/2017 Drilling Company: Cascade

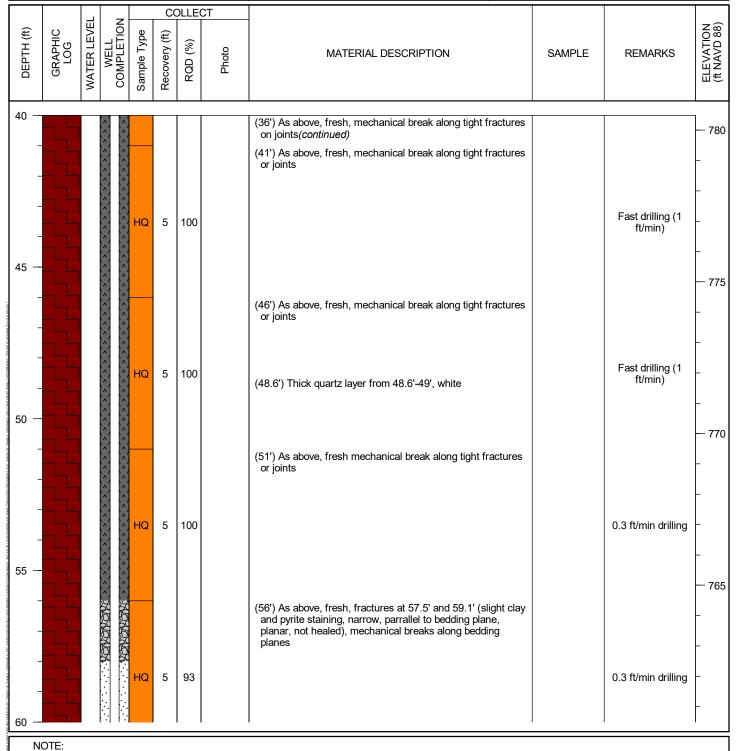
Sonic/HQ Rock Coring Drilling Method:

**Terra Sonic** Drilling Equipment: M. Hanson and J. Triepke Driller Name:

Logged By: 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): Ground Surface Elev. (ft):

820.49 Location (Y, X): 1241490.28, 2026504.40 Well Depth (ft): (60-70)Well Diameter (in): Screen Slot (in): 0.01 **PVC** Riser Material: **PVC** Screen Material: **Bentonite** Seal Material(s): Filter Pack: Sand Pack





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Client: Southern Company Services
Project: Plant Wansley Pre-Design Investigation

BORING LOG Boring No.PB-9

4 of 4

Address: 1371 Liberty Church Rd. Carrollton, GA 30116 Page:

4/13/2017 Boring Depth (ft): Well Depth (ft): (60-70)Drilling Start Date: Drilling End Date: 4/19/2017 Boring Diameter (in): 6" x 4" Well 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: Terra Sonic DTW After Drilling (ft): **PVC** Screen Material: Driller Name: M. Hanson and J. Triepke Ground Surface Elev. (ft): 820.49 Seal Material(s): **Bentonite** Location (Y, X): 1241490.28, 2026504.40 Sand Pack Logged By: N. Tilahun Filter Pack:

			_		CC	OLLE	CT				
DEPTH (ft)	GRAPHIC LOG	WATER LEVEL	WELL	Sample Type	Recovery (ft)	RQD (%)	Photo	MATERIAL DESCRIPTION	SAMPLE	REMARKS	ELEVATION (ft NAVD 88)
60 -			l::⊟::			Ī					
65 -				HQ	4	40		(61') As above, fresh, moderately fractured, slight pyrite and clay staining, clay fillings might be washed away by drilling water, fractures have irregular surface (planar to andulating), rock fragments don't fit well and only 4' of rock recovered which could imply soft fillings (clay) existed between rock fragments and washed out		Drilling water is muddy	- 760 - - -
WANGE CLA CIR INTEGOL T							Photo 12 of photo	(66') Same as above, fresh, intensely fractured, soft near fractures			— 755 -
DAMESTICATION OF DAT ESPORAGO, COSTORY THE				HQ	5	75	log	(67.5') Same as above, fresh, mechanical break along bedding planes and tight fractures			-
70 -								(70') Same as above, fresh, mechanical break along bedding planes and tight fractures			— 750 -
FILOGO CP. A NOA EVONTER ANT WASS. EVOSH EVON PILOGO CP. A NOA EVON EVON EVON EVON EVON EVON EVON EVON				HQ	5	100					-
75 -								(75.0') Boring Terminated			<b>」</b>

NOTE:

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 nterval: -2.5'-47' Vaterial: Schedule 40 PV
-	<b>–</b> 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				F F	ILTER PACK nterval: 45'-57' Гуре: #1 Sand/Prepacke Filter
- - - -	-	dry to moist, brown to reddish orange								- F	FILTER PACK SEAL nterval: 41.5'-45' Type: 3/8" Bentonite Pelle
	- 765									A A	NNULUS SEAL nterval: 0'-41.5' Гуре: Portland Type 1
- - -	- -									<b>V</b> F	VELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodi. Aluminum
-	- - - 760										PRILLING METHODS Soil Drill: Hydrovac/4-inch Sonic
-	-									_	Rock Drill: 4-inch Sonic
) <del>-</del>   -	-									Portland	
	— 755 –					753.70					
;	-	24.00 - 28.00 GRAVELLY CLAY; wet, yellow-orange, trace black and white stringers, manganese oxide and weathered feldspar, lean clay	GC		X	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				29.00					
	- 745	Mylonitic QUARTZITE ROCK; white to light brown, rock is less 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

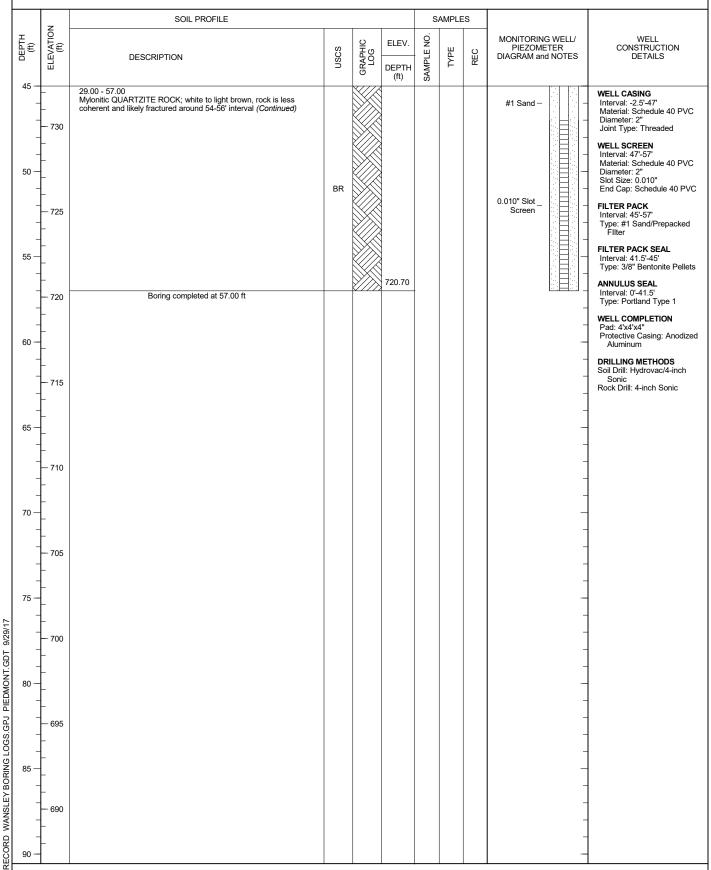
DRILLER: Tom Ardito

GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.



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.



SOUTHERN #2	À
COMPAN	Υ

	SOUTH! EARTH	ERN COMPANY SCIENCE AND I	SERVICES, INC. ENVIRONMENTAL	ENGINEERING					meters		
	ONTRAC	TOR CASCADE		EQUIPMENT _S	SONIC	METHOD	Roto	osoni	RDINATES: N:12428		
B	ORING D	<b>EPTH</b> <u>58 ft.</u>		ER DEPTH: DURING	G				ANGLE DELAYED _12.		
DEPTH (ft)	GRAPHIC LOG		STRATA DESC	RIPTION		ELEV			WELL D Protective aluminum 4-foot square concre Top of casing Elev. =	cover with bollards te pad	
25 25 2 2 2 20 2 2 2 2 2 2 2 2 2 2 2 2 2		Well-graded San - tan, dry, fine to  Silt (ML) - orange, wet, cla	coarse grain, mottle	d brown and orange		789.33 786.33 n			—Surface Seal: concAnnular Fill: Cemer bags, 46 lbs, Portla	nt-Bentonite Grout - 6	ô
32	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	- mottled orange				771.33					

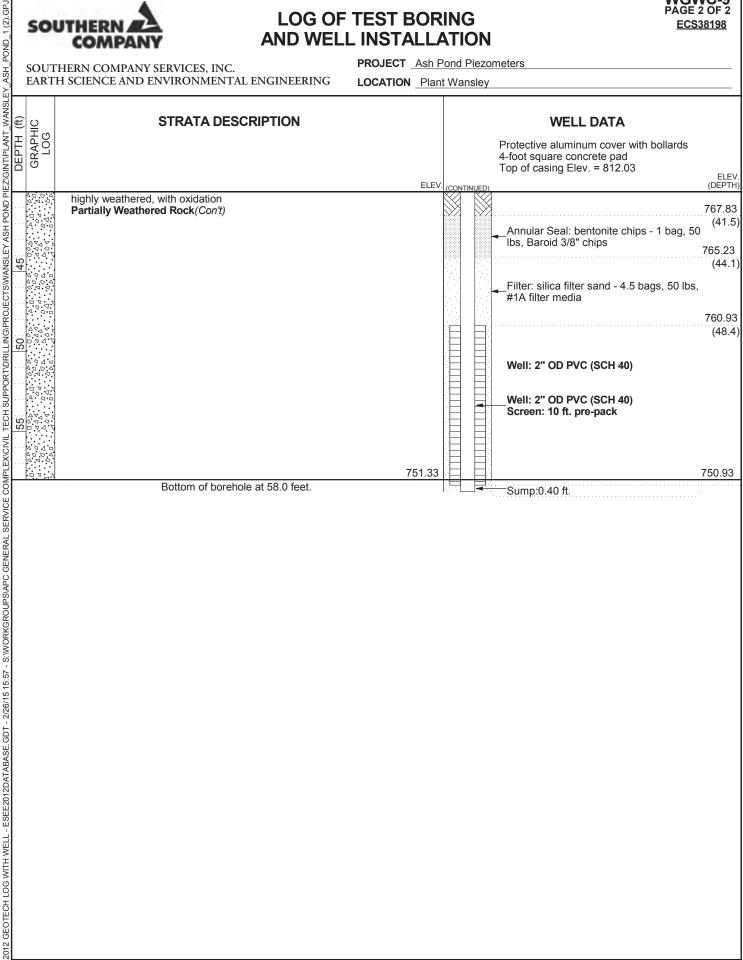


# **LOG OF TEST BORING** AND WELL INSTALLATION

WGWC-9 PAGE 2 OF 2 ECS38198

SOUTHERN COMPANY SERVICES, INC.

PROJECT Ash Pond Piezometers



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		
(£)	ATION		(0	일	ELEV.	Ŏ.			MONITORING WELL/ PIEZOMETER	WELL CONSTRUCTION
2	ELEVATION (ft)	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	ML		(-)	37				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"
10 —	- 800	6.00: Shelby Tube Collected: 6'-8'  11.00 - 23.00			798.61 11.00					End Cap: Schedule 40 P FILTER PACK Interval: 134'-136 Type: #1 Sand Prepacke Filter FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pell
15 —	- 795	CLAYEY SILT; dry to moist, orange to red, 5-10% muscovite, trace black MnO, trace garnet, trace quartz, saprolite	ML		11.00					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
20 —	- 790		IVIL		706 64					Rock Drill: 4-inch Sonic
25 —	- 785 - 780	23.00 - 37.00 SILT; moist, yellow brown, some clay, come very fine sand, layers of white CLAYEY SILT, 3" thick lense of weathered pegmatite material at 25', 39', and 42'	ML		786.61 23.00					
35 —	- 775	36.00: Shelby Tube Collected: 36'-38'			772.61					
-	- 770	37.00 - 40.00 CLAYEY SILT; some weathered pegmatite material, white/pink weathered potassium feldspar and plagioclase	ML		37.00					
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		769.61 40.00					
45 —	765	Log continued on next page								
DRILI	LING	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						AMPLE	S		
(£)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	FOG	DEPTH (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
55	- - - - - 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 Diameter: 2'
5 —	_ _ _ _ _ 755		ML								FILTER PACK Interval: 134'-136 Type: #1 Sand Prepacked Filter PACK Interval: 134'-136 Type: #1 Sand Prepacked Filter FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pelle
-	- - - - 750	58.00 - 58.10 1" black layer with gravel size quarts grains, silt sized black particles 58.10 - 88.00				751.61 58.10					ANNULUS SEAL Interval: 0'-131.5' Type: Portland Type 1  WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodiz
55 —		moist, grayish brown with some orange mineral oxidation, weathered muscovite schist, predominately weathered feldspars								Portland Type 1	Aluminum  DRILLING METHODS  Soil Drill: 4-inch Sonic  Rock Drill: 4-inch Sonic
0	- 740 - - -										
5 —	735  										
0 -	730  										
5 —	725   					721.61					
- - -	- 720	88.00 - 92.00 SANDY SILT; moist to wet, orange brown, sandy silt, very fine to fine sand, trace fine gravel, micaceous	ML			88.00					

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 I	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 PV
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 —	<del></del> 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

		COIL DDOCILE			ELEVA		AMPLE			
_	Z O	SOIL PROFILE	T				AIVIPLE	:5		
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)							#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		139.00				0.010" Slot	WELL SCREEN Interval: 136'-146' Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC
-	-	142.00 - 145.00 SAPROLITE-ROCK/TRANSITIONALLY WEATHERED ROCK; wet, transitionally weathered garnet quartz muscovite plagioclase schist	TWR		667.61 142.00					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			664.61					FILTER PACK SEAL Interval: 131.5'-134' Type: 3/8" Bentonite Pellets ANNULUS SEAL
	-								_ 	Interval: 0'-131.5' Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4"
150 <del>-</del> -	- 660 -								 _ _	Protective Casing: Anodize Aluminum  DRILLING METHODS  Soil Drill: 4-inch Sonic
	-								- -	Rock Drill: 4-inch Sonic
155 — –	- 655 - -									
	-								_ _ _	
160 — - -	- 650 - -								 	
-	- - - 645								<u>-</u>	
65 —	- 645 - -								_ _ _	
-	- - - 640								<u>-</u>	
70 — _ _	— U4U								- - -	
	- 625								- -	
75 — - -	- 635 - -									
	_								_ _ _	
- 1	630									

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: 96.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 11/2/15 DATE COMPLETED: 11/4/15 NORTHING: 1240610.93 EASTING: 2024585.91 GS ELEVATION: 807.32 TOC ELEVATION: 809.78 SHEET 1 of 3
DEPTH W.L.: 20.25' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 11/4/15
TIME W.L.: 10:08

	z	SOIL PROFILE						AMPLE	S		
Œ)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	FOG	ELEV.  DEPTH  (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER CONSTRUCTION DIAGRAM and NOTES DETAILS	١
0 -	-	0.00 - 2.00 SILT; moist, orange overburden	ML			805.32				WELL CASING Interval: -2.5'-73' Material: Schedule 40	PV
- - - - - -	805  	2.00 - 7.00 CLAYEY SILT; moist, brown, micaceous, trace garnets up to 1cm, materials are loose/soft	ML			2.00				WELL CASING Interval: -2.5-7.3' Material: Schedule 40 Diameter: 2" Joint Type: Threaded  WELL SCREEN Interval: 73'-93' 3" Material: Schedule 40 Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 FILTER PACK Interval: 69.5'-96' Type: #1 Sand/ Prepa FILTER PACK SEAL Interval: 69.5'-96.5' Type: 3/8" Bentonite P  ANNULUS SEAL Interval: 0'-66.5' Type: Portland Type 1  WELL COMPLETION Paci: 4'x4'x4" Protective Casing: And Aluminum  DRILLING METHODS Soil Drill: 4-inch Sonice Rock Drill: 4-inch Sonice	
	- 800	7.00 - 22.00 SILTY SAND; moist to wet (18 - 26 feet), orange, brown and white (saprolite)				7.00				Filt Terp Pack Interval: 69, 5-96' Type: #1 Sand/ Prepar	
-	-									FILTER PACK SEAL Interval: 66.5'-69.5' Type: 3/8" Bentonite P  ANNULUS SEAL Interval: 0'-66.5' Type: Portland Type 1	
-	795  		SM							WELL COMPLETION Pad: 4'x4'x4" Protective Casing: And Aluminum  DRILLING METHODS	
-	- 790 	16.00: Shelby Tube Collected: 16'-17'								Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic	
) -	- - -	22.00, 26.00				785.32					
-	785 	22.00 - 26.00 SAPROLITE; weathered pegmatite	ML			22.00					
-	- - - 780	26.00 - 28.00 trace quartz, wet 28.00 - 35.00				781.32 26.00 779.32 28.00					
	- - - - - 775	28.00 - 33.00 r SILTY CLAY; moist, very light brown. metamorphic foliation present. trace gravel size quartzite rock fragments (saprolite)	CL			26.00					
; - ; - ; -	- - -	35.00 - 36.00 SAPROLITE-ROCK; weathered micaceous meta-quartzite	TWR	D A A	<b>△ △ △ △ △</b>	772.32 35.00 771.32 36.00				Portland Type 1	
-	- 770 	36.00 - 46.00 ROCK; light brown quartzite with light orange oxidation, micaceous meta quartzite	BR			30.00				Portland	
	- 765 -										
5 –	-	Log continued on next page									

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: 96.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 11/2/15 DATE COMPLETED: 11/4/15 NORTHING: 1240610.93 EASTING: 2024585.91 GS ELEVATION: 807.32 TOC ELEVATION: 809.78 SHEET 2 of 3
DEPTH W.L.: 20.25' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 11/4/15
TIME W.L.: 10:08

