



**REPORT**

# 2021 Annual Groundwater Monitoring and Corrective Action Report

*Georgia Power Company - Plant Branch  
Ash Pond E*

Submitted to:



**Georgia Power Company**

241 Ralph McGill Boulevard NE, Atlanta, Georgia 30308

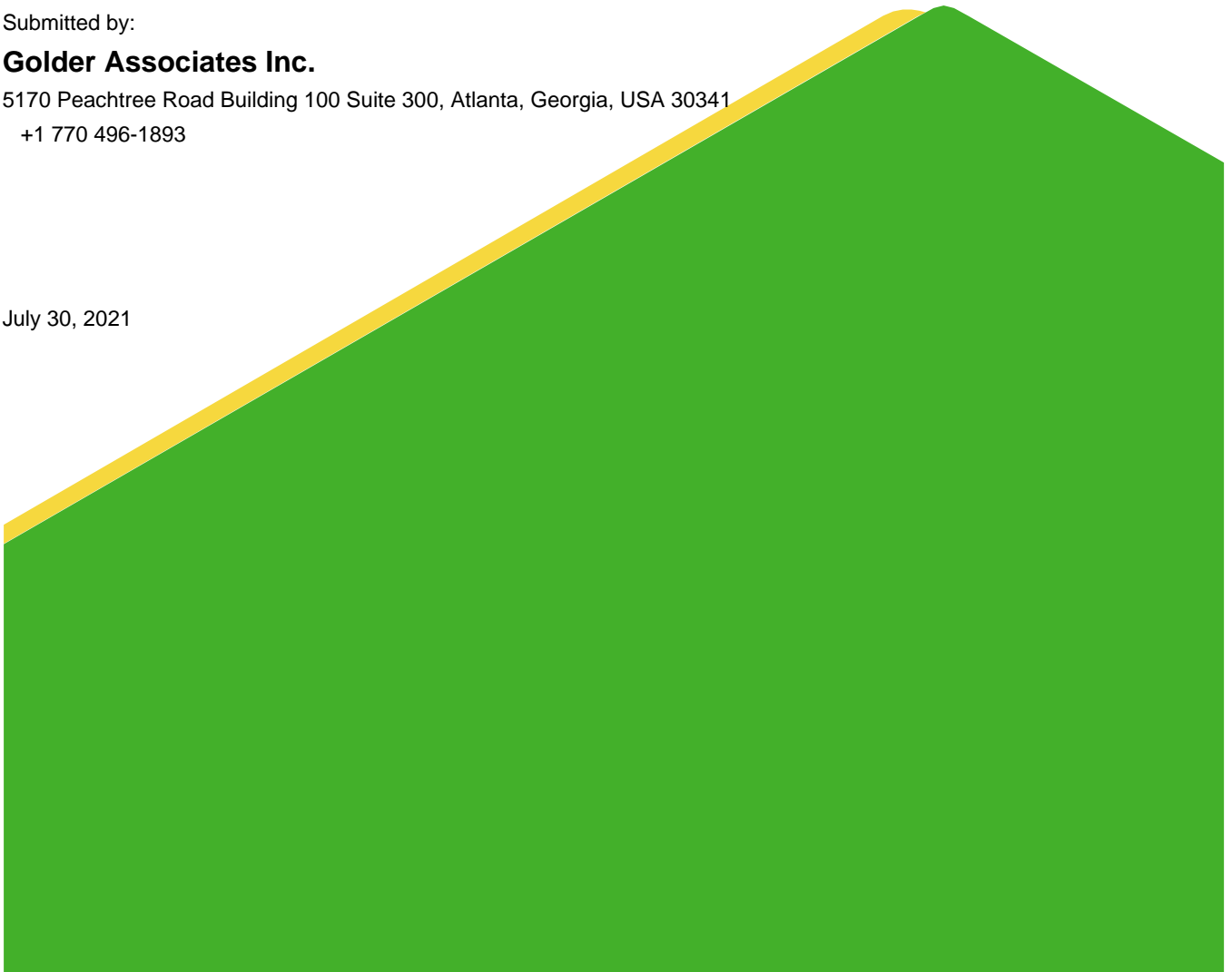
Submitted by:

**Golder Associates Inc.**

5170 Peachtree Road Building 100 Suite 300, Atlanta, Georgia, USA 30341

+1 770 496-1893

July 30, 2021

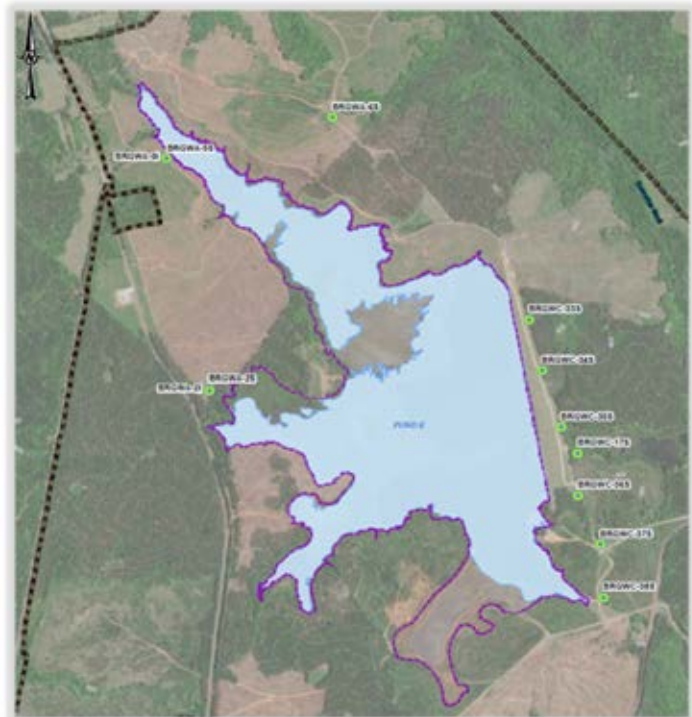


## Summary

This 2021 Annual Groundwater Monitoring & Corrective Action Report, Georgia Power Company - Plant Branch Ash Pond E (AP-E), Milledgeville, Putnam County, Georgia (GA), report provides the status of groundwater monitoring and corrective program July 2020 through June 2021. Groundwater monitoring and reporting for AP-E is performed by Golder Associates Inc. (Golder) in accordance with the United States Environmental Protection Agency (US EPA) Coal Combustion Residual (CCR) Rule published in the Code of Federal Regulations Title 40 Part 257 (40 CFR Part 257, Subpart D) dated April 17, 2015 and revised July 2018 40 CFR § 257.90 through § 257.98. This summary was prepared by Golder on behalf of Georgia Power to meet the requirements listed in Part A, Section 6<sup>1</sup> of the US EPA CCR rule [40 Code of Federal Regulations (CFR) 257 Subpart D]. As required in 40 CFR § 257.90(e), this Annual Report describes the status of the groundwater monitoring program, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and presents projected key activities for the upcoming year for AP-E. The other CCR unit (AP-BCD) on-site at Plant Branch is reported separately.

Plant Branch formerly operated as a coal-fired power plant since the 1960s until its retirement in 2015; Plant Branch is no longer active and is decommissioned. Located approximately 8 miles north of Milledgeville in Putnam County (1100 Milledgeville Road, Milledgeville, GA 31024), the property occupies approximately 3,200 acres and is bounded on the south and east by Lake Sinclair.

Groundwater at the Site is monitored using a monitoring system comprised of upgradient and downgradient wells for each CCR Unit. AP-E network consists of five (5) upgradient and seven (7) downgradient wells installed to meet federal and state monitoring requirements. Routine sampling and reporting for AP-E began after the background groundwater conditions were established between 2016 and 2018. Based on groundwater quality, an assessment monitoring program was established on November 13, 2019. During the 2021 annual reporting period, the Site remained in assessment monitoring.



Plant Branch

<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

Pursuant to the options of 40 CFR 257.95 as adopted by 391-3-4-.10, an Alternate Source Demonstration (ASD) was prepared in response to statistically significant levels (SSLs) of beryllium and cobalt in samples from compliance groundwater monitoring wells. The evaluation demonstrates that statistically significant levels of beryllium and cobalt identified in groundwater are due to the presence of naturally-occurring beryllium and cobalt present in soils and bedrock, and not caused by a release from the CCR unit. The ASD was submitted to the GA Environmental Protection Division (EPD) on July 28, 2020 (Golder, 2020).

Groundwater elevation measurements were recorded at the site monitoring wells and piezometers prior to each sampling event. The elevation data were used to confirm the groundwater flow direction, and to confirm that the groundwater monitoring well network for the CCR units remains sufficient to monitor groundwater downgradient of the unit.

### 2021 Annual Groundwater Monitoring Activities

There is no change to the AP-E certified detection network between June 2020 and July 2021. Groundwater monitoring sampling events for AP-E were conducted in August 2020 (annual), September 2020, and March 2021 (semi-annual). Groundwater samples were collected and analyzed for Appendix III and Appendix IV required monitoring parameters from each of the compliance monitoring wells.

Analytical data from the September 2020 and March 2021 monitoring events have been statistically analyzed in accordance with the site's certified statistical analysis method. Statistical analyses indicate statistically significant increases (SSIs) for Appendix III constituents above the statistical limits and SSLs of Appendix IV constituents above the groundwater protection standards as summarized below.

Appendix III Constituent	September 2020
Boron	BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Calcium	BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Chloride	BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Fluoride	BRGWC-38S
pH	BRGWC-33S, BRGWC-34S, BRGWC-36S, BRGWC-37S, BRGWC-38S
Sulfate	BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
TDS	BRGWC-17S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Appendix IV Constituent	September 2020
Beryllium	BRGWC-38S
Cobalt	BRGWC-33S, BRGWC-38S

Appendix III Constituent	March 2021
Boron	BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Calcium	BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Chloride	BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Fluoride	BRGWC-38S
pH	BRGWC-33S, BRGWC-34S, BRGWC-36S, BRGWC-37S, BRGWC-38S
Sulfate	BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
TDS	BRGWC-17S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S
Appendix IV Constituent	March 2021
Beryllium	BRGWC-38S
Cobalt	BRGWC-33S, BRGWC-38S

Georgia Power will continue routine groundwater monitoring and reporting at the Site. Reports will be posted to the website and provided to GA EPD semi-annually.

---

<sup>2</sup> Appendix III: boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids

<sup>3</sup> Appendix IV: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, combined radium (226 + 228), selenium, and thallium.

# Table of Contents

<b>1.0</b>	<b>INTRODUCTION</b>	<b>8</b>
1.1	Site Description and Background	8
1.2	Site Geology and Hydrogeologic Setting	8
1.3	Groundwater Monitoring Well Network	9
<b>2.0</b>	<b>GROUNDWATER MONITORING ACTIVITIES</b>	<b>9</b>
2.1	Monitoring Well Installation and Maintenance	9
2.2	Assessment Monitoring	9
<b>3.0</b>	<b>SAMPLE METHODOLOGY AND ANALYSIS</b>	<b>10</b>
3.1	Groundwater Elevation Measurement	10
3.2	Groundwater Gradient and Flow Velocity	10
3.3	Groundwater Sampling	11
3.4	Laboratory Analyses	12
3.5	Quality Assurance and Quality Control	12
<b>4.0</b>	<b>STATISTICAL ANALYSES</b>	<b>12</b>
4.1	Statistical Method	13
4.1.1	Appendix III Assessment Monitoring Statistical Methods	14
4.1.2	Appendix IV Assessment Monitoring Statistical Methods	14
4.2	Statistical Analysis Results	15
4.2.1	September 2020 Appendix III Statistical Results	15
4.2.2	September 2020 Appendix IV Statistical Results	16
4.2.3	March 2021 Appendix III Statistical Results	16
4.2.4	March 2021 Appendix IV Statistical Results	16
4.3	Alternate Source Demonstration	16
<b>5.0</b>	<b>MONITORING PROGRAM STATUS</b>	<b>17</b>
<b>6.0</b>	<b>CONCLUSIONS AND FUTURE ACTIONS</b>	<b>17</b>
<b>7.0</b>	<b>REFERENCES</b>	<b>17</b>

## Table of Contents (continued)

### Figures & Tables

Figure 1	Site Location Map
Figure 2	Site Plan and Monitoring Well Location Map
Figure 3	Potentiometric Surface Contour Map – August 17, 2020
Figure 4	Potentiometric Surface Contour Map – September 14, 2020
Figure 5	Potentiometric Surface Contour Map – March 1, 2021
Table 1	Summary of Monitoring Well, Assessment and Piezometer Construction
Table 2	Groundwater Sampling Event Summary – AP-E
Table 3	Summary of Groundwater Elevations – AP-BCD and AP-E
Table 4A	Groundwater Velocity Calculations – AP-E (August 2020)
Table 4B	Groundwater Velocity Calculations – AP-E (September 2020)
Table 4C	Groundwater Velocity Calculations – AP-E (March 2021)
Table 5A	Analytical Data Summary – AP-E (August 2020)
Table 5B	Analytical Data Summary – AP-E (September 2020)
Table 5C	Analytical Data Summary – AP-E (March 2021)
Table 6	Summary of Background Levels and GWPS – AP-E

### Appendices

Appendix A	Analytical Results, Field Data Forms, Well Inspection Forms & Data Validation Summaries
Appendix B	Statistical Analyses

## Certification Statement

This 2021 Annual Groundwater Monitoring & Corrective Action Report, Georgia Power Company Plant Branch Ash Pond E (AP-E) has been prepared in compliance with the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10(6)(a-c) by a qualified groundwater scientist with Golder Associates Inc.

### Golder Associates Inc.



---

Brian Steele, PG  
Georgia Licensed Professional Geologist No. 2171



---

Steven J. Cribb, PE  
Georgia Licensed Professional Engineer No. 025799

Golder and the G logo are trademarks of Golder Associates Corporation

## 1.0 INTRODUCTION

In accordance with the Georgia Environmental Protection Division (GA EPD) Rules of Solid Waste Management 391-3-4-.10(6)(a)-(c), this *2021 Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document groundwater monitoring activities conducted at Georgia Power Company's (Georgia Power) Plant Branch Ash Pond E, referred to as AP-E. To specify groundwater monitoring requirements, GA EPD Rule 391-3-4-.10(6)(a) incorporates by reference the United States Environmental Protection Agency (US EPA) Coal Combustion Residuals (CCR) Rule 40 Code of Federal Regulations (CFR) § 257.90 through 257.91 and 257.93 through 257.94. For ease of reference, the US EPA CCR Rules may be cited within this report. Plant Branch ceased producing electricity prior to April 2015, and therefore, Ash Pond E is not subject to the US EPA CCR Rule.

Three monitoring events were conducted during this monitoring period - an initial annual assessment monitoring event conducted in August 2020, and two semi-annual assessment monitoring events conducted in September 2020 and March 2021. This report documents the activities completed at Branch AP-E between July 2020 and June 2021. Activities completed at Branch AP-BCD are reported under separate cover.

### 1.1 Site Description and Background

Plant Branch is located in Putnam County, GA, approximately 8 miles north of Milledgeville. The property occupies approximately 3,200 acres and is bounded on the south and east by Lake Sinclair, which is an approximate 15,330-acre hydroelectric reservoir that was created in 1953 by the impoundment of the Oconee River. A site location map is included as Figure 1.

Plant Branch formerly operated as a coal-fired power plant between the 1960s until its retirement in 2015. Plant Branch is no longer active and is decommissioned. During its operation, five ash ponds were used for management of the CCR on the plant property. These CCR ponds are identified as Ponds A, B, C, D, and E. Ash Pond A, the first ash pond constructed at the Site, was taken out of service in the late 1960s and was closed in April 2016 by the removal and relocation of its stored CCR to Ash Pond E. Ponds B, C, D, and E are inactive and will be closed by removal by relocation of the stored CCR material to a proposed fully lined landfill located on the plant property. This report documents the groundwater monitoring program at Ash Pond E (AP-E).

Plant Branch ceased producing electricity prior to April 2015. Therefore, AP-E is not subject to the Federal CCR Rule. A CCR Unit Solid Waste Handling Permit application for AP-E was submitted to GA EPD in November 2018 and is under review.

### 1.2 Site Geology and Hydrogeologic Setting

The following section and subsections include a general description of regional geologic and hydrogeologic characteristics of formations that occur beneath the site. Information presented in this section is based on published literature, discussion with local geologic experts, experience working in this geologic terrain, as described in the *November 2020 Hydrogeologic Assessment Report, Revision 1* (Geosyntec, 2020).

The site is located within the Piedmont Physiographic Province of central Georgia, which is characterized by gently rolling hills and narrow valleys, with locally pronounced linear ridges. Overall, the property slopes gently east and south toward Beaverdam Creek and Lake Sinclair. The metamorphic and igneous rocks that underlie the area have been subjected to physical and chemical weathering which has created a landscape dissected by creeks and streams forming a dendritic drainage pattern. These rocks are deeply weathered due to the humid



climate and bedrock is typically overlain by a variably thick blanket of residual soils and saprolite. The overall depth of weathering in the Piedmont/Blue Ridge is generally about 20 to 60 feet; however, the depth of weathering along discontinuities and/or very feldspathic rock units may extend to depths greater than 100 feet. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances.

Based on our review of available data, micaceous, locally saprolitic soils, consisting primarily of clay, silty clay, silt, and sandy clay occur as a variably thick blanket of residuum overlying bedrock across most of the site. The thickness of the residual soil encountered in the borings is variable, ranging from approximately 11 feet to as much as 74 feet. Saprolitic soils and/or saprolitic rock vary in thickness across the site but are generally encountered at or near ground surface. Saprolitic rock is also considered to be transitionally weathered rock (TWR) or partially weathered rock (PWR), as defined by standard penetration test data, where available. Material overlying the top of rock surface, including residual soils, saprolite, and transitionally weathered rock, is collectively referred to as overburden.

### 1.3 Groundwater Monitoring Well Network

Pursuant to § 257.91 of the CCR rule and 391-3-4-.10(6), a groundwater monitoring system was installed within the uppermost aquifer at AP-E. Wells placed in upgradient and downgradient locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps.

A network of 12 monitoring wells were installed between 2014 to 2018 for groundwater monitoring in proximity to AP-E. Table 1, Summary of Monitoring Well, Assessment and Piezometer Construction, includes the pertinent construction details for the AP-E monitoring well network at Plant Branch.

Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the overburden, the transition-zone, and the upper bedrock as a single inter-connected aquifer system. Wells suffixed with an “S” are installed in overburden (saprolitic soil), an “I” indicates transitionally weathered rock (transition zone), and “D” indicates upper bedrock. Groundwater in the overburden, partially weathered rock, fractured bedrock, and the materials comprise a single uppermost aquifer based on site hydrogeologic conditions.

## 2.0 GROUNDWATER MONITORING ACTIVITIES

The following section describes monitoring-related activities performed at the Site during the previous monitoring period (July 2020 through June 2021).

Pursuant to § 257.90(e)(3), Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed for AP-E.

### 2.1 Monitoring Well Installation and Maintenance

There was no change to the certified groundwater monitoring system for the reporting period. The groundwater monitoring system has remained the same since July 2020. Monitoring well related activities were limited to visual inspection of well conditions prior to sampling, recording site conditions, and performing exterior maintenance to provide safe access for sampling.

### 2.2 Assessment Monitoring

Pursuant to §257.94(e)(3), an assessment monitoring program was initiated for AP-E at Plant Branch based on statistically significant increases documented in the 2019 Annual Groundwater Monitoring and Corrective Action

climate and bedrock is typically overlain by a variably thick blanket of residual soils and saprolite. The overall depth of weathering in the Piedmont/Blue Ridge is generally about 20 to 60 feet; however, the depth of weathering along discontinuities and/or very feldspathic rock units may extend to depths greater than 100 feet. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances.

Based on our review of available data, micaceous, locally saprolitic soils, consisting primarily of clay, silty clay, silt, and sandy clay occur as a variably thick blanket of residuum overlying bedrock across most of the site. The thickness of the residual soil encountered in the borings is variable, ranging from approximately 11 feet to as much as 74 feet. Saprolitic soils and/or saprolitic rock vary in thickness across the site but are generally encountered at or near ground surface. Saprolitic rock is also considered to be transitionally weathered rock (TWR) or partially weathered rock (PWR), as defined by standard penetration test data, where available. Material overlying the top of rock surface, including residual soils, saprolite, and transitionally weathered rock, is collectively referred to as overburden.

### 1.3 Groundwater Monitoring Well Network

Pursuant to § 257.91 of the CCR rule and 391-3-4-.10(6), a groundwater monitoring system was installed within the uppermost aquifer at AP-E. Wells placed in upgradient and downgradient locations based on groundwater flow direction as determined by the potentiometric surface elevation contour maps.

A network of 12 monitoring wells were installed between 2014 to 2018 for groundwater monitoring in proximity to AP-E. Table 1, Monitoring Well Network Summary, includes the pertinent construction details for the AP-E monitoring well network at Plant Branch.

Based on the site hydrogeology, the monitoring system is designed to monitor groundwater flow in the overburden, the transition-zone, and the upper bedrock as a single inter-connected aquifer system. Wells suffixed with an “S” are installed in overburden (saprolitic soil), an “I” indicates transitionally weathered rock (transition zone), and “D” indicates upper bedrock. Groundwater in the overburden, partially weathered rock, fractured bedrock, and the materials comprise a single uppermost aquifer based on site hydrogeologic conditions.

## 2.0 GROUNDWATER MONITORING ACTIVITIES

The following section describes monitoring-related activities performed at the Site during the previous monitoring period (July 2020 through June 2021).

Pursuant to § 257.90(e)(3), Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed for AP-E.

### 2.1 Monitoring Well Installation and Maintenance

There was no change to the certified groundwater monitoring system for the reporting period. The groundwater monitoring system has remained the same since July 2020. Monitoring well related activities were limited to visual inspection of well conditions prior to sampling, recording site conditions, and performing exterior maintenance to provide safe access for sampling.

### 2.2 Assessment Monitoring

Pursuant to §257.94(e)(3), an assessment monitoring program was initiated for AP-E at Plant Branch based on statistically significant increases documented in the 2019 Annual Groundwater Monitoring and Corrective Action

Report, (Golder 2019). A notice of assessment monitoring was placed in the operation record on November 13, 2019.

Groundwater sampling events were conducted for AP-E during August 2020, September 2020, and March 2021 in accordance with § 257.93 and GA EPD rule 391-3-4-.10(6)(a). Samples were collected from each well in the certified monitoring system for the CCR unit. The location of each of these monitoring wells is shown on Figure 2. Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed for AP-E and the status of the monitoring network.

During the initial annual assessment sampling event in August 2020, groundwater samples were collected and analyzed for Appendix IV to meet the requirement of §257.95(b). During the September 2020 and March 2021 semi-annual sampling events, groundwater samples from each detection monitoring well were collected for analysis of Appendix III and the Appendix IV constituents detected during the August 2020 event. Results of sampling activities during this monitoring period are presented in Appendix A, Analytical Results, Field Data Forms, Well Inspection Forms, and Data Validation Summaries.

### **3.0 SAMPLE METHODOLOGY AND ANALYSIS**

Sampling events completed during this reporting period for AP-E represent both the 2020 annual Appendix IV monitoring event as well as two independent semi-annual assessment monitoring events for AP-E at Plant Branch. Groundwater analytical data and chain of custody records are presented in Appendix A. The following sections describe methods used to conduct groundwater monitoring at the site.

#### **3.1 Groundwater Elevation Measurement**

Prior to each scheduled sampling events, groundwater elevations were recorded from the monitoring well network. Groundwater elevations are summarized in Table 3, Summary of Groundwater Elevations. The recorded water level data were used to develop Figure 3, AP-E Potentiometric Surface Elevation Contour Map – August 17, 2020, Figure 4, AP-E Potentiometric Surface Elevation Contour Map – September 14, 2020, and Figure 5, AP-E Potentiometric Surface Elevation Contour Map – March 1, 2021. Review of Figures 3 through 5 shows that the general direction of groundwater flow across AP-E is to the east-northeast and east-southeast. This groundwater flow pattern is consistent with previous observations.

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

Groundwater flow rates at the site were calculated based on hydraulic gradients, hydraulic conductivity from previous slug test results, and an estimated effective porosity of the screened horizon. Based on slug test data at the site, hydraulic conductivity ranges from 2.7 to 5.5 feet per day, which is used in the flow calculations. The hydraulic gradient was calculated between well pairs shown on Table 4A, Groundwater Velocity Calculations – August 2020 and Table 4B, Groundwater Velocity Calculations – September 2020, and Table 4C, Groundwater Flow Velocity Calculations – March 2021. An effective porosity of 0.20 was used based on the default values for effective porosity recommended by US EPA for a silty sand-type soil (US EPA, 1996).

Horizontal flow velocity was calculated using the commonly used derivative of Darcy's Law:

$$V = \frac{K * i}{n_e} \quad \text{Where:}$$

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

$K$  = Average hydraulic conductivity of the aquifer  $\left(\frac{\text{feet}}{\text{day}}\right)$

$i$  = Horizontal hydraulic gradient  $\left[\frac{\text{feet}}{\text{feet}}\right]$

$n_e$  = Effective porosity

Using this equation and groundwater elevation data from these sampling events, groundwater flow velocities are calculated for various areas of the site and are tabulated on Tables 4A through 4C.

As presented on Tables 4A through 4C, groundwater flow velocity at the site ranges from approximately 0.07 to 0.27 feet per day (or approximately 24 to 100 feet per year) across AP-E. The observed groundwater flow velocities calculated for this monitoring event are also generally consistent with expected velocities in the regolith-upper bedrock aquifers of Georgia Piedmont and confirm the groundwater monitoring system as properly located to monitor the uppermost aquifer for AP-E at Plant Branch.

### 3.3 Groundwater Sampling

Groundwater samples were collected in accordance with §257.93(a) and 391-3-4-.10(6). Monitoring wells were purged and sampled using low-flow sampling procedures. Dedicated and/or non-dedicated low-flow pneumatic bladder pumps or peristaltic pumps were used to purge and sample the wells. During the purging of each well, field measurements of temperature, specific conductance, dissolved oxygen (DO), pH, and oxidation-reduction potential (ORP), were recorded using a SmarTroll® or AquaTroll® (In-Situ field instrument) along with a separate turbidity meter.

Groundwater samples were collected when the following general stabilization criteria were met:

- 0.1 standard units for pH
- 5% for specific conductance
- $\pm 10\%$  for DO where  $DO > 0.5$  milligrams per liter (mg/L); if  $DO < 0.5$  mg/L (no stabilization criteria apply)
- Turbidity measurements less than 5 nephelometric turbidity units (NTUs)

Following well stabilization, samples were collected directly into appropriately preserved laboratory supplied sample containers, placed in ice-packed coolers, and submitted to the laboratory following standard chain-of-custody protocol. Field information forms, generated directly from the In-Situ field instrument, and chain-of-custody records are included in Appendix A.

Environmental monitoring field data sheets are included with the analytical reports in Appendix A. Field data and sampling notes for each monitoring well are recorded on the field information forms, which contain a description of the sampling equipment, sampling method, purge rate, field observations, field calibration forms, and depth to water measurements at each monitoring location.

### 3.4 Laboratory Analyses

Groundwater samples were collected during August and September in 2020, and March 2021. During the August 2020 sampling event, wells were analyzed for Appendix IV monitoring parameters pursuant to 40 CFR § 257.90(e)(3). The September 2020 and March 2021 events represents two semi-annual sampling events for AP-E at Plant Branch. Because AP-E is currently in assessment monitoring, groundwater samples from wells in the assessment monitoring program were analyzed for Appendix III and the detected Appendix IV monitoring parameters per 40 CFR Parts 257 and 261. Tables 5A, 5B, and 5C Analytical Data Summary – Pond E, presents a tabulated summary of the August 2020 through March 2021 sampling results. Analytical methods used for groundwater monitoring parameters can be found on the attached analytical data reports in Appendix A.

Laboratory analyses for these assessment monitoring events were performed by Pace Analytical (Pace) in Atlanta, Georgia and Greensburg, Pennsylvania. Pace is accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintains a NELAP certification for all parameters analyzed for this project. NELAP certification for Pace for 2020 and 2021 are provided in Appendix A. Groundwater data and chain of custody records for the monitoring events are presented in Appendix A.

### 3.5 Quality Assurance and Quality Control

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

Groundwater quality data in this report was independently validated in accordance with US EPA guidance (US EPA, 2002) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestions spikes, laboratory and field duplicate relative percent difference (RPDs), field and equipment blanks, and reporting limits. The data are considered usable for meeting project objectives and the results are considered valid.

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

## 4.0 STATISTICAL ANALYSES

Statistical analysis of Appendix III groundwater monitoring data was performed pursuant to § 257.93 following the established statistical method for AP-E. In addition, pursuant to § 257.95(d)(2), Georgia Power established groundwater protection standards (GWPS) for the Appendix IV constituents and completed statistical analyses of the Appendix IV groundwater monitoring data obtained during the September 2020 and March 2021 assessment monitoring events. The reports generated from the analyses is provided in Appendix B. The September 2020 data were statistically analyzed by Groundwater Stats Consulting (GSC).

## 4.1 Statistical Method

The selected statistical method for AP-E was developed in accordance with § 257.93(f) and 391-3-4-.10(6) using methodology presented in Statistical Analysis of Groundwater Data at RCRA Facilities, Unified Guidance (US EPA, 2009). 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 US EPA regulations and guidance as recommended in the US EPA (2009) document.

Plant Branch AP-E Statistical Method Summary provides a summary of the statistical methodology used at AP-E for the groundwater monitoring conducted in March 2021 and will be used for any routine monitoring in the future.

PLANT BRANCH AP-E STATISTICAL METHOD SUMMARY		
Monitoring Well Network	Upgradient Wells	BRGWA-2S, BRGWA-2I, BRGWA-5S, BRGWA-5I, BRGWA-6S
	Downgradient Wells	BRGWC-17S, BRGWC-33S, BRGWC- 34S, BRGWC-35S, BRGWC-36S, BRGWC-37S, and BRGWC-38S
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, Total Dissolved Solids (TDS)
	Appendix IV (Assessment Monitoring)	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium (226+228)
Statistical Methodology	Data Screening on Proposed Background	Evaluate outliers, trends, and seasonality when sufficient data are available
	Statistical Limits	Interwell statistical limits will be applied on a constituent basis, depending on the appropriateness of the method as determined by the Analysis of Variance.
	Prediction Limits	Parametric when data follow a normal or transformed normal distribution and when less than 50% non-detects, utilizing Kaplan Meier non-detect adjustment when applicable; nonparametric when data sets contain greater than 50% non-detects or when data are not normally or transformed-normally distributed.
	Confidence Intervals	Used in Assessment and Corrective Action monitoring.
	No Statistical Testing	Statistical testing is not required for parameters with 100% non-detects.
	Verification Resample Plan (Optional)	1-of-2 with minimum of 8 samples per well for interwell testing. <ul style="list-style-type: none"> <li>▪ Initial statistical exceedance warrants independent resampling within 90 days.</li> <li>▪ If resample passes, well/parameter is not considered a confirmed statistically significant increase (SSI).</li> </ul>

PLANT BRANCH AP-E STATISTICAL METHOD SUMMARY		
		<ul style="list-style-type: none"> <li>▪ If resample exceeds, well/parameter has a confirmed SSI.</li> <li>▪ If no resample is collected, the original result is deemed verified.</li> </ul>

The following guidance is also applicable to the statistical analysis method:

- Statistical analyses are not performed on analytes containing 100% non-detects (US EPA Unified Guidance, 2009, Chapter 6).
- When data contain less than or equal to 15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, a non-detect adjustment such as the Kaplan-Meier or Regression on Order Statistics (ROS) method for adjustment of the mean and standard deviation will be used prior to constructing a parametric prediction limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

#### 4.1.1 Appendix III Assessment Monitoring Statistical Methods

Groundwater quality data were evaluated through use of interwell prediction limits for Appendix III parameters. Using this method, upgradient well data were pooled to establish a background statistical limit. Data from the September 2020 and March 2021 assessment monitoring events were compared to the statistical limit to determine whether any concentrations exceed background levels. The selected statistical method uses an optional 1-of-2 verification resample plan. When an initial statistically SSI or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier.

If resampling is performed and the result does not confirm the initial finding, the initial exceedance is considered a false positive result and there is no confirmed exceedance. When the resample confirms the initial finding, an SSI is declared. The Sen’s Slope/Mann Kendall trend test was used to statistically evaluate concentration levels over time and determine whether concentrations are increasing, decreasing, or stabilizing.

#### 4.1.2 Appendix IV Assessment Monitoring Statistical Methods

For the Assessment Monitoring Program (Appendix IV constituents), parametric tolerance limits were used to calculate site specific background limits from pooled upgradient well data for Appendix IV parameters with a target of 95% confidence and 95% coverage. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background limits were then used when determining the groundwater protection standard (GWPS) under GA EPD Rule 391-3-4-.10(6)(a).

US EPA revised the Federal CCR Rule on July 30, 2018, updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2).

As described in 40 CFR § 257.95(h)(1-3), the GWPS for cobalt, lead, lithium and molybdenum are:

- Cobalt 0.006 mg/L
- Lead 0.015 mg/L
- Lithium 0.040 mg/L
- Molybdenum 0.100 mg/L
- Background levels where the background level is higher than the Rule-specified GWPS.

Presently those updated GWPS have not yet been incorporated in the current GA EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, under GA EPD rules, background concentrations are considered when determining the GWPS for constituents where an MCL has not been established (or where background is higher than the MCL). Under the existing GA EPD rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above State rule requirements, GWPS were established for statistical comparison of Appendix IV constituents. Summary of Background Levels and GWPS (Table 6) summarizes the background limit established at each monitoring well and the GWPS established under State rules.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV parameters in each downgradient well. Those confidence intervals were compared to the GWPS established for the State rules. Only when the entire confidence interval is above a GWPS is the well/constituent pair considered to exceed its respective standard. If there is an exceedance of the established standard, a SSL exceedance is identified.

A summary table of the statistical results accompanies the prediction limits for Appendix III and confidence intervals for Appendix IV in Appendix B, Statistical Analyses. The background period for statistical analyses included data through March 2021. Tolerance limits for confidence interval calculations are updated to include current data. Due to varying reporting limits in background, the most recent reporting limit is used when data is not reported above detection limits. This results in a more appropriate statistical test.

## 4.2 Statistical Analysis Results

Analytical data from the semi-annual assessment monitoring events in September 2020 and March 2021 at AP-E have been statistically analyzed in accordance with the site's certified Statistical Analysis Plan. Verification resampling to confirm initial SSIs was not performed. The statistical results of the September 2020 and March 2021 monitoring events and resampling events are included in Appendix B, Statistical Analyses.

### 4.2.1 September 2020 Appendix III Statistical Results

Based on the statistical results presented in Appendix B, groundwater conditions have not returned to background and assessment monitoring should continue pursuant to 40 CFR 257.95(f). A detailed list of the noted exceedances is provided in Appendix B.



#### 4.2.2 September 2020 Appendix IV Statistical Results

Analytical data from the September 2020 monitoring event at AP-E have been statistically analyzed in accordance with the site's certified statistical analysis method. Review of the Sanitas results indicates that using the GWPS established according to GA EPD Rule 391-3-4-.10(6)(a), the following SSLs are identified below in AP-E September 2020 Confidence Interval Statistically Significant Level Exceedances.

AP-E September 2020 Confidence Interval Statistically Significant Level Exceedances	
AP-E Monitoring Well	Appendix IV Parameter
BRGWC-38S	Beryllium, Cobalt
BRGWC-33S	Cobalt

#### 4.2.3 March 2021 Appendix III Statistical Results

Based on the Appendix III statistical results, groundwater conditions have not returned to background and assessment monitoring should continue pursuant to 40 CFR 257.95(f). A detailed list of the noted exceedances is provided in the summary section and in Appendix B.

#### 4.2.4 March 2021 Appendix IV Statistical Results

Analytical data from the March 2021 monitoring event at AP-E have been statistically analyzed in accordance with the site's certified statistical analysis method. Review of the Sanitas results indicates that using the GWPS established according to GA EPD Rule 391-3-4-.10(6)(a), the following SSLs were identified:

AP-E March 2021 Confidence Interval Statistically Significant Level Exceedances	
AP-E Monitoring Well	Appendix IV Parameter
BRGWC-38S	Beryllium, Cobalt
BRGWC-33S	Cobalt

### 4.3 Alternate Source Demonstration

Pursuant to the options of 40 CFR 257.95 as adopted by 391-3-4-.10, an Alternate Source Demonstration (ASD) was prepared in response to SSLs identified for beryllium and cobalt in groundwater monitoring wells. The ASD was submitted to GA EPD on July 28, 2020 (Golder 2020).

The evaluation presented in this document demonstrates that statistically significant levels of beryllium and cobalt identified in groundwater are due to the presence of naturally-occurring beryllium and cobalt present in soils and bedrock, and not caused by a release from the CCR unit.

The occurrence of low-pH groundwater is due to natural groundwater recharge and flow conditions, which facilitates the release and mobilization of beryllium and cobalt from natural sources in the underlying rock formations to groundwater. The following lines of evidence demonstrate the natural occurrence of beryllium and cobalt in site groundwater.

- Beryllium and cobalt are not detected above naturally-occurring background concentrations and have limited to no mobility in porewater from AP-E.
- The elemental ratios of lithium and boron in downgradient wells are reflective of upgradient groundwater conditions at the Site rather than porewater.
- Beryllium and cobalt are naturally occurring in the soils and bedrock at Plant Branch as identified by chemical analysis and sequential extraction of soil and rock samples.
- Soil/bedrock mineralogical results support the presence of naturally occurring beryllium and cobalt at Plant Branch.
- Beryllium and cobalt GWPS exceedances only occur where acidic groundwater is present, which is unrelated to the CCR porewater (circumneutral pH) and suggests aquifer materials are the source for elevated beryllium and cobalt concentrations.

Therefore, no further actions (i.e., Assessment of Corrective Measures) are warranted at this time.

## 5.0 MONITORING PROGRAM STATUS

Statistical evaluations of the groundwater monitoring data for AP-E confirm SSIs of Appendix III groundwater monitoring parameters above background and SSLs of Appendix IV groundwater monitoring parameter above the established GWPS. An ASD report was submitted on July 28, 2020 that documents the natural occurrence of target Appendix IV SSLs in the Site groundwater and that these exceedances are not caused by AP-E. However, based on the results from the September 2020 and March 2021 sampling events, AP-E will remain in assessment monitoring.

## 6.0 CONCLUSIONS AND FUTURE ACTIONS

This 2021 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Plant Branch AP-E has been prepared to fulfill the requirements of GA EPD Rules of Solid Waste Management 391-3-4-.10(6). The groundwater flow direction and rates interpreted during the August 2020, September 2020, and March 2021 monitoring events are generally consistent with historical evaluations. Review of analytical results and statistical analyses developed for the site indicates confirmed SSIs of Appendix III above background and SSLs of Appendix IV above the established GWPS. Plant Branch submitted an ASD for each of the identified SSLs following the rule and timelines specified in 40 CFR 257.95. Based on the findings presented herein, Plant Branch will continue with assessment groundwater monitoring and reporting. The next semiannual assessment sampling event is planned for September 2021. The September 2021 semiannual assessment monitoring event will be a combined event to meet the requirements of 40 C.F.R. §257.95(b) and (d)(1) and will include sampling and analysis of all Appendix III and IV constituents.

## 7.0 REFERENCES

Geosyntec Consultants, 2020. Hydrogeologic Assessment Report Revision 01, Georgia Power – Plant Branch, Putnam County, Georgia. Submitted to Southern Company Services in November 2020.

Golder Associates, 2020. Alternate Source Demonstration, Georgia Power – Plant Branch AP-E, Putnam County, Georgia, July 2020.

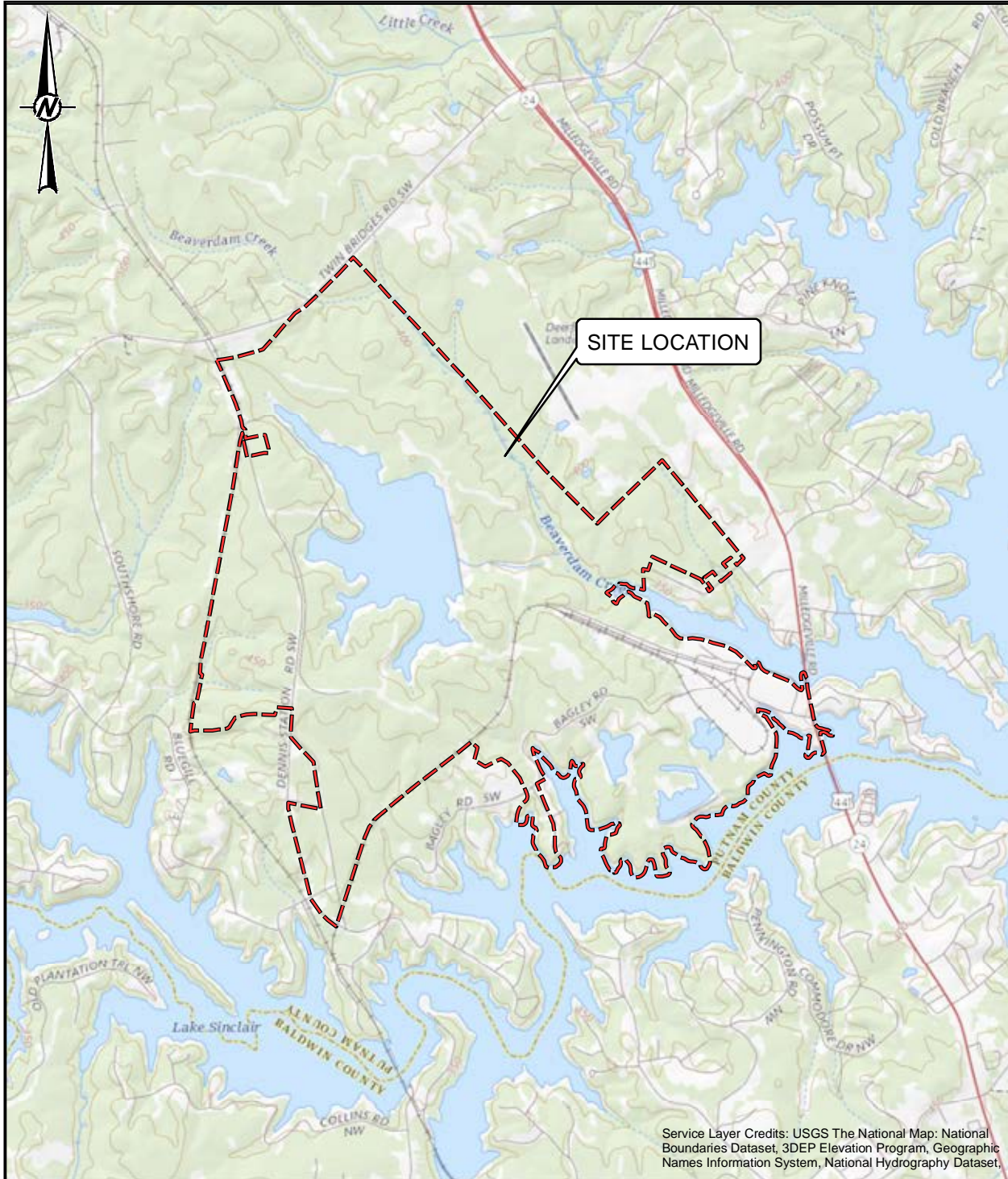
Golder Associates, 2019. First Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Plant Branch, Milledgeville, Georgia, August 2019.

US EPA, 1996. Soil Guidance Manual

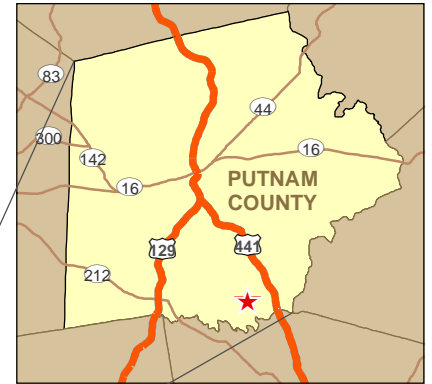
US EPA, 2002, Data Validation Standard Operating Procedures and Quality Assurance Manual, November.

US EPA, 2009, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*. EPA 530-R-09-007.

# FIGURES & TABLES



Service Layer Credits: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset.



CLIENT  
 GEORGIA POWER COMPANY  
 PLANT BRANCH



PROJECT  
 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE  
 ACTION REPORT - AP-E

TITLE  
**SITE LOCATION MAP**

CONSULTANT



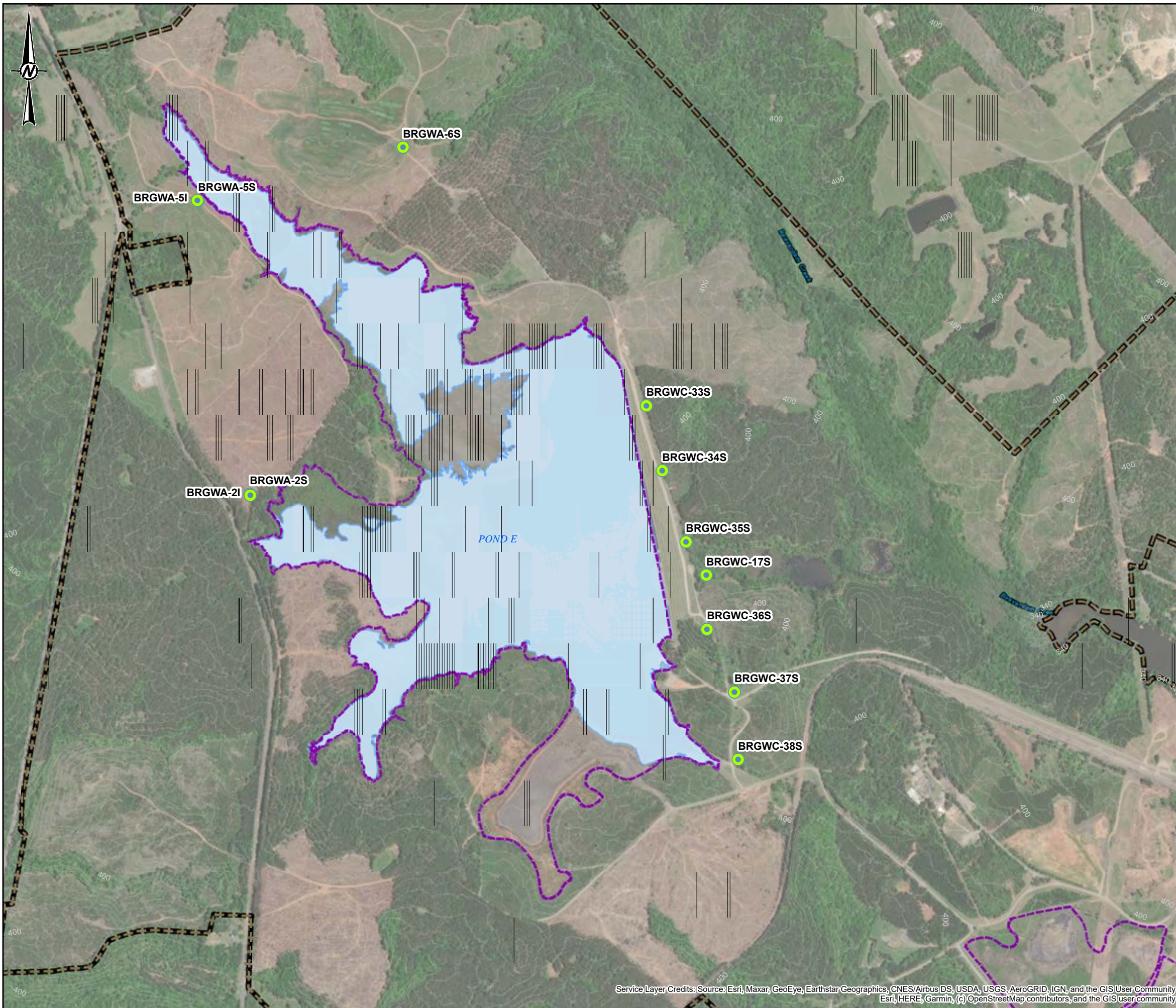
YYYY-MM-DD	2019-03-15
PREPARED	DJC
DESIGN	DLP
CHECKED	RK
REVIEW/APPROVED	DLP

PROJECT No.  
 166625421

CONTROL  
 1666254A000-GIS.mxd

Rev.  
 0

FIGURE  
 1



- LEGEND**
- MONITORING WELL
  - PROPERTY BOUNDARY
  - APPROXIMATE ASH POND BOUNDARY
  - APPROXIMATE SURFACE WATER LIMITS

- REFERENCE**
1. SERVICE LAYER CREDITS: SOURCE: ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
  2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).
  3. ASH POND BOUNDARY AND PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.
  4. PIEZOMETER AND WELL LOCATIONS PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.
  5. TOPOGRAPHIC CONTOURS PROVIDED BY GEORGIA POWER COMPANY (MARCH 2018).



CLIENT  
**GEORGIA POWER COMPANY**  
 PLANT BRANCH



PROJECT  
**2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - AP-E**

TITLE  
**SITE PLAN AND MONITORING WELL LOCATION MAP**

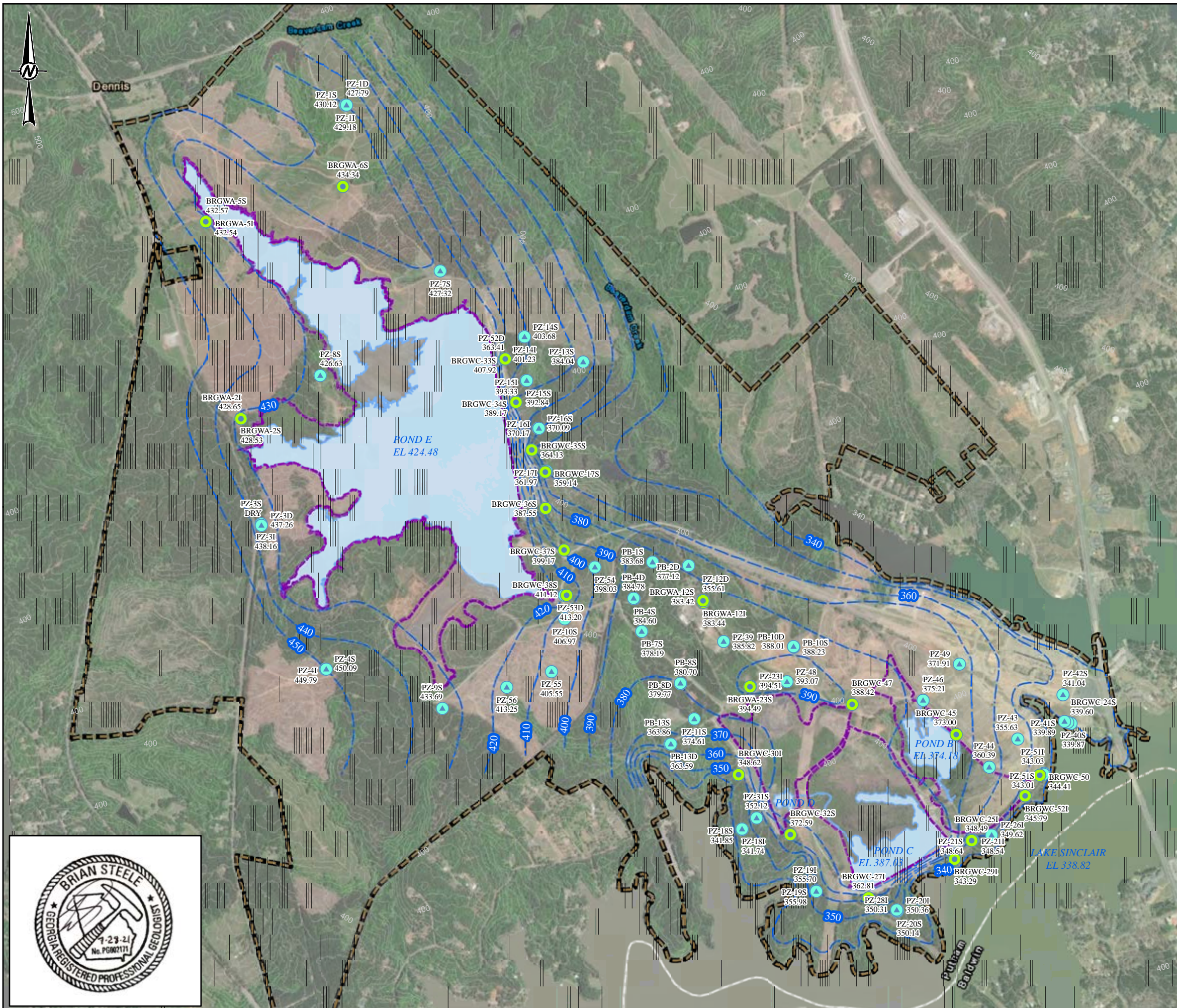
CONSULTANT	YYYY-MM-DD	2020-05-21
	PREPARED	BAS
	DESIGN	BAS
	CHECKED	RK
	REVIEW/APPROVED	DLP

PROJECT No. 166625421 CONTROL 1666254V001-GIS.mxd Rev. 0 FIGURE 2

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Path: C:\GIS\Southern Company\PlantBranch\Environmental - CCR\Figures\August 2020 Annual Report\Figure 2 - Site Plan and Well Location Map.mxd

1 in. IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIB



**LEGEND**

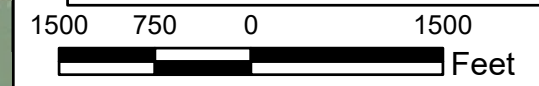
- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- INFERRED POTENTIOMETRIC SURFACE (NAVD88)
- APPROXIMATE ASH POND BOUNDARY
- APPROXIMATE SURFACE WATER LIMITS

**NOTES**

1. GROUNDWATER SURFACE CONTOUR INTERVAL = 10 FEET.
2. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, AND TOPOGRAPHIC CONTOURS. THEREFORE, CONTOURS MAY NOT REFLECT ACTUAL CONDITIONS.
3. DEEP (D) AND INTERMEDIATE (I) WELL ELEVATIONS WERE NOT USED FOR GROUNDWATER CONTOURING.
4. NAVD88 = NORTH AMERICAN VERTICAL DATUM 88.
5. GROUNDWATER ELEVATIONS AND POND ELEVATIONS RECORDED AUGUST 17, 2020.

**REFERENCE**

1. SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY.
2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).
3. BORING/PIEZOMETER LOCATIONS PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.
4. PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.



CLIENT  
**GEORGIA POWER COMPANY**  
 PLANT BRANCH



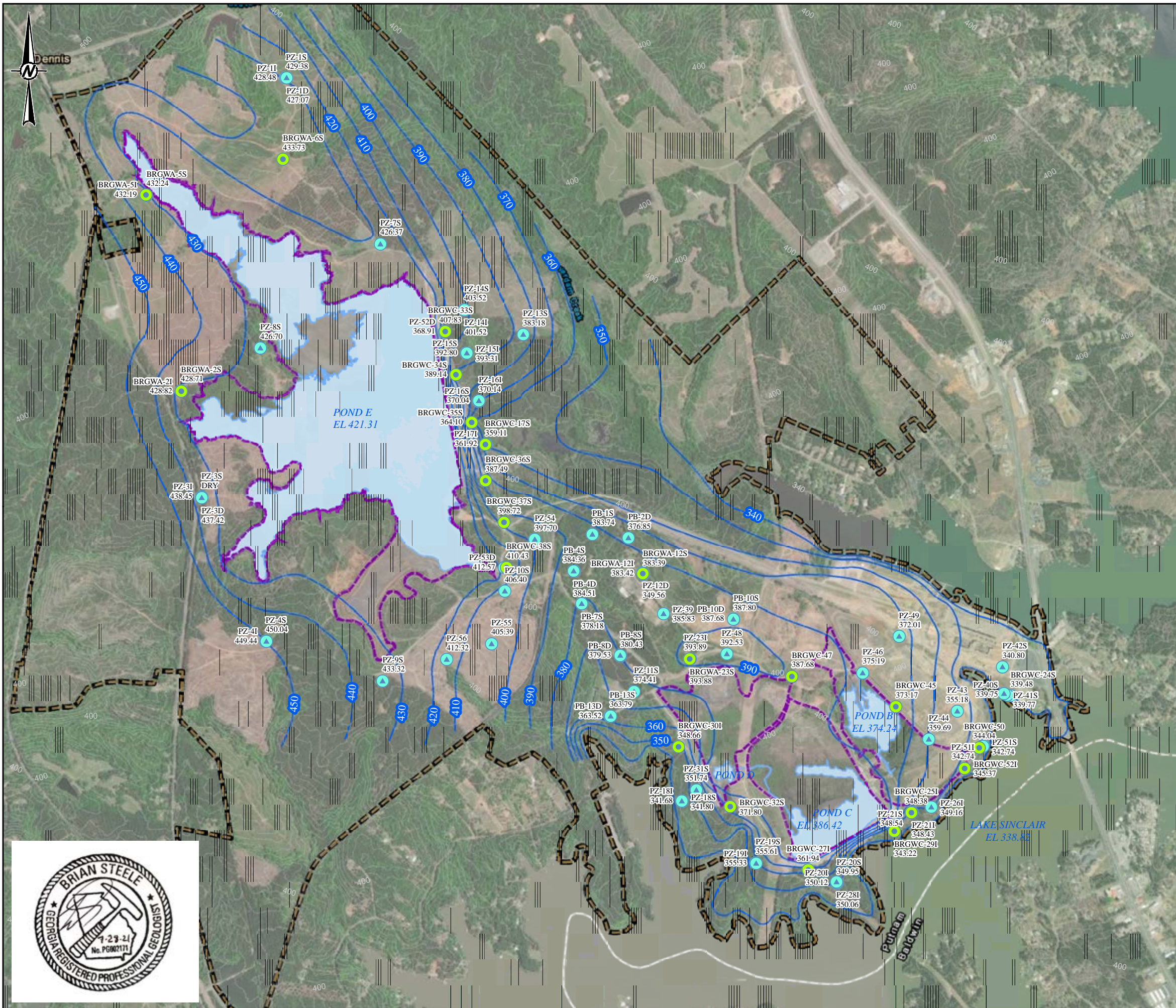
PROJECT  
**2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - AP-E**

TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP**  
**AUGUST 17, 2020**

CONSULTANT	YYYY-MM-DD	2020-07-24
	PREPARED	DJC
	DESIGN	ED
	CHECKED	RK
	REVIEW/APPROVED	DLP

PROJECT No. 166625421 CONTROL 1666254V001-GIS.mxd Rev. 1 FIGURE 3

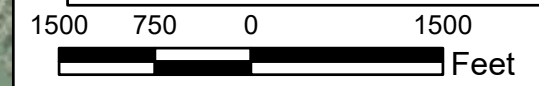




- LEGEND**
- MONITORING WELL
  - PIEZOMETER
  - INFERRED POTENTIOMETRIC SURFACE (NAVD88)
  - PROPERTY BOUNDARY
  - APPROXIMATE ASH POND BOUNDARY
  - APPROXIMATE SURFACE WATER LIMITS

- NOTES**
1. GROUNDWATER SURFACE CONTOUR INTERVAL = 10 FEET.
  2. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, AND TOPOGRAPHIC CONTOURS. THEREFORE, CONTOURS MAY NOT REFLECT ACTUAL CONDITIONS.
  3. DEEP (D) AND INTERMEDIATE (I) WELL ELEVATIONS WERE NOT USED FOR GROUNDWATER CONTOURING.
  4. NAVD88 = NORTH AMERICAN VERTICAL DATUM 88.
  5. GROUNDWATER ELEVATIONS AND POND ELEVATIONS RECORDED SEPTEMBER 14, 2020.

- REFERENCE**
1. SERVICE LAYER CREDITS: ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY.
  2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).
  3. BORING/PIEZOMETER LOCATIONS PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.
  4. PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.



CLIENT  
**GEORGIA POWER COMPANY**  
 PLANT BRANCH

PROJECT  
**2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - AP-E**

TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP**  
**SEPTEMBER 14, 2020**

CONSULTANT	YYYY-MM-DD	2020-09-25
<b>GOLDER</b> MEMBER OF WSP	PREPARED	SEB
	DESIGN	ED
	CHECKED	RK
	REVIEW/APPROVED	DLP

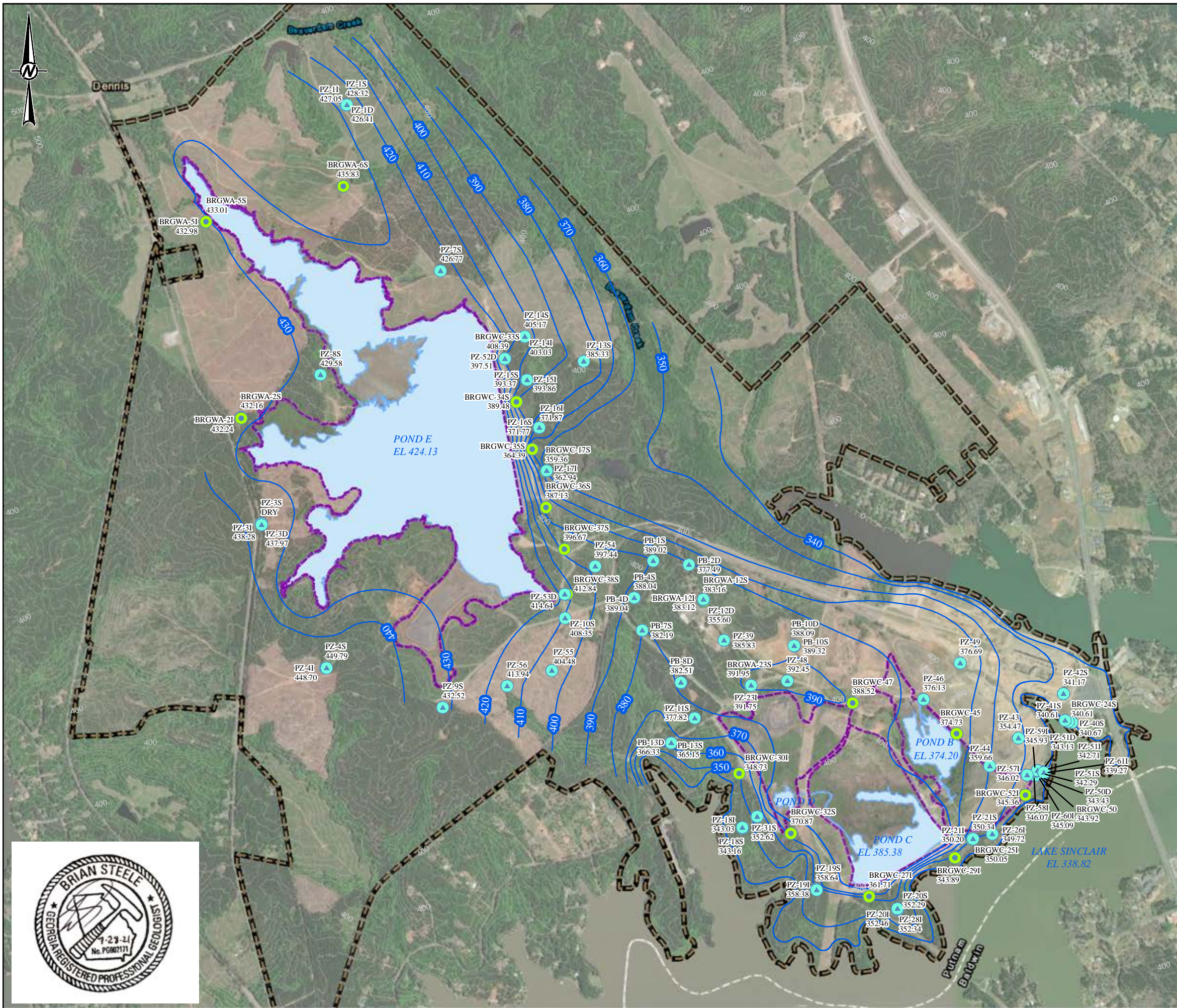
PROJECT No. 166625421 CONTROL 1666254V001-GIS.mxd Rev. 1 FIGURE 4



2021 Annual Groundwater Monitoring and Corrective Action Report

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIB





- LEGEND**
- MONITORING WELL
  - ▲ PIEZOMETER
  - INFERRED POTENTIOMETRIC SURFACE (NAVD88)
  - PROPERTY BOUNDARY
  - APPROXIMATE ASH POND BOUNDARY
  - APPROXIMATE SURFACE WATER LIMITS

- NOTES**
1. GROUNDWATER SURFACE CONTOUR INTERVAL = 10 FEET
  2. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, AND TOPOGRAPHIC CONTOURS. THEREFORE, CONTOURS MAY NOT REFLECT ACTUAL CONDITIONS.
  3. DEEP (D) AND INTERMEDIATE (I) WELL ELEVATIONS WERE NOT USED FOR GROUNDWATER CONTOURING.
  4. NAVD88=NORTH AMERICAN VERTICAL DATUM 88
  5. GROUNDWATER AND POND ELEVATIONS RECORDED MARCH 1, 2021, EXCEPT PZ-57I, PZ-58I, PZ-59I, PZ-60I AND PZ-61I WHICH ARE FROM APRIL 5 THROUGH APRIL 7, 2021.