LO	CATION	n: Carroliton, GA		TO	C ELEV	ATION	1: 809	.78	TIME W.L.: 10:08		
	z	SOIL PROFILE					AMPLE	S			
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	ELEV.	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS	
45 -	Ш			GR _	DEPTH (ft)	SAM			nove novel		
-	- - - - 760	46.00 - 56.00 more competent rock	BR		761.32 46.00				= = = = = = = = = = = = = = = = = = =	WELL CASING Interval: -2.5'-73' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN	
50 —	- - - - -								3/8" Bentonite — Pellets	Interval: 73-93'3" Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC	
-	- 755 -									FILTER PACK Interval: 69.5'-96' Type: #1 Sand/ Prepack Filter	
55 —	-				751.32					FILTER PACK SEAL Interval: 66.5'-69.5' Type: 3/8" Bentonite Pellets	
-	- - 750	56.00 - 87.00 light brown quartzite with light orange oxidation, micaceous meta quartzite			56.00					ANNULUS SEAL Interval: 0'-66.5' Type: Portland Type 1	
60 -	-									WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodized Aluminum	
-	-									DRILLING METHODS Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic	
-	- 745 -										
65 <del>-</del>	-  -  -										
-	- - 740								3/8" Bentonite –		
- 70 –	-								Pellets		
-	-  -  -		BR								
-	- 735 - -										
75 <del>-</del>	-										
-	- 730										
80 -	- -										
-	- - - 725										
-	-								0.010" Slot		
85 — -	-  -  -				720.32				#1 Sand –		
-	720 	87.00 - 96.00 grey and pink quartzite			87.00						
90 -	-	Log continued on next page									
		Log continuos on next page	1						1	1	

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: 96.00 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 11/2/15 DATE COMPLETED: 11/4/15

NORTHING: 1240610.93 EASTING: 2024585.91 GS ELEVATION: 807.32 TOC ELEVATION: 809.78

SHEET 3 of 3 DEPTH W.L.: 20.25' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 11/4/15 TIME W.L.: 10:08

		SOIL PROFILE								
Ĕ	NOITY (			ပ္	ELEV.		AMPLE		MONITORING WELL/	WELL
DEPTH (#)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC LOG	DEPTH (ft)	SAMPLE NO.	TYPE	REC	PIEZOMETER DIAGRAM and NOTES	CONSTRUCTION DETAILS
90	-	87.00 - 96.00 grey and pink quartzite (Continued)								WELL CASING Interval: -2.5'-73'
}	-									Material: Schedule 40 PV Diameter: 2"
-	<del></del> 715									Joint Type: Threaded
-{									-	WELL SCREEN Interval: 73'-93' 3" Material: Schedule 40 PV
95 —	-	Boring completed at 96.00 ft			711.32					Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 P'
-	— 710 —								_	FILTER PACK Interval: 69.5'-96' Type: #1 Sand/ Prepack
100 —	-								<del>-</del>	FILTER PACK SEAL Interval: 66.5'-69.5' Type: 3/8" Bentonite Pelle
-	- 705								<u>-</u>	ANNULUS SEAL Interval: 0'-66.5' Type: Portland Type 1
-	-								_	WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodiz
105 —	-								_	Aluminum  DRILLING METHODS Soil Drill: 4-inch Sonic
-	<del>-</del> 700								_	Rock Drill: 4-inch Sonic
]	-								_ 	
110	_								_	
-									_	
4	- 695								_	
-	-								_	
115	-									
-									_	
-	<del></del> 690								_	
-	-								=	
120 —	-									
-	-								_	
-	- 685								_	
=	-								=	
125	-								_	
123	-								_	
-	-								_	
-	— 680 –								_	
-	_								_	
130 —	-								_	
]	-								_	
-	<del></del> 675								_	
-									_	
135 —									_	
		LE: 1 in = 5.5 ft COMPANY: Cascade Drilling							George, P.G. rkman, P.G.	Golder



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 53.50 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 11/11/15 DATE COMPLETED: 11/11/15

NORTHING: 1240483.16 EASTING: 2023912.92 GS ELEVATION: 802.03 TOC ELEVATION: 804.69

SHEET 1 of 2 DEPTH W.L.: 5.85' (bgs) ELEVATION W.L.: (amsl) DATE W.L.: 11/13/15 TIME W.L.:

	z	SOIL PROFILE				$\perp$	SAME	PLES		
(ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	ELE	/.	H	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
		DESCRIPTION	)SN	GRAF	DEPT (ft)	SAMPLE NO.	TYPE	:   22	DINGIVAW AND NOTES	DETAILS
0 —	_	0.00 - 3.00 CLAYEY SILT; homogenous overburden, orange brown, dry to								WELL CASING Interval: -2.5'-43'
-	- 800	moist	ML							Material: Schedule 40 P <sup>1</sup> Diameter: 2"
-	_	3.00 - 5.00		H	799.0					Joint Type: Threaded
-	-	CLAYEY SILT; homogenous overburden some coarse gravel, some subrounded weathered cobbles of quartzite, trace white and black			797.0					WELL SCREEN Interval: 43.5'-53.5' Material: Schedule 40 P\
5 —	-	staining, orange brown, dry to moist 5.00 - 7.00		H	5.00				02001 02001 00001 00001 00001 00001 00001 00001 00001 00001 00001 00001	Diameter: 2' Slot Size: 0.010"
-	-	CLAYEY SILT; homogenous overburden, orange brown, black foliations, moist, soft			795.0	3			00000 00000 00000 00000 00000 00000 0000	End Cap: Schedule 40 F
-	<del></del> 795	7.00 - 9.00 SILTY SAND; grey/brown, silty sand to clayey sand, moist	<b></b>		7.00					FILTER PACK Interval: 41'-53.5'
_	-	Shelby Tube Collected: 7'-9'	SM		793.0	3			00000 00000 00000 00000 00000 00000 0000	Type: #1 Sand/Prepack
10 —	- -	9.00 - 11.00 SILTY SAND; with some gravel, subangular, slightly weathered quartzite; greyish brown, moist			9.00				Portland Type 1	FILTER PACK SEAL Interval: 38.8'-41' Type: 3/8" Bentonite Pel
-	-	11.00 - 14.00	1	 	791.0	_				ANNULUS SEAL
_	<del> 790</del>	GRAVELY CLAYEY SILT; fine to coarse quartzite gravel, some medium coarse sand, trace black, brown and white micaceous	MLG	66						Interval: 0'-38.8' Type: Portland Type 1
-	-	foliations; greyish brown			788.0	3				WELL COMPLETION Pad: 4'x4'x4"
	-	14.00 - 16.00 SILTY CLAY; micaceous, grey, trace brown and black foliations,			14.0	)				Protective Casing: Anod Aluminum
15 —	-	SILLY CLAY; micaceous, grey, trace brown and black foliations, dry. soft to firm	CL		786.0	3				DRILLING METHODS
		16.00 - 22.00 CLAYEY GRAVEL; fine to coarse gravel and cobbles, some white		XX.	16.00					Soil Drill: 4-inch Sonic Rock Drill: 4-inch Sonic
	— 785 _	quartzite, red, orange and black stāining, brown silty clay, moist Shelby Tube Collected: 17.1'-17.5'							00000 00000 00000 00000 00000 00000 0000	
_	_		GC		g				00000 5000000	
20 —	_								Portland	
-	-				780.0	13				
-	<del></del> 780	22.00 - 24.50	1	\(\frac{1}{2}\rightarrow\rightar	XI .					
-	-	TRANSITIONALLY WEATHERED ROCK/SAPROLITE; cobble and pulverized quartzite	TWR		Ž A					
	-	24.50 - 27.00		D 4	△ 777.5  ▽ 24.5					
25 —	-	weathered quartzose schist, trace fine pyrite, drill pulverized rock into grey powder, some 3-4" cobbles		\[ \d \ \D \ \d \]	Ž 24.5					
	- - 775			DA DA						
_	— 775 –	27.00 - 29.00 weathered, quartzose gravel, some grey clay		\[ \delta \delt	Δł				pool jood jood jood jood jood jood jood j	
-	_	29.00 - 30.00		A D D D	7 113.0					
30 —	-	weathered, pulverized schist, wet 30.00 - 33.00		$\Delta \Delta$	▽ 772.0 ▽ 30.0	3				
-	-	weathered, quartzose gravel, some grey clay, wet		^4 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	DA .					
-	<b>—</b> 770			D	₹ 769.0					
-	-	33.00 - 37.00 BEDROCK; quartzose schist/gneiss, large garnets, green		Ž.	33.0					
25	-	amphibole, mica, black homblende/biotite, white feldspar	DE.		$\geq$					
35 —	_		BR							
	- 765	07.00 40.00			765.0					
-	- 100	37.00 - 43.00 various sizes of mafic gneiss and quartzose schist, weathered			37.0	,				
_	-									
40 —	-								3/8" Bentonite – Pellets	
-	-								Cliets	
-	<del> 760</del>				759.0	3				
-	-	43.00 - 53.50 mafic gneiss, fine to coarse grey gravel, small weathered cobbles,			43.0	)				
45 —	-	bedrock			$\geqslant$					
		Log continued on next page	1	24.15	Jenso	TOP	. 17!	ato:- !	rinko	
		LE: 1 in = 5.5 ft COMPANY: Cascade Drilling						sten Ju el P. Ki	rinko rkman, P.G.	Caldan
		David Wilcox			E: 9/29					Golder



PROJECT: SCS Wansley PROJECT NUMBER: 154117 DRILLED DEPTH: 53.50 ft LOCATION: Carrollton, GA

DRILL RIG: PS-150 Track Mounted Rig DATE STARTED: 11/11/15 DATE COMPLETED: 11/11/15 NORTHING: 1240483.16 EASTING: 2023912.92 GS ELEVATION: 802.03 TOC ELEVATION: 804.69 SHEET 2 of 2
DEPTH W.L.: 5.85' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 11/13/15
TIME W.L.:

(ft) ELEVATION (ft)	SOIL PROFILE				9	AMPLE			
(ft) ELEVATIOI (ft)		1			0,	AIVIPLE	.5		
	DESCRIPTION	nscs	GRAPHIC LOG	ELEV.  DEPTH  (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
45 755 50	43.00 - 53.50 mafic gneiss, fine to coarse grey gravel, small weathered cobbles, bedrock ( <i>Continued</i> )							#1 Sand	WELL CASING Interval: -2.5'-43' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded  WELL SCREEN Interval: 43.5'-53.5' Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC
750 	Boring completed at 53.50 ft			748.53					FILTER PACK Interval: 41'-53.5' Type: #1 Sand/Prepack filt
55 —	boning completed at 55.50 it							_ _ _	FILTER PACK SEAL Interval: 38.8'-41' Type: 3/8" Bentonite Pellet ANNULUS SEAL
								- - -	Interval: 0'-38.8' Type: Portland Type 1 WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodiz Aluminum
60 — — — — 740								_ _ -	Aluminum  DRILLING METHODS  Soil Drill: 4-inch Sonic  Rock Drill: 4-inch Sonic
  5								- - -	
 735 								- - -	
0								- - -	
730   5								- - -	
725									
0								_ _ _	
								- - -	
  								- - -	
								- - -	
00 —								_	

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

DRILLER: David Wilcox

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 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	I	AMPLE			
Ξ	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				o o				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
	-		SM							Interval: 0'-77' Type: Portland Type 1  WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodized
15 <del></del> -	— 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									
_	-	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	ML		753.60					
30 —	- 750 -	(saprolite) 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 33.00				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			TOCELE	1	AMPLE			
DEPTH (ft)	ELEVATION (ft)	DESCRIPTION	nscs	GRAPHIC	DEPTH (ft)	SAMPLE NO.	TYPE	REC	MONITORING WELL/ PIEZOMETER DIAGRAM and NOTES	WELL CONSTRUCTION DETAILS
45 — - -	735  	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-tic lense from 30-33' (35% quartz). some weathered schist (saprolite) (Continued)								WELL CASING Interval: -2.5'-82' Material: Schedule 40 PVC Diameter: 2" Joint Type: Threaded WELL SCREEN
50 —	- 730 									Interval: 82'-92' Material: Schedule 40 PVC Diameter: 2' Slot Size: 0.010" End Cap: Schedule 40 PVC
55 —	-									FILTER PACK Interval: 79.1'-92' Type: #1 Sand/Prepacked Filter  FILTER PACK SEAL Interval: 77'-79.1'
-	725  									Type: 3/8" Bentonite Pellets  ANNULUS SEAL Interval: 0'-77' Type: Portland Type 1
60 —	- 720 	60.00 - 63.00 stiffer with trace gravel			720.60 60.00					WELL COMPLETION Pad: 4'x4'x4" Protective Casing: Anodized Aluminum  DRILLING METHODS Soil Drill: Hydrovac/4-inch
65 —	- - - - 715	63.00 - 70.00 TRANSITIONALLY WEATHERED ROCK; brown micaceous schist and garnetiferous greywacke, dry	PWR		717.60 V 63.00					Sonic Rock Drill: 4-inch Sonic
70 —	_ _ _ 710 _	70.00 - 87.00 ROCK; gametiferous greywacke with white plagioclase laminations			710.60					
75 —	- - 705 - -								3/8"	
80 —	- - 700 -		BR						Bentonite – Pellets – – – – – – – – – – – – – – – – – – –	
85 — —	- - 695 -	87.00 - 92.00			693.60 87.00				#1 Sand	
90 —	-	ROCK; wet, dark grey micaceous schist  Log continued on next page	BR							

LOG SCALE: 1 in = 5.5 ft

DRILLING COMPANY: Cascade Drilling

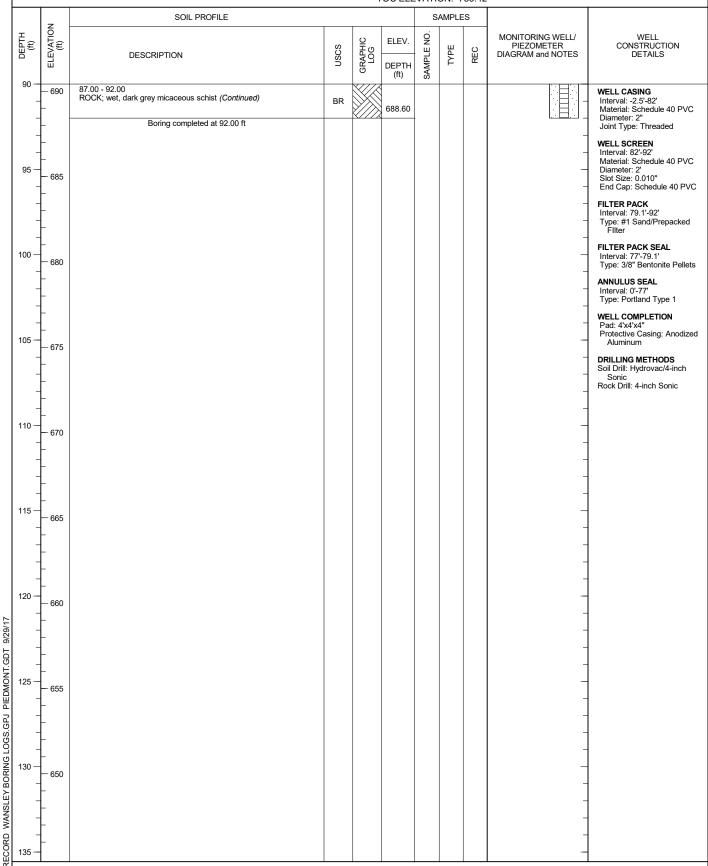
DRILLER: Tom Ardito

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 3 of 3
DEPTH W.L.: 20.5' (bgs)
ELEVATION W.L.: (amsl)
DATE W.L.: 10/28/15
TIME W.L.: 13:10



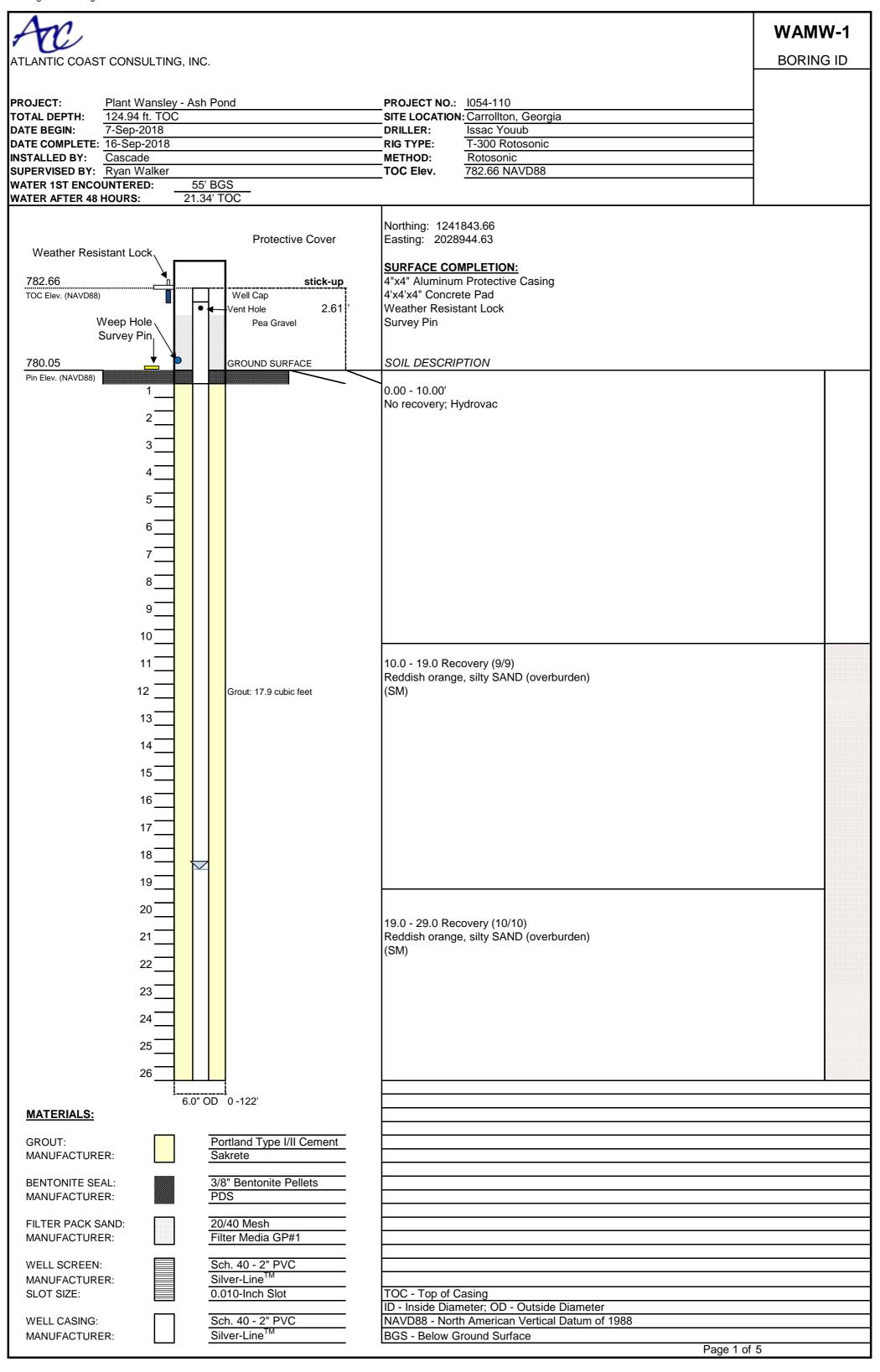
LOG SCALE: 1 in = 5.5 ft

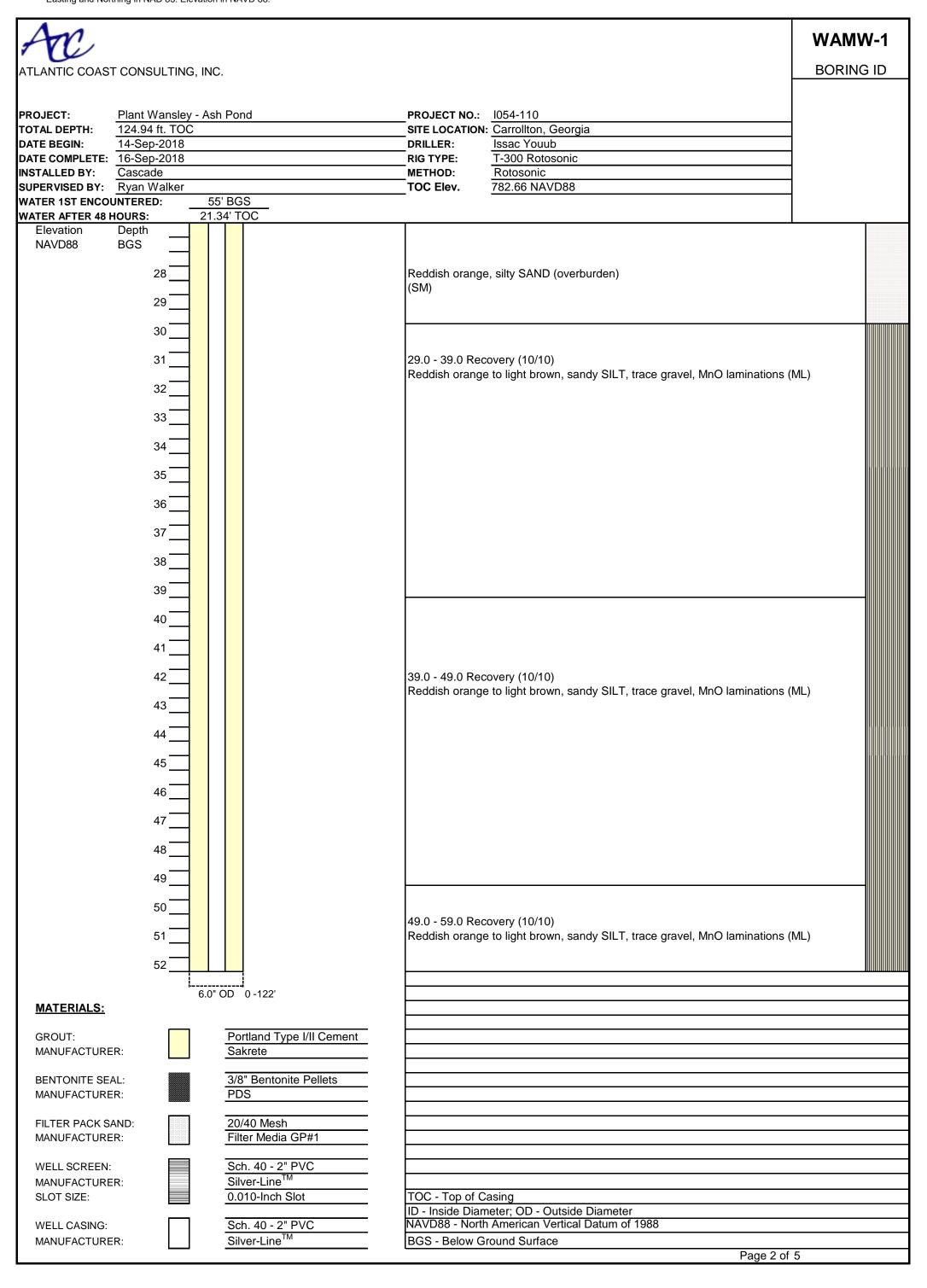
DRILLING COMPANY: Cascade Drilling

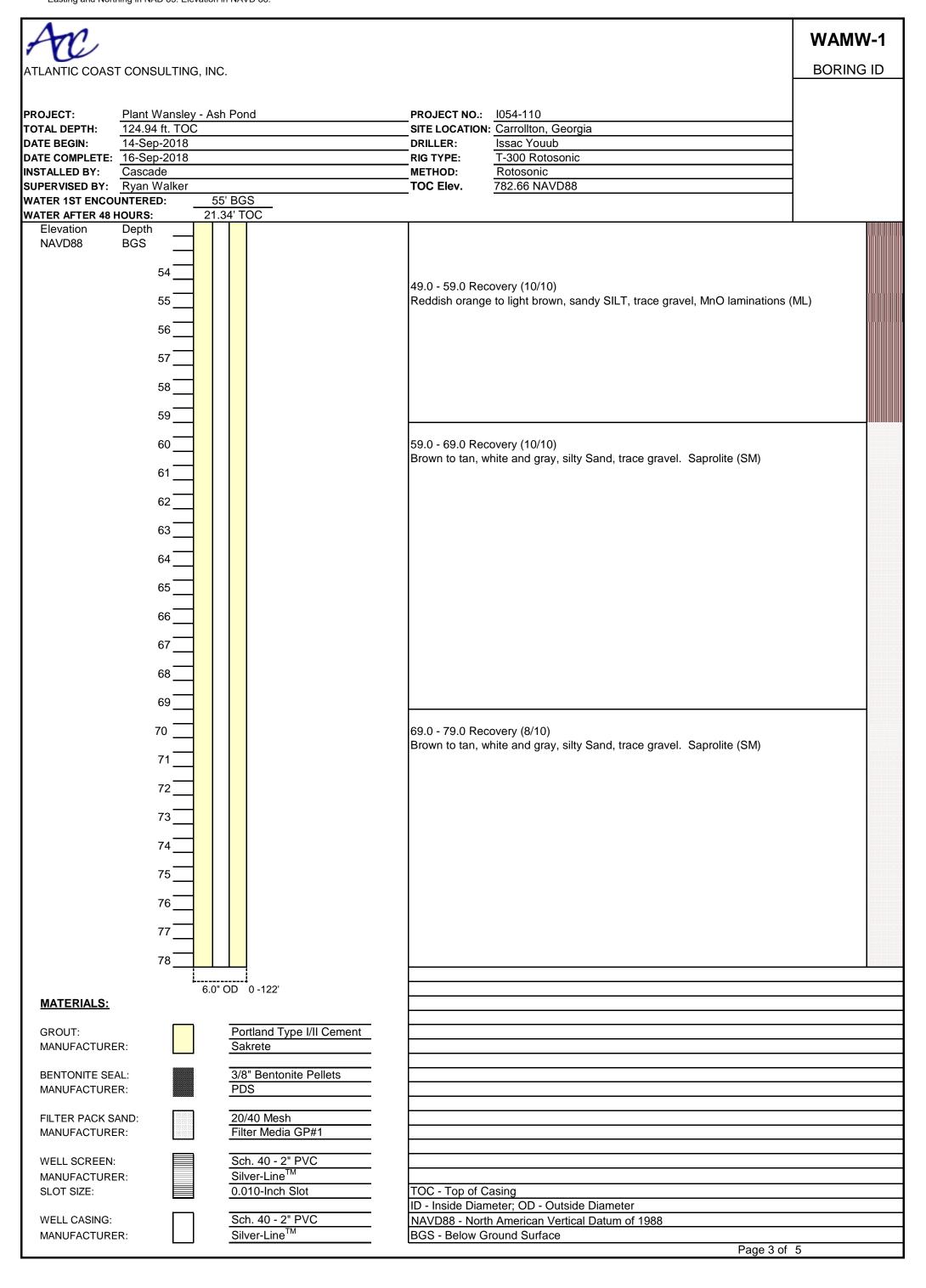
DRILLER: Tom Ardito

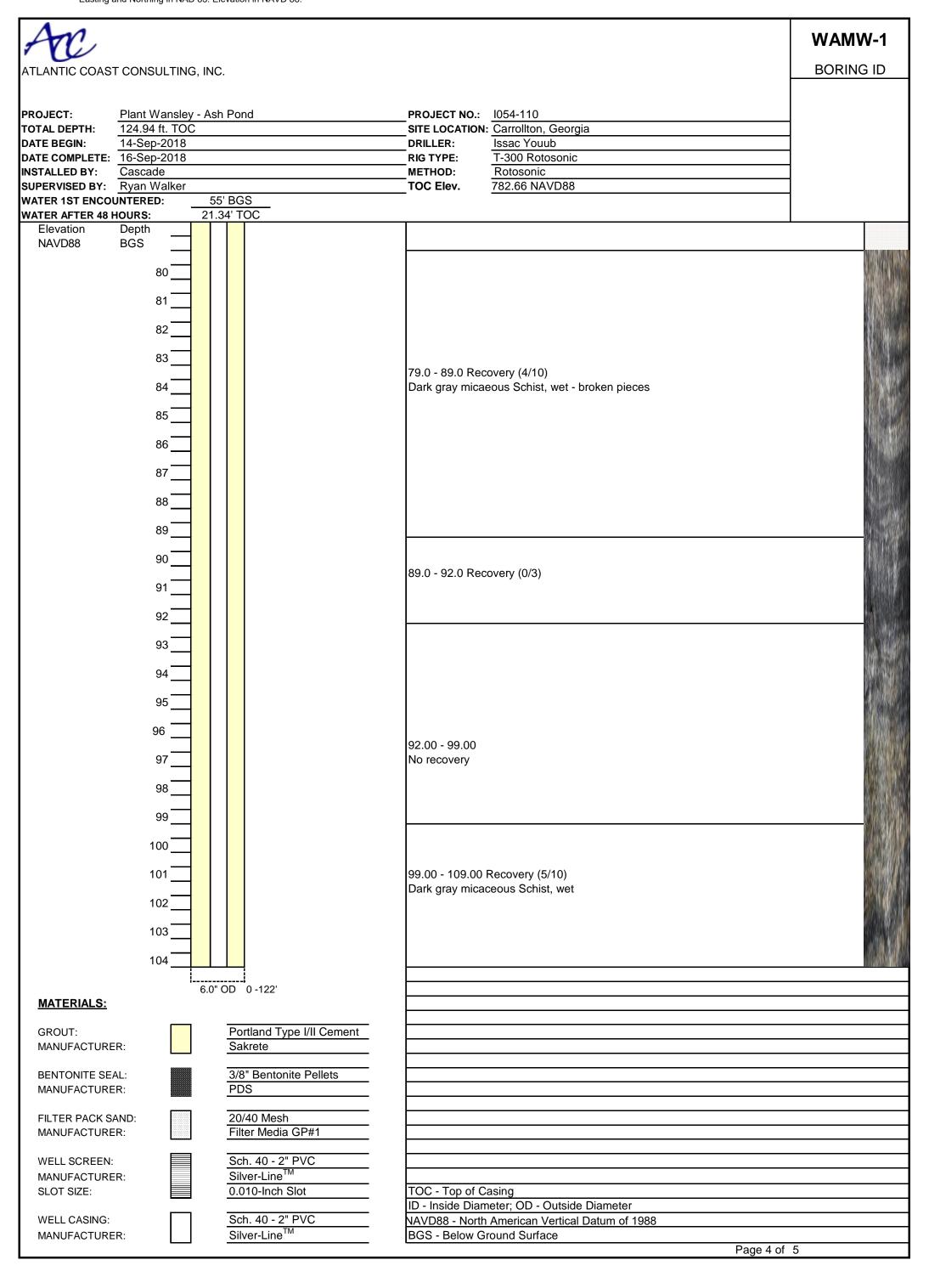
GA INSPECTOR: Kristen Jurinko CHECKED BY: Rachel P. Kirkman, P.G.