- REFERENCE**
1. SERVICE LAYER CREDITS: SOURCE: ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AERGRID, IGN, AND THE GIS USER COMMUNITY ESRI, HERE, GARMIN, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
  2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).
  3. BORING/PIEZOMETER LOCATIONS PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.
  4. PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.



CLIENT  
**GEORGIA POWER COMPANY**  
 PLANT BRANCH

PROJECT  
**2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT - AP-E**

TITLE  
**POTENTIOMETRIC SURFACE CONTOUR MAP**  
**MARCH 1, 2021**

CONSULTANT	DATE	BY
	YYYY-MM-DD	2021-06-30
	PREPARED	BAS
	DESIGN	DC
	CHECKED	BS
	REVIEW/APPROVED	RK

PROJECT No. 166625421 CONTROL 1666254V001-GIS.mxd Rev. 1 FIGURE 5



Path: C:\GIS\Southern Company\Plant Branch\Environmental - CCR\Figures\Potentiometric Surface Map\Figure 3 - BCD March 2021 Potentiometric Surface Map\_NoInset.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET HAS BEEN MODIFIED FROM ANSIS

**TABLE 1**  
**SUMMARY OF MONITORING WELL, ASSESSMENT AND PIEZOMETER CONSTRUCTION**  
 Georgia Power Company - Plant Branch

Well-ID	Old Well-ID	Location	Hydrogeologic Unit Screened <sup>(3)</sup>	Latitude	Longitude	Ground Surface Elevation (feet NAVD88) <sup>(1)</sup>	Top of Casing Elevation (feet NAVD88) <sup>(1)</sup>	Total Depth (feet bgs) <sup>(2)</sup>	Top of Screen Elevation (feet NAVD88) <sup>(1)</sup>	Screen Tip Elevation (feet NAVD88) <sup>(1)</sup>	Screen Length	Date of Installation
<b>AP-BCD ASSESSMENT WELLS</b>												
BRGWA-2S	PZ-2S	Upgradient BCD & E	Saprolite	33.205940	-83.338294	440.4	443.20	44.6	406.20	396.20	10.0	4/2/2014
BRGWA-2I	PZ -2I	Upgradient BCD & E	Amphibolite Gneiss	33.205913	-83.338279	440.5	443.14	64.3	386.60	376.60	10.0	3/14/2014
BRGWA-5S	PZ-5S	Upgradient BCD & E	Saprolite	33.214300	-83.339971	440.8	443.86	40.0	411.20	401.20	10.0	4/3/2014
BRGWA-5I	PZ - 5I	Upgradient BCD & E	Amphibolite Gneiss	33.214317	-83.339996	441.1	443.79	61.2	390.30	380.30	10.0	4/3/2014
BRGWA-6S	PZ-6S	Upgradient BCD & E	Saprolite	33.215780	-83.333008	455.8	458.96	49.7	416.50	406.50	10.0	4/1/2014
BRGWA-12S	PZ-12S	Upgradient BCD	Residuum	33.197941	-83.314864	431.6	434.64	58.3	383.70	373.70	10.0	3/4/2014
BRGWA-12I	PZ -12I	Upgradient BCD	Biotite Gneiss	33.197981	-83.314877	431.5	434.39	77.6	364.30	354.30	10.0	2/20/2014
BRGWA-23S	PZ-23S	Upgradient BCD	Saprolite/TWR	33.194311	-83.312528	425.5	428.24	40.8	394.70	384.70	10.0	7/26/2016
BRGWC-25I	PZ-25I	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.187670	-83.301326	355.0	357.37	20.5	344.50	334.50	10.0	7/25/2016
BRGWC-27I	PZ-27S	Downgradient C	Saprolite	33.185265	-83.306589	364.0	366.86	24.0	350.00	340.00	10.0	7/22/2016
BRGWC-29I	PZ-29I	Downgradient C	TWR	33.186890	-83.302200	350.6	353.23	20.0	340.60	330.60	10.0	7/23/2016
BRGWC-30I	PZ-30I	Downgradient D	Saprolite/TWR/Biotite Gneiss	33.190566	-83.313141	350.0	352.61	20.3	340.00	330.00	10.0	7/18/2016
BRGWC-32S	PZ-32S	Downgradient D	Saprolite	33.187992	-83.310531	403.6	406.39	45.0	368.60	358.60	10.0	7/20/2016
BRGWC-45	PZ-45	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.192199	-83.302065	381.6	384.58	57.0	335.00	325.00	10.0	2/3/2018
BRGWC-47	PZ-47	Downgradient D	TWR	33.193530	-83.307343	408.8	411.20	92.0	327.20	317.20	10.0	1/25/2018
BRGWC-50	PZ-50	Downgradient B	Residuum/Biotite Gneiss	33.190421	-83.297841	378.8	381.35	65.0	324.20	314.20	10.0	1/31/2018
BRGWC-52I	PZ-52	Downgradient B	Biotite Gneiss	33.189551	-83.298594	381.2	383.87	73.9	317.30	307.30	10.0	8/6/2018
PZ-50D	NA	Downgradient	Biotite Gneiss	33.190410	-83.297817	378.3	380.86	106.0	282.30	272.30	10.0	10/8/2020
PZ-51I	NA	Downgradient	Saprolite/TWR/Biotite Gneiss	33.190523	-83.297623	378.0	380.52	65.0	323.10	313.10	10.0	8/1/2018
PZ-61I	NA	Downgradient	Saprolite/TWR/Biotite Gneiss	33.190498	-83.297655	377.7	380.64	76.0	312.00	302.00	10.0	3/30/2021

**TABLE 1**  
**SUMMARY OF MONITORING WELL, ASSESSMENT AND PIEZOMETER CONSTRUCTION**  
 Georgia Power Company - Plant Branch

Well-ID	Old Well-ID	Location	Hydrogeologic Unit Screened <sup>(3)</sup>	Latitude	Longitude	Ground Surface Elevation (feet NAVD88) <sup>(1)</sup>	Top of Casing Elevation (feet NAVD88) <sup>(1)</sup>	Total Depth (feet bgs) <sup>(2)</sup>	Top of Screen Elevation (feet NAVD88) <sup>(1)</sup>	Screen Tip Elevation (feet NAVD88) <sup>(1)</sup>	Screen Length	Date of Installation
<b>AP-E ASSESSMENT WELLS</b>												
BRGWA-2S	PZ-2S	Upgradient E	Saprolite	33.205940	-83.338294	440.4	443.20	44.6	406.20	396.20	10.0	4/2/2014
BRGWA-2I	PZ -2I	Upgradient E	Amphibolite Gneiss	33.205913	-83.338279	440.5	443.14	64.3	386.60	376.60	10.0	3/14/2014
BRGWA-5S	PZ-5S	Upgradient E	Saprolite	33.214300	-83.339971	440.8	443.86	40.0	411.20	401.20	10.0	4/3/2014
BRGWA-5I	PZ - 5I	Upgradient E	Amphibolite Gneiss	33.214317	-83.339996	441.1	443.79	61.2	390.30	380.30	10.0	4/3/2014
BRGWA-6S	PZ-6S	Upgradient E	Saprolite	33.215780	-83.333008	455.8	458.96	49.7	416.50	406.50	10.0	4/1/2014
BRGWC-17S	PZ-17S	Downgradient E	Alluvium	33.203532	-83.322836	362.2	365.32	7.1	360.50	355.50	5.0	3/13/2014
BRGWC-33S	PZ-33S	Downgradient E	Saprolite/TWR/Biotite Gneiss	33.208371	-83.324826	414.2	416.68	26.4	398.20	388.20	10.0	7/26/2016
BRGWC-34S	PZ-34S	Downgradient E	Saprolite	33.206518	-83.324300	389.2	391.96	23.0	376.20	366.20	10.0	7/25/2016
BRGWC-35S	PZ-35S	Downgradient E	Saprolite	33.204484	-83.323519	363.7	366.31	27.4	346.70	336.70	10.0	7/23/2016
BRGWC-36S	PZ-36S	Downgradient E	Saprolite	33.201997	-83.322833	383.1	389.84	28.7	364.40	354.40	10.0	7/26/2016
BRGWC-37S	PZ-37S	Downgradient E	Saprolite/TWR	33.200205	-83.321914	444.4	447.05	63.6	390.80	380.80	10.0	7/24/2016
BRGWC-38S	PZ-38S	Downgradient E	Saprolite/TWR	33.198277	-83.321812	429.8	432.24	38.2	402.00	392.00	10.0	7/22/2016
<b>AP-BCD DELINEATION PIEZOMETERS</b>												
PZ-51S	NA	Downgradient B	Residuum	33.190474	-83.297644	377.9	380.27	45.4	337.90	332.90	5.0	8/1/2018
PZ-51D	NA	Downgradient B	Biotite Gneiss	33.190548	-83.297643	378.1	380.75	106.0	282.10	272.10	10.0	10/9/2020
PZ-57I	NA	Downgradient B	Saprolite/TWR	33.190395	-83.298504	379.4	382.50	75.9	313.80	303.80	10.0	3/24/2021
PZ-58I	NA	Downgradient B	Saprolite/TWR	33.190383	-83.298087	379.3	382.27	63.9	325.70	315.70	10.0	3/27/2021
PZ-60I	NA	Downgradient B	Saprolite/TWR	33.190407	-83.297979	379.5	382.61	60.8	329.00	319.00	10.0	3/29/2021
<b>PIEZOMETERS</b>												
PZ-1D	NA	Upgradient	Biotite Gneiss	33.219259	-83.332788	462.9	463.41	160.0	NA	302.90	94.5	4/4/2014
PZ-1I	NA	Upgradient	Biotite Gneiss	33.219250	-83.332855	461.9	464.71	79.5	392.80	382.80	10.0	3/10/2014
PZ-1S	NA	Upgradient	Saprolite	33.219251	-83.332821	462.4	465.07	65.0	407.80	397.80	10.0	3/20/2014
PZ-3D	NA	Upgradient	Biotite Gneiss	33.201356	-83.337283	486.7	487.50	130.0	NA	358.59	82.0	3/27/2014
PZ-3I	NA	Upgradient	Biotite Gneiss	33.201412	-83.337289	486.5	489.49	54.6	442.30	432.30	10.0	3/11/2014
PZ-3S	NA	Upgradient	Saprolite	33.201384	-83.337284	487	490.53	39.9	457.50	447.50	10.0	3/11/2014
PZ-4I	NA	Upgradient	Biotite Gneiss	33.195212	-83.334049	479.9	482.98	46.8	443.50	433.50	10.0	3/11/2014
PZ-4S	NA	Upgradient	Saprolite	33.195216	-83.334088	479.9	482.87	30.0	460.30	450.30	10.0	3/10/2014
PZ-7S	NA	Downgradient	Saprolite	33.212137	-83.328090	449	451.57	44.5	414.90	404.90	10.0	4/1/2014
PZ-8S	NA	Upgradient	Saprolite	33.207731	-83.334235	450.5	453.08	49.5	411.40	401.40	10.0	4/1/2014
PZ-9S	NA	Upgradient	Saprolite	33.193487	-83.328157	466.1	469.28	48.0	428.50	418.50	10.0	3/5/2014
PZ-10S	NA	Downgradient	Saprolite	33.197260	-83.321907	431	433.85	39.0	402.40	392.40	10.0	3/5/2014
PZ-11S	NA	Downgradient	Saprolite	33.192944	-83.315371	390.9	393.99	24.5	376.80	366.80	10.0	2/20/2014
PZ-12D	PZD-12D	Downgradient	Biotite Gneiss	33.198010	-83.314885	431.4	434.09	141.7	350.10	290.10	60.0	4/14/2014
PZ-13S	NA	Downgradient	Saprolite	33.208218	-83.320866	406.5	409.97	34.7	382.20	372.20	10.0	3/19/2014
PZ-14I	NA	Downgradient	Biotite Gneiss	33.209302	-83.323834	419.9	422.71	53.8	376.50	366.50	10.0	3/20/2014

**TABLE 1**  
**SUMMARY OF MONITORING WELL, ASSESSMENT AND PIEZOMETER CONSTRUCTION**  
 Georgia Power Company - Plant Branch

Well-ID	Old Well-ID	Location	Hydrogeologic Unit Screened <sup>(3)</sup>	Latitude	Longitude	Ground Surface Elevation (feet NAVD88) <sup>(1)</sup>	Top of Casing Elevation (feet NAVD88) <sup>(1)</sup>	Total Depth (feet bgs) <sup>(2)</sup>	Top of Screen Elevation (feet NAVD88) <sup>(1)</sup>	Screen Tip Elevation (feet NAVD88) <sup>(1)</sup>	Screen Length	Date of Installation
PZ-14S	NA	Downgradient	Saprolite	33.209303	-83.323855	420.2	423.31	37.6	393.00	383.00	10.0	3/20/2014
PZ-15I	NA	Downgradient	Biotite Gneiss/Amphibolite	33.207440	-83.323742	400.2	403.06	88.7	321.90	311.90	10.0	3/25/2014
PZ-15S	NA	Downgradient	Saprolite	33.207438	-83.323759	400.1	402.90	39.9	370.20	360.20	10.0	3/27/2014
PZ-16I	NA	Downgradient	Amphibolite Gneiss	33.205401	-83.323146	379.5	382.45	38.6	351.30	341.30	10.0	3/14/2014
PZ-16S	NA	Downgradient	Saprolite	33.205393	-83.323166	379.3	382.52	19.1	370.60	360.60	10.0	3/18/2014
PZ-17I	NA	Downgradient	Amphibolite Gneiss	33.203566	-83.322788	362.3	365.33	43.5	329.20	319.20	10.0	3/17/2014
PZ-18I	NA	Downgradient	Biotite Gneiss	33.188252	-83.312988	359.6	362.55	38.4	331.30	321.30	10.0	2/26/2014
PZ-18S	NA	Downgradient	Saprolite	33.188228	-83.312982	359.7	362.82	24.2	345.00	335.00	10.0	3/26/2014
PZ-19I	NA	Downgradient	Biotite Gneiss	33.185563	-83.309241	368.9	371.74	43.7	335.60	325.60	10.0	3/4/2014
PZ-19S	NA	Downgradient	Saprolite	33.185586	-83.309258	368.4	371.42	28.0	350.80	340.80	10.0	3/4/2014
PZ-20I	NA	Downgradient	Biotite Gneiss	33.184705	-83.305130	362.2	365.34	29.5	343.10	333.10	10.0	3/5/2014
PZ-20S	NA	Downgradient	Saprolite	33.184691	-83.305140	362.2	365.41	15.3	357.30	347.30	10.0	3/5/2014
PZ-21I	NA	Downgradient	Biotite Gneiss	33.187691	-83.301283	355.8	358.92	24.4	341.80	331.80	10.0	3/10/2014
PZ-21S	NA	Downgradient	Residuum/Saprolite	33.187694	-83.301305	355.5	358.52	9.8	351.10	346.10	5.0	3/11/2014
PZ-23I	NA	Downgradient	Biotite Gneiss	33.194321	-83.312497	425.1	427.74	66.5	368.60	358.60	10.0	7/29/2016
PZ-24S	BRGWC-24S	Downgradient A	Saprolite	33.192629	-83.296220	351.4	354.10	42.0	319.90	309.90	10.0	7/27/2016
PZ-26I	NA	Downgradient	Biotite Gneiss	33.187898	-83.300306	368	370.63	30.5	347.50	337.50	10.0	7/26/2016
PZ-28I	NA	Downgradient	TWR/Biotite Gneiss	33.184732	-83.305158	362.5	364.81	24.0	348.50	338.50	10.0	7/24/2016
PZ-31S	NA	Downgradient	TWR	33.188716	-83.312244	374.3	376.77	39.5	344.80	334.80	10.0	7/26/2016
PZ-39	NA	Downgradient	Saprolite	33.196254	-83.313842	432	434.78	44.7	397.30	387.30	10.0	7/30/2016
PZ-40S	NA	Downgradient A	Residuum	33.192669	-83.296398	353.2	355.96	40.2	324.40	314.40	10.0	2/14/2017
PZ-41S	NA	Downgradient A	Saprolite	33.192716	-83.296555	354.3	357.17	44.2	320.50	310.50	10.0	2/14/2017
PZ-42S	NA	Downgradient A	Residuum	33.193854	-83.296624	359	361.66	32.2	337.20	327.20	10.0	2/9/2017
PZ-43	NA	Downgradient A	Residuum/Biotite Gneiss	33.191985	-83.298942	381.0	383.71	40.4	351.00	341.00	10.0	2/7/2018
PZ-44	NA	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.190799	-83.300405	380.5	383.04	57.0	333.90	323.90	10.0	2/2/2018
PZ-46	NA	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.193658	-83.303739	382.1	384.64	45.6	346.50	336.50	10.0	2/5/2018
PZ-48	NA	Downgradient D	Saprolite/TWR/Amphibolite	33.194504	-83.310642	418.3	420.90	67.0	361.70	351.70	10.0	1/24/2018
PZ-49	NA	Downgradient B	Residuum/Biotite Gneiss	33.195198	-83.301871	382.2	384.99	17.0	375.60	365.60	10.0	1/30/2018
PZ-50D	NA	Downgradient B	Biotite Gneiss	33.190410	-83.297817	378.3	380.86	106.0	282.30	272.30	10.0	10/8/2020
PZ-51S	NA	Downgradient B	Residuum	33.190474	-83.297644	377.9	380.27	45.4	337.90	332.90	5.0	8/1/2018
PZ-51I	NA	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.190523	-83.297623	378	380.52	65.0	323.10	313.10	10.0	8/1/2018

**TABLE 1**  
**SUMMARY OF MONITORING WELL, ASSESSMENT AND PIEZOMETER CONSTRUCTION**  
 Georgia Power Company - Plant Branch

Well-ID	Old Well-ID	Location	Hydrogeologic Unit Screened <sup>(3)</sup>	Latitude	Longitude	Ground Surface Elevation (feet NAVD88) <sup>(1)</sup>	Top of Casing Elevation (feet NAVD88) <sup>(1)</sup>	Total Depth (feet bgs) <sup>(2)</sup>	Top of Screen Elevation (feet NAVD88) <sup>(1)</sup>	Screen Tip Elevation (feet NAVD88) <sup>(1)</sup>	Screen Length	Date of Installation
PZ-51D	NA	Downgradient B	Biotite Gneiss	33.190548	-83.297643	378.1	380.75	106.0	282.10	272.10	10.0	10/9/2020
PZ-52D	NA	Downgradient E	Biotite Gneiss	33.208362	-83.324870	414.3	417.03	59.5	364.80	354.80	10.0	5/14/2020
PZ-53D	NA	Downgradient E	Saprolite/TWR/Biotite Gneiss	33.198283	-83.321917	431.6	434.68	139.4	302.20	292.20	10.0	5/17/2020
PZ-54	NA	Downgradient E	Saprolite/TWR	33.199468	-83.320356	440.8	443.86	52.0	398.80	388.80	10.0	5/15/2020
PZ-55	NA	Downgradient E	Saprolite/TWR/Biotite Gneiss	33.195029	-83.322604	450.2	453.07	49.3	410.90	400.90	10.0	5/19/2020
PZ-56	NA	Downgradient B	Saprolite/TWR/Biotite Gneiss	33.194377	-83.324890	416.2	418.84	29.3	396.90	386.90	10.0	5/20/2020
PZ-57I	NA	Downgradient B	Saprolite/TWR	33.190395	-83.298504	379.4	382.50	75.9	313.80	303.80	10.0	3/24/2021
PZ-58I	NA	Downgradient B	Saprolite/TWR	33.190383	-83.298087	379.3	382.27	63.9	325.70	315.70	10.0	3/27/2021
PZ-59I	NA	Downgradient B	Saprolite/TWR	33.190591	-83.297981	379.9	383.49	65.9	324.30	314.30	10.0	3/31/2021
PZ-60I	NA	Downgradient B	Saprolite/TWR	33.190407	-83.297979	379.5	382.61	60.8	329.00	319.00	10.0	3/29/2021
PZ-61I	NA	Downgradient B	Saprolite/TWR	33.190498	-83.297655	377.7	380.64	76.0	312.00	302.00	10.0	3/30/2021
PB-1S	NA	Downgradient	Saprolite/PWR	33.199673	-83.317420	400.4	403.16	38.0	372.40	362.40	10.0	1/22/2019
PB-2D	NA	Downgradient	Gneiss	33.199504	-83.315596	414.9	416.71	57.0	367.90	357.90	10.0	12/4/2018
PB-4S	NA	Downgradient	Saprolite/PWR	33.198098	-83.318372	409.3	411.15	48.0	371.30	361.30	10.0	1/16/2019
PB-4D	NA	Downgradient	Gneiss	33.198110	-83.318400	409.0	412.12	114.5	304.50	294.50	10.0	1/16/2019
PB-7S	NA	Downgradient	Saprolite/PWR	33.196710	-83.318003	399.7	402.88	33.0	376.70	366.70	10.0	1/14/2019
PB-8S	NA	Downgradient	Saprolite/PWR	33.194463	-83.316044	398.6	401.82	35.0	373.60	363.60	10.0	1/8/2018
PB-8D	NA	Downgradient	Gneiss	33.194480	-83.316062	398.2	401.74	106.0	304.20	294.20	10.0	1/8/2018
PB-10S	NA	Downgradient	Saprolite	33.195992	-83.310279	397.6	400.91	33.0	374.60	364.60	10.0	1/16/2019
PB-10D	NA	Downgradient	Gneiss	33.196004	-83.310294	397.5	400.31	85.0	322.50	312.50	10.0	1/16/2019
PB-13S	NA	Downgradient	Saprolite	33.191900	-83.316612	370.8	373.31	50.0	330.80	320.80	10.0	12/10/2018
PB-13D	NA	Downgradient	Gneiss	33.191900	-83.316570	371.1	373.77	97.0	284.10	274.10	10.0	12/10/2018

**Notes:**

1. feet NAVD88 = feet North American Vertical Datum 1988 feet NAD83 = North American Datum 1983
2. feet bgs = feet below ground surface
3. TWR = Transitionally Weathered Rock
4. NA = Not applicable
5. Piezometers may be used to collect waters levels. They are not considered compliance monitoring locations

**TABLE 2**  
**GROUNDWATER SAMPLING EVENT SUMMARY - AP-E**  
 Georgia Power Company - Plant Branch

Well ID	Hydraulic Location	Summary of Sampling Events			Status of Monitoring Well
		August 2020	September 2020	March 2021	
Purpose of Sampling Event		Annual Appendix IV Scan	Assessment	Assessment	
<b>AP-E</b>					
<b>BRGWA-2S</b>	Upgradient	X	X	X	Assessment
<b>BRGWA-2I</b>	Upgradient	X	X	X	Assessment
<b>BRGWA-5S</b>	Upgradient	X	X	X	Assessment
<b>BRGWA-5I</b>	Upgradient	X	X	X	Assessment
<b>BRGWA-6S</b>	Upgradient	X	X	X	Assessment
<b>BRGWC-17S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-33S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-34S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-35S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-36S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-37S</b>	Downgradient	X	X	X	Assessment
<b>BRGWC-38S</b>	Downgradient	X	X	X	Assessment

**TABLE 3**  
**SUMMARY OF GROUNDWATER ELEVATIONS - AP-BCD and AP-E**  
 Georgia Power Company- Plant Branch

Well-ID	Top of Casing Elevation (feet NAVD88) <sup>[2]</sup>	GROUNDWATER ELEVATIONS (FEET NAVD88)		
		8/17/2020	9/14/2020	3/1/2021
<b>POND BCD</b>				
BRGWA-12S	434.64	383.42	383.39	383.16
BRGWA-12I	434.39	383.44	383.92	383.12
BRGWA-23S	428.24	394.49	393.88	391.95
BRGWC-25I	357.37	348.49	348.38	350.05
BRGWC-27I	366.86	362.81	361.94	361.71
BRGWC-29I	353.23	343.29	343.22	343.89
BRGWC-30I	352.61	348.62	348.66	348.73
BRGWC-32S	406.39	372.59	371.80	370.87
BRGWC-45	384.58	373.00	373.17	374.73
BRGWC-47	411.20	388.42	387.68	388.52
BRGWC-50	381.35	344.41	344.04	343.92
BRGWC-52I	383.87	345.79	345.37	345.36

**TABLE 3**  
**SUMMARY OF GROUNDWATER ELEVATIONS - AP-BCD and AP-E**  
 Georgia Power Company- Plant Branch

Well-ID	Top of Casing Elevation (feet NAVD88) <sup>[2]</sup>	GROUNDWATER ELEVATIONS (FEET NAVD88)		
		8/17/2020	9/14/2020	3/1/2021
<b>POND E</b>				
BRGWA-2S	443.20	428.53	428.71	432.16
BRGWA-2I	443.14	428.65	428.82	432.24
BRGWA-5S	443.86	432.57	432.24	433.01
BRGWA-5I	443.79	432.54	432.19	432.98
BRGWA-6S	458.96	434.34	433.73	435.83
BRGWC-17S	365.32	359.14	359.11	359.36
BRGWC-33S	416.68	407.92	407.83	408.39
BRGWC-34S	391.96	389.17	389.14	389.48
BRGWC-35S	366.31	364.13	364.10	364.39
BRGWC-36S	389.84	387.55	387.49	387.13
BRGWC-37S	447.05	399.17	398.72	396.67
BRGWC-38S	432.24	411.12	410.43	412.84



**TABLE 3**  
**SUMMARY OF GROUNDWATER ELEVATIONS - AP-BCD and AP-E**  
 Georgia Power Company- Plant Branch

Well-ID	Top of Casing Elevation (feet NAVD88) <sup>[2]</sup>	GROUNDWATER ELEVATIONS (FEET NAVD88)		
		8/17/2020	9/14/2020	3/1/2021
<b>PIEZOMETERS</b>				
PZ-1S	465.07	430.12	429.38	428.32
PZ-1I	464.71	429.18	428.48	427.05
PZ-1D	463.41	427.79	427.07	426.41
PZ-3S	490.53	DRY	DRY	DRY
PZ-3I	489.49	438.16	438.45	438.28
PZ-3D	487.50	437.26	437.42	437.97
PZ-4S	482.87	450.09	450.04	449.79
PZ-4I	482.98	449.79	449.44	448.70
PZ-7S	451.57	427.32	426.37	426.77
PZ-8S	453.08	426.63	426.70	429.58
PZ-9S	469.28	433.69	433.32	432.52
PZ-10S	433.85	406.97	406.40	408.35
PZ-11S	393.99	374.61	374.41	377.82
PZ-12D	434.09	355.61	349.56	355.60
PZ-13S	409.97	384.04	383.18	385.33
PZ-14S	423.31	403.68	403.52	405.17
PZ-14I	422.71	401.23	401.52	403.03
PZ-15S	402.90	392.84	392.80	393.37
PZ-15I	403.06	393.33	393.31	393.86
PZ-16S	382.52	370.09	370.04	371.77
PZ-16I	382.45	370.17	370.14	371.87
PZ-17I	365.33	361.97	361.92	362.94
PZ-18S	362.82	341.85	341.80	343.16
PZ-18I	362.55	341.74	341.68	343.03
PZ-19S	371.42	355.98	355.61	358.64
PZ-19I	371.74	355.70	355.33	358.38
PZ-20S	365.41	350.14	349.95	352.29
PZ-20I	365.34	350.36	350.12	352.46
PZ-21S	358.52	348.64	348.54	350.34

**TABLE 3**  
**SUMMARY OF GROUNDWATER ELEVATIONS - AP-BCD and AP-E**  
 Georgia Power Company- Plant Branch

Well-ID	Top of Casing Elevation (feet NAVD88) <sup>[2]</sup>	GROUNDWATER ELEVATIONS (FEET NAVD88)		
		8/17/2020	9/14/2020	3/1/2021
<b>PIEZOMETERS</b>				
PZ-21I	358.92	348.54	348.43	350.20
PZ-23I	427.74	394.51	393.89	391.75
BRGWC-24S	354.10	339.60	339.48	340.61
PZ-26I	370.63	349.62	349.16	349.72
PZ-28I	364.81	350.31	350.06	352.34
PZ-31S	376.77	352.12	351.74	352.62
PZ-39	434.78	385.82	385.83	385.83
PZ-40S	355.96	339.87	339.75	340.67
PZ-41S	357.17	339.89	339.77	340.61
PZ-42S	361.66	341.04	340.80	341.17
PZ-43	383.71	355.63	355.18	354.47
PZ-44	383.04	360.39	359.69	359.66
PZ-46	384.64	375.21	375.19	376.13
PZ-48	420.90	393.07	392.53	392.45
PZ-49	384.99	371.91	372.01	376.69
PZ-50D	380.86	NA	NA	343.43
PZ-51S	380.27	343.01	342.74	342.29
PZ-51I	380.52	343.03	342.74	342.71
PZ-51D	380.75	NA	NA	343.13
PZ-52D	417.03	363.41	368.91	397.51
PZ-53D	434.68	413.20	412.57	414.64
PZ-54	443.86	398.03	397.70	397.44
PZ-55	453.07	405.55	405.39	404.48
PZ-56	418.84	413.25	412.32	413.94
PZ-57I	382.50	NI	NI	346.02
PZ-58I	382.27	NI	NI	346.07
PZ-59I	383.49	NI	NI	345.93
PZ-60I	382.61	NI	NI	345.09
PZ-61I	380.64	NI	NI	339.27

**TABLE 3**  
**SUMMARY OF GROUNDWATER ELEVATIONS - AP-BCD and AP-E**  
 Georgia Power Company- Plant Branch

Well-ID	Top of Casing Elevation (feet NAVD88) <sup>[2]</sup>	GROUNDWATER ELEVATIONS (FEET NAVD88)		
		8/17/2020	9/14/2020	3/1/2021
<b>Temporary Landfill Piezometers</b>				
PB-1S	403.16	383.68	383.74	389.02
PB-2D	416.71	377.12	376.85	377.49
PB-4S	411.15	384.60	384.36	388.04
PB-4D	412.12	384.78	384.51	389.04
PB-7S	402.88	378.19	378.18	382.19
PB-8S	401.82	380.70	380.43	382.37
PB-8D	401.74	379.77	379.53	382.51
PB-10S	400.91	388.23	387.80	389.32
PB-10D	400.31	388.01	387.68	388.09
PB-13S	373.31	363.86	363.79	365.15
PB-13D	373.77	363.59	363.52	366.33

**Notes:**

1. Feet NAVD88 = feet North American Vertical Datum 1988
2. Updated survey data for all wells provided by Metro Engineering in July 2020.
3. NA - Not available
4. NI - Not installed
5. PZ-57I, PZ-58I, PZ-59I, PZ-60I, and PZ-61I groundwater elevations collected between April 5 and April 7, 2021.

**TABLE 4A**  
**GROUNDWATER VELOCITY CALCULATIONS - AP-E (August 2020)**  
 Georgia Power Company - Plant Branch

Flow Paths	Groundwater Elevation (feet NAVD88) <sup>7</sup>	$\Delta H$ (feet) <sup>1</sup>	$\Delta L$ (feet) <sup>2</sup>	Hydraulic Gradient ( $\Delta H/\Delta L$ ) <sup>3</sup>	Average Hydraulic Conductivity, K (feet per day) <sup>5</sup>	Assumed Effective Porosity ( $n_e$ ) <sup>6</sup>	Average Linear Groundwater Velocity	
							(feet per day) <sup>4</sup>	(feet per year) <sup>4</sup>
<b>AP-E August 17, 2020</b>								
BRGWA-5S / BRGWC-33S	432.57	24.65	5108.0	0.005	2.73 to 5.47	0.2	0.07 to 0.14	24.9 to 49.9
	407.92							
PZ-4I / BRGWC-38S	449.79	38.67	3904.0	0.010	2.73 to 5.47	0.2	0.14 to 0.27	49.8 to 99.8
	411.12							

**Notes:**

1.  $\Delta H$  = Change in groundwater elevation.
2.  $\Delta L$  = Distance along flow path.
3.  $I = \Delta H / \Delta L$ .
4. Velocity =  $(I * K)/n_e$ .
5. Hydraulic conductivity range based on historical aquifer performance tests (revised 4/2019).
6. Effective porosity based on default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1996).
7. NAVD88 = North American Vertical Datum 1988.

**TABLE 4B**  
**GROUNDWATER VELOCITY CALCULATIONS - AP-E (September 2020)**  
 Georgia Power Company - Plant Branch

Flow Paths	Groundwater Elevation (feet NAVD88) <sup>7</sup>	$\Delta H$ (feet) <sup>1</sup>	$\Delta L$ (feet) <sup>2</sup>	Hydraulic Gradient ( $\Delta H/\Delta L$ ) <sup>3</sup>	Average Hydraulic Conductivity, K (feet per day) <sup>5</sup>	Assumed Effective Porosity ( $n_e$ ) <sup>6</sup>	Average Linear Groundwater Velocity	
							(feet per day) <sup>4</sup>	(feet per year) <sup>4</sup>
<b>AP-E September 14, 2020</b>								
BRGWA-5S / BRGWC-33S	432.24	24.41	5110.0	0.005	2.73 to 5.47	0.2	0.07 to 0.14	24.9 to 49.9
	407.83							
PZ-4I / BRGWC-38S	449.44	39.01	3917.0	0.010	2.73 to 5.47	0.2	0.14 to 0.27	49.8 to 99.8
	410.43							

**Notes:**

1.  $\Delta H$  = Change in groundwater elevation.
2.  $\Delta L$  = Distance along flow path.
3.  $I = \Delta H / \Delta L$ .
4.  $Velocity = (I * K)/n_e$ .
5. Hydraulic conductivity range based on historical aquifer performance tests (revised 4/2019).
6. Effective porosity based on default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1996).
7. NAVD88 = North American Vertical Datum 1988.

**TABLE 4C**  
**GROUNDWATER VELOCITY CALCULATIONS - AP-E (March 2021)**  
 Georgia Power Company - Plant Branch

Flow Paths	Groundwater Elevation (feet NAVD88) <sup>7</sup>	$\Delta H$ (feet) <sup>1</sup>	$\Delta L$ (feet) <sup>2</sup>	Hydraulic Gradient ( $\Delta H/\Delta L$ ) <sup>3</sup>	Average Hydraulic Conductivity, K (feet per day) <sup>5</sup>	Assumed Effective Porosity ( $n_e$ ) <sup>6</sup>	Average Linear Groundwater Velocity	
							(feet per day) <sup>4</sup>	(feet per year) <sup>4</sup>
<b>AP-E March 1, 2021</b>								
BRGWA-5S / BRGWC-33S	433.01	24.62	5110.0	0.005	2.73 to 5.47	0.2	0.07 to 0.14	24.9 to 49.9
	408.39							
PZ-4I / BRGWC-38S	448.70	35.86	3917.0	0.009	2.73 to 5.47	0.2	0.12 to 0.25	44.8 to 89.8
	412.84							

**Notes:**

1.  $\Delta H$  = Change in groundwater elevation.
2.  $\Delta L$  = Distance along flow path.
3.  $I = \Delta H / \Delta L$ .
4. Velocity =  $(I * K)/n_e$ .
5. Hydraulic conductivity range based on historical aquifer performance tests (revised 4/2019).
6. Effective porosity based on default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1996).
7. NAVD88 = North American Vertical Datum 1988.

**TABLE 5A**  
**ANALYTICAL DATA SUMMARY - AP-E (August 2020)**  
 Georgia Power Company - Plant Branch

Analyte	Units	Well ID											
		BRGWA-2S	BRGWA-2I	BRGWA-5S	BRGWA-5I	BRGWA-6S	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
		8/18/2020	8/18/2020	8/18/2020	8/18/2020	8/18/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020	8/19/2020
<b>Appendix III</b>													
BORON, TOTAL	mg/L	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
CALCIUM, TOTAL	mg/L	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
CHLORIDE, TOTAL	mg/L	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.10	0.11	0.074 J	0.060 J	0.051 J	0.055 J	0.95
pH	S.U.	6.06	6.59	6.41	6.29	6.33	6.24	4.78	5.78	5.97	5.53	5.66	4.12
SULFATE, TOTAL	mg/L	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
TOTAL DISSOLVED SOLIDS	mg/L	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
<b>Appendix IV</b>													
ANTIMONY, TOTAL	mg/L	0.00042 J	0.00054 J	0.0016 J	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028
ARSENIC, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.0021 J
BARIUM, TOTAL	mg/L	0.010	0.010 J	0.040	0.022	0.014	0.047	0.020	0.024	0.040	0.037	0.026	0.016
BERYLLIUM, TOTAL	mg/L	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	0.0014 J	0.00015 J	0.00015 J	0.00011 J	< 0.000046	0.0079
CADMIUM, TOTAL	mg/L	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	0.00029 J	0.00018 J	< 0.00012	< 0.00012	< 0.00012	0.00056 J
CHROMIUM, TOTAL	mg/L	0.0085 J	0.00096 J	0.0050 J	0.0069 J	0.015	0.012	< 0.00055	< 0.00055	0.0073 J	0.0094 J	0.0017 J	0.0043 J
COBALT, TOTAL	mg/L	0.0014 J	< 0.00038	< 0.00038	0.00048 J	0.00061 J	< 0.00038	0.036	0.0041 J	< 0.00038	< 0.00038	< 0.00038	0.22
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.10	0.11	0.074 J	0.060 J	0.051 J	0.055 J	0.95
LEAD, TOTAL	mg/L	< 0.000036	< 0.000036	0.00010 J	< 0.000036	< 0.000036	< 0.000036	0.000060 J	< 0.000036	< 0.000036	0.000047 J	< 0.000036	0.00031 J
LITHIUM, TOTAL	mg/L	< 0.00081	0.054	< 0.00081	0.00095 J	0.0026 J	0.0010 J	0.0090 J	0.00082 J	0.0021 J	0.0024 J	< 0.00081	0.021 J
MERCURY, TOTAL	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	0.000084 J	< 0.000078	0.00012 J	0.00013 J	0.00013 J	0.00014 J	0.00018 J
MOLYBDENUM, TOTAL	mg/L	< 0.00069	0.0011 J	< 0.00069	0.0015 J	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069
RADIUM (226 + 228)	pCi/L	1.22 U	0.0861 U	0.581 U	0.530 U	0.453 U	0.985 U	1.14 U	1.21 U	0.162 U	1.40	0.582 U	3.17
SELENIUM, TOTAL	mg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	0.0030 J	< 0.0016	< 0.0016	< 0.0016	0.0020 J	< 0.0016	0.041
THALLIUM, TOTAL	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	0.00018 J	< 0.00014	< 0.00014	< 0.00014	< 0.00014	0.00019 J

**Notes:**

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data are presented as a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
7. NM indicates the substance was not analyzed or required for this event.

**TABLE 5B**  
**ANALYTICAL DATA SUMMARY - AP-E (September 2020)**  
 Georgia Power Company - Plant Branch

Analyte	Units	Well ID											
		BRGWA-2S	BRGWA-2I	BRGWA-5S	BRGWA-5I	BRGWA-6S	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
		9/15/2020	9/15/2020	9/15/2020	9/15/2020	9/15/2020	9/16/2020	9/16/2020	9/16/2020	9/16/2020	9/16/2020	9/16/2020	9/17/2020
<b>Appendix III</b>													
BORON, TOTAL	mg/L	< 0.0052	< 0.0052	< 0.0052	< 0.0052	< 0.0052	0.0066 J	1.1	2.2	1.9	0.99	0.0062 J	1.4
CALCIUM, TOTAL	mg/L	3.9	14.1	16.8	12.7	3.7	37.9	37.9	77.7	61.8	45.9	3.2	33.1
CHLORIDE, TOTAL	mg/L	1.7	1.9	3.7	3.7	2.3	4.2	4.1	6.6	6.0	7.9	1.8	6.1
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	0.051 J	< 0.050	< 0.050	0.10	0.085 J	0.077 J	0.062 J	< 0.050	< 0.050	0.68
pH	S.U.	6.01	6.64	6.25	6.27	6.43	6.26	4.78	5.81	5.96	5.58	5.84	4.17
SULFATE, TOTAL	mg/L	< 0.50	5.9	< 0.50	1.7	< 0.50	151	154	283	270	256	< 0.50	356
TOTAL DISSOLVED SOLIDS	mg/L	69	116	116	100	79	316	88	392	474	463	31	587
<b>Appendix IV</b>													
ANTIMONY, TOTAL	mg/L	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028
ARSENIC, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.0015 J
BARIUM, TOTAL	mg/L	0.0094 J	0.0083 J	0.038	0.022	0.013	0.044	0.019	0.023	0.033	0.030	0.024	0.014
BERYLLIUM, TOTAL	mg/L	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	0.0015 J	0.00014 J	0.00014 J	0.000080 J	< 0.000046	0.0073
CADMIUM, TOTAL	mg/L	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	0.00032 J	0.00017 J	< 0.00012	< 0.00012	< 0.00012	0.00050 J
CHROMIUM, TOTAL	mg/L	0.0082 J	< 0.00055	0.0048 J	0.0069 J	0.014	0.012	< 0.00055	< 0.00055	0.0058 J	0.0064 J	0.0018 J	0.0042 J
COBALT, TOTAL	mg/L	0.0010 J	< 0.00038	< 0.00038	0.00050 J	< 0.00038	< 0.00038	0.034	0.0042 J	< 0.00038	< 0.00038	< 0.00038	0.20
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	0.051 J	< 0.050	< 0.050	0.10	0.085 J	0.077 J	0.062 J	< 0.050	< 0.050	0.68
LEAD, TOTAL	mg/L	< 0.000036	< 0.000036	0.000043 J	0.0013 J	< 0.000036	0.000054 J	0.000063 J	< 0.000036	0.00012 J	< 0.000036	< 0.000036	0.00032 J
LITHIUM, TOTAL	mg/L	< 0.00081	0.033	< 0.00081	0.0010 J	0.0027 J	0.00096 J	0.0089 J	< 0.00081	0.0020 J	0.0022 J	< 0.00081	0.020 J
MERCURY, TOTAL	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	0.00011 J
MOLYBDENUM, TOTAL	mg/L	< 0.00069	0.00070 J	< 0.00069	0.0015 J	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069
RADIUM (226 + 228)	pCi/L	0.579 U	0.0583 U	0.55 U	0.215 U	0.474 U	0.478 U	0.195 U	0.72 U	1.25 U	1.17 U	0.844 U	2.92
SELENIUM, TOTAL	mg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	0.0028 J	< 0.0016	< 0.0016	0.0031 J	< 0.0016	0.029
THALLIUM, TOTAL	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	0.00018 J	< 0.00014	< 0.00014	< 0.00014	< 0.00014	0.00017 J

**Notes:**

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data are reported as a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurement.
7. NM indicates the substance was not analyzed or required for this event.



**TABLE 5C**  
**ANALYTICAL DATA SUMMARY - AP-E (March 2021)**  
 Georgia Power Company - Plant Branch

Analyte	Units	Well ID											
		BRGWA-2S	BRGWA-2I	BRGWA-5S	BRGWA-5I	BRGWA-6S	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
		3/2/2021	3/1/2021	3/2/2021	3/2/2021	3/1/2021	3/4/2021	3/3/2021	3/3/2021	3/4/2021	3/3/2021	3/3/2021	3/4/2021
<b>Appendix III</b>													
BORON, TOTAL	mg/L	< 0.0052	< 0.0052	0.0071 J	0.0053 J	< 0.0052	< 0.0052	1.1	2.1	1.9	1.0	< 0.0052	1.5
CALCIUM, TOTAL	mg/L	4.0	15.4	16.8	13.2	4.2	41.2	37.5	88.6	71.8	53.0	3.6	41.0
CHLORIDE, TOTAL	mg/L	1.7	1.8	3.7	3.8	2.1	4.6	3.9	6.4	5.8	8.1	1.9	5.6
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.096 J	0.069 J	0.071 J	0.076 J	< 0.050	< 0.050	0.83
pH	S.U.	6.20	6.66	6.42	6.47	6.70	6.45	4.83	5.88	6.14	5.86	5.87	4.19
SULFATE, TOTAL	mg/L	< 0.50	4.7	< 0.50	2.2	0.74 J	122	133	277	251	252	< 0.50	325
TOTAL DISSOLVED SOLIDS	mg/L	43.0	98.0	96.0	80.0	39.0	316	212	422	480	442	33.0	540
<b>Appendix IV</b>													
ANTIMONY, TOTAL	mg/L	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028	< 0.00028
ARSENIC, TOTAL	mg/L	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	< 0.00078	0.0029 J
BARIUM, TOTAL	mg/L	0.0094	0.0074	0.037	0.023	0.016	0.039	0.020	0.024	0.034	0.031	0.024	0.015
BERYLLIUM, TOTAL	mg/L	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	0.0013	0.00015 J	0.00012 J	0.000079 J	< 0.000046	0.0077
CADMIUM, TOTAL	mg/L	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	0.00022 J	0.00015 J	< 0.00012	< 0.00012	< 0.00012	0.00042 J
CHROMIUM, TOTAL	mg/L	0.0074	< 0.00055	0.0044 J	0.0064	0.011	0.010	< 0.00055	< 0.00055	0.0053	0.0067	0.0014 J	0.0040 J
COBALT, TOTAL	mg/L	0.0010 J	< 0.00038	< 0.00038	0.00053 J	< 0.00038	< 0.00038	0.028	0.0046 J	< 0.00038	< 0.00038	< 0.00038	0.20
FLUORIDE, TOTAL	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.096 J	0.069 J	0.071 J	0.076 J	< 0.050	< 0.050	0.83
LEAD, TOTAL	mg/L	< 0.000036	< 0.000036	< 0.000036	0.000037 J	< 0.000036	< 0.000036	0.000058 J	< 0.000036	< 0.000036	< 0.000036	< 0.000036	0.00034 J
LITHIUM, TOTAL	mg/L	< 0.00081	0.027 J	< 0.00081	0.00081 J	0.0036 J	0.00086 J	0.0085 J	0.00096 J	0.0021 J	0.0024 J	< 0.00081	0.021 J
MERCURY, TOTAL	mg/L	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	0.000085 J
MOLYBDENUM, TOTAL	mg/L	< 0.00069	< 0.00069	< 0.00069	0.0015 J	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069	< 0.00069
RADIUM (226 + 228)	pCi/L	0.342 U	0.127 U	0.362 U	0.409 U	0.215 U	0.380 U	0.708 U	1.12	0.461 U	0.307 U	1.12	1.99
SELENIUM, TOTAL	mg/L	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	< 0.0016	0.0024 J	< 0.0016	0.039
THALLIUM, TOTAL	mg/L	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	0.00018 J	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014

**Notes:**

1. mg/L - milligrams per Liter
2. pCi/L - picocuries per Liter
3. S.U. - Standard Units
4. < indicates the substance was not detected above the analytical method detection limit (MDL). The value displayed is the method detection limit.
5. J indicates the substance was detected at such low levels that the precision of the laboratory instruments could not produce a reliable value. Therefore, the value displayed is qualified by the laboratory as an estimated number.
6. Radium data are reported as a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed as less than the MDC and considered an undetected result (U qualified). The MDC varies depending upon the sample amount and elapsed time of the measurement.

**TABLE 6**  
**SUMMARY OF BACKGROUND LEVELS AND GWPS - AP-E**  
 Georgia Power Company - Plant Branch

Analyte	Units	Maximum Contaminant Level (MCL)	Site Specific Background September 2020 <sup>[1]</sup>	Site Specific Background March 2021 <sup>[1]</sup>	State GWPS <sup>[2]</sup>
Antimony	mg/L	0.006	0.003	0.003	0.006
Arsenic	mg/L	0.01	0.005	0.005	0.01
Barium	mg/L	2	0.063	0.063	2
Beryllium	mg/L	0.004	0.003	0.0005	0.004
Cadmium	mg/L	0.005	0.0025	0.0005	0.005
Chromium	mg/L	0.1	0.01356	0.016	0.1
Cobalt	mg/L	NA	0.005	0.005	0.005
Fluoride	mg/L	4	0.3	0.19	4
Lead	mg/L	NA	0.005	0.0013	0.0013
Lithium	mg/L	NA	0.089	0.089	0.089
Mercury	mg/L	0.002	0.0005	0.00021	0.002
Molybdenum	mg/L	NA	0.01	0.01	0.01
Radium (226 + 228)	pCi/L	5	1.42	1.39	5
Selenium	mg/L	0.05	0.01	0.005	0.05
Thallium	mg/L	0.002	0.001	0.001	0.002

Notes:

mg/L = milligrams per liter; pCi/L = picocuries per liter; NA = Not Available

[1] The background limits are used when determining the groundwater protection standard (GWPS) under 40 CFR § 257.95(h) and 391-3-4-.10(6)(a).

[2] Under existing EPD rules, the GWPS is: (i) the MCL, (ii) where the MCL is not established, the background concentration, or (iii) background levels for constituents where the background level is higher than the MCL.

**APPENDIX A**

**ANALYTICAL RESULTS, FIELD DATA FORMS,  
WELL INSPECTION FORMS & DATA  
VALIDATION SUMMARIES**

**APPENDIX A**

# ANALYTICAL RESULTS

September 11, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Dear Joju Abraham:


Enclosed are the analytical results for sample(s) received by the laboratory on August 19, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

---

### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 191  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

### **Pace Analytical Services Charlotte**

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92491389001	BRGWA-5I	Water	08/18/20 09:40	08/19/20 10:10
92491389002	BRGWA-5S	Water	08/18/20 10:15	08/19/20 10:10
92491389003	BRGWA-2I	Water	08/18/20 10:45	08/19/20 10:10
92491389004	BRGWA-2S	Water	08/18/20 11:38	08/19/20 10:10
92491389005	BRGWA-6S	Water	08/18/20 12:48	08/19/20 10:10

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92491389001	BRGWA-5I	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491389002	BRGWA-5S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491389003	BRGWA-2I	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491389004	BRGWA-2S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491389005	BRGWA-6S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92491389001</b>	<b>BRGWA-5I</b>					
	pH	6.29	Std. Units		09/09/20 17:00	
EPA 6020B	Barium	0.022	mg/L	0.010	08/21/20 17:42	
EPA 6020B	Chromium	0.0069J	mg/L	0.010	08/21/20 17:42	
EPA 6020B	Cobalt	0.00048J	mg/L	0.0050	08/21/20 17:42	
EPA 6020B	Lithium	0.00095J	mg/L	0.030	08/21/20 17:42	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	08/21/20 17:42	
EPA 9315	Radium-226	0.0774 ± 0.196 (0.479)	pCi/L		09/02/20 07:40	
EPA 9320	Radium-228	C:76% T:NA 0.453 ± 0.459 (0.950)	pCi/L		09/09/20 12:05	
		C:53% T:92%				
Total Radium Calculation	Total Radium	0.530 ± 0.655 (1.43)	pCi/L		09/10/20 13:23	
<b>92491389002</b>	<b>BRGWA-5S</b>					
	pH	6.41	Std. Units		09/09/20 17:00	
EPA 6020B	Antimony	0.0016J	mg/L	0.0030	08/21/20 18:05	
EPA 6020B	Barium	0.040	mg/L	0.010	08/21/20 18:05	
EPA 6020B	Chromium	0.0050J	mg/L	0.010	08/21/20 18:05	
EPA 6020B	Lead	0.00010J	mg/L	0.0050	08/21/20 18:05	
EPA 9315	Radium-226	0.241 ± 0.241 (0.446)	pCi/L		09/02/20 07:41	
EPA 9320	Radium-228	C:86% T:NA 0.340 ± 0.449 (0.959)	pCi/L		09/09/20 12:05	
		C:59% T:93%				
Total Radium Calculation	Total Radium	0.581 ± 0.690 (1.41)	pCi/L		09/10/20 13:23	
<b>92491389003</b>	<b>BRGWA-2I</b>					
	pH	6.59	Std. Units		09/09/20 17:00	
EPA 6020B	Antimony	0.00054J	mg/L	0.0030	08/21/20 18:11	
EPA 6020B	Barium	0.010J	mg/L	0.010	08/21/20 18:11	
EPA 6020B	Chromium	0.00096J	mg/L	0.010	08/21/20 18:11	
EPA 6020B	Lithium	0.054	mg/L	0.030	08/21/20 18:11	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	08/21/20 18:11	
EPA 9315	Radium-226	0.0861 ± 0.243 (0.593)	pCi/L		09/02/20 07:41	
		C:77% T:NA				

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92491389003</b>	<b>BRGWA-2I</b>					
EPA 9320	Radium-228	-0.176 ± 0.358 (0.872) C:61% T:91%	pCi/L		09/09/20 12:05	
Total Radium Calculation	Total Radium	0.0861 ± 0.601 (1.47)	pCi/L		09/10/20 13:23	
<b>92491389004</b>	<b>BRGWA-2S</b>					
	pH	6.06	Std. Units		09/09/20 17:00	
EPA 6020B	Antimony	0.00042J	mg/L	0.0030	08/21/20 18:17	
EPA 6020B	Barium	0.010	mg/L	0.010	08/21/20 18:17	
EPA 6020B	Chromium	0.0085J	mg/L	0.010	08/21/20 18:17	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	08/21/20 18:17	
EPA 9315	Radium-226	0.189 ± 0.267 (0.570) C:70% T:NA	pCi/L		09/02/20 07:41	
EPA 9320	Radium-228	1.03 ± 0.516 (0.891) C:61% T:81%	pCi/L		09/09/20 12:05	
Total Radium Calculation	Total Radium	1.22 ± 0.783 (1.46)	pCi/L		09/10/20 13:23	
<b>92491389005</b>	<b>BRGWA-6S</b>					
	pH	6.33	Std. Units		09/09/20 17:00	
EPA 6020B	Barium	0.014	mg/L	0.010	08/21/20 18:22	
EPA 6020B	Chromium	0.015	mg/L	0.010	08/21/20 18:22	
EPA 6020B	Cobalt	0.00061J	mg/L	0.0050	08/21/20 18:22	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	08/21/20 18:22	
EPA 9315	Radium-226	-0.0918 ± 0.174 (0.573) C:79% T:NA	pCi/L		09/02/20 08:46	
EPA 9320	Radium-228	0.453 ± 0.384 (0.763) C:66% T:81%	pCi/L		09/09/20 12:05	
Total Radium Calculation	Total Radium	0.453 ± 0.558 (1.34)	pCi/L		09/10/20 13:23	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Sample: BRGWA-5I		Lab ID: 92491389001		Collected: 08/18/20 09:40		Received: 08/19/20 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.29	Std. Units			1		09/09/20 17:00		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/20/20 14:56	08/21/20 17:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/20/20 14:56	08/21/20 17:42	7440-38-2	
Barium	0.022	mg/L	0.010	0.00071	1	08/20/20 14:56	08/21/20 17:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/20/20 14:56	08/21/20 17:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/20/20 14:56	08/21/20 17:42	7440-43-9	
Chromium	0.0069J	mg/L	0.010	0.00055	1	08/20/20 14:56	08/21/20 17:42	7440-47-3	
Cobalt	0.00048J	mg/L	0.0050	0.00038	1	08/20/20 14:56	08/21/20 17:42	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/20/20 14:56	08/21/20 17:42	7439-92-1	
Lithium	0.00095J	mg/L	0.030	0.00081	1	08/20/20 14:56	08/21/20 17:42	7439-93-2	
Molybdenum	0.0015J	mg/L	0.010	0.00069	1	08/20/20 14:56	08/21/20 17:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/20/20 14:56	08/21/20 17:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/20/20 14:56	08/21/20 17:42	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/21/20 08:05	08/21/20 12:37	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/20/20 17:51	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Sample: BRGWA-5S		Lab ID: 92491389002		Collected: 08/18/20 10:15		Received: 08/19/20 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.41	Std. Units			1		09/09/20 17:00		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.0016J	mg/L	0.0030	0.00028	1	08/20/20 14:56	08/21/20 18:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/20/20 14:56	08/21/20 18:05	7440-38-2	
Barium	0.040	mg/L	0.010	0.00071	1	08/20/20 14:56	08/21/20 18:05	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/20/20 14:56	08/21/20 18:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/20/20 14:56	08/21/20 18:05	7440-43-9	
Chromium	0.0050J	mg/L	0.010	0.00055	1	08/20/20 14:56	08/21/20 18:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/20/20 14:56	08/21/20 18:05	7440-48-4	
Lead	0.00010J	mg/L	0.0050	0.000036	1	08/20/20 14:56	08/21/20 18:05	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	08/20/20 14:56	08/21/20 18:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/20/20 14:56	08/21/20 18:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/20/20 14:56	08/21/20 18:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/20/20 14:56	08/21/20 18:05	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/21/20 08:05	08/21/20 12:47	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/20/20 19:52	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Sample: BRGWA-2I		Lab ID: 92491389003		Collected: 08/18/20 10:45		Received: 08/19/20 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.59	Std. Units			1		09/09/20 17:00		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00054J	mg/L	0.0030	0.00028	1	08/20/20 14:56	08/21/20 18:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/20/20 14:56	08/21/20 18:11	7440-38-2	
Barium	0.010J	mg/L	0.010	0.00071	1	08/20/20 14:56	08/21/20 18:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/20/20 14:56	08/21/20 18:11	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/20/20 14:56	08/21/20 18:11	7440-43-9	
Chromium	0.00096J	mg/L	0.010	0.00055	1	08/20/20 14:56	08/21/20 18:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/20/20 14:56	08/21/20 18:11	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/20/20 14:56	08/21/20 18:11	7439-92-1	
Lithium	0.054	mg/L	0.030	0.00081	1	08/20/20 14:56	08/21/20 18:11	7439-93-2	
Molybdenum	0.0011J	mg/L	0.010	0.00069	1	08/20/20 14:56	08/21/20 18:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/20/20 14:56	08/21/20 18:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/20/20 14:56	08/21/20 18:11	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/21/20 08:05	08/21/20 12:49	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/20/20 20:06	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Sample: BRGWA-2S		Lab ID: 92491389004		Collected: 08/18/20 11:38		Received: 08/19/20 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.06	Std. Units			1		09/09/20 17:00		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	0.00042J	mg/L	0.0030	0.00028	1	08/20/20 14:56	08/21/20 18:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/20/20 14:56	08/21/20 18:17	7440-38-2	
Barium	0.010	mg/L	0.010	0.00071	1	08/20/20 14:56	08/21/20 18:17	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/20/20 14:56	08/21/20 18:17	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/20/20 14:56	08/21/20 18:17	7440-43-9	
Chromium	0.0085J	mg/L	0.010	0.00055	1	08/20/20 14:56	08/21/20 18:17	7440-47-3	
Cobalt	0.0014J	mg/L	0.0050	0.00038	1	08/20/20 14:56	08/21/20 18:17	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/20/20 14:56	08/21/20 18:17	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	08/20/20 14:56	08/21/20 18:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/20/20 14:56	08/21/20 18:17	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/20/20 14:56	08/21/20 18:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/20/20 14:56	08/21/20 18:17	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/21/20 08:05	08/21/20 12:51	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/20/20 20:19	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Sample: BRGWA-6S		Lab ID: 92491389005		Collected: 08/18/20 12:48		Received: 08/19/20 10:10		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.33	Std. Units			1		09/09/20 17:00		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/20/20 14:56	08/21/20 18:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/20/20 14:56	08/21/20 18:22	7440-38-2	
Barium	0.014	mg/L	0.010	0.00071	1	08/20/20 14:56	08/21/20 18:22	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/20/20 14:56	08/21/20 18:22	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/20/20 14:56	08/21/20 18:22	7440-43-9	
Chromium	0.015	mg/L	0.010	0.00055	1	08/20/20 14:56	08/21/20 18:22	7440-47-3	
Cobalt	0.00061J	mg/L	0.0050	0.00038	1	08/20/20 14:56	08/21/20 18:22	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/20/20 14:56	08/21/20 18:22	7439-92-1	
Lithium	0.0026J	mg/L	0.030	0.00081	1	08/20/20 14:56	08/21/20 18:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/20/20 14:56	08/21/20 18:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/20/20 14:56	08/21/20 18:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/20/20 14:56	08/21/20 18:22	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/21/20 08:05	08/21/20 12:58	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	ND	mg/L	0.10	0.050	1		08/20/20 20:33	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

QC Batch: 561324 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

METHOD BLANK: 2977587 Matrix: Water  
Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	08/21/20 17:31	
Arsenic	mg/L	ND	0.0050	0.00078	08/21/20 17:31	
Barium	mg/L	ND	0.010	0.00071	08/21/20 17:31	
Beryllium	mg/L	ND	0.0030	0.000046	08/21/20 17:31	
Cadmium	mg/L	ND	0.0025	0.00012	08/21/20 17:31	
Chromium	mg/L	ND	0.010	0.00055	08/21/20 17:31	
Cobalt	mg/L	ND	0.0050	0.00038	08/21/20 17:31	
Lead	mg/L	ND	0.0050	0.000036	08/21/20 17:31	
Lithium	mg/L	ND	0.030	0.00081	08/21/20 17:31	
Molybdenum	mg/L	ND	0.010	0.00069	08/21/20 17:31	
Selenium	mg/L	ND	0.010	0.0016	08/21/20 17:31	
Thallium	mg/L	ND	0.0010	0.00014	08/21/20 17:31	

LABORATORY CONTROL SAMPLE: 2977588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	103	80-120	
Arsenic	mg/L	0.1	0.094	94	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.097	97	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.096	96	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2977589 2977590

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		92491389001 Result	Spike Conc.	Spike Conc.	Result							Result
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	2	20	
Barium	mg/L	0.022	0.1	0.1	0.13	0.12	108	96	75-125	9	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Parameter	Units	2977589		2977590		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92491389001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Cadmium	mg/L	ND	0.1	0.1	0.097	0.10	97	100	75-125	3	20		
Chromium	mg/L	0.0069J	0.1	0.1	0.11	0.11	102	101	75-125	1	20		
Cobalt	mg/L	0.00048J	0.1	0.1	0.10	0.099	99	99	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20		
Lithium	mg/L	0.00095J	0.1	0.1	0.098	0.098	97	97	75-125	0	20		
Molybdenum	mg/L	0.0015J	0.1	0.1	0.10	0.10	99	101	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.095	0.091	94	90	75-125	4	20		
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

QC Batch:	561377	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

METHOD BLANK: 2977870 Matrix: Water

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	08/21/20 12:32	

LABORATORY CONTROL SAMPLE: 2977871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2977872 2977873

Parameter	Units	2977872		2977873		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0026	0.0026	104	106	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

QC Batch: 561236 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

METHOD BLANK: 2977010 Matrix: Water  
Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	08/20/20 16:29	

LABORATORY CONTROL SAMPLE: 2977011

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2977012 2977013

Parameter	Units	92490037006		MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec						
Fluoride	mg/L	0.055J	2.5	2.5	2.7	2.4	107	94	90-110	12	10	R1			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2977014 2977015

Parameter	Units	92491455002		MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec						
Fluoride	mg/L	ND	2.5	2.5	2.4	2.3	95	92	90-110	4	10				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-5I</b> <b>Lab ID: 92491389001</b> Collected: 08/18/20 09:40      Received: 08/19/20 10:10      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0774 ± 0.196 (0.479)</b> C:76% T:NA	pCi/L	09/02/20 07:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.453 ± 0.459 (0.950)</b> C:53% T:92%	pCi/L	09/09/20 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.530 ± 0.655 (1.43)</b>	pCi/L	09/10/20 13:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-5S</b> <b>Lab ID: 92491389002</b> Collected: 08/18/20 10:15      Received: 08/19/20 10:10      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.241 ± 0.241 (0.446)</b> <b>C:86% T:NA</b>	pCi/L	09/02/20 07:41	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.340 ± 0.449 (0.959)</b> <b>C:59% T:93%</b>	pCi/L	09/09/20 12:05	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.581 ± 0.690 (1.41)</b>	pCi/L	09/10/20 13:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-2I</b> <b>Lab ID: 92491389003</b> Collected: 08/18/20 10:45      Received: 08/19/20 10:10      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0861 ± 0.243 (0.593)</b> <b>C:77% T:NA</b>	pCi/L	09/02/20 07:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.176 ± 0.358 (0.872)</b> <b>C:61% T:91%</b>	pCi/L	09/09/20 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.0861 ± 0.601 (1.47)</b>	pCi/L	09/10/20 13:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

**Sample: BRGWA-2S**      **Lab ID: 92491389004**      Collected: 08/18/20 11:38      Received: 08/19/20 10:10      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.189 ± 0.267 (0.570)</b> <b>C:70% T:NA</b>	pCi/L	09/02/20 07:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.03 ± 0.516 (0.891)</b> <b>C:61% T:81%</b>	pCi/L	09/09/20 12:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.22 ± 0.783 (1.46)</b>	pCi/L	09/10/20 13:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-6S</b> <b>Lab ID: 92491389005</b> Collected: 08/18/20 12:48      Received: 08/19/20 10:10      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>-0.0918 ± 0.174 (0.573)</b> <b>C:79% T:NA</b>	pCi/L	09/02/20 08:46	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.453 ± 0.384 (0.763)</b> <b>C:66% T:81%</b>	pCi/L	09/09/20 12:05	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.453 ± 0.558 (1.34)</b>	pCi/L	09/10/20 13:23	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

---

QC Batch:	411435	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

---

METHOD BLANK: 1990342 Matrix: Water

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.664 ± 0.374 (0.672) C:70% T:89%	pCi/L	09/09/20 12:03	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

QC Batch:	411373	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

METHOD BLANK: 1989993 Matrix: Water

Associated Lab Samples: 92491389001, 92491389002, 92491389003, 92491389004, 92491389005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0671 ± 0.195 (0.481) C:88% T:NA	pCi/L	09/02/20 07:31	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND WELLS

Pace Project No.: 92491389

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND WELLS  
Pace Project No.: 92491389

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92491389001	BRGWA-5I				
92491389002	BRGWA-5S				
92491389003	BRGWA-2I				
92491389004	BRGWA-2S				
92491389005	BRGWA-6S				
92491389001	BRGWA-5I	EPA 3005A	561324	EPA 6020B	561396
92491389002	BRGWA-5S	EPA 3005A	561324	EPA 6020B	561396
92491389003	BRGWA-2I	EPA 3005A	561324	EPA 6020B	561396
92491389004	BRGWA-2S	EPA 3005A	561324	EPA 6020B	561396
92491389005	BRGWA-6S	EPA 3005A	561324	EPA 6020B	561396
92491389001	BRGWA-5I	EPA 7470A	561377	EPA 7470A	561555
92491389002	BRGWA-5S	EPA 7470A	561377	EPA 7470A	561555
92491389003	BRGWA-2I	EPA 7470A	561377	EPA 7470A	561555
92491389004	BRGWA-2S	EPA 7470A	561377	EPA 7470A	561555
92491389005	BRGWA-6S	EPA 7470A	561377	EPA 7470A	561555
92491389001	BRGWA-5I	EPA 9315	411373		
92491389002	BRGWA-5S	EPA 9315	411373		
92491389003	BRGWA-2I	EPA 9315	411373		
92491389004	BRGWA-2S	EPA 9315	411373		
92491389005	BRGWA-6S	EPA 9315	411373		
92491389001	BRGWA-5I	EPA 9320	411435		
92491389002	BRGWA-5S	EPA 9320	411435		
92491389003	BRGWA-2I	EPA 9320	411435		
92491389004	BRGWA-2S	EPA 9320	411435		
92491389005	BRGWA-6S	EPA 9320	411435		
92491389001	BRGWA-5I	Total Radium Calculation	413341		
92491389002	BRGWA-5S	Total Radium Calculation	413341		
92491389003	BRGWA-2I	Total Radium Calculation	413341		
92491389004	BRGWA-2S	Total Radium Calculation	413341		
92491389005	BRGWA-6S	Total Radium Calculation	413341		
92491389001	BRGWA-5I	EPA 300.0 Rev 2.1 1993	561236		
92491389002	BRGWA-5S	EPA 300.0 Rev 2.1 1993	561236		
92491389003	BRGWA-2I	EPA 300.0 Rev 2.1 1993	561236		
92491389004	BRGWA-2S	EPA 300.0 Rev 2.1 1993	561236		
92491389005	BRGWA-6S	EPA 300.0 Rev 2.1 1993	561236		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Sample Condition Upon Receipt

Client Name: GA Power

WO#: **92491389**



92491389

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other  
Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no    Seals intact:  yes  no

Proj. Name: \_\_\_\_\_

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used 233    Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 218    Biological Tissue is Frozen: Yes No  
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 8/14/2006

		Comments:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed    Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):	_____	

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:  
Bottle Identification Form (BIF)  
Document No.:  
F-CAR-CS-043-Rev.00

Document issued: March 14, 2019  
Page 1 of 1  
Issuing Authority:  
Pace Carolinas Quality Office

Project #

WO#: 92491389

PM: KLH1 Due Date: 09/02/20  
CLIENT: GR-GA Power

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.  
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

\*Bottom half of box is to list number of bottle

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (C-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)	BP3H-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (C-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (C-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (C-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GX (3 vials per kit)-vph/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG9U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	
	1																											
	2																											
	3																											
	4																											
	5																											
	6																											
	7																											
	8																											
	9																											
	10																											
	11																											
	12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office. Out of hold, incorrect preservative, out of temp, incorrect containers.



# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or  
MTJL Log-in Number Here

## ALL SHADED AREAS are for LAB USE ONLY

Company: Georgia Power - Coal Combustion Residuals  
 Address: 2480 Maner Road  
 Atlanta, GA 30339  
 Report To: Joju Abraham

Billing Information

Copy To: Golder

State: Georgia City: Milledgeville Time Zone Collected: ET

Project Name: Branch BCC Background Well  
 Project # CCR

Collected By (print): Travis Mart nez, Andrea McClure  
 Collected By (signature): *[Signature]*

Turnaround Date Required:  Same Day  Next Day  2 Day  3 Day  4 Day  5 Day  
 Expedite Charges Apply:

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Comp. Grab	Collected (or Composite Start)		Composite End		pH	# of Ctns
			Date	Time	Date	Time		
BRGWA-5I	GW	G	8-18-2020	0940			6.29	4
BRGWA-5S	GW	G	8-18-2020	1015			6.41	4
BRGWA-2I	GW	G	8-18-2020	1045			6.59	4
BRGWA-2S	GW	G	8-18-2020	1138			6.06	4
BRGWA-6S	GW	G	8-18-2020	1248			6.33	4

Metals App IV - see comments	Fluoride	Radium 226,228	Mercury
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA

Custody Signatures Present Y N NA

Collector Signature Present Y N NA

Bottles Intact Y N NA

Correct Bottles Y N NA

Sufficient Volume Y N NA

Samples Received on Ice Y N NA

VDA - Headspace Acceptable Y N NA

USDA Regulated Soils Y N NA

Samples in Holding Time Y N NA

Residual Chlorine Present Y N NA

CF Strips: \_\_\_\_\_

Sample pH Acceptable Y N NA

pH Strips: \_\_\_\_\_

Sulfide Present Y N NA

Lead Acetate Strips: \_\_\_\_\_

LAB USE ONLY:  
Lab Sample # / Comments:

42491389

(App IV Metals) Sb, As, Ba, Be, Cd, Cr, Co, Hg, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

Relinquished by/Company: (Signature) *[Signature]* Golder  
 Date/Time: 8-19-2020/0815

Received by/Company: (Signature) *[Signature]*  
 Date/Time: 8/19/2020/1010

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

MTJL LAB USE ONLY

Table #:

Actnum:

Template:

Preflog:

PM:

PB:

LAB Sample Temperature Info:

Temp Blank Received Y N NA

Therm ID: 532

Cooler 1 Temp Upon Receipt *[Signature]*

Cooler 1 Therm Corr. Factor *[Signature]*

Cooler 1 Corrected Temp *[Signature]*

Comments:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of 1

September 11, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on August 20, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tyler Forney for  
Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta

Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## CERTIFICATIONS

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

---

### Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

### Pace Analytical Services Charlotte

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92491663001	DUP-1	Water	08/19/20 00:00	08/20/20 10:03
92491663002	BRGWC-33S	Water	08/19/20 09:47	08/20/20 10:03
92491663003	BRGWC-34S	Water	08/19/20 10:34	08/20/20 10:03
92491663004	FB-1	Water	08/19/20 10:16	08/20/20 10:03
92491663005	BRGWC-35S	Water	08/19/20 11:25	08/20/20 10:03
92491663006	BRGWC-37S	Water	08/19/20 12:23	08/20/20 10:03
92491663007	BRGWC-38S	Water	08/19/20 13:26	08/20/20 10:03
92491663008	BRGWC-36S	Water	08/19/20 14:58	08/20/20 10:03
92491663009	BRGWC-17S	Water	08/19/20 16:27	08/20/20 10:03

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92491663001	DUP-1	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663002	BRGWC-33S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663003	BRGWC-34S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663004	FB-1	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663005	BRGWC-35S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663006	BRGWC-37S	EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
92491663007	BRGWC-38S	EPA 6020B	CW1	12	PASI-GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92491663008	BRGWC-36S	EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92491663009	BRGWC-17S	EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
		EPA 6020B	CW1	12	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92491663001</b>	<b>DUP-1</b>					
EPA 6020B	Barium	0.025	mg/L	0.010	08/25/20 18:05	
EPA 6020B	Beryllium	0.00012J	mg/L	0.0030	08/25/20 18:05	
EPA 6020B	Cadmium	0.00016J	mg/L	0.0025	08/25/20 18:05	
EPA 6020B	Cobalt	0.0042J	mg/L	0.0050	08/25/20 18:05	
EPA 9315	Radium-226	0.208 ± 0.117 (0.174) C:77% T:NA	pCi/L		09/02/20 17:59	
EPA 9320	Radium-228	1.08 ± 0.591 (1.08) C:70% T:77%	pCi/L		09/09/20 15:10	
Total Radium Calculation	Total Radium	1.29 ± 0.708 (1.25)	pCi/L		09/10/20 13:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.065J	mg/L	0.10	08/21/20 19:29	
<b>92491663002</b>	<b>BRGWC-33S</b>					
	pH	4.78	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.020	mg/L	0.010	08/25/20 18:11	
EPA 6020B	Beryllium	0.0014J	mg/L	0.0030	08/25/20 18:11	
EPA 6020B	Cadmium	0.00029J	mg/L	0.0025	08/25/20 18:11	
EPA 6020B	Cobalt	0.036	mg/L	0.0050	08/25/20 18:11	
EPA 6020B	Lead	0.000060J	mg/L	0.0050	08/26/20 18:23	
EPA 6020B	Lithium	0.0090J	mg/L	0.030	08/25/20 18:11	
EPA 6020B	Thallium	0.00018J	mg/L	0.0010	08/26/20 18:23	
EPA 9315	Radium-226	0.270 ± 0.129 (0.180) C:84% T:NA	pCi/L		09/02/20 17:59	
EPA 9320	Radium-228	0.866 ± 0.525 (0.981) C:65% T:82%	pCi/L		09/09/20 15:10	
Total Radium Calculation	Total Radium	1.14 ± 0.654 (1.16)	pCi/L		09/10/20 13:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	08/21/20 20:23	
<b>92491663003</b>	<b>BRGWC-34S</b>					
	pH	5.78	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.024	mg/L	0.010	08/25/20 18:16	
EPA 6020B	Beryllium	0.00015J	mg/L	0.0030	08/25/20 18:16	
EPA 6020B	Cadmium	0.00018J	mg/L	0.0025	08/25/20 18:16	
EPA 6020B	Cobalt	0.0041J	mg/L	0.0050	08/25/20 18:16	
EPA 6020B	Lithium	0.00082J	mg/L	0.030	08/25/20 18:16	
EPA 7470A	Mercury	0.00012J	mg/L	0.00020	08/25/20 09:49	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92491663003</b>	<b>BRGWC-34S</b>					
EPA 9315	Radium-226	0.344 ± 0.136 (0.166) C:81% T:NA	pCi/L		09/02/20 17:59	
EPA 9320	Radium-228	0.868 ± 0.608 (1.17) C:68% T:59%	pCi/L		09/09/20 15:10	
Total Radium Calculation	Total Radium	1.21 ± 0.744 (1.34)	pCi/L		09/10/20 13:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	08/21/20 20:36	
<b>92491663004</b>	<b>FB-1</b>					
EPA 7470A	Mercury	0.00012J	mg/L	0.00020	08/25/20 09:51	
EPA 9315	Radium-226	0.0526 ± 0.0700 (0.132) C:81% T:NA	pCi/L		09/02/20 17:59	
EPA 9320	Radium-228	0.705 ± 0.443 (0.820) C:71% T:75%	pCi/L		09/09/20 15:10	
Total Radium Calculation	Total Radium	0.758 ± 0.513 (0.952)	pCi/L		09/10/20 13:29	
<b>92491663005</b>	<b>BRGWC-35S</b>					
	pH	5.97	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.040	mg/L	0.010	08/25/20 18:39	
EPA 6020B	Beryllium	0.00015J	mg/L	0.0030	08/25/20 18:39	
EPA 6020B	Chromium	0.0073J	mg/L	0.010	08/25/20 18:39	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	08/25/20 18:39	
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	08/25/20 09:59	
EPA 9315	Radium-226	0.117 ± 0.111 (0.202) C:92% T:NA	pCi/L		09/02/20 18:00	
EPA 9320	Radium-228	0.0450 ± 0.477 (1.10) C:70% T:76%	pCi/L		09/09/20 16:24	
Total Radium Calculation	Total Radium	0.162 ± 0.588 (1.30)	pCi/L		09/10/20 13:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	08/21/20 21:03	
<b>92491663006</b>	<b>BRGWC-37S</b>					
	pH	5.66	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.026	mg/L	0.010	08/25/20 18:45	
EPA 6020B	Chromium	0.0017J	mg/L	0.010	08/25/20 18:45	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92491663006</b>	<b>BRGWC-37S</b>					
EPA 7470A	Mercury	0.00014J	mg/L	0.00020	08/25/20 10:01	
EPA 9315	Radium-226	0.235 ± 0.132 (0.211) C:89% T:NA	pCi/L		09/03/20 16:47	
EPA 9320	Radium-228	0.347 ± 0.444 (0.941) C:70% T:81%	pCi/L		09/09/20 16:46	
Total Radium Calculation	Total Radium	0.582 ± 0.576 (1.15)	pCi/L		09/10/20 13:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	08/21/20 21:44	
<b>92491663007</b>	<b>BRGWC-38S</b>					
	pH	4.12	Std. Units		09/09/20 17:02	
EPA 6020B	Arsenic	0.0021J	mg/L	0.0050	08/25/20 18:51	
EPA 6020B	Barium	0.016	mg/L	0.010	08/25/20 18:51	
EPA 6020B	Beryllium	0.0079	mg/L	0.0030	08/25/20 18:51	
EPA 6020B	Cadmium	0.00056J	mg/L	0.0025	08/25/20 18:51	
EPA 6020B	Chromium	0.0043J	mg/L	0.010	08/25/20 18:51	
EPA 6020B	Cobalt	0.22	mg/L	0.0050	08/25/20 18:51	
EPA 6020B	Lead	0.00031J	mg/L	0.0050	08/26/20 19:03	
EPA 6020B	Lithium	0.021J	mg/L	0.030	08/25/20 18:51	
EPA 6020B	Selenium	0.041	mg/L	0.010	08/25/20 18:51	
EPA 6020B	Thallium	0.00019J	mg/L	0.0010	08/26/20 19:03	
EPA 7470A	Mercury	0.00018J	mg/L	0.00020	08/25/20 10:03	
EPA 9315	Radium-226	0.832 ± 0.221 (0.210) C:83% T:NA	pCi/L		09/03/20 16:47	
EPA 9320	Radium-228	2.34 ± 0.758 (1.07) C:67% T:86%	pCi/L		09/09/20 15:11	
Total Radium Calculation	Total Radium	3.17 ± 0.979 (1.28)	pCi/L		09/10/20 13:29	
EPA 300.0 Rev 2.1 1993	Fluoride	0.95	mg/L	0.10	08/21/20 21:57	
<b>92491663008</b>	<b>BRGWC-36S</b>					
	pH	5.53	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.037	mg/L	0.010	08/25/20 18:56	
EPA 6020B	Beryllium	0.00011J	mg/L	0.0030	08/25/20 18:56	
EPA 6020B	Chromium	0.0094J	mg/L	0.010	08/25/20 18:56	
EPA 6020B	Lead	0.000047J	mg/L	0.0050	08/26/20 19:09	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	08/25/20 18:56	
EPA 6020B	Selenium	0.0020J	mg/L	0.010	08/25/20 18:56	
EPA 7470A	Mercury	0.00013J	mg/L	0.00020	08/25/20 10:06	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92491663008</b>	<b>BRGWC-36S</b>					
EPA 9315	Radium-226	0.467 ± 0.158 (0.187) C:94% T:NA	pCi/L		09/03/20 16:47	
EPA 9320	Radium-228	0.933 ± 0.441 (0.727) C:68% T:78%	pCi/L		09/09/20 12:01	
Total Radium Calculation	Total Radium	1.40 ± 0.599 (0.914)	pCi/L		09/10/20 15:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.051J	mg/L	0.10	08/21/20 22:11	
<b>92491663009</b>	<b>BRGWC-17S</b>					
	pH	6.24	Std. Units		09/09/20 17:02	
EPA 6020B	Barium	0.047	mg/L	0.010	08/27/20 15:20	
EPA 6020B	Chromium	0.012	mg/L	0.010	08/27/20 15:20	
EPA 6020B	Lithium	0.0010J	mg/L	0.030	08/27/20 15:20	
EPA 6020B	Selenium	0.0030J	mg/L	0.010	08/27/20 15:20	
EPA 7470A	Mercury	0.000084J	mg/L	0.00020	08/25/20 10:08	
EPA 9315	Radium-226	0.118 ± 0.0995 (0.173) C:88% T:NA	pCi/L		09/03/20 16:47	
EPA 9320	Radium-228	0.867 ± 0.503 (0.914) C:66% T:71%	pCi/L		09/09/20 12:02	
Total Radium Calculation	Total Radium	0.985 ± 0.603 (1.09)	pCi/L		09/10/20 15:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	08/21/20 22:24	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Sample: DUP-1		Lab ID: 92491663001		Collected: 08/19/20 00:00		Received: 08/20/20 10:03		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:05	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:05	7440-38-2		
Barium	<b>0.025</b>	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:05	7440-39-3		
Beryllium	<b>0.00012J</b>	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:05	7440-41-7		
Cadmium	<b>0.00016J</b>	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:05	7440-43-9		
Chromium	ND	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:05	7440-47-3		
Cobalt	<b>0.0042J</b>	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:05	7440-48-4		
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:17	7439-92-1		
Lithium	ND	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:05	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:05	7439-98-7		
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:05	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:17	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 09:37	7439-97-6		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	<b>0.065J</b>	mg/L	0.10	0.050	1		08/21/20 19:29	16984-48-8		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS  
 Pace Project No.: 92491663

Sample: BRGWC-33S		Lab ID: 92491663002		Collected: 08/19/20 09:47		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	4.78	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:11	7440-38-2	
Barium	0.020	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:11	7440-39-3	
Beryllium	0.0014J	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:11	7440-41-7	
Cadmium	0.00029J	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:11	7440-47-3	
Cobalt	0.036	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:11	7440-48-4	
Lead	0.000060J	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:23	7439-92-1	
Lithium	0.0090J	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:11	7782-49-2	
Thallium	0.00018J	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:23	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 09:47	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.11	mg/L	0.10	0.050	1		08/21/20 20:23	16984-48-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS  
 Pace Project No.: 92491663

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-34S      Lab ID: 92491663003      Collected: 08/19/20 10:34      Received: 08/20/20 10:03      Matrix: Water</b>									
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.78	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:16	7440-38-2	
Barium	0.024	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:16	7440-39-3	
Beryllium	0.00015J	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:16	7440-41-7	
Cadmium	0.00018J	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:16	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:16	7440-47-3	
Cobalt	0.0041J	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:16	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:29	7439-92-1	
Lithium	0.00082J	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:16	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:29	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A      Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00012J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 09:49	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.074J	mg/L	0.10	0.050	1		08/21/20 20:36	16984-48-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: FB-1		Lab ID: 92491663004		Collected: 08/19/20 10:16		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:34	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:34	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:34	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:34	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:34	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:34	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	<b>0.00012J</b>	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 09:51	7439-97-6	
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Fluoride	ND	mg/L	0.10	0.050	1		08/21/20 20:50	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: BRGWC-35S		Lab ID: 92491663005		Collected: 08/19/20 11:25		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.97	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:39	7440-38-2	
Barium	0.040	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:39	7440-39-3	
Beryllium	0.00015J	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:39	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:39	7440-43-9	
Chromium	0.0073J	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:39	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:52	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:39	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:52	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00013J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 09:59	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.060J	mg/L	0.10	0.050	1		08/21/20 21:03	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: BRGWC-37S		Lab ID: 92491663006		Collected: 08/19/20 12:23		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.66	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:45	7440-38-2	
Barium	0.026	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:45	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:45	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:45	7440-43-9	
Chromium	0.0017J	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:45	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 18:57	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:45	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 18:57	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00014J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 10:01	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.055J	mg/L	0.10	0.050	1		08/21/20 21:44	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: BRGWC-38S		Lab ID: 92491663007		Collected: 08/19/20 13:26		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	4.12	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:51	7440-36-0	
Arsenic	0.0021J	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:51	7440-38-2	
Barium	0.016	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:51	7440-39-3	
Beryllium	0.0079	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:51	7440-41-7	
Cadmium	0.00056J	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:51	7440-43-9	
Chromium	0.0043J	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:51	7440-47-3	
Cobalt	0.22	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:51	7440-48-4	
Lead	0.00031J	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 19:03	7439-92-1	
Lithium	0.021J	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:51	7439-98-7	
Selenium	0.041	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:51	7782-49-2	
Thallium	0.00019J	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 19:03	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00018J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 10:03	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.95	mg/L	0.10	0.050	1		08/21/20 21:57	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: BRGWC-36S		Lab ID: 92491663008		Collected: 08/19/20 14:58		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.53	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:05	08/25/20 18:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:05	08/25/20 18:56	7440-38-2	
Barium	0.037	mg/L	0.010	0.00071	1	08/24/20 15:05	08/25/20 18:56	7440-39-3	
Beryllium	0.00011J	mg/L	0.0030	0.000046	1	08/24/20 15:05	08/25/20 18:56	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/24/20 15:05	08/25/20 18:56	7440-43-9	
Chromium	0.0094J	mg/L	0.010	0.00055	1	08/24/20 15:05	08/25/20 18:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/24/20 15:05	08/25/20 18:56	7440-48-4	
Lead	0.000047J	mg/L	0.0050	0.000036	1	08/24/20 15:05	08/26/20 19:09	7439-92-1	
Lithium	0.0024J	mg/L	0.030	0.00081	1	08/24/20 15:05	08/25/20 18:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:05	08/25/20 18:56	7439-98-7	
Selenium	0.0020J	mg/L	0.010	0.0016	1	08/24/20 15:05	08/25/20 18:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:05	08/26/20 19:09	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.00013J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 10:06	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.051J	mg/L	0.10	0.050	1		08/21/20 22:11	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Sample: BRGWC-17S		Lab ID: 92491663009		Collected: 08/19/20 16:27		Received: 08/20/20 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.24	Std. Units			1		09/09/20 17:02		
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	08/24/20 15:10	08/27/20 15:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	08/24/20 15:10	08/27/20 15:20	7440-38-2	
Barium	0.047	mg/L	0.010	0.00071	1	08/24/20 15:10	08/27/20 15:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	08/24/20 15:10	08/27/20 15:20	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	08/24/20 15:10	08/27/20 15:20	7440-43-9	
Chromium	0.012	mg/L	0.010	0.00055	1	08/24/20 15:10	08/27/20 15:20	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	08/24/20 15:10	08/27/20 15:20	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	08/24/20 15:10	08/27/20 15:20	7439-92-1	
Lithium	0.0010J	mg/L	0.030	0.00081	1	08/24/20 15:10	08/27/20 15:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	08/24/20 15:10	08/27/20 15:20	7439-98-7	
Selenium	0.0030J	mg/L	0.010	0.0016	1	08/24/20 15:10	08/27/20 15:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	08/24/20 15:10	08/27/20 15:20	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.000084J	mg/L	0.00020	0.000078	1	08/24/20 11:30	08/25/20 10:08	7439-97-6	
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Fluoride	0.10	mg/L	0.10	0.050	1		08/21/20 22:24	16984-48-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

QC Batch: 561963 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008

METHOD BLANK: 2980652 Matrix: Water  
Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	08/25/20 16:08	
Arsenic	mg/L	ND	0.0050	0.00078	08/25/20 16:08	
Barium	mg/L	ND	0.010	0.00071	08/25/20 16:08	
Beryllium	mg/L	ND	0.0030	0.000046	08/25/20 16:08	
Cadmium	mg/L	ND	0.0025	0.00012	08/25/20 16:08	
Chromium	mg/L	ND	0.010	0.00055	08/25/20 16:08	
Cobalt	mg/L	ND	0.0050	0.00038	08/25/20 16:08	
Lead	mg/L	ND	0.0050	0.000036	08/26/20 16:20	
Lithium	mg/L	ND	0.030	0.00081	08/25/20 16:08	
Molybdenum	mg/L	ND	0.010	0.00069	08/25/20 16:08	
Selenium	mg/L	ND	0.010	0.0016	08/25/20 16:08	
Thallium	mg/L	ND	0.0010	0.00014	08/26/20 16:20	

LABORATORY CONTROL SAMPLE: 2980653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.097	97	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2980654 2980655

Parameter	Units	92491455013 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Antimony	mg/L	0.00064J	0.1	0.1	0.1	0.10	101	99	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.12	0.1	0.1	0.24	0.23	115	114	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameter	Units	2980654		2980655		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result								
Beryllium	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	0	20		
Cadmium	mg/L	0.00058J	0.1	0.1	0.096	0.096	95	95	75-125	0	20		
Chromium	mg/L	0.0015J	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Cobalt	mg/L	0.00040J	0.1	0.1	0.10	0.10	99	99	75-125	0	20		
Lead	mg/L	0.00035J	0.1	0.1	0.094	0.093	94	93	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.096	0.098	96	97	75-125	1	20		
Molybdenum	mg/L	0.00077J	0.1	0.1	0.10	0.10	102	99	75-125	2	20		
Selenium	mg/L	0.0028J	0.1	0.1	0.10	0.10	99	99	75-125	0	20		
Thallium	mg/L	0.00021J	0.1	0.1	0.094	0.093	94	93	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

QC Batch: 561964 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92491663009

METHOD BLANK: 2980659 Matrix: Water  
Associated Lab Samples: 92491663009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	08/27/20 15:08	
Arsenic	mg/L	ND	0.0050	0.00078	08/27/20 15:08	
Barium	mg/L	ND	0.010	0.00071	08/27/20 15:08	
Beryllium	mg/L	ND	0.0030	0.000046	08/27/20 15:08	
Cadmium	mg/L	ND	0.0025	0.00012	08/27/20 15:08	
Chromium	mg/L	ND	0.010	0.00055	08/27/20 15:08	
Cobalt	mg/L	ND	0.0050	0.00038	08/27/20 15:08	
Lead	mg/L	ND	0.0050	0.000036	08/27/20 15:08	
Lithium	mg/L	ND	0.030	0.00081	08/27/20 15:08	
Molybdenum	mg/L	ND	0.010	0.00069	08/27/20 15:08	
Selenium	mg/L	ND	0.010	0.0016	08/27/20 15:08	
Thallium	mg/L	ND	0.0010	0.00014	08/27/20 15:08	

LABORATORY CONTROL SAMPLE: 2980660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.099	99	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2980661 2980662

Parameter	Units	92491663009		2980662		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.10	0.10	103	102	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.10	0.10	101	100	75-125	1	20	
Barium	mg/L	0.047	0.1	0.14	0.14	98	97	75-125	0	20	
Beryllium	mg/L	ND	0.1	0.097	0.096	97	96	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameter	Units	2980661		2980662		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		92491663009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Cadmium	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Chromium	mg/L	0.012	0.1	0.1	0.12	0.11	106	102	75-125	4	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20		
Lead	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Lithium	mg/L	0.0010J	0.1	0.1	0.10	0.099	98	98	75-125	0	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	103	100	75-125	2	20		
Selenium	mg/L	0.0030J	0.1	0.1	0.10	0.10	99	102	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

QC Batch:	561900	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008, 92491663009

METHOD BLANK: 2980098 Matrix: Water

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008, 92491663009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	08/25/20 09:32	

LABORATORY CONTROL SAMPLE: 2980099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2980100 2980101

Parameter	Units	2980100		2980101		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92491663001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Mercury	mg/L	ND	0.0025	0.0025	0.0023	0.0024	90	94	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

QC Batch: 561506 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008, 92491663009

METHOD BLANK: 2978310 Matrix: Water  
 Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007, 92491663008, 92491663009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	08/21/20 17:28	

LABORATORY CONTROL SAMPLE: 2978311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2978312 2978313

Parameter	Units	92491393004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.17	2.5	2.5	3.0	3.0	112	112	90-110	0	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2978314 2978315

Parameter	Units	92491663005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.060J	2.5	2.5	2.7	2.7	105	106	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

**Sample: DUP-1**      **Lab ID: 92491663001**      Collected: 08/19/20 00:00      Received: 08/20/20 10:03      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.208 ± 0.117 (0.174)</b> <b>C:77% T:NA</b>	pCi/L	09/02/20 17:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.08 ± 0.591 (1.08)</b> <b>C:70% T:77%</b>	pCi/L	09/09/20 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.29 ± 0.708 (1.25)</b>	pCi/L	09/10/20 13:24	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-33S</b> <b>Lab ID: 92491663002</b> Collected: 08/19/20 09:47      Received: 08/20/20 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.270 ± 0.129 (0.180)</b> <b>C:84% T:NA</b>	pCi/L	09/02/20 17:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.866 ± 0.525 (0.981)</b> <b>C:65% T:82%</b>	pCi/L	09/09/20 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.14 ± 0.654 (1.16)</b>	pCi/L	09/10/20 13:24	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-34S</b> <b>Lab ID: 92491663003</b> Collected: 08/19/20 10:34      Received: 08/20/20 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.344 ± 0.136 (0.166)</b> <b>C:81% T:NA</b>	pCi/L	09/02/20 17:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.868 ± 0.608 (1.17)</b> <b>C:68% T:59%</b>	pCi/L	09/09/20 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.21 ± 0.744 (1.34)</b>	pCi/L	09/10/20 13:24	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

**Sample: FB-1**      **Lab ID: 92491663004**      Collected: 08/19/20 10:16      Received: 08/20/20 10:03      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0526 ± 0.0700 (0.132)</b> <b>C:81% T:NA</b>	pCi/L	09/02/20 17:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.705 ± 0.443 (0.820)</b> <b>C:71% T:75%</b>	pCi/L	09/09/20 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.758 ± 0.513 (0.952)</b>	pCi/L	09/10/20 13:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-35S</b> <b>Lab ID: 92491663005</b> Collected: 08/19/20 11:25      Received: 08/20/20 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.117 ± 0.111 (0.202)</b> <b>C:92% T:NA</b>	pCi/L	09/02/20 18:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0450 ± 0.477 (1.10)</b> <b>C:70% T:76%</b>	pCi/L	09/09/20 16:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.162 ± 0.588 (1.30)</b>	pCi/L	09/10/20 13:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-37S</b> <b>Lab ID: 92491663006</b> Collected: 08/19/20 12:23      Received: 08/20/20 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.235 ± 0.132 (0.211)</b> <b>C:89% T:NA</b>	pCi/L	09/03/20 16:47	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.347 ± 0.444 (0.941)</b> <b>C:70% T:81%</b>	pCi/L	09/09/20 16:46	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.582 ± 0.576 (1.15)</b>	pCi/L	09/10/20 13:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-38S</b> <b>Lab ID: 92491663007</b> Collected: 08/19/20 13:26      Received: 08/20/20 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.832 ± 0.221 (0.210)</b> <b>C:83% T:NA</b>	pCi/L	09/03/20 16:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>2.34 ± 0.758 (1.07)</b> <b>C:67% T:86%</b>	pCi/L	09/09/20 15:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>3.17 ± 0.979 (1.28)</b>	pCi/L	09/10/20 13:29	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

**Sample: BRGWC-36S**      **Lab ID: 92491663008**      Collected: 08/19/20 14:58      Received: 08/20/20 10:03      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.467 ± 0.158 (0.187)</b> <b>C:94% T:NA</b>	pCi/L	09/03/20 16:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.933 ± 0.441 (0.727)</b> <b>C:68% T:78%</b>	pCi/L	09/09/20 12:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.40 ± 0.599 (0.914)</b>	pCi/L	09/10/20 15:11	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

**Sample: BRGWC-17S**      **Lab ID: 92491663009**      Collected: 08/19/20 16:27      Received: 08/20/20 10:03      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.118 ± 0.0995 (0.173)</b> <b>C:88% T:NA</b>	pCi/L	09/03/20 16:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.867 ± 0.503 (0.914)</b> <b>C:66% T:71%</b>	pCi/L	09/09/20 12:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.985 ± 0.603 (1.09)</b>	pCi/L	09/10/20 15:11	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

QC Batch:	411439	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92491663008, 92491663009

METHOD BLANK:	1990347	Matrix:	Water
---------------	---------	---------	-------

Associated Lab Samples: 92491663008, 92491663009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.274 ± 0.326 (0.685) C:63% T:88%	pCi/L	09/09/20 12:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

QC Batch: 411436

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007

METHOD BLANK: 1990343

Matrix: Water

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005, 92491663006, 92491663007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.245 ± 0.335 (0.716) C:71% T:90%	pCi/L	09/09/20 15:09	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL - RADIOCHEMISTRY**

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

---

QC Batch:	411375	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92491663006, 92491663007, 92491663008, 92491663009

---

METHOD BLANK: 1989998 Matrix: Water

Associated Lab Samples: 92491663006, 92491663007, 92491663008, 92491663009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.135 ± 0.115 (0.203) C:91% T:NA	pCi/L	09/03/20 16:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

---

QC Batch:	411374	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005

---

METHOD BLANK: 1989996 Matrix: Water

Associated Lab Samples: 92491663001, 92491663002, 92491663003, 92491663004, 92491663005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.241 ± 0.165 (0.285) C:87% T:NA	pCi/L	09/02/20 18:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK WELLS  
Pace Project No.: 92491663

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92491663002	BRGWC-33S				
92491663003	BRGWC-34S				
92491663005	BRGWC-35S				
92491663006	BRGWC-37S				
92491663007	BRGWC-38S				
92491663008	BRGWC-36S				
92491663009	BRGWC-17S				
92491663001	DUP-1	EPA 3005A	561963	EPA 6020B	562039
92491663002	BRGWC-33S	EPA 3005A	561963	EPA 6020B	562039
92491663003	BRGWC-34S	EPA 3005A	561963	EPA 6020B	562039
92491663004	FB-1	EPA 3005A	561963	EPA 6020B	562039
92491663005	BRGWC-35S	EPA 3005A	561963	EPA 6020B	562039
92491663006	BRGWC-37S	EPA 3005A	561963	EPA 6020B	562039
92491663007	BRGWC-38S	EPA 3005A	561963	EPA 6020B	562039
92491663008	BRGWC-36S	EPA 3005A	561963	EPA 6020B	562039
92491663009	BRGWC-17S	EPA 3005A	561964	EPA 6020B	562041
92491663001	DUP-1	EPA 7470A	561900	EPA 7470A	562049
92491663002	BRGWC-33S	EPA 7470A	561900	EPA 7470A	562049
92491663003	BRGWC-34S	EPA 7470A	561900	EPA 7470A	562049
92491663004	FB-1	EPA 7470A	561900	EPA 7470A	562049
92491663005	BRGWC-35S	EPA 7470A	561900	EPA 7470A	562049
92491663006	BRGWC-37S	EPA 7470A	561900	EPA 7470A	562049
92491663007	BRGWC-38S	EPA 7470A	561900	EPA 7470A	562049
92491663008	BRGWC-36S	EPA 7470A	561900	EPA 7470A	562049
92491663009	BRGWC-17S	EPA 7470A	561900	EPA 7470A	562049
92491663001	DUP-1	EPA 9315	411374		
92491663002	BRGWC-33S	EPA 9315	411374		
92491663003	BRGWC-34S	EPA 9315	411374		
92491663004	FB-1	EPA 9315	411374		
92491663005	BRGWC-35S	EPA 9315	411374		
92491663006	BRGWC-37S	EPA 9315	411375		
92491663007	BRGWC-38S	EPA 9315	411375		
92491663008	BRGWC-36S	EPA 9315	411375		
92491663009	BRGWC-17S	EPA 9315	411375		
92491663001	DUP-1	EPA 9320	411436		
92491663002	BRGWC-33S	EPA 9320	411436		
92491663003	BRGWC-34S	EPA 9320	411436		
92491663004	FB-1	EPA 9320	411436		
92491663005	BRGWC-35S	EPA 9320	411436		
92491663006	BRGWC-37S	EPA 9320	411436		
92491663007	BRGWC-38S	EPA 9320	411436		
92491663008	BRGWC-36S	EPA 9320	411439		
92491663009	BRGWC-17S	EPA 9320	411439		
92491663001	DUP-1	Total Radium Calculation	413343		
92491663002	BRGWC-33S	Total Radium Calculation	413343		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK WELLS

Pace Project No.: 92491663

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92491663003	BRGWC-34S	Total Radium Calculation	413343		
92491663004	FB-1	Total Radium Calculation	413344		
92491663005	BRGWC-35S	Total Radium Calculation	413344		
92491663006	BRGWC-37S	Total Radium Calculation	413344		
92491663007	BRGWC-38S	Total Radium Calculation	413344		
92491663008	BRGWC-36S	Total Radium Calculation	413382		
92491663009	BRGWC-17S	Total Radium Calculation	413382		
92491663001	DUP-1	EPA 300.0 Rev 2.1 1993	561506		
92491663002	BRGWC-33S	EPA 300.0 Rev 2.1 1993	561506		
92491663003	BRGWC-34S	EPA 300.0 Rev 2.1 1993	561506		
92491663004	FB-1	EPA 300.0 Rev 2.1 1993	561506		
92491663005	BRGWC-35S	EPA 300.0 Rev 2.1 1993	561506		
92491663006	BRGWC-37S	EPA 300.0 Rev 2.1 1993	561506		
92491663007	BRGWC-38S	EPA 300.0 Rev 2.1 1993	561506		
92491663008	BRGWC-36S	EPA 300.0 Rev 2.1 1993	561506		
92491663009	BRGWC-17S	EPA 300.0 Rev 2.1 1993	561506		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**CHAIN-OF-CUSTODY Analytical Request Document**

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Georgia Power Coal Combustion Residuals  
 Address: 2480 Maner Road  
 Atlanta, GA 30339  
 Report To: Joju Abraham  
 Email: To: scsinvo ces@southernco.com

Copy To: Golder  
 Site Collect on info/Address: Plant Branch

Phone: (404) 506-7239  
 Email: jabraham@southernco.com

State: Georgia City: Milledgeville Time Zone Collected:  
 PT  MT  CT  ET

Project Name: Branch E Network Weis  
 Project # CCR  
 Pace Profile#

Collected By (print): Travis Martinez, Andrea McClure  
 Purchase Order #  
 Quote #  
 Turnaround Date Required:  
 Rush:  Same Day  Next Day  
 2 Day  3 Day  4 Day  5 Day  
 (Expedite Charges Apply)

Pace Project Manager:  
 kevin.herring@pacelabs.com  
 Immediately Packed on Ice:  
 Yes  No  
 Field Filtered (if applicable):  
 Yes  No  
 Analysis:

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder #

**W0# : 92491663**

ALL SI

Container Present:  
 1  2  3  4  5  6  7  8  9  10

62491663

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) zinc acetate, (5) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		pH	# of Ctns
			Date	Time	Date	Time		
DUP-1	GW	G	8-19-2020	-			-	4
BRGWC-33s	GW	G	8-19-2020	0947			4.78	4
BRGWC-34s	GW	G	8-19-2020	1034			5.78	4
FB-1	WT	G	8-19-2020	1016			-	4
BRGWC-35s	GW	G	8-19-2020	1125			5.97	6
BRGWC-37s	GW	G	8-19-2020	1223			5.66	4
BRGWC-38s	GW	G	8-19-2020	1326			4.12	4
BRGWC-36s	GW	G	8-19-2020	1458			5.53	6
BRGWC-17s	GW	G	8-19-2020	1627			6.24	4

Analyses	Metals App IV - see comments	Fluoride	Radium 226,228	Mercury	Lab Profile/Line:
	X	X	X	X	Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signatures Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA CI Strips: Sample pH Acceptable Y N NA pH Strips: Sulfide Present Y N NA Lead Acetate Strips:
	X	X	X	X	LAB USE ONLY: Lab Sample # / Comments: 92491663
	X	X	X	X	Rad-1(+2 Radium)
	X	X	X	X	Rad-2(+2 Radium)

(App IV Metals): Sb, As, Ba, Be, Cd, Cr, Co, Hg, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via:  
 FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:  
 Temp Blank Received: Y N NA  
 Therm ID#: TH231  
 Cooler 1 Temp Upon Receipt: 0.7  
 Cooler 1 Therm Corr. Factor: 0.0  
 Cooler 1 Corrected Temp: 0.7  
 Comments:

Relinquished by/Company: (Signature)  
*Tom Golder*  
 Date/Time: 8-20-2020/0815

Received by/Company: (Signature)  
*K. Welly Pace*  
 Date/Time: 8/20/20 1005

Relinquished by/Company: (Signature)

Received by/Company: (Signature)

Relinquished by/Company: (Signature)

Received by/Company: (Signature)

MTJL LAB USE ONLY

Table #:  
 Accnum:  
 Template:  
 Prelogin:  
 PM:  
 PB:

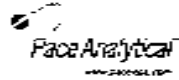
Trip Blank Received: Y N NA  
 HCL MeOH TSP Other

Non Conformance(s):  
 YES / NO

Page: 1 of 1







## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAL  
Date: 9/3/2020  
Worklist: 55838  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MS Sample ID:	198996
MB concentration:	0.241
MB Counting Uncertainty:	0.151
MB MDC:	0.255
MB Numerical Performance Indicator:	2.94
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCS/NI or NI?	N
	LCS55838	LCS05838
Count Date:	9/2/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.045	
Volume Used (mL):	0.10	
Aliquot Volume (L g. F):	0.501	
Target Conc. (pCi/L g. F):	4.798	
Uncertainty (Calculated):	0.058	
Result (pCi/L g. F):	4.296	
LCS/LCSD Counting Uncertainty (pCi/L g. F):	0.343	
Numerical Performance Indicator:	1.50	
Percent Recovery:	90.37%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limit:	125%	
Lower % Recovery Limit:	75%	

Duplicate Sample Assessment		
Sample I.D.:	924919E0005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	924919E0005DUP	
Sample Result (pCi/L g. F):	0.117	
Sample Result Counting Uncertainty (pCi/L g. F):	0.110	
Sample Duplicate Result (pCi/L g. F):	0.098	
Sample Duplicate Result Counting Uncertainty (pCi/L g. F):	0.087	
Are Sample and/or duplicate result below RL?	See Below #F	
Duplicate Numerical Performance Indicator:	0.253	924919E0005
Duplicate RPD:	18.83%	924919E0005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L g. F):		
MS Target Conc. (pCi/L g. F):		
MSD Aliquot (L g. F):		
MSD Target Conc. (pCi/L g. F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L g. F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L g. F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L g. F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L g. F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L g. F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

#F Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

LAM 9/3/2020

Qua. 3-20



### Quality Control Sample Performance Assessment

Test: Ra-228  
Analyst: LAL  
Date: 5/2/2020  
Work st: 56538  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	1980996	
MB concentration	0.241	
MB Counting Uncertainty	0.161	
MB MDC	0.285	
MB Numerical Performance Indicator	2.94	
MB Status vs Numerical Indicator	N/A	
MB Status vs. MDC	Pass	

	LCS2 (Y <sup>214</sup> P)	
	LCS45838	LCS55838
Count Date:	5/2/2020	5/2/2020
Spike ID:	19-032	19-032
Decay Corrected Spike Concentration (pCi/mL)	24,045	24,045
Volume Used (mL)	0.10	0.10
Aliquot Volume (L, g, Fl)	0.501	0.508
Target Conc. (pCiL, g, Fl)	4.798	4.720
Uncertainty (Calculated)	0.058	0.057
Result (pCiL, g, Fl)	4.038	4.783
LCS/LCSD Counting Uncertainty (pCiL, g, Fl)	0.343	0.364
Numerical Performance Indicator:	-2.62	0.34
Percent Recovery:	90.37%	101.36%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limit:	125%	125%
Lower % Recovery Limit:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS5668	Enter duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.:	LCS05402	
Sample Result (pCiL, g, Fl):	4.536	
Sample Result Counting Uncertainty (pCiL, g, Fl):	0.343	
Sample Duplicate Result (pCiL, g, Fl):	4.783	
Sample Duplicate Result Counting Uncertainty (pCiL, g, Fl):	0.364	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-1.753	52451653205
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.46%	52451653050UP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collector Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, Fl):		
MS Target Conc. (pCiL, g, Fl):		
MSD Aliquot (L, g, Fl):		
MSD Target Conc. (pCiL, g, Fl):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCiL, g, Fl):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCiL, g, Fl):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCiL, g, Fl):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCiL, g, Fl):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCiL, g, Fl):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

⚠ Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

AM 9/3/2020

See 9.3.20



## Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-228  
Analyst: LAL  
Date: 9/3/2020  
Worklist: 55839  
Matrix: DW

Method Blank Assessment	
MB Sample ID	199998
MB Concentration	0.136
MB Counting Uncertainty	0.113
MB MDC	0.203
MB Numerical Performance Indicator	2.34
MB Status vs Numerical Indicator	N/A
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	LCS (Y or N)†	
	LCS55839	LCS55839
Count Date	9-4-2020	
Spike I.D.	19-033	
Decay Corrected Spike Concentration (pCi/L)	24.045	
Volume Used (mL)	0.10	
Aliquot Volume (L, g, F)	0.502	
Target Conc. (pCi/L, g, F)	4.755	
Uncertainty (Calculated)	0.057	
Result (pCi/L, g, F)	4.055	
LSC/LSD Counting Uncertainty (pCi/L, g, F)	0.782	
Numerical Performance Indicator	-1.72	
Percent Recovery	85.54%	
Status vs Numerical Indicator	N/A	
Status vs Recovery	Pass	
Upper % Recovery Limits	125%	
Lower % Recovery Limits	75%	

Duplicate Sample Assessment		Enter Duplicate sample I.D.s if other than LCS/LSD in the space below
Sample I.D.	9249199012	
Duplicate Sample I.D.	9249199012 DUP	
Sample Result (pCi/L, g, F)	0.384	
Sample Result Counting Uncertainty (pCi/L, g, F)	0.375	
Sample Duplicate Result (pCi/L, g, F)	0.377	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.254	
Are sample and/or duplicate results below RL?†	See Below #	
Duplicate Numerical Performance Indicator	1.23†	
Duplicate RPD	67.84%	9249199012
Duplicate Status vs Numerical Indicator	N/A	9249199012 DUP
Duplicate Status vs RPD	Fail	
% RPD Limit	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collector Date		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCi/L)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limits		
MS/MSD Lower % Recovery Limits		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)	
Duplicate Numerical Performance Indicator	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD	
MS/MSD Duplicate Status vs Numerical Indicator	
MS/MSD Duplicate Status vs RPD	
% RPD Limit	

†† Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~Batch must be re-prepared due to unacceptable precision.~~ N/A

LAL 9/4/2020

LAL 9/4/2020

LAL 9/4/2020



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAL  
Date: 9/3/2020  
Worklist: 55839  
Matrix: DW

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment		
MB Sample ID	198296	
MB Concentration	0.135	
MB Counting Uncertainty	0.113	
MB MDC	0.205	
MB Numerical Performance Indicator	2.34	
MB Status vs Numerical Indicator	N/A	
MB Status vs MDC	Pass	

Laboratory Control Sample Assessment	LCS# (Y or N)?	
	LCS#55839	N
Count Date	9/4/2020	
Spae. D.	15-032	
Decay Corrected Spike Concentration (pCi/mL)	24.045	
Volume Used (mL)	0.10	
Aliquot Volume (L, g, F)	0.502	
Target Conc. (pCi/L, g, F)	4.765	
Uncertainty (Calculated)	0.057	
Result (pCi/L, g, F)	4.590	
LCS/LCSD Counting Uncertainty (pCi/L, g, F)	0.782	
Numerical Performance Indicator	-1.72	
Percent Recovery	85.64%	
Status vs Numerical Indicator	N/A	
Status vs Recovery	Pass	
Upper % Recovery Limit	125%	
Lower % Recovery Limit	75%	

Duplicate Sample Assessment		
Sample ID	9249165308	Enter Duplicate sample IDs if other than LCS/LCSD in the space below
Duplicate Sample ID	9249165308 DLP	
Sample Result (pCi/L, g, F)	3.467	
Sample Result Counting Uncertainty (pCi/L, g, F)	0.143	
Sample Duplicate Result (pCi/L, g, F)	0.359	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.236	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator	0.728	
Duplicate RPD	28.34%	9249165308
Duplicate Status vs Numerical Indicator	N/A	9249165308 DLP
Duplicate Status vs RPD	Fail	
% RPD Limit	25%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date		
Sample ID		
Sample MS ID		
Sample MSD ID		
Spire ID		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (calculated)		
MSD Spike Uncertainty (calculated)		
Sample Result		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample ID		
Sample MS ID		
Sample MSD ID		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
Duplicate Numerical Performance Indicator		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD		
MS/MSD Duplicate Status vs Numerical Indicator		
MS/MSD Duplicate Status vs RPD		
% RPD Limit		

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

~~Blank must be rechecked due to unacceptable precision~~ N/A JAM 9/4/2020

*Ch 9/4/20*



### Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
Analyst: VAL  
Date: 9/2/2020  
Worklist: 55852  
Matrix: WT

Method Blank Assessment	
MB Sample ID	1990843
MB Concentration	0.245
MB 2 Sigma CSU	0.335
MB MDC	0.716
MB Numerical Performance Indicator	1.43
MB Status vs Numerical Indicator	Pass
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	LCS# (Y or N)?	
	LCS55852	LCS05852
Count Date:	9/2/2020	9/2/2020
Spike I.D.:	20-005	20-030
Decay Corrected Spike Concentration (pCi/mL)	38.470	38.470
Volume Used (mL)	0.10	0.10
Aliquot Volume (L, g, F)	0.801	0.802
Target Conc. (pCi/L, g, F)	4.804	4.799
Uncertainty (calculated)	0.235	0.235
Result (pCi/L, g, F)	4.151	5.838
LCS1,CS0 2 Sigma CSU (pCi/L, g, F)	1.079	1.360
Numerical Performance Indicator	-1.15	1.47
Percent Recovery	86.42%	121.64%
Status vs Numerical Indicator	NA	NA
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	135%	135%
Lower % Recovery Limit	60%	60%

Duplicate Sample Assessment		
Sample I.D.:	LCS55852	Enter Duplicate sample ID if other than LCS#LCS# in the space below.
Duplicate Sample I.D.:	LCS05852	
Sample Result (pCi/L, g, F):	4.151	
Sample Result 2 Sigma CSU (pCi/L, g, F):	1.079	
Sample Duplicate Result (pCi/L, g, F):	5.838	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.360	
Ave sample and/or duplicate results below RPD	NO	
Duplicate Numerical Performance Indicator	-1.500	
(Based on the LCS/LCS0 Percent Recoveries) Duplicate RPD:	33.35%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	95%	

Sample Matrix Spike Control Assessment	MSMSD 1	MSMSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.		
MSMSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (calculated)		
MSD Spike Uncertainty (calculated)		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample ID if other than LCS#LCS# in the space below.
Sample MS I.D.:		
Sample MSD I.D.:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator:		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

9-10-20

9-10-20



### Quality Control Sample Performance Assessment

Test: Ra-228  
Analyst: VAL  
Date: 9/2/2020  
Worklist: 55853  
Matrix: Wt

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment	
MB Sample ID	1590047
MB Concentration	0.274
MB 2 Sigma CSU	0.225
MB MDC	0.685
MB Numerical Performance Indicator	1.65
MB Status vs Numerical Indicator	Pass
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	LCS? (Y or N)?	
	LCS55853	LCS65853
Count Date	9/2/2020	9/2/2020
Spike ID	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL)	38.472	38.472
Volume Used (mL)	0.10	0.10
Aliquot Volume (L, g, F)	0.810	0.812
Target Conc. (pCi, g, F)	4.748	4.755
Uncertainty (Calculated)	0.233	0.232
Result (pCi, g, F)	4.900	5.603
LCS/LCSD 2 Sigma CSU (pCi, g, F)	1.118	1.205
Numerical Performance Indicator	0.37	1.38
Percent Recovery	104.53%	113.30%
Status vs Numerical Indicator	NA	NA
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	135%	125%
Lower % Recovery Limit	60%	60%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi, g, F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result		
Sample Result 2 Sigma CSU (pCi, g, F):		
Sample Matrix Spike Result		
Matrix Spike Result 2 Sigma CSU (pCi, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

Duplicate Sample Assessment		
Sample ID:	LCS55853	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample ID:	LCS65853	
Sample Result (pCi, g, F):	4.850	
Sample Result 2 Sigma CSU (pCi, g, F):	1.118	
Sample Duplicate Result (pCi, g, F):	5.603	
Sample Duplicate Result 2 Sigma CSU (pCi, g, F):	1.205	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	-0.752	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	35%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample ID:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample MS ID:		
Sample MSD ID:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F):		
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/MSD Duplicate RPD:		
MS/MSD Duplicate Status vs Numerical Indicator:		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

\* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

VAL  
9-10-20

OK  
9/10/20

October 08, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92495654

Dear Joju Abraham:

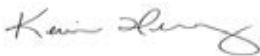
Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92495654

---

### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

---

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92495654001	BRGWA-6S	Water	09/15/20 09:45	09/16/20 09:45
92495654002	BRGWA-5S	Water	09/15/20 13:20	09/16/20 09:45
92495654003	BRGWA-5I	Water	09/15/20 14:02	09/16/20 09:45
92495654004	BRGWA-2S	Water	09/15/20 15:01	09/16/20 09:45
92495654005	BRGWA-2I	Water	09/15/20 16:07	09/16/20 09:45

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92495654001	BRGWA-6S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92495654002	BRGWA-5S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92495654003	BRGWA-5I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92495654004	BRGWA-2S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92495654005	BRGWA-2I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495654001</b>	<b>BRGWA-6S</b>					
EPA 9315	Radium-226	0.00810 ± 0.162 (0.444) C:88% T:NA	pCi/L		09/30/20 07:18	
EPA 9320	Radium-228	0.466 ± 0.418 (0.851) C:71% T:86%	pCi/L		10/05/20 15:06	
Total Radium Calculation	Total Radium	0.474 ± 0.580 (1.30)	pCi/L		10/06/20 14:01	
<b>92495654002</b>	<b>BRGWA-5S</b>					
EPA 9315	Radium-226	0.0906 ± 0.218 (0.520) C:87% T:NA	pCi/L		09/30/20 07:18	
EPA 9320	Radium-228	0.459 ± 0.553 (1.17) C:71% T:84%	pCi/L		10/05/20 17:44	
Total Radium Calculation	Total Radium	0.550 ± 0.771 (1.69)	pCi/L		10/06/20 14:01	
<b>92495654003</b>	<b>BRGWA-5I</b>					
EPA 9315	Radium-226	0.0999 ± 0.226 (0.535) C:87% T:NA	pCi/L		09/30/20 07:18	
EPA 9320	Radium-228	0.115 ± 0.622 (1.42) C:66% T:76%	pCi/L		10/05/20 17:44	
Total Radium Calculation	Total Radium	0.215 ± 0.848 (1.96)	pCi/L		10/06/20 14:01	
<b>92495654004</b>	<b>BRGWA-2S</b>					
EPA 9315	Radium-226	0.109 ± 0.177 (0.389) C:91% T:NA	pCi/L		09/30/20 07:18	
EPA 9320	Radium-228	0.470 ± 0.606 (1.29) C:63% T:77%	pCi/L		10/05/20 17:44	
Total Radium Calculation	Total Radium	0.579 ± 0.783 (1.68)	pCi/L		10/06/20 14:01	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495654005</b>	<b>BRGWA-2I</b>					
EPA 9315	Radium-226	-0.0263 ± 0.159 (0.461) C:94% T:NA	pCi/L		09/30/20 07:18	
EPA 9320	Radium-228	0.0583 ± 0.776 (1.80) C:44% T:84%	pCi/L		10/05/20 17:44	
Total Radium Calculation	Total Radium	0.0583 ± 0.935 (2.26)	pCi/L		10/06/20 14:01	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Sample: **BRGWA-6S** Lab ID: **92495654001** Collected: 09/15/20 09:45 Received: 09/16/20 09:45 Matrix: Water  
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.00810 ± 0.162 (0.444)</b> <b>C:88% T:NA</b>	pCi/L	09/30/20 07:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.466 ± 0.418 (0.851)</b> <b>C:71% T:86%</b>	pCi/L	10/05/20 15:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.474 ± 0.580 (1.30)</b>	pCi/L	10/06/20 14:01	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

**Sample: BRGWA-5S**      **Lab ID: 92495654002**      Collected: 09/15/20 13:20      Received: 09/16/20 09:45      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0906 ± 0.218 (0.520)</b> <b>C:87% T:NA</b>	pCi/L	09/30/20 07:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.459 ± 0.553 (1.17)</b> <b>C:71% T:84%</b>	pCi/L	10/05/20 17:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.550 ± 0.771 (1.69)</b>	pCi/L	10/06/20 14:01	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

**Sample: BRGWA-5I**      **Lab ID: 92495654003**      Collected: 09/15/20 14:02      Received: 09/16/20 09:45      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0999 ± 0.226 (0.535)</b> <b>C:87% T:NA</b>	pCi/L	09/30/20 07:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.115 ± 0.622 (1.42)</b> <b>C:66% T:76%</b>	pCi/L	10/05/20 17:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.215 ± 0.848 (1.96)</b>	pCi/L	10/06/20 14:01	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-2S</b> <b>Lab ID: 92495654004</b> Collected: 09/15/20 15:01      Received: 09/16/20 09:45      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.109 ± 0.177 (0.389)</b> <b>C:91% T:NA</b>	pCi/L	09/30/20 07:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.470 ± 0.606 (1.29)</b> <b>C:63% T:77%</b>	pCi/L	10/05/20 17:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.579 ± 0.783 (1.68)</b>	pCi/L	10/06/20 14:01	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-2I</b> <b>Lab ID: 92495654005</b> Collected: 09/15/20 16:07      Received: 09/16/20 09:45      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0263 ± 0.159 (0.461)</b> <b>C:94% T:NA</b>	pCi/L	09/30/20 07:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0583 ± 0.776 (1.80)</b> <b>C:44% T:84%</b>	pCi/L	10/05/20 17:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.0583 ± 0.935 (2.26)</b>	pCi/L	10/06/20 14:01	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

---

QC Batch:	415401	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92495654001, 92495654002, 92495654003, 92495654004, 92495654005

---

METHOD BLANK: 2008969 Matrix: Water

Associated Lab Samples: 92495654001, 92495654002, 92495654003, 92495654004, 92495654005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.804 ± 0.467 (0.852) C:69% T:78%	pCi/L	10/05/20 15:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

---

QC Batch:	415400	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92495654001, 92495654002, 92495654003, 92495654004, 92495654005

---

METHOD BLANK: 2008968 Matrix: Water

Associated Lab Samples: 92495654001, 92495654002, 92495654003, 92495654004, 92495654005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0938 ± 0.181 (0.415) C:94% T:NA	pCi/L	09/30/20 07:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92495654

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92495654001	BRGWA-6S	EPA 9315	415400		
92495654002	BRGWA-5S	EPA 9315	415400		
92495654003	BRGWA-5I	EPA 9315	415400		
92495654004	BRGWA-2S	EPA 9315	415400		
92495654005	BRGWA-2I	EPA 9315	415400		
92495654001	BRGWA-6S	EPA 9320	415401		
92495654002	BRGWA-5S	EPA 9320	415401		
92495654003	BRGWA-5I	EPA 9320	415401		
92495654004	BRGWA-2S	EPA 9320	415401		
92495654005	BRGWA-2I	EPA 9320	415401		
92495654001	BRGWA-6S	Total Radium Calculation	417208		
92495654002	BRGWA-5S	Total Radium Calculation	417208		
92495654003	BRGWA-5I	Total Radium Calculation	417208		
92495654004	BRGWA-2S	Total Radium Calculation	417208		
92495654005	BRGWA-2I	Total Radium Calculation	417208		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Sample Condition Upon Rec

WO#: 92495654

Client Name: GA Power



92495654

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Oth

Tracking #: \_\_\_\_\_

Proj. Due Date: \_\_\_\_\_  
Proj. Name: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no    Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used \_\_\_\_\_    Type of Ice:  Wet  Blue  None     Samples on ice, cooling process has begun

Cooler Temperature 0.8    Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/16/2004

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, colform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed    Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Field Data Required?    Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:  
Bottle Identification Form (BIF)  
Document No.:  
F-CAR-CS-043-Rev.00

Document Issued: March 14, 2019  
Page 1 of 1  
Issuing Authority:  
Pace Carolinas Quality Office

Project #

**WO# : 92495654**

PH: KLH1 Due Date: 09/30/20  
CLIENT: GA-GA Power

• Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

• Exceptions: VOA, Coliform, TOC, Oil and Grease, DRD/8015 (water) DOC, LLHg

• Bottom half of box is to list number of bottle

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (C-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (C-)	WGFLU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (C-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (C-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	
	1																											
	2																											
	3																											
	4																											
	5																											
	6																											
	7																											
	8																											
	9																											
	10																											
	11																											
	12																											

**pH Adjustment Log for Preserved Samples**

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification C  
Out of hold, incorrect preservative, out of temp, incorrect containers.





# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Attix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

Company: Georgia Power - Coal Combustion Residuals		Billing information	
Address: 2480 Maner Road Atlanta, GA 30339			
Report To: Joey Abraham		Email To: scmvoices@southernco.com	
Copy To: Golder		Site Collection Info/Address: Plant Branch	
Phone: (404) 506-7239 Email: jbraham@southernco.com		State: Georgia City: Milledgeville Time Zone: Collected	
Phone: (404) 506-7239 Email: jbraham@southernco.com		Project Name: Plant Branch BCD/E Background Project # CCR 3rd Semi-Annual	
Collected By (print): Travis Martinez, Andrea McClure		Purchase Order # Quote #	
Collected By (signature):		Turnaround Date Required Rush:     Same Day     Next Day     2 Day     3 Day     4 Day     5 Day (Expedite Charges Apply)	
		Face Project Manager: kevin.berring@pacelab.com Immediately Packed on Ice: <input checked="" type="checkbox"/> Yes   <input type="checkbox"/> No Field Filtered (if applicable): <input type="checkbox"/> Yes   <input type="checkbox"/> No Analysis:	

**ALL SHADED AREAS are for LAB USE ONLY**

Container Preservative Type **		Lab Project Manager:
1	2	

\*\* Preservative Types (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) nitric acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	Lab Profile/Line:			
	Metals 6010/6020/7470 - see comments	TDS	Chloride/Fluoride/Sulfate	Radium 226.228

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (S), Oil (O), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		pH	# of Ctns
			Date	Time	Date	Time		
BRGWA-6S	GW	G	9-15-2020	0945			6.43	5
BRGWA-5S	GW	G	9-15-2020	1320			6.25	5
BRGWA-5E	GW	G	9-15-2020	1402			6.27	5
BRGWA-2S	GW	G	9-15-2020	1501			6.01	5
BRGWA-2I	GW	G	9-15-2020	1607			6.64	5

LAB USE ONLY: Lab Sample # / Comments:  92495654
---

(Metals): As, B, Ba, Be, Ca, Cd, Co, Cr, Mo, Pb, Sb, Se, Li, Tl, Hg	Type of Ice Used: Wet Blue Dry None	SHORT HOLDS PRESENT (<72 hours): Y N N/A	LAB Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: Cooler 1 Temp Upon Receipt: ___°C Cooler 1 Therm Corr. Factor: ___°C Cooler 1 Corrected Temp: ___°C Comments:
Relinquished by/Company: (Signature) 	Packing Material Used:	Lab Tracking #:	
Relinquished by/Company: (Signature)	Radchem sample(s) screened (<500 cpm): Y N NA	Samples received via: FEDEX UPS Client Courier Pace Courier	
Relinquished by/Company: (Signature)	Date/Time: 9-16-2020/0800	Date/Time: 9/16/20 0945	MTJL LAB USE ONLY Table #: Acctnum: Template: Prelogin: PM: PB:
	Received by/Company: (Signature) 		Trip Blank Received: Y N NA HCL MeOH TSP Other
			Non Conformance(s): YES / NO



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAL  
Date: 9/29/2020  
Worksheet: 55344  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID:	2008968
MB concentration:	0.094
MB Counting Uncertainty:	0.180
MB MDC:	0.416
MB Numerical Performance Indicator:	1.02
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCSD56344	LCSD56344
Count Date:	9/29/2020	9/29/2020
Spike C.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.044	24.044
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.509	0.505
Target Conc. (pCi/L, g, F):	4.723	4.761
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	3.890	3.912
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.659	0.653
Numerical Performance Indicator:	-2.36	-2.39
Percent Recovery:	82.15%	82.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limit:	125%	125%
Lower % Recovery Limit:	75%	75%

Duplicate Sample Assessment		
Sample ID:	LCSD56344	Enter Duplicate sample IDs if other than LCSD in the space below.
Duplicate Sample ID:	LCSD56344	
Sample Result (pCi/L, g, F):	3.890	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.699	
Sample Duplicate Result (pCi/L, g, F):	3.912	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.693	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.085	924969609C1
(Based on the LCSD/LCSD Percent Recoveries) Duplicate RPD:	0.04%	924969609C1CUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/USD 1	MS/USD 2
Sample Collection Date:		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in USD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
USD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

⚠ Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*lall 10/1/2020*

*lall 10/1/2020*



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAC  
Date: 9/29/2020  
Worklist: 56344  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2008968
MB Concentration	0.054
MB Counting Uncertainty	0.180
MB MDC	0.415
MB Numerical Performance Indicator	Pass
MB Status vs Numerical Indicator	N/A
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	LCS# (Y or N)?	N
		LCS#56344
Count Date	9/30/2020	
Spike I.D.	19-033	
Decay Corrected Spike Concentration (pCi/mL)	24.544	
Volume Used (mL)	0.10	
Aliquot Volume (L, g, F)	0.909	
Target Conc. (pCi/L, g, F)	4.725	
Uncertainty (Calculated)	0.057	
Result (pCi/L, g, F)	3.582	
LCS1, CS0 Counting Uncertainty (pCi/L, g, F)	0.599	
Numerical Performance Indicator	Fail	
Percent Recovery	82.15%	
Status vs Numerical Indicator	N/A	
Status vs Recovery	Pass	
Upper % Recovery Limit	125%	
Lower % Recovery Limit	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS1, CS0 in the space below:
Sample I.D.	92495960001	
Duplicate Sample I.D.	92495960001 DUP	
Sample Result (pCi/L, g, F)	0.399	
Sample Result Counting Uncertainty (pCi/L, g, F)	0.282	
Sample Duplicate Result (pCi/L, g, F)	0.162	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.250	
Are sample and/or duplicate results below RL?	See Below #	
Duplicate Numerical Performance Indicator	Fail	
Duplicate RPD	89.47%	
Duplicate Status vs Numerical Indicator	N/A	
Duplicate Status vs RPD	Fail	
% RPD Limit	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.
Sample MS I.D.
Sample MSD I.D.
Sample Matrix Spike Result
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)
Sample Matrix Spike Duplicate Result
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/MSD Duplicate RPD
MS/MSD Duplicate Status vs Numerical Indicator
MS/MSD Duplicate Status vs RPD
% RPD Limit

# Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~Subst. in spike prep prep sub to unacceptable precision~~ N/A

LAM 10/1/2020

LAM 10/1/2020

LAM 10/1/2020



### Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: VAL  
Date: 9/29/2020  
Worklist: 56345  
Matrix: WFT

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment		
MB Sample ID	000069	
MB Concentration	0.504	
MB 2 Sigma CSU	0.467	
MB MDC	0.852	
MB Numerical Performance Indicator	3.58	
MB Status vs Numerical Indicator	Fail	
MB Status vs MDC	Pass	

Laboratory Control Sample Assessment	LCS# FY or NY?	
	LCS56345	LCS256345
Count Date	10-20-20	10-20-20
Spike I.D.	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL)	38.140	38.140
Volume Used (mL)	0.15	0.15
Aliquot Volume (mL, g, F)	0.219	0.206
Target Conc. (pCi, g, F)	4.639	4.752
Uncertainty (Calculated)	0.228	0.232
Result (pCi, g, F)	4.461	4.137
LCS/LCSD 2 Sigma CSU (pCi, g, F)	1.517	1.135
Numerical Performance Indicator	-0.25	-0.88
Percent Recovery	96.38%	87.43%
Status vs Numerical Indicator	NA	NA
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	135%	135%
Lower % Recovery Limit	50%	50%

Sample Matrix Spike Control Assessment:	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result:		
Sample Result 2 Sigma CSU (pCi, g, F)		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi, g, F)		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Duplicate Sample Assessment		
Sample I.D.:	LCS56345	Enter Duplicate sample IDs if other than LCS/LCSD in the space below
Duplicate Sample I.D.:	LCS256345	
Sample Result (pCi, g, F)	4.461	
Sample Result 2 Sigma CSU (pCi, g, F)	1.517	
Sample Duplicate Result (pCi, g, F)	4.137	
Sample Duplicate Result 2 Sigma CSU (pCi, g, F)	1.305	
Are sample and/or duplicate results below RFD?	NO	
Duplicate Numerical Performance Indicator	0.373	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD	9.74%	
Duplicate Status vs Numerical Indicator	Pass	
Duplicate Status vs RPD	Pass	
% RPD Limit	35%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.
Sample MS I.D.
Sample MSD I.D.
Sample Matrix Spike Result:
Matrix Spike Result 2 Sigma CSU (pCi, g, F)
Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F)
Duplicate Numerical Performance Indicator
(Based on the Percent Recoveries) MS/MSD Duplicate RPD
MS/MSD Duplicate Status vs Numerical Indicator
MS/MSD Duplicate Status vs RPD
% RPD Limit

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

**Comments:**

If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-blanked.

*Handwritten note:* 10/20/20

*Handwritten signature:* VAL 10/16/2020

September 27, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on September 16, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

---

### **Pace Analytical Services Charlotte**

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92495656001	BRGWA-6S	Water	09/15/20 09:45	09/16/20 09:45
92495656002	BRGWA-5S	Water	09/15/20 13:20	09/16/20 09:45
92495656003	BRGWA-5I	Water	09/15/20 14:02	09/16/20 09:45
92495656004	BRGWA-2S	Water	09/15/20 15:01	09/16/20 09:45
92495656005	BRGWA-2I	Water	09/15/20 16:07	09/16/20 09:45

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92495656001	BRGWA-6S	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92495656002	BRGWA-5S	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92495656003	BRGWA-5I	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92495656004	BRGWA-2S	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92495656005	BRGWA-2I	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92495656001</b>	<b>BRGWA-6S</b>					
	pH	6.43	Std. Units		09/22/20 12:29	
EPA 6010D	Calcium	3.7	mg/L	1.0	09/17/20 18:38	
EPA 6020B	Barium	0.013	mg/L	0.010	09/21/20 16:55	
EPA 6020B	Chromium	0.014	mg/L	0.010	09/21/20 16:55	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	09/21/20 16:55	
SM 2450C-2011	Total Dissolved Solids	79.0	mg/L	10.0	09/17/20 15:25	
EPA 300.0 Rev 2.1 1993	Chloride	2.3	mg/L	1.0	09/23/20 23:33	
<b>92495656002</b>	<b>BRGWA-5S</b>					
	pH	6.25	Std. Units		09/22/20 12:29	
EPA 6010D	Calcium	16.8	mg/L	1.0	09/17/20 18:43	
EPA 6020B	Barium	0.038	mg/L	0.010	09/21/20 17:00	
EPA 6020B	Chromium	0.0048J	mg/L	0.010	09/21/20 17:00	
EPA 6020B	Lead	0.000043J	mg/L	0.0050	09/21/20 17:00	
SM 2450C-2011	Total Dissolved Solids	116	mg/L	10.0	09/17/20 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	09/23/20 23:48	
EPA 300.0 Rev 2.1 1993	Fluoride	0.051J	mg/L	0.10	09/23/20 23:48	
<b>92495656003</b>	<b>BRGWA-5I</b>					
	pH	6.27	Std. Units		09/22/20 12:29	
EPA 6010D	Calcium	12.7	mg/L	1.0	09/17/20 18:47	
EPA 6020B	Barium	0.022	mg/L	0.010	09/21/20 17:06	
EPA 6020B	Chromium	0.0069J	mg/L	0.010	09/21/20 17:06	
EPA 6020B	Cobalt	0.00050J	mg/L	0.0050	09/21/20 17:06	
EPA 6020B	Lead	0.0013J	mg/L	0.0050	09/21/20 17:06	
EPA 6020B	Lithium	0.0010J	mg/L	0.030	09/21/20 17:06	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	09/21/20 17:06	
SM 2450C-2011	Total Dissolved Solids	100	mg/L	10.0	09/17/20 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	09/24/20 00:03	
EPA 300.0 Rev 2.1 1993	Sulfate	1.7	mg/L	1.0	09/24/20 00:03	
<b>92495656004</b>	<b>BRGWA-2S</b>					
	pH	6.01	Std. Units		09/22/20 12:29	
EPA 6010D	Calcium	3.9	mg/L	1.0	09/17/20 19:00	
EPA 6020B	Barium	0.0094J	mg/L	0.010	09/21/20 17:12	
EPA 6020B	Chromium	0.0082J	mg/L	0.010	09/21/20 17:12	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	09/21/20 17:12	
SM 2450C-2011	Total Dissolved Solids	69.0	mg/L	10.0	09/17/20 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	1.7	mg/L	1.0	09/24/20 00:48	
<b>92495656005</b>	<b>BRGWA-2I</b>					
	pH	6.64	Std. Units		09/22/20 12:29	
EPA 6010D	Calcium	14.1	mg/L	1.0	09/17/20 19:04	
EPA 6020B	Barium	0.0083J	mg/L	0.010	09/21/20 17:18	
EPA 6020B	Lithium	0.033	mg/L	0.030	09/21/20 17:18	
EPA 6020B	Molybdenum	0.00070J	mg/L	0.010	09/21/20 17:18	
SM 2450C-2011	Total Dissolved Solids	116	mg/L	10.0	09/17/20 15:26	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	09/24/20 07:27	
EPA 300.0 Rev 2.1 1993	Sulfate	5.9	mg/L	1.0	09/24/20 07:27	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Sample: <b>BRGWA-6S</b>		Lab ID: <b>92495656001</b>		Collected: 09/15/20 09:45		Received: 09/16/20 09:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	<b>6.43</b>	Std. Units			1		09/22/20 12:29		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>3.7</b>	mg/L	1.0	0.070	1	09/16/20 15:14	09/17/20 18:38	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/16/20 18:16	09/21/20 16:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/16/20 18:16	09/21/20 16:55	7440-38-2	
Barium	<b>0.013</b>	mg/L	0.010	0.00071	1	09/16/20 18:16	09/21/20 16:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/16/20 18:16	09/21/20 16:55	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/16/20 18:16	09/21/20 16:55	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/16/20 18:16	09/21/20 16:55	7440-43-9	
Chromium	<b>0.014</b>	mg/L	0.010	0.00055	1	09/16/20 18:16	09/21/20 16:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/16/20 18:16	09/21/20 16:55	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/16/20 18:16	09/21/20 16:55	7439-92-1	
Lithium	<b>0.0027J</b>	mg/L	0.030	0.00081	1	09/16/20 18:16	09/21/20 16:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/16/20 18:16	09/21/20 16:55	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/16/20 18:16	09/21/20 16:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/16/20 18:16	09/21/20 16:55	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 12:58	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>79.0</b>	mg/L	10.0	10.0	1		09/17/20 15:25		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>2.3</b>	mg/L	1.0	0.60	1		09/23/20 23:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/23/20 23:33	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/23/20 23:33	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Sample: BRGWA-5S		Lab ID: 92495656002		Collected: 09/15/20 13:20		Received: 09/16/20 09:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.25	Std. Units			1		09/22/20 12:29		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	16.8	mg/L	1.0	0.070	1	09/16/20 15:14	09/17/20 18:43	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/16/20 18:16	09/21/20 17:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/16/20 18:16	09/21/20 17:00	7440-38-2	
Barium	0.038	mg/L	0.010	0.00071	1	09/16/20 18:16	09/21/20 17:00	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/16/20 18:16	09/21/20 17:00	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/16/20 18:16	09/21/20 17:00	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/16/20 18:16	09/21/20 17:00	7440-43-9	
Chromium	0.0048J	mg/L	0.010	0.00055	1	09/16/20 18:16	09/21/20 17:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/16/20 18:16	09/21/20 17:00	7440-48-4	
Lead	0.000043J	mg/L	0.0050	0.000036	1	09/16/20 18:16	09/21/20 17:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/16/20 18:16	09/21/20 17:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/16/20 18:16	09/21/20 17:00	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/16/20 18:16	09/21/20 17:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/16/20 18:16	09/21/20 17:00	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 13:07	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	116	mg/L	10.0	10.0	1		09/17/20 15:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.7	mg/L	1.0	0.60	1		09/23/20 23:48	16887-00-6	
Fluoride	0.051J	mg/L	0.10	0.050	1		09/23/20 23:48	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/23/20 23:48	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Sample: BRGWA-5I		Lab ID: 92495656003		Collected: 09/15/20 14:02		Received: 09/16/20 09:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.27	Std. Units			1		09/22/20 12:29		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	12.7	mg/L	1.0	0.070	1	09/16/20 15:14	09/17/20 18:47	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/16/20 18:16	09/21/20 17:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/16/20 18:16	09/21/20 17:06	7440-38-2	
Barium	0.022	mg/L	0.010	0.00071	1	09/16/20 18:16	09/21/20 17:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/16/20 18:16	09/21/20 17:06	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/16/20 18:16	09/21/20 17:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/16/20 18:16	09/21/20 17:06	7440-43-9	
Chromium	0.0069J	mg/L	0.010	0.00055	1	09/16/20 18:16	09/21/20 17:06	7440-47-3	
Cobalt	0.00050J	mg/L	0.0050	0.00038	1	09/16/20 18:16	09/21/20 17:06	7440-48-4	
Lead	0.0013J	mg/L	0.0050	0.000036	1	09/16/20 18:16	09/21/20 17:06	7439-92-1	
Lithium	0.0010J	mg/L	0.030	0.00081	1	09/16/20 18:16	09/21/20 17:06	7439-93-2	
Molybdenum	0.0015J	mg/L	0.010	0.00069	1	09/16/20 18:16	09/21/20 17:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/16/20 18:16	09/21/20 17:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/16/20 18:16	09/21/20 17:06	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 13:10	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	100	mg/L	10.0	10.0	1		09/17/20 15:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	3.7	mg/L	1.0	0.60	1		09/24/20 00:03	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/20 00:03	16984-48-8	
Sulfate	1.7	mg/L	1.0	0.50	1		09/24/20 00:03	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Sample: BRGWA-2S		Lab ID: 92495656004		Collected: 09/15/20 15:01		Received: 09/16/20 09:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.01	Std. Units			1		09/22/20 12:29		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	3.9	mg/L	1.0	0.070	1	09/16/20 15:14	09/17/20 19:00	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/16/20 18:16	09/21/20 17:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/16/20 18:16	09/21/20 17:12	7440-38-2	
Barium	0.0094J	mg/L	0.010	0.00071	1	09/16/20 18:16	09/21/20 17:12	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/16/20 18:16	09/21/20 17:12	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/16/20 18:16	09/21/20 17:12	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/16/20 18:16	09/21/20 17:12	7440-43-9	
Chromium	0.0082J	mg/L	0.010	0.00055	1	09/16/20 18:16	09/21/20 17:12	7440-47-3	
Cobalt	0.0010J	mg/L	0.0050	0.00038	1	09/16/20 18:16	09/21/20 17:12	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/16/20 18:16	09/21/20 17:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/16/20 18:16	09/21/20 17:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/16/20 18:16	09/21/20 17:12	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/16/20 18:16	09/21/20 17:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/16/20 18:16	09/21/20 17:12	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 13:12	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	69.0	mg/L	10.0	10.0	1		09/17/20 15:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	1.7	mg/L	1.0	0.60	1		09/24/20 00:48	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/20 00:48	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/24/20 00:48	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Sample: BRGWA-2I		Lab ID: 92495656005		Collected: 09/15/20 16:07		Received: 09/16/20 09:45		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	6.64	Std. Units			1		09/22/20 12:29		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	14.1	mg/L	1.0	0.070	1	09/16/20 15:14	09/17/20 19:04	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/16/20 18:16	09/21/20 17:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/16/20 18:16	09/21/20 17:18	7440-38-2	
Barium	0.0083J	mg/L	0.010	0.00071	1	09/16/20 18:16	09/21/20 17:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/16/20 18:16	09/21/20 17:18	7440-41-7	
Boron	ND	mg/L	0.10	0.0052	1	09/16/20 18:16	09/21/20 17:18	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/16/20 18:16	09/21/20 17:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/16/20 18:16	09/21/20 17:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/16/20 18:16	09/21/20 17:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/16/20 18:16	09/21/20 17:18	7439-92-1	
Lithium	0.033	mg/L	0.030	0.00081	1	09/16/20 18:16	09/21/20 17:18	7439-93-2	
Molybdenum	0.00070J	mg/L	0.010	0.00069	1	09/16/20 18:16	09/21/20 17:18	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/16/20 18:16	09/21/20 17:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/16/20 18:16	09/21/20 17:18	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 13:14	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	116	mg/L	10.0	10.0	1		09/17/20 15:26		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	1.9	mg/L	1.0	0.60	1		09/24/20 07:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/24/20 07:27	16984-48-8	
Sulfate	5.9	mg/L	1.0	0.50	1		09/24/20 07:27	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

QC Batch:	566871	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

METHOD BLANK: 3003868 Matrix: Water  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/17/20 17:42	

LABORATORY CONTROL SAMPLE: 3003869

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.93J	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3003870 3003871

Parameter	Units	3003870		3003871		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495653001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	5.7	1	1	6.6	6.6	89	87	75-125	0	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

QC Batch: 566966 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

METHOD BLANK: 3004543 Matrix: Water  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	09/21/20 15:26	
Arsenic	mg/L	ND	0.0050	0.00078	09/21/20 15:26	
Barium	mg/L	ND	0.010	0.00071	09/21/20 15:26	
Beryllium	mg/L	ND	0.0030	0.000046	09/21/20 15:26	
Boron	mg/L	ND	0.10	0.0052	09/21/20 15:26	
Cadmium	mg/L	ND	0.0025	0.00012	09/21/20 15:26	
Chromium	mg/L	ND	0.010	0.00055	09/21/20 15:26	
Cobalt	mg/L	ND	0.0050	0.00038	09/21/20 15:26	
Lead	mg/L	ND	0.0050	0.000036	09/21/20 15:26	
Lithium	mg/L	ND	0.030	0.00081	09/21/20 15:26	
Molybdenum	mg/L	ND	0.010	0.00069	09/21/20 15:26	
Selenium	mg/L	ND	0.010	0.0016	09/21/20 15:26	
Thallium	mg/L	ND	0.0010	0.00014	09/21/20 15:26	

LABORATORY CONTROL SAMPLE: 3004544

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	105	80-120	
Boron	mg/L	1	1.1	109	80-120	
Cadmium	mg/L	0.1	0.099	99	80-120	
Chromium	mg/L	0.1	0.10	105	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.099	99	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3004545 3004546

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495653001	Result	Spike Conc.	Spike Conc.								
Antimony	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20		
Arsenic	mg/L	ND	0.1	0.1	0.10	0.096	101	96	75-125	5	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

Parameter	Units	3004545		3004546		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495653001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.058	0.1	0.1	0.16	0.15	99	95	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.096	102	96	75-125	6	20		
Boron	mg/L	ND	1	1	1.0	0.98	103	97	75-125	5	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.096	100	96	75-125	4	20		
Chromium	mg/L	0.0025J	0.1	0.1	0.11	0.099	103	96	75-125	7	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20		
Lead	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	104	100	75-125	4	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	3	20		
Selenium	mg/L	ND	0.1	0.1	0.098	0.10	98	99	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.097	0.094	97	94	75-125	4	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

QC Batch: 567255 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

METHOD BLANK: 3006139 Matrix: Water  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/18/20 12:53	

LABORATORY CONTROL SAMPLE: 3006140

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0026	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3006141 3006142

Parameter	Units	3006141		3006142		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495656001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0025	102	100	75-125	2	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

QC Batch: 567139 Analysis Method: SM 2450C-2011  
QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

METHOD BLANK: 3005336 Matrix: Water  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004, 92495656005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/17/20 15:22	

LABORATORY CONTROL SAMPLE: 3005337

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	420	105	84-108	

SAMPLE DUPLICATE: 3005338

Parameter	Units	92494171032 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	146	142	3	10	

SAMPLE DUPLICATE: 3005339

Parameter	Units	92495656003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	100	95.0	5	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

QC Batch: 568234 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004

METHOD BLANK: 3010905 Matrix: Water  
Associated Lab Samples: 92495656001, 92495656002, 92495656003, 92495656004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/23/20 17:04	
Fluoride	mg/L	ND	0.10	0.050	09/23/20 17:04	
Sulfate	mg/L	ND	1.0	0.50	09/23/20 17:04	

LABORATORY CONTROL SAMPLE: 3010906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	53.0	106	90-110	
Fluoride	mg/L	2.5	2.7	109	90-110	
Sulfate	mg/L	50	53.2	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3010909 3010910

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92496730002	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	264	50	50	389	389	249	249	90-110	0	10		
Fluoride	mg/L	0.60	2.5	2.5	3.3	3.4	110	110	90-110	1	10		
Sulfate	mg/L	3.0	50	50	57.3	57.3	109	109	90-110	0	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3011115 3011116

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92496730004	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	109	50	50	158	158	97	97	90-110	0	10		
Fluoride	mg/L	0.43	2.5	2.5	3.1	3.2	108	109	90-110	1	10		
Sulfate	mg/L	79.4	50	50	120	120	81	81	90-110	0	10 M1		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

QC Batch: 568377 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92495656005

METHOD BLANK: 3011350 Matrix: Water  
Associated Lab Samples: 92495656005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/24/20 06:58	
Fluoride	mg/L	ND	0.10	0.050	09/24/20 06:58	
Sulfate	mg/L	ND	1.0	0.50	09/24/20 06:58	

LABORATORY CONTROL SAMPLE: 3011351

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.7	101	90-110	
Fluoride	mg/L	2.5	2.6	102	90-110	
Sulfate	mg/L	50	50.1	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3011352 3011353

Parameter	Units	92495656005		3011352		3011353		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				
Chloride	mg/L	1.9	50	50	55.8	56.2	108	109	90-110	1	10
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	109	110	90-110	1	10
Sulfate	mg/L	5.9	50	50	59.3	59.6	107	108	90-110	1	10

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3011354 3011355

Parameter	Units	92496524001		3011354		3011355		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result				
Chloride	mg/L	2.6	50	50	56.8	57.6	108	110	90-110	1	10
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	108	110	90-110	2	10
Sulfate	mg/L	1.0	50	50	54.0	54.8	106	108	90-110	1	10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92495656

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92495656

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92495656001	BRGWA-6S				
92495656002	BRGWA-5S				
92495656003	BRGWA-5I				
92495656004	BRGWA-2S				
92495656005	BRGWA-2I				
92495656001	BRGWA-6S	EPA 3010A	566871	EPA 6010D	566908
92495656002	BRGWA-5S	EPA 3010A	566871	EPA 6010D	566908
92495656003	BRGWA-5I	EPA 3010A	566871	EPA 6010D	566908
92495656004	BRGWA-2S	EPA 3010A	566871	EPA 6010D	566908
92495656005	BRGWA-2I	EPA 3010A	566871	EPA 6010D	566908
92495656001	BRGWA-6S	EPA 3005A	566966	EPA 6020B	566971
92495656002	BRGWA-5S	EPA 3005A	566966	EPA 6020B	566971
92495656003	BRGWA-5I	EPA 3005A	566966	EPA 6020B	566971
92495656004	BRGWA-2S	EPA 3005A	566966	EPA 6020B	566971
92495656005	BRGWA-2I	EPA 3005A	566966	EPA 6020B	566971
92495656001	BRGWA-6S	EPA 7470A	567255	EPA 7470A	567454
92495656002	BRGWA-5S	EPA 7470A	567255	EPA 7470A	567454
92495656003	BRGWA-5I	EPA 7470A	567255	EPA 7470A	567454
92495656004	BRGWA-2S	EPA 7470A	567255	EPA 7470A	567454
92495656005	BRGWA-2I	EPA 7470A	567255	EPA 7470A	567454
92495656001	BRGWA-6S	SM 2450C-2011	567139		
92495656002	BRGWA-5S	SM 2450C-2011	567139		
92495656003	BRGWA-5I	SM 2450C-2011	567139		
92495656004	BRGWA-2S	SM 2450C-2011	567139		
92495656005	BRGWA-2I	SM 2450C-2011	567139		
92495656001	BRGWA-6S	EPA 300.0 Rev 2.1 1993	568234		
92495656002	BRGWA-5S	EPA 300.0 Rev 2.1 1993	568234		
92495656003	BRGWA-5I	EPA 300.0 Rev 2.1 1993	568234		
92495656004	BRGWA-2S	EPA 300.0 Rev 2.1 1993	568234		
92495656005	BRGWA-2I	EPA 300.0 Rev 2.1 1993	568377		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Sample Condition Upon Receipt

WO#: 92495656

Client Name: GA Power



92495656

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Proj. Name: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used \_\_\_\_\_ Type of Ice:  Wet  Blue  None  Samples on ice, cooling process has begun

Cooler Temperature 2/14 0.8 Biological Tissue is Frozen: Yes No  
Temp should be above freezing to 6°C

Date and Initials of person examining contents: 9/16/2004

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, colform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

\_\_\_\_\_

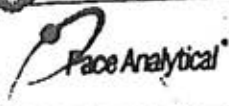
\_\_\_\_\_

\_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)





Document Name:  
Bottle Identification Form (BIF)  
Document No.:  
F-CAR-CS-043-Rev.00

Document issued: March 14, 2019  
Page 1 of 1  
Issuing Authority:  
Pace Carolinas Quality Office

Project #

**WO# : 92495656**

PM: KLH1 Due Date: 09/30/20  
CLIENT: GA-GA Power

\*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/BO15 (water) DOC, LLHg

Bottom half of box is to list number of bottle

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (C-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)	BP3H-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (C-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (C-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (C-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GX (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP9A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG6U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Sedimentation vials (N/A)	
	1																											
	2																											
	3																											
	4																											
	5																											
	6																											
	7																											
	8																											
	9																											
	10																											
	11																											
	12																											

**pH Adjustment Log for Preserved Samples**

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification C  
Out of hold, incorrect preservative, out of temp, incorrect containers.



### CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Attach Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here

Company: Georgia Power - Coal Combustion Residuals		Billing Information	
Address: 2480 Manner Road Atlanta, GA 30339			
Report To: Joju Abraham		Email To: scsvoices@southernco.com	
Copy To: Golder		Site Collection Info/Address: Plant Branch	
Phone: (404) 506-7239		State: Georgia City: Milledgeville Time Zone: Collected	
Email: j.abraham@southernco.com		[ ] PT [ ] MT [ ] CT [ ] X CT	
Phone: (404) 506-7239	Project Name: Plant Branch BCD/E Background	Pace Profile#	
Email: j.abraham@southernco.com	Project # CCR 3rd Semi-Annual		
Collected By (print): Travis Martinez, Andrea McClure	Purchase Order #	Pace Project Manager: kevin.herring@pacelab.com	
Collected By (signature): <i>[Signature]</i>	Quote #	Immediately Packed on Ice [X] Yes [ ] No	
	Turnaround Date Required	Field Filtered (if applicable) [ ] Yes [ ] No	
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)	Analysis: _____	

**ALL SHADED AREAS are for LAB USE ONLY**

Container Preservative Type **										Lab Project Manager:	
1											

\*\* Preservative Types (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) nitric acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses				Lab Profile/Line:	
Metals 6010/6020/7470 - see comments	TOS	Chloride/Fluoride/Sulfate	Radium 226-228	Lab Sample Receipt Checklist:	
				Custody Seals Present/Intact Y N NA	
				Custody Signatures Present Y N NA	
				Collector Signature Present Y N NA	
				Bottles Intact Y N NA	
Correct Bottles Y N NA					
Sufficient Volume Y N NA					
Samples Received on Ice Y N NA					
VDA - Headspace Acceptable Y N NA					
USDA Regulated Soils Y N NA					
Samples in Holding Time Y N NA					
Residual Chlorine Present Y N NA					
Cl Strips: _____					
Sample pH Acceptable Y N NA					
pH Strips: _____					
Sulfide Present Y N NA					
Lead Acetate Strips: _____					

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (S), Oil (O), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		pH	# of Ctns
			Date	Time	Date	Time		
BRGWA-6S	GW	G	9-15-2020	0945			6.43	5
BRGWA-5S	GW	G	9-15-2020	1320			6.25	5
BRGWA-5I	GW	G	9-15-2020	1402			6.27	5
BRGWA-2S	GW	G	9-15-2020	1501			6.01	5
BRGWA-2I	GW	G	9-15-2020	1607			6.64	5

LAB USE ONLY: Lab Sample # / Comments: <i>92495656</i>	
--	--

(Metals): As, B, Ba, Be, Ca, Cd, Co, Cr, Mo, Pb, Sb, Se, Li, Tl, Hg	Type of Ice Used: Wet Blue Dry None	SHORT HOLDS PRESENT (<72 hours): Y N N/A	LAB Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: _____ Cooler 1 Temp Upon Receipt: ___oC Cooler 1 Therm Corr. Factor: ___oC Cooler 1 Corrected Temp: ___oC Comments:
	Packing Material Used:	Lab Tracking #:	
	Radchem sample(s) screened (<500 cpm): Y N NA	Samples received via: FEDEX UPS Client Courier Pace Courier	

Relinquished by/Company: (Signature) <i>[Signature]</i> / Golder	Date/Time: 9-16-2020 / 0800	Received by/Company: (Signature) <i>[Signature]</i>	Date/Time: 9/16/20 0945	MTJL LAB USE ONLY Table #
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Account: Template: Prelogin: PM: PB:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Trip Blank Received: Y N NA HCL MeOH TSP Other
				Non Conformance(s): YES / NO

October 12, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK RADS  
Pace Project No.: 92495960

Dear Joju Abraham:

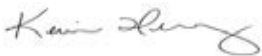
Enclosed are the analytical results for sample(s) received by the laboratory between September 17, 2020 and September 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92495960

---

### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE SUMMARY

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92495960

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92495960001	BRGWC-35S	Water	09/16/20 09:05	09/17/20 10:00
92495960002	BRGWC-34S	Water	09/16/20 09:59	09/17/20 10:00
92495960003	BRGWC-33S	Water	09/16/20 11:02	09/17/20 10:00
92495960004	BRGWC-17S	Water	09/16/20 12:30	09/17/20 10:00
92495960005	BRGWC-36S	Water	09/16/20 15:21	09/17/20 10:00
92495960006	BRGWC-37S	Water	09/16/20 16:09	09/17/20 10:00
92495960007	FB-1	Water	09/16/20 10:10	09/17/20 10:00
92495960008	DUP-2	Water	09/16/20 00:00	09/17/20 10:00
92495960009	BRGWC-38S	Water	09/17/20 11:26	09/18/20 10:15

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92495960001	BRGWC-35S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960002	BRGWC-34S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960003	BRGWC-33S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960004	BRGWC-17S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960005	BRGWC-36S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960006	BRGWC-37S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960007	FB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960008	DUP-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92495960009	BRGWC-38S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92495960

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495960001</b>	<b>BRGWC-35S</b>					
EPA 9315	Radium-226	0.399 ± 0.288 (0.465) C:82% T:NA	pCi/L		09/30/20 09:01	
EPA 9320	Radium-228	0.846 ± 0.848 (1.77) C:66% T:85%	pCi/L		10/05/20 18:33	
Total Radium Calculation	Total Radium	1.25 ± 1.14 (2.24)	pCi/L		10/07/20 15:56	
<b>92495960002</b>	<b>BRGWC-34S</b>					
EPA 9315	Radium-226	0.156 ± 0.212 (0.446) C:86% T:NA	pCi/L		09/30/20 08:22	
EPA 9320	Radium-228	0.564 ± 0.797 (1.71) C:67% T:80%	pCi/L		10/05/20 18:33	
Total Radium Calculation	Total Radium	0.720 ± 1.01 (2.16)	pCi/L		10/07/20 15:56	
<b>92495960003</b>	<b>BRGWC-33S</b>					
EPA 9315	Radium-226	0.0620 ± 0.200 (0.495) C:86% T:NA	pCi/L		09/30/20 08:29	
EPA 9320	Radium-228	0.133 ± 0.499 (1.13) C:62% T:72%	pCi/L		10/06/20 11:51	
Total Radium Calculation	Total Radium	0.195 ± 0.699 (1.63)	pCi/L		10/07/20 15:56	
<b>92495960004</b>	<b>BRGWC-17S</b>					
EPA 9315	Radium-226	-0.0553 ± 0.184 (0.552) C:80% T:NA	pCi/L		09/30/20 08:30	
EPA 9320	Radium-228	0.478 ± 0.453 (0.929) C:62% T:83%	pCi/L		10/06/20 11:51	
Total Radium Calculation	Total Radium	0.478 ± 0.637 (1.48)	pCi/L		10/07/20 15:56	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495960005</b>	<b>BRGWC-36S</b>					
EPA 9315	Radium-226	0.239 ± 0.229 (0.425) C:87% T:NA	pCi/L		09/30/20 08:31	
EPA 9320	Radium-228	0.926 ± 0.502 (0.904) C:64% T:81%	pCi/L		10/06/20 11:51	
Total Radium Calculation	Total Radium	1.17 ± 0.731 (1.33)	pCi/L		10/07/20 15:56	
<b>92495960006</b>	<b>BRGWC-37S</b>					
EPA 9315	Radium-226	0.276 ± 0.291 (0.588) C:83% T:NA	pCi/L		09/30/20 08:32	
EPA 9320	Radium-228	0.568 ± 0.492 (1.00) C:67% T:79%	pCi/L		10/06/20 11:51	
Total Radium Calculation	Total Radium	0.844 ± 0.783 (1.59)	pCi/L		10/07/20 15:56	
<b>92495960007</b>	<b>FB-1</b>					
EPA 9315	Radium-226	0.116 ± 0.208 (0.473) C:95% T:NA	pCi/L		09/30/20 08:24	
EPA 9320	Radium-228	0.0575 ± 0.419 (0.957) C:65% T:84%	pCi/L		10/06/20 11:51	
Total Radium Calculation	Total Radium	0.174 ± 0.627 (1.43)	pCi/L		10/07/20 15:56	
<b>92495960008</b>	<b>DUP-2</b>					
EPA 9315	Radium-226	0.283 ± 0.239 (0.426) C:88% T:NA	pCi/L		09/30/20 08:33	
EPA 9320	Radium-228	0.907 ± 0.502 (0.922) C:65% T:84%	pCi/L		10/06/20 11:52	
Total Radium Calculation	Total Radium	1.19 ± 0.741 (1.35)	pCi/L		10/07/20 15:56	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495960009</b>	<b>BRGWC-38S</b>					
EPA 9315	Radium-226	0.852 ± 0.369 (0.409)	pCi/L		09/30/20 08:25	
EPA 9320	Radium-228	C:91% T:NA 2.07 ± 0.730 (1.08)	pCi/L		10/06/20 11:52	
Total Radium Calculation	Total Radium	C:63% T:74% 2.92 ± 1.10 (1.49)	pCi/L		10/07/20 15:56	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-35S</b> <b>Lab ID: 92495960001</b> Collected: 09/16/20 09:05      Received: 09/17/20 10:00      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.399 ± 0.288 (0.465)</b> <b>C:82% T:NA</b>	pCi/L	09/30/20 09:01	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.846 ± 0.848 (1.77)</b> <b>C:66% T:85%</b>	pCi/L	10/05/20 18:33	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.25 ± 1.14 (2.24)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-34S</b> <b>Lab ID: 92495960002</b> Collected: 09/16/20 09:59      Received: 09/17/20 10:00      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.156 ± 0.212 (0.446)</b> <b>C:86% T:NA</b>	pCi/L	09/30/20 08:22	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.564 ± 0.797 (1.71)</b> <b>C:67% T:80%</b>	pCi/L	10/05/20 18:33	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.720 ± 1.01 (2.16)</b>	pCi/L	10/07/20 15:56	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

**Sample: BRGWC-33S**      **Lab ID: 92495960003**      Collected: 09/16/20 11:02      Received: 09/17/20 10:00      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0620 ± 0.200 (0.495)</b> <b>C:86% T:NA</b>	pCi/L	09/30/20 08:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.133 ± 0.499 (1.13)</b> <b>C:62% T:72%</b>	pCi/L	10/06/20 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.195 ± 0.699 (1.63)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

**Sample: BRGWC-17S**      **Lab ID: 92495960004**      Collected: 09/16/20 12:30      Received: 09/17/20 10:00      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0553 ± 0.184 (0.552)</b> <b>C:80% T:NA</b>	pCi/L	09/30/20 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.478 ± 0.453 (0.929)</b> <b>C:62% T:83%</b>	pCi/L	10/06/20 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.478 ± 0.637 (1.48)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Sample: **BRGWC-36S** Lab ID: **92495960005** Collected: 09/16/20 15:21 Received: 09/17/20 10:00 Matrix: Water  
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.239 ± 0.229 (0.425)</b> <b>C:87% T:NA</b>	pCi/L	09/30/20 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.926 ± 0.502 (0.904)</b> <b>C:64% T:81%</b>	pCi/L	10/06/20 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.17 ± 0.731 (1.33)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

**Sample: BRGWC-37S**      **Lab ID: 92495960006**      Collected: 09/16/20 16:09      Received: 09/17/20 10:00      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.276 ± 0.291 (0.588)</b> <b>C:83% T:NA</b>	pCi/L	09/30/20 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.568 ± 0.492 (1.00)</b> <b>C:67% T:79%</b>	pCi/L	10/06/20 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.844 ± 0.783 (1.59)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Sample: **FB-1** Lab ID: **92495960007** Collected: 09/16/20 10:10 Received: 09/17/20 10:00 Matrix: Water  
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.116 ± 0.208 (0.473)</b> <b>C:95% T:NA</b>	pCi/L	09/30/20 08:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.0575 ± 0.419 (0.957)</b> <b>C:65% T:84%</b>	pCi/L	10/06/20 11:51	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.174 ± 0.627 (1.43)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

**Sample: DUP-2**      **Lab ID: 92495960008**      Collected: 09/16/20 00:00      Received: 09/17/20 10:00      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.283 ± 0.239 (0.426)</b> <b>C:88% T:NA</b>	pCi/L	09/30/20 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.907 ± 0.502 (0.922)</b> <b>C:65% T:84%</b>	pCi/L	10/06/20 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.19 ± 0.741 (1.35)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-38S</b> <b>Lab ID: 92495960009</b> Collected: 09/17/20 11:26      Received: 09/18/20 10:15      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.852 ± 0.369 (0.409)</b> <b>C:91% T:NA</b>	pCi/L	09/30/20 08:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>2.07 ± 0.730 (1.08)</b> <b>C:63% T:74%</b>	pCi/L	10/06/20 11:52	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>2.92 ± 1.10 (1.49)</b>	pCi/L	10/07/20 15:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

QC Batch: 415401

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92495960001, 92495960002

METHOD BLANK: 2008969

Matrix: Water

Associated Lab Samples: 92495960001, 92495960002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.804 ± 0.467 (0.852) C:69% T:78%	pCi/L	10/05/20 15:01	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

QC Batch: 415400

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92495960001, 92495960002

METHOD BLANK: 2008968

Matrix: Water

Associated Lab Samples: 92495960001, 92495960002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0938 ± 0.181 (0.415) C:94% T:NA	pCi/L	09/30/20 07:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALIFIERS

Project: BRANCH E NETWORK RADS

Pace Project No.: 92495960

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92495960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92495960001	BRGWC-35S	EPA 9315	415400		
92495960002	BRGWC-34S	EPA 9315	415400		
92495960003	BRGWC-33S	EPA 9315	415402		
92495960004	BRGWC-17S	EPA 9315	415402		
92495960005	BRGWC-36S	EPA 9315	415402		
92495960006	BRGWC-37S	EPA 9315	415402		
92495960007	FB-1	EPA 9315	415402		
92495960008	DUP-2	EPA 9315	415402		
92495960009	BRGWC-38S	EPA 9315	415402		
92495960001	BRGWC-35S	EPA 9320	415401		
92495960002	BRGWC-34S	EPA 9320	415401		
92495960003	BRGWC-33S	EPA 9320	415403		
92495960004	BRGWC-17S	EPA 9320	415403		
92495960005	BRGWC-36S	EPA 9320	415403		
92495960006	BRGWC-37S	EPA 9320	415403		
92495960007	FB-1	EPA 9320	415403		
92495960008	DUP-2	EPA 9320	415403		
92495960009	BRGWC-38S	EPA 9320	415403		
92495960001	BRGWC-35S	Total Radium Calculation	417460		
92495960002	BRGWC-34S	Total Radium Calculation	417460		
92495960003	BRGWC-33S	Total Radium Calculation	417460		
92495960004	BRGWC-17S	Total Radium Calculation	417460		
92495960005	BRGWC-36S	Total Radium Calculation	417460		
92495960006	BRGWC-37S	Total Radium Calculation	417460		
92495960007	FB-1	Total Radium Calculation	417460		
92495960008	DUP-2	Total Radium Calculation	417460		
92495960009	BRGWC-38S	Total Radium Calculation	417460		

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.





Sample Condition Upon Rec

WO#: 92495960

Client Name: G. A. Lower



Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other

Tracking #: \_\_\_\_\_

Proj. Due Date: \_\_\_\_\_  
Proj. Name: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no    Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used 214

Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 1.1  
Temp should be above freezing to 6°C

Biological Tissue is Frozen: Yes No

Date and initials of person examining contents: 9/17/2004

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
<del>All containers needing preservation have been checked</del>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, W-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office ( i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:  
Bottle Identification Form (BIF)  
Document No.:  
F-CAR-CS-043-Rev.00

Document Issued: March 14, 2019  
Page 1 of 1  
Issuing Authority:  
Pace Carolinas Quality Office

Project

W0# : 92495960

PM: KLH1

Due Date: 10/01/20

CLIENT: GA-GA Power

• Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/BO15 (water) DOC, LLHg

• Bottom half of box is to list number of bottle

Matrix	Item#	BP4U-125 mL Plastic Unpreserved (N/A) (C-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (C-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic 2N Acetate & NaOH (pH > 9)	BP4C-125 mL Plastic NaOH (pH > 12) (C-)	WGSU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (C-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (C-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(C-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NH2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-S03S kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG8U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	
	1																												
	2																												
	3																												
	4																												
	5																												
	6																												
	7																												
	8																												
	9																												
	10																												
	11																												
	12																												

BPIN

2  
2  
2  
2  
2  
2  
2  
2  
2  
2

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office. Out of hold, incorrect preservative, out of temp, incorrect containers.



### Quality Control Sample Performance Assessment



Test: Ra-228  
Analyst: LAL  
Date: 8/29/2020  
Worksheet: 56346  
Matrix: CW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2008571
MB Concentration	<0.02
MB Counting Uncertainty	0.179
MB MDC	0.422
MB Numerical Performance Indicator	<0.25
MB Status vs Numerical Indicator	NA
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCS# 7Y or 17P	
	LCS#6246	LCS#56346
Count Date	8/29/2020	8/29/2020
Spike - D	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL)	24.044	24.044
Volume Used (mL)	0.10	0.10
Aliquot Volume (L, g, F)	0.504	0.505
Target Conc. (pCi/L, g, F)	4.774	4.731
Uncertainty (Calculated)	0.057	0.057
Result (pCi/L, g, F)	5.385	4.719
LCS/LCSD Counting Uncertainty (pCi/L, g, F)	0.860	0.760
Numerical Performance Indicator	1.40	<0.03
Percent Recovery	112.87%	99.74%
Status vs Numerical Indicator	NA	NA
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	125%	125%
Lower % Recovery Limit	75%	75%

Sample Matrix Spike Control Assessment	VSM#D 1	VSM#D 2
Sample Collection Date:		
Sample I.D.:		
Sample MS I.D.:		
Sample MSD I.D.:		
Spike I.D.:		
VSM#SD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
VSM#SD Upper % Recovery Limit:		
VSM#SD Lower % Recovery Limit:		

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:	LCS#56346	
Duplicate Sample I.D.:	LCS#56346	
Sample Result (pCi/L, g, F)	5.385	
Sample Result Counting Uncertainty (pCi/L, g, F)	0.860	
Sample Duplicate Result (pCi/L, g, F)	4.719	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.760	
Are sample and/or duplicate results below RPD?	NO	
Duplicate Numerical Performance Indicator (Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.128	
Duplicate Status vs Numerical Indicator	NA	
Duplicate Status vs RPD	Pass	
% RPD Limit	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.:
Sample MS - D:
Sample MSD I.D.:
Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)
Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/MSD Duplicate RPD:
MS/MSD Duplicate Status vs Numerical Indicator
MS/MSD Duplicate Status vs RPD
% RPD Limit

\*# Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Quint 1/2020*

*LAM 10/1/2020*

### Quality Control Sample Performance Assessment



Test: Ra-229  
Analyst: CAL  
Date: 9/29/2020  
Worklist: 58348  
Matrix: DVN

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Method Blank Assessment		
MB Sample ID	200697	
MB Concentration	< 0.21	
MB Counting Uncertainty	0.170	
MB MDC	0.482	
MB Numerical Performance Indicator	0.25	
MB Status vs Numerical Indicator	N/A	
MB Status vs MDC	Pass	

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCSD56345	LCSD56346
Count Date	9/30/2020	
Spike ID	19-033	
Decay Corrected Spike Concentration (pCi/L)	24.384	
Volume Used (mL)	0.10	
Adjust Volume (L, g, F)	0.534	
Target Conc. (pCi/L, g, F)	4.774	
Uncertainty (Calculated)	0.657	
Result (pCi/L, g, F)	5.063	
LGS/LCSD Counting Uncertainty (pCi/L, g, F)	0.880	
Numerical Performance Indicator	1.40	
Percent Recovery	112.87%	
Status vs Numerical Indicator	N/A	
Status vs Recovery	Pass	
Upper % Recovery Limit	125%	
Lower % Recovery Limit	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/L)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Duplicate Sample Assessment		
Sample ID	92495249001	Enter Duplicate sample IDs in the space below:  92495249001 92495249001DU
Duplicate Sample ID	92495249001DU	
Sample Result (pCi/L, g, F)	0.241	
Sample Result Counting Uncertainty (pCi/L, g, F)	0.234	
Sample Duplicate Result (pCi/L, g, F)	0.452	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.344	
Are sample and/or duplicate results below RPD?	See Below #	
Duplicate Numerical Performance Indicator	0.993	
Duplicate RPD	50.22%	
Duplicate Status vs Numerical Indicator	N/A	
Duplicate Status vs RPD	Fail**	
% RPD Limit	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample ID:
Sample MS ID:
Sample MSD ID:
Sample Matrix Spike Result:
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):
Sample Matrix Spike Duplicate Result:
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):
Duplicate Numerical Performance Indicator (Based on the Percent Recovery):
MS/MSD Duplicate Status vs Numerical Indicator:
MS/MSD Duplicate Status vs RPD:
% RPD Limit:

# Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~Blank must be re-prepared due to unacceptable precision.~~ N/A

CAL 10/1/2020

CAL 10/1/2020

CAL 10/1/2020



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAL  
Date: 9/29/2020  
Worksheet: 55344  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID:	2008968
MB concentration:	0.094
MB Counting Uncertainty:	0.180
MB MDC:	0.416
MB Numerical Performance Indicator:	1.02
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCSD56344	LCSD56344
Count Date:	9/29/2020	9/29/2020
Spike C.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.044	24.044
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.509	0.505
Target Conc. (pCi/L, g, F):	4.723	4.761
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	3.890	3.912
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.659	0.653
Numerical Performance Indicator:	-2.36	-2.39
Percent Recovery:	82.15%	82.18%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limit:	125%	125%
Lower % Recovery Limit:	75%	75%

Duplicate Sample Assessment		
Sample ID:	LCSD56344	Enter Duplicate sample IDs if other than LCSD in the space below.
Duplicate Sample ID:	LCSD56344	
Sample Result (pCi/L, g, F):	3.890	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.699	
Sample Duplicate Result (pCi/L, g, F):	3.912	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.693	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.085	924969600C1
(Based on the LCSD/LCSD Percent Recoveries) Duplicate RPD:	0.04%	924969600C1LCP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Sample Matrix Spike Control Assessment	MS/USD 1	MS/USD 2
Sample Collection Date:		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in USD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
USD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

⚠ Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*lall 10/1/2020*

*lall 10/1/2020*



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: LAC  
Date: 9/29/2020  
Worklist: 56344  
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	200868
MB Concentration	0.054
MB Counting Uncertainty	0.180
MB MDC	0.418
MB Numerical Performance Indicator	Pass
MB Status vs Numerical Indicator	N/A
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	LCS# (Y or N)?	N
		LCS#56344
Count Date	9/30/2020	
Spike I.D.	19-033	
Decay Corrected Spike Concentration (pCi/mL)	24.544	
Volume Used (mL)	0.10	
Aliquot Volume (L, g, F)	0.909	
Target Conc. (pCi/L, g, F)	4.728	
Uncertainty (Calculated)	0.057	
Result (pCi/L, g, F)	3.582	
LCS1,CS0 Counting Uncertainty (pCi/L, g, F)	0.599	
Numerical Performance Indicator	Fail	
Percent Recovery	82.15%	
Status vs Numerical Indicator	N/A	
Status vs Recovery	Pass	
Upper % Recovery Limit	125%	
Lower % Recovery Limit	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi/L, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi/L, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result		
Sample Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Duplicate Sample Assessment	
Sample I.D.	9249596001
Duplicate Sample I.D.	9249596001 DUP
Sample Result (pCi/L, g, F)	0.399
Sample Result Counting Uncertainty (pCi/L, g, F)	0.282
Sample Duplicate Result (pCi/L, g, F)	0.162
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F)	0.250
Are sample and/or duplicate results below RL?	See Below #
Duplicate Numerical Performance Indicator	Fail
Duplicate RPD	89.47%
Duplicate Status vs Numerical Indicator	N/A
Duplicate Status vs RPD	Fail
% RPD Limit	25%

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	
Sample MS I.D.	
Sample MSD I.D.	
Sample Matrix Spike Result	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F)	
Duplicate Numerical Performance Indicator	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD	
MS/MSD Duplicate Status vs Numerical Indicator	
MS/MSD Duplicate Status vs RPD	
% RPD Limit	

# Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

~~Subst. in spike prep prep sub to unacceptable precision~~ N/A

LAM 10/1/2020

LAM 10/1/2020

LAM 10/1/2020



## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: VAL  
Date: 9/29/2020  
Worklist: 56345  
Matrix: WFT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment		
MB Sample ID	000069	
MB Concentration	0.504	
MB 2 Sigma CSU	0.467	
MB MDC	0.852	
MB Numerical Performance Indicator	3.58	
MB Status vs Numerical Indicator	Fail	
MB Status vs MDC	Pass	

Laboratory Control Sample Assessment	LCS# FY or NY?	
	LCS56345	LCS256345
Count Date	10-22-2020	10-22-2020
Spike I.D.	20-030	20-030
Decay Corrected Spike Concentration (pCi/mL)	38.140	38.140
Volume Used (mL)	0.10	0.10
Aliquot Volume (mL, g, F)	0.219	0.206
Target Conc. (pCi, g, F)	4.639	4.752
Uncertainty (Calculated)	0.228	0.232
Result (pCi, g, F)	4.461	4.137
LCS/LCSD 2 Sigma CSU (pCi, g, F)	1.517	1.135
Numerical Performance Indicator	-0.25	-0.88
Percent Recovery	96.38%	87.43%
Status vs Numerical Indicator	NA	NA
Status vs Recovery	Pass	Pass
Upper % Recovery Limit	135%	135%
Lower % Recovery Limit	50%	50%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spike I.D.		
MS/MSD Decay Corrected Spike Concentration (pCi/mL)		
Spike Volume Used in MS (mL)		
Spike Volume Used in MSD (mL)		
MS Aliquot (L, g, F)		
MS Target Conc. (pCi, g, F)		
MSD Aliquot (L, g, F)		
MSD Target Conc. (pCi, g, F)		
MS Spike Uncertainty (Calculated)		
MSD Spike Uncertainty (Calculated)		
Sample Result		
Sample Result 2 Sigma CSU (pCi, g, F)		
Sample Matrix Spike Result		
Matrix Spike Result 2 Sigma CSU (pCi, g, F)		
Sample Matrix Spike Duplicate Result		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F)		
MS Numerical Performance Indicator		
MSD Numerical Performance Indicator		
MS Percent Recovery		
MSD Percent Recovery		
MS Status vs Numerical Indicator		
MSD Status vs Numerical Indicator		
MS Status vs Recovery		
MSD Status vs Recovery		
MS/MSD Upper % Recovery Limit		
MS/MSD Lower % Recovery Limit		

Duplicate Sample Assessment		
Sample I.D.	LCS56345	Enter Duplicate sample IDs if other than LCS/LCSD in the space below
Duplicate Sample I.D.	LCS256345	
Sample Result (pCi, g, F)	4.461	
Sample Result 2 Sigma CSU (pCi, g, F)	1.517	
Sample Duplicate Result (pCi, g, F)	4.137	
Sample Duplicate Result 2 Sigma CSU (pCi, g, F)	1.305	
Are sample and/or duplicate results below RFD?	NO	
Duplicate Numerical Performance Indicator	0.373	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD	9.74%	
Duplicate Status vs Numerical Indicator	Pass	
Duplicate Status vs RPD	Pass	
% RPD Limit	35%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D.
Sample MS I.D.
Sample MSD I.D.
Sample Matrix Spike Result
Matrix Spike Result 2 Sigma CSU (pCi, g, F)
Sample Matrix Spike Duplicate Result
Matrix Spike Duplicate Result 2 Sigma CSU (pCi, g, F)
Duplicate Numerical Performance Indicator
(Based on the Percent Recoveries) MS/MSD Duplicate RPD
MS/MSD Duplicate Status vs Numerical Indicator
MS/MSD Duplicate Status vs RPD
% RPD Limit

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

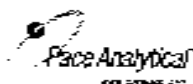
**Comments:**

If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-blanked.