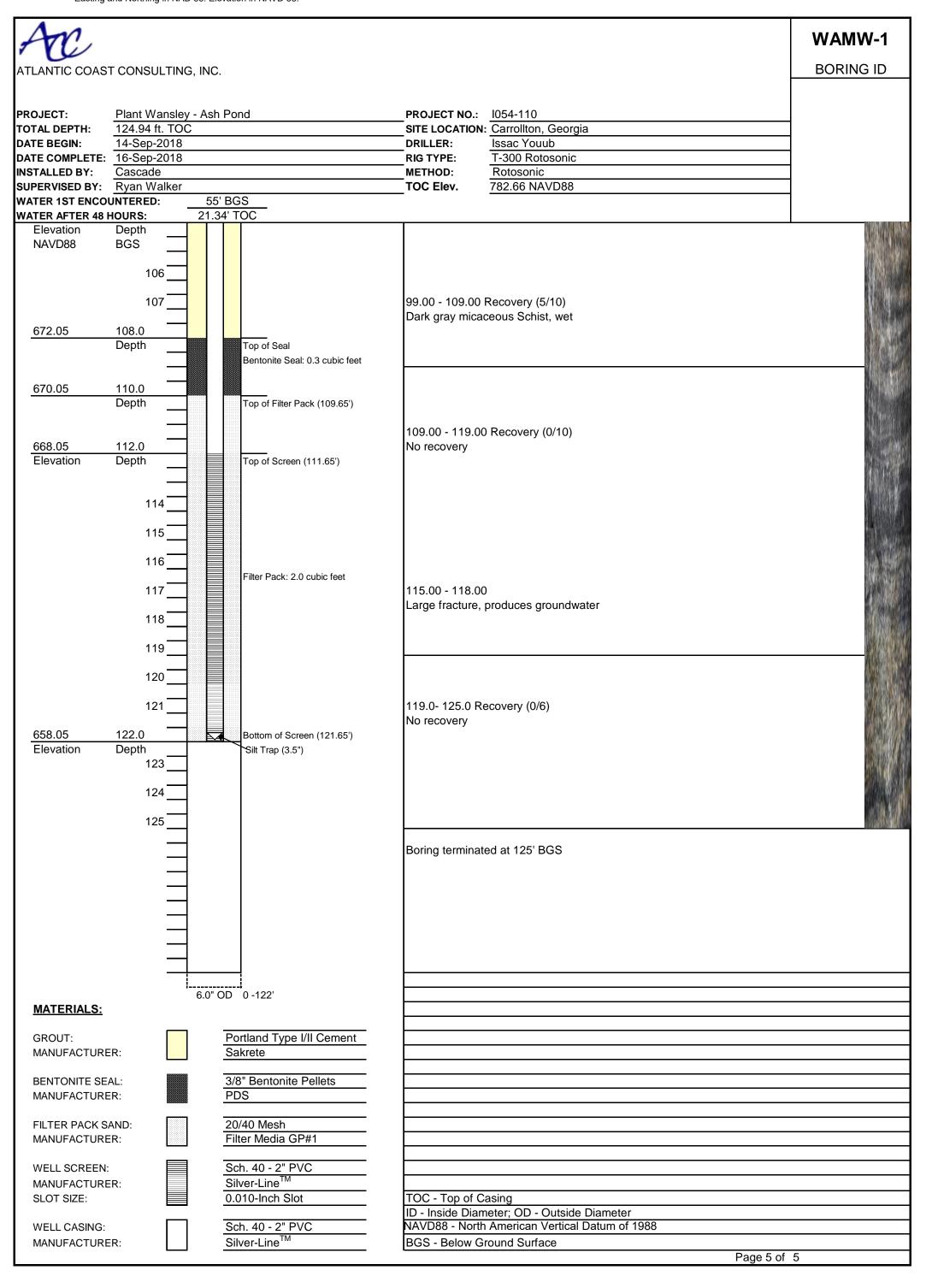


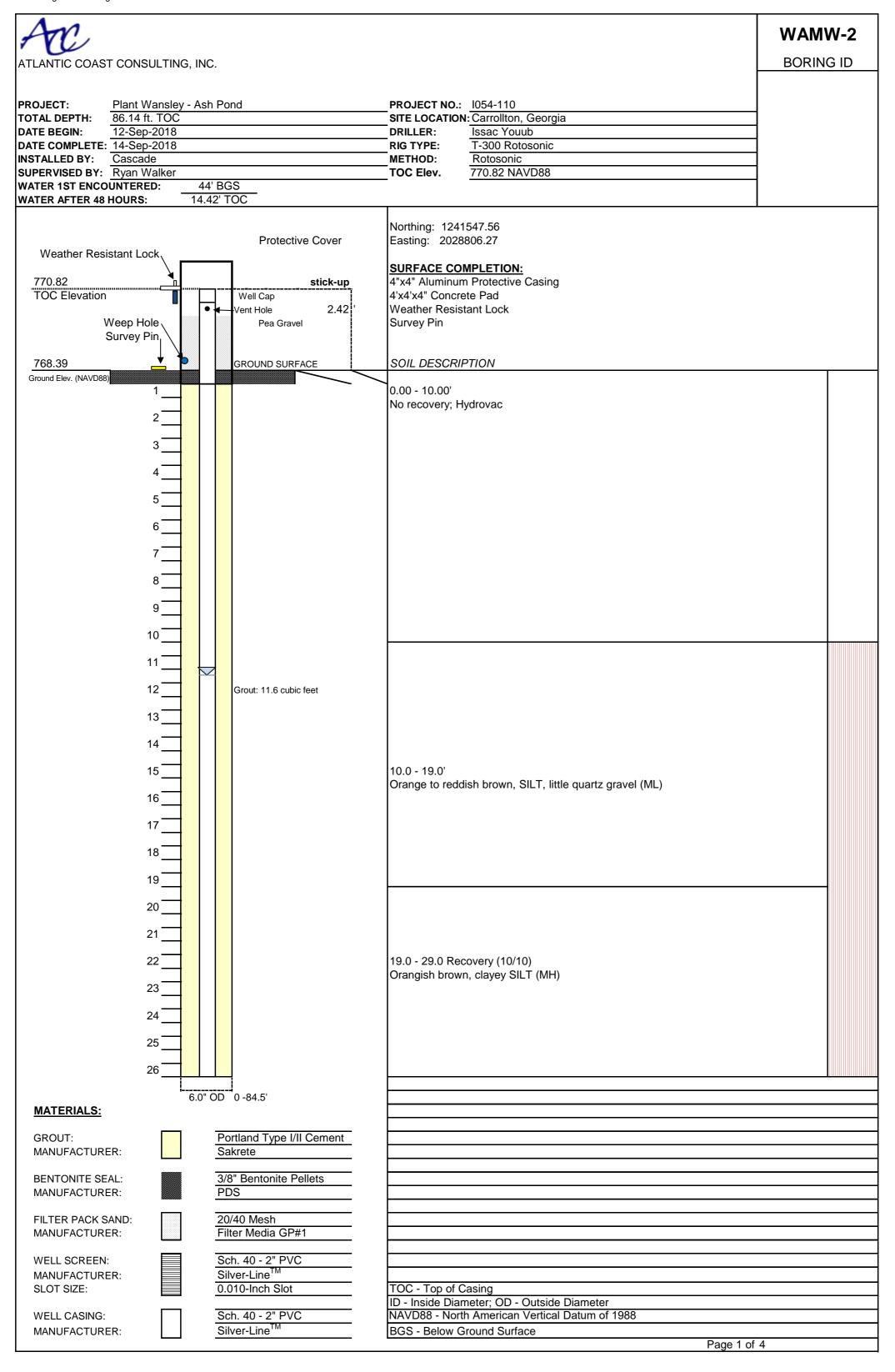


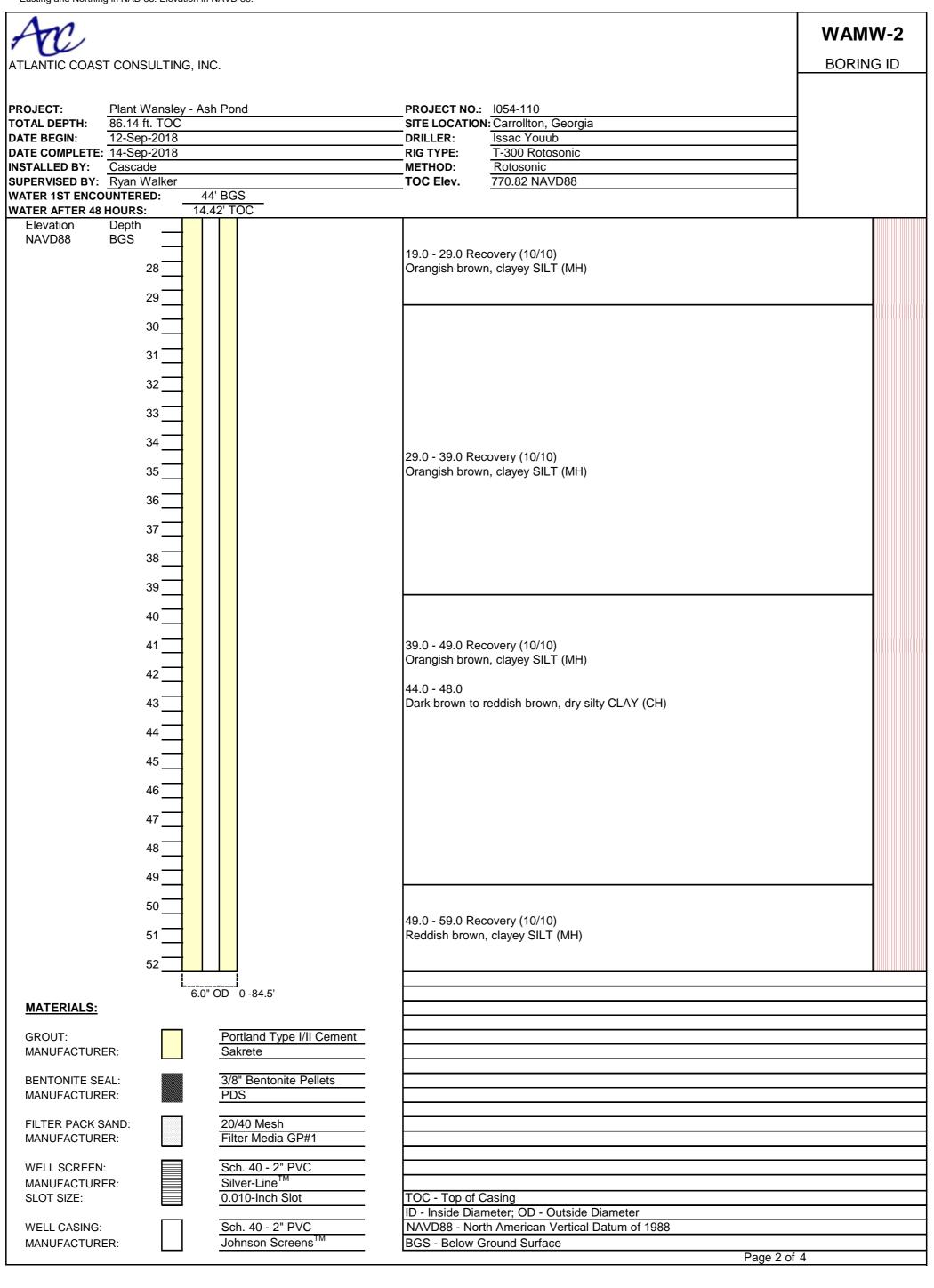


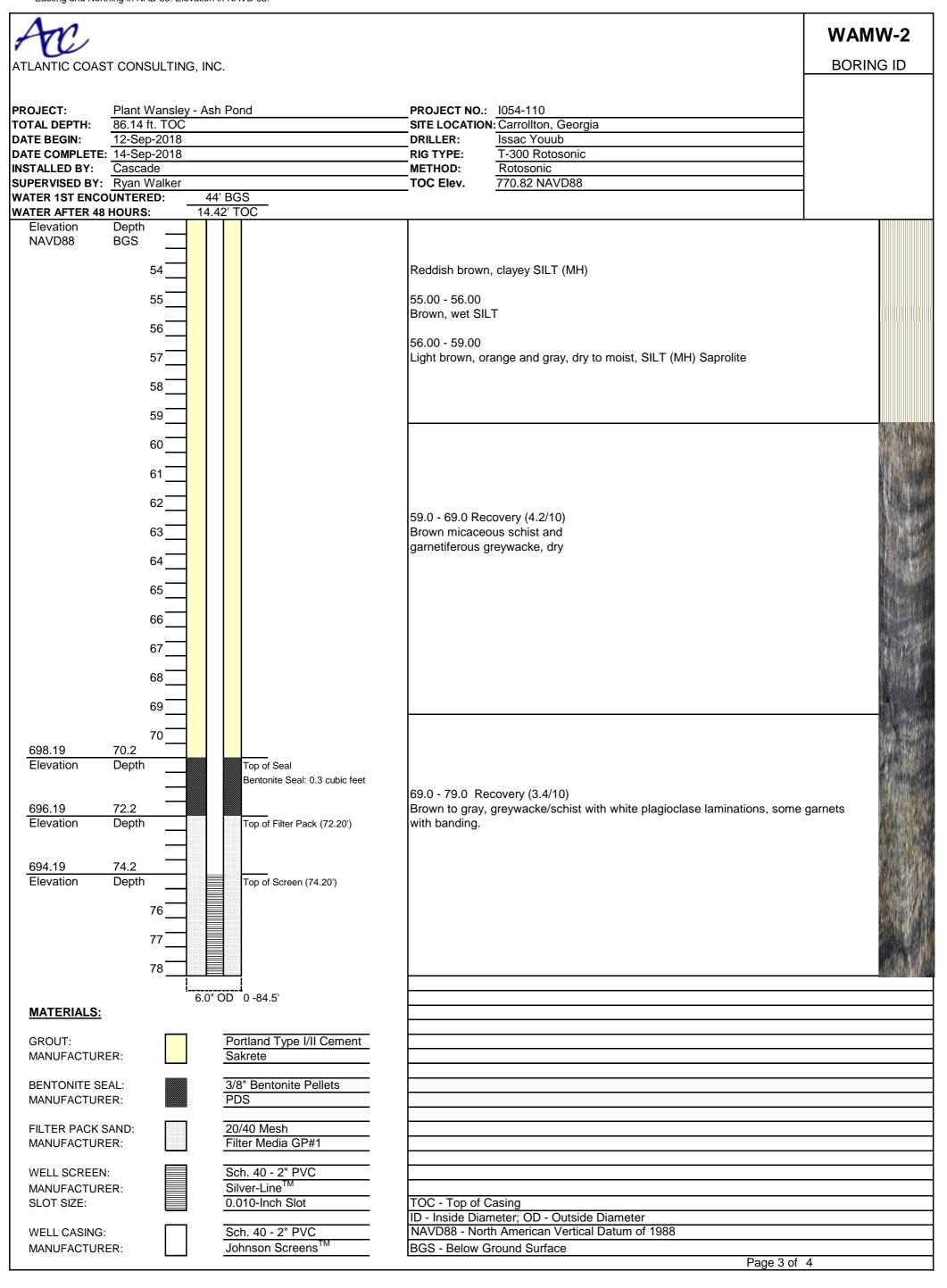


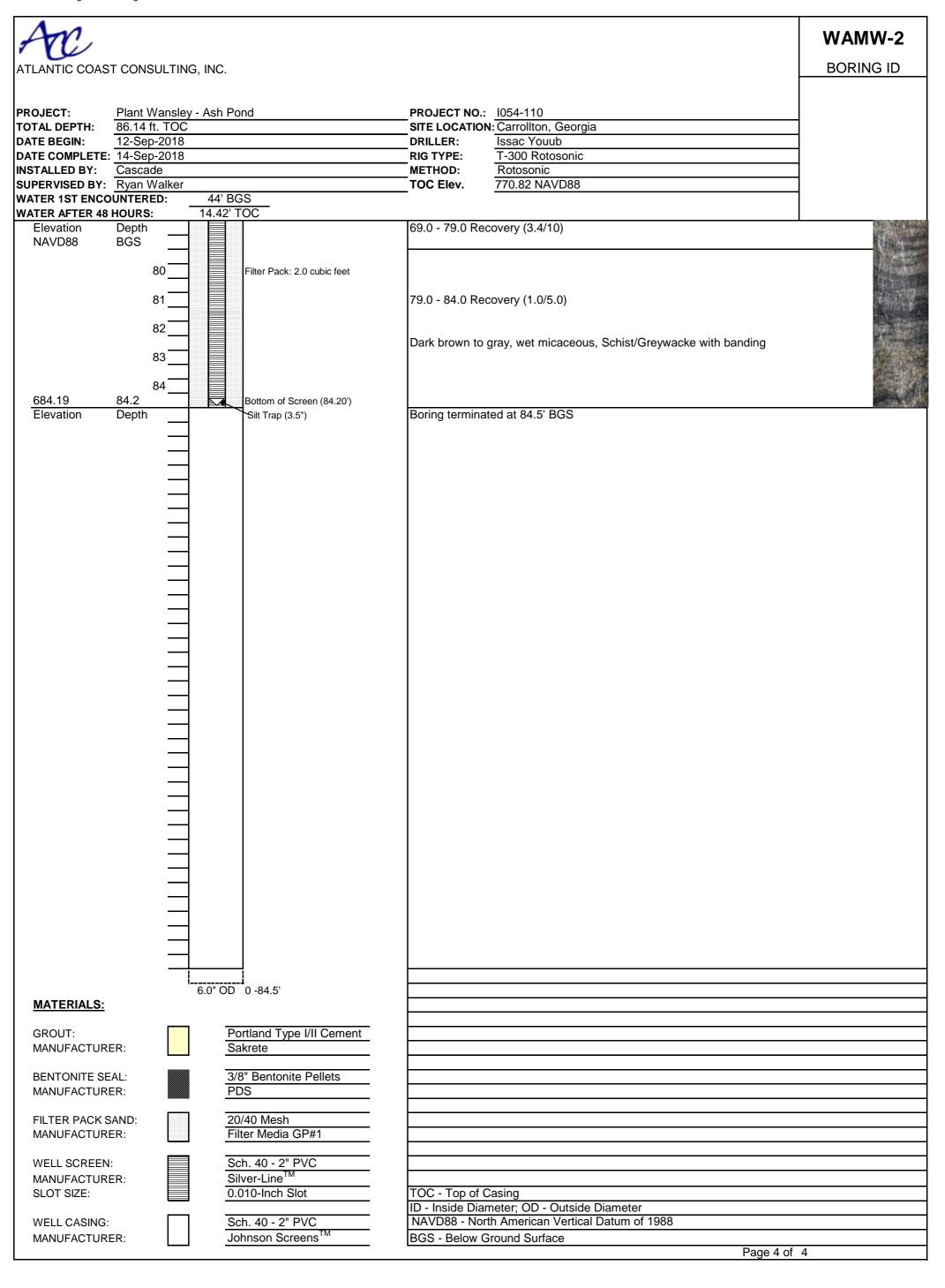














# **Environment Testing America**

# **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 PA Lab ID: 02-00416

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

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

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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

# 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.

# **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

11/10/2020

# **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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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Pittsburgh

# **Sample Summary**

Client: Southern Company

180-109917-6

180-109917-7

Project/Site: Plant Wansley GW7327

PB-7 144-154

PB-8 135-145

Lab Sample ID **Client Sample ID** Matrix Collected Received Asset ID 180-109917-1 PB-3 57-61 Solid 07/14/20 11:05 08/21/20 09:45 07/14/20 11:00 08/21/20 09:45 180-109917-2 PB-3 47-52 Solid 180-109917-3 PB-4 49-59 Solid 07/14/20 12:10 08/21/20 09:45 180-109917-4 PB-4 64-68 Solid 07/14/20 12:15 08/21/20 09:45 180-109917-5 PB-4 73-80 Solid 07/14/20 12:20 08/21/20 09:45

07/14/20 12:45 08/21/20 09:45

07/14/20 15:15 08/21/20 09:45

Solid

Solid

Job ID: 180-109917-1

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# **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

#### **Protocol References:**

Residual

Total

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

Sequential Extraction Procedure, Residual Fraction

Preparation, Total Material

Job ID: 180-109917-1

TAL KNX

TAL KNX

TAL-KNOX

TAL-KNOX

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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 **Matrix: Solid** 

Date Received: 08/21/20 09:45

Batch Batch Dil Initial Final Batch Prepared Method Factor or Analyzed **Prep Type** Type Run **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

Lab Sample ID: 180-109917-1 Date Collected: 07/14/20 11:05 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.1

	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 Instrumer	6010B nt 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 nt 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 nt 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 nt 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 nt 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 nt 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

Lab Sample ID: 180-109917-2 Date Collected: 07/14/20 11:00 **Matrix: Solid** 

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
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Instrumer	t ID: NOEQUIP								

Eurofins TestAmerica, Pittsburgh

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Job ID: 180-109917-1

Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Client: Southern Company

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

_	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 Instrumer	6010B nt ID: DUO		5			44042	10/29/20 16:38	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 12:17	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 Instrumer	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 Instrumer	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 Instrumer	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 Instrumer	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 Instrumer	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 Instrumer	6010B SEP nt ID: DUO		1			44042	10/29/20 12:17	KNC	TAL KNX

Client Sample ID: PB-4 49-59

Sum of Steps 1-7

Analysis

Lab Sample ID: 180-109917-3 Date Collected: 07/14/20 12:10 Date Received: 08/21/20 09:45

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Туре Method Factor **Amount Amount** Number or Analyzed Analyst Run Lab

Instrument ID: NOEQUIP

6010B SEP

Client Sample ID: PB-4 49-59 Lab Sample ID: 180-109917-3

Date Collected: 07/14/20 12:10 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.1

	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 16:43	KNC	TAL KNX
	Instrumer	nt ID: DUO								

Eurofins TestAmerica, Pittsburgh

11/02/20 10:23 DKW

44105

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**Matrix: Solid** 

TAL KNX

11/10/2020

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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 nt 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 Instrumer	6010B SEP at ID: DUO		1	-		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

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 12:41	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 Instrumer	6010B SEP nt 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 Instrumer	6010B SEP nt 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 Instrumer	6010B SEP nt 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 Instrumer	6010B SEP nt 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 Instrumer	6010B SEP nt 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 Instrumer	6010B SEP nt 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 Method or Analyzed **Prep Type** Туре Run **Factor Amount Amount** Number Analyst Lab 11/02/20 10:23 DKW Sum of Steps 1-7 Analysis 6010B SEP 44105 TAL KNX Instrument ID: NOEQUIP

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
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

Lab Sample ID: 180-109917-6

**Matrix: Solid** 

**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
Sum of Steps 1-7	Analysis	6010B SEP		1			44105	11/02/20 10:23	DKW	TAL KNX
	Inetrumer	A ID. NOEOLIID								

Client Sample ID: PB-7 144-154

Date Collected: 07/14/20 12:45

Date Received: 08/21/20 09:45

Instrument ID: DUO

_										
	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 14:36	KNC	TAL KNX

Eurofins TestAmerica, Pittsburgh

Job ID: 180-109917-1

Client: Southern Company Project/Site: Plant Wansley GW7327

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	6010B SEP		4			43944	10/27/20 12:50	KNC	TAL KNX
	Instrumer	it ID: DUO								
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	6010B SEP		3			43944	10/27/20 14:31	KNC	TAL KNX
	Instrumer	it ID: DUO								
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	6010B SEP		1			43944	10/27/20 16:03	KNC	TAL KNX
	Instrumer	it 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		1			43997	10/28/20 12:43	KNC	TAL KNX
	Instrumer	it ID: DUO								
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	6010B SEP		5			43997	10/28/20 14:25	KNC	TAL KNX
	Instrumer	it ID: DUO								
Step 6	SEP	Acid/Sulfide			5.00 g	250 mL	43605	10/19/20 08:00	KNC	TAL KNX
Step 6	Analysis	6010B SEP		1			43997	10/28/20 15:57	KNC	TAL KNX
	Instrumer	it ID: DUO								
Step 7	Prep	Residual			1.000 g	50 mL	43637	10/20/20 08:00	KNC	TAL KNX
Step 7	Analysis	6010B SEP		1	J		44042	10/29/20 12:46	KNC	TAL KNX
	Instrumer	it ID: DUO								

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 **Matrix: Solid** 

Lab Sample ID: 180-109917-7

Percent Solids: 99.5

**Matrix: Solid** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	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: NOEQUIP								

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

Matrix: Solid
Percent Solids: 99.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared 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 12:55	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 14:36	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 16:08	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 12:48	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 14:30	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 at ID: DUO		1			43997	10/28/20 16:02	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 at ID: DUO		1	-		44042	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

Batch Type: Prep

KNC = Kerry Collins

Batch Type: Analysis

DKW = Donna Wilburn KNC = Kerry Collins Percent Solids: 99.5

6

8

30

11

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 **Matrix: Solid** Date Received: 08/21/20 09:45 Percent Solids: 99.1

die Neceivea. Ooiz iizo	03.40							ercent dona	3. 33.1
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 1							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61		10	0.61	mg/Kg	<u></u>	09/29/20 08:00	10/27/20 12:12	4
Method: 6010B SEP - SI	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	<del>*</del>	10/13/20 08:00	10/27/20 13:53	3
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 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 - SI	EP Metals (ICP) - S	Step 4							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.3	J	5.0	0.30	mg/Kg	<u></u>	10/15/20 08:00	10/28/20 16:31	- 2
Method: 6010B SEP - SI	ED Motals (ICD) -	Ston 5							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	2.7	J	38	2.2	mg/Kg	<del>*</del>	10/19/20 08:00	10/28/20 13:46	- 5
Method: 6010B SEP - SI	EP Metals (ICP) - S	Step 6							
Analyte	· · · · · · · · · · · · · · · · · · ·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.8	J	2.5	0.15	mg/Kg	<del>*</del>	10/19/20 08:00	10/28/20 15:32	1
Method: 6010B SEP - SI	EP Metals (ICP) - 9	Step 7							
Analyte	· · · · · · · · · · · · · · · · · · ·	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium			2.5	0.15	mg/Kg	— <del>-</del>	10/20/20 08:00	10/29/20 12:12	1
Method: 6010B SEP - SI	EP Metals (ICP) - \$	Sum of Step	s 1-7						
	• • •	Sum of Step Qualifier	s 1-7 RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 6010B SEP - SE Analyte Lithium	• • •	•			Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/02/20 10:23	
Analyte	Result	•	RL			<u>D</u>	Prepared		
Analyte Lithium	Result 17 etals (ICP) - Total	•	RL		mg/Kg	_ <u>D</u>	Prepared Prepared		Dil Fac

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. 00/2 1/20	0 09.45							Percent Sono	15. 33.3
	SEP Metals (ICP) - S	Step 1							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60		10	0.60	mg/Kg	<u></u>	09/29/20 08:00	10/27/20 12:17	4
_ Method: 6010B SEP - :	SEP Metals (ICP) - S	Step 2							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.45		7.5	0.45	mg/Kg	<del>*</del>	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	<del>-</del>	10/14/20 08:00	10/27/20 15:44	1
	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
	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	<del>-</del>	10/19/20 08:00	10/28/20 13:51	5
Method: 6010B SEP -	SEP Metals (ICP) - \$	Step 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	4.1		2.5	0.15	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 15:37	1
Method: 6010B SEP -	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 12:17	1
Method: 6010B SEP -	SEP Metals (ICP) - \$	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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<u>:</u>

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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

Date Collected: 07/14/20 12:10

Matrix: Solid

Date Received: 08/21/20 09:45

Percent Solids: 99.1

Method: 6010B SEP - 9	SEP Metals (ICP) - S	tep 1							
Analyte	, ,	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61		10	0.61	mg/Kg	<del>*</del>	09/29/20 08:00	10/27/20 12:36	4
Method: 6010B SEP - 9	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 14:03	3
	SEP Metals (ICP) - S	tep 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 - 9	SEP Metals (ICP) - S	tep 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	1
	SEP Metals (ICP) - S	tep 5							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.2	J	38	2.2	mg/Kg	☼	10/19/20 08:00	10/28/20 13:56	5
_ Method: 6010B SEP - 9	SEP Metals (ICP) - S	tep 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	4.7	J	5.0	0.30	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 16:40	2
Method: 6010B SEP - 9	SEP Metals (ICP) - S	tep 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	14		2.5	0.15	mg/Kg	<del>*</del>	10/20/20 08:00	10/29/20 12:32	1
Method: 6010B SEP - 3	SEP Metals (ICP) - S	um of Steps	s 1-7						
Analyte	Result	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 I	Metals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	36		13	0.76	mg/Kg	₩	09/28/20 08:00	10/29/20 16:43	5

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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

	••••							
Method: 6010B SEP - SI	EP Metals (ICP) - Step 1							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61	10	0.61	mg/Kg	<del>*</del>	09/29/20 08:00	10/27/20 12:41	4
_ Method: 6010B SEP - SI	EP 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	☼	10/13/20 08:00	10/27/20 14:07	3
- Method: 6010B SEP - SI	EP 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 - SI	EP 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 - SI	EP 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 - SI	EP Metals (ICP) - Step 6							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	14	2.5	0.15	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 15:47	1
- Method: 6010B SEP - SI	EP 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 - SI	EP 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 M	etals (ICP) - Total							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	43	13	0.76	mg/Kg	<del></del>	09/28/20 08:00	10/29/20 16:47	5

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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

Matrix: Solid
Percent Solids: 99.6

Method: 6010B SEP - S	SEP Metals (ICP) - Step 1							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.60	10	0.60	mg/Kg	<u></u>	09/29/20 08:00	10/27/20 12:45	4
Method: 6010B SEP - S	SEP Metals (ICP) - 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 - S	SEP Metals (ICP) - Step 3							
Analyte	Result 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 - S	SEP Metals (ICP) - 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 - S	SEP Metals (ICP) - 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 - S	SEP Metals (ICP) - Step 6							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	7.9	2.5	0.15	mg/Kg	<del>*</del>	10/19/20 08:00	10/28/20 15:52	1
Method: 6010B SEP - S	SEP Metals (ICP) - 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 12:42	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	32	2.5	0.15	mg/Kg			11/02/20 10:23	1
Method: 6010B - SEP N	Metals (ICP) - Total							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	36	13	0.75	mg/Kg	<del></del>	09/28/20 08:00	10/29/20 16:52	5

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Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lithium	<0.60		10	0.60	mg/Kg	<del>-</del>	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 Fa
Lithium	0.69	J	7.5	0.45	mg/Kg	<del>*</del>	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 F
Lithium	0.57	J	2.5	0.15	mg/Kg	<del>-</del>	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 F
Lithium	11		2.5	0.15	mg/Kg	<del>-</del>	10/15/20 08:00	10/28/20 12:43	
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 5							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Lithium	6.9	J	38	2.2	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 14:25	
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Lithium	69		2.5	0.15	mg/Kg	<del>*</del>	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 F
Lithium	53		2.5	0.15	mg/Kg	<del>*</del>	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 F
Lithium	140		2.5	0.15	mg/Kg			11/02/20 10:23	
Method: 6010B - SEP	Metals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil F
Lithium	130		2.5	0.15	mg/Kg	— <u> </u>	09/28/20 08:00	10/29/20 14:36	

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Lithium

Client Sample ID: PB-8 135-145 Lab Sample ID: 180-109917-7

Date Collected: 07/14/20 15:15

Date Received: 08/21/20 09:45

Matrix: Solid
Percent Solids: 99.5

Date Received: 08/21/20	0 09:45							Percent Solid	IS: 99.5
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	<del>-</del>	09/29/20 08:00	10/27/20 12:55	4
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 2							
Analyte	• • •	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	<del>*</del>	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	<del>*</del>	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	<del></del>	10/19/20 08:00	10/28/20 16:02	1
Method: 6010B SEP -	SEP Metals (ICP) - S	Step 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	18		2.5	0.15	mg/Kg	<del>*</del>	10/20/20 08:00	10/29/20 12:52	1
Method: 6010B SEP -	SEP Metals (ICP) - \$	Sum of Step	s 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 (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

2.5

0.15 mg/Kg

© 09/28/20 08:00 10/29/20 14:42

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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

**Matrix: Solid** 

**Analysis Batch: 44042** 

MB MB

Analyte

Result Qualifier

< 0.15

RL 2.5 **MDL** Unit 0.15 mg/Kg Prepared

09/28/20 08:00 10/29/20 10:56

Client Sample ID: Method Blank

Analyzed Dil Fac

Prep Type: Total/NA Prep Batch: 43059

Prep Type: Total/NA

Prep Batch: 43059

**Prep Type: Step 1** 

Prep Batch: 43133

Prep Type: Step 1

Prep Batch: 43133

Prep Type: Step 1

Prep Batch: 43133

RPD

Prep Type: Step 2

Prep Batch: 43460

10

Prep Type: Total/NA

Prep Batch: 43059

Lab Sample ID: LCS 140-43059/15-A

**Matrix: Solid** 

Lithium

Analyte

Lithium

Lithium

**Analysis Batch: 44042** 

Spike

Added 5.00 5.17

Result Qualifier

LCS LCS

Unit mg/Kg

D %Rec 103

%Rec. Limits 75 - 125

Client Sample ID: Lab Control Sample Dup

**Client Sample ID: Lab Control Sample** 

Lab Sample ID: LCSD 140-43059/16-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

Analyte

Spike Added 5.00

RL

10

Spike

Added

5.00

Spike

Added

5.00

LCSD LCSD Result Qualifier 5.03

MDL Unit

LCS LCS

LCSD LCSD

4.61 J

Result Qualifier

5.09 J

Result Qualifier

0.60 mg/Kg

Unit

Unit

mg/Kg

mg/Kg

Unit mg/Kg %Rec

Prepared

%Rec

%Rec

92

102

Client Sample ID: Lab Control Sample Dup

Limits 75 - 125

**Client Sample ID: Method Blank** 

09/29/20 08:00 10/27/20 11:39

**Client Sample ID: Lab Control Sample** 

%Rec.

Limits

%Rec.

Limits

75 - 125

**Client Sample ID: Method Blank** 

75 - 125

Analyzed

%Rec.

RPD Limit 30

**RPD** 

Dil Fac

**RPD** 

Limit

Dil Fac

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4

**Matrix: Solid** 

**Analysis Batch: 43944** 

MB MB

Result Qualifier

Analyte

Lithium <0.60 Lab Sample ID: LCS 140-43060/15-B ^5

**Matrix: Solid** 

**Analysis Batch: 43944** 

Analyte Lithium

Lab Sample ID: LCSD 140-43060/16-B ^5 **Matrix: Solid** 

**Analysis Batch: 43944** 

Analyte Lithium

Lab Sample ID: MB 140-43447/14-B ^3 Matrix: Solid

**Analysis Batch: 43944** 

Analyte Lithium

MR MR Result Qualifier <0.45

RL 7.5 MDL Unit 0.45 mg/Kg

**Prepared** 

Analyzed 10/13/20 08:00 10/27/20 13:09

Eurofins TestAmerica, Pittsburgh

2

Client: Southern Company

Lithium

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

# Method: 6010B SEP - SEP Metals (ICP) (Continued)

Lab Sample ID: LCS 140-43447/15-B ^5

Matrix: Solid

Analysis Batch: 43944

Client Sample ID: Lab Control Sample

Prep Type: Step 2

Prep Batch: 43460

4.57 J

mg/Kg

91

75 - 125

Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit D %Rec Limits

5.00

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 Prep Batch: 43495

Lab Sample ID: LCS 140-43465/15-B

Matrix: Solid

Client Sample ID: Lab Control Sample

Prep Type: Step 3

Analysis Batch: 43944

Spike LCS LCS

Analyte

Added Result Qualifier Unit D %Rec Limits

AnalyteAdded<br/>LithiumResult<br/>5.00Qualifier<br/>5.29Unit<br/>mg/KgD<br/>106%Rec<br/>75 - 125Limits<br/>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

Rec. RPD

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
 RL Qualifier
 MDL mit RL Qualifier
 D mit RL Qualifier
 D mg/Kg
 Prepared 10/15/20 08:00
 Analyzed 10/28/20 11:26
 Dil Fac 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

Analysis Batch: 43997

Spike LCS LCS %Rec.

Analysis Batch: 43539

 Analyte
 Added
 Result
 Qualifier
 Unit
 D
 %Rec
 Limits

 Lithium
 5.00
 5.32
 mg/Kg
 106
 75 - 125

Lab Sample ID: LCSD 140-43496/16-B

Matrix: Solid

Analysis Batch: 43997

Spike

Client Sample ID: Lab Control Sample Dup
Prep Type: Step 4
Prep Batch: 43539
Rec. RPD

 Analyte
 Added Lithium
 Result Spike
 LCSD LCSD
 KRec.
 RPD Limit

 Lithium
 5.00
 5.20
 mg/Kg
 D mg/Kg
 MRec Limits
 RPD Limit

Eurofins TestAmerica, Pittsburgh

Project/Site: Plant Wansley GW7327

Job ID: 180-109917-1

# Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

**Matrix: Solid** 

**Analysis Batch: 43997** 

MB MB

MB MB

MB MB Result Qualifier

< 0.15

< 0.15

Result Qualifier

Result Qualifier Analyte

<2.2

RL 38

**MDL** Unit 2.2 mg/Kg Prepared

Analyzed

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

<u>10/19/20 08:00</u> <u>10/28/20 13:02</u>

**Prep Type: Step 5** Prep Batch: 43604

Prep Batch: 43604

RPD

Prep Type: Step 6

Prep Batch: 43605

Dil Fac

**RPD** 

Limit

Dil Fac

**Prep Type: Step 5** 

Prep Batch: 43604

Lab Sample ID: LCS 140-43540/15-B ^5

**Matrix: Solid** 

Lithium

Analyte

Lithium

**Analysis Batch: 43997** 

Spike Added 15.0

Spike

Added

15.0

Spike

Added

5.00

Spike

Added

5 00

Spike

Added

5.00

RL

2.5

LCS LCS 16.4 J

Result Qualifier Unit

D %Rec mg/Kg 109

75 - 125

%Rec. Limits

%Rec.

Limits

75 - 125

**Client Sample ID: Method Blank** 

Analyzed

Client Sample ID: Lab Control Sample Dup **Prep Type: Step 5** 

%Rec

**Matrix: Solid** 

**Analysis Batch: 43997** 

Analyte

Lab Sample ID: LCSD 140-43540/16-B ^5

Lithium

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

Lithium

Analyte

Lithium

Lab Sample ID: LCSD 140-43605/16-A

**Matrix: Solid Analysis Batch: 43997** 

Analyte

Lab Sample ID: MB 140-43637/14-A **Matrix: Solid** 

**Analysis Batch: 44042** 

Lab Sample ID: LCS 140-43637/15-A

**Matrix: Solid Analysis Batch: 44042** 

Analyte

Lithium

LCSD LCSD Result Qualifier

17.4 J

LCS LCS

LCSD LCSD

5.03

Result Qualifier

**MDL** Unit

LCS LCS

5.04

Result Qualifier

0.15 mg/Kg

4.96

Result Qualifier

MDL Unit

0.15 mg/Kg

Unit

Unit

Unit

mg/Kg

mg/Kg

Unit

mg/Kg

10/19/20 08:00 10/28/20 14:45

Prepared

Client Sample ID: Lab Control Sample Prep Type: Step 6

Prep Batch: 43605

%Rec. Limits %Rec

99 75 - 125 mg/Kg Client Sample ID: Lab Control Sample Dup

Prep Type: Step 6

Prep Batch: 43605 %Rec. **RPD** 

Limits **RPD** Limit D %Rec 101 75 - 125

Client Sample ID: Method Blank

Analyzed

**Prep Type: Step 7** Prep Batch: 43637

Dil Fac

<u>10/20/20 08:00</u> <u>10/29/20 10:42</u>

Prepared

%Rec

101

**Client Sample ID: Lab Control Sample Prep Type: Step 7** 

Prep Batch: 43637

%Rec. Limits

75 - 125

RL

2.5

# **QC Sample Results**

Client: Southern Company Job ID: 180-109917-1

Project/Site: Plant Wansley GW7327

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: LCSD 140-43637/16-A **Client Sample ID: Lab Control Sample Dup** 

**Matrix: Solid** 

**Prep Type: Step 7 Analysis Batch: 44042** Prep Batch: 43637 LCSD LCSD Snika

	<b>Бріке</b>	LC2D	LC2D				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lithium	5.00	5.05		mg/Kg		101	75 - 125	0	30

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 Batch
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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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 Batch
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 Project/Site: Plant Wansley GW7327 Job ID: 180-109917-1

**Metals** 

Prep Batch: 43637

Lab Sample ID 180-109917-1	Client Sample ID PB-3 57-61	Prep Type Step 7	Matrix Solid	Method Residual	Prep Batch
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

Job ID: 180-109917-1

Client: Southern Company 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

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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	

44/53 Chain of Custody Record

North Canton, OH 44720-6900

Phone (330) 497-9396

4101 Shuffel Street NW

**Environment Testing** America Seurofins :

N - None
O - AsNaO2
P - Na2O4S
O - Na2SO3
R - Na2SO4
R - Na2SO4
T - TSP Dodecahydrate
U - Acetone Applicable to all samples on COC - perform particle size reduction as needed to ensure The Pip special Instructions/Note: homogeneous sample is analyzed Z - other (specify) Months W - pH 4-5 V - MCAA Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Preservation Codes: A - HCL B - NaOH C - Zn Acetale D - Nitric Acid E - NaHSO4 F - MeOH Archive For 924 -----Special Instructions/QC Requirements: see special note above Salar me. 180-109917 Chain of Custody Disposal By Lab Analysis Requested May may Long E-Mail: shali.brown@testamericainc.com Return To Client × ×  $\times$ × 6020 Lithium × × × × × × × × × × Particle Size Reduction Lab PM: Brown, Shali Company 240 Perform MS/MSD (Yes or No) Time: Preservation Code: A-Air) S S S S S S S Radiological Type (C=comp, Sample G=grab) O O O O O O O 3 day RUSH 1730 Sample Time 11:05 11:00 12:10 12:15 12:20 12:45 15:15 Date: Unknown TAT Requested (days) Due Date Requested: NLT 7/22/2020 \$-20-20 Date/Time: Sample Date Sampler: Taylor Payne Phone: 678-718-4760 7/14/20 7/14/20 7/14/20 7/14/20 7/14/20 7/14/20 Poison B Skin Irritant Deliverable Requested: (II) II, IV, Other (specify) 1255 Roberts Blvd NW, Suite 200 Possible Hazard Identification Polytical of the state of the s Empty Kit Relinquished by: reimer@geosyntec.com Client Information Sample Identification Plant Wansley AP1 578-202-9564 PB-7 144-154 PB-8 135-145 Adria Reimer Relinquished by: Bage 357-61 Bage 347-52 Bage 347-52 P8-4 64-68 PB-4 73-80 Kennesaw Geosyntec GA 30144 GW7327

Cooler Temperature(s) °C and Other Remarks:

Custody Seal No.:

A Yes A No

### 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

ORIGIN ID: PHDA (330) 312-0176

EUROFINS TESTAMERICA CANTON 4101 SHUFFEL STREET NH

SHIP DATE: 20AUG20 ACTMGT: 59.50 LB CAD: 0562057/CAFE3313

BILL RECIPIENT

TO ENVIRONMENTAL SAMPLE RECEIPT NORTH CANTON, OH 447206900 UNITED STATES US

**TESTAMERICA PITTSBURGH** 

PITTSBURGH PA 15238 301 ALPHA DRIVE RIDC PARK

DEPT: AL HAIDET (412) 963-7058

FedEx

FRI - 21 AUG 10:30

PRIORITY OVERNIGHT

65 AGCA

15238 PA-US PIT

Uncorrected Yempii IIII Thermometer ID

40

- Initials PT-WASR-001 effective 11/8/18 William.