*Handwritten note:* 10/29/20

*Handwritten signature:* VAL 10/29/20





## Quality Control Sample Performance Assessment

Test: Ra-226  
Analyst: VAL  
Date: 9/29/2020  
Worklist: 56347  
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2002973
MB Concentration	0.752
MB 2 Sigma CSU	0.480
MB MDC	0.832
MB Numerical Performance Indicator	3.38
MB Status vs Numerical Indicator	Fail*
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
		LCSD66347
Count Date	13/6/2020	
Spike ID	20-030	
Decay Corrected Spike Concentration (pCi/mL)	38.131	
Volume Used (mL)	0.10	
Aliquot Volume (L, g, F)	0.814	
Target Conc. (pCi/L, g, F)	4.587	
Uncertainty (Calculated)	0.212	
Result (pCi/L, g, F)	6.284	
LCSD/CSU 2 Sigma CSU (pCi/L, g, F)	1.522	
Numerical Performance Indicator	2.52	
Percent Recovery	142.15%	
Status vs Numerical Indicator	Warning	
Status vs Recovery	Fail High**	
Upper % Recovery Limits	135%	
Lower % Recovery Limits	50%	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCSD/CSU in the space below
Sample ID:	92496249001	
Duplicate Sample ID:	92496249001DUP	
Sample Result (pCi/L, g, F)	0.711	
Sample Result 2 Sigma CSU (pCi/L, g, F)	0.513	
Sample Duplicate Result (pCi/L, g, F)	0.232	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F)	0.143	
Are sample and/or duplicate results below RPD?	See Below **	
Duplicate Numerical Performance Indicator	1.254	92496249001
Duplicate RPD	121.90%	92496249001DUP
Duplicate Status vs Numerical Indicator	Pass	
Duplicate Status vs RPD	Fail**	
% RPD Limit	30%	

Sample Matrix Spike Control Assessment	MISMDC 1	MISMDC 2
Sample Collection Date:		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSD Spike Uncertainty (calculated):		
Sample Result:		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limits:		
MS/MSD Lower % Recovery Limits:		

Matrix Spike Duplicate Sample Assessment		
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Sample Matrix Spike Result:		
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Duplicate Numerical Performance Indicator		
(Based on the Percent Recoveries) MS/MSD Duplicate RPD		
MS/MSD Duplicate Status vs Numerical Indicator		
MS/MSD Duplicate Status vs RPD:		
% RPD Limit:		

\*\* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:  
\* If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable, otherwise this batch must be re-grappd.  
\*\* If all sample results are below MDC, the batch is acceptable, otherwise this batch must be re-grappd due to LCS failure

10/1/20

VAL  
10/17/2020

October 01, 2020

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between September 17, 2020 and September 18, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tyler Forney for  
Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Co. Services  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta

Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

---

### **Pace Analytical Services Charlotte**

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
Massachusetts Certification #: M-NC030  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812  
Georgia DW Microbiology Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001  
Virginia Certification #: 460204

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92495964001	BRGWC-35S	Water	09/16/20 09:05	09/17/20 10:00
92495964002	BRGWC-34S	Water	09/16/20 09:59	09/17/20 10:00
92495964003	BRGWC-33S	Water	09/16/20 11:02	09/17/20 10:00
92495964004	BRGWC-17S	Water	09/16/20 12:30	09/17/20 10:00
92495964005	BRGWC-36S	Water	09/16/20 15:21	09/17/20 10:00
92495964006	BRGWC-37S	Water	09/16/20 16:09	09/17/20 10:00
92495964007	FB-1	Water	09/16/20 10:10	09/17/20 10:00
92495964008	DUP-2	Water	09/16/20 00:00	09/17/20 10:00
92495964009	BRGWC-38S	Water	09/17/20 11:26	09/18/20 10:15

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92495964001	BRGWC-35S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964002	BRGWC-34S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964003	BRGWC-33S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964004	BRGWC-17S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964005	BRGWC-36S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964006	BRGWC-37S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964007	FB-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
92495964008	DUP-2	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	BRJ	3
<b>92495964009</b>	<b>BRGWC-38S</b>	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	FFP	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	BRJ	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92495964001</b>	<b>BRGWC-35S</b>					
	pH	5.96	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	61.8	mg/L	1.0	09/22/20 21:32	
EPA 6020B	Barium	0.033	mg/L	0.010	09/22/20 17:42	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	09/22/20 17:42	
EPA 6020B	Boron	1.9	mg/L	0.10	09/22/20 17:42	
EPA 6020B	Chromium	0.0058J	mg/L	0.010	09/22/20 17:42	
EPA 6020B	Lead	0.00012J	mg/L	0.0050	09/22/20 17:42	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	09/22/20 17:42	
SM 2450C-2011	Total Dissolved Solids	474	mg/L	10.0	09/18/20 09:58	
EPA 300.0 Rev 2.1 1993	Chloride	6.0	mg/L	1.0	09/19/20 18:22	
EPA 300.0 Rev 2.1 1993	Fluoride	0.062J	mg/L	0.10	09/19/20 18:22	
EPA 300.0 Rev 2.1 1993	Sulfate	270	mg/L	6.0	09/20/20 04:47	
<b>92495964002</b>	<b>BRGWC-34S</b>					
	pH	5.81	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	77.7	mg/L	1.0	09/22/20 21:37	
EPA 6020B	Barium	0.023	mg/L	0.010	09/22/20 17:48	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	09/22/20 17:48	
EPA 6020B	Boron	2.2	mg/L	0.10	09/22/20 17:48	
EPA 6020B	Cadmium	0.00017J	mg/L	0.0025	09/22/20 17:48	
EPA 6020B	Cobalt	0.0042J	mg/L	0.0050	09/22/20 17:48	
SM 2450C-2011	Total Dissolved Solids	392	mg/L	10.0	09/18/20 09:58	
EPA 300.0 Rev 2.1 1993	Chloride	6.6	mg/L	1.0	09/19/20 18:37	
EPA 300.0 Rev 2.1 1993	Fluoride	0.077J	mg/L	0.10	09/19/20 18:37	
EPA 300.0 Rev 2.1 1993	Sulfate	283	mg/L	6.0	09/20/20 05:01	
<b>92495964003</b>	<b>BRGWC-33S</b>					
	pH	4.78	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	37.9	mg/L	1.0	09/22/20 21:41	
EPA 6020B	Barium	0.019	mg/L	0.010	09/22/20 17:53	
EPA 6020B	Beryllium	0.0015J	mg/L	0.0030	09/22/20 17:53	
EPA 6020B	Boron	1.1	mg/L	0.10	09/22/20 17:53	
EPA 6020B	Cadmium	0.00032J	mg/L	0.0025	09/22/20 17:53	
EPA 6020B	Cobalt	0.034	mg/L	0.0050	09/22/20 17:53	
EPA 6020B	Lead	0.000063J	mg/L	0.0050	09/22/20 17:53	
EPA 6020B	Lithium	0.0089J	mg/L	0.030	09/22/20 17:53	
EPA 6020B	Selenium	0.0028J	mg/L	0.010	09/22/20 17:53	
EPA 6020B	Thallium	0.00018J	mg/L	0.0010	09/22/20 17:53	
SM 2450C-2011	Total Dissolved Solids	88.0	mg/L	10.0	09/18/20 09:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	09/19/20 18:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.085J	mg/L	0.10	09/19/20 18:52	
EPA 300.0 Rev 2.1 1993	Sulfate	154	mg/L	3.0	09/20/20 05:16	
<b>92495964004</b>	<b>BRGWC-17S</b>					
	pH	6.26	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	37.9	mg/L	1.0	09/22/20 21:45	
EPA 6020B	Barium	0.044	mg/L	0.010	09/22/20 18:11	
EPA 6020B	Boron	0.0066J	mg/L	0.10	09/22/20 18:11	
EPA 6020B	Chromium	0.012	mg/L	0.010	09/22/20 18:11	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92495964004</b>	<b>BRGWC-17S</b>					
EPA 6020B	Lead	0.000054J	mg/L	0.0050	09/22/20 18:11	
EPA 6020B	Lithium	0.00096J	mg/L	0.030	09/22/20 18:11	
SM 2450C-2011	Total Dissolved Solids	316	mg/L	10.0	09/18/20 09:59	
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	09/19/20 19:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	09/19/20 19:07	
EPA 300.0 Rev 2.1 1993	Sulfate	151	mg/L	3.0	09/20/20 05:30	
<b>92495964005</b>	<b>BRGWC-36S</b>					
	pH	5.58	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	45.9	mg/L	1.0	09/22/20 21:50	
EPA 6020B	Barium	0.030	mg/L	0.010	09/22/20 18:16	
EPA 6020B	Beryllium	0.000080J	mg/L	0.0030	09/22/20 18:16	
EPA 6020B	Boron	0.99	mg/L	0.10	09/22/20 18:16	
EPA 6020B	Chromium	0.0064J	mg/L	0.010	09/22/20 18:16	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	09/22/20 18:16	
EPA 6020B	Selenium	0.0031J	mg/L	0.010	09/22/20 18:16	
SM 2450C-2011	Total Dissolved Solids	463	mg/L	10.0	09/18/20 09:59	
EPA 300.0 Rev 2.1 1993	Chloride	7.9	mg/L	1.0	09/19/20 19:22	
EPA 300.0 Rev 2.1 1993	Sulfate	256	mg/L	5.0	09/20/20 06:15	M6
<b>92495964006</b>	<b>BRGWC-37S</b>					
	pH	5.84	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	3.2	mg/L	1.0	09/22/20 21:54	
EPA 6020B	Barium	0.024	mg/L	0.010	09/22/20 18:22	
EPA 6020B	Boron	0.0062J	mg/L	0.10	09/22/20 18:22	
EPA 6020B	Chromium	0.0018J	mg/L	0.010	09/22/20 18:22	
SM 2450C-2011	Total Dissolved Solids	31.0	mg/L	10.0	09/18/20 09:59	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	09/19/20 20:07	
<b>92495964008</b>	<b>DUP-2</b>					
EPA 6010D	Calcium	47.6	mg/L	1.0	09/25/20 19:00	
EPA 6020B	Barium	0.030	mg/L	0.010	09/22/20 18:34	
EPA 6020B	Beryllium	0.000085J	mg/L	0.0030	09/22/20 18:34	
EPA 6020B	Boron	1.0	mg/L	0.10	09/22/20 18:34	
EPA 6020B	Chromium	0.0067J	mg/L	0.010	09/22/20 18:34	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	09/22/20 18:34	
EPA 6020B	Selenium	0.0040J	mg/L	0.010	09/22/20 18:34	
SM 2450C-2011	Total Dissolved Solids	462	mg/L	10.0	09/18/20 09:59	
EPA 300.0 Rev 2.1 1993	Chloride	7.9	mg/L	1.0	09/19/20 20:36	
EPA 300.0 Rev 2.1 1993	Sulfate	251	mg/L	5.0	09/20/20 06:59	
<b>92495964009</b>	<b>BRGWC-38S</b>					
	pH	4.17	Std. Units		09/29/20 12:27	
EPA 6010D	Calcium	33.1	mg/L	1.0	09/25/20 19:26	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	09/22/20 20:22	
EPA 6020B	Barium	0.014	mg/L	0.010	09/22/20 20:22	
EPA 6020B	Beryllium	0.0073	mg/L	0.0030	09/22/20 20:22	
EPA 6020B	Boron	1.4	mg/L	0.10	09/22/20 20:22	
EPA 6020B	Cadmium	0.00050J	mg/L	0.0025	09/22/20 20:22	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92495964009</b>	<b>BRGWC-38S</b>					
EPA 6020B	Chromium	0.0042J	mg/L	0.010	09/22/20 20:22	
EPA 6020B	Cobalt	0.20	mg/L	0.0050	09/22/20 20:22	
EPA 6020B	Lead	0.00032J	mg/L	0.0050	09/22/20 20:22	
EPA 6020B	Lithium	0.020J	mg/L	0.030	09/22/20 20:22	
EPA 6020B	Selenium	0.029	mg/L	0.010	09/22/20 20:22	
EPA 6020B	Thallium	0.00017J	mg/L	0.0010	09/22/20 20:22	
EPA 7470A	Mercury	0.00011J	mg/L	0.00050	09/23/20 10:43	
SM 2450C-2011	Total Dissolved Solids	587	mg/L	10.0	09/21/20 16:29	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	09/22/20 12:31	
EPA 300.0 Rev 2.1 1993	Fluoride	0.68	mg/L	0.10	09/22/20 12:31	
EPA 300.0 Rev 2.1 1993	Sulfate	356	mg/L	7.0	09/22/20 18:55	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Sample: BRGWC-35S		Lab ID: 92495964001		Collected: 09/16/20 09:05		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.96	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	61.8	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:32	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 17:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 17:42	7440-38-2	
Barium	0.033	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 17:42	7440-39-3	
Beryllium	0.00014J	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 17:42	7440-41-7	
Boron	1.9	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 17:42	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 17:42	7440-43-9	
Chromium	0.0058J	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 17:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 17:42	7440-48-4	
Lead	0.00012J	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 17:42	7439-92-1	
Lithium	0.0020J	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 17:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 17:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 17:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 17:42	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 14:52	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	474	mg/L	10.0	10.0	1		09/18/20 09:58		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	6.0	mg/L	1.0	0.60	1		09/19/20 18:22	16887-00-6	
Fluoride	0.062J	mg/L	0.10	0.050	1		09/19/20 18:22	16984-48-8	
Sulfate	270	mg/L	6.0	3.0	6		09/20/20 04:47	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Sample: <b>BRGWC-34S</b>		Lab ID: <b>92495964002</b>		Collected: 09/16/20 09:59		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	<b>5.81</b>	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>77.7</b>	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:37	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 17:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 17:48	7440-38-2	
Barium	<b>0.023</b>	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 17:48	7440-39-3	
Beryllium	<b>0.00014J</b>	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 17:48	7440-41-7	
Boron	<b>2.2</b>	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 17:48	7440-42-8	
Cadmium	<b>0.00017J</b>	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 17:48	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 17:48	7440-47-3	
Cobalt	<b>0.0042J</b>	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 17:48	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 17:48	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 17:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 17:48	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 17:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 17:48	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 14:54	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>392</b>	mg/L	10.0	10.0	1		09/18/20 09:58		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>6.6</b>	mg/L	1.0	0.60	1		09/19/20 18:37	16887-00-6	
Fluoride	<b>0.077J</b>	mg/L	0.10	0.050	1		09/19/20 18:37	16984-48-8	
Sulfate	<b>283</b>	mg/L	6.0	3.0	6		09/20/20 05:01	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Sample: BRGWC-33S		Lab ID: 92495964003		Collected: 09/16/20 11:02		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	4.78	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	37.9	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:41	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 17:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 17:53	7440-38-2	
Barium	0.019	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 17:53	7440-39-3	
Beryllium	0.0015J	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 17:53	7440-41-7	
Boron	1.1	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 17:53	7440-42-8	
Cadmium	0.00032J	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 17:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 17:53	7440-47-3	
Cobalt	0.034	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 17:53	7440-48-4	
Lead	0.000063J	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 17:53	7439-92-1	
Lithium	0.0089J	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 17:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 17:53	7439-98-7	
Selenium	0.0028J	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 17:53	7782-49-2	
Thallium	0.00018J	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 17:53	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 14:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	88.0	mg/L	10.0	10.0	1		09/18/20 09:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	4.1	mg/L	1.0	0.60	1		09/19/20 18:52	16887-00-6	
Fluoride	0.085J	mg/L	0.10	0.050	1		09/19/20 18:52	16984-48-8	
Sulfate	154	mg/L	3.0	1.5	3		09/20/20 05:16	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Sample: <b>BRGWC-17S</b>		Lab ID: <b>92495964004</b>		Collected: 09/16/20 12:30		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	<b>6.26</b>	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>37.9</b>	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:45	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 18:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 18:11	7440-38-2	
Barium	<b>0.044</b>	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 18:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 18:11	7440-41-7	
Boron	<b>0.0066J</b>	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 18:11	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 18:11	7440-43-9	
Chromium	<b>0.012</b>	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 18:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 18:11	7440-48-4	
Lead	<b>0.000054J</b>	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 18:11	7439-92-1	
Lithium	<b>0.00096J</b>	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 18:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 18:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 18:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 18:11	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 14:59	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>316</b>	mg/L	10.0	10.0	1		09/18/20 09:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>4.2</b>	mg/L	1.0	0.60	1		09/19/20 19:07	16887-00-6	
Fluoride	<b>0.10</b>	mg/L	0.10	0.050	1		09/19/20 19:07	16984-48-8	
Sulfate	<b>151</b>	mg/L	3.0	1.5	3		09/20/20 05:30	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Sample: BRGWC-36S		Lab ID: 92495964005		Collected: 09/16/20 15:21		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.58	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	45.9	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:50	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 18:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 18:16	7440-38-2	
Barium	0.030	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 18:16	7440-39-3	
Beryllium	0.000080J	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 18:16	7440-41-7	
Boron	0.99	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 18:16	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 18:16	7440-43-9	
Chromium	0.0064J	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 18:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 18:16	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 18:16	7439-92-1	
Lithium	0.0022J	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 18:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 18:16	7439-98-7	
Selenium	0.0031J	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 18:16	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 18:16	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 15:01	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	463	mg/L	10.0	10.0	1		09/18/20 09:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	7.9	mg/L	1.0	0.60	1		09/19/20 19:22	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/19/20 19:22	16984-48-8	
Sulfate	256	mg/L	5.0	2.5	5		09/20/20 06:15	14808-79-8	M6

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Sample: BRGWC-37S		Lab ID: 92495964006		Collected: 09/16/20 16:09		Received: 09/17/20 10:00		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	5.84	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	3.2	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:54	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 18:22	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 18:22	7440-38-2	
Barium	0.024	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 18:22	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 18:22	7440-41-7	
Boron	0.0062J	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 18:22	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 18:22	7440-43-9	
Chromium	0.0018J	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 18:22	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 18:22	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 18:22	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 18:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 18:22	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 18:22	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 18:22	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 15:03	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	31.0	mg/L	10.0	10.0	1		09/18/20 09:59		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.8	mg/L	1.0	0.60	1		09/19/20 20:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/19/20 20:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/19/20 20:07	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Sample: FB-1		Lab ID: 92495964007		Collected: 09/16/20 10:10	Received: 09/17/20 10:00	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	09/22/20 14:15	09/22/20 21:58	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 18:28	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 18:28	7440-38-2		
Barium	ND	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 18:28	7440-39-3		
Beryllium	ND	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 18:28	7440-41-7		
Boron	ND	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 18:28	7440-42-8		
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 18:28	7440-43-9		
Chromium	ND	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 18:28	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 18:28	7440-48-4		
Lead	ND	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 18:28	7439-92-1		
Lithium	ND	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 18:28	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 18:28	7439-98-7		
Selenium	ND	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 18:28	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 18:28	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 15:06	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		09/18/20 09:59			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/19/20 20:21	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		09/19/20 20:21	16984-48-8		
Sulfate	ND	mg/L	1.0	0.50	1		09/19/20 20:21	14808-79-8		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Sample: DUP-2		Lab ID: 92495964008		Collected: 09/16/20 00:00	Received: 09/17/20 10:00	Matrix: Water			
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA							
Calcium	<b>47.6</b>	mg/L	1.0	0.070	1	09/24/20 14:17	09/25/20 19:00	7440-70-2	
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA							
Antimony	ND	mg/L	0.0030	0.00028	1	09/18/20 11:00	09/22/20 18:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	09/18/20 11:00	09/22/20 18:34	7440-38-2	
Barium	<b>0.030</b>	mg/L	0.010	0.00071	1	09/18/20 11:00	09/22/20 18:34	7440-39-3	
Beryllium	<b>0.00085J</b>	mg/L	0.0030	0.000046	1	09/18/20 11:00	09/22/20 18:34	7440-41-7	
Boron	<b>1.0</b>	mg/L	0.10	0.0052	1	09/18/20 11:00	09/22/20 18:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00012	1	09/18/20 11:00	09/22/20 18:34	7440-43-9	
Chromium	<b>0.0067J</b>	mg/L	0.010	0.00055	1	09/18/20 11:00	09/22/20 18:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	09/18/20 11:00	09/22/20 18:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	09/18/20 11:00	09/22/20 18:34	7439-92-1	
Lithium	<b>0.0023J</b>	mg/L	0.030	0.00081	1	09/18/20 11:00	09/22/20 18:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/18/20 11:00	09/22/20 18:34	7439-98-7	
Selenium	<b>0.0040J</b>	mg/L	0.010	0.0016	1	09/18/20 11:00	09/22/20 18:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	09/18/20 11:00	09/22/20 18:34	7440-28-0	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA							
Mercury	ND	mg/L	0.00050	0.000078	1	09/18/20 08:30	09/18/20 15:08	7439-97-6	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA							
Total Dissolved Solids	<b>462</b>	mg/L	10.0	10.0	1		09/18/20 09:59		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville							
Chloride	<b>7.9</b>	mg/L	1.0	0.60	1		09/19/20 20:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/19/20 20:36	16984-48-8	
Sulfate	<b>251</b>	mg/L	5.0	2.5	5		09/20/20 06:59	14808-79-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Sample: <b>BRGWC-38S</b>		Lab ID: <b>92495964009</b>		Collected: 09/17/20 11:26		Received: 09/18/20 10:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
pH	<b>4.17</b>	Std. Units			1		09/29/20 12:27		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>33.1</b>	mg/L	1.0	0.070	1	09/24/20 14:17	09/25/20 19:26	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	09/21/20 14:30	09/22/20 20:22	7440-36-0	
Arsenic	<b>0.0015J</b>	mg/L	0.0050	0.00078	1	09/21/20 14:30	09/22/20 20:22	7440-38-2	
Barium	<b>0.014</b>	mg/L	0.010	0.00071	1	09/21/20 14:30	09/22/20 20:22	7440-39-3	
Beryllium	<b>0.0073</b>	mg/L	0.0030	0.000046	1	09/21/20 14:30	09/22/20 20:22	7440-41-7	
Boron	<b>1.4</b>	mg/L	0.10	0.0052	1	09/21/20 14:30	09/22/20 20:22	7440-42-8	
Cadmium	<b>0.00050J</b>	mg/L	0.0025	0.00012	1	09/21/20 14:30	09/22/20 20:22	7440-43-9	
Chromium	<b>0.0042J</b>	mg/L	0.010	0.00055	1	09/21/20 14:30	09/22/20 20:22	7440-47-3	
Cobalt	<b>0.20</b>	mg/L	0.0050	0.00038	1	09/21/20 14:30	09/22/20 20:22	7440-48-4	
Lead	<b>0.00032J</b>	mg/L	0.0050	0.000036	1	09/21/20 14:30	09/22/20 20:22	7439-92-1	
Lithium	<b>0.020J</b>	mg/L	0.030	0.00081	1	09/21/20 14:30	09/22/20 20:22	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	09/21/20 14:30	09/22/20 20:22	7439-98-7	
Selenium	<b>0.029</b>	mg/L	0.010	0.0016	1	09/21/20 14:30	09/22/20 20:22	7782-49-2	
Thallium	<b>0.00017J</b>	mg/L	0.0010	0.00014	1	09/21/20 14:30	09/22/20 20:22	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	<b>0.00011J</b>	mg/L	0.00050	0.000078	1	09/22/20 11:15	09/23/20 10:43	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2450C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>587</b>	mg/L	10.0	10.0	1		09/21/20 16:29		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>6.1</b>	mg/L	1.0	0.60	1		09/22/20 12:31	16887-00-6	
Fluoride	<b>0.68</b>	mg/L	0.10	0.050	1		09/22/20 12:31	16984-48-8	
Sulfate	<b>356</b>	mg/L	7.0	3.5	7		09/22/20 18:55	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

QC Batch: 568100 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007

METHOD BLANK: 3010230 Matrix: Water  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/22/20 20:31	

LABORATORY CONTROL SAMPLE: 3010231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.92J	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3010232 3010233

Parameter	Units	3010232		3010233		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495653006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	43.1	1	1	44.0	43.4	83	22	75-125	1	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

QC Batch: 568747	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92495964008, 92495964009

METHOD BLANK: 3013294 Matrix: Water

Associated Lab Samples: 92495964008, 92495964009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	09/25/20 18:16	

LABORATORY CONTROL SAMPLE: 3013295

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3013296 3013297

Parameter	Units	3013296		3013297		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495904004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Calcium	mg/L	75.8	1	1	74.9	75.7	-84	-9	75-125	1	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 567397 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

METHOD BLANK: 3006748 Matrix: Water  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00033J	0.0030	0.00028	09/22/20 15:42	
Arsenic	mg/L	ND	0.0050	0.00078	09/22/20 15:42	
Barium	mg/L	ND	0.010	0.00071	09/22/20 15:42	
Beryllium	mg/L	ND	0.0030	0.000046	09/22/20 15:42	
Boron	mg/L	ND	0.10	0.0052	09/22/20 15:42	
Cadmium	mg/L	ND	0.0025	0.00012	09/22/20 15:42	
Chromium	mg/L	ND	0.010	0.00055	09/22/20 15:42	
Cobalt	mg/L	ND	0.0050	0.00038	09/22/20 15:42	
Lead	mg/L	ND	0.0050	0.000036	09/22/20 15:42	
Lithium	mg/L	ND	0.030	0.00081	09/22/20 15:42	
Molybdenum	mg/L	ND	0.010	0.00069	09/22/20 15:42	
Selenium	mg/L	ND	0.010	0.0016	09/22/20 15:42	
Thallium	mg/L	ND	0.0010	0.00014	09/22/20 15:42	

LABORATORY CONTROL SAMPLE: 3006749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	112	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3006750 3006751

Parameter	Units	92495870002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Parameter	Units	3006750		3006751		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495870002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Arsenic	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20		
Barium	mg/L	0.019	0.1	0.1	0.12	0.12	97	99	75-125	2	20		
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20		
Boron	mg/L	0.0053J	1	1	1.0	1.0	100	101	75-125	1	20		
Cadmium	mg/L	ND	0.1	0.1	0.098	0.096	98	96	75-125	1	20		
Chromium	mg/L	0.00086J	0.1	0.1	0.10	0.10	103	104	75-125	1	20		
Cobalt	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	1	20		
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	0	20		
Molybdenum	mg/L	ND	0.1	0.1	0.096	0.096	95	96	75-125	0	20		
Selenium	mg/L	ND	0.1	0.1	0.099	0.096	99	96	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.098	0.099	98	99	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 567743 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92495964009

METHOD BLANK: 3008588 Matrix: Water  
Associated Lab Samples: 92495964009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	09/22/20 17:54	
Arsenic	mg/L	ND	0.0050	0.00078	09/22/20 17:54	
Barium	mg/L	ND	0.010	0.00071	09/22/20 17:54	
Beryllium	mg/L	ND	0.0030	0.000046	09/22/20 17:54	
Boron	mg/L	ND	0.10	0.0052	09/22/20 17:54	
Cadmium	mg/L	ND	0.0025	0.00012	09/22/20 17:54	
Chromium	mg/L	ND	0.010	0.00055	09/22/20 17:54	
Cobalt	mg/L	ND	0.0050	0.00038	09/22/20 17:54	
Lead	mg/L	ND	0.0050	0.000036	09/22/20 17:54	
Lithium	mg/L	ND	0.030	0.00081	09/22/20 17:54	
Molybdenum	mg/L	ND	0.010	0.00069	09/22/20 17:54	
Selenium	mg/L	ND	0.010	0.0016	09/22/20 17:54	
Thallium	mg/L	ND	0.0010	0.00014	09/22/20 17:54	

LABORATORY CONTROL SAMPLE: 3008589

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	100	80-120	
Arsenic	mg/L	0.1	0.093	93	80-120	
Barium	mg/L	0.1	0.095	95	80-120	
Beryllium	mg/L	0.1	0.092	92	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.093	93	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.092	92	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008590 3008591

Parameter	Units	92496275001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	105	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.10	96	98	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Parameter	Units	3008590		3008591		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		92496275001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							
Barium	mg/L	57.5 ug/L	0.1	0.1	0.15	0.16	94	101	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.087	0.092	87	92	75-125	6	20	
Boron	mg/L	244 ug/L	1	1	1.1	1.2	89	98	75-125	8	20	
Cadmium	mg/L	ND	0.1	0.1	0.094	0.096	94	96	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	102	104	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.099	95	99	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.093	92	93	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.094	0.097	89	92	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	99	104	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.091	0.093	91	93	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

QC Batch:	567375	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

METHOD BLANK: 3006615 Matrix: Water

Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/18/20 14:02	

LABORATORY CONTROL SAMPLE: 3006616

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3006617 3006618

Parameter	Units	92495653002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0026	100	103	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 568007      Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A      Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495964009

METHOD BLANK: 3009608      Matrix: Water  
Associated Lab Samples: 92495964009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	09/23/20 09:49	

LABORATORY CONTROL SAMPLE: 3009609

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3009610      3009611

Parameter	Units	3009610		3009611		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92496278002 ND	0.0025	0.0025	0.0024	0.0025	95	99	75-125	4	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92495964

QC Batch: 567372

Analysis Method: SM 2450C-2011

QC Batch Method: SM 2450C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

METHOD BLANK: 3006601

Matrix: Water

Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/18/20 09:58	

LABORATORY CONTROL SAMPLE: 3006602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	84-108	

SAMPLE DUPLICATE: 3006603

Parameter	Units	92495653011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	622	654	5	10	

SAMPLE DUPLICATE: 3006604

Parameter	Units	92495900008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1220	1250	3	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 567882      Analysis Method: SM 2450C-2011  
QC Batch Method: SM 2450C-2011      Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92495964009

METHOD BLANK: 3009251      Matrix: Water  
Associated Lab Samples: 92495964009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/21/20 16:27	

LABORATORY CONTROL SAMPLE: 3009252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 3009253

Parameter	Units	92495653008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2090	2130	2	10	

SAMPLE DUPLICATE: 3009254

Parameter	Units	92495870011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	25.0	18.0	33	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 567607 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

METHOD BLANK: 3008004 Matrix: Water  
Associated Lab Samples: 92495964001, 92495964002, 92495964003, 92495964004, 92495964005, 92495964006, 92495964007, 92495964008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/19/20 15:23	
Fluoride	mg/L	ND	0.10	0.050	09/19/20 15:23	
Sulfate	mg/L	ND	1.0	0.50	09/19/20 15:23	

LABORATORY CONTROL SAMPLE: 3008005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.3	105	90-110	
Fluoride	mg/L	2.5	2.7	106	90-110	
Sulfate	mg/L	50	52.5	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008006 3008007

Parameter	Units	92495653007		3008007		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	4.4	50	50	57.4	58.2	106	108	90-110	1	10
Fluoride	mg/L	0.13	2.5	2.5	2.8	2.8	107	109	90-110	1	10
Sulfate	mg/L	334	50	50	389	385	111	103	90-110	1	10 M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3008008 3008009

Parameter	Units	92495964005		3008009		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	7.9	50	50	61.3	62.0	107	108	90-110	1	10
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	107	108	90-110	1	10
Sulfate	mg/L	256	50	50	298	299	85	87	90-110	0	10 M6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

QC Batch: 567943 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92495964009

METHOD BLANK: 3009484 Matrix: Water  
Associated Lab Samples: 92495964009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/22/20 07:03	
Fluoride	mg/L	ND	0.10	0.050	09/22/20 07:03	
Sulfate	mg/L	ND	1.0	0.50	09/22/20 07:03	

LABORATORY CONTROL SAMPLE: 3009485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	54.8	110	90-110	
Fluoride	mg/L	2.5	2.7	110	90-110	
Sulfate	mg/L	50	54.9	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3009486 3009487

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495894011 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	105	50	50	152	155	94	101	90-110	2	10		
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	103	104	90-110	1	10		
Sulfate	mg/L	209	50	50	255	261	92	103	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3009488 3009489

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92495900016 Result	Spike Conc.	Spike Conc.	Result								
Chloride	mg/L	ND	50	50	52.8	52.5	106	105	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	104	90-110	1	10		
Sulfate	mg/L	ND	50	50	52.6	52.2	105	104	90-110	1	10		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH E NETWORK

Pace Project No.: 92495964

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK  
Pace Project No.: 92495964

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92495964001	BRGWC-35S				
92495964002	BRGWC-34S				
92495964003	BRGWC-33S				
92495964004	BRGWC-17S				
92495964005	BRGWC-36S				
92495964006	BRGWC-37S				
92495964009	BRGWC-38S				
92495964001	BRGWC-35S	EPA 3010A	568100	EPA 6010D	568125
92495964002	BRGWC-34S	EPA 3010A	568100	EPA 6010D	568125
92495964003	BRGWC-33S	EPA 3010A	568100	EPA 6010D	568125
92495964004	BRGWC-17S	EPA 3010A	568100	EPA 6010D	568125
92495964005	BRGWC-36S	EPA 3010A	568100	EPA 6010D	568125
92495964006	BRGWC-37S	EPA 3010A	568100	EPA 6010D	568125
92495964007	FB-1	EPA 3010A	568100	EPA 6010D	568125
92495964008	DUP-2	EPA 3010A	568747	EPA 6010D	568813
92495964009	BRGWC-38S	EPA 3010A	568747	EPA 6010D	568813
92495964001	BRGWC-35S	EPA 3005A	567397	EPA 6020B	567512
92495964002	BRGWC-34S	EPA 3005A	567397	EPA 6020B	567512
92495964003	BRGWC-33S	EPA 3005A	567397	EPA 6020B	567512
92495964004	BRGWC-17S	EPA 3005A	567397	EPA 6020B	567512
92495964005	BRGWC-36S	EPA 3005A	567397	EPA 6020B	567512
92495964006	BRGWC-37S	EPA 3005A	567397	EPA 6020B	567512
92495964007	FB-1	EPA 3005A	567397	EPA 6020B	567512
92495964008	DUP-2	EPA 3005A	567397	EPA 6020B	567512
92495964009	BRGWC-38S	EPA 3005A	567743	EPA 6020B	567850
92495964001	BRGWC-35S	EPA 7470A	567375	EPA 7470A	567456
92495964002	BRGWC-34S	EPA 7470A	567375	EPA 7470A	567456
92495964003	BRGWC-33S	EPA 7470A	567375	EPA 7470A	567456
92495964004	BRGWC-17S	EPA 7470A	567375	EPA 7470A	567456
92495964005	BRGWC-36S	EPA 7470A	567375	EPA 7470A	567456
92495964006	BRGWC-37S	EPA 7470A	567375	EPA 7470A	567456
92495964007	FB-1	EPA 7470A	567375	EPA 7470A	567456
92495964008	DUP-2	EPA 7470A	567375	EPA 7470A	567456
92495964009	BRGWC-38S	EPA 7470A	568007	EPA 7470A	568119
92495964001	BRGWC-35S	SM 2450C-2011	567372		
92495964002	BRGWC-34S	SM 2450C-2011	567372		
92495964003	BRGWC-33S	SM 2450C-2011	567372		
92495964004	BRGWC-17S	SM 2450C-2011	567372		
92495964005	BRGWC-36S	SM 2450C-2011	567372		
92495964006	BRGWC-37S	SM 2450C-2011	567372		
92495964007	FB-1	SM 2450C-2011	567372		
92495964008	DUP-2	SM 2450C-2011	567372		
92495964009	BRGWC-38S	SM 2450C-2011	567882		
92495964001	BRGWC-35S	EPA 300.0 Rev 2.1 1993	567607		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK

Pace Project No.: 92495964

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92495964002	BRGWC-34S	EPA 300.0 Rev 2.1 1993	567607		
92495964003	BRGWC-33S	EPA 300.0 Rev 2.1 1993	567607		
92495964004	BRGWC-17S	EPA 300.0 Rev 2.1 1993	567607		
92495964005	BRGWC-36S	EPA 300.0 Rev 2.1 1993	567607		
92495964006	BRGWC-37S	EPA 300.0 Rev 2.1 1993	567607		
92495964007	FB-1	EPA 300.0 Rev 2.1 1993	567607		
92495964008	DUP-2	EPA 300.0 Rev 2.1 1993	567607		
92495964009	BRGWC-38S	EPA 300.0 Rev 2.1 1993	567943		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Sample Condition Upon Receipt

Client Name: G. Alower

WO#: 92495964

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  
Tracking #: \_\_\_\_\_



Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used 214 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 1.1 Biological Tissue is Frozen: Yes No  
Temp should be above freezing to 8°C  
Comments: \_\_\_\_\_  
Date and initials of person examining contents: 9/15/2008

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix:	<u>W</u>	
All containers needing preservation have been checked:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
		Lot # of added preservative
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (If purchased):		

Client Notification/ Resolution: \_\_\_\_\_ Field Data Required? Y / N  
Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: \_\_\_\_\_ Date: \_\_\_\_\_

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



**CHAIN-OF-CUSTODY Analytical Request Document**

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTR Log-in Number Here

**ALL SHADED AREAS are for LAB USE ONLY**

Company: Georgia Power - Coal Combustion Residuals  
 Billing Information:  
 Address: 2480 Manor Road  
 Atlanta, GA 30339  
 Report To: Jeyu Abraham  
 Email To: jeyu.abraham@southernco.com  
 Copy To: Golder  
 Site Collection Info/Address: Plant Branch  
 State: Georgia City: Milledgeville Time Zone Collected:  
 I [ ] P [ ] IMT [ ] CT [ ] XT [ ]  
 Project Name: Plant Branch E Network  
 Project # CDR 3rd Semi-Annual  
 Pace Profile:  
 Purchased Order #  
 Quote #  
 Pace Project Manager:  
 kenny.herning@pace-labs.com  
 Collected By (print): Tereb Maricic, Andrea McClure  
 Turnaround Date Required:  
 Immediately Packed on Ice:  
 I [ ] Yes [ ] No  
 Field Filtered (if applicable):  
 I [ ] Yes [ ] No  
 Rush:  
 I [ ] Same Day [ ] Next Day  
 I [ ] 1 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day  
 (Expedite Charges Apply)  
 Analyzed:  
 \* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW),  
 Product (PL), Soil/Solid (SL, OL, DL), Wipe (WP), Air (AR), Tissue (TS), Biosolid (B), Water (WT), Other (OT)

Container Preservation Type: \*\*  
 Lab Project Manager:  
 \*\* Preservation Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) low acetate,  
 (6) methanol, (7) sodium borate, (8) sodium methoxide, (9) acetone, (10) ascorbic acid, (11) ammonium sulfate,  
 (12) ammonium hydroxide, (13) TSP, (14) Unpreserved, (15) Other

Analysis	Lab Profile/line:
Metals 6010/6020/7470 - see comments	Lab Sample Receipt Checklist Custody Seals Present/Intact: Y/N/NA Custody Signatures Present: Y/N/NA Collector Signatures Present: Y/N/NA Bottles Intact: Y/N/NA Correct Bottles: Y/N/NA Sealed Vials: Y/N/NA Samples Received on Ice: Y/N/NA WDA - Headspace Acceptable: Y/N/NA USDA Regulated Solts: Y/N/NA Samples in Holding Time: Y/N/NA Residual Chlorine Present: Y/N/NA Cl Strip: Sample pH Acceptable: Y/N/NA pH Strip: Sulfide Present: Y/N/NA Lead Acetate Strip: _____
TDS	Lab USE ONLY: Lab Sample #/ Comments: 9/14/2020 + 2 Radium
Chloride/Fluoride/Sulfate	
Radium 226, 228	

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		pH	Field Obs
			Date	Time	Date	Time		
BRGWC-355	GW	G	9-16-2020	0905			5.96	7
BRGWC-345	GW	G	9-16-2020	0959			5.81	5
BRGWC-335	GW	G	9-16-2020	1102			4.78	5
BRGWC-175	GW	G	9-16-2020	1230			6.26	5
BRGWC-365	GW	G	9-16-2020	1521			5.58	5
BRGWC-375	GW	G	9-16-2020	1609			5.84	5
FB-1	W	G	9-16-2020	1010			-	5
DUP-2	GW	G	9-16-2020	--			-	5

(Metals): As, B, Ba, Be, Ca, Cd, Co, Cr, Mn, Pb, Se, Sr, Li, Ti, Hg  
 Type of Ice Used: Wet Blue Dry None  
 Packing Material Used:  
 Radchem sample(s) screened (<500 cpm): Y N NA  
 SHORT SHEDS PRESENT (<72 hours): Y N N/A  
 Lab Tracking #:  
 Samples received via:  
 FEDEX UPS Other Courier Pace Courier  
 Lab Sample Temperature Info:  
 Temp Blank Received: Y N NA  
 Therm ID# 215  
 Cooler 1 Temp (non-compliant) 10°C  
 Cooler 2 Therm Corr. Factor 1.0°C  
 Cooler 1 Corrected Temp: 11.0°C  
 Comments:

Requisitioned by/Company (Signature): Jeyu Abraham / Golder  
 Date/Time: 9-17-2020/0800  
 Received by/Company (Signature): Charles Hinkle  
 Date/Time: 9/17/20 1000  
 Requisitioned by/Company (Signature):  
 Date/Time:  
 Received by/Company (Signature):  
 Date/Time:  
 Requisitioned by/Company (Signature):  
 Date/Time:  
 Received by/Company (Signature):  
 Date/Time:  
 MTR LAB USE ONLY  
 Account:  
 Template:  
 Prelog:  
 PH:  
 PB:  
 Trip Blank Received: Y N NA  
 PCL MeOH TSP Other  
 Non-Conformance(s):  
 Y/N / NO  
 Page 1 of 1



May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92524837

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92524837

---

### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

---

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92524837001	BRGWA-6S	Water	03/01/21 16:30	03/02/21 10:05
92524837002	BRGWA-2I	Water	03/01/21 16:39	03/02/21 10:05
92524837003	BRGWA-5S	Water	03/02/21 09:29	03/03/21 10:03
92524837004	BRGWA-5I	Water	03/02/21 10:11	03/03/21 10:03
92524837005	BRGWA-2S	Water	03/02/21 12:05	03/03/21 10:03

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92524837001	BRGWA-6S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92524837002	BRGWA-2I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92524837003	BRGWA-5S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92524837004	BRGWA-5I	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92524837005	BRGWA-2S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92524837

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92524837001</b>	<b>BRGWA-6S</b>					
EPA 9315	Radium-226	-0.00545 ± 0.102 (0.290) C:70% T:NA	pCi/L		03/15/21 09:18	
EPA 9320	Radium-228	0.215 ± 0.314 (0.676) C:79% T:90%	pCi/L		03/15/21 16:09	
Total Radium Calculation	Total Radium	0.215 ± 0.416 (0.966)	pCi/L		03/19/21 14:02	
<b>92524837002</b>	<b>BRGWA-2I</b>					
EPA 9315	Radium-226	-0.0504 ± 0.0524 (0.222) C:86% T:NA	pCi/L		03/15/21 09:18	
EPA 9320	Radium-228	0.127 ± 0.294 (0.654) C:79% T:93%	pCi/L		03/15/21 16:09	
Total Radium Calculation	Total Radium	0.127 ± 0.346 (0.876)	pCi/L		03/19/21 14:02	
<b>92524837003</b>	<b>BRGWA-5S</b>					
EPA 9315	Radium-226	0.0258 ± 0.0722 (0.179) C:89% T:NA	pCi/L		03/26/21 08:08	
EPA 9320	Radium-228	0.336 ± 0.311 (0.635) C:83% T:92%	pCi/L		03/22/21 13:11	
Total Radium Calculation	Total Radium	0.362 ± 0.383 (0.814)	pCi/L		03/26/21 14:37	
<b>92524837004</b>	<b>BRGWA-5I</b>					
EPA 9315	Radium-226	0.115 ± 0.106 (0.196) C:88% T:NA	pCi/L		03/26/21 08:08	
EPA 9320	Radium-228	0.294 ± 0.329 (0.689) C:84% T:84%	pCi/L		03/22/21 13:11	
Total Radium Calculation	Total Radium	0.409 ± 0.435 (0.885)	pCi/L		03/26/21 14:37	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92524837

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92524837005</b>	<b>BRGWA-2S</b>					
EPA 9315	Radium-226	0.0214 ± 0.0865 (0.222) C:76% T:NA	pCi/L		03/26/21 08:08	
EPA 9320	Radium-228	0.321 ± 0.308 (0.627) C:84% T:84%	pCi/L		03/22/21 13:11	
Total Radium Calculation	Total Radium	0.342 ± 0.395 (0.849)	pCi/L		03/26/21 14:37	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-6S</b> <b>Lab ID: 92524837001</b> Collected: 03/01/21 16:30      Received: 03/02/21 10:05      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.00545 ± 0.102 (0.290)</b> <b>C:70% T:NA</b>	pCi/L	03/15/21 09:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.215 ± 0.314 (0.676)</b> <b>C:79% T:90%</b>	pCi/L	03/15/21 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.215 ± 0.416 (0.966)</b>	pCi/L	03/19/21 14:02	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-2I</b> <b>Lab ID: 92524837002</b> Collected: 03/01/21 16:39      Received: 03/02/21 10:05      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>-0.0504 ± 0.0524 (0.222)</b> <b>C:86% T:NA</b>	pCi/L	03/15/21 09:18	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.127 ± 0.294 (0.654)</b> <b>C:79% T:93%</b>	pCi/L	03/15/21 16:09	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.127 ± 0.346 (0.876)</b>	pCi/L	03/19/21 14:02	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-5S</b> <b>Lab ID: 92524837003</b> Collected: 03/02/21 09:29      Received: 03/03/21 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0258 ± 0.0722 (0.179)</b> <b>C:89% T:NA</b>	pCi/L	03/26/21 08:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.336 ± 0.311 (0.635)</b> <b>C:83% T:92%</b>	pCi/L	03/22/21 13:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.362 ± 0.383 (0.814)</b>	pCi/L	03/26/21 14:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-5I</b> <b>Lab ID: 92524837004</b> Collected: 03/02/21 10:11      Received: 03/03/21 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.115 ± 0.106 (0.196)</b> <b>C:88% T:NA</b>	pCi/L	03/26/21 08:08	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.294 ± 0.329 (0.689)</b> <b>C:84% T:84%</b>	pCi/L	03/22/21 13:11	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.409 ± 0.435 (0.885)</b>	pCi/L	03/26/21 14:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWA-2S</b> <b>Lab ID: 92524837005</b> Collected: 03/02/21 12:05      Received: 03/03/21 10:03      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.0214 ± 0.0865 (0.222)</b> <b>C:76% T:NA</b>	pCi/L	03/26/21 08:08	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.321 ± 0.308 (0.627)</b> <b>C:84% T:84%</b>	pCi/L	03/22/21 13:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.342 ± 0.395 (0.849)</b>	pCi/L	03/26/21 14:37	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

QC Batch: 437599

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92524837001, 92524837002

METHOD BLANK: 2112389

Matrix: Water

Associated Lab Samples: 92524837001, 92524837002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00470 ± 0.0712 (0.214) C:85% T:NA	pCi/L	03/15/21 09:18	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

---

QC Batch:	438266	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92524837003, 92524837004, 92524837005

---

METHOD BLANK: 2115671 Matrix: Water

Associated Lab Samples: 92524837003, 92524837004, 92524837005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.142 ± 0.131 (0.243) C:77% T:NA	pCi/L	03/26/21 08:05	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

QC Batch: 437641

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92524837001, 92524837002

METHOD BLANK: 2112538

Matrix: Water

Associated Lab Samples: 92524837001, 92524837002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.312 ± 0.330 (0.686) C:82% T:90%	pCi/L	03/15/21 16:07	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

QC Batch: 438909

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92524837003, 92524837004, 92524837005

METHOD BLANK: 2118824

Matrix: Water

Associated Lab Samples: 92524837003, 92524837004, 92524837005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.308 ± 0.318 (0.657) C:79% T:84%	pCi/L	03/22/21 13:09	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND RADS

Pace Project No.: 92524837

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND RADS  
Pace Project No.: 92524837

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92524837001	BRGWA-6S	EPA 9315	437599		
92524837002	BRGWA-2I	EPA 9315	437599		
92524837003	BRGWA-5S	EPA 9315	438266		
92524837004	BRGWA-5I	EPA 9315	438266		
92524837005	BRGWA-2S	EPA 9315	438266		
92524837001	BRGWA-6S	EPA 9320	437641		
92524837002	BRGWA-2I	EPA 9320	437641		
92524837003	BRGWA-5S	EPA 9320	438909		
92524837004	BRGWA-5I	EPA 9320	438909		
92524837005	BRGWA-2S	EPA 9320	438909		
92524837001	BRGWA-6S	Total Radium Calculation	439586		
92524837002	BRGWA-2I	Total Radium Calculation	439586		
92524837003	BRGWA-5S	Total Radium Calculation	440668		
92524837004	BRGWA-5I	Total Radium Calculation	440668		
92524837005	BRGWA-2S	Total Radium Calculation	440668		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
Sample Condition Upon Receipt(SCUR)

Document Revised: October 28, 2020  
Page 1 of 2

Document No.:  
F-CAR-CS-033-Rev.07

Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition:  
Upon Receipt

Client Name:

Project #:

WO#: 92524840

Carrier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:



92524840

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: MT 3/2/21

Packing Material:  Bubble Wrap  Bubble Sags  None  Other

Biological Tissue Frozen?

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Yes  No  N/A

Cooler Temp: 4.4 Correction Factor: Add/Subtract (°C) ± 0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.4

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<22 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: GW			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_ Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_ Date: \_\_\_\_\_

**ALL SHADED AREAS are for LAB USE ONLY**

Company: **George Power - Coal Combustion Residues**  
 Address: **2480 Wanner Road**  
 Atlanta, GA 30033  
 Report To: **Jabi Alsharhan**  
 Copy To: **Soldier**  
 Phone: **(404) 506-7239**  
 Email: **jlabrhan@gepower.com**  
 Project Name: **Plant Branch BCC/TE Background**  
 Project # **CCR 4th Semi-Annual**  
 Collected by (Print): **Travis Karmak**  
 Analyzed by: **[Signature]**  
 Collected by (Signature): **[Signature]**

State: **Georgia** City: **Milledgeville** Time Zone: **Collect**  
 Email To: **stevew@gepower.com**  
 Project Profile:  
 Page Project Manager: **Kevin.Herring@gepower.com**  
 Immediately Picked up for: **[X] Yes [ ] No**  
 Field Filtered (if applicable): **[ ] Yes [ ] No**  
 Rush: **[ ] Same Day [ ] Next Day [ ] 12 Day [ ] 14 Day [ ] 15 Day**  
 (Specify Charges Ahead)

\* Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Sediment (S), or (OIL), Waste (WP), Air (AIR), Tissue (TS), Biossavy (BL), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite)		Composite End		pH	M of Cms
			Date	Time	Date	Time		
<b>BRGWA-6S</b>	<b>GW</b>	<b>G</b>	<b>3-1-21</b>	<b>1630</b>			<b>6.70</b>	<b>5</b>
<b>BRGWA-2Z</b>	<b>GW</b>	<b>G</b>	<b>3-1-21</b>	<b>1639</b>			<b>6.66</b>	<b>5</b>

(Notes): **As, B, Ba, Be, Ca, Cd, Co, Cr, Mn, Pb, Se, U, Ti, Mg**

Type of Lab Used: **WJG**  
 Pending Materials Used: **Other**

Random sample(s) screened (<500 ppm): **Y N NA**

Requisitioned by/Company: **[Signature]**  
 Requisitioned by/Company: **[Signature]**  
 Date/Time: **3-2-21/0815**  
 Date/Time: **3-2-21/0815**  
 Received by/Company: **[Signature]**  
 Received by/Company: **[Signature]**  
 Date/Time: **3-2-21/0815**  
 Received by/Company: **[Signature]**

Container Preservation Type: **\*\***  
 Analysis:  
 Lab Profile/Time:  
 Lab Sample Receipt: **Check**  
 Quality Scale: **Y/N/NA**  
 Custody Signatures Present: **Y/N/NA**  
 Collector Signatures Present: **Y/N/NA**  
 Analytical Report: **Y/N/NA**  
 Corrected Results: **Y/N/NA**  
 Surrogate Volume: **Y/N/NA**  
 Sample Received on Ice: **Y/N/NA**  
 USA Registered SOPs: **Y/N/NA**  
 Sampled in Holding Time: **Y/N/NA**  
 Field/Onsite Present: **Y/N/NA**  
 C-Steps: **Y/N/NA**  
 Sample pH Acceptable: **Y/N/NA**  
 pH Solids: **Y/N/NA**  
 Surfactant Present: **Y/N/NA**  
 Lead Acetate Strip: **Y/N/NA**

Metals 6010/6020/7470 - see comments	TDS	Chloride/Fluoride/Sulfate	Radium 226.228
<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

SHOET INDICUS PRESENT (72 hours): **X** **N/A**  
 LAB Tracking #:  
 Samples received by:  
 RECEX UPS Clerk: **COMP**  
 MFL/LAB USE ONLY  
 Date/Time: **3/2/21/0815**  
 Date/Time: **3/2/21/0815**  
 Accrual: **Table B**  
 Template:  
 Precheck:  
 PIR:  
 LAB Sample Temperature Info:  
 Temp Blank Received: **Y N NA**  
 Thermo ID: **150**  
 Cooler 1 Temp Upon Receipt: **5°C**  
 Cooler 2 Temp Upon Receipt: **5°C**  
 Cooler 3 Corrected Temp: **5°C**  
 Comments:  
 Trip Blank Received: **Y N NA**  
 HQ: **MEON** TSP: **Other**  
 Non-Conformance(s): **Page 1 of 1**

Company: Georgia Power - Coal Combustion Residuals  
 Address: 2880 Kramer Road  
 Atlanta, GA 30339

Project Information:  
 Report To: John Abraham  
 Email To: jbraham@faceanalytical.com  
 Site Collection Info/Address: Plant Branch

Phone: (404) 506-7239  
 Email: jbraham@faceanalytical.com  
 Phone: (404) 506-7239  
 Email: jbraham@faceanalytical.com  
 Collected By: (Print) Travis Hartsel  
 Andrea McClure

State Georgia City: Milldgen K Time Zone: Collected  
 Project Name: Plant Branch BCOE Background  
 Project # CCR 4th Semi-Annual  
 Purchase Order #  
 Quote #  
 Turnaround Date Requested:  
 Rush  Same Day  Next Day  
 12 Day  3 Day  4 Day  5 Day  
 (Freezer Charges apply)

Collected By Signature: *[Signature]*

Analyses:  
 Yes  No  
 Yes  No  
 Yes  No  
 Yes  No

\* Matrix Codes (Insert in Matrix Box Below) Drinking Water (DW), Ground Water (GW), Wastewater (WW),  
 Product (PL), Surface (SI), Oil (OI), WPC (WPC), Air (AIR), Tissue (TI), Biosolids (B), Water (WT), Other (OT)

Lab Sample Receipt Checklist:  
 Custody Seal Photocopied Y/N/A  
 Custody Signature Present Y/N/A  
 Collector Signature Present Y/N/A  
 Sample Volume Y/N/A  
 Correct Volume Y/N/A  
 Samples Received on Site Y/N/A  
 VOA - Headgear Assembled Y/N/A  
 VOA - Regulated Solids Y/N/A  
 Samples in Holding Tank Y/N/A  
 Acidified Colant Present Y/N/A  
 ID Strip Y/N/A  
 Sample pH acceptable Y/N/A  
 pH Strips Y/N/A  
 Sample Present Y/N/A  
 Lead Acetate Strip Y/N/A

Customer Sample ID: BRGWA-55  
 BRGWA-57  
 BRGWA-29

Matrix: GW  
 GW  
 GW  
 Collected for Composite Start Date: 3-2-21  
 Time: 0929  
 Composite End Date: 3-2-21  
 Time: 1011  
 PH: 6.425  
 # of Cans: 6475

Metals 6010/6020/7470 - see comments  
 TDS  
 Chloride/Fluoride/Sulfate  
 Radium 226,228

Requested by Company: (Signature) *[Signature]*  
 Date/Time: 3-3-21 10815  
 Received by Company: (Signature) *[Signature]*  
 Date/Time: 3/3/21 1003

Requested by Company: (Signature) *[Signature]*  
 Date/Time: 3-3-21 10815  
 Received by Company: (Signature) *[Signature]*  
 Date/Time: 3/3/21 1003

Lab Tracking #:  
 Sample received via: FBRX UPS Client Courier  
 Counter Face Counter  
 Table #:  
 Accurim:  
 Template:  
 Prebags:  
 N/A:  
 N/A:

Lab Sample Temperature Note:  
 Temp Blank Received: Y N NA  
 Thermo ID:  
 Cooler 1 Temp Upon Receipt: \_\_\_ °C  
 Cooler 1 Thermo Corr Factor: \_\_\_ °C  
 Cooler 1 Correlated Temp: \_\_\_ °C  
 Comments:  
 Trip Blank Received: Y N NA  
 HCL MICH TSP: OHR  
 Non-Conformance: Page: 1  
 YES / NO of: 1

Container Preservation Type:  
 (1) none, (2) acid, (3) sulfuric acid, (4) hydrochloric acid, (5) sodium hydroxide, (6) free acetone,  
 (6) methanol, (7) sodium borate, (8) 50% ammonia, (9) 50% ammonia, (10) bleach, (11) acetic acid, (12) ammonium hydroxide,  
 (13) ammonium hydroxide, (14) TSP, (15) Unpreserved, (16) Other





# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-228  
Analyst: LAL  
Date: 3/9/2021  
Worklist: 59152  
MSTRX: DW



Method Blank Assessment	
MB Sample ID	2112939
MB Concentration:	-0.005
MB Counting Uncertainty:	0.071
MB MDC:	0.214
MB Numerical Performance Indicator:	-0.13
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD \$9152	LCSD \$9152
Count Date:	3/15/2021
Spike I.D.:	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.504
Target Conc. (pCi/L, g, F):	4.772
Uncertainty (Calculated):	0.057
Result (pCi/L, g, F):	5.339
LCSD/LCSD Counting Uncertainty (pCi/L, g, F):	0.625
Numerical Performance Indicator:	1.77
Percent Recovery:	111.88%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	92524756004
Duplicate Sample I.D.:	92524756004DUP
Sample Result (pCi/L, g, F):	0.330
Sample Duplicate Result (pCi/L, g, F):	0.165
Sample Duplicate Counting Uncertainty (pCi/L, g, F):	0.280
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.189
Are sample and/or duplicate results below RL?	See Below ##
Duplicate Numerical Performance Indicator:	0.394
Duplicate RPD:	16.51%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

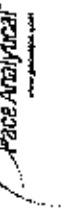
Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
MS Spike Uncertainty (calculated):	
MSD Spike Uncertainty (calculated):	
Sample Result:	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	
MS/MSD Upper % Recovery Limits:	
MS/MSD Lower % Recovery Limits:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

VAM 3/15/21

CVE 3/15/21

# Quality Control Sample Performance Assessment



Test: Ra-226  
Analyst: CLA  
Date: 3/18/2021  
Worklist: 59289  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2115671
MB concentration:	0.142
MB Counting Uncertainty:	0.128
MB MDC:	0.243
MB Numerical Performance Indicator:	2.15
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD59289	LCSD59289
Count Date:	3/25/2021
Spike I.D.:	19-053
Decay Corrected Spike Concentration (pCi/mL):	24.039
Volume Used (mL):	0.10
Adjusted Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	4.797
Uncertainty (Calculated):	0.009
Result (pCi/L, g, F):	5.221
LCSD Counting Uncertainty (pCi/L, g, F):	0.630
Numerical Performance Indicator:	1.56
Percent Recovery:	108.03%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	92525905004
Duplicate Sample I.D.:	92525905004DUP
Sample Result (pCi/L, g, F):	0.131
Sample Duplicate Result (pCi/L, g, F):	0.148
Sample Duplicate Result (pCi/L, g, F):	0.079
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.113
Are sample and/or duplicate results below RLP?	See Below ##
Duplicate Numerical Performance Indicator:	0.554
Duplicate RPD:	49.44%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail
% RPD Limit:	25%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

Sample result is re-prepped due to unacceptable precision. N/A

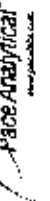
Analyst Must Manually Enter All Fields Highlighted in Yellow.

Sample Matrix Spike Control Assessment	MISMISO 1	MISMISO 2
Sample Collection Date		
Sample I.D.		
Sample MS I.D.		
Sample MSD I.D.		
Spikes I.D.:		
MISMISO Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc. (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc. (pCi/L, g, F):		
MS Spike Uncertainty (Calculated):		
MSD Spike Uncertainty (Calculated):		
Sample Result:		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MSD Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MISMISO Upper % Recovery Limits:		
MISMISO Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
Duplicate RPD:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

12/12/2021

# Quality Control Sample Performance Assessment



Test: RS-226  
 Analyst: CLA  
 Date: 3/18/2021  
 Worksheet: 59289  
 Matrix: DW

Analyst Must Manually Enter All Fields. Highlighted in Yellow.