180-109917 Waybill

Company

Date/Time.

8

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

Return To Chen;

Moral

Special Instructions/OC Requirements

Primary Deliverable Rank: 2

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

eversion of Methon

recested by

Empty Kit Relinquished by:

Possible Hazard Identification

Unconfirmed

спанся з Звотепс

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Cooler Temberstury(s) 10 and Other Remarks:

Received ty:

Company

Ostelline

720

### Chain of Custody Record

Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park

I**rofins** . Epotooment Testing America

	ပ	hain	hain of Custody Record	tody R	900	9											. Efwiconment Testing	
Pittsjurgh, PA 15238 Phone. 412:953-7058 Fax: 412:953-2468				•				==		<u> </u>		Ş	şto			-	America	
	Samples			tat Par						ļ	 	 	 			0,	İ	
Citent Information (Sub Contract Lab)	-			Brow	Brown, Shali	_										180-410782.1		
Cleft ustract. Shipping/Receving	Phone:			Shall Shall	Brown.	SEuc	E-bait Shali.Brown:©Eurofinset.com	E S			State of Co. Geomotia	State of Gogin Geomia				Page: Psych 1 of 1		
Сотранус				-	Seconds	100	Acceptations Robins (See possi	1	Ŀ	l					ļ	940		•
TestAmerica Laboratones, Inc.																180-109917-1		
Address: 5815 Middlebrook Piks.	Due Dare Requested 10/13/2020	¥						Ā	Analysis Requested	Bed	597	۲				Preservation Codes	150	_
City: Knoxvilla	TAT Requested (days):	<u> </u>			F		L			_		$\vdash$	$\vdash$	L	$\vdash$	A - 40: B - NaOF	M - Maxeloo N - Mone	
Saz. Dr. TK, 37921	_							_	M bive o							0 - Vario 2004	0 - Na2045 0 - Na2503	
Priore: (865-291-3000(Tel) 865-584-4315(Fax)	÷ 04				. (4						•	9				F - MeCA G - Archor H - Ascretir Ar 4	R - Na2S203 5 - P2504 7 - 1950 Ongestington	
Emş.	₩0₩											desp			*	I - ice J - El Wayer	U-Acesono V-ACAA	
Project Name: Plant Wansley GW7327	Project ≠: 18019922										_				10 militi	K:60;k L:50;	W - pH ÷5 Z - other (specify)	
\$ ta: Wansley CCR	******														nosto	Officer		
Sample Identification • Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=orab)	Matrix (wester, personale, personale, personale,	Field Filtocod MSM mrehed	35109 EE0106	99198_40108 99198_40108	35/d3 <b>5</b> _86/09	#27455 B0100 	joT, 938:00f08	199/896 80100	938/438_86106 		_	Total Number	ole long	Graedal Instrumentation	
	V	X		on Code:	т.	-	┿	╁━	+	┿	╂╌	╌			Y			_
PB-3 57-61 (180-:09917-1)	7714/20	:1:05 Fastem		Solid		×	×	×	×	×	×	×	L		-			_
PB-3 47-52 (180-109917-2)	7/14/20	11:00 Eastern		Soild	_	×	×	×	×	×	×	×	_		-			_
PB-4 49-59 (180-1099:7-3)	7/14/20	12:10 Eastern		Solid		×	×	×	×	×	×	×			-			_
PB-4 64-68 (180-109917-4)	7714/20	12:15 Eastem		Soid		×	×	×	×	×	×	×	_		-			_
PB-4 73-80 (180-169917-5)	7/14/20	12:20 Eastern		Solid		×	×	×	×	×	×	×			-			_
P6-7 144-154 (180-109917-6)	7/14/20	12:46 Eastern	_	Solid		×	×	×	×	×	×	×			<u>-</u>			_
PB-8 135-145 (180-109917-7)	7/14/20	15:15 Еэstет		Solid		×	×	×	×	×	×	×			-			_
						$\dashv$	$\Box$				$\dashv$			-	$\dashv$			_
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here: Since incombay acceptables and stage. Eurobe 18 kinnering places the comments of analysis of analysis analysis of services and acceptables as services and acceptables analysis. If an incombay post not the services as acceptable in acceptable of Ongar is the State of Ongar is analysis analysis. If an incompanient acceptable in acceptable of Ongar is analysis and on a Caracy analysis analysis analysis analysis analysis analysis analysis.	S places the ownership being analyzed, the se date, return the signed	of method, and the Change of Cust	rayte & accredit s shoopd pack p boy accesting to	acon comphan o the Eurofine I said complican	estate estate en lo iliu	90 90 90 90 90 90 90 90 90 90 90 90 90 9	polytect : ratory or stem one	eppenions other ma	50 TE 5000	samol	ndibe proved	الاسان 1908 كار	Sec.	4 L7 der 45 13 950	chain-of sredden;	cusady. If the labora in status should be bro	This sendle skipment is forwarded under that inchrousody. If the laboratory cose not currently consists to provide the provides. Any changes to econological should be brought to Euroffes	
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linguished by.

Custody Sea's Intact: Custody Seal No.:

Log In Number:

# EUROFINS/TESTAMÉRICA KNOXVILLE SAMPLE RECEIPT/CONDÍTION UPON RECEIPT ANOMALY CHECKLIST

Review Items	<u> </u>	ķ	VX.	if No, what was the problem?	Comments/Actions Taken
L. Are the shipping containers intact?				C Containers, Broken	ıı
2. Were ambient air containers received intact?				☐ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?				O Yes C NA	15K# 1669 5100 7619
4, is the cooler temperature within limits? (> freczing				G. Cooler Out of Tema. Client	1110/06
temp. of water to 6 "C, VQST: 10°C)				Contacted, Proceed/Cancel	
Thermometer ID: $S \subset bd$	_			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 march COC?	\			G COC & Samples Do Not Match	
(IDs, Dates, Times)	_				
				☐ COC Not Received	
8. Were all of the samples listed on the COC received?	\				
	_			<ul> <li>Sample on COC, Not Received</li> </ul>	
9. Is the date/time of sample collection noted?	_			G COC; No Date/Time; Client	
				Contacted	Labeling Verified by: Date:
<ol> <li>Was the sampler identified on the COC?</li> </ol>				Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/			OC Incorrect/Incomplete	pH test strip lot number:
12. Are tests/parameters listed for each sample?	/			G COC No tests on COC	
13. Is the matrix of the samples noted?	/			G COC Incorrect/Incomplete	!
14. Was COC relinquished? (Signed/Dated/Timed)	/			G COC Incorrect/Incomplete	Box 16A: pl1 Box 18A: Residual Preservation Chlorine
15. Were samples received within holding time?				☐ Holding Time - Receipt	
16. Were samples received with correct chemical	_			3 pll Adjusted, pH Included	Lot Number:
preservative (excluding Encore)?				(See box 16A)	Exp Date:
			^	☐ Incorrect Preservative	Analyst:
17. Were VOA samples received without headspace?	_		/	Theadspace (VOA only)	Date:
18. Did you check for residual chlorine, if necessary?				O Residual Chlorine	11mc:
(c.g. 1613B, 1668)			\		
Chlorine (est surp lot number.	_		1		
19. For 1613B water samples is pl1<9?			\	☐ If no, notify lab to adjust	
20. For red samples was sample activity info. Provided?				☐ Project missing info	
Project #:PM Instructions:					
11 / 11				0.16.7.	
Sample Receiving Associate:			Cate		QAUZ6K52.doc, 062719

Client: Southern Company

Job Number: 180-109917-1

Login Number: 109917

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, 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

### **Table of Contents**

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### **Case Narrative**

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

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 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 × V × V1 × D) / (W × S × 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

A method blank, laboratory control sample and laboratory control sample duplicate were prepared and analyzed with each SEP step in

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 (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 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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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

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		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Sum of Steps 1-7	Analysis	6010B SEP		1			44104	11/02/20 10:20	DKW	TAL KNX

Instrument ID: NOEQUIP

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 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	KNC	TAL KNX
Total/NA	Analysis Instrumer	6010B nt ID: DUO		5			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		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

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### **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

Lithium

Lithium

Client Sample ID: WGWC-8-47-57 Lab Sample ID: 180-109919-1

Date Collected: 07/09/20 09:45 **Matrix: Solid** t Solide: 98 7

Date Received. 00/21/20 09.45	reiteilt Solius. 30.7
Mathed: COAOD CED, CED Matele (ICD), Cton 4	
Method: 6010B SEP - SEP Metals (ICP) - Step 1	

Method: 6010B SEP - SE	P Metals (ICP) - Step 1							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.61	10	0.61	mg/Kg	— <u></u>	09/29/20 08:00	10/27/20 12:07	4
Method: 6010B SEP - SE	P Metals (ICP) - Step 2							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.46	7.6	0.46	mg/Kg	☆	10/13/20 08:00	10/27/20 13:48	3
_ Method: 6010B SEP - SE	P Metals (ICP) - Step 3							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.15	2.5	0.15	mg/Kg	<del>-</del>	10/14/20 08:00	10/27/20 15:34	1
_ Method: 6010B SEP - SE	P Metals (ICP) - Step 4							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.2 J	2.5	0.15	mg/Kg	<u></u>	10/15/20 08:00	10/28/20 11:54	1
- Method: 6010B SEP - SE	P Metals (ICP) - Step 5							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<2.2	38	2.2	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 13:41	5
_ Method: 6010B SEP - SE	P Metals (ICP) - Step 6							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	1.1 J	2.5	0.15	mg/Kg	— <u> </u>	10/19/20 08:00	10/28/20 15:27	1
_ Method: 6010B SEP - SE	P 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 12:07	1
_ Method: 6010B SEP - SE	P Metals (ICP) - Sum of Steps	s 1-7						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Mathadi COAOD CED Matala (	ICD) Total						
Method: 6010B - SEP Metals (	ICP) - Iotal						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac

2.5

13

0.15 mg/Kg

0.76 mg/Kg

12

11/02/20 10:20

Job ID: 180-109919-1

Client: Southern Company

Project/Site: Plant Wansley GW7327

Method: 6010B - SEP Metals (ICP) - Total

Lab Sample ID: MB 140-43059/14-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

MB MB

Analyte

Result Qualifier

< 0.15

RL 2.5 **MDL** Unit 0.15 mg/Kg Prepared

09/28/20 08:00 10/29/20 10:56

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 43059

Prep Type: Total/NA

Prep Batch: 43059

Analyzed Dil Fac

Prep Type: Total/NA

Prep Batch: 43059

Lab Sample ID: LCS 140-43059/15-A

**Matrix: Solid** 

Lithium

Analyte

Lithium

Lithium

Lithium

Analyte

Lithium

**Analysis Batch: 44042** 

Spike Added 5.00

5.17

LCS LCS Result Qualifier Unit

D %Rec mg/Kg 103

Limits

Client Sample ID: Lab Control Sample Dup

**Client Sample ID: Lab Control Sample** 

%Rec. 75 - 125

%Rec.

Lab Sample ID: LCSD 140-43059/16-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

Analyte

Spike Added 5.00

LCSD LCSD

RL

10

Spike

Added

5.00

Spike

Added

5.00

Result Qualifier 5.03

MDL Unit

LCS LCS

LCSD LCSD

4.61 J

Result Qualifier

MDL Unit

0.45 mg/Kg

Unit

mg/Kg

5.09 J

Result Qualifier

0.60 mg/Kg

Unit mg/Kg %Rec

Limits RPD 75 - 125

Limit 30

**RPD** 

Dil Fac

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4

**Matrix: Solid** 

**Analysis Batch: 43944** 

MB MB

Result Qualifier

Analyte

Lithium <0.60 Lab Sample ID: LCS 140-43060/15-B ^5

**Matrix: Solid** 

**Analysis Batch: 43944** 

Analyte

Lab Sample ID: LCSD 140-43060/16-B ^5

**Matrix: Solid Analysis Batch: 43944** 

Lab Sample ID: MB 140-43447/14-B ^3

Matrix: Solid **Analysis Batch: 43944** 

MR MR Analyte Result Qualifier Lithium <0.45

Prepared

**Client Sample ID: Method Blank** 

**Prep Type: Step 1** Prep Batch: 43133

**Client Sample ID: Lab Control Sample** 

09/29/20 08:00 10/27/20 11:39

Prep Type: Step 1

Analyzed

Prep Batch: 43133

%Rec. Limits

Unit %Rec mg/Kg 102 75 - 125

**Prepared** 

Client Sample ID: Lab Control Sample Dup Prep Type: Step 1

Prep Batch: 43133

**RPD** %Rec. RPD Limit %Rec Limits 92 75 - 125 10

**Client Sample ID: Method Blank** 

10/13/20 08:00 10/27/20 13:09

Analyzed

Prep Type: Step 2

Prep Batch: 43460

Dil Fac

Eurofins TestAmerica, Pittsburgh

RL

7.5

Client: Southern Company

Lithium

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

### 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 Lithium 5.00 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** Prep Batch: 43495

MB MB Dil Fac Result Qualifier RL **MDL** Unit Analyzed Analyte Prepared 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 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 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

**Analysis Batch: 43997** Prep Batch: 43539 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 **Matrix: Solid Prep Type: Step 4** 

5 32

mg/Kg

Prep Batch: 43539 **Analysis Batch: 43997** Spike LCS LCS %Rec. Added Analyte Result Qualifier Limits Unit D %Rec 5.00

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** Analyte Added Result Qualifier Limits Unit %Rec Limit Lithium 5.00 104 75 - 125 5.20 mg/Kg 30

Eurofins TestAmerica, Pittsburgh

75 - 125

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 180-109919-1

**Prep Type: Step 5** 

Prep Batch: 43604

### Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

**Matrix: Solid** 

**Analysis Batch: 43997** 

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

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

**Matrix: Solid Analysis Batch: 43997** 

Analyte

Lab Sample ID: MB 140-43605/14-A

Lithium

Lithium

Lithium

Analyte

**Matrix: Solid Analysis Batch: 43997** 

Analyte

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** 

Analyte

Lab Sample ID: MB 140-43637/14-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

Lithium Lab Sample ID: LCS 140-43637/15-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

Analyte Lithium

Spike Added 5.00

5.04

RL

2.5

Result Qualifier

LCS LCS

**MDL** Unit

0.15 mg/Kg

Unit mg/Kg

Unit

mg/Kg

%Rec 101

75 - 125

Eurofins TestAmerica, Pittsburgh

D %Rec

109

**Client Sample ID: Lab Control Sample Prep Type: Step 5** 

75 - 125

Client Sample ID: Method Blank

Prep Batch: 43604

%Rec. Limits

Client Sample ID: Lab Control Sample Dup **Prep Type: Step 5** 

Prep Batch: 43604

%Rec. **RPD** Limits Limit %Rec RPD 75 - 125

Client Sample ID: Method Blank

Prep Type: Step 6 Prep Batch: 43605

Analyzed Dil Fac

**Client Sample ID: Lab Control Sample** 

10/19/20 08:00 10/28/20 14:45

Prep Type: Step 6 Prep Batch: 43605

%Rec.

Limits

Unit %Rec 99 75 - 125 mg/Kg

D %Rec

**Prepared** 

101

Prepared

Client Sample ID: Lab Control Sample Dup

Prep Type: Step 6 Prep Batch: 43605

%Rec. **RPD** Limits **RPD** Limit

Client Sample ID: Method Blank

75 - 125

**Prep Type: Step 7** 

Dil Fac

Prep Batch: 43637

<u>10/20/20 08:00</u> <u>10/29/20 10:42</u>

Analyzed

**Client Sample ID: Lab Control Sample Prep Type: Step 7** 

Prep Batch: 43637 %Rec.

Limits

### **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

 Analyte
 Added
 Result Qualifier
 Unit mg/Kg
 D %Rec limits
 RPD limit RPD limit

 Lithium
 5.00
 5.05
 mg/Kg
 101
 75 - 125
 0
 30

9

4

J

9

10

111

### **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley GW7327

Metals

Prep Batch: 43059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	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
180-109919-1	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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-109919-1	WGWC-8-47-57	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
180-109919-1	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		ep 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

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### **QC Association Summary**

Client: Southern Company

Project/Site: Plant Wansley GW7327

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**Metals (Continued)** 

SEP Batch:	42400	/ C = 4!
SEP Batch:	4.344h	it.ontinijeni

	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	
L	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

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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	

particle size reduction as needed to ensure homogeneous sample is analyzed Applicable to all samples on COC - perform P - Na2C45 Q - Na2S03 R - Na2S203 S - H2SO4 U - Acetone V - MCAA V - MCAA Z - other (specify) Ver: 01/16/2019 Special Instructions/Note: Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) reservation Codes A - HCL B - NaOH C - Zn Acetate D - Nitric Acid F - MacOH G - Amchlor H - Ascorbic Acid 1600 I - Ice J - Di Water K - EDTA L - EDA [X] Archive For 180-109919 Chain of Custody 794671754P Total Number of containers DateTime Special Instructions/QC Requirements: see special note above Disposal By Lab FLAFX Analysis Requested xoler Temperature(s) °C and Other Remarks shali.brown@testamericainc.com Return To Client ceived by. Lab PM: Brown, Shali E-Mail: SHO ETT (ON 10 SOY) GSI (Winwater, Sisolid, Onwasteloil, Preservation Code: Matrix CIN Radiological (C=comp, G=grab) Sample Type 19:10 3 day RUSH 1730 SAMMIN 13: 6a Sample Time 1-20-70 Due Date Requested: NLT 7/17/2020 TAT Requested (days): Unknown To your P/10/0200 Sample Date 205-657-5949 Sampler. 7/ Project # 18019922 SSOW#: Poison B Skin Irritant Deliverable Requested: I.(II.) III, IV, Other (specify) Custody Seal No. 1255 Roberts Blvd NW, Suite 200 Possible Hazard Identification North Canton, OH 44720-6900 Phone (330) 497-9396 MAWN Empty Kit Relinquished by: Custody Seals Intact: Client Information Sample Identification [X] Non-Hazard Plant Wansley 678-202-9564 Adria Reimer Kennesaw Geosyntec GA 30144 GW7327

💸 eurofins

Chain of Custody Record

Eurofins TestAmerica, Canton4101 Shuffel 5

4101 Shuffel Street NW

### 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

SHIP DATE: 20AUG20 ACTWGT: 59.50 LB CAD: 0562057/CAFE3313

ORIGIN ID:PHDA (330) 312-0176 EUROFINS TESTAMERICA CANTON 4101 SHUFFEL STREET NW BILL RECIPIENT

NORTH CANTON, OH 447206900 UNITED STATES US

TO ENVIRONMENTAL SAMPLE RECEIPT

**TESTAMERICA PITTSBURGH** 

301 ALPHA DRIVE

RIDC PARK

PITTSBURGH PA 15238

DEPT: AL HAIDET (412) 983-7058

FRI - 21 AUG 10:30/

PRIORITY OVERNIGHT

15238

65 AGCA

PA-US PIT

Uncorrected temp | | | | | Thermometer ID

Initials PT-WA-SR-001 effective 11/8/18 

180-109919 Waybill

### Eurofins TestAmerica, Pittsburgh

301 Alpha Drive RIDC Park Pitsburgh, PA 15238 Prone: 412-963-7058 Fax 412-963-2468

Chain of Custody Record

Environment Testing America

ins

Client Information (Sub Contract Lab)	Батр ес	Lab F.M. Browns	Cat P.M. Brown, Shali					-	I				10041	
Clerk Corlact.	Dypre							Ģ,	o O				- Positi + A61	
Shipping/Receiving		Shali	Shali, Brown:@Eurofinsat.com	Eurofi	1581.00	٤		ß	Georgia				Page 1 of 1	
Company: TestAmerica Laboratones, Inc.	į		Accreditations Recurses (See note):	ons Rea	<u> </u>	(appua							500 € 180-109919-1	
Address: 5815 Middlebrook Pike,	Due Data Requested: 10/13/2020					Anal)	sis R	Analysis Requested	sted				Preservation Codes:	85;
Gits:	TAT Requested (dnys):		· ·:	_		<u> </u>	Luwi	<u> </u>		_			0 - Zn Azetan	N Vone  O - Asking 2
9486. 20 TM, 37921							ևոծ ծ							P - Na2045 0 - Na2503 0 - 100503
Phone: 865-231-3000(Tel) 365-584-4315(Fax)	PO F:	•					1 6¥) 6	T qed2	9				2	5 - N226203 5 - H2804 - 155 Codecaliptical
Enak	,*OW		(0)						doss (					U - Acetare V - MOAA
Proper Varie: Plant Wansloy GW7327	Project #. 16019922									ichte		19U ISY	K - 80TA L - 80A	Windless Zilotter (specify)
San: Wansley CCR	380mm		Al OS					_		HOW IN		ە! جەر	Other:	
Sample Identification - Client ID (Lab ID)	Sample Time	Sample Matrix Type (wearer, Cacomp, constants, Ann.)	MisM miohe9	138/438 <sup>-</sup> 1301.09	435/435_B0103	138/438 <sup>-</sup> 80109	€0_932_H0103	10T 10T 118Y918	135/035-80103	00:00 <b></b> /0:00  <b>0</b> :00:00		Younni IstoT	Special	Special Instructions/Mre-
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WGWC-8-47-57 (180-108919-1)	7/9/20 09:45 Eastern	Solice		×	×	×	ж	×	×	×		F		
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Note: Short interaction are subject to change, Eurofine Teachmerical places the comments of method, margine & complance upon our substances. This sample share of this flow-edded under changes of the samples must be strong about the teacher about the teacher of the samples must be strong that the Eurofus Section of E	is places the ownership of method, analyte being shallyced, the samples must be should date, return the signed Chain of Cystopy at	graphical completion of the Co	e upon o, estáneno se to electr	d subcom a laborati fres Tessé	sactiate ary or on version.	Sayer CS.	138 % 2000 2000 2000	196 SH	ingredis roct. 29	Sewards iv chars	0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	oustody. If the laboral astronal sequidities by	ony does not cutter dy again to Europhis
Possible Hazard Identification			Same	ve Disc	) jesoc	A 788	d yer	95564	seo if	dures	as are r	etaine	d longer than 1	moorth)
Ожолбтоб			_	Return	To CM	nt.	Ш	Dispo	sal By	1sb		Arch	Return To Client Disposal By Lab Archivo For Man	Mooths
Deriverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank 2		Speci	Special Instructions/OC Requirements:	kalions	8	quiran	ernts:						
Emoty Kit Relinquished by:	Date:	П	Time:	П	,				Retrod of Shipmers	£13kp	ier:			
Removed Matter John	001 02111/b	High Hills		Second	4					<u> </u>	$C_{\mu_0}$	68	04%	company ©779
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I	Determen	Company	<u>«</u>	Received by:	٤					O Sec	Date/Time.			Сотралу
Custody Seals Intact: Custody Seal No.:			ű	Cooker Temperature(s.F.C. and Other Remarks)	geralure	(# D) 1%	d Other	30m2kk	 					
								ı						

# EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION LPON RECEIPT ANOMALY CHECKLIST

Loc: 180 109919

Log in Number:

Review Items	Ye No	2	If No, what was the problem?	Comments/Actions Taken
L. Are the shipping containers intact?		_	1 Containers, Broken	
2. Were ambient air containers received intact?			☐ Checked in lab	87:3.9 % CT: 2.0%, / Cos/ec
3. The coolers/containers custody seal if present, is it intact?	\	i	□ Yes	THY # 1810 76/9
4. Is the cooler temperature within limits? (> freezing temperature 6.0° VOCT- 1000)	`		Cooler Out of Temp, Client	المرا المساهرة
The amount of the Company of the Com	_		Contacted, Proceed/Cancel	
Correction factor:			Looler Out of Lemp, Same Day Receipt	
5. Were all of the sample containers received intact?		<u>.</u>	☐ Containers, Broken	
6. Were samples received in appropriate containers?	, \		Containers, Improper, Client	
7. Do sample container labels match COC?		-	COC & Samples Do Not Match	
(Mbs, Dates, Times)	_		☐ COC Incorrect/Incomplete	
			COC Not Received	
8. Were all of the samples listed on the COC received?	_		☐ Sample Received, Not on COC	
	,		☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	_		☐ COC; No Date/Time; Client	
		4	Contacted	Labeling Verified by: Date:
10. Was the sampler identified on the COC?		$\setminus$	C Sampler Not Listed on COC	
11. Is the client and project name/# identified?	/	,	C. 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?		_	C Holding Time - Receipt	
16. Were samples received with correct chemical			E pM Adjusted, pll Included	Lot Number:
preservative (excluding Encore)?		_	(See box 16A)	Exp Date:
17. Were VOA samples received without headspace?			C Headspace (VOA only)	Date:
18. Did you check for residual chlorine, if necessary?			☐ Residual Chlorine	Тіте:
(v.g. 1015to, 1000) Chlorine test strip lot number:	_ <del>_</del>			
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: Reco UA	:   	Dat	Date: 9/1 <u>9/20</u>	QA026R32.doc, 062719

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

### **Table of Contents**

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Certification Summary	20
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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

Job ID: 240-136127-2 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

### **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

Lab Sample ID: 240-136127-2

### Client Sample ID: WGWC-19 87-88

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.52 J	2.6	0.15	mg/Kg	1	₩	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

### Client Sample ID: WGWC-19 89-90

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	0.52	<u>J</u>	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

Prop Type

Job ID: 240-136127-2

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# **Client Sample Results**

Client: Southern Company

Project/Site: Plant Wansley GW7327

Client Sample ID: WGWC-19 87-88 Lab Sample ID: 240-136127-1

Method: 6010B SEP - SEP Metals (ICP) - Step 2	ite Neceiveu. 03/04/20 11	.00						reiceilt Solla	13. 31.1
Method: 6010B SEP - SEP Metals (ICP) - Step 2   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyze	Method: 6010B SEP - SEF	Metals (ICP) - Step 1							
Method: 6010B SEP - SEP Metals (ICP) - Step 2         Result Qualifier         RL MDL Unit         D Prepared mg/Kg         Analyzed Analyzed Mg/Kg         Analyzed Mg/Kg <t< th=""><th>nalyte</th><th>Result Qualifier</th><th>RL</th><th>MDL</th><th>Unit</th><th>D</th><th>Prepared</th><th>Analyzed</th><th>Dil Fac</th></t<>	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	ithium	<0.62	10	0.62	mg/Kg	<u></u>	09/29/20 08:00	10/27/20 13:00	4
Method: 6010B SEP - SEP Metals (ICP) - Step 3   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Moderate   Moderat	Method: 6010B SEP - SEF	Metals (ICP) - Step 2							
Method: 6010B SEP - SEP Metals (ICP) - Step 3         Result Qualifier         RL MDL Unit         D Prepared         Analyzed Analyzed           Lithium         0.52 J         2.6 0.15 mg/Kg         10/14/20 08:00 10/27/20 16:00 10/27/20	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	ithium	<0.46	7.7	0.46	mg/Kg	<u></u>	10/13/20 08:00	10/27/20 14:41	3
Method: 6010B SEP - SEP Metals (ICP) - Step 4   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyte   Result   Qualifier   RL   MDL   Unit   Mg/Kg   Mg/K	Method: 6010B SEP - SEF	Metals (ICP) - Step 3							
Method: 6010B SEP - SEP Metals (ICP) - Step 4         Result Qualifier         RL MDL guilding         Unit Durit mg/Kg         D Prepared Durit/20 08:00         Analyzed Durit/20 08:00         Analyzed Durit/20 08:00         10/28/20 12:3           Method: 6010B SEP - SEP Metals (ICP) - Step 5 Analyte         Result Qualifier         RL MDL Unit Durit Durit Durit Durit/20 08:00         D Prepared Durit/20 08:00         10/28/20 14:3           Method: 6010B SEP - SEP Metals (ICP) - Step 6 Analyte         Result Qualifier         RL MDL Unit Durit Durit/20 08:00         D Prepared Durit/20 08:00         10/28/20 16:3           Method: 6010B SEP - SEP Metals (ICP) - Step 7 Analyte         Result Qualifier         RL MDL Unit Durit Durit/20 08:00         D Prepared Analyzed Durit/20 08:00         10/28/20 16:3           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7 Analyte         Result Qualifier         RL MDL Unit Durit Durit/20 08:00         D Prepared Analyzed Durit/20 08:00         10/29/20 12:3           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7 Analyte         Result Qualifier         RL MDL Unit Durit Durit/20 08:00         D Prepared Analyzed Durit/20 08:00         11/22/20 10:3           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL Unit Durit Durit Durit/20 08:00         D Prepared Analyzed Analyzed Durit/20 08:00	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result Lithium         Qualifier         RL         MDL Unit mg/Kg         D mg/Kg         Prepared mg/Kg         Analyzed 10/28/20 12::           Method: 6010B SEP - SEP Metals (ICP) - Step 5 Analyte         Result Result Result Qualifier         RL         MDL Unit D mg/Kg         D mg/Kg         10/19/20 08:00         10/28/20 12::           Method: 6010B SEP - SEP Metals (ICP) - Step 6 Analyte         Result Result Qualifier         RL MDL MDL Unit Mg/Kg         D mg/Kg         10/19/20 08:00         10/28/20 14::           Method: 6010B SEP - SEP Metals (ICP) - Step 5 Analyte         Result Qualifier         RL MDL MDL MIT MG/Kg         Unit MG/Kg         D Prepared Analyzed Analyzed Analyzed Analyzed MG/Kg           Lithium         55         2.6         0.15 mg/Kg         10/29/20 08:00         10/29/20 16::           Method: 6010B SEP - SEP Metals (ICP) - Step 7 Analyte         Result Qualifier         RL MDL MDL MIT MG/Kg         D Prepared Analyzed MG/Kg         Analyzed Analyzed MG/Kg           Lithium         26         2.6         0.15 mg/Kg         D Prepared Analyzed MG/Kg         Analyzed MG/Kg           Method: 6010B SEP - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL MG/Kg         Unit MG/Kg         D Prepared Analyzed Analyzed Analyzed Analyzed Analyzed Analyzed Analyzed Analyzed MG/Kg	ithium	0.52 J	2.6	0.15	mg/Kg	₩	10/14/20 08:00	10/27/20 16:13	1
Method: 6010B SEP - SEP Metals (ICP) - Step 5   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyze	Method: 6010B SEP - SEF	Metals (ICP) - Step 4							
Method: 6010B SEP - SEP Metals (ICP) - Step 5           Analyte         Result Qualifier         RL guilting         MDL Unit Dunit         D Prepared Duly P	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result Lithium         Qualifier         RL         MDL Unit         D mg/Kg         Prepared Prepared         Analyzed 10/28/20 14:3           Method: 6010B SEP - SEP Metals (ICP) - Step 6 Analyte         Result Qualifier         RL         MDL Unit         D Prepared Analyzed Analyzed Inches         Analyzed Analyzed Inches           Lithium         55         2.6         0.15 mg/Kg         10/19/20 08:00         10/28/20 16:00           Method: 6010B SEP - SEP Metals (ICP) - Step 7 Analyte         Result Qualifier         RL MDL Unit mg/Kg         D Prepared Analyzed Inches         Analyzed Inches           Lithium         26         2.6         0.15 mg/Kg         10/20/20 08:00         10/29/20 12:00           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7 Analyte         Result Qualifier         RL MDL Unit D Prepared Analyzed Inches         Analyzed Analyzed Inches           Lithium         98         2.5         0.15 mg/Kg         11/02/20 10:00           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL Unit D Prepared Analyzed Analyzed	ithium		2.6	0.15	mg/Kg	₩	10/15/20 08:00	10/28/20 12:52	1
Method: 6010B SEP - SEP Metals (ICP) - Step 6   Analyte   Result   Qualifier   RL   MDL   Unit   D   Prepared   Analyzed   Analyze	Method: 6010B SEP - SEF	Metals (ICP) - Step 5							
Method: 6010B SEP - SEP Metals (ICP) - Step 6           Analyte         Result Qualifier         RL Result Qualifier         MDL Unit D Prepared Analyzed         Prepared Analyzed           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL Unit D Prepared Analyzed         Prepared Analyzed	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result Lithium         Qualifier         RL         MDL mg/Kg         Unit mg/Kg         D mg/Kg         Prepared mg/Kg         Analyzed mg/Kg<	ithium	5.7 J	39	2.3	mg/Kg	₩	10/19/20 08:00	10/28/20 14:35	5
Lithium         55         2.6         0.15 mg/Kg         * 10/19/20 08:00         10/28/20 16:0           Method: 6010B SEP - SEP Metals (ICP) - Step 7           Analyte         Result Qualifier         RL Qualifier         MDL Qualifier         MDL Qualifier         MDL Qualifier         MDL Qualifier         MDL Qualifier         MDL Qualifier         D Prepared Analyzed         Analyzed Analyzed           Lithium         98         2.5         0.15 mg/Kg         D Prepared Analyzed         Analyzed Analyzed           Method: 6010B - SEP Metals (ICP) - Total Analyzed         Result Qualifier         RL MDL Qualifier         MDL Qualifier         D Prepared Analyzed	Method: 6010B SEP - SEF	Metals (ICP) - Step 6							
Method: 6010B SEP - SEP Metals (ICP) - Step 7           Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed           Lithium         26         2.6         0.15         mg/Kg         3         10/20/20 08:00         10/29/20 12:00.00           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7         Analyte         Result Qualifier         RL         MDL Unit         D         Prepared         Analyzed           Lithium         98         2.5         0.15         mg/Kg         11/02/20 10:1           Method: 6010B - SEP Metals (ICP) - Total         Analyte         Result Qualifier         RL         MDL Unit         D         Prepared         Analyzed	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte         Result Lithium         Qualifier         RL 2.6         MDL 2.6         Unit mg/Kg         D mg/Kg         Prepared 10/20/20 08:00         Analyzed 10/29/20 12:00           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7         Result Qualifier         RL MDL Unit mg/Kg         D Prepared Analyzed Analyzed I1/02/20 10:00           Lithium         98         2.5         0.15         mg/Kg         11/02/20 10:00           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL Unit         D Prepared Analyzed         Analyzed	ithium	55	2.6	0.15	mg/Kg	<u></u>	10/19/20 08:00	10/28/20 16:07	1
Lithium         26         2.6         0.15 mg/Kg         x 10/20/20 08:00         10/29/20 12:00           Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7           Analyte         Result Qualifier         RL MDL Unit mg/Kg         D Prepared mg/Kg         Analyzed 11/02/20 10:00           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result Qualifier         RL MDL Unit D Prepared Analyzed         D Prepared Analyzed	Method: 6010B SEP - SEF	Metals (ICP) - Step 7							
Method: 6010B SEP - SEP Metals (ICP) - Sum of Steps 1-7  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Lithium 98 2.5 0.15 mg/Kg  Method: 6010B - SEP Metals (ICP) - Total  Analyte Result Qualifier RL MDL Unit D Prepared Analyzed	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed  Lithium 98 2.5 0.15 mg/Kg D Prepared 11/02/20 10:2  Method: 6010B - SEP Metals (ICP) - Total Analyte Result Qualifier RL MDL Unit D Prepared Analyzed	ithium	26	2.6	0.15	mg/Kg	<u></u>	10/20/20 08:00	10/29/20 12:57	1
Lithium         98         2.5         0.15 mg/Kg         11/02/20 10::           Method: 6010B - SEP Metals (ICP) - Total Analyte         Result         Qualifier         RL         MDL         Unit         D         Prepared         Analyzed	Method: 6010B SEP - SEF	Metals (ICP) - Sum of Step	s 1-7						
Method: 6010B - SEP Metals (ICP) - Total Analyte Result Qualifier RL MDL Unit D Prepared Analyzed	nalyte	Result Qualifier				D	Prepared	Analyzed	Dil Fac
Analyte Result Qualifier RL MDL Unit D Prepared Analyzed	ithium	98	2.5	0.15	mg/Kg			11/02/20 10:26	1
	Method: 6010B - SEP Met	als (ICP) - Total							
Lithium 86 2.6 0.15 mg/Kg \$\pi\$ 09/28/20 08:00 10/29/20 14:	nalyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ithium	86	2.6	0.15	mg/Kg	₩	09/28/20 08:00	10/29/20 14:47	1