**Method Blank Assessment**

MB Sample ID	2115671
MB Concentration	0.142
MB Counting Uncertainty	0.129
MB MDC	0.243
MB Numerical Performance Indicator	2.16
MB Status vs Numerical Indicator	N/A
MB Status vs. MDC	Pass

**Laboratory Control Sample Assessment**

Count Date:	LCS# (Y or N)?	Y
3/28/2021	LCS059289	
3/28/2021	LCS059289	
19.033	19.033	19.033
24.039	24.039	24.039
0.10	0.10	0.10
0.501	0.501	0.505
4.757	4.757	4.761
0.058	0.058	0.057
5.221	5.221	5.012
0.530	0.530	0.556
1.56	1.56	0.91
108.83%	108.83%	105.27%
N/A	N/A	N/A
Pass	Pass	Pass
125%	125%	125%
75%	75%	75%

**Duplicate Sample Assessment**

Sample ID:	LCS059289	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample ID	LCS059289	3252590504 3252590504
Sample Result (pCi/L, g, F):	5.221	
Sample Duplicate Result (pCi/L, g, F):	0.530	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	5.012	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.534	
Ave sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator	0.541	
Duplicate Percent Recoveries	3.32%	
Duplicate Status vs Numerical Indicator	N/A	
Duplicate Status vs RPD	Pass	
% RPD Limit	25%	

**Sample Matrix Spike Control Assessment**

Sample Collection Date:	MS/MSD 1	MS/MSD 2
Sample ID:		
Sample MS ID:		
Sample MSD ID:		
Spike ID:		
MS/MSD Decay Corrected Spike Concentration (pCi/mL):		
Spike Volume Used in MS (mL):		
Spike Volume Used in MSD (mL):		
MS Aliquot (L, g, F):		
MS Target Conc (pCi/L, g, F):		
MSD Aliquot (L, g, F):		
MSD Target Conc (pCi/L, g, F):		
MS Spike Uncertainty (calculated):		
MSO Spike Uncertainty (calculated):		
Sample Result:		
Sample Matrix Spike Result:		
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):		
Sample Matrix Spike Duplicate Result:		
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):		
MS Numerical Performance Indicator:		
MS Percent Recovery:		
MSD Percent Recovery:		
MS Status vs Numerical Indicator:		
MSD Status vs Numerical Indicator:		
MS Status vs Recovery:		
MSD Status vs Recovery:		
MS/MSD Upper % Recovery Limit:		
MS/MSD Lower % Recovery Limit:		

**Matrix Spike/Matrix Spike Duplicate Sample Assessment**

Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

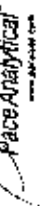
## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Handwritten signature*

*Handwritten signature*

# Quality Control Sample Performance Assessment



*Analysis Must Manually Enter All Fields Highlighted in Yellow.*

Test: Ra-228  
 Analyst: VAIL  
 Date: 3/11/2021  
 Worksheet: 59157  
 Matrix: WIT

**Method Blank Assessment**

MB Sample ID	2112533
MB Concentration	0.312
MB 2 Sigma CSU	0.330
MB MDIC	0.686
MB Numerical Performance Indicator	1.85
MB Status vs Numerical Indicator	Pass
MB Status vs MDC	Pass

**Laboratory Control Sample Assessment**

LCSD (Y or N)?	Y
LCSD59157	3/15/2021
LCSD59157	21-003
LCSD59157	38.455
Count Date:	3/15/2021
Spikes I.D.:	21-003
Decay Corrected Spike Concentration (pCi/mL):	0.10
Volume Used (mL):	0.907
Aliquot Volume (L, g, F):	4.747
Target Conc. (pCi/L, g, F):	0.233
Uncertainty (Counting):	2.971
Result (pCi/L, g, F):	0.653
LCSD 2 Sigma CSU (pCi/L, g, F):	-2.75
Numerical Performance Indicator:	73.55%
Percent Recovery:	N/A
Status vs Numerical Indicator:	Pass
Status vs Recovery:	135%
Upper % Recovery Limit:	60%
Lower % Recovery Limit:	60%

**Duplicate Sample Assessment**

LCSD (Y or N)?	Y
LCSD59157	3/15/2021
LCSD59157	21-003
LCSD59157	38.455
Sample I.D.:	21-003
Duplicate Sample I.D.:	21-003
Sample Result (pCi/L, g, F):	0.653
Duplicate Result (pCi/L, g, F):	0.653
Sample 2 Sigma CSU (pCi/L, g, F):	2.971
Duplicate 2 Sigma CSU (pCi/L, g, F):	2.971
Sample Duplicate Result (pCi/L, g, F):	0.784
Duplicate Duplicate Result (pCi/L, g, F):	0.784
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.975
Duplicate Percent Recovery:	16.54%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	96%

**Sample Matrix Spike Control Assessment**

Sample Collection Date:	Sample I.D.	Sample MS I.D.	Sample MSD I.D.	MS/MSD 1	MS/MSD 2
Sample Volume Used in MS (mL):	MS Aliquot (L, g, F):	MS Target Conc. (pCi/L, g, F):	MSD Aliquot (L, g, F):	MSD Target Conc. (pCi/L, g, F):	MSD Spike Uncertainty (calculated):
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	MS Spike Uncertainty (calculated):	MSD Spike Uncertainty (calculated):	Sample Result:	Sample Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Result:
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	Sample Matrix Spike Duplicate Result:	Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	MS Numerical Performance Indicator:	MSD Numerical Performance Indicator:	MS Percent Recovery:
MS Status vs Numerical Indicator:	MSD Status vs Numerical Indicator:	MS Status vs Recovery:	MSD Status vs Recovery:	MS/MSD Upper % Recovery Limit:	MS/MSD Lower % Recovery Limit:

**Matrix Spike/Matrix Spike Duplicate Sample Assessment**

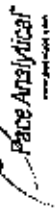
Sample I.D.	Sample MS I.D.	Sample MSD I.D.	MS/MSD 1	MS/MSD 2
Sample Matrix Spike Result:	Sample Matrix Spike Duplicate Result:	Duplicate Numerical Performance Indicator:	MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:
MS/MSD Duplicate Status vs Numerical Indicator:	MS/MSD Duplicate Status vs RPD:	% RPD Limit:		

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Handwritten signature/initials*

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test# Ra-228  
 Analyst VAL  
 Date 3/19/2021  
 Worklist 59356  
 Matrix WTT

Method Blank Assessment	
MB Sample ID	2116a24
MB concentration	0.308
MB 2 Sigma CSU	0.318
MB MDC	0.657
MB Numerical Performance Indicator	1.50
MB Status vs Numerical Indicator	Pass
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	
LCSD ID or NJ?	Y
LCSD59356	3/22/2021
21-003	21-003
38.368	38.368
0.10	0.10
0.814	0.816
4.715	4.703
0.230	0.230
3.779	3.043
0.901	0.781
-1.97	-3.35
89.15%	64.70%
N/A	N/A
Pass	Pass
135%	133%
80%	80%

Duplicate Sample Assessment	
Sample ID:	LCSD59356
Enter Duplicate sample IDs if other than LCSD in the spot below	
Sample Result (pCi/L, g, F):	3.779
Sample Duplicate Result (pCi/L, g, F):	3.043
Sample Duplicate Result 2 (pCi/L, g, F):	0.781
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator (Based on the LCSD Percent Recoveries)	1.210
Duplicate Status vs Numerical Indicator	Pass
Duplicate Status vs RPD	Pass
% RPD Limit	36%

Sample Matrix Spike Control Assessment	
Sample Collection Date	MS/MSD 1
Sample ID	MS/MSD 2
Sample MS ID	
Sample MSD ID	
Sample ID	
MS/MSD Decay Corrected Spike Concentration (pCi/mL)	
Spike Volume Used in MS (mL)	
Spike Volume Used in MSD (mL)	
MS Aliquot (L, g, F)	
MS Target Conc. (pCi/L, g, F)	
MSD Aliquot (L, g, F)	
MS Target Conc. (pCi/L, g, F)	
MS Spike Uncertainty (calculated)	
MSD Spike Uncertainty (calculated)	
Sample Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Result	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
MS Numerical Performance Indicator	
MSD Numerical Performance Indicator	
MS Percent Recovery	
MSD Percent Recovery	
MS Status vs Numerical Indicator	
MSD Status vs Numerical Indicator	
MS Status vs Recovery	
MSD Status vs Recovery	
MS/MSD Upper % Recovery Limit	
MS/MSD Lower % Recovery Limit	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample ID	
Sample MS ID	
Sample MSD ID	
Sample Matrix Spike Result	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
Duplicate Numerical Performance Indicator (Based on the Percent Recoveries)	
MS/MSD Duplicate Status vs Numerical Indicator	
MS/MSD Duplicate Status vs RPD	
% RPD Limit	

# Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Handwritten signature/initials*

May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Dear Joju Abraham:

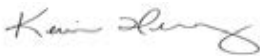
Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

---

### **Pace Analytical Services Charlotte**

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92524840001	BRGWA-6S	Water	03/01/21 16:30	03/02/21 10:05
92524840002	BRGWA-2I	Water	03/01/21 16:39	03/02/21 10:05
92524840003	BRGWA-5S	Water	03/02/21 09:29	03/03/21 10:03
92524840004	BRGWA-5I	Water	03/02/21 10:11	03/03/21 10:03
92524840005	BRGWA-2S	Water	03/02/21 12:05	03/03/21 10:03

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92524840001	BRGWA-6S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92524840002	BRGWA-2I	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92524840003	BRGWA-5S	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92524840004	BRGWA-5I	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92524840005	BRGWA-2S	EPA 6010D	DRB	1
		EPA 6020B	KH	13
		EPA 7470A	VB	1
		SM 2540C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville  
PASI-C = Pace Analytical Services - Charlotte  
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92524840001</b>	<b>BRGWA-6S</b>					
	Performed by	CUSTOME			03/22/21 11:45	
		R				
	pH	6.70	Std. Units		03/22/21 11:45	
EPA 6010D	Calcium	4.2	mg/L	1.0	03/03/21 17:44	
EPA 6020B	Barium	0.016	mg/L	0.0050	03/03/21 17:34	
EPA 6020B	Chromium	0.011	mg/L	0.0050	03/03/21 17:34	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	03/03/21 17:34	
SM 2540C-2011	Total Dissolved Solids	39.0	mg/L	10.0	03/02/21 15:43	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	03/06/21 16:02	
EPA 300.0 Rev 2.1 1993	Sulfate	0.74J	mg/L	1.0	03/06/21 16:02	
<b>92524840002</b>	<b>BRGWA-2I</b>					
	Performed by	CUSTOME			03/22/21 11:45	
		R				
	pH	6.66	Std. Units		03/22/21 11:45	
EPA 6010D	Calcium	15.4	mg/L	1.0	03/03/21 17:49	
EPA 6020B	Barium	0.0074	mg/L	0.0050	03/03/21 17:40	
EPA 6020B	Lithium	0.027J	mg/L	0.030	03/03/21 17:40	
SM 2540C-2011	Total Dissolved Solids	98.0	mg/L	10.0	03/02/21 15:43	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	03/06/21 16:16	
EPA 300.0 Rev 2.1 1993	Sulfate	4.7	mg/L	1.0	03/06/21 16:16	
<b>92524840003</b>	<b>BRGWA-5S</b>					
	Performed by	CUSTOME			03/22/21 11:45	
		R				
	pH	6.42	Std. Units		03/22/21 11:45	
EPA 6010D	Calcium	16.8	mg/L	1.0	03/10/21 00:43	
EPA 6020B	Barium	0.037	mg/L	0.0050	03/08/21 21:35	
EPA 6020B	Boron	0.0071J	mg/L	0.040	03/08/21 21:35	
EPA 6020B	Chromium	0.0044J	mg/L	0.0050	03/08/21 21:35	
SM 2540C-2011	Total Dissolved Solids	96.0	mg/L	10.0	03/05/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	03/12/21 03:34	
<b>92524840004</b>	<b>BRGWA-5I</b>					
	Performed by	CUSTOME			03/22/21 11:45	
		R				
	pH	6.47	Std. Units		03/22/21 11:45	
EPA 6010D	Calcium	13.2	mg/L	1.0	03/10/21 00:57	
EPA 6020B	Barium	0.023	mg/L	0.0050	03/08/21 21:41	
EPA 6020B	Boron	0.0053J	mg/L	0.040	03/08/21 21:41	
EPA 6020B	Chromium	0.0064	mg/L	0.0050	03/08/21 21:41	
EPA 6020B	Cobalt	0.00053J	mg/L	0.0050	03/08/21 21:41	
EPA 6020B	Lead	0.000037J	mg/L	0.0010	03/08/21 21:41	
EPA 6020B	Lithium	0.00081J	mg/L	0.030	03/08/21 21:41	
EPA 6020B	Molybdenum	0.0015J	mg/L	0.010	03/08/21 21:41	
SM 2540C-2011	Total Dissolved Solids	80.0	mg/L	10.0	03/05/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	3.8	mg/L	1.0	03/12/21 03:48	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	03/12/21 03:48	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92524840005</b>	<b>BRGWA-2S</b>					
	Performed by	CUSTOME			03/22/21 11:45	
		R				
	pH	6.20	Std. Units		03/22/21 11:45	
EPA 6010D	Calcium	4.0	mg/L	1.0	03/10/21 01:02	
EPA 6020B	Barium	0.0094	mg/L	0.0050	03/08/21 21:58	
EPA 6020B	Chromium	0.0074	mg/L	0.0050	03/08/21 21:58	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	03/08/21 21:58	
SM 2540C-2011	Total Dissolved Solids	43.0	mg/L	10.0	03/05/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	1.7	mg/L	1.0	03/12/21 04:02	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Sample: BRGWA-6S		Lab ID: 92524840001		Collected: 03/01/21 16:30		Received: 03/02/21 10:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.70</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>4.2</b>	mg/L	1.0	0.070	1	03/03/21 10:17	03/03/21 17:44	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:24	03/03/21 17:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:24	03/03/21 17:34	7440-38-2	
Barium	<b>0.016</b>	mg/L	0.0050	0.00071	1	03/03/21 10:24	03/03/21 17:34	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:24	03/03/21 17:34	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/03/21 10:24	03/03/21 17:34	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:24	03/03/21 17:34	7440-43-9	
Chromium	<b>0.011</b>	mg/L	0.0050	0.00055	1	03/03/21 10:24	03/03/21 17:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:24	03/03/21 17:34	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:24	03/03/21 17:34	7439-92-1	
Lithium	<b>0.0036J</b>	mg/L	0.030	0.00081	1	03/03/21 10:24	03/03/21 17:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/03/21 10:24	03/03/21 17:34	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:24	03/04/21 14:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:24	03/03/21 17:34	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:16	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>39.0</b>	mg/L	10.0	10.0	1		03/02/21 15:43		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>2.1</b>	mg/L	1.0	0.60	1		03/06/21 16:02	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 16:02	16984-48-8	
Sulfate	<b>0.74J</b>	mg/L	1.0	0.50	1		03/06/21 16:02	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

Sample: BRGWA-2I		Lab ID: 92524840002		Collected: 03/01/21 16:39		Received: 03/02/21 10:05		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.66</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>15.4</b>	mg/L	1.0	0.070	1	03/03/21 10:17	03/03/21 17:49	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A									
Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/03/21 10:24	03/03/21 17:40	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/03/21 10:24	03/03/21 17:40	7440-38-2	
Barium	<b>0.0074</b>	mg/L	0.0050	0.00071	1	03/03/21 10:24	03/03/21 17:40	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/03/21 10:24	03/03/21 17:40	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/03/21 10:24	03/03/21 17:40	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/03/21 10:24	03/03/21 17:40	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/03/21 10:24	03/03/21 17:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/03/21 10:24	03/03/21 17:40	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/03/21 10:24	03/03/21 17:40	7439-92-1	
Lithium	<b>0.027J</b>	mg/L	0.030	0.00081	1	03/03/21 10:24	03/03/21 17:40	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/03/21 10:24	03/03/21 17:40	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/03/21 10:24	03/04/21 14:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/03/21 10:24	03/03/21 17:40	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A									
Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 13:18	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011									
Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>98.0</b>	mg/L	10.0	10.0	1		03/02/21 15:43		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993									
Pace Analytical Services - Asheville									
Chloride	<b>1.8</b>	mg/L	1.0	0.60	1		03/06/21 16:16	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 16:16	16984-48-8	
Sulfate	<b>4.7</b>	mg/L	1.0	0.50	1		03/06/21 16:16	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Sample: BRGWA-5S		Lab ID: 92524840003		Collected: 03/02/21 09:29		Received: 03/03/21 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.42</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>16.8</b>	mg/L	1.0	0.070	1	03/05/21 10:53	03/10/21 00:43	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/05/21 13:31	03/08/21 21:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/05/21 13:31	03/08/21 21:35	7440-38-2	
Barium	<b>0.037</b>	mg/L	0.0050	0.00071	1	03/05/21 13:31	03/08/21 21:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/05/21 13:31	03/08/21 21:35	7440-41-7	
Boron	<b>0.0071J</b>	mg/L	0.040	0.0052	1	03/05/21 13:31	03/08/21 21:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/05/21 13:31	03/08/21 21:35	7440-43-9	
Chromium	<b>0.0044J</b>	mg/L	0.0050	0.00055	1	03/05/21 13:31	03/08/21 21:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/05/21 13:31	03/08/21 21:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/05/21 13:31	03/08/21 21:35	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/05/21 13:31	03/08/21 21:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/05/21 13:31	03/08/21 21:35	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/05/21 13:31	03/08/21 21:35	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/05/21 13:31	03/08/21 21:35	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 14:54	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>96.0</b>	mg/L	10.0	10.0	1		03/05/21 11:06		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.7</b>	mg/L	1.0	0.60	1		03/12/21 03:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/12/21 03:34	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/12/21 03:34	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Sample: BRGWA-5I		Lab ID: 92524840004		Collected: 03/02/21 10:11		Received: 03/03/21 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.47</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>13.2</b>	mg/L	1.0	0.070	1	03/05/21 10:53	03/10/21 00:57	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/05/21 13:31	03/08/21 21:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/05/21 13:31	03/08/21 21:41	7440-38-2	
Barium	<b>0.023</b>	mg/L	0.0050	0.00071	1	03/05/21 13:31	03/08/21 21:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/05/21 13:31	03/08/21 21:41	7440-41-7	
Boron	<b>0.0053J</b>	mg/L	0.040	0.0052	1	03/05/21 13:31	03/08/21 21:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/05/21 13:31	03/08/21 21:41	7440-43-9	
Chromium	<b>0.0064</b>	mg/L	0.0050	0.00055	1	03/05/21 13:31	03/08/21 21:41	7440-47-3	
Cobalt	<b>0.00053J</b>	mg/L	0.0050	0.00038	1	03/05/21 13:31	03/08/21 21:41	7440-48-4	
Lead	<b>0.000037J</b>	mg/L	0.0010	0.000036	1	03/05/21 13:31	03/08/21 21:41	7439-92-1	
Lithium	<b>0.00081J</b>	mg/L	0.030	0.00081	1	03/05/21 13:31	03/08/21 21:41	7439-93-2	
Molybdenum	<b>0.0015J</b>	mg/L	0.010	0.00069	1	03/05/21 13:31	03/08/21 21:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/05/21 13:31	03/08/21 21:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/05/21 13:31	03/08/21 21:41	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 14:56	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>80.0</b>	mg/L	10.0	10.0	1		03/05/21 11:06		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>3.8</b>	mg/L	1.0	0.60	1		03/12/21 03:48	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/12/21 03:48	16984-48-8	
Sulfate	<b>2.2</b>	mg/L	1.0	0.50	1		03/12/21 03:48	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Sample: BRGWA-2S		Lab ID: 92524840005		Collected: 03/02/21 12:05		Received: 03/03/21 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/22/21 11:45		
pH	6.20	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	4.0	mg/L	1.0	0.070	1	03/05/21 10:53	03/10/21 01:02	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/05/21 13:31	03/08/21 21:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/05/21 13:31	03/08/21 21:58	7440-38-2	
Barium	0.0094	mg/L	0.0050	0.00071	1	03/05/21 13:31	03/08/21 21:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/05/21 13:31	03/08/21 21:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/05/21 13:31	03/08/21 21:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/05/21 13:31	03/08/21 21:58	7440-43-9	
Chromium	0.0074	mg/L	0.0050	0.00055	1	03/05/21 13:31	03/08/21 21:58	7440-47-3	
Cobalt	0.0010J	mg/L	0.0050	0.00038	1	03/05/21 13:31	03/08/21 21:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/05/21 13:31	03/08/21 21:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/05/21 13:31	03/08/21 21:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/05/21 13:31	03/08/21 21:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/05/21 13:31	03/08/21 21:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/05/21 13:31	03/08/21 21:58	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 08:45	03/08/21 14:59	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	43.0	mg/L	10.0	10.0	1		03/05/21 11:06		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	1.7	mg/L	1.0	0.60	1		03/12/21 04:02	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/12/21 04:02	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/12/21 04:02	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

QC Batch: 603832	Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524840001, 92524840002

METHOD BLANK: 3180960 Matrix: Water

Associated Lab Samples: 92524840001, 92524840002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/03/21 17:08	

LABORATORY CONTROL SAMPLE: 3180961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3180962 3180963

Parameter	Units	3180962		3180963		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	23.3	1	1	25.2	25.9	190	266	75-125	3	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

QC Batch:	604550	Analysis Method:	EPA 6010D
QC Batch Method:	EPA 3010A	Analysis Description:	6010D ATL
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524840003, 92524840004, 92524840005

METHOD BLANK: 3184771 Matrix: Water

Associated Lab Samples: 92524840003, 92524840004, 92524840005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/09/21 23:35	

LABORATORY CONTROL SAMPLE: 3184772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184773 3184774

Parameter	Units	3184773		3184774		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Calcium	mg/L	44.0	1	43.9	44.6	-5	63	75-125	2	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
 Pace Project No.: 92524840

QC Batch: 603841 Analysis Method: EPA 6020B  
 QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524840001, 92524840002

METHOD BLANK: 3181014 Matrix: Water

Associated Lab Samples: 92524840001, 92524840002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/03/21 16:48	
Arsenic	mg/L	ND	0.0050	0.00078	03/03/21 16:48	
Barium	mg/L	ND	0.0050	0.00071	03/03/21 16:48	
Beryllium	mg/L	ND	0.00050	0.000046	03/03/21 16:48	
Boron	mg/L	ND	0.040	0.0052	03/03/21 16:48	
Cadmium	mg/L	ND	0.00050	0.00012	03/03/21 16:48	
Chromium	mg/L	ND	0.0050	0.00055	03/03/21 16:48	
Cobalt	mg/L	ND	0.0050	0.00038	03/03/21 16:48	
Lead	mg/L	ND	0.0010	0.000036	03/03/21 16:48	
Lithium	mg/L	ND	0.030	0.00081	03/03/21 16:48	
Molybdenum	mg/L	ND	0.010	0.00069	03/03/21 16:48	
Selenium	mg/L	ND	0.0050	0.0016	03/04/21 13:23	
Thallium	mg/L	ND	0.0010	0.00014	03/03/21 16:48	

LABORATORY CONTROL SAMPLE: 3181015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.095	95	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	0.1	0.098	98	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3181016 3181017

Parameter	Units	92524830001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	106	105	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

Parameter	Units	3181016		3181017		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92524830001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.042	0.1	0.1	0.15	0.14	104	100	75-125	3	20		
Beryllium	mg/L	0.00012J	0.1	0.1	0.093	0.094	93	94	75-125	1	20		
Boron	mg/L	ND	1	1	0.96	0.96	96	96	75-125	0	20		
Cadmium	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	3	20		
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	99	75-125	3	20		
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	102	98	75-125	4	20		
Lead	mg/L	ND	0.1	0.1	0.095	0.092	95	92	75-125	3	20		
Lithium	mg/L	ND	0.1	0.1	0.099	0.098	99	97	75-125	2	20		
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.098	100	98	75-125	2	20		
Selenium	mg/L	ND	0.1	0.1	0.098	0.091	98	91	75-125	7	20		
Thallium	mg/L	ND	0.1	0.1	0.093	0.090	93	90	75-125	3	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

QC Batch: 604612 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

METHOD BLANK: 3185232 Matrix: Water  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/08/21 19:41	
Arsenic	mg/L	ND	0.0050	0.00078	03/08/21 19:41	
Barium	mg/L	ND	0.0050	0.00071	03/08/21 19:41	
Beryllium	mg/L	ND	0.00050	0.000046	03/08/21 19:41	
Boron	mg/L	ND	0.040	0.0052	03/08/21 19:41	
Cadmium	mg/L	ND	0.00050	0.00012	03/08/21 19:41	
Chromium	mg/L	ND	0.0050	0.00055	03/08/21 19:41	
Cobalt	mg/L	ND	0.0050	0.00038	03/08/21 19:41	
Lead	mg/L	ND	0.0010	0.000036	03/08/21 19:41	
Lithium	mg/L	ND	0.030	0.00081	03/08/21 19:41	
Molybdenum	mg/L	ND	0.010	0.00069	03/08/21 19:41	
Selenium	mg/L	ND	0.0050	0.0016	03/08/21 19:41	
Thallium	mg/L	ND	0.0010	0.00014	03/08/21 19:41	

LABORATORY CONTROL SAMPLE: 3185233

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.097	97	80-120	
Beryllium	mg/L	0.1	0.093	93	80-120	
Boron	mg/L	1	0.92	92	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.097	97	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.093	93	80-120	
Thallium	mg/L	0.1	0.093	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185234 3185235

Parameter	Units	92524831002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

Parameter	Units	3185234		3185235		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92524831002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Barium	mg/L	0.023	0.1	0.1	0.12	0.12	93	96	75-125	3	20		
Beryllium	mg/L	ND	0.1	0.1	0.084	0.085	84	85	75-125	1	20		
Boron	mg/L	0.52	1	1	1.4	1.4	88	85	75-125	2	20		
Cadmium	mg/L	ND	0.1	0.1	0.093	0.094	93	94	75-125	1	20		
Chromium	mg/L	0.00064J	0.1	0.1	0.094	0.098	94	97	75-125	4	20		
Cobalt	mg/L	0.0055	0.1	0.1	0.095	0.099	90	94	75-125	4	20		
Lead	mg/L	0.00014J	0.1	0.1	0.092	0.094	92	94	75-125	2	20		
Lithium	mg/L	0.023J	0.1	0.1	0.11	0.11	85	88	75-125	2	20		
Molybdenum	mg/L	0.0021J	0.1	0.1	0.096	0.099	93	97	75-125	4	20		
Selenium	mg/L	0.0037J	0.1	0.1	0.093	0.096	90	93	75-125	3	20		
Thallium	mg/L	ND	0.1	0.1	0.090	0.093	90	92	75-125	3	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

QC Batch: 604596

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524840001, 92524840002

METHOD BLANK: 3185122

Matrix: Water

Associated Lab Samples: 92524840001, 92524840002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/08/21 13:02	

LABORATORY CONTROL SAMPLE: 3185123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185124 3185125

Parameter	Units	3185124		3185125		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0022	0.0021	87	81	75-125	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

QC Batch: 604663 Analysis Method: EPA 7470A  
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

METHOD BLANK: 3185603 Matrix: Water  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/08/21 14:27	

LABORATORY CONTROL SAMPLE: 3185604

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185605 3185606

Parameter	Units	3185605		3185606		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92524831012 ND	0.0025	0.0025	0.0024	0.0022	95	88	75-125	7	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

QC Batch: 603554

Analysis Method: SM 2540C-2011

QC Batch Method: SM 2540C-2011

Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524840001, 92524840002

METHOD BLANK: 3179650

Matrix: Water

Associated Lab Samples: 92524840001, 92524840002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/02/21 15:40	

LABORATORY CONTROL SAMPLE: 3179651

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	393	98	90-111	

SAMPLE DUPLICATE: 3179652

Parameter	Units	92524632011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	194	196	1	10	

SAMPLE DUPLICATE: 3179653

Parameter	Units	92524632016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	128	129	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

QC Batch: 604527 Analysis Method: SM 2540C-2011  
QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

METHOD BLANK: 3184654 Matrix: Water  
Associated Lab Samples: 92524840003, 92524840004, 92524840005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/05/21 11:03	

LABORATORY CONTROL SAMPLE: 3184655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	375	94	90-111	

SAMPLE DUPLICATE: 3184656

Parameter	Units	92525799001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2090	1960	6	10	

SAMPLE DUPLICATE: 3184657

Parameter	Units	92525341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	167	152	9	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

QC Batch: 604543 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92524840001, 92524840002

METHOD BLANK: 3184704 Matrix: Water  
Associated Lab Samples: 92524840001, 92524840002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/06/21 12:54	
Fluoride	mg/L	ND	0.10	0.050	03/06/21 12:54	
Sulfate	mg/L	ND	1.0	0.50	03/06/21 12:54	

LABORATORY CONTROL SAMPLE: 3184705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.2	96	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184706 3184707

Parameter	Units	92523440025		3184706		3184707		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	2.6	2.6	50	50	50.5	51.7	96	98	90-110	2	10	
Fluoride	mg/L	0.13	0.13	2.5	2.5	2.6	2.7	100	102	90-110	2	10	
Sulfate	mg/L	ND	ND	50	50	48.5	49.7	96	99	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184708 3184709

Parameter	Units	92524853002		3184708		3184709		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Chloride	mg/L	8.3	8.3	50	50	57.2	57.0	98	97	90-110	0	10	
Fluoride	mg/L	0.26	0.26	2.5	2.5	2.8	2.8	101	101	90-110	0	10	
Sulfate	mg/L	42.4	42.4	50	50	91.1	90.9	97	97	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

QC Batch: 606038 Analysis Method: EPA 300.0 Rev 2.1 1993  
 QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92524840003, 92524840004, 92524840005

METHOD BLANK: 3192959 Matrix: Water  
 Associated Lab Samples: 92524840003, 92524840004, 92524840005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/12/21 00:26	
Fluoride	mg/L	ND	0.10	0.050	03/12/21 00:26	
Sulfate	mg/L	ND	1.0	0.50	03/12/21 00:26	

LABORATORY CONTROL SAMPLE: 3192960

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.8	106	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	54.5	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192961 3192962

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92526606002	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	68.3	50	50	100	102	64	67	90-110	2	10	M1	
Fluoride	mg/L	0.34	2.5	2.5	2.5	2.5	85	87	90-110	2	10	M1	
Sulfate	mg/L	95.3	50	50	128	130	65	68	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192963 3192964

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525375001	Result	Spike Conc.	Spike Conc.								
Chloride	mg/L	3.7	50	50	47.1	46.1	87	85	90-110	2	10	M1	
Fluoride	mg/L	ND	2.5	2.5	2.2	2.2	89	87	90-110	2	10	M1	
Sulfate	mg/L	0.51J	50	50	45.8	44.7	91	88	90-110	2	10	M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND

Pace Project No.: 92524840

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND  
Pace Project No.: 92524840

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92524840001	BRGWA-6S				
92524840002	BRGWA-2I				
92524840003	BRGWA-5S				
92524840004	BRGWA-5I				
92524840005	BRGWA-2S				
92524840001	BRGWA-6S	EPA 3010A	603832	EPA 6010D	603942
92524840002	BRGWA-2I	EPA 3010A	603832	EPA 6010D	603942
92524840003	BRGWA-5S	EPA 3010A	604550	EPA 6010D	604640
92524840004	BRGWA-5I	EPA 3010A	604550	EPA 6010D	604640
92524840005	BRGWA-2S	EPA 3010A	604550	EPA 6010D	604640
92524840001	BRGWA-6S	EPA 3005A	603841	EPA 6020B	603947
92524840002	BRGWA-2I	EPA 3005A	603841	EPA 6020B	603947
92524840003	BRGWA-5S	EPA 3005A	604612	EPA 6020B	604686
92524840004	BRGWA-5I	EPA 3005A	604612	EPA 6020B	604686
92524840005	BRGWA-2S	EPA 3005A	604612	EPA 6020B	604686
92524840001	BRGWA-6S	EPA 7470A	604596	EPA 7470A	604882
92524840002	BRGWA-2I	EPA 7470A	604596	EPA 7470A	604882
92524840003	BRGWA-5S	EPA 7470A	604663	EPA 7470A	604884
92524840004	BRGWA-5I	EPA 7470A	604663	EPA 7470A	604884
92524840005	BRGWA-2S	EPA 7470A	604663	EPA 7470A	604884
92524840001	BRGWA-6S	SM 2540C-2011	603554		
92524840002	BRGWA-2I	SM 2540C-2011	603554		
92524840003	BRGWA-5S	SM 2540C-2011	604527		
92524840004	BRGWA-5I	SM 2540C-2011	604527		
92524840005	BRGWA-2S	SM 2540C-2011	604527		
92524840001	BRGWA-6S	EPA 300.0 Rev 2.1 1993	604543		
92524840002	BRGWA-2I	EPA 300.0 Rev 2.1 1993	604543		
92524840003	BRGWA-5S	EPA 300.0 Rev 2.1 1993	606038		
92524840004	BRGWA-5I	EPA 300.0 Rev 2.1 1993	606038		
92524840005	BRGWA-2S	EPA 300.0 Rev 2.1 1993	606038		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
Sample Condition Upon Receipt(SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition:  
Upon Receipt

Client Name:

Project #:

WO#: 92524840

Carrier:  Fed Ex  UPS  USPS  Client  
 Commercial  Pace  Other:



92524840

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/Initials Person Examining Contents: MT 3/2/21

Packing Material:  Bubble Wrap  Bubble Sags  None  Other

Biological Tissue Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 230

Type of Ice:

Wet  Blue  None

Cooler Temp:

4.4

Correction Factor:

Add/Subtract (°C)

± 0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C):

4.4

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?

Yes  No

Comments/Discrepancy:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<22 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <i>GW</i>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_



Company: George Power - Coal Combustion Residuals  
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields  
 Billing Information:

Address: 2480 Winters Road  
 Atlanta, GA 30039

Report To: John Abraham

Email To: jbrahman@bceanalytical.com

Copy To: Soldier

Site collection info/address: North Branch

Phone: (404) 506-7239

State: Georgia City: Milledgeville Time Zone Collected

Email: jbrahman@bceanalytical.com

Project Name: Plant Branch BCC/VE Background

Phone: (404) 506-7239

Project # CCR 4th Semi-Annual

Collected by (Print): Travis Karmark

Purchase Order #

Analysis Method

Quote #

Collected by (Signature): *[Signature]*

Turnaround Date Required:

Analysis Method: Rush:  Same Day  Next Day  
 12 Day  14 Day  15 Day  
 (Specify Churns Above)

\* Matrix Codes (insert in matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Sed (S), or (OIL), Waste (WP), Air (A), Tissue (TS), Biossary (BL), Water (WT), Other (OT)

Customer Sample ID

Matrix \*

Comp / Grab

Collected (or Composite Date)

Composite End Date

Time

Time

Time

Time

Time

Time

Time

BRGWA-65  
 BRGWA-22

GW  
 GW

G  
 G

3-1-21  
 3-1-21

1630  
 1639

670  
 666

5  
 5

5  
 5

5  
 5

5  
 5

5  
 5

5  
 5

X X Metals 6010/6020/7470 - see comments

X X TDS

X X Chloride/Fluoride/Sulfate

X X Radium 226,228

**ALL SHADED AREAS are for LAB USE ONLY**

Container Preservation Type \*\*  
 \*\* preservative Types: (1) nitric acid, (2) hydrochloric acid, (3) sulfuric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) 10% formalin, (8) sodium molybdate, (9) borax, (A) seawater acid, (B) ammonium hydroxide, (C) TSP, (D) Unpreserved, (O) Other

Analysis

Lab Profile/Time

Lab Sample Receipt Check:

Quantity Scale Attached/Correct: Y/N/NA

Customer Signature Present: Y/N/NA

Customer ID/Order Present: Y/N/NA

Original Receipt: Y/N/NA

Corrected Receipt: Y/N/NA

Surrogate Volume: Y/N/NA

Surrogate Received on Ice: Y/N/NA

USA Registered SOBs: Y/N/NA

Sampled in Holding Time: Y/N/NA

Residual Chloride Present: Y/N/NA

C-Sobos: Y/N/NA

Sample pH Acceptable: Y/N/NA

pH Sober: Y/N/NA

Surfactant Present: Y/N/NA

Lead Acetate Strip: Y/N/NA

Lab Use ONLY:  
 Lab Sample # / Comments:

(Matrix): As, B, Ba, Be, Ca, Cd, Co, Cr, Mn, Pb, Se, U, Ti, Mg

Type of Lab Used:  Field  Ship  Dry  None

SHOOT HODDS PRESENT (72 hours):  Y  N/A

LAB Sample Temperature Info:  
 Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

Requisitioned by/Company: (Signature)

Date/Time: 3-2-21/0815

Received by/Company: (Signature)

Quantity: 3/2/24

Table #: *[Handwritten]*

Temp Blank Received: Y/N/NA

**ALL SHADED AREAS are for LAB USE ONLY**

Company: Georgia Power - Coal Combustion Residuals  
 Address: 2460 Kramer Road  
 Atlanta, GA 30339

Report To: John Abraham  
 Copy To: Golder  
 Email To: jbraab@faceanalytical.com  
 Site Collection Info/Address: Plant Branch

Phone: (404) 506-7239  
 Email: jbraab@faceanalytical.com  
 Project Name: Plant Branch BCOE Background

Project # CCR 4th Semi-Annual  
 Purchaser Order #  
 Quote #

Turnaround Days Requested:  
 Rush  
 Same Day  
 1 Day  
 3 Day  
 4 Day  
 5 Day

Signature:  
 Analysts:  
 pH  
 Yes  
 No

\* Matrix Codes (Insert in Matrix Box Below) Drinking Water (DW), Ground Water (GW), Wastewater (WW),  
 Product # (P), Surface # (S), Oil (O), Waste (WP), Air (AL), Tissue (T), Biosolar (B), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Collected for Composite		Composite Find		pH	# of Chn
		Date	Time	Date	Time		
BRCWA-55	GW	3-2-21	0929			6.425	
BRCWA-57	GW	3-2-21	1011			6.475	
BRCWA-29	GW	3-2-21	1205			6.205	

(Matrix): A, B, Ba, Be, Ca, Cd, Co, Cr, Mn, Pb, Se, Si, U, Ti, Hg  
 Type of Use Used: Wet Blue Dry None  
 Pending Material Used:  
 SPQRIT MOLDS PRESENT (472 hours): Y N N/A

Requested by/Company (Signature):  
 Date/Time: 3-3-21 10815  
 Received by/Company (Signature):  
 Date/Time: 3/3/21 1003

Requested by/Company (Signature):  
 Date/Time:  
 Received by/Company (Signature):  
 Date/Time:

Requested by/Company (Signature):  
 Date/Time:  
 Received by/Company (Signature):  
 Date/Time:

Container Preservation Type: \*\*

Residuals	
Metals 6010/6020/7470 - see comments	
TDS	
Chloride/Fluoride/Sulfate	
Radium 226,228	

Lab Project Manager:  
 Lab Sample Receipt Checklist:  
 Custody Seal Photo/Labeld Y/N/NA  
 Custody Signature Present Y/N/NA  
 Collector Signature Present Y/N/NA  
 Sample Volume Y/N/NA  
 Correct Volume Y/N/NA  
 Samples Received on Site Y/N/NA  
 VOA - Headspace Acetate Y/N/NA  
 VOA - Residuals SO4 Y/N/NA  
 Samples in Holding Tank Y/N/NA  
 Acidified Coliform Present Y/N/NA  
 Cl 5/10/15  
 Sample pH acceptable Y/N/NA  
 pH Range Y/N/NA  
 Sulfide Present Y/N/NA  
 Lead Acetate Solns. Y/N/NA  
 Lab Use ONLY:  
 Lab Sample # / Comments

Lab Tracking #: 30807  
 Samples received via: FEDEX UPS Client Courier Face Courier  
 Table #: METAL LAB USE ONLY  
 Method: HCL MICH TSP OTHER  
 Non Conformance: YES / NO  
 Page: 1 of 1

May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

Dear Joju Abraham:

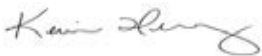
Enclosed are the analytical results for sample(s) received by the laboratory between March 04, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

---

### **Pace Analytical Services Pennsylvania**

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601  
ANAB DOD-ELAP Rad Accreditation #: L2417  
Alabama Certification #: 41590  
Arizona Certification #: AZ0734  
Arkansas Certification  
California Certification #: 04222CA  
Colorado Certification #: PA01547  
Connecticut Certification #: PH-0694  
Delaware Certification  
EPA Region 4 DW Rad  
Florida/TNI Certification #: E87683  
Georgia Certification #: C040  
Florida: Cert E871149 SEKS WET  
Guam Certification  
Hawaii Certification  
Idaho Certification  
Illinois Certification  
Indiana Certification  
Iowa Certification #: 391  
Kansas/TNI Certification #: E-10358  
Kentucky Certification #: KY90133  
KY WW Permit #: KY0098221  
KY WW Permit #: KY0000221  
Louisiana DHH/TNI Certification #: LA180012  
Louisiana DEQ/TNI Certification #: 4086  
Maine Certification #: 2017020  
Maryland Certification #: 308  
Massachusetts Certification #: M-PA1457  
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235  
Montana Certification #: Cert0082  
Nebraska Certification #: NE-OS-29-14  
Nevada Certification #: PA014572018-1  
New Hampshire/TNI Certification #: 297617  
New Jersey/TNI Certification #: PA051  
New Mexico Certification #: PA01457  
New York/TNI Certification #: 10888  
North Carolina Certification #: 42706  
North Dakota Certification #: R-190  
Ohio EPA Rad Approval: #41249  
Oregon/TNI Certification #: PA200002-010  
Pennsylvania/TNI Certification #: 65-00282  
Puerto Rico Certification #: PA01457  
Rhode Island Certification #: 65-00282  
South Dakota Certification  
Tennessee Certification #: 02867  
Texas/TNI Certification #: T104704188-17-3  
Utah/TNI Certification #: PA014572017-9  
USDA Soil Permit #: P330-17-00091  
Vermont Dept. of Health: ID# VT-0282  
Virgin Island/PADEP Certification  
Virginia/VELAP Certification #: 9526  
Washington Certification #: C868  
West Virginia DEP Certification #: 143  
West Virginia DHHR Certification #: 9964C  
Wisconsin Approve List for Rad  
Wyoming Certification #: 8TMS-L

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE SUMMARY

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525650001	BRGWC-33S	Water	03/03/21 09:03	03/04/21 08:15
92525650002	BRGWC-34S	Water	03/03/21 10:05	03/04/21 08:15
92525650003	BRGWC-36S	Water	03/03/21 16:16	03/04/21 08:15
92525650004	BRGWC-37S	Water	03/03/21 17:18	03/04/21 08:15
92525650005	FB-1	Water	03/03/21 16:12	03/04/21 08:15
92525650006	BRGWC-35S	Water	03/04/21 14:17	03/05/21 11:30
92525650007	BRGWC-17S	Water	03/04/21 15:36	03/05/21 11:30
92525650008	BRGWC-38S	Water	03/04/21 17:14	03/05/21 11:30
92525650009	DUP-2	Water	03/04/21 00:00	03/05/21 11:30

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**SAMPLE ANALYTE COUNT**

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525650001	BRGWC-33S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650002	BRGWC-34S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650003	BRGWC-36S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650004	BRGWC-37S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650005	FB-1	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650006	BRGWC-35S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650007	BRGWC-17S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650008	BRGWC-38S	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525650009	DUP-2	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92525650001</b>	<b>BRGWC-33S</b>					
EPA 9315	Radium-226	0.266 ± 0.165 (0.307) C:69% T:NA	pCi/L		03/26/21 08:12	
EPA 9320	Radium-228	0.442 ± 0.413 (0.849) C:82% T:76%	pCi/L		03/23/21 13:41	
Total Radium Calculation	Total Radium	0.708 ± 0.578 (1.16)	pCi/L		03/26/21 15:12	
<b>92525650002</b>	<b>BRGWC-34S</b>					
EPA 9315	Radium-226	0.229 ± 0.138 (0.205) C:88% T:NA	pCi/L		03/26/21 08:06	
EPA 9320	Radium-228	0.886 ± 0.474 (0.860) C:81% T:75%	pCi/L		03/23/21 13:41	
Total Radium Calculation	Total Radium	1.12 ± 0.612 (1.07)	pCi/L		03/26/21 15:12	
<b>92525650003</b>	<b>BRGWC-36S</b>					
EPA 9315	Radium-226	0.202 ± 0.149 (0.261) C:82% T:NA	pCi/L		03/26/21 08:06	
EPA 9320	Radium-228	0.105 ± 0.363 (0.817) C:82% T:81%	pCi/L		03/23/21 13:41	
Total Radium Calculation	Total Radium	0.307 ± 0.512 (1.08)	pCi/L		03/26/21 15:12	
<b>92525650004</b>	<b>BRGWC-37S</b>					
EPA 9315	Radium-226	0.313 ± 0.180 (0.303) C:92% T:NA	pCi/L		03/26/21 08:10	
EPA 9320	Radium-228	0.809 ± 0.400 (0.710) C:80% T:98%	pCi/L		03/23/21 13:41	
Total Radium Calculation	Total Radium	1.12 ± 0.580 (1.01)	pCi/L		03/26/21 15:12	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92525650005</b>	<b>FB-1</b>					
EPA 9315	Radium-226	0.164 ± 0.138 (0.260) C:92% T:NA	pCi/L		03/26/21 08:07	
EPA 9320	Radium-228	0.670 ± 0.401 (0.751) C:83% T:86%	pCi/L		03/23/21 13:41	
Total Radium Calculation	Total Radium	0.834 ± 0.539 (1.01)	pCi/L		03/26/21 15:12	
<b>92525650006</b>	<b>BRGWC-35S</b>					
EPA 9315	Radium-226	0.0514 ± 0.0888 (0.199) C:89% T:NA	pCi/L		03/25/21 09:45	
EPA 9320	Radium-228	0.410 ± 0.481 (1.01) C:81% T:81%	pCi/L		03/24/21 19:52	
Total Radium Calculation	Total Radium	0.461 ± 0.570 (1.21)	pCi/L		03/26/21 13:56	
<b>92525650007</b>	<b>BRGWC-17S</b>					
EPA 9315	Radium-226	0.0868 ± 0.135 (0.301) C:85% T:NA	pCi/L		03/25/21 10:28	
EPA 9320	Radium-228	0.293 ± 0.414 (0.890) C:78% T:74%	pCi/L		03/25/21 12:20	
Total Radium Calculation	Total Radium	0.380 ± 0.549 (1.19)	pCi/L		03/26/21 13:56	
<b>92525650008</b>	<b>BRGWC-38S</b>					
EPA 9315	Radium-226	0.524 ± 0.207 (0.237) C:91% T:NA	pCi/L		03/25/21 10:09	
EPA 9320	Radium-228	1.47 ± 0.520 (0.768) C:76% T:85%	pCi/L		03/25/21 12:20	
Total Radium Calculation	Total Radium	1.99 ± 0.727 (1.01)	pCi/L		03/26/21 13:56	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SUMMARY OF DETECTION

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92525650009</b>	<b>DUP-2</b>					
EPA 9315	Radium-226	0.181 ± 0.150 (0.283)	pCi/L		03/25/21 09:33	
EPA 9320	Radium-228	C:87% T:NA -0.0895 ± 0.345 (0.814)	pCi/L		03/25/21 12:20	
Total Radium Calculation	Total Radium	C:78% T:84% 0.181 ± 0.495 (1.10)	pCi/L		03/26/21 13:56	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-33S</b> <b>Lab ID: 92525650001</b> Collected: 03/03/21 09:03      Received: 03/04/21 08:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.266 ± 0.165 (0.307)</b> C:69% T:NA	pCi/L	03/26/21 08:12	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.442 ± 0.413 (0.849)</b> C:82% T:76%	pCi/L	03/23/21 13:41	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.708 ± 0.578 (1.16)</b>	pCi/L	03/26/21 15:12	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-34S</b> <b>Lab ID: 92525650002</b> Collected: 03/03/21 10:05      Received: 03/04/21 08:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.229 ± 0.138 (0.205)</b> <b>C:88% T:NA</b>	pCi/L	03/26/21 08:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.886 ± 0.474 (0.860)</b> <b>C:81% T:75%</b>	pCi/L	03/23/21 13:41	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.12 ± 0.612 (1.07)</b>	pCi/L	03/26/21 15:12	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-36S</b> <b>Lab ID: 92525650003</b> Collected: 03/03/21 16:16      Received: 03/04/21 08:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.202 ± 0.149 (0.261)</b> <b>C:82% T:NA</b>	pCi/L	03/26/21 08:06	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.105 ± 0.363 (0.817)</b> <b>C:82% T:81%</b>	pCi/L	03/23/21 13:41	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.307 ± 0.512 (1.08)</b>	pCi/L	03/26/21 15:12	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-37S</b> <b>Lab ID: 92525650004</b> Collected: 03/03/21 17:18      Received: 03/04/21 08:15      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.313 ± 0.180 (0.303)</b> <b>C:92% T:NA</b>	pCi/L	03/26/21 08:10	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.809 ± 0.400 (0.710)</b> <b>C:80% T:98%</b>	pCi/L	03/23/21 13:41	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>1.12 ± 0.580 (1.01)</b>	pCi/L	03/26/21 15:12	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Sample: **FB-1** Lab ID: **92525650005** Collected: 03/03/21 16:12 Received: 03/04/21 08:15 Matrix: Water  
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.164 ± 0.138 (0.260)</b> <b>C:92% T:NA</b>	pCi/L	03/26/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>0.670 ± 0.401 (0.751)</b> <b>C:83% T:86%</b>	pCi/L	03/23/21 13:41	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.834 ± 0.539 (1.01)</b>	pCi/L	03/26/21 15:12	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-35S</b> <b>Lab ID: 92525650006</b> Collected: 03/04/21 14:17      Received: 03/05/21 11:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0514 ± 0.0888 (0.199)</b> <b>C:89% T:NA</b>	pCi/L	03/25/21 09:45	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.410 ± 0.481 (1.01)</b> <b>C:81% T:81%</b>	pCi/L	03/24/21 19:52	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.461 ± 0.570 (1.21)</b>	pCi/L	03/26/21 13:56	7440-14-4	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-17S</b> <b>Lab ID: 92525650007</b> Collected: 03/04/21 15:36      Received: 03/05/21 11:30      Matrix: Water PWS:      Site ID:      Sample Type:						
Pace Analytical Services - Greensburg						
Radium-226	EPA 9315	<b>0.0868 ± 0.135 (0.301)</b> <b>C:85% T:NA</b>	pCi/L	03/25/21 10:28	13982-63-3	
Pace Analytical Services - Greensburg						
Radium-228	EPA 9320	<b>0.293 ± 0.414 (0.890)</b> <b>C:78% T:74%</b>	pCi/L	03/25/21 12:20	15262-20-1	
Pace Analytical Services - Greensburg						
Total Radium	Total Radium Calculation	<b>0.380 ± 0.549 (1.19)</b>	pCi/L	03/26/21 13:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
<b>Sample: BRGWC-38S</b> <b>Lab ID: 92525650008</b> Collected: 03/04/21 17:14      Received: 03/05/21 11:30      Matrix: Water PWS:      Site ID:      Sample Type:						
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.524 ± 0.207 (0.237)</b> <b>C:91% T:NA</b>	pCi/L	03/25/21 10:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>1.47 ± 0.520 (0.768)</b> <b>C:76% T:85%</b>	pCi/L	03/25/21 12:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>1.99 ± 0.727 (1.01)</b>	pCi/L	03/26/21 13:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

**Sample: DUP-2**      **Lab ID: 92525650009**      Collected: 03/04/21 00:00      Received: 03/05/21 11:30      Matrix: Water  
PWS:      Site ID:      Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	<b>0.181 ± 0.150 (0.283)</b> <b>C:87% T:NA</b>	pCi/L	03/25/21 09:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	<b>-0.0895 ± 0.345 (0.814)</b> <b>C:78% T:84%</b>	pCi/L	03/25/21 12:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	<b>0.181 ± 0.495 (1.10)</b>	pCi/L	03/26/21 13:56	7440-14-4	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

QC Batch:	438264	Analysis Method:	EPA 9315
QC Batch Method:	EPA 9315	Analysis Description:	9315 Total Radium
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650007, 92525650008, 92525650009

METHOD BLANK: 2115666 Matrix: Water

Associated Lab Samples: 92525650007, 92525650008, 92525650009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0177 ± 0.140 (0.349) C:93% T:NA	pCi/L	03/25/21 09:33	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

QC Batch: 438168

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650007, 92525650008, 92525650009

METHOD BLANK: 2115336

Matrix: Water

Associated Lab Samples: 92525650007, 92525650008, 92525650009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0301 ± 0.353 (0.815) C:79% T:75%	pCi/L	03/25/21 12:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

QC Batch: 438266

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650001, 92525650002, 92525650003, 92525650004, 92525650005

METHOD BLANK: 2115671

Matrix: Water

Associated Lab Samples: 92525650001, 92525650002, 92525650003, 92525650004, 92525650005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.142 ± 0.131 (0.243) C:77% T:NA	pCi/L	03/26/21 08:05	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

QC Batch: 438167

Analysis Method: EPA 9320

QC Batch Method: EPA 9320

Analysis Description: 9320 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650006

METHOD BLANK: 2115335

Matrix: Water

Associated Lab Samples: 92525650006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.199 ± 0.331 (0.720) C:83% T:85%	pCi/L	03/24/21 16:42	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

QC Batch: 438263

Analysis Method: EPA 9315

QC Batch Method: EPA 9315

Analysis Description: 9315 Total Radium

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650006

METHOD BLANK: 2115665

Matrix: Water

Associated Lab Samples: 92525650006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0782 ± 0.129 (0.288) C:88% T:NA	pCi/L	03/25/21 09:33	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL - RADIOCHEMISTRY

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

---

QC Batch:	438169	Analysis Method:	EPA 9320
QC Batch Method:	EPA 9320	Analysis Description:	9320 Radium 228
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92525650001, 92525650002, 92525650003, 92525650004, 92525650005

---

METHOD BLANK: 2115337 Matrix: Water

Associated Lab Samples: 92525650001, 92525650002, 92525650003, 92525650004, 92525650005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.429 ± 0.325 (0.634) C:80% T:90%	pCi/L	03/23/21 13:45	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALIFIERS

Project: BRANCH E NETWORK RADS

Pace Project No.: 92525650

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

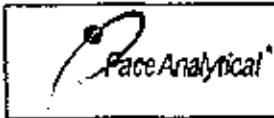
### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK RADS  
Pace Project No.: 92525650

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525650001	BRGWC-33S	EPA 9315	438266		
92525650002	BRGWC-34S	EPA 9315	438266		
92525650003	BRGWC-36S	EPA 9315	438266		
92525650004	BRGWC-37S	EPA 9315	438266		
92525650005	FB-1	EPA 9315	438266		
92525650006	BRGWC-35S	EPA 9315	438263		
92525650007	BRGWC-17S	EPA 9315	438264		
92525650008	BRGWC-38S	EPA 9315	438264		
92525650009	DUP-2	EPA 9315	438264		
92525650001	BRGWC-33S	EPA 9320	438169		
92525650002	BRGWC-34S	EPA 9320	438169		
92525650003	BRGWC-36S	EPA 9320	438169		
92525650004	BRGWC-37S	EPA 9320	438169		
92525650005	FB-1	EPA 9320	438169		
92525650006	BRGWC-35S	EPA 9320	438167		
92525650007	BRGWC-17S	EPA 9320	438168		
92525650008	BRGWC-38S	EPA 9320	438168		
92525650009	DUP-2	EPA 9320	438168		
92525650001	BRGWC-33S	Total Radium Calculation	440686		
92525650002	BRGWC-34S	Total Radium Calculation	440686		
92525650003	BRGWC-36S	Total Radium Calculation	440686		
92525650004	BRGWC-37S	Total Radium Calculation	440686		
92525650005	FB-1	Total Radium Calculation	440686		
92525650006	BRGWC-35S	Total Radium Calculation	440647		
92525650007	BRGWC-17S	Total Radium Calculation	440647		
92525650008	BRGWC-38S	Total Radium Calculation	440647		
92525650009	DUP-2	Total Radium Calculation	440647		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

G-A Power

Project #:

WO#: **92525657**



92525657

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Client

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/initials Person Examining Contents: 7/4/21

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.6

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Company: Georgia Power - Coal Combustion Residuals  
 Address: 2400 Market Road  
 Atlanta, GA 30339  
 Report To: Joyce Alexander  
 Email: joyce.alexander@ga.com

Phone: (404) 506-7238  
 Email: jalexander@ga.com  
 Project Name: Plant Branches & Network  
 Project # CCR 6th Semi-Annual

Collected By: Travis Matthews  
 Analyzed By: [Signature]

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biosolids (B), Water (WT), Other (OT)

Customer Sample ID: BR6WC-335, BR6WC-345, BR6WC-365, BR6WC-375, FB-1

Customer Sample ID	Matrix	Comp / Grab	Collected For (Matrix, SMT, SMT)	Time	Comp to Test	Date	Time	pH	# of On's
BR6WC-335	GW	G	3-3-21	0903				4.83	5
BR6WC-345	GW	G	3-3-21	1005				5.89	7
BR6WC-365	GW	G	3-3-21	1616				5.86	5
BR6WC-375	GW	G	3-3-21	1718				5.87	5
FB-1	W	G	3-3-21	1612				-	5

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biosolids (B), Water (WT), Other (OT)

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biosolids (B), Water (WT), Other (OT)

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biosolids (B), Water (WT), Other (OT)

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biosolids (B), Water (WT), Other (OT)

Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]

Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]

Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]

Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]

Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]  
 Lab Project Manager: [Signature]

Company: Geor 83 Power - Coal Combustion Residuals  
 Address: 2480 Mainer Road  
 Atlanta, GA 30339  
 Report To: John Avallano  
 Email: jsherman@southcoast.com  
 Phone: (404) 506-7239  
 Project Name: Plant Branch E Network  
 Purchas Order #:   
 Collected By (email): Travis Matinez  
 Analyzed By (email):   
 Collected By (signature):   
 Turnaround Date Required:   
 State: Georgia City: Milledgeville Time Zone: Eastern  
 Site Collection Info/Address: Plant Branch

Final To: scshimpoes@southcoast.com  
 Site Collection Info/Address: Plant Branch  
 Project Profile:   
 Pace Project Manager:   
 keron.harrington@southcoast.com  
 Immediately Packed on ice:   
 Field Filtered (if applicable):   
 Analyzed:   
 Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (PL), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Biossary (B), Water (WT), Other (OT)

Customer Sample ID	Matrix	Comp / Grab	Collected for Composite	Composite End	pH	# of Cans
			Date	Date		
BRGWC-355	GW	6	3-4-21 1417		6.14	5
BRGWC-175	GW	6	3-4-21 1536		6.45	5
BRGWC-385	GW	6	3-4-21 1714		4.19	5
DUP-2	GW	6	3-4-21 --		--	5

Field Filtered (if applicable):   
 Yes  No  
 Same Day  Next Day  
 1-2 Day  3 Day  4 Day  5 Day  
 (Specify Order App)

Container Preservative Type	Lab Project Manager	Lab Profile/Line
1		Lab Sample Receipt Checklist Outbody Seal Present/Unlabeled Y/N NA Outbody Signatures Present Y/N NA Collector Signature Present Y/N NA Barcodes Intact Y/N NA Correct Buckets Y/N NA Seals/Seal Volume Y/N NA Samples Packed on Ice Y/N NA VOA - Headspace Acceptable Y/N NA USDA Regulated Salt Y/N NA Samples in Holding Time Y/N NA Residual Chlorine Present Y/N NA Cl Spills: Sample pH Acceptable Y/N NA pH Strips: Residual Present Y/N NA Lead Acetate Strip: Lab Used Only: Lab Sample # / Comments:

Metals 6010/6020/7470 - see comments	TDS	Chloride/Fluoride/Sulfate	Radium 226-228
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X
X	X	X	X

Requested by/Company (Signature)	Date/Time	Received by/Company (Signature)	Date/Time	Requested by/Company (Signature)	Date/Time
<i>[Signature]</i>	3-5-21 1000	<i>[Signature]</i>	3-5-21 1130	<i>[Signature]</i>	

Requested by/Company (Signature)	Date/Time	Received by/Company (Signature)	Date/Time
<i>[Signature]</i>		<i>[Signature]</i>	

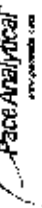
  

Requested by/Company (Signature)	Date/Time	Received by/Company (Signature)	Date/Time
<i>[Signature]</i>		<i>[Signature]</i>	

Requested by/Company (Signature)	Date/Time	Received by/Company (Signature)	Date/Time
<i>[Signature]</i>		<i>[Signature]</i>	

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-226  
 Analyst: CLA  
 Date: 3/24/2021  
 Worksheet: 59267  
 Matrix: DW

**Method Blank Assessment**

MB Sample ID	2115665
MB Concentration:	0.076
MB Counting Uncertainty:	0.128
MB MDC:	0.288
MB Numerical Performance Indicator	1.20
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

**Laboratory Control Sample Assessment**

Count Date	LCSD (Y or N)?	Y
3/25/2021	LCSD59287	3/25/2021
19-033	LCSD59287	19-033
24-039	LCSD59287	24-039
0.10		0.10
0.501		0.502
4.900		4.787
0.058		0.057
5.031		4.732
0.564		0.536
104.82%		86.84%
Pass		N/A
125%		Pass
75%		75%

**Duplicate Sample Assessment**

Sample ID	Duplicate Sample ID	Enter Duplicate sample IDs if other than LCSD in the space below.
LCSD59287	LCSD59287	92525653001 92525653001DUP
5.031	5.031	
0.564	0.564	
4.732	4.732	
0.535	0.535	
ND	ND	
0.758	0.758	
5.98%	5.98%	
N/A	N/A	
Pass	Pass	
25%	25%	

**Sample Matrix Spike Control Assessment**

Sample Collection Date	MS/MSD 1	MS/MSD 2
Sample ID: Sample MS ID Sample MSD ID Spike ID		
MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated):		
Sample Result: Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

**Matrix Spike/Matrix Spike Duplicate Sample Assessment**

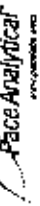
Sample ID	Sample MS ID	Sample MSD ID
Sample Matrix Spike Result Sample Matrix Spike Duplicate Result: Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPO: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:		

*Handwritten signature: CLM-59267*

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

# Quality Control Sample Performance Assessment



**Analyst Must Manually Enter All Fields Highlighted in Yellow**

Test: **Ra-226**  
 Analyst: **CLA**  
 Date: **3/24/2021**  
 Worksheet: **59287**  
 Matrix: **DW**

Method Blank Assessment	
MB Sample ID	2116665
MB Concentration:	0.07B
MB Counting Uncertainty:	0.12B
MB MDC:	0.19B
MB Numerical Performance Indicator:	1.29
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSD Yr or N?	N
LCSD59287	LCSD59287
Count Date:	3/25/2021
Spoke I.D.:	19-033
Decay Corrected Spoke Concentration (pCi/mL):	24.033
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	4.900
Uncertainty (Calculated):	0.068
Result (pCi/L, g, F):	5.031
LCSD Counting Uncertainty (pCi/L, g, F):	0.364
Numerical Performance Indicator:	104.62%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	92525653001
Duplicate Sample I.D.:	92525653001DUP
Sample Result (pCi/L, g, F):	0.181
Sample Duplicate Result (pCi/L, g, F):	0.197
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.244
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.147
Are samples and/or duplicate results below RL?	See Below #
Duplicate Numerical Performance Indicator:	0.503
Duplicate RPD:	29.79%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail
% RPD Limit:	25%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

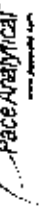
\*\*\*Batch must be re-prepped due to unacceptable precision.