Job ID: 240-136127-2

2

4

**3** 

8

10

11

12

# **Client Sample Results**

Client: Southern Company Job ID: 240-136127-2

Project/Site: Plant Wansley GW7327

Date Received: 09/04/20 11:00

Client Sample ID: WGWC-19 89-90 Lab Sample ID: 240-136127-2

Date Collected: 09/03/20 13:05

Percent Solids: 96.3

ato 1100011001 00/0-1/20								Oroonic Coma	0. 00.0
Method: 6010B SEP - SE	EP Metals (ICP) - S	tep 1							
Analyte	• • •	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.62		10	0.62	mg/Kg	<del>*</del>	09/29/20 08:00	10/27/20 13:04	
Method: 6010B SEP - SE	EP Metals (ICP) - S	tep 2							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	<0.47		7.8	0.47	mg/Kg	<del>*</del>	10/13/20 08:00	10/27/20 14:46	3
Method: 6010B SEP - SE	EP Metals (ICP) - S	tep 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 - SE	EP Metals (ICP) - S	tep 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 - SE	EP Metals (ICP) - S	tep 5							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	5.1	J	39	2.3	mg/Kg	<del></del>	10/19/20 08:00	10/28/20 14:40	5
Method: 6010B SEP - SE	EP Metals (ICP) - S	tep 6							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	45		2.6	0.16	mg/Kg	<del></del>	10/19/20 08:00	10/28/20 16:26	1
Method: 6010B SEP - SE	EP Metals (ICP) - S	tep 7							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	20		2.6	0.16	mg/Kg	<del>*</del>	10/20/20 08:00	10/29/20 13:02	1
Method: 6010B SEP - SE	EP Metals (ICP) - S	um of Step	s 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 Me	etals (ICP) - Total								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

2

3

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9

11

12

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 Type: Total/NA

Prep Batch: 43059

RPD

Method: 6010B - SEP Metals (ICP) - Total

Lab Sample ID: MB 140-43059/14-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

MB MB

< 0.15

Result Qualifier RL Analyte

**MDL** Unit 2.5

0.15 mg/Kg

Prepared

Analyzed 09/28/20 08:00 10/29/20 10:56

Client Sample ID: Method Blank

Dil Fac

Lab Sample ID: LCS 140-43059/15-A

**Matrix: Solid** 

Lithium

Analyte

Lithium

Lithium

Lithium

Analyte

**Analysis Batch: 44042** 

Spike Added 5.00

5.17

LCS LCS

Result Qualifier Unit

D %Rec 103 mg/Kg

Limits 75 - 125

Client Sample ID: Lab Control Sample Dup

%Rec.

**Client Sample ID: Lab Control Sample** 

Prep Batch: 43059

Lab Sample ID: LCSD 140-43059/16-A

**Matrix: Solid** 

**Analysis Batch: 44042** 

Analyte

Spike Added 5.00

5.03

LCSD LCSD Result Qualifier

Unit %Rec mg/Kg

%Rec. Limits 75 - 125

**RPD** Limit 30

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43060/14-B ^4

**Matrix: Solid** 

**Analysis Batch: 43944** 

MB MB

Analyte

Result Qualifier <0.60

RL 10

Spike

Added

5.00

Spike

Added

5.00

MDL Unit 0.60 mg/Kg

LCS LCS

LCSD LCSD

4.61 J

Result Qualifier

MDL Unit

0.45 mg/Kg

5.09 J

Result Qualifier

Unit

Unit

mg/Kg

mg/Kg

Prepared Analyzed 09/29/20 08:00 10/27/20 11:39

Dil Fac

Lab Sample ID: LCS 140-43060/15-B ^5

**Matrix: Solid** 

**Analysis Batch: 43944** 

Analyte

Lithium

Lab Sample ID: LCSD 140-43060/16-B ^5 **Matrix: Solid** 

**Analysis Batch: 43944** 

Lithium Lab Sample ID: MB 140-43447/14-B ^3

Matrix: Solid

**Analysis Batch: 43944** 

MR MR Analyte Result Qualifier Lithium <0.45

Client Sample ID: Method Blank Prep Type: Step 1

Prep Batch: 43133

**Client Sample ID: Lab Control Sample** 

Prep Type: Step 1 Prep Batch: 43133

%Rec.

%Rec Limits 102 75 - 125

Client Sample ID: Lab Control Sample Dup

%Rec

**Prepared** 

92

Prep Type: Step 1 Prep Batch: 43133

**RPD** %Rec. RPD Limit Limits

**Client Sample ID: Method Blank** 

75 - 125

Prep Type: Step 2

10

Prep Batch: 43460

Analyzed Dil Fac 10/13/20 08:00 10/27/20 13:09

Eurofins TestAmerica, Canton

RL

7.5

Client: Southern Company

Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

Prep Batch: 43495

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Method Blank

# 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 **Prep Type: Step 3** 

**Matrix: Solid 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 Matrix: Solid Prep Type: Step 3** Prep Batch: 43495

**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 **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

**Matrix: Solid** 

**Analysis Batch: 43997** 

Prep Type: Step 4 Prep Batch: 43539

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 **Matrix: Solid Prep Type: Step 4** 

**Analysis Batch: 43997** 

Prep Batch: 43539 Spike LCS LCS %Rec. Added Result Qualifier Limits Unit D %Rec

Analyte 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 Lithium 5.00 75 - 125 5.20 mg/Kg 104 30

Eurofins TestAmerica, Canton

Client: Southern Company

Project/Site: Plant Wansley GW7327

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** 

Limit

Dil Fac

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

%Rec.

Limits

75 - 125

%Rec.

Method: 6010B SEP - SEP Metals (ICP)

Lab Sample ID: MB 140-43540/14-B ^5

**Matrix: Solid** 

**Analysis Batch: 43997** 

MB MB

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

Lab Sample ID: LCS 140-43540/15-B ^5

Lab Sample ID: LCSD 140-43540/16-B ^5

Matrix: Solid

**Matrix: Solid** 

Lithium

Analyte

Lithium

**Analysis Batch: 43997** 

Analyte

**Analysis Batch: 43997** 

Spike Added 15.0

Spike

Added

15.0

Spike

Added

5.00

Spike

Added

5 00

Result Qualifier

RL

2.5

16.4 J

LCSD LCSD

17.4 J

LCS LCS

MDL Unit

LCS LCS

LCSD LCSD

5.03

Result Qualifier

**MDL** Unit

LCS LCS

5.04

Result Qualifier

0.15 mg/Kg

Unit

Unit

mg/Kg

mg/Kg

4.96

Result Qualifier

0.15 mg/Kg

Unit

%Rec

D %Rec

109

Limits RPD 75 - 125

Lab Sample ID: MB 140-43605/14-A

**Matrix: Solid** 

**Analysis Batch: 43997** 

MB MB

MB MB Result Qualifier

< 0.15

Analyte Result Qualifier 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** 

Analyte

Lithium

Analyte

Lab Sample ID: MB 140-43637/14-A **Matrix: Solid** 

**Analysis Batch: 44042** 

Lithium

Lab Sample ID: LCS 140-43637/15-A

**Matrix: Solid Analysis Batch: 44042** 

Spike Added Analyte Lithium

Client Sample ID: Lab Control Sample Dup

Unit

mg/Kg

Result Qualifier

mg/Kg Client Sample ID: Method Blank

> Prep Type: Step 6 Prep Batch: 43605

**Client Sample ID: Lab Control Sample** 

10/19/20 08:00 10/28/20 14:45

Prep Type: Step 6 Prep Batch: 43605

%Rec.

Analyzed

Limits Unit %Rec 99 75 - 125 mg/Kg

D %Rec

**Prepared** 

101

Prepared

Client Sample ID: Lab Control Sample Dup

Prep Type: Step 6 Prep Batch: 43605

%Rec. **RPD** Limits **RPD** Limit

Client Sample ID: Method Blank

75 - 125

**Prep Type: Step 7** Prep Batch: 43637

Dil Fac

**Client Sample ID: Lab Control Sample** 

10/20/20 08:00 10/29/20 10:42

**Prep Type: Step 7** Prep Batch: 43637

%Rec.

Analyzed

Limits %Rec 75 - 125 101

Eurofins TestAmerica, Canton

5.00

RL

2.5

# **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 **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Step 7 Analysis Batch: 44042** Prep Batch: 43637

Spike LCSD LCSD RPD

Result Qualifier Unit Added Limits RPD Limit Analyte D %Rec Lithium 5.00 5.05 75 - 125 30 mg/Kg 101 0

# **QC Association Summary**

Client: Southern Company Project/Site: Plant Wansley GW7327

Job ID: 240-136127-2

### **Metals**

Pre	n Ba	tch:	430	59
	Pu	toii.	700	

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 Pro	ep 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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 2	Solid	3010A	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 P	rep Batch
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

<b>Lab Sample ID</b> 240-136127-1	Client Sample ID WGWC-19 87-88	Prep Type Step 3	Matrix Solid	Method 3010A	Prep Batch 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	n

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**

<b>Lab Sample ID</b> 240-136127-1	Client Sample ID WGWC-19 87-88	Prep Type Step 4	Matrix Solid	Method  Metal Hydroxide	Prep Batch
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	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-136127-1	WGWC-19 87-88	Step 5	Solid	Organic-Bound	
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

### **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	

Eurofins TestAmerica, Canton

Job ID: 240-136127-2

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** 

**Prepared** 

Batch Batch Dilution Batch **Prep Type** Method **Factor** Number or Analyzed Analyst Type Run Lab Sum of Steps 1-7 Analysis 6010B SEP 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

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** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	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 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

Eurofins TestAmerica, Canton

# **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 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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 $<sup>^{\</sup>star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$ 

Eurofins TestAmerica, Canton

Environment Testing For samples requiring 6000 extrame (coats) - perform particle size reduction as needed to ensure homogeneous sample is analyzed N - None O - AshaO2 P - Na2O4S O - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydral 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

Special Instructions/QC Requirements: see special note above seurofins 💸 1/00 E - NaHSO4 F - MeOH J - Di Water K - EDTA L - EDA Total Number of containers 240-136127 Chain of Custody Analysis Requested Cooler Temperature(s) C and Other Remarks. Chain of Custody Record  $\lambda c/3.5$ shali.brown@testamericainc.com 13 teceived by Lab PM: Brown, Shali E-Mail. Preservation Code: Radiological Type (C=comp, G=grab) Sample 5 3 day RUSH 1.4 Sample 9.3.201300 305 Unknown TAT Requested (days): Due Date Requested Phone: 205-657-5949 Sample Date Project #: 18019922 SSOW#: Will Burke Poison B EURUIIIIS LESIAIIIERICA, CAIRCIIEIVI SIIUIIEI 89-90 81-88 Skin Irritant CX Non-Hazard Flammable Skin Irrita Deliverable Requested: I(I)XII, IV, Other (specify) Custody Seal No.: N77WC-19 1255 Roberts Blvd NW, Suite 200 Possible Hazard Identification 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 nquished by: 678-202-9564 finquished by: Adria Reimer nquished by: State, Zp: GA 30144 Geosymtec Kennesaw GW7327 Page 21 of 24 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 9-4-70	matheman
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	rm
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	s) No
-Were the seals on the outside of the cooler(s) signed & dated?	No NA
	s No
	No NA
3. Shippers' packing slip attached to the cooler(s)?	
4. Did custody papers accompany the sample(s)?	li lests that are not
5. Were the custody papers relinquished & signed in the appropriate place?  6. Was/were the person(s) who collected the samples clearly identified on the COC?	checked for ph by
	No Receiving:
	No VOAs
and the state of t	No Oil and Grease
10. Sufficient quantity received to perform indicated analyses?	100
	No 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?	No NA pH Strip Lot# HC911298
	s No O
	No NA
	s We
16. Was a LL Hg or Me Hg trip blank present?Ye	s No
Contacted PM by via Verbal V	Voice Mail Other
5) 11 1000	olec Itali
Concerning	
17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by:
18. SAMPLE CONDITION	
Sample(s) were received after the recommended hold	
	d in a broken container.
Sample(s) were received with bubble >6 mm	in diameter. (Notify PM)
19. SAMPLE PRESERVATION	
	**
Sample(s) were fur Time preserved: Preservative(s) added/Lot number(s):	rther preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):	
VOA Sample Processustion Date/Time VOAs France	
VOA Sample Preservation - Date/Time VOAs Frozen:	

WI-NC-099

Eurofins TestAmerica, Canton

4101 Shuffel Street NW

North Carton, OH 44726 Phone, 330-497-9395 Fax 330-497-0772

Client Information (Sub Contract Lab)	Sanaka:		Brown, Shali	· <del>=</del>				U	arner 172	Carner Trapeing No(s)		COC No 240.124993			
Chen Comac	Poone		E-Rei:					i i	ည် မြ	ä		Page:			
Shipping/Rocarwag			Shaii.Brown@Eurofinset.com	@Euro	Finset.co	Ĕ		O	Georgia			Page 1 cf 1			
Company. TestAmerica Laboratories, Inc.			Active	Actionalisms Required (See nate):	ران دانهط (8	# #	<u></u>					Joc#: 240-136127-2	7-2		ı
Actress. 5815 Middlebrook Pike.	Due Date Requested: 9/22/2020					Ana	Vsis	l se	Analysis Requested			Presurvation Codes	8		
Cov	TAT Regisested [days]:		ž			+		+	F	ŀ	E	전. [		ארדמ	
Knowelle State Zie							nM bo					CO CI Apelate CO CI Apelate CO CI Apelate CO CI Apelate		N - Nove O - Asnac2 P - Naso4s	
TN, 37921						1	E 34	_				SO HE MARGO		2803	
Pt.cro 855-291-3000(Tcl) 865-584-4315(Fax)	PO F.		**************************************	a deg								S. Anchor	Q	sacos SC: Pilodecanarate	
Email	WO#;		#19 <u>6</u>	S (ab)			tio1 q						2 ×	elone SAA	
Pract Name CCR - Plant Wans ey	Project ∓; 18019922		<b>10.9</b> 0	vi ros			as (d					A CDTA	WipH445 Zidhoris	WipHass Ziothor (specify)	
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	l ",	Sample Type (C=comp,	Wetter Secondary	108_SEP/SE	109 ZEP/SE	35/435 <sup>*</sup> 60# 35/435 <sup>*</sup> 60#	108 255 C?	101"d95/ <b>3</b> 01/	1987982801			វទព្ធហ្វាក់ ខ្មែរ			
Sample Identification - Client ID (Lab ID)	Sumple Date Time	G=grab)	II X	09	o 1	-127	09	- 2	09 (A)	300		8 A	Special instructions/Note	ons/Note:	1.00
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Possible Hazard Identification			eS.	mple Di	Jesods	A fee	mey	88.5	essed	l sampl	sare ret	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	bran t men	-	
Unconfirmed			_	Retu	J TO C	ient	-	L Diss	osal By	ζeŢ,	Ĭ	chwe For	Mor	Months	
Deliverable Requested: I, II, IV, Other (specify)	Primary Defiverable Rank: 2	: 2	ගී	Special Instructions/QC Requirements	netion	8	ednice	gcaw							
Emply Kit Reinquished by:	Date:		Time:				li		Melto	Meltine of \$5 pment	ent.				
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Custody Seals Infact: Custody Seal No.  2 Yes				Coder Tamperature(s) <sup>1</sup> C and Other Remarks	rupedur	၁ (န)	ard Ot	ا چ	ļ ģ	1			 		
					1								Ver 0	Ver 00:16:2019	7

# EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	, si	8	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 scal if present, is it intact?			O Yes O NA		
4. Is the cooler temperature within limits? (> freezing			O Cooler Out of Temp, Client		
temp. of water to 6 °C, VOST: 10 °C)			Contacted, Proceed/Cancel		
Correction factor: 0.0	_		□ Cooler Out of Lemp, Same Day 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?		<u> </u>	C COC & Samples Do Not Match		
(Ds, Dates, Times)	_		☐ COC Incorrect/Incomplete		
			C COC Not Received		
8. Were all of the samples listed on the COC received?	_		C Sample Received, Not on COC		
		 	C Sample on COC, Not Received		
9. Is the date/time of sample collection noted?	_		C COC; No Date/Time; Client		
		\ 	Contacted	Labeling Verified by: Date:	le:
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?	//		I" COC No tests on COC		
13. Is the matrix of the samples noted?	//		12 COC Incorrect/Incomplete		
14. Was COC relinquished? (Signed/Dated/Timed)	/		C. COC Incorrect/Incomplete	Box 16A: pH Box 19 Preservation C	Box 18A: Residual Chlorine
15. Were samples received within holding time?			C Holding Time - Receipt	Preservative:	
16. Were samples received with correct chemical		/	☐ pH Adjusted, pH Included	Lot Number:	
preservative (excluding Encore)?			(See box 16A)	Exp Date:	
12 Word VOA morning or market and additional paradometers		$\downarrow$	C. Hoodenger (70A policy	Date:	
17. Weig YOA Samples teestyed without measurage.		\	C treatspace (*t. out.)	Time:	
18. Did you eneck for residual enforme, if necessary?		\	L Kesidual Chlorine		
(e.g. 10 (a.s. 1000) Chlorine test strin lot number:		_			
10 Nov 1613R water camples is nH<92		\	F If no notify lab to adjust		
20. For rad samples was sample activity info. Provided?		\	C Project missing info		
Project #: PM Instructions:				· · · · · · · · · · · · · · · · · · ·	,
Sample Receiving Associate:	!     ,	_ Date	Date: 4-10-2}	QA026R32.doc, 062719	,062719