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample I.D. Sample MS I.D. Sample MSD I.D. Spoke I.D. MS/MSD Decay Corrected Spoke Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result: Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limits: MS/MSD Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment
Sample I.D. Sample MS I.D. Sample MSD I.D. Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator: Duplicate Numerical Performance Indicator: MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

*Handwritten signature/initials*

# Quality Control Sample Performance Assessment



Analytist *Must Manually Enter All Fields, Highlighted in Yellow*

Test: Ra-226  
 Analyst: CLA  
 Date: 3/24/2021  
 Worksheet: 59288  
 Matrix: DW

Method Blank Assessment	
MB Sample ID	2115666
MB Concentration:	0.016
MB Counting Uncertainty:	0.140
MB MDC:	0.349
MB Numerical Performance Indicator:	0.25
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	LCSD59288
Spike ID:	3252021
Decay Corrected Spike Concentration (pCi/mL):	19.033
Volume Used (mL):	24.039
Aliquot Volume (L, g, F):	0.10
Target Conc. (pCi/L, g, F):	0.508
Uncertainty (Calculated):	4.734
Result (pCi/L, g, F):	0.057
LCSD Counting Uncertainty (pCi/L, g, F):	4.623
Numerical Performance Indicator:	0.506
Status vs Numerical Indicator:	-1.27
Status vs Recovery:	93.06%
Upper % Recovery Limits:	N/A
Lower % Recovery Limits:	Pass
	125%
	75%

Duplicate Sample Assessment	
Sample ID:	LCSD59288
Duplicate Sample ID:	LCSD59288
Sample Result (pCi/L, g, F):	4.623
Sample Duplicate Result (pCi/L, g, F):	0.574
Sample Duplicate Result Uncertainty (pCi/L, g, F):	4.405
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.506
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	0.558
(Based on the LCS(LDSD Percent Recoveries) Duplicate RPD:	3.42%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Sample Matrix Spike Control Assessment	
Sample Collection Date:	MS/MSD 1
Sample I.D.:	MS/MSD 2
Sample MS I.D.:	
Sample MSD I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
MS Spike Uncertainty (Calculated):	
MSD Spike Uncertainty (Calculated):	
Sample Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	
MS/MSD Upper % Recovery Limit:	
MS/MSD Lower % Recovery Limit:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

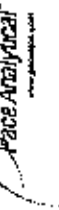
Comments:

*Handwritten notes:*  
 3/24/21  
 19.033

*Handwritten:* 3/24/21



# Quality Control Sample Performance Assessment



Test: Ra-226  
Analyst: CLA  
Date: 3/18/2021  
Worklist: 59289  
Matrix: DW

Method Blank Assessment	
MB Sample ID	2115671
MB concentration:	0.142
MB Counting Uncertainty:	0.128
MB MDC:	0.243
MB Numerical Performance Indicator:	2.15
MB Status vs Numerical Indicator:	N/A
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
LCSD (Y or N)?	N
LCSD9289	LCSD9289
Count Date:	3/25/2021
Spike I.D.:	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.039
Volume Used (mL):	0.10
Adjusted Volume (L, g, F):	0.501
Target Conc. (pCi/L, g, F):	4.797
Uncertainty (Calculated):	0.009
Result (pCi/L, g, F):	5.221
LCSD Counting Uncertainty (pCi/L, g, F):	0.630
Numerical Performance Indicator:	1.56
Percent Recovery:	108.83%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	125%
Lower % Recovery Limits:	75%

Duplicate Sample Assessment	
Sample I.D.:	92525905004
Duplicate Sample I.D.:	92525905004DUP
Sample Result (pCi/L, g, F):	0.131
Sample Duplicate Result (pCi/L, g, F):	0.148
Sample Duplicate Result (pCi/L, g, F):	0.079
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.113
Are sample and/or duplicate results below RLP?	See Below ##
Duplicate Numerical Performance Indicator:	0.554
Duplicate RPD:	49.44%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Fail
% RPD Limit:	25%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

Comments:

Sample result is re-prepped due to unacceptable precision. N/A

3/18/21

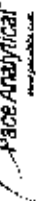
12/12/2021

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Sample Matrix Spike Control Assessment	MISMISO 1	MISMISO 2
Sample Collection Date Sample I.D. Sample MS I.D. Sample MSD I.D. Spike I.D.:		
MISMISO Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc. (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc. (pCi/L, g, F): MS Spike Uncertainty (Calculated): MSD Spike Uncertainty (Calculated):		
Sample Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Result: Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): MS Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MISMISO Upper % Recovery Limits: MISMISO Lower % Recovery Limits:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F): Matrix Spike Duplicate Result: Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:	

# Quality Control Sample Performance Assessment



Test: Rg-226  
 Analyst: CLA  
 Date: 3/18/2021  
 Worksheet: 59289  
 Matrix: DW

Analyst Must Manually Enter All Fields. Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2115671
MB Concentration	0.142
MB Counting Uncertainty	0.129
MB MDC	0.243
MB Numerical Performance Indicator	2.16
MB Status vs Numerical Indicator	N/A
MB Status vs. MDC	Pass

Laboratory Control Sample Assessment	
Count Date:	LCSID (Y or N)?
3/28/2021	LCS059289
19.033	19.033
24.039	24.039
0.10	0.10
0.501	0.505
4.757	4.761
0.058	0.057
5.221	5.012
0.530	0.556
108.83%	105.27%
N/A	N/A
Pass	Pass
125%	125%
75%	75%

Duplicate Sample Assessment	
Sample ID:	LCS059289
Duplicate Sample ID	LCS059289
Sample Result (pCi/L, g, F):	5.221
Sample Duplicate Result (pCi/L, g, F):	0.530
Sample Duplicate Result (pCi/L, g, F):	5.012
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.534
Ave sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator	0.541
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	3.32%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

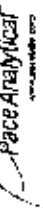
Comments:

Sample Matrix Spike Control Assessment	
Sample Collection Date:	MS/MSD 1
Sample ID:	MS/MSD 2
Sample MS ID	
Sample MSD ID	
Spike ID:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc (pCi/L, g, F):	
MS Spike Uncertainty (calculated):	
MSO Spike Uncertainty (calculated):	
Sample Result:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
MS Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	
MS/MSD Upper % Recovery Limit:	
MS/MSD Lower % Recovery Limit:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Sample Matrix Spike Result:	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

VanBuren

# Quality Control Sample Performance Assessment



Analyst **Must Manually Enter All Fields Highlighted in Yellow.**

Test: Ra-228  
Analyst: VAL  
Date: 3/22/2021  
Worksheet: 55272  
Matrix: YW

Method Blank Assessment	
MB Sample ID	2115335
MB Concentration:	0.160
MB 2 Sigma CSU:	0.331
MB MDC:	0.720
MB Numerical Performance Indicator:	1.18
MB Status vs Numerical Indicator:	Pass
MB Status vs MDC:	Pass

Laboratory Control Sample Assessment	
Count Date:	LCSD (Y or N)?
3/24/2021	LCSD59272
Spike ID:	21-003
Decay Corrected Spike Concentration (pCi/mL)	38.341
Volume Used (mL)	0.10
Aliquot Volume (L, g, F)	0.805
Target Conc. (pCi/L, g, F)	4.763
Uncertainty (Calculated):	0.230
Result (pCi/L, g, F)	4.478
LCSD 2 Sigma CSU (pCi/L, g, F)	1.058
Numerical Performance Indicator:	-0.52
Percent Recovery:	92.76%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limit:	135%
Lower % Recovery Limit:	50%

Duplicate Sample Assessment	
Sample ID:	LCSD59272
Duplicate Sample ID:	LCSD59272
Sample Result (pCi/L, g, F)	4.478
Sample Result 2 Sigma CSU (pCi/L, g, F)	1.058
Sample Duplicate Result (pCi/L, g, F)	4.067
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F)	1.008
Are sample and/or duplicate results below RL?	ND
Duplicate Numerical Performance Indicator:	0.470
Duplicate Percent Recovery:	6.75%
Duplicate Status vs Numerical Indicator:	Pass
Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Sample Matrix Spike Control Assessment	
Sample Collection Date:	
Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Spike ID:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL)	
Spike Volume Used in MS (mL)	
Spike Volume Used in MSD (mL)	
MS Aliquot (L, g, F)	
MS Target Conc. (pCi/L, g, F)	
MSD Aliquot (L, g, F)	
MSD Target Conc. (pCi/L, g, F)	
MS Spike Uncertainty (Calculated)	
MSD Spike Uncertainty (Calculated)	
Sample Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Result:	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F)	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
MS Numerical Performance Indicator:	
MSO Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	
MS/MSD Upper % Recovery Limits:	
MS/MSD Lower % Recovery Limits:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample ID:	
Sample MS ID:	
Sample MSD ID:	
Sample Matrix Spike Result:	
Sample Matrix Spike Duplicate Result:	
Sample Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F)	
Duplicate Numerical Performance Indicator:	
Duplicate Percent Recovery:	
Duplicate Status vs Numerical Indicator:	
Duplicate Status vs RPD:	
% RPD Limit:	

\* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

*Handwritten signature/initials*

# Quality Control Sample Performance Assessment

*Analyst Must Manually Enter All Fields Highlighted in Yellow:*



Test: **Ra-228**  
 Analyst: **VAL**  
 Date: **3/19/2021**  
 Worksheet: **59273**  
 Matrix: **WT**

Method Blank Assessment	
MB Sample ID	2115396
MB Concentration	0.030
MB 2 Sigma CSU	0.353
MB MDC	0.815
MB Numerical Performance Indicator	0.17
MB Status vs Numerical Indicator	Pass
MB Status vs MDC	Pass

Laboratory Control Sample Assessment	
Count Date	LCSID (Y or N)?
3/23/2021	3.CSD59273
3/25/2021	3/25/2021
3/26/2021	21-003
3/27/2021	38-331
3/28/2021	0.10
3/29/2021	0.808
3/30/2021	4.743
3/31/2021	4.737
4/1/2021	0.232
4/2/2021	5.676
4/3/2021	1.257
4/4/2021	1.44
4/5/2021	119.83%
4/6/2021	N/A
4/7/2021	Pass
4/8/2021	135%
4/9/2021	60%

Duplicate Sample Assessment	
Sample ID	LCS59273
Duplicate Sample ID	LCS59273
Sample Result (pCi/L, g, F)	4.271
Sample Duplicate Result (pCi/L, g, F)	1.022
Sample Duplicate Result 2 (pCi/L, g, F)	5.676
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator	-1.700
(Based on the LCS/LCSO Percent Recoveries) Duplicate RPD	28.40%
Duplicate Status vs Numerical Indicator	Pass
Duplicate Status vs RPD	Pass
% RPD Limit	36%

## Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC

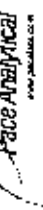
Comments:

*Handwritten signature/initials*

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date: Sample I.D. Sample MS I.D. Sample MSD I.D. Spike ID: MS/MSD Decay Corrected Spike Concentration (pCi/mL): Spike Volume Used in MS (mL): Spike Volume Used in MSD (mL): MS Aliquot (L, g, F): MS Target Conc (pCi/L, g, F): MSD Aliquot (L, g, F): MSD Target Conc (pCi/L, g, F): MSD Spike Uncertainty (calculated): MS Spike Uncertainty (calculated): MSD Spike Uncertainty (calculated): Sample Result: Sample Result 2 (Sigma CSU (pCi/L, g, F): Matrix Spike Result: Matrix Spike Result 2 (Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 (Sigma CSU (pCi/L, g, F): MS Numerical Performance Indicator: MSD Numerical Performance Indicator: MS Percent Recovery: MSD Percent Recovery: MS Status vs Numerical Indicator: MSD Status vs Numerical Indicator: MS Status vs Recovery: MSD Status vs Recovery: MS/MSD Upper % Recovery Limit: MS/MSD Lower % Recovery Limit:		

Matrix Spike/MSD is Spike Duplicate Sample Assessment
Sample I.D. Sample MS I.D. Sample MSD I.D. Sample Matrix Spike Result: Matrix Spike Result 2 (Sigma CSU (pCi/L, g, F): Sample Matrix Spike Duplicate Result: Matrix Spike Duplicate Result 2 (Sigma CSU (pCi/L, g, F): Duplicate Numerical Performance Indicator: (Based on the Percent Recoveries) MS/MSD Duplicate RPD: MS/MSD Duplicate Status vs Numerical Indicator: MS/MSD Duplicate Status vs RPD: % RPD Limit:

# Quality Control Sample Performance Assessment



Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test: Ra-228  
 Analyst: VAL  
 Date: 3/18/2021  
 Worksheet: 59274  
 Matrix: WT

Method Blank Assessment	
MB Sample ID	2115937
MB concentration:	0.429
MB 2 Sigma CSU:	0.325
MB MDC:	0.634
MB Numerical Performance Indicator:	2.50
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	
LCS#	Y or N?
LCS59274	Y
LCS59274	Y
Count Date:	3/23/2021
Spike I.D.:	21-029
Decay Corrected Spike Concentration (pCi/mL):	38.355
Volume Used (mL):	0.10
Aliquot Volume (L, g, F):	0.809
Target Conc. (pCi/L, g, F):	4.741
Uncertainty (Calculated):	0.232
Result (pCi/L, g, F):	4.249
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.750
Numerical Performance Indicator:	-4.64
Percent Recovery:	89.61%
Status vs Numerical Indicator:	N/A
Status vs Recovery:	Pass
Upper % Recovery Limits:	135%
Lower % Recovery Limits:	50%

Duplicate Sample Assessment	
Sample I.D.:	LCS59274
Duplicate Sample I.D.:	LCS090274
Sample Result (pCi/L, g, F):	2.824
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.750
Sample Duplicate Result (pCi/L, g, F):	4.249
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.005
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-2.154
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	39.09%
Duplicate Status vs Numerical Indicator:	Warning
Duplicate Status vs RPD:	Pass
% RPD Limit:	56%

\*\*\* Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Sample Matrix Spike Control Assessment	
Sample Collection Date:	MS/MSD 1
Sample I.D.:	MS/MSD 2
Sample MS I.D.:	
Sample MSD I.D.:	
Spike I.D.:	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	
Spike Volume Used in MS (mL):	
Spike Volume Used in MSD (mL):	
MS Aliquot (L, g, F):	
MS Target Conc. (pCi/L, g, F):	
MSD Aliquot (L, g, F):	
MSD Target Conc. (pCi/L, g, F):	
MS Spike Uncertainty (calculated):	
MSD Spike Uncertainty (calculated):	
MS Numerical Performance Indicator:	
MSD Numerical Performance Indicator:	
MS Percent Recovery:	
MSD Percent Recovery:	
MS Status vs Numerical Indicator:	
MSD Status vs Numerical Indicator:	
MS Status vs Recovery:	
MSD Status vs Recovery:	
MS/MSD Upper % Recovery Limits:	
MS/MSD Lower % Recovery Limits:	

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.:	
Sample MS I.D.:	
Sample MSD I.D.:	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	
Sample Matrix Spike Duplicate Result:	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	
Duplicate Numerical Performance Indicator:	
(Based on the Percent Recoveries) MS/MSD Duplicate RPD:	
MS/MSD Duplicate Status vs Numerical Indicator:	
MS/MSD Duplicate Status vs RPD:	
% RPD Limit:	

May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Dear Joju Abraham:

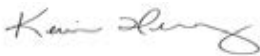
Enclosed are the analytical results for sample(s) received by the laboratory between March 04, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH E NETWORK

Pace Project No.: 92525657

---

### **Pace Analytical Services Charlotte**

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078

Louisiana/NELAP Certification # LA170028

North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342

North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001

Florida/NELAP Certification #: E87627

Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804

Florida/NELAP Certification #: E87648

North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40

South Carolina Certification #: 99030001

Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092

Florida DOH Certification #: E87315

Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381

South Carolina Certification #: 98011001

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE SUMMARY

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525657001	BRGWC-33S	Water	03/03/21 09:03	03/04/21 08:15
92525657002	BRGWC-34S	Water	03/03/21 10:05	03/04/21 08:15
92525657003	BRGWC-36S	Water	03/03/21 16:16	03/04/21 08:15
92525657004	BRGWC-37S	Water	03/03/21 17:18	03/04/21 08:15
92525657005	FB-1	Water	03/03/21 16:12	03/04/21 08:15
92525657006	BRGWC-35S	Water	03/04/21 14:17	03/05/21 11:30
92525657007	BRGWC-17S	Water	03/04/21 15:36	03/05/21 11:30
92525657008	BRGWC-38S	Water	03/04/21 17:14	03/05/21 11:30
92525657009	DUP-2	Water	03/04/21 00:00	03/05/21 11:30

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525657001	BRGWC-33S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657002	BRGWC-34S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657003	BRGWC-36S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657004	BRGWC-37S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657005	FB-1	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657006	BRGWC-35S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657007	BRGWC-17S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525657008	BRGWC-38S	EPA 6010D	DRB	1
		EPA 6020B	CW1	13

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
<b>92525657009</b>	<b>DUP-2</b>	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92525657001</b>	<b>BRGWC-33S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	4.83	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	37.5	mg/L	1.0	03/12/21 17:06	M1
EPA 6020B	Barium	0.020	mg/L	0.0050	03/15/21 15:39	
EPA 6020B	Beryllium	0.0013	mg/L	0.00050	03/15/21 15:39	
EPA 6020B	Boron	1.1	mg/L	0.040	03/15/21 15:39	
EPA 6020B	Cadmium	0.00022J	mg/L	0.00050	03/15/21 15:39	
EPA 6020B	Cobalt	0.028	mg/L	0.0050	03/15/21 15:39	
EPA 6020B	Lead	0.000058J	mg/L	0.0010	03/15/21 15:39	
EPA 6020B	Lithium	0.0085J	mg/L	0.030	03/15/21 15:39	
EPA 6020B	Thallium	0.00018J	mg/L	0.0010	03/15/21 15:39	
SM 2540C-2011	Total Dissolved Solids	212	mg/L	10.0	03/06/21 09:44	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	03/13/21 17:52	
EPA 300.0 Rev 2.1 1993	Fluoride	0.069J	mg/L	0.10	03/13/21 17:52	
EPA 300.0 Rev 2.1 1993	Sulfate	133	mg/L	3.0	03/14/21 12:28	
<b>92525657002</b>	<b>BRGWC-34S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	5.88	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	88.6	mg/L	1.0	03/12/21 18:27	
EPA 6020B	Barium	0.024	mg/L	0.0050	03/15/21 15:45	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	03/15/21 15:45	
EPA 6020B	Boron	2.1	mg/L	0.040	03/15/21 15:45	
EPA 6020B	Cadmium	0.00015J	mg/L	0.00050	03/15/21 15:45	
EPA 6020B	Cobalt	0.0046J	mg/L	0.0050	03/15/21 15:45	
EPA 6020B	Lithium	0.00096J	mg/L	0.030	03/15/21 15:45	
SM 2540C-2011	Total Dissolved Solids	422	mg/L	10.0	03/06/21 09:44	
EPA 300.0 Rev 2.1 1993	Chloride	6.4	mg/L	1.0	03/13/21 18:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.071J	mg/L	0.10	03/13/21 18:07	
EPA 300.0 Rev 2.1 1993	Sulfate	277	mg/L	6.0	03/14/21 12:42	
<b>92525657003</b>	<b>BRGWC-36S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	5.86	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	53.0	mg/L	1.0	03/12/21 18:31	
EPA 6020B	Barium	0.031	mg/L	0.0050	03/15/21 16:08	
EPA 6020B	Beryllium	0.000079J	mg/L	0.00050	03/15/21 16:08	
EPA 6020B	Boron	1.0	mg/L	0.040	03/15/21 16:08	
EPA 6020B	Chromium	0.0067	mg/L	0.0050	03/15/21 16:08	
EPA 6020B	Lithium	0.0024J	mg/L	0.030	03/15/21 16:08	
EPA 6020B	Selenium	0.0024J	mg/L	0.0050	03/15/21 16:08	
SM 2540C-2011	Total Dissolved Solids	442	mg/L	10.0	03/06/21 09:44	
EPA 300.0 Rev 2.1 1993	Chloride	8.1	mg/L	1.0	03/13/21 18:21	
EPA 300.0 Rev 2.1 1993	Sulfate	252	mg/L	5.0	03/14/21 12:57	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92525657004</b>	<b>BRGWC-37S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	5.87	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	3.6	mg/L	1.0	03/12/21 18:36	
EPA 6020B	Barium	0.024	mg/L	0.0050	03/15/21 16:13	
EPA 6020B	Chromium	0.0014J	mg/L	0.0050	03/15/21 16:13	
SM 2540C-2011	Total Dissolved Solids	33.0	mg/L	10.0	03/06/21 09:44	
EPA 300.0 Rev 2.1 1993	Chloride	1.9	mg/L	1.0	03/13/21 18:36	
<b>92525657006</b>	<b>BRGWC-35S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	6.14	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	71.8	mg/L	1.0	03/12/21 18:46	
EPA 6020B	Barium	0.034	mg/L	0.0050	03/15/21 16:36	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	03/15/21 16:36	
EPA 6020B	Boron	1.9	mg/L	0.040	03/15/21 16:36	
EPA 6020B	Chromium	0.0053	mg/L	0.0050	03/15/21 16:36	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	03/15/21 16:36	
SM 2540C-2011	Total Dissolved Solids	480	mg/L	10.0	03/09/21 16:20	
EPA 300.0 Rev 2.1 1993	Chloride	5.8	mg/L	1.0	03/15/21 10:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.076J	mg/L	0.10	03/15/21 10:18	
EPA 300.0 Rev 2.1 1993	Sulfate	251	mg/L	6.0	03/15/21 18:14	M6
<b>92525657007</b>	<b>BRGWC-17S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	6.45	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	41.2	mg/L	1.0	03/12/21 18:51	
EPA 6020B	Barium	0.039	mg/L	0.0050	03/15/21 16:42	
EPA 6020B	Chromium	0.010	mg/L	0.0050	03/15/21 16:42	
EPA 6020B	Lithium	0.00086J	mg/L	0.030	03/15/21 16:42	
SM 2540C-2011	Total Dissolved Solids	316	mg/L	10.0	03/09/21 16:20	
EPA 300.0 Rev 2.1 1993	Chloride	4.6	mg/L	1.0	03/15/21 11:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.096J	mg/L	0.10	03/15/21 11:03	
EPA 300.0 Rev 2.1 1993	Sulfate	122	mg/L	3.0	03/15/21 19:28	
<b>92525657008</b>	<b>BRGWC-38S</b>					
	Performed by	CUSTOME			03/19/21 07:34	
		R				
	pH	4.19	Std. Units		03/19/21 07:34	
EPA 6010D	Calcium	41.0	mg/L	1.0	03/12/21 18:55	
EPA 6020B	Arsenic	0.0029J	mg/L	0.0050	03/15/21 16:48	
EPA 6020B	Barium	0.015	mg/L	0.0050	03/15/21 16:48	
EPA 6020B	Beryllium	0.0077	mg/L	0.00050	03/15/21 16:48	
EPA 6020B	Boron	1.5	mg/L	0.040	03/15/21 16:48	
EPA 6020B	Cadmium	0.00042J	mg/L	0.00050	03/15/21 16:48	
EPA 6020B	Chromium	0.0040J	mg/L	0.0050	03/15/21 16:48	
EPA 6020B	Cobalt	0.20	mg/L	0.0050	03/15/21 16:48	
EPA 6020B	Lead	0.00034J	mg/L	0.0010	03/15/21 16:48	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SUMMARY OF DETECTION

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92525657008</b>	<b>BRGWC-38S</b>					
EPA 6020B	Lithium	0.021J	mg/L	0.030	03/15/21 16:48	
EPA 6020B	Selenium	0.039	mg/L	0.0050	03/15/21 16:48	
EPA 7470A	Mercury	0.000085J	mg/L	0.00020	03/09/21 11:49	
SM 2540C-2011	Total Dissolved Solids	540	mg/L	10.0	03/09/21 16:21	
EPA 300.0 Rev 2.1 1993	Chloride	5.6	mg/L	1.0	03/15/21 11:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.83	mg/L	0.10	03/15/21 11:18	
EPA 300.0 Rev 2.1 1993	Sulfate	325	mg/L	7.0	03/15/21 19:43	
<b>92525657009</b>	<b>DUP-2</b>					
EPA 6010D	Calcium	70.7	mg/L	1.0	03/12/21 19:10	
EPA 6020B	Barium	0.036	mg/L	0.0050	03/15/21 16:53	
EPA 6020B	Beryllium	0.00013J	mg/L	0.00050	03/15/21 16:53	
EPA 6020B	Boron	2.0	mg/L	0.040	03/15/21 16:53	
EPA 6020B	Chromium	0.0054	mg/L	0.0050	03/15/21 16:53	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	03/15/21 16:53	
SM 2540C-2011	Total Dissolved Solids	493	mg/L	10.0	03/09/21 16:21	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	03/15/21 11:33	
EPA 300.0 Rev 2.1 1993	Fluoride	0.073J	mg/L	0.10	03/15/21 11:33	
EPA 300.0 Rev 2.1 1993	Sulfate	249	mg/L	6.0	03/15/21 19:58	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-33S		Lab ID: 92525657001		Collected: 03/03/21 09:03		Received: 03/04/21 08:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/19/21 07:34		
pH	4.83	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	37.5	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 17:06	7440-70-2	M1
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 15:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 15:39	7440-38-2	
Barium	0.020	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 15:39	7440-39-3	
Beryllium	0.0013	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 15:39	7440-41-7	
Boron	1.1	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 15:39	7440-42-8	
Cadmium	0.00022J	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 15:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 15:39	7440-47-3	
Cobalt	0.028	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 15:39	7440-48-4	
Lead	0.000058J	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 15:39	7439-92-1	
Lithium	0.0085J	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 15:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 15:39	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 15:39	7782-49-2	
Thallium	0.00018J	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 15:39	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 09:00	03/08/21 16:28	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	212	mg/L	10.0	10.0	1		03/06/21 09:44		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	3.9	mg/L	1.0	0.60	1		03/13/21 17:52	16887-00-6	
Fluoride	0.069J	mg/L	0.10	0.050	1		03/13/21 17:52	16984-48-8	
Sulfate	133	mg/L	3.0	1.5	3		03/14/21 12:28	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-34S		Lab ID: 92525657002		Collected: 03/03/21 10:05		Received: 03/04/21 08:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/19/21 07:34		
pH	5.88	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	88.6	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:27	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 15:45	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 15:45	7440-38-2	
Barium	0.024	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 15:45	7440-39-3	
Beryllium	0.00015J	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 15:45	7440-41-7	
Boron	2.1	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 15:45	7440-42-8	
Cadmium	0.00015J	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 15:45	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 15:45	7440-47-3	
Cobalt	0.0046J	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 15:45	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 15:45	7439-92-1	
Lithium	0.00096J	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 15:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 15:45	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 15:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 15:45	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 09:00	03/08/21 16:30	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	422	mg/L	10.0	10.0	1		03/06/21 09:44		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	6.4	mg/L	1.0	0.60	1		03/13/21 18:07	16887-00-6	
Fluoride	0.071J	mg/L	0.10	0.050	1		03/13/21 18:07	16984-48-8	
Sulfate	277	mg/L	6.0	3.0	6		03/14/21 12:42	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-36S		Lab ID: 92525657003		Collected: 03/03/21 16:16		Received: 03/04/21 08:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/19/21 07:34		
pH	5.86	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	53.0	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:31	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:08	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:08	7440-38-2	
Barium	0.031	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:08	7440-39-3	
Beryllium	0.000079J	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:08	7440-41-7	
Boron	1.0	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:08	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:08	7440-43-9	
Chromium	0.0067	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:08	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:08	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:08	7439-92-1	
Lithium	0.0024J	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:08	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:08	7439-98-7	
Selenium	0.0024J	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:08	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:08	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 09:00	03/08/21 16:33	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	442	mg/L	10.0	10.0	1		03/06/21 09:44		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	8.1	mg/L	1.0	0.60	1		03/13/21 18:21	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:21	16984-48-8	
Sulfate	252	mg/L	5.0	2.5	5		03/14/21 12:57	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Sample: BRGWC-37S		Lab ID: 92525657004		Collected: 03/03/21 17:18		Received: 03/04/21 08:15		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:34		
pH	<b>5.87</b>	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>3.6</b>	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:36	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:13	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:13	7440-38-2	
Barium	<b>0.024</b>	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:13	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:13	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:13	7440-43-9	
Chromium	<b>0.0014J</b>	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:13	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:13	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:13	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:13	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:13	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 09:00	03/08/21 16:35	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>33.0</b>	mg/L	10.0	10.0	1		03/06/21 09:44		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>1.9</b>	mg/L	1.0	0.60	1		03/13/21 18:36	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:36	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 18:36	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: FB-1		Lab ID: 92525657005		Collected: 03/03/21 16:12		Received: 03/04/21 08:15		Matrix: Water		
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:41	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:19	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:19	7440-38-2		
Barium	ND	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:19	7440-39-3		
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:19	7440-41-7		
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:19	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:19	7440-43-9		
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:19	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:19	7440-48-4		
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:19	7439-92-1		
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:19	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:19	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:19	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:19	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 09:00	03/08/21 16:37	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/06/21 09:44			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/13/21 19:19	16887-00-6		
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:19	16984-48-8	M1	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 19:19	14808-79-8	M1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-35S		Lab ID: 92525657006		Collected: 03/04/21 14:17		Received: 03/05/21 11:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/19/21 07:34		
pH	6.14	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	71.8	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:46	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:36	7440-38-2	
Barium	0.034	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:36	7440-39-3	
Beryllium	0.00012J	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:36	7440-41-7	
Boron	1.9	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:36	7440-43-9	
Chromium	0.0053	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:36	7439-92-1	
Lithium	0.0021J	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:36	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:36	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:44	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	480	mg/L	10.0	10.0	1		03/09/21 16:20		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	5.8	mg/L	1.0	0.60	1		03/15/21 10:18	16887-00-6	
Fluoride	0.076J	mg/L	0.10	0.050	1		03/15/21 10:18	16984-48-8	
Sulfate	251	mg/L	6.0	3.0	6		03/15/21 18:14	14808-79-8	M6

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-17S		Lab ID: 92525657007		Collected: 03/04/21 15:36		Received: 03/05/21 11:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:34		
pH	<b>6.45</b>	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	<b>41.2</b>	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:51	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:42	7440-38-2	
Barium	<b>0.039</b>	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:42	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:42	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:42	7440-43-9	
Chromium	<b>0.010</b>	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:42	7439-92-1	
Lithium	<b>0.00086J</b>	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:42	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:42	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:42	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:46	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	<b>316</b>	mg/L	10.0	10.0	1		03/09/21 16:20		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	<b>4.6</b>	mg/L	1.0	0.60	1		03/15/21 11:03	16887-00-6	
Fluoride	<b>0.096J</b>	mg/L	0.10	0.050	1		03/15/21 11:03	16984-48-8	
Sulfate	<b>122</b>	mg/L	3.0	1.5	3		03/15/21 19:28	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: BRGWC-38S		Lab ID: 92525657008		Collected: 03/04/21 17:14		Received: 03/05/21 11:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/19/21 07:34		
pH	4.19	Std. Units			1		03/19/21 07:34		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Calcium	41.0	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 18:55	7440-70-2	
<b>6020 MET ICPMS</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA									
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:48	7440-36-0	
Arsenic	0.0029J	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:48	7440-38-2	
Barium	0.015	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:48	7440-39-3	
Beryllium	0.0077	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:48	7440-41-7	
Boron	1.5	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:48	7440-42-8	
Cadmium	0.00042J	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:48	7440-43-9	
Chromium	0.0040J	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:48	7440-47-3	
Cobalt	0.20	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:48	7440-48-4	
Lead	0.00034J	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:48	7439-92-1	
Lithium	0.021J	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:48	7439-98-7	
Selenium	0.039	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:48	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:48	7440-28-0	
<b>7470 Mercury</b>									
Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA									
Mercury	0.000085J	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:49	7439-97-6	
<b>2540C Total Dissolved Solids</b>									
Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA									
Total Dissolved Solids	540	mg/L	10.0	10.0	1		03/09/21 16:21		
<b>300.0 IC Anions 28 Days</b>									
Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville									
Chloride	5.6	mg/L	1.0	0.60	1		03/15/21 11:18	16887-00-6	
Fluoride	0.83	mg/L	0.10	0.050	1		03/15/21 11:18	16984-48-8	
Sulfate	325	mg/L	7.0	3.5	7		03/15/21 19:43	14808-79-8	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Sample: DUP-2		Lab ID: 92525657009		Collected: 03/04/21 00:00	Received: 03/05/21 11:30	Matrix: Water				
Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual	
			Limit	MDL	DF					
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	<b>70.7</b>	mg/L	1.0	0.070	1	03/12/21 10:10	03/12/21 19:10	7440-70-2		
<b>6020 MET ICPMS</b>		Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 10:14	03/15/21 16:53	7440-36-0		
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 10:14	03/15/21 16:53	7440-38-2		
Barium	<b>0.036</b>	mg/L	0.0050	0.00071	1	03/12/21 10:14	03/15/21 16:53	7440-39-3		
Beryllium	<b>0.00013J</b>	mg/L	0.00050	0.000046	1	03/12/21 10:14	03/15/21 16:53	7440-41-7		
Boron	<b>2.0</b>	mg/L	0.040	0.0052	1	03/12/21 10:14	03/15/21 16:53	7440-42-8		
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 10:14	03/15/21 16:53	7440-43-9		
Chromium	<b>0.0054</b>	mg/L	0.0050	0.00055	1	03/12/21 10:14	03/15/21 16:53	7440-47-3		
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 10:14	03/15/21 16:53	7440-48-4		
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 10:14	03/15/21 16:53	7439-92-1		
Lithium	<b>0.0022J</b>	mg/L	0.030	0.00081	1	03/12/21 10:14	03/15/21 16:53	7439-93-2		
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 10:14	03/15/21 16:53	7439-98-7		
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 10:14	03/15/21 16:53	7782-49-2		
Thallium	ND	mg/L	0.0010	0.00014	1	03/12/21 10:14	03/15/21 16:53	7440-28-0		
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:27	7439-97-6		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	<b>493</b>	mg/L	10.0	10.0	1		03/09/21 16:21			
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	<b>5.7</b>	mg/L	1.0	0.60	1		03/15/21 11:33	16887-00-6		
Fluoride	<b>0.073J</b>	mg/L	0.10	0.050	1		03/15/21 11:33	16984-48-8		
Sulfate	<b>249</b>	mg/L	6.0	3.0	6		03/15/21 19:58	14808-79-8		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch: 606044 Analysis Method: EPA 6010D  
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005, 92525657006, 92525657007, 92525657008, 92525657009

METHOD BLANK: 3192983 Matrix: Water  
 Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005, 92525657006, 92525657007, 92525657008, 92525657009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/12/21 16:56	

LABORATORY CONTROL SAMPLE: 3192984

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192985 3192986

Parameter	Units	3192985		3192986		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525657001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Calcium	mg/L	37.5	1	1	38.4	39.5	92	207	75-125	3	20	M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

QC Batch: 606050 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3005A Analysis Description: 6020 MET  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005, 92525657006, 92525657007, 92525657008, 92525657009

METHOD BLANK: 3193049 Matrix: Water  
Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005, 92525657006, 92525657007, 92525657008, 92525657009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00045J	0.0030	0.00028	03/15/21 15:28	
Arsenic	mg/L	ND	0.0050	0.00078	03/15/21 15:28	
Barium	mg/L	ND	0.0050	0.00071	03/15/21 15:28	
Beryllium	mg/L	ND	0.00050	0.000046	03/15/21 15:28	
Boron	mg/L	ND	0.040	0.0052	03/15/21 15:28	
Cadmium	mg/L	ND	0.00050	0.00012	03/15/21 15:28	
Chromium	mg/L	ND	0.0050	0.00055	03/15/21 15:28	
Cobalt	mg/L	ND	0.0050	0.00038	03/15/21 15:28	
Lead	mg/L	ND	0.0010	0.000036	03/15/21 15:28	
Lithium	mg/L	ND	0.030	0.00081	03/15/21 15:28	
Molybdenum	mg/L	ND	0.010	0.00069	03/15/21 15:28	
Selenium	mg/L	ND	0.0050	0.0016	03/15/21 15:28	
Thallium	mg/L	ND	0.0010	0.00014	03/15/21 15:28	

LABORATORY CONTROL SAMPLE: 3193050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	106	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.11	105	80-120	
Boron	mg/L	1	1.1	106	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	103	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	105	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193051 3193052

Parameter	Units	92525657002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Result						
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

Parameter	Units	3193051		3193052		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525657002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	104	104	75-125	1	20		
Barium	mg/L	0.024	0.1	0.1	0.12	0.12	100	99	75-125	1	20		
Beryllium	mg/L	0.00015J	0.1	0.1	0.092	0.093	92	92	75-125	0	20		
Boron	mg/L	2.1	1	1	3.0	3.0	87	89	75-125	1	20		
Cadmium	mg/L	0.00015J	0.1	0.1	0.10	0.10	101	102	75-125	1	20		
Chromium	mg/L	ND	0.1	0.1	0.098	0.097	97	97	75-125	1	20		
Cobalt	mg/L	0.0046J	0.1	0.1	0.10	0.10	96	96	75-125	0	20		
Lead	mg/L	ND	0.1	0.1	0.095	0.094	95	94	75-125	1	20		
Lithium	mg/L	0.00096J	0.1	0.1	0.095	0.096	94	95	75-125	1	20		
Molybdenum	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20		
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	1	20		
Thallium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch:	604664	Analysis Method:	EPA 7470A
QC Batch Method:	EPA 7470A	Analysis Description:	7470 Mercury
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005

METHOD BLANK: 3185623 Matrix: Water  
Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/08/21 15:49	

LABORATORY CONTROL SAMPLE: 3185624

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185625 3185626

Parameter	Units	3185625		3185626		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	ND	0.0025	0.0022	0.0019	86	78	75-125	10	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch: 604928	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525657006, 92525657007, 92525657008

METHOD BLANK: 3187260 Matrix: Water

Associated Lab Samples: 92525657006, 92525657007, 92525657008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/09/21 10:42	

LABORATORY CONTROL SAMPLE: 3187261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187262 3187263

Parameter	Units	3187262		3187263		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92525375013 ND	0.0025	0.0023	0.0019	93	78	75-125	18	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch: 605556	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525657009

METHOD BLANK: 3190111 Matrix: Water

Associated Lab Samples: 92525657009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/11/21 11:23	

LABORATORY CONTROL SAMPLE: 3190112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3190113 3190114

Parameter	Units	3190113		3190114		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Mercury	mg/L	92526541001 ND	0.0025	0.0025	0.0023	0.0024	91	94	75-125	3	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch: 604754 Analysis Method: SM 2540C-2011  
 QC Batch Method: SM 2540C-2011 Analysis Description: 2540C Total Dissolved Solids  
 Laboratory: Pace Analytical Services - Peachtree Corners, GA  
 Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005

METHOD BLANK: 3186276 Matrix: Water  
 Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004, 92525657005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 09:43	

LABORATORY CONTROL SAMPLE: 3186277

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	385	96	90-111	

SAMPLE DUPLICATE: 3186278

Parameter	Units	92525375007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	288	277	4	10	

SAMPLE DUPLICATE: 3186279

Parameter	Units	92525662002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1050	1010	4	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK

Pace Project No.: 92525657

QC Batch:	605136	Analysis Method:	SM 2540C-2011
QC Batch Method:	SM 2540C-2011	Analysis Description:	2540C Total Dissolved Solids
		Laboratory:	Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92525657006, 92525657007, 92525657008, 92525657009

METHOD BLANK: 3187989 Matrix: Water

Associated Lab Samples: 92525657006, 92525657007, 92525657008, 92525657009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/09/21 16:18	

LABORATORY CONTROL SAMPLE: 3187990

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	384	96	90-111	

SAMPLE DUPLICATE: 3187991

Parameter	Units	92525375013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 3187992

Parameter	Units	92524831030 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	234	232	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

QC Batch: 606452 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004

METHOD BLANK: 3195118 Matrix: Water  
Associated Lab Samples: 92525657001, 92525657002, 92525657003, 92525657004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 11:23	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 11:23	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 11:23	

LABORATORY CONTROL SAMPLE: 3195119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	53.7	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195120 3195121

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92524831015 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	8.3	50	50	50	61.2	62.7	106	109	90-110	2	10	
Fluoride	mg/L	0.34	2.5	2.5	2.5	4.0	4.0	148	147	90-110	1	10	M1
Sulfate	mg/L	225	50	50	50	267	269	84	87	90-110	1	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195122 3195123

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92524831022 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	2.9	50	50	50	56.8	57.0	108	108	90-110	0	10	
Fluoride	mg/L	0.71	2.5	2.5	2.5	4.6	4.7	154	158	90-110	2	10	M1
Sulfate	mg/L	143	50	50	50	193	193	100	100	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

QC Batch: 606453 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525657005

METHOD BLANK: 3195124 Matrix: Water  
Associated Lab Samples: 92525657005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 18:50	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 18:50	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 18:50	

LABORATORY CONTROL SAMPLE: 3195125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.4	105	90-110	
Fluoride	mg/L	2.5	2.7	108	90-110	
Sulfate	mg/L	50	54.7	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195126 3195127

Parameter	Units	92525657005		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	ND	50	50	53.3	53.5	106	107	90-110	0	10		
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	112	113	90-110	0	10	M1	
Sulfate	mg/L	ND	50	50	55.5	55.9	111	112	90-110	1	10	M1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195128 3195129

Parameter	Units	92527275001		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Chloride	mg/L	6.2	50	50	59.3	60.2	106	108	90-110	1	10		
Fluoride	mg/L	ND	2.5	2.5	3.6	3.6	141	143	90-110	1	10	M1	
Sulfate	mg/L	ND	50	50	55.7	56.6	111	113	90-110	1	10	M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

QC Batch: 606497 Analysis Method: EPA 300.0 Rev 2.1 1993  
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92525657006, 92525657007, 92525657008, 92525657009

METHOD BLANK: 3195321 Matrix: Water  
Associated Lab Samples: 92525657006, 92525657007, 92525657008, 92525657009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/15/21 05:49	
Fluoride	mg/L	ND	0.10	0.050	03/15/21 05:49	
Sulfate	mg/L	ND	1.0	0.50	03/15/21 05:49	

LABORATORY CONTROL SAMPLE: 3195322

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.1	92	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	45.3	91	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195323 3195324

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525919013 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	5.9	50	50	56.7	55.0	102	98	90-110	3	10		
Fluoride	mg/L	ND	2.5	2.5	2.5	2.4	99	97	90-110	3	10		
Sulfate	mg/L	38.9	50	50	90.2	88.6	103	99	90-110	2	10		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195325 3195326

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525657006 Result	Spike Conc.	Spike Conc.	Conc.								
Chloride	mg/L	5.8	50	50	55.5	56.0	100	100	90-110	1	10		
Fluoride	mg/L	0.076J	2.5	2.5	2.6	2.7	103	103	90-110	0	10		
Sulfate	mg/L	251	50	50	293	305	83	108	90-110	4	10 M6		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH E NETWORK

Pace Project No.: 92525657

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK  
Pace Project No.: 92525657

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525657001	BRGWC-33S				
92525657002	BRGWC-34S				
92525657003	BRGWC-36S				
92525657004	BRGWC-37S				
92525657006	BRGWC-35S				
92525657007	BRGWC-17S				
92525657008	BRGWC-38S				
92525657001	BRGWC-33S	EPA 3010A	606044	EPA 6010D	606283
92525657002	BRGWC-34S	EPA 3010A	606044	EPA 6010D	606283
92525657003	BRGWC-36S	EPA 3010A	606044	EPA 6010D	606283
92525657004	BRGWC-37S	EPA 3010A	606044	EPA 6010D	606283
92525657005	FB-1	EPA 3010A	606044	EPA 6010D	606283
92525657006	BRGWC-35S	EPA 3010A	606044	EPA 6010D	606283
92525657007	BRGWC-17S	EPA 3010A	606044	EPA 6010D	606283
92525657008	BRGWC-38S	EPA 3010A	606044	EPA 6010D	606283
92525657009	DUP-2	EPA 3010A	606044	EPA 6010D	606283
92525657001	BRGWC-33S	EPA 3005A	606050	EPA 6020B	606350
92525657002	BRGWC-34S	EPA 3005A	606050	EPA 6020B	606350
92525657003	BRGWC-36S	EPA 3005A	606050	EPA 6020B	606350
92525657004	BRGWC-37S	EPA 3005A	606050	EPA 6020B	606350
92525657005	FB-1	EPA 3005A	606050	EPA 6020B	606350
92525657006	BRGWC-35S	EPA 3005A	606050	EPA 6020B	606350
92525657007	BRGWC-17S	EPA 3005A	606050	EPA 6020B	606350
92525657008	BRGWC-38S	EPA 3005A	606050	EPA 6020B	606350
92525657009	DUP-2	EPA 3005A	606050	EPA 6020B	606350
92525657001	BRGWC-33S	EPA 7470A	604664	EPA 7470A	604885
92525657002	BRGWC-34S	EPA 7470A	604664	EPA 7470A	604885
92525657003	BRGWC-36S	EPA 7470A	604664	EPA 7470A	604885
92525657004	BRGWC-37S	EPA 7470A	604664	EPA 7470A	604885
92525657005	FB-1	EPA 7470A	604664	EPA 7470A	604885
92525657006	BRGWC-35S	EPA 7470A	604928	EPA 7470A	605029
92525657007	BRGWC-17S	EPA 7470A	604928	EPA 7470A	605029
92525657008	BRGWC-38S	EPA 7470A	604928	EPA 7470A	605029
92525657009	DUP-2	EPA 7470A	605556	EPA 7470A	605621
92525657001	BRGWC-33S	SM 2540C-2011	604754		
92525657002	BRGWC-34S	SM 2540C-2011	604754		
92525657003	BRGWC-36S	SM 2540C-2011	604754		
92525657004	BRGWC-37S	SM 2540C-2011	604754		
92525657005	FB-1	SM 2540C-2011	604754		
92525657006	BRGWC-35S	SM 2540C-2011	605136		
92525657007	BRGWC-17S	SM 2540C-2011	605136		
92525657008	BRGWC-38S	SM 2540C-2011	605136		
92525657009	DUP-2	SM 2540C-2011	605136		
92525657001	BRGWC-33S	EPA 300.0 Rev 2.1 1993	606452		
92525657002	BRGWC-34S	EPA 300.0 Rev 2.1 1993	606452		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

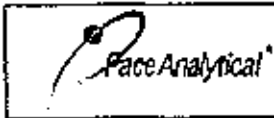
Project: BRANCH E NETWORK

Pace Project No.: 92525657

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525657003	BRGWC-36S	EPA 300.0 Rev 2.1 1993	606452		
92525657004	BRGWC-37S	EPA 300.0 Rev 2.1 1993	606452		
92525657005	FB-1	EPA 300.0 Rev 2.1 1993	606453		
92525657006	BRGWC-35S	EPA 300.0 Rev 2.1 1993	606497		
92525657007	BRGWC-17S	EPA 300.0 Rev 2.1 1993	606497		
92525657008	BRGWC-38S	EPA 300.0 Rev 2.1 1993	606497		
92525657009	DUP-2	EPA 300.0 Rev 2.1 1993	606497		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 28, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

G-A Power

Project #:

WO#: **92525657**



92525657

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Other:  Client

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Date/initials Person Examining Contents: 7/4/21

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.6

USDA Regulated Soil (  N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>W</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Company: Georgia's Power - Coal Combustion Residuals  
 Address: 2400 Marler Road  
 Atlanta, GA 30339  
 Report To: Joyce Alexander  
 Email: joyce.alexander@southernco.com  
 Phone: (404) 506-7239  
 State: Georgia City: Milledgeville Time Zone Collected: ET  
 Project Name: Plant Branches & Network  
 Project # CCR 6th Semi-Annual  
 Colected By (Event): Travis Matthews  
 Analytical Manager: *Travis Matthews*

Matrix Codes (insert in Matrix box below): Orange Water (OW), Ground Water (GW), Wastewater (WW), Product (P), Sorbent (S), Oil (O), Waste (W), Air (A), Tissue (T), Biossorb (B), Water (WT), Other (OT)  
 Matrix: *GW*  
 Sample # *3-3-21-0903*  
 Date Collected: *3-3-21*  
 Time Collected: *10:05*  
 pH: *5.89*  
 # of Onions: *7*

Customer Sample ID	Matrix	Emp / Grab	Collected For (Matrix)	Compo to Test	pH	# of Onions
<i>BR-GWC-335</i>	<i>GW</i>	<i>G</i>	<i>3-3-21</i>	<i>0903</i>	<i>5.89</i>	<i>7</i>
<i>BR-GWC-345</i>	<i>GW</i>	<i>G</i>	<i>3-3-21</i>	<i>1005</i>	<i>5.86</i>	<i>5</i>
<i>BR-GWC-365</i>	<i>GW</i>	<i>G</i>	<i>3-3-21</i>	<i>1616</i>	<i>5.87</i>	<i>5</i>
<i>BR-GWC-375</i>	<i>GW</i>	<i>G</i>	<i>3-3-21</i>	<i>1718</i>	<i>5.87</i>	<i>5</i>
<i>FB-1</i>	<i>W</i>	<i>G</i>	<i>3-3-21</i>	<i>1612</i>	<i>5.87</i>	<i>5</i>

Analysis: *Metals 6010/6020/7470 - see comments*  
 TDS  
 Chloride/Fluoride/Sulfate  
 Radium 226,228  
 Lab Project Manager: *Travis Matthews*

Received by/Company (Signature)	Date/Time	Received by/Company (Signature)	Date/Time
<i>[Signature]</i>	<i>3-4-21</i>	<i>[Signature]</i>	<i>3-4-21</i>
<i>[Signature]</i>	<i>3-4-21</i>	<i>[Signature]</i>	<i>3-4-21</i>

Lab Project Manager: *Travis Matthews*  
 Lab Sample #/Comments: *42 Radium*  
 Lab Use ONLY:  
 Lab Sample #/Comments: *42 Radium*

Lab Project/Line: *42 Radium*  
 Lab Sample #/Comments: *42 Radium*  
 Lab Use ONLY:  
 Lab Sample #/Comments: *42 Radium*

Lab Project/Line	Lab Sample #/Comments	Lab Use ONLY
<i>42 Radium</i>	<i>42 Radium</i>	<i>42 Radium</i>

ALL SHADED AREAS are for LAB USE ONLY

Company: Gevco Power - Coal Combustion Residuals  
 Address: 2480 Warner Road  
 Atlanta, GA 30339  
 Report To: John Avallan  
 Email: jsherman@southco.com  
 Phone: (404) 506-7239

Project Name: Plant Branch E Network  
 Project # CCR 4th Semi-Annual  
 Purchas Order #  
 Collected By (email): Travis Matinez  
 Analyzed By (email): [Signature]

State: Georgia City: Milledgeville Time Zone: Eastern  
 Date: [ ] PM [ ] AM [ ] CT [ ] ET

Trace Project Manager: [Signature]  
 Email: jsherman@southco.com  
 Project Manager: [Signature]  
 Email: [Signature]  
 Project Manager: [Signature]  
 Email: [Signature]

Turnaround Data Required:  
 [ ] Same Day [ ] Next Day  
 [ ] 1-2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day  
 (Specify Charges Apply)

Field Filtered (if applicable):  
 [ ] Yes [ ] No  
 Analyzed: [ ] Yes [ ] No

Matrix Codes (insert in Matrix box below): Deionized Water (DW), Ground Water (GW), Wastewater (WW),  
 Product (pl), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Biossary (B), Water (WT), Other (OT)

Customer Sample ID	Matrix	Comp / Grab	Collected for Composite	Composite End	pH	# of Cans
			Date	Date		
BRGWC-355	GW	6	3-4-21 1417		6.14	5
BRGWC-175	GW	6	3-4-21 1536		6.45	5
BRGWC-385	GW	6	3-4-21 1714		4.19	5
DUP-2	GW	6	3-4-21 --		--	5

Type of Use Used: VWD Date Dry None  
 Reason for Use Used: [Signature]  
 Address: A, B, Ba, Be, Ca, Cd, Co, Cr, Hg, Pb, Se, Si, Sn, Ti, U, Ni, Hg  
 Reason for Use Used: [Signature]

Requested by/Company: [Signature]  
 Date/Time: 3-5-21 1000  
 Received by/Company: [Signature]

Requested by/Company: [Signature]  
 Date/Time: [Signature]

Requested by/Company: [Signature]  
 Date/Time: [Signature]

Container Preservative Type	Lab Project Manager
1	[Signature]

Analysis	Lab Profile/Note
Metals 6010/6020/7470 - see comments	Lab Sample Received Checklist Outbody Seal Present/Checked Y/N NA Outbody Zipper/Seal Present Y/N NA Collector Signature Present Y/N NA Bagged Index Y/N NA Correct Buckets Y/N NA Sealed/Seal Volume Y/N NA Samples Received on Ice Y/N NA VOA - Headspace Acceptable Y/N NA USDA Regulated Soil Y/N NA Samples in Holding Time Y/N NA Residual Chlorine Present Y/N NA Cl Spills Y/N NA Sample pH Acceptable Y/N NA pH Strips Y/N NA Sulfide Present Y/N NA Lead Acetate Strip Y/N NA
TDS	Lab USE ONLY: Lab Sample # / Comments:
Chloride/Fluoride/Sulfate	
Radium 226-228	

Lab Tracking #:	Sample(s) received via:	Client	Counter	Face Counter
	FDDX	UFS	Client	Counter

Lab Tracking #:	Sample(s) received via:	Client	Counter	Face Counter
	FDDX	UFS	Client	Counter

Lab Tracking #:	Sample(s) received via:	Client	Counter	Face Counter
	FDDX	UFS	Client	Counter

May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tyler Forney for  
Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.

Tim Richards, Golder Associates - Atlanta  
Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## CERTIFICATIONS

Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

---

### **Pace Analytical Services Ormond Beach**

8 East Tower Circle, Ormond Beach, FL 32174  
Alaska DEC- CS/UST/LUST  
Alabama Certification #: 41320  
Arizona Certification# AZ0819  
Colorado Certification: FL NELAC Reciprocity  
Connecticut Certification #: PH-0216  
Delaware Certification: FL NELAC Reciprocity  
Florida Certification #: E83079  
Georgia Certification #: 955  
Guam Certification: FL NELAC Reciprocity  
Hawaii Certification: FL NELAC Reciprocity  
Illinois Certification #: 200068  
Indiana Certification: FL NELAC Reciprocity  
Kansas Certification #: E-10383  
Kentucky Certification #: 90050  
Louisiana Certification #: FL NELAC Reciprocity  
Louisiana Environmental Certificate #: 05007  
Maryland Certification: #346  
Michigan Certification #: 9911  
Mississippi Certification: FL NELAC Reciprocity  
Missouri Certification #: 236

Montana Certification #: Cert 0074  
Nebraska Certification: NE-OS-28-14  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL022  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
North Dakota Certification #: R-216  
Ohio DEP 87780  
Oklahoma Certification #: D9947  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
South Carolina Certification: #96042001  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

---

### **Pace Analytical Services Charlotte**

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92524842001	BRGWA-6S	Water	03/01/21 16:30	03/02/21 10:05
92524842002	BRGWA-2I	Water	03/01/21 16:39	03/02/21 10:05
92524842003	BRGWA-5S	Water	03/02/21 09:29	03/03/21 10:03
92524842004	BRGWA-5I	Water	03/02/21 10:11	03/03/21 10:03
92524842005	BRGWA-2S	Water	03/02/21 12:05	03/03/21 10:03

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92524842001	BRGWA-6S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	JKG	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92524842002	BRGWA-2I	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	JKG	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92524842003	BRGWA-5S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92524842004	BRGWA-5I	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92524842005	BRGWA-2S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

PASI-O = Pace Analytical Services - Ormond Beach

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92524842001</b>	<b>BRGWA-6S</b>					
	Performed by	CUSTOMER			03/22/21 11:45	
	pH	6.70	Std. Units		03/22/21 11:45	
EPA 6010D	Iron	0.094	mg/L	0.040	03/03/21 17:44	
EPA 6010D	Manganese	0.0051J	mg/L	0.040	03/03/21 17:44	
EPA 6010D	Potassium	1.3	mg/L	0.20	03/03/21 17:44	
EPA 6010D	Sodium	3.0	mg/L	1.0	03/03/21 17:44	
EPA 6010D	Magnesium	3.8	mg/L	0.050	03/03/21 17:44	
EPA 6010D	Hardness, Total(SM 2340B)	26.1	mg/L	2.7	03/03/21 17:44	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	27.6	mg/L	5.0	03/12/21 16:01	
SM 2320B-2011	Alkalinity, Total as CaCO3	27.6	mg/L	5.0	03/12/21 16:01	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.57	mg/L	0.040	03/06/21 12:19	
<b>92524842002</b>	<b>BRGWA-2I</b>					
	Performed by	CUSTOMER			03/22/21 11:45	
	pH	6.66	Std. Units		03/22/21 11:45	
EPA 6010D	Iron	0.64	mg/L	0.040	03/03/21 17:49	
EPA 6010D	Manganese	0.024J	mg/L	0.040	03/03/21 17:49	
EPA 6010D	Potassium	6.6	mg/L	0.20	03/03/21 17:49	
EPA 6010D	Sodium	5.9	mg/L	1.0	03/03/21 17:49	
EPA 6010D	Magnesium	7.0	mg/L	0.050	03/03/21 17:49	
EPA 6010D	Hardness, Total(SM 2340B)	67.6	mg/L	2.7	03/03/21 17:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	79.3	mg/L	5.0	03/12/21 16:08	
SM 2320B-2011	Alkalinity, Total as CaCO3	79.3	mg/L	5.0	03/12/21 16:08	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.15	mg/L	0.040	03/06/21 12:22	
<b>92524842003</b>	<b>BRGWA-5S</b>					
	Performed by	CUSTOMER			03/22/21 11:45	
	pH	6.42	Std. Units		03/22/21 11:45	
EPA 6010D	Iron	0.14	mg/L	0.040	03/19/21 04:33	
EPA 6010D	Manganese	0.0063J	mg/L	0.040	03/19/21 04:33	
EPA 6010D	Potassium	0.49	mg/L	0.20	03/19/21 15:40	
EPA 6010D	Sodium	4.5	mg/L	1.0	03/19/21 04:33	
EPA 6010D	Magnesium	7.0	mg/L	0.050	03/19/21 04:33	
EPA 6010D	Hardness, Total(SM 2340B)	73.0	mg/L	2.7	03/19/21 04:33	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	79.4	mg/L	5.0	03/12/21 18:54	
SM 2320B-2011	Alkalinity, Total as CaCO3	79.4	mg/L	5.0	03/12/21 18:54	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.17	mg/L	0.040	03/08/21 11:30	
<b>92524842004</b>	<b>BRGWA-5I</b>					
	Performed by	CUSTOMER			03/22/21 11:45	
	pH	6.47	Std. Units		03/22/21 11:45	
EPA 6010D	Potassium	0.99	mg/L	0.20	03/10/21 00:57	
EPA 6010D	Sodium	4.5	mg/L	1.0	03/10/21 00:57	
EPA 6010D	Magnesium	8.9	mg/L	0.050	03/10/21 00:57	
EPA 6010D	Hardness, Total(SM 2340B)	69.6	mg/L	2.7	03/10/21 00:57	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	79.3	mg/L	5.0	03/12/21 19:03	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>92524842004</b>	<b>BRGWA-5I</b>					
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	79.3	mg/L	5.0	03/12/21 19:03	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	0.21	mg/L	0.040	03/08/21 11:35	
<b>92524842005</b>	<b>BRGWA-2S</b>					
	Performed by	CUSTOMER			03/22/21 11:45	
	pH	6.20	Std. Units		03/22/21 11:45	
EPA 6010D	Iron	0.19	mg/L	0.040	03/19/21 04:37	
EPA 6010D	Manganese	0.064	mg/L	0.040	03/19/21 04:37	
EPA 6010D	Potassium	0.36	mg/L	0.20	03/19/21 15:44	
EPA 6010D	Sodium	3.2	mg/L	1.0	03/19/21 04:37	
EPA 6010D	Magnesium	3.9	mg/L	0.050	03/19/21 04:37	
EPA 6010D	Hardness, Total(SM 2340B)	26.5	mg/L	2.7	03/19/21 04:37	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	31.9	mg/L	5.0	03/12/21 19:12	
SM 2320B-2011	Alkalinity, Total as CaCO <sub>3</sub>	31.9	mg/L	5.0	03/12/21 19:12	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub>	0.23	mg/L	0.040	03/08/21 11:39	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Sample: BRGWA-6S      Lab ID: 92524842001      Collected: 03/01/21 16:30      Received: 03/02/21 10:05      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.70</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.094</b>	mg/L	0.040	0.016	1	03/03/21 10:17	03/03/21 17:44	7439-89-6	
Manganese	<b>0.0051J</b>	mg/L	0.040	0.0017	1	03/03/21 10:17	03/03/21 17:44	7439-96-5	
Potassium	<b>1.3</b>	mg/L	0.20	0.056	1	03/03/21 10:17	03/03/21 17:44	7440-09-7	
Sodium	<b>3.0</b>	mg/L	1.0	0.26	1	03/03/21 10:17	03/03/21 17:44	7440-23-5	
Magnesium	<b>3.8</b>	mg/L	0.050	0.0076	1	03/03/21 10:17	03/03/21 17:44	7439-95-4	
Hardness, Total(SM 2340B)	<b>26.1</b>	mg/L	2.7	0.21	1	03/03/21 10:17	03/03/21 17:44		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>27.6</b>	mg/L	5.0	5.0	1		03/12/21 16:01		
Alkalinity,Carbonate (CaCO3)	<b>ND</b>	mg/L	5.0	5.0	1		03/12/21 16:01		
Alkalinity, Total as CaCO3	<b>27.6</b>	mg/L	5.0	5.0	1		03/12/21 16:01		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.57</b>	mg/L	0.040	0.017	1		03/06/21 12:19		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>ND</b>	mg/L	1.0	0.50	1		03/09/21 08:28		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Sample: BRGWA-2I      Lab ID: 92524842002      Collected: 03/01/21 16:39      Received: 03/02/21 10:05      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.66</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.64</b>	mg/L	0.040	0.016	1	03/03/21 10:17	03/03/21 17:49	7439-89-6	
Manganese	<b>0.024J</b>	mg/L	0.040	0.0017	1	03/03/21 10:17	03/03/21 17:49	7439-96-5	
Potassium	<b>6.6</b>	mg/L	0.20	0.056	1	03/03/21 10:17	03/03/21 17:49	7440-09-7	
Sodium	<b>5.9</b>	mg/L	1.0	0.26	1	03/03/21 10:17	03/03/21 17:49	7440-23-5	
Magnesium	<b>7.0</b>	mg/L	0.050	0.0076	1	03/03/21 10:17	03/03/21 17:49	7439-95-4	
Hardness, Total(SM 2340B)	<b>67.6</b>	mg/L	2.7	0.21	1	03/03/21 10:17	03/03/21 17:49		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>79.3</b>	mg/L	5.0	5.0	1		03/12/21 16:08		
Alkalinity,Carbonate (CaCO3)	<b>ND</b>	mg/L	5.0	5.0	1		03/12/21 16:08		
Alkalinity, Total as CaCO3	<b>79.3</b>	mg/L	5.0	5.0	1		03/12/21 16:08		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.15</b>	mg/L	0.040	0.017	1		03/06/21 12:22		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>ND</b>	mg/L	1.0	0.50	1		03/09/21 08:43		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Sample: BRGWA-5S		Lab ID: 92524842003		Collected: 03/02/21 09:29		Received: 03/03/21 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.42</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.14</b>	mg/L	0.040	0.016	1	03/15/21 14:10	03/19/21 04:33	7439-89-6	
Manganese	<b>0.0063J</b>	mg/L	0.040	0.0017	1	03/15/21 14:10	03/19/21 04:33	7439-96-5	
Potassium	<b>0.49</b>	mg/L	0.20	0.056	1	03/15/21 14:10	03/19/21 15:40	7440-09-7	
Sodium	<b>4.5</b>	mg/L	1.0	0.26	1	03/15/21 14:10	03/19/21 04:33	7440-23-5	
Magnesium	<b>7.0</b>	mg/L	0.050	0.0076	1	03/15/21 14:10	03/19/21 04:33	7439-95-4	
Hardness, Total(SM 2340B)	<b>73.0</b>	mg/L	2.7	0.21	1	03/15/21 14:10	03/19/21 04:33		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>79.4</b>	mg/L	5.0	5.0	1		03/12/21 18:54		
Alkalinity,Carbonate (CaCO3)	<b>ND</b>	mg/L	5.0	5.0	1		03/12/21 18:54		
Alkalinity, Total as CaCO3	<b>79.4</b>	mg/L	5.0	5.0	1		03/12/21 18:54		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993									
Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.17</b>	mg/L	0.040	0.017	1		03/08/21 11:30		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B									
Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>ND</b>	mg/L	1.0	0.50	1		03/16/21 04:13		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Sample: BRGWA-51      Lab ID: 92524842004      Collected: 03/02/21 10:11      Received: 03/03/21 10:03      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/22/21 11:45		
pH	<b>6.47</b>	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.016	1	03/05/21 10:53	03/10/21 00:57	7439-89-6	
Manganese	ND	mg/L	0.040	0.0017	1	03/05/21 10:53	03/10/21 00:57	7439-96-5	
Potassium	<b>0.99</b>	mg/L	0.20	0.056	1	03/05/21 10:53	03/10/21 00:57	7440-09-7	
Sodium	<b>4.5</b>	mg/L	1.0	0.26	1	03/05/21 10:53	03/10/21 00:57	7440-23-5	
Magnesium	<b>8.9</b>	mg/L	0.050	0.0076	1	03/05/21 10:53	03/10/21 00:57	7439-95-4	
Hardness, Total(SM 2340B)	<b>69.6</b>	mg/L	2.7	0.21	1	03/05/21 10:53	03/10/21 00:57		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>79.3</b>	mg/L	5.0	5.0	1		03/12/21 19:03		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/12/21 19:03		
Alkalinity, Total as CaCO3	<b>79.3</b>	mg/L	5.0	5.0	1		03/12/21 19:03		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.21</b>	mg/L	0.040	0.017	1		03/08/21 11:35		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/16/21 04:53		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Sample: BRGWA-2S		Lab ID: 92524842005		Collected: 03/02/21 12:05		Received: 03/03/21 10:03		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	CUSTOMER				1		03/22/21 11:45		
pH	6.20	Std. Units			1		03/22/21 11:45		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	0.19	mg/L	0.040	0.016	1	03/15/21 14:10	03/19/21 04:37	7439-89-6	
Manganese	0.064	mg/L	0.040	0.0017	1	03/15/21 14:10	03/19/21 04:37	7439-96-5	
Potassium	0.36	mg/L	0.20	0.056	1	03/15/21 14:10	03/19/21 15:44	7440-09-7	
Sodium	3.2	mg/L	1.0	0.26	1	03/15/21 14:10	03/19/21 04:37	7440-23-5	
Magnesium	3.9	mg/L	0.050	0.0076	1	03/15/21 14:10	03/19/21 04:37	7439-95-4	
Hardness, Total(SM 2340B)	26.5	mg/L	2.7	0.21	1	03/15/21 14:10	03/19/21 04:37		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	31.9	mg/L	5.0	5.0	1		03/12/21 19:12		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/12/21 19:12		
Alkalinity, Total as CaCO3	31.9	mg/L	5.0	5.0	1		03/12/21 19:12		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993									
Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	0.23	mg/L	0.040	0.017	1		03/08/21 11:39		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B									
Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/16/21 05:09		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

QC Batch: 603832

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524842001, 92524842002

METHOD BLANK: 3180960

Matrix: Water

Associated Lab Samples: 92524842001, 92524842002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.21	03/03/21 17:08	
Iron	mg/L	ND	0.040	0.016	03/03/21 17:08	
Magnesium	mg/L	ND	0.050	0.0076	03/03/21 17:08	
Manganese	mg/L	ND	0.040	0.0017	03/03/21 17:08	
Potassium	mg/L	ND	0.20	0.056	03/03/21 17:08	
Sodium	mg/L	ND	1.0	0.26	03/03/21 17:08	

LABORATORY CONTROL SAMPLE: 3180961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hardness, Total(SM 2340B)	mg/L	6.6	6.9	104	80-120	
Iron	mg/L	1	1.0	102	80-120	
Magnesium	mg/L	1	1.0	105	80-120	
Manganese	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Sodium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3180962 3180963

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result						
Hardness, Total(SM 2340B)	mg/L	72.7	6.6	6.6	82.1	84.5	141	178	75-125	3	20
Iron	mg/L	1.5	1	1	2.6	2.7	109	114	75-125	2	20
Magnesium	mg/L	3.5	1	1	4.7	4.8	112	125	75-125	3	20
Manganese	mg/L	0.35	1	1	1.3	1.4	98	100	75-125	2	20
Potassium	mg/L	4.0	1	1	5.1	5.2	110	123	75-125	3	20
Sodium	mg/L	7.5	1	1	8.8	9.0	137	150	75-125	2	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

QC Batch: 604550 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92524842004

METHOD BLANK: 3184771 Matrix: Water  
Associated Lab Samples: 92524842004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.21	03/09/21 23:35	
Magnesium	mg/L	ND	0.050	0.0076	03/09/21 23:35	
Manganese	mg/L	ND	0.040	0.0017	03/09/21 23:35	
Potassium	mg/L	0.081J	0.20	0.056	03/09/21 23:35	
Sodium	mg/L	ND	1.0	0.26	03/09/21 23:35	

LABORATORY CONTROL SAMPLE: 3184772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hardness, Total(SM 2340B)	mg/L	6.6	6.6	99	80-120	
Iron	mg/L	1	1.0	100	80-120	
Magnesium	mg/L	1	1.0	100	80-120	
Manganese	mg/L	1	0.97	97	80-120	
Potassium	mg/L	1	1.1	109	80-120	
Sodium	mg/L	1	1.2	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184773 3184774

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92524831002 Result	Spike Conc.	Spike Conc.	Result						
Hardness, Total(SM 2340B)	mg/L	149	6.6	6.6	152	154	49	84	75-125	2	20
Iron	mg/L	0.53	1	1	2.3	1.6	178	110	75-125	35	20 M1,R1
Magnesium	mg/L	9.5	1	1	10.3	10.4	81	96	75-125	1	20
Manganese	mg/L	1.3	1	1	2.2	2.3	94	101	75-125	3	20
Potassium	mg/L	6.1	1	1	7.0	7.1	93	104	75-125	2	20
Sodium	mg/L	10.5	1	1	11.2	11.4	68	89	75-125	2	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

QC Batch: 606634

Analysis Method: EPA 6010D

QC Batch Method: EPA 3010A

Analysis Description: 6010D ATL

Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92524842003, 92524842005

METHOD BLANK: 3196175

Matrix: Water

Associated Lab Samples: 92524842003, 92524842005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.21	03/19/21 03:10	
Iron	mg/L	ND	0.040	0.016	03/19/21 03:10	
Magnesium	mg/L	ND	0.050	0.0076	03/19/21 03:10	
Manganese	mg/L	ND	0.040	0.0017	03/19/21 03:10	
Potassium	mg/L	ND	0.20	0.056	03/19/21 03:10	
Sodium	mg/L	ND	1.0	0.26	03/19/21 03:10	

LABORATORY CONTROL SAMPLE: 3196176

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hardness, Total(SM 2340B)	mg/L	6.6	6.9	104	80-120	
Iron	mg/L	1	1.0	101	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Manganese	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	1.1	113	80-120	
Sodium	mg/L	1	1.1	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3196177 3196178

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92526031001 Result	Spike Conc.	Spike Conc.	Result						
Hardness, Total(SM 2340B)	mg/L	789	6.6	6.6	797	775	122	-204	75-125	3	20
Iron	mg/L	2.8	1	1	3.8	3.7	101	89	75-125	3	20
Magnesium	mg/L	66.1	1	1	67.0	65.6	86	-56	75-125	2	20 M1
Manganese	mg/L	1.1	1	1	2.1	2.0	99	91	75-125	4	20
Potassium	mg/L	14.1	1	1	15.3	15.0	122	90	75-125	2	20
Sodium	mg/L	51.4	1	1	52.6	51.1	123	-27	75-125	3	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

QC Batch: 606220 Analysis Method: SM 2320B-2011  
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92524842001, 92524842002

METHOD BLANK: 3193657 Matrix: Water  
Associated Lab Samples: 92524842001, 92524842002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	03/12/21 12:40	
Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/12/21 12:40	
Alkalinity,Carbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/12/21 12:40	

LABORATORY CONTROL SAMPLE: 3193658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	51.4	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193659 3193660

Parameter	Units	92526098001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	496	50	50	506	510	20	28	80-120	1	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193661 3193662

Parameter	Units	92526099006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	50	50	25.2	25.5	50	51	80-120	1	25	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

QC Batch: 606222

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92524842003, 92524842004, 92524842005

METHOD BLANK: 3193668

Matrix: Water

Associated Lab Samples: 92524842003, 92524842004, 92524842005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	03/12/21 16:41	
Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/12/21 16:41	
Alkalinity,Carbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/12/21 16:41	

LABORATORY CONTROL SAMPLE: 3193669

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193670 3193671

Parameter	Units	92526099008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	50	50	ND	ND	0	0	80-120		25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3194100 3194101

Parameter	Units	92526099009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	50	50	51.4	51.6	103	103	80-120	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

QC Batch: 604635 Analysis Method: EPA 353.2 Rev 2.0 1993  
QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92524842001, 92524842002

METHOD BLANK: 3185368 Matrix: Water  
Associated Lab Samples: 92524842001, 92524842002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	03/06/21 12:02	

LABORATORY CONTROL SAMPLE: 3185369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185370 3185371

Parameter	Units	92525704003		3185371		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Nitrogen, NO2 plus NO3	mg/L	0.29	2.5	2.5	2.4	2.3	83	82	90-110	1	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3185372 3185373

Parameter	Units	92525704004		3185373		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Nitrogen, NO2 plus NO3	mg/L	0.25	2.5	2.5	2.4	2.4	86	85	90-110	1	10 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC  
Pace Project No.: 92524842

QC Batch: 604829 Analysis Method: EPA 353.2 Rev 2.0 1993  
QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
Laboratory: Pace Analytical Services - Asheville  
Associated Lab Samples: 92524842003, 92524842004, 92524842005

METHOD BLANK: 3186506 Matrix: Water  
Associated Lab Samples: 92524842003, 92524842004, 92524842005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	03/08/21 11:27	

LABORATORY CONTROL SAMPLE: 3186507

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186508 3186509

Parameter	Units	3186508		3186509		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Nitrogen, NO2 plus NO3	mg/L	0.17	2.5	2.5	2.6	2.6	97	97	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186510 3186511

Parameter	Units	3186510		3186511		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
Nitrogen, NO2 plus NO3	mg/L	0.21	2.5	2.5	2.6	2.6	97	96	90-110	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

QC Batch: 710987

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Analysis Description: 5310B Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Ormond Beach

Associated Lab Samples: 92524842001, 92524842002

METHOD BLANK: 3874940

Matrix: Water

Associated Lab Samples: 92524842001, 92524842002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	03/09/21 05:57	

LABORATORY CONTROL SAMPLE: 3874941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	19.5	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3874942 3874943

Parameter	Units	3874942		3874943		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	7.0	20	25.6	25.7	93	93	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3874944 3874945

Parameter	Units	3874944		3874945		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	1.9		20.6	20.7				0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

QC Batch: 712765	Analysis Method: SM 5310B
QC Batch Method: SM 5310B	Analysis Description: 5310B Dissolved Organic Carbon
	Laboratory: Pace Analytical Services - Ormond Beach

Associated Lab Samples: 92524842003, 92524842004, 92524842005

METHOD BLANK: 3886735 Matrix: Water

Associated Lab Samples: 92524842003, 92524842004, 92524842005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	03/16/21 03:44	

LABORATORY CONTROL SAMPLE: 3886736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	18.9	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3886737 3886738

Parameter	Units	92524842003		3886738		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	ND	20	20	18.6	18.7	91	91	80-120	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3886739 3886740

Parameter	Units	92525383006		3886740		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	ND	20	20	18.8	18.8	93	93	80-120	0	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH BCD/E BACKGROUND MISC

Pace Project No.: 92524842

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92524842001	BRGWA-6S				
92524842002	BRGWA-2I				
92524842003	BRGWA-5S				
92524842004	BRGWA-5I				
92524842005	BRGWA-2S				
92524842001	BRGWA-6S	EPA 3010A	603832	EPA 6010D	603942
92524842002	BRGWA-2I	EPA 3010A	603832	EPA 6010D	603942
92524842003	BRGWA-5S	EPA 3010A	606634	EPA 6010D	606723
92524842004	BRGWA-5I	EPA 3010A	604550	EPA 6010D	604640
92524842005	BRGWA-2S	EPA 3010A	606634	EPA 6010D	606723
92524842001	BRGWA-6S	SM 2320B-2011	606220		
92524842002	BRGWA-2I	SM 2320B-2011	606220		
92524842003	BRGWA-5S	SM 2320B-2011	606222		
92524842004	BRGWA-5I	SM 2320B-2011	606222		
92524842005	BRGWA-2S	SM 2320B-2011	606222		
92524842001	BRGWA-6S	EPA 353.2 Rev 2.0 1993	604635		
92524842002	BRGWA-2I	EPA 353.2 Rev 2.0 1993	604635		
92524842003	BRGWA-5S	EPA 353.2 Rev 2.0 1993	604829		
92524842004	BRGWA-5I	EPA 353.2 Rev 2.0 1993	604829		
92524842005	BRGWA-2S	EPA 353.2 Rev 2.0 1993	604829		
92524842001	BRGWA-6S	SM 5310B	710987		
92524842002	BRGWA-2I	SM 5310B	710987		
92524842003	BRGWA-5S	SM 5310B	712765		
92524842004	BRGWA-5I	SM 5310B	712765		
92524842005	BRGWA-2S	SM 5310B	712765		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Document Name:  
Sample Condition Upon Receipt (SCUR)  
Document No.:  
F-CAR-CS-033-Rev.07

Document Revised: October 23, 2020  
Page 1 of 2  
Issuing Authority:  
Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

G-A power - coal combustion Project

WO#: **92524842**



Counter:  Commercial  Fed Ex  UPS  USPS  Client  Pace  Other: \_\_\_\_\_

Custody Seal Present?  Yes  No Seal Intact?  Yes  No

Date/Initials Person Examining Contents: MT 3/2/21

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Time Frozen?

Yes  No  N/A

Thermometer:

IR Gun ID: 230

Type of Ice:  Wet  Blue  None

Cooler Temp: 4.4

Correction Factor: Add/Subtract (°C) ± 0

Temp should be above freezing to 6°C

Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.4

USDA Regulated Soil:  N/A, water sample

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?

Yes  No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

Comments/Discrepancy:

Chain of Custody Present?	Yes	No	N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3.
Rush Turn Around Time Requested?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.
Sufficient Volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5.
Correct Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6.
-Pace Containers Used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Containers Intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9.
-Includes Date/Time/ID/Analysis Matrix: <u>GW</u>				
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10.
Trip Blank Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Company: Georgia Power - Coal Combustion Products  
 Address: 2460 Mosier Road  
 Atlanta, GA 30339

Report To: John Abraham  
 Email To: john.abraham@epa.gov  
 Phone: (404) 506-2339

Project Name: Plant Branch BCO/E Background  
 Project # CCH 4th Semi-Annual

Collected By: Jeffrey Travis Matthews  
 Date Collected: 3-1-21

Matrix: GW  
 Composite: G

Metals 6010/6020/7470 - see comments  
 Total Alkalinity and Bicarbonate/Carbonate Alkalinity  
 Dissolved Organic Carbon  
 NOX 353.2  
 Total Hardness SM 2304B

Customer Sample ID: PRGW1-65  
 Matrix: GW  
 Composite: G

Collected for Composite: 3-1-21 1630  
 Composite End: 3-1-21 1639

PH: 6.70  
 CHS: 6

Metals (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Solid (S), Oil (O), Wipe (W), Air (A), Tissue (T), Biossey (B), Water (WT), Other (OT)

Customer Sample ID	Matrix	Comp / Grab	Collected for Composite Start Date	Time	Composite End Date	Time	PH	# of CHS
PRGW1-65	GW	G	3-1-21	1630	3-1-21	1639	6.70	6
PRGW1-01	GW	G	3-1-21	1639				

Container Preparing Type \*\*

Lab Project Manager:

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Temperature Info:

Temp. Storage: 4 NA

Temp. In Lab: 15°C

Order 1 Temp. Control: 15°C

Order 2 Temp. Control: 15°C

Order 3 Temp. Control: 15°C

Order 4 Temp. Control: 15°C

Order 5 Temp. Control: 15°C

Order 6 Temp. Control: 15°C

Order 7 Temp. Control: 15°C

Order 8 Temp. Control: 15°C

Order 9 Temp. Control: 15°C

Order 10 Temp. Control: 15°C

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Lab Sample Received: Y/N/NA

Correctly Sealed/Unlabeled: Y/N/NA

Correctly Signed/Unlabeled: Y/N/NA

Collector Signature Present: Y/N/NA

Isolator Present: Y/N/NA

Correct Bottles: Y/N/NA

Sample Volume: Y/N/NA

Samples Received on Ice: Y/N/NA

VOL - Hydrogen Accrual: Y/N/NA

VOL - Hydrogen Sulfide: Y/N/NA

Sample to Holding Time: Y/N/NA

Residual Chlorine Present: Y/N/NA

Q Sample: Y/N/NA

Sample pH Accurable: Y/N/NA

pH Stable: Y/N/NA

Sample Present: Y/N/NA

End Acquire SW: Y/N/NA

Lab Sample # / Comments: 42224612

Company: Georgia Power - Coal Combustion Residuals (Billing Information)  
 Address: 2480 Walker Road Atlanta, GA 30339  
 Report To: Jhp Alvarado Email To: sculmocer@southerrco.com  
 Phone: (404) 506-2229 Project Name: Plant Branch 600/E Background  
 Email: jzaham@southerrco.com Project #: CRK 4th Semi-Annual  
 Collected by: Jhp Alvarado, Travis Hernandez, Price Project Manager  
 Address Mailing: Kevin.hertel@patefab.com  
 Collected Signature: *[Signature]* Turnaround Date Required:  Immediately Packed on Ice:  No  
 X1 Yes  No  
 Rush:  Same Day  Next Day  Field Filled (if applicable):  
 12 Day  13 Day  14 Day  15 Day  No  
 Analytic:  Yes  No  
 Analytic:  Yes  No

Site: Georgia City: Marietta Time Zone Collected:  JPT  JNY  KET  JET  
 Site Collection Info/Address Plant Branch

Material Code/Insert in Matrix Box below: Drinking Water (DW), Ground Water (GW), Wastewater (WW),  
 Product (P), Sediment (SL), Oil (OL), Vapors (VP), Air (AA), Tissue (T), Shavings (S), Water (WT), Other (OT)

Customer Sample ID	Matrix *	Cona / Grab	Collected (or Composite) Date	Time	Composite End Date	Time	pH	# of Cans
BRGWA-5S	GW	G	3-2-21	0924			6.42	6
RRGWA-5I	GW	G	3-2-21	1011			6.47	6
BRGWA-2S	GW	G	3-2-21	1205			6.20	6

Analyses	1	2	3	4
Metals 6010/6020/7470 - see comments				
Total Alkalinity and Bicarbonate/Carbonate Alkalinity				
Dissolved Organic Carbon				
NOX 353 2				
Total Hardness 5M 2304B				

Lab Project Manager: *[Signature]*  
 Lab Sample Received Checklist:  
 Quantity:  N/A  Y N NA  
 Quality:  N/A  Y N NA  
 Collector Signature Present:  Y N NA  
 Labels Present:  Y N NA  
 Correct Boxes:  Y N NA  
 Sufficient Volume:  Y N NA  
 Labels by Receiver on Ice:  Y N NA  
 VOA - Freeholders Acceptable:  Y N NA  
 USA Registered Seals:  Y N NA  
 Samples in Holding Time:  Y N NA  
 Residual Chlorine Present:  Y N NA  
 ID Strip:  Y N NA  
 Sample pH Acceptable:  Y N NA  
 pH Strip:  Y N NA  
 Sulfide Present:  Y N NA  
 Lead Acetate Strip:  Y N NA

LAB USE ONLY:  
 Lab Sample # / Comments:  
 Lab Sample Received Checklist:  
 Quantity:  N/A  Y N NA  
 Quality:  N/A  Y N NA  
 Collector Signature Present:  Y N NA  
 Labels Present:  Y N NA  
 Correct Boxes:  Y N NA  
 Sufficient Volume:  Y N NA  
 Labels by Receiver on Ice:  Y N NA  
 VOA - Freeholders Acceptable:  Y N NA  
 USA Registered Seals:  Y N NA  
 Samples in Holding Time:  Y N NA  
 Residual Chlorine Present:  Y N NA  
 ID Strip:  Y N NA  
 Sample pH Acceptable:  Y N NA  
 pH Strip:  Y N NA  
 Sulfide Present:  Y N NA  
 Lead Acetate Strip:  Y N NA

Type of Ice Used	Wet	Blue	Dry	Name	SHOWN HOURS PRESENT (432 hours):	Y	N	N/A
Shipping Material Used:								
Lab Tracking #:								

LAB Sample Temperature Info:  
 Thermo ID#: \_\_\_\_\_  
 Cooler 1 Temp Upon Receipt: \_\_\_\_\_ °C  
 Cooler 1 Thermo Corr. Factor: \_\_\_\_\_ °C  
 Cooler 1 Transport Temp: \_\_\_\_\_ °C  
 Cooler 1 Comments: \_\_\_\_\_

Requested by/Company (Signature): *[Signature]* Date/Time: 3-3-21 10815  
 Received by/Company (Signature): *[Signature]* Date/Time: 3-3-21 1003  
 Table #: KTR LAB USE ONLY

Approved by/Company (Signature): \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Non-Conformances: \_\_\_\_\_ Page: 1 of 1



May 03, 2021

Joju Abraham  
Georgia Power-CCR  
2480 Maner Road  
Atlanta, GA 30339

RE: Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 04, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Ormond Beach

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kevin Herring  
kevin.herring@pacelabs.com  
1(704)875-9092  
HORIZON Database Administrator

Enclosures

cc: Daniela Herrera, Golder  
Ben Hodges, Georgia Power  
Jimmy Jones, Golder Associates Inc.  
Kristen Jurinko  
Julie Lehrman, Golder Associates Inc.  
Ms. Lauren Petty, Southern Company  
Carolyn Powrozek, Golder  
Dawn Prell, Golder Associates Inc.  
Tim Richards, Golder Associates - Atlanta

Brian Steele, Golder



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

---

### **Pace Analytical Services Ormond Beach**

8 East Tower Circle, Ormond Beach, FL 32174  
Alaska DEC- CS/UST/LUST  
Alabama Certification #: 41320  
Arizona Certification# AZ0819  
Colorado Certification: FL NELAC Reciprocity  
Connecticut Certification #: PH-0216  
Delaware Certification: FL NELAC Reciprocity  
Florida Certification #: E83079  
Georgia Certification #: 955  
Guam Certification: FL NELAC Reciprocity  
Hawaii Certification: FL NELAC Reciprocity  
Illinois Certification #: 200068  
Indiana Certification: FL NELAC Reciprocity  
Kansas Certification #: E-10383  
Kentucky Certification #: 90050  
Louisiana Certification #: FL NELAC Reciprocity  
Louisiana Environmental Certificate #: 05007  
Maryland Certification: #346  
Michigan Certification #: 9911  
Mississippi Certification: FL NELAC Reciprocity  
Missouri Certification #: 236

Montana Certification #: Cert 0074  
Nebraska Certification: NE-OS-28-14  
New Hampshire Certification #: 2958  
New Jersey Certification #: FL022  
New York Certification #: 11608  
North Carolina Environmental Certificate #: 667  
North Carolina Certification #: 12710  
North Dakota Certification #: R-216  
Ohio DEP 87780  
Oklahoma Certification #: D9947  
Pennsylvania Certification #: 68-00547  
Puerto Rico Certification #: FL01264  
South Carolina Certification: #96042001  
Tennessee Certification #: TN02974  
Texas Certification: FL NELAC Reciprocity  
US Virgin Islands Certification: FL NELAC Reciprocity  
Virginia Environmental Certification #: 460165  
West Virginia Certification #: 9962C  
Wisconsin Certification #: 399079670  
Wyoming (EPA Region 8): FL NELAC Reciprocity

---

### **Pace Analytical Services Charlotte**

9800 Kincey Ave. Ste 100, Huntersville, NC 28078  
Louisiana/NELAP Certification # LA170028  
North Carolina Drinking Water Certification #: 37706  
North Carolina Field Services Certification #: 5342  
North Carolina Wastewater Certification #: 12

South Carolina Certification #: 99006001  
Florida/NELAP Certification #: E87627  
Kentucky UST Certification #: 84  
Virginia/VELAP Certification #: 460221

---

### **Pace Analytical Services Asheville**

2225 Riverside Drive, Asheville, NC 28804  
Florida/NELAP Certification #: E87648  
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40  
South Carolina Certification #: 99030001  
Virginia/VELAP Certification #: 460222

---

### **Pace Analytical Services Peachtree Corners**

110 Technology Pkwy, Peachtree Corners, GA 30092  
Florida DOH Certification #: E87315  
Georgia DW Inorganics Certification #: 812

North Carolina Certification #: 381  
South Carolina Certification #: 98011001

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE SUMMARY

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525669001	BRGWC-33S	Water	03/03/21 09:03	03/04/21 08:15
92525669002	BRGWC-34S	Water	03/03/21 10:05	03/04/21 08:15
92525669003	BRGWC-36S	Water	03/03/21 16:16	03/04/21 08:15
92525669004	BRGWC-37S	Water	03/03/21 17:18	03/04/21 08:15
92525669005	FB-1	Water	03/03/21 16:12	03/04/21 08:15
92525669006	BRGWC-35S	Water	03/04/21 14:17	03/05/21 11:30
92525669007	BRGWC-17S	Water	03/04/21 15:36	03/05/21 11:30
92525669008	BRGWC-38S	Water	03/04/21 17:14	03/05/21 11:30
92525669009	DUP-2	Water	03/04/21 00:00	03/05/21 11:30

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525669001	BRGWC-33S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669002	BRGWC-34S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669003	BRGWC-36S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669004	BRGWC-37S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669005	FB-1	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669006	BRGWC-35S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669007	BRGWC-17S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669008	BRGWC-38S	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O
92525669009	DUP-2	EPA 6010D	DRB	6	PASI-GA
		SM 2320B-2011	ECH	3	PASI-A
		EPA 353.2 Rev 2.0 1993	KDF1	1	PASI-A
		SM 5310B	AGS	1	PASI-O

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### SAMPLE ANALYTE COUNT

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

---

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
--------	-----------	--------	----------	-------------------	------------

---

PASI-A = Pace Analytical Services - Asheville  
PASI-C = Pace Analytical Services - Charlotte  
PASI-GA = Pace Analytical Services - Peachtree Corners, GA  
PASI-O = Pace Analytical Services - Ormond Beach

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92525669001</b>	<b>BRGWC-33S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	4.83	Std. Units		03/19/21 07:41	
EPA 6010D	Manganese	1.0	mg/L	0.040	03/12/21 17:06	
EPA 6010D	Potassium	10.9	mg/L	0.20	03/12/21 17:06	
EPA 6010D	Sodium	13.5	mg/L	1.0	03/12/21 17:06	
EPA 6010D	Magnesium	4.1	mg/L	0.050	03/12/21 17:06	
EPA 6010D	Hardness, Total(SM 2340B)	111	mg/L	2.7	03/12/21 17:06	
<b>92525669002</b>	<b>BRGWC-34S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	5.88	Std. Units		03/19/21 07:41	
EPA 6010D	Iron	0.017J	mg/L	0.040	03/12/21 18:27	
EPA 6010D	Manganese	3.7	mg/L	0.040	03/12/21 18:27	
EPA 6010D	Potassium	3.9	mg/L	0.20	03/12/21 18:27	
EPA 6010D	Sodium	23.8	mg/L	1.0	03/12/21 18:27	
EPA 6010D	Magnesium	18.2	mg/L	0.050	03/12/21 18:27	
EPA 6010D	Hardness, Total(SM 2340B)	296	mg/L	2.7	03/12/21 18:27	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	29.2	mg/L	5.0	03/16/21 23:01	
SM 2320B-2011	Alkalinity, Total as CaCO3	29.2	mg/L	5.0	03/16/21 23:01	
<b>92525669003</b>	<b>BRGWC-36S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	5.86	Std. Units		03/19/21 07:41	
EPA 6010D	Manganese	0.0022J	mg/L	0.040	03/12/21 18:31	
EPA 6010D	Potassium	4.2	mg/L	0.20	03/12/21 18:31	
EPA 6010D	Sodium	40.9	mg/L	1.0	03/12/21 18:31	
EPA 6010D	Magnesium	22.4	mg/L	0.050	03/12/21 18:31	
EPA 6010D	Hardness, Total(SM 2340B)	224	mg/L	2.7	03/12/21 18:31	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	20.4	mg/L	5.0	03/16/21 23:18	
SM 2320B-2011	Alkalinity, Total as CaCO3	20.4	mg/L	5.0	03/16/21 23:18	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.062	mg/L	0.040	03/08/21 12:20	
SM 5310B	Dissolved Organic Carbon	0.55J	mg/L	1.0	03/12/21 20:54	
<b>92525669004</b>	<b>BRGWC-37S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	5.87	Std. Units		03/19/21 07:41	
EPA 6010D	Potassium	2.0	mg/L	0.20	03/12/21 18:36	
EPA 6010D	Sodium	4.7	mg/L	1.0	03/12/21 18:36	
EPA 6010D	Magnesium	1.2	mg/L	0.050	03/12/21 18:36	
EPA 6010D	Hardness, Total(SM 2340B)	14.1	mg/L	2.7	03/12/21 18:36	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	22.1	mg/L	5.0	03/16/21 23:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	22.1	mg/L	5.0	03/16/21 23:23	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.28	mg/L	0.040	03/08/21 12:21	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SUMMARY OF DETECTION

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Lab Sample ID	Client Sample ID	Result	Units	Report Limit	Analyzed	Qualifiers
Method	Parameters					
<b>92525669006</b>	<b>BRGWC-35S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	6.14	Std. Units		03/19/21 07:41	
EPA 6010D	Iron	0.019J	mg/L	0.040	03/12/21 18:46	
EPA 6010D	Manganese	0.013J	mg/L	0.040	03/12/21 18:46	
EPA 6010D	Potassium	4.5	mg/L	0.20	03/12/21 18:46	
EPA 6010D	Sodium	19.6	mg/L	1.0	03/12/21 18:46	
EPA 6010D	Magnesium	36.2	mg/L	0.050	03/12/21 18:46	
EPA 6010D	Hardness, Total(SM 2340B)	328	mg/L	2.7	03/12/21 18:46	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	57.3	mg/L	5.0	03/17/21 20:39	
SM 2320B-2011	Alkalinity, Total as CaCO3	57.3	mg/L	5.0	03/17/21 20:39	
<b>92525669007</b>	<b>BRGWC-17S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	6.45	Std. Units		03/19/21 07:41	
EPA 6010D	Potassium	1.1	mg/L	0.20	03/12/21 18:51	
EPA 6010D	Sodium	23.5	mg/L	1.0	03/12/21 18:51	
EPA 6010D	Magnesium	23.5	mg/L	0.050	03/12/21 18:51	
EPA 6010D	Hardness, Total(SM 2340B)	200	mg/L	2.7	03/12/21 18:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	89.1	mg/L	5.0	03/17/21 20:59	
SM 2320B-2011	Alkalinity, Total as CaCO3	89.1	mg/L	5.0	03/17/21 20:59	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.052	mg/L	0.040	03/08/21 13:03	
SM 5310B	Dissolved Organic Carbon	0.86J	mg/L	1.0	03/12/21 21:45	
<b>92525669008</b>	<b>BRGWC-38S</b>					
	Performed by	CUSTOME			03/19/21 07:41	
		R				
	pH	4.19	Std. Units		03/19/21 07:41	
EPA 6010D	Iron	0.025J	mg/L	0.040	03/12/21 18:55	
EPA 6010D	Manganese	2.0	mg/L	0.040	03/12/21 18:55	
EPA 6010D	Potassium	7.3	mg/L	0.20	03/12/21 18:55	
EPA 6010D	Sodium	51.3	mg/L	1.0	03/12/21 18:55	
EPA 6010D	Magnesium	43.4	mg/L	0.050	03/12/21 18:55	
EPA 6010D	Hardness, Total(SM 2340B)	281	mg/L	2.7	03/12/21 18:55	
EPA 353.2 Rev 2.0 1993	Nitrogen, NO2 plus NO3	0.078	mg/L	0.040	03/08/21 13:04	
<b>92525669009</b>	<b>DUP-2</b>					
EPA 6010D	Iron	0.027J	mg/L	0.040	03/12/21 19:10	
EPA 6010D	Manganese	0.012J	mg/L	0.040	03/12/21 19:10	
EPA 6010D	Potassium	4.4	mg/L	0.20	03/12/21 19:10	
EPA 6010D	Sodium	19.4	mg/L	1.0	03/12/21 19:10	
EPA 6010D	Magnesium	35.5	mg/L	0.050	03/12/21 19:10	
EPA 6010D	Hardness, Total(SM 2340B)	323	mg/L	2.7	03/12/21 19:10	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	58.2	mg/L	5.0	03/17/21 21:10	
SM 2320B-2011	Alkalinity, Total as CaCO3	58.2	mg/L	5.0	03/17/21 21:10	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: <b>BRGWC-33S</b> Lab ID: <b>92525669001</b> Collected: 03/03/21 09:03 Received: 03/04/21 08:15 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>4.83</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 17:06	7439-89-6	
Manganese	<b>1.0</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 17:06	7439-96-5	
Potassium	<b>10.9</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 17:06	7440-09-7	
Sodium	<b>13.5</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 17:06	7440-23-5	
Magnesium	<b>4.1</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 17:06	7439-95-4	
Hardness, Total(SM 2340B)	<b>111</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 17:06		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 22:39		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 22:39		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		03/16/21 22:39		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993									
Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		03/08/21 12:18		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B									
Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/12/21 20:23		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: <b>BRGWC-34S</b> Lab ID: <b>92525669002</b> Collected: 03/03/21 10:05      Received: 03/04/21 08:15      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>5.88</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.017J</b>	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:27	7439-89-6	
Manganese	<b>3.7</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:27	7439-96-5	
Potassium	<b>3.9</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:27	7440-09-7	
Sodium	<b>23.8</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:27	7440-23-5	
Magnesium	<b>18.2</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:27	7439-95-4	
Hardness, Total(SM 2340B)	<b>296</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:27		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>29.2</b>	mg/L	5.0	5.0	1		03/16/21 23:01		
Alkalinity,Carbonate (CaCO3)	<b>ND</b>	mg/L	5.0	5.0	1		03/16/21 23:01		
Alkalinity, Total as CaCO3	<b>29.2</b>	mg/L	5.0	5.0	1		03/16/21 23:01		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>ND</b>	mg/L	0.040	0.017	1		03/08/21 12:19		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>ND</b>	mg/L	1.0	0.50	1		03/12/21 20:40		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: <b>BRGWC-36S</b> Lab ID: <b>92525669003</b> Collected: 03/03/21 16:16      Received: 03/04/21 08:15      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>5.86</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:31	7439-89-6	
Manganese	<b>0.0022J</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:31	7439-96-5	
Potassium	<b>4.2</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:31	7440-09-7	
Sodium	<b>40.9</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:31	7440-23-5	
Magnesium	<b>22.4</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:31	7439-95-4	
Hardness, Total(SM 2340B)	<b>224</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:31		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>20.4</b>	mg/L	5.0	5.0	1		03/16/21 23:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 23:18		
Alkalinity, Total as CaCO3	<b>20.4</b>	mg/L	5.0	5.0	1		03/16/21 23:18		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.062</b>	mg/L	0.040	0.017	1		03/08/21 12:20		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>0.55J</b>	mg/L	1.0	0.50	1		03/12/21 20:54		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

Sample: <b>BRGWC-37S</b> Lab ID: <b>92525669004</b> Collected: 03/03/21 17:18 Received: 03/04/21 08:15 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>5.87</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:36	7439-89-6	
Manganese	ND	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:36	7439-96-5	
Potassium	<b>2.0</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:36	7440-09-7	
Sodium	<b>4.7</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:36	7440-23-5	
Magnesium	<b>1.2</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:36	7439-95-4	
Hardness, Total(SM 2340B)	<b>14.1</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:36		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>22.1</b>	mg/L	5.0	5.0	1		03/16/21 23:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 23:23		
Alkalinity, Total as CaCO3	<b>22.1</b>	mg/L	5.0	5.0	1		03/16/21 23:23		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.28</b>	mg/L	0.040	0.017	1		03/08/21 12:21		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/12/21 21:07		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: FB-1		Lab ID: 92525669005		Collected: 03/03/21 16:12	Received: 03/04/21 08:15	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	ND	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:41	7439-89-6		
Manganese	ND	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:41	7439-96-5		
Potassium	ND	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:41	7440-09-7		
Sodium	ND	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:41	7440-23-5		
Magnesium	ND	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:41	7439-95-4		
Hardness, Total(SM 2340B)	ND	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:41			
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 23:28			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/16/21 23:28			
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		03/16/21 23:28			
<b>353.2 Nitrogen, NO2/NO3 pres.</b>		Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		03/08/21 12:23			
<b>5310B Dissolved Organic Carbon</b>		Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/12/21 21:21			

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: <b>BRGWC-35S</b> Lab ID: <b>92525669006</b> Collected: 03/04/21 14:17      Received: 03/05/21 11:30      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>6.14</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.019J</b>	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:46	7439-89-6	
Manganese	<b>0.013J</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:46	7439-96-5	
Potassium	<b>4.5</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:46	7440-09-7	
Sodium	<b>19.6</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:46	7440-23-5	
Magnesium	<b>36.2</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:46	7439-95-4	
Hardness, Total(SM 2340B)	<b>328</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:46		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>57.3</b>	mg/L	5.0	5.0	1		03/17/21 20:39		
Alkalinity,Carbonate (CaCO3)	<b>ND</b>	mg/L	5.0	5.0	1		03/17/21 20:39		
Alkalinity, Total as CaCO3	<b>57.3</b>	mg/L	5.0	5.0	1		03/17/21 20:39		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>ND</b>	mg/L	0.040	0.017	1		03/08/21 13:02		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>ND</b>	mg/L	1.0	0.50	1		03/12/21 21:34		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: BRGWC-17S		Lab ID: 92525669007		Collected: 03/04/21 15:36		Received: 03/05/21 11:30		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>6.45</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D Preparation Method: EPA 3010A									
Pace Analytical Services - Peachtree Corners, GA									
Iron	ND	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:51	7439-89-6	
Manganese	ND	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:51	7439-96-5	
Potassium	<b>1.1</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:51	7440-09-7	
Sodium	<b>23.5</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:51	7440-23-5	
Magnesium	<b>23.5</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:51	7439-95-4	
Hardness, Total(SM 2340B)	<b>200</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:51		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011									
Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	<b>89.1</b>	mg/L	5.0	5.0	1		03/17/21 20:59		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/17/21 20:59		
Alkalinity, Total as CaCO3	<b>89.1</b>	mg/L	5.0	5.0	1		03/17/21 20:59		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993									
Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.052</b>	mg/L	0.040	0.017	1		03/08/21 13:03		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B									
Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	<b>0.86J</b>	mg/L	1.0	0.50	1		03/12/21 21:45		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: <b>BRGWC-38S</b> Lab ID: <b>92525669008</b> Collected: 03/04/21 17:14      Received: 03/05/21 11:30      Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Field Data</b>									
Analytical Method: Pace Analytical Services - Charlotte									
Performed by	<b>CUSTOMER</b>				1		03/19/21 07:41		
pH	<b>4.19</b>	Std. Units			1		03/19/21 07:41		
<b>6010D ATL ICP</b>									
Analytical Method: EPA 6010D      Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA									
Iron	<b>0.025J</b>	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 18:55	7439-89-6	
Manganese	<b>2.0</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 18:55	7439-96-5	
Potassium	<b>7.3</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 18:55	7440-09-7	
Sodium	<b>51.3</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 18:55	7440-23-5	
Magnesium	<b>43.4</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 18:55	7439-95-4	
Hardness, Total(SM 2340B)	<b>281</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 18:55		
<b>2320B Alkalinity</b>									
Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville									
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/17/21 21:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/17/21 21:08		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		03/17/21 21:08		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville									
Nitrogen, NO2 plus NO3	<b>0.078</b>	mg/L	0.040	0.017	1		03/08/21 13:04		
<b>5310B Dissolved Organic Carbon</b>									
Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach									
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/12/21 23:13		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Sample: DUP-2		Lab ID: 92525669009		Collected: 03/04/21 00:00	Received: 03/05/21 11:30	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010D ATL ICP</b>		Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Iron	<b>0.027J</b>	mg/L	0.040	0.016	1	03/12/21 10:10	03/12/21 19:10	7439-89-6		
Manganese	<b>0.012J</b>	mg/L	0.040	0.0017	1	03/12/21 10:10	03/12/21 19:10	7439-96-5		
Potassium	<b>4.4</b>	mg/L	0.20	0.056	1	03/12/21 10:10	03/12/21 19:10	7440-09-7		
Sodium	<b>19.4</b>	mg/L	1.0	0.26	1	03/12/21 10:10	03/12/21 19:10	7440-23-5		
Magnesium	<b>35.5</b>	mg/L	0.050	0.0076	1	03/12/21 10:10	03/12/21 19:10	7439-95-4		
Hardness, Total(SM 2340B)	<b>323</b>	mg/L	2.7	0.21	1	03/12/21 10:10	03/12/21 19:10			
<b>2320B Alkalinity</b>		Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	<b>58.2</b>	mg/L	5.0	5.0	1		03/17/21 21:10			
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		03/17/21 21:10			
Alkalinity, Total as CaCO3	<b>58.2</b>	mg/L	5.0	5.0	1		03/17/21 21:10			
<b>353.2 Nitrogen, NO2/NO3 pres.</b>		Analytical Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	ND	mg/L	0.040	0.017	1		03/08/21 13:06			
<b>5310B Dissolved Organic Carbon</b>		Analytical Method: SM 5310B Pace Analytical Services - Ormond Beach								
Dissolved Organic Carbon	ND	mg/L	1.0	0.50	1		03/12/21 23:57			

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 606044 Analysis Method: EPA 6010D  
QC Batch Method: EPA 3010A Analysis Description: 6010D ATL  
Laboratory: Pace Analytical Services - Peachtree Corners, GA  
Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005, 92525669006, 92525669007, 92525669008, 92525669009

METHOD BLANK: 3192983 Matrix: Water  
Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005, 92525669006, 92525669007, 92525669008, 92525669009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hardness, Total(SM 2340B)	mg/L	ND	2.7	0.21	03/12/21 16:56	
Iron	mg/L	ND	0.040	0.016	03/12/21 16:56	
Magnesium	mg/L	ND	0.050	0.0076	03/12/21 16:56	
Manganese	mg/L	ND	0.040	0.0017	03/12/21 16:56	
Potassium	mg/L	ND	0.20	0.056	03/12/21 16:56	
Sodium	mg/L	ND	1.0	0.26	03/12/21 16:56	

LABORATORY CONTROL SAMPLE: 3192984

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Hardness, Total(SM 2340B)	mg/L	6.6	7.0	105	80-120	
Iron	mg/L	1	1.0	103	80-120	
Magnesium	mg/L	1	1.1	105	80-120	
Manganese	mg/L	1	1.0	101	80-120	
Potassium	mg/L	1	1.1	110	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192985 3192986

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		92525657001 Result	Spike Conc.	Spike Conc.	Result						
Hardness, Total(SM 2340B)	mg/L	111	6.6	6.6	117	121	102	154	75-125	3	20
Iron	mg/L	ND	1	1	1.1	1.1	106	110	75-125	3	20
Magnesium	mg/L	4.1	1	1	5.2	5.4	108	121	75-125	3	20
Manganese	mg/L	1.0	1	1	2.0	2.1	103	107	75-125	2	20
Potassium	mg/L	10.9	1	1	11.9	12.3	103	141	75-125	3	20 M1
Sodium	mg/L	13.5	1	1	14.6	15.1	103	153	75-125	3	20 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 606874

Analysis Method: SM 2320B-2011

QC Batch Method: SM 2320B-2011

Analysis Description: 2320B Alkalinity

Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525669001

METHOD BLANK: 3197235

Matrix: Water

Associated Lab Samples: 92525669001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	03/16/21 19:52	
Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/16/21 19:52	
Alkalinity,Carbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/16/21 19:52	

LABORATORY CONTROL SAMPLE: 3197236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	50.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3197237 3197238

Parameter	Units	92527199002		3197237		3197238		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	110	50	157	50	160	94	100	80-120	2	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3197239 3197240

Parameter	Units	92527211001		3197239		3197240		% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	28.5	50	78.5	50	79.4	100	102	80-120	1	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 606876 Analysis Method: SM 2320B-2011  
 QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525669002, 92525669003, 92525669004, 92525669005

METHOD BLANK: 3197245 Matrix: Water  
 Associated Lab Samples: 92525669002, 92525669003, 92525669004, 92525669005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	03/16/21 22:52	
Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/16/21 22:52	
Alkalinity,Carbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/16/21 22:52	

LABORATORY CONTROL SAMPLE: 3197246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	51.6	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3197247 3197248

Parameter	Units	92525669002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	29.2	50	50	79.0	78.6	100	99	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3197249 3197250

Parameter	Units	92525536003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	50	50	54.8	54.7	104	103	80-120	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 607154 Analysis Method: SM 2320B-2011  
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity  
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525669006, 92525669007, 92525669008, 92525669009

METHOD BLANK: 3198620 Matrix: Water  
Associated Lab Samples: 92525669006, 92525669007, 92525669008, 92525669009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	ND	5.0	5.0	03/17/21 17:52	
Alkalinity,Bicarbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/17/21 17:52	
Alkalinity,Carbonate (CaCO <sub>3</sub> )	mg/L	ND	5.0	5.0	03/17/21 17:52	

LABORATORY CONTROL SAMPLE: 3198621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	50	53.0	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3198624 3198625

Parameter	Units	92525669006		3198625		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	57.3	50	50	110	109	106	104	80-120	1	25

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3200194 3200195

Parameter	Units	92525383011		3200195		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Alkalinity, Total as CaCO <sub>3</sub>	mg/L	28.9	50	50	80.0	81.0	102	104	80-120	1	25

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 604832 Analysis Method: EPA 353.2 Rev 2.0 1993  
 QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005

METHOD BLANK: 3186513 Matrix: Water  
 Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	03/08/21 12:03	

LABORATORY CONTROL SAMPLE: 3186514

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186515 3186516

Parameter	Units	3186515		3186516		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.3	2.3	94	94	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186517 3186518

Parameter	Units	3186517		3186518		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.4	2.4	95	95	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 604834 Analysis Method: EPA 353.2 Rev 2.0 1993  
 QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
 Laboratory: Pace Analytical Services - Asheville  
 Associated Lab Samples: 92525669006, 92525669007, 92525669008, 92525669009

METHOD BLANK: 3186519 Matrix: Water  
 Associated Lab Samples: 92525669006, 92525669007, 92525669008, 92525669009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	ND	0.040	0.017	03/08/21 12:37	

LABORATORY CONTROL SAMPLE: 3186520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186521 3186522

Parameter	Units	92525798002		3186521		3186522		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Nitrogen, NO2 plus NO3	mg/L	0.26	2.5	2.5	2.5	2.5	2.5	91	90	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186523 3186524

Parameter	Units	92525827002		3186523		3186524		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Nitrogen, NO2 plus NO3	mg/L	0.092	2.5	2.5	2.5	1.7	1.7	63	64	90-110	1	10 M1	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC  
Pace Project No.: 92525669

QC Batch: 711998 Analysis Method: SM 5310B  
QC Batch Method: SM 5310B Analysis Description: 5310B Dissolved Organic Carbon  
Laboratory: Pace Analytical Services - Ormond Beach  
Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005, 92525669006, 92525669007

METHOD BLANK: 3881059 Matrix: Water  
Associated Lab Samples: 92525669001, 92525669002, 92525669003, 92525669004, 92525669005, 92525669006, 92525669007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	03/12/21 15:23	

LABORATORY CONTROL SAMPLE: 3881060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	19.3	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3881061 3881062

Parameter	Units	92525383007		3881062		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Dissolved Organic Carbon	mg/L	ND	20	20	18.7	18.7	93	93	80-120	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3881063 3881064

Parameter	Units	92525677002		3881064		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Dissolved Organic Carbon	mg/L	0.89J	20	20	19.8	19.7	95	94	80-120	0	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

QC Batch: 711999

Analysis Method: SM 5310B

QC Batch Method: SM 5310B

Analysis Description: 5310B Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Ormond Beach

Associated Lab Samples: 92525669008, 92525669009

METHOD BLANK: 3881067

Matrix: Water

Associated Lab Samples: 92525669008, 92525669009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.50	03/12/21 22:46	

LABORATORY CONTROL SAMPLE: 3881068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	20	19.0	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3881069 3881070

Parameter	Units	92525669008		3881070		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	ND	20	20	18.8	18.6	93	93	80-120	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3881071 3881072

Parameter	Units	35617414003		3881072		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Dissolved Organic Carbon	mg/L	20.4	20	20	39.3	38.8	94	92	80-120	1	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## QUALIFIERS

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

---

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BRANCH E NETWORK MISC

Pace Project No.: 92525669

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525669001	BRGWC-33S				
92525669002	BRGWC-34S				
92525669003	BRGWC-36S				
92525669004	BRGWC-37S				
92525669006	BRGWC-35S				
92525669007	BRGWC-17S				
92525669008	BRGWC-38S				
92525669001	BRGWC-33S	EPA 3010A	606044	EPA 6010D	606283
92525669002	BRGWC-34S	EPA 3010A	606044	EPA 6010D	606283
92525669003	BRGWC-36S	EPA 3010A	606044	EPA 6010D	606283
92525669004	BRGWC-37S	EPA 3010A	606044	EPA 6010D	606283
92525669005	FB-1	EPA 3010A	606044	EPA 6010D	606283
92525669006	BRGWC-35S	EPA 3010A	606044	EPA 6010D	606283
92525669007	BRGWC-17S	EPA 3010A	606044	EPA 6010D	606283
92525669008	BRGWC-38S	EPA 3010A	606044	EPA 6010D	606283
92525669009	DUP-2	EPA 3010A	606044	EPA 6010D	606283
92525669001	BRGWC-33S	SM 2320B-2011	606874		
92525669002	BRGWC-34S	SM 2320B-2011	606876		
92525669003	BRGWC-36S	SM 2320B-2011	606876		
92525669004	BRGWC-37S	SM 2320B-2011	606876		
92525669005	FB-1	SM 2320B-2011	606876		
92525669006	BRGWC-35S	SM 2320B-2011	607154		
92525669007	BRGWC-17S	SM 2320B-2011	607154		
92525669008	BRGWC-38S	SM 2320B-2011	607154		
92525669009	DUP-2	SM 2320B-2011	607154		
92525669001	BRGWC-33S	EPA 353.2 Rev 2.0 1993	604832		
92525669002	BRGWC-34S	EPA 353.2 Rev 2.0 1993	604832		
92525669003	BRGWC-36S	EPA 353.2 Rev 2.0 1993	604832		
92525669004	BRGWC-37S	EPA 353.2 Rev 2.0 1993	604832		
92525669005	FB-1	EPA 353.2 Rev 2.0 1993	604832		
92525669006	BRGWC-35S	EPA 353.2 Rev 2.0 1993	604834		
92525669007	BRGWC-17S	EPA 353.2 Rev 2.0 1993	604834		
92525669008	BRGWC-38S	EPA 353.2 Rev 2.0 1993	604834		
92525669009	DUP-2	EPA 353.2 Rev 2.0 1993	604834		
92525669001	BRGWC-33S	SM 5310B	711998		
92525669002	BRGWC-34S	SM 5310B	711998		
92525669003	BRGWC-36S	SM 5310B	711998		
92525669004	BRGWC-37S	SM 5310B	711998		
92525669005	FB-1	SM 5310B	711998		
92525669006	BRGWC-35S	SM 5310B	711998		
92525669007	BRGWC-17S	SM 5310B	711998		
92525669008	BRGWC-38S	SM 5310B	711999		
92525669009	DUP-2	SM 5310B	711999		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville  Eden  Greenwood  Huntersville  Raleigh  Mechanicsville  Atlanta  Kernersville

Sample Condition Upon Receipt

Client Name:

GA Power

Project #:

WO#: **92525669**

Courier:  Commercial  Fed Ex  Pace  UPS  USPS  Client  Other: \_\_\_\_\_



92525669

Date/Initials Person Examining Contents: 3/4/21

Custody Seal Present?  Yes  No Seals Intact?  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Biological Tissue Frozen?  Yes  No  N/A

Thermometer:  IR Gun ID: 230 Type of Ice:  Wet  Blue  None

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C  
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 1.6

USDA Regulated Soil (  N/A, water sample)

Old samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?  Yes  No

Old samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match OOC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Includes Date/Time/ID/Analysis Matrix: <u>W</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

COMMENTS/SAMPLE DISCREPANCY

Field Data Required?  Yes  No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager SCURF Review: \_\_\_\_\_

Date: \_\_\_\_\_

Project Manager SRF Review: \_\_\_\_\_

Date: \_\_\_\_\_







**COMMONWEALTH of VIRGINIA**  
*Department of General Services*

*Division of Consolidated Laboratory Services*

*600 North 5th Street  
Richmond, Virginia 23219-3691  
(804) 648-4480  
FAX (804) 692-0416*

06/10/2020

Craig Tronzo  
Pace Analytical Services, LLC - Asheville NC  
2225 Riverside Drive  
Asheville NC 28804

VELAP ID: 460222

Dear Craig Tronzo:

The Division of Consolidated Laboratory Services (DCLS) has accredited Pace Analytical Services, LLC - Asheville NC pursuant to the provisions of 1VAC30-46 and The NELAC Institute (TNI) 2009 Standard. Certificate number 10807 and the corresponding Scope of Accreditation are enclosed. This certificate expires 06/14/2021. The certificate must be conspicuously displayed in the laboratory along with the associated Scope of Accreditation.

Please note that your laboratory is required to notify the Virginia Environmental Laboratory Accreditation Program (VELAP) in writing of any changes in key accreditation criteria within 30 calendar days of the change per 1VAC30-46-90 A. This requirement includes changes in ownership, location, key personnel, and major instrumentation.

To maintain accreditation, the laboratory must continue to comply with 1VAC30-46. This includes ongoing satisfactory proficiency testing. The method checklists used by VELAP in the on-site assessment process are available upon request as a supplement to internal audits.

Please direct all correspondences and questions regarding accreditation to your laboratory's lead assessor, Ila Meyer-Fritzsche, at [ila.meyer-fritzsche@dgs.virginia.gov](mailto:ila.meyer-fritzsche@dgs.virginia.gov) or (804) 648-4480 x306.

Sincerely yours,

Cathy Westerman  
Manager, Laboratory Certification Program

Enclosures  
cc: Felicia Grogan



**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF GENERAL SERVICES  
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



**Certifies that**

**VA Laboratory ID#: 460222  
Pace Analytical Services, LLC - Asheville NC  
2225 Riverside Drive  
Asheville, NC 28804**

**Owner: PAS PARENT, LLC  
Operator: PACE ANALYTICAL SERVICES, LLC  
Responsible Official: FELICIA GROGAN**

Having met the requirements of 1 VAC 30-46 and  
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute  
is hereby approved as an  
**Accredited Environmental Laboratory**

As more fully described in the attached Scope of Accreditation

**Effective Date: June 15, 2020  
Expiration Date: June 14, 2021  
Certificate # 10807**

**Denise M. Toney, Ph.D., HCLD  
DGS Deputy Director for Laboratories**

Continued accreditation status depends on successful ongoing participation in the program.  
Certificate to be conspicuously displayed at the laboratory.  
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)  
Scope of Accreditation.  
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 10807

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: June 15, 2020  
 Expiration Date: June 14, 2021

**DRINKING WATER**

METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4	COPPER	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA
SM 2320 B-2011	ALKALINITY AS CaCO <sub>3</sub>	VA
SM 9223 COLISURE®	TOTAL COLIFORMS	VA

METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4	LEAD	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA
SM 9223 COLISURE®	ESCHERICHIA COLI	VA

**NON-POTABLE WATER**

METHOD	ANALYTE	PRIMARY
EPA 1010	FLASHPOINT	VA
EPA 160.4	RESIDUE-VOLATILE	VA
EPA 180.1 REV 2	TURBIDITY	VA
EPA 200.7 REV 4.4	ANTIMONY	VA
EPA 200.7 REV 4.4	BARIUM	VA
EPA 200.7 REV 4.4	BORON	VA
EPA 200.7 REV 4.4	CALCIUM	VA
EPA 200.7 REV 4.4	COBALT	VA
EPA 200.7 REV 4.4	IRON	VA
EPA 200.7 REV 4.4	MAGNESIUM	VA
EPA 200.7 REV 4.4	MOLYBDENUM	VA
EPA 200.7 REV 4.4	POTASSIUM	VA
EPA 200.7 REV 4.4	SILICA AS SiO <sub>2</sub>	VA
EPA 200.7 REV 4.4	SODIUM	VA
EPA 200.7 REV 4.4	TIN	VA
EPA 200.7 REV 4.4	VANADIUM	VA
EPA 200.8 REV 5.4	ALUMINUM	VA
EPA 200.8 REV 5.4	ARSENIC	VA
EPA 200.8 REV 5.4	BERYLLIUM	VA
EPA 200.8 REV 5.4	CHROMIUM	VA
EPA 200.8 REV 5.4	COPPER	VA
EPA 200.8 REV 5.4	MANGANESE	VA
EPA 200.8 REV 5.4	NICKEL	VA
EPA 200.8 REV 5.4	SILVER	VA
EPA 200.8 REV 5.4	VANADIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	BORON	VA
EPA 200.8 REV 5.4 - EXTENDED	IRON	VA
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	VA

METHOD	ANALYTE	PRIMARY
EPA 120.1	CONDUCTIVITY	VA
EPA 1631 E	MERCURY	VA
EPA 200.7 REV 4.4	ALUMINUM	VA
EPA 200.7 REV 4.4	ARSENIC	VA
EPA 200.7 REV 4.4	BERYLLIUM	VA
EPA 200.7 REV 4.4	CADMIUM	VA
EPA 200.7 REV 4.4	CHROMIUM	VA
EPA 200.7 REV 4.4	COPPER	VA
EPA 200.7 REV 4.4	LEAD	VA
EPA 200.7 REV 4.4	MANGANESE	VA
EPA 200.7 REV 4.4	NICKEL	VA
EPA 200.7 REV 4.4	SELENIUM	VA
EPA 200.7 REV 4.4	SILVER	VA
EPA 200.7 REV 4.4	THALLIUM	VA
EPA 200.7 REV 4.4	TITANIUM	VA
EPA 200.7 REV 4.4	ZINC	VA
EPA 200.8 REV 5.4	ANTIMONY	VA
EPA 200.8 REV 5.4	BARIUM	VA
EPA 200.8 REV 5.4	CADMIUM	VA
EPA 200.8 REV 5.4	COBALT	VA
EPA 200.8 REV 5.4	LEAD	VA
EPA 200.8 REV 5.4	MOLYBDENUM	VA
EPA 200.8 REV 5.4	SELENIUM	VA
EPA 200.8 REV 5.4	THALLIUM	VA
EPA 200.8 REV 5.4	ZINC	VA
EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.





**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 10807

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: June 15, 2020  
 Expiration Date: June 14, 2021

**NON-POTABLE WATER**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4 - EXTENDED	TIN	VA
EPA 218.6 REV 3.3	CHROMIUM VI	VA
EPA 300.0 REV 2.1	BROMIDE	VA
EPA 300.0 REV 2.1	FLUORIDE	VA
EPA 300.0 REV 2.1	NITRATE/NITRITE	VA
EPA 300.0 REV 2.1	ORTHOPOSPHATE AS P	VA
EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	VA
EPA 350.1 REV 2	AMMONIA AS N	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA
EPA 420.4 REV 1 (AS LACHAT 10-210-00-1-X)	TOTAL PHENOLICS	VA
EPA 6010 D	ANTIMONY	VA
EPA 6010 D	BARIUM	VA
EPA 6010 D	BORON	VA
EPA 6010 D	CALCIUM	VA
EPA 6010 D	COBALT	VA
EPA 6010 D	IRON	VA
EPA 6010 D	LITHIUM	VA
EPA 6010 D	MANGANESE	VA
EPA 6010 D	NICKEL	VA
EPA 6010 D	SELENIUM	VA
EPA 6010 D	SILVER	VA
EPA 6010 D	STRONTIUM	VA
EPA 6010 D	TIN	VA
EPA 6010 D	VANADIUM	VA
EPA 6010 D - EXTENDED	SILICON	VA
EPA 6020 B	ANTIMONY	VA
EPA 6020 B	BARIUM	VA
EPA 6020 B	CADMIUM	VA
EPA 6020 B	CHROMIUM	VA
EPA 6020 B	COPPER	VA
EPA 6020 B	LEAD	VA
EPA 6020 B	MANGANESE	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	VA
EPA 245.1 REV 3	MERCURY	VA
EPA 300.0 REV 2.1	CHLORIDE	VA
EPA 300.0 REV 2.1	NITRATE AS N	VA
EPA 300.0 REV 2.1	NITRITE AS N	VA
EPA 300.0 REV 2.1	SULFATE	VA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA
EPA 351.2 REV 2 (AS LACHAT 10-107-06-2-D)	KJELDAHL NITROGEN - TOTAL (TKN)	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRATE/NITRITE	VA
EPA 365.1 REV 2 (AS LACHAT 10-115-01-1-E)	PHOSPHORUS, TOTAL	VA
EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ARSENIC	VA
EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	CADMIUM	VA
EPA 6010 D	CHROMIUM	VA
EPA 6010 D	COPPER	VA
EPA 6010 D	LEAD	VA
EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SILICA AS SiO <sub>2</sub>	VA
EPA 6010 D	SODIUM	VA
EPA 6010 D	THALLIUM	VA
EPA 6010 D	TITANIUM	VA
EPA 6010 D	ZINC	VA
EPA 6020 B	ALUMINUM	VA
EPA 6020 B	ARSENIC	VA
EPA 6020 B	BERYLLIUM	VA
EPA 6020 B	CALCIUM	VA
EPA 6020 B	COBALT	VA
EPA 6020 B	IRON	VA
EPA 6020 B	MAGNESIUM	VA
EPA 6020 B	MOLYBDENUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCL5 with the same Certificate Number indicated above.



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 10807

**Face Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: June 15, 2020  
 Expiration Date: June 14, 2021

**NON-POTABLE WATER**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8020 B	NICKEL	VA
EPA 8020 B	SELENIUM	VA
EPA 8020 B	SODIUM	VA
EPA 8020 B	TIN	VA
EPA 8020 B	ZINC	VA
EPA 8020 B - EXTENDED	BORON	VA
EPA 8020 B - EXTENDED	STRONTIUM	VA
EPA 8020 B - EXTENDED	URANIUM	VA
EPA 7470 A	MERCURY	VA
EPA 9012 B	TOTAL CYANIDE	VA
EPA 9056 A	BROMIDE	VA
EPA 9056 A	FLUORIDE	VA
EPA 9056 A	NITRITE AS N	VA
EPA 9056 A	SULFATE	VA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	VA
LACHAT QUIKCHEM 10-204-00-1-X	CYANIDE	VA
SM 2340 B-2011	TOTAL HARDNESS AS CaCO3	VA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	VA
SM 2540 F-2011	RESIDUE-SETTLABLE	VA
SM 4500-CL <sup>-</sup> E-2011	CHLORIDE	VA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	VA
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	VA
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 8020 B	POTASSIUM	VA
EPA 8020 B	SILVER	VA
EPA 8020 B	THALLIUM	VA
EPA 8020 B	VANADIUM	VA
EPA 8020 B - EXTENDED	BISMUTH	VA
EPA 8020 B - EXTENDED	LITHIUM	VA
EPA 8020 B - EXTENDED	TITANIUM	VA
EPA 7186 A	CHROMIUM VI	VA
EPA 8010 C	PREP: CYANIDE DISTILLATION	VA
EPA 8040 C	PH	VA
EPA 8056 A	CHLORIDE	VA
EPA 8056 A	NITRATE AS N	VA
EPA 8056 A	ORTHOPHOSPHATE AS P	VA
EPA 9056 A - EXTENDED	NITRATE/NITRITE	VA
EPA 9095 B	FREE LIQUID	VA
SM 2320 B-2011	ALKALINITY AS CaCO3	VA
SM 2540 B-2011	RESIDUE-TOTAL (TS)	VA
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	VA
SM 3500-CR B-2011	CHROMIUM VI	VA
SM 4500-CN <sup>-</sup> E-2011	CYANIDE	VA
SM 4500-S2 <sup>-</sup> D-2011	SULFIDE	VA
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	VA
SM 5310 B-2011	TOTAL ORGANIC CARBON (TOC)	VA

**SOLID AND CHEMICAL MATERIALS**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 A	FLASHPOINT	VA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	VA
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	VA
EPA 6010 D	ANTIMONY	VA
EPA 6010 D	BARIUM	VA
EPA 6010 D	BORON	VA
EPA 6010 D	CALCIUM	VA
EPA 6010 D	COBALT	VA
EPA 6010 D	IRON	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	VA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA
EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ARSENIC	VA
EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	CADMIUM	VA
EPA 6010 D	CHROMIUM	VA
EPA 6010 D	COPPER	VA
EPA 6010 D	LEAD	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 10807

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: June 15, 2020  
 Expiration Date: June 14, 2021

**SOLID AND CHEMICAL MATERIALS**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SILVER	VA
EPA 6010 D	STRONTIUM	VA
EPA 6010 D	TITANIUM	VA
EPA 6010 D	ZINC	VA
EPA 7471 B	MERCURY	VA
EPA 9060	TOTAL ORGANIC CARBON (TOC)	VA
EPA 9065	TOTAL PHENOLICS	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	MANGANESE	VA
EPA 6010 D	NICKEL	VA
EPA 6010 D	SELENIUM	VA
EPA 6010 D	SODIUM	VA
EPA 6010 D	THALLIUM	VA
EPA 6010 D	VANADIUM	VA
EPA 6010 D - EXTENDED	SILICON	VA
EPA 9045 D	PH	VA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	VA
EPA 9095 B	FREE LIQUID	VA



State of Florida  
Department of Health, Bureau of Public Health Laboratories  
This is to certify that



E87315

PACE ANALYTICAL SERVICES, LLC- ATLANTA GA  
110 TECHNOLOGY PARKWAY  
PEACHTREE CORNERS, GA 30092

has complied with Florida Administrative Code 64E-1,  
for the examination of environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - MICROBIOLOGY

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: October 06, 2020      Expiration Date: June 30, 2021



A handwritten signature in blue ink, appearing to read "P. Lewandowski".

Patty A. Lewandowski, MBA, MT(ASCP)  
Chief Bureau of Public Health Laboratories  
DH Form 1697, 7/04

NON-TRANSFERABLE E87315-49-10/06/2020  
Supersedes all previously issued certificates



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Drinking Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Color	SM 2120 B	Secondary Inorganic Contaminants	NELAP	4/10/2002
Escherichia coli	SM 9223 B	Microbiology	NELAP	4/10/2002
Escherichia coli	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Nitrate	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	Primary Inorganic Contaminants	NELAP	4/10/2002
pH	SM 4500-H+-B	Primary Inorganic Contaminants, Secondary Inorganic Contaminants	NELAP	4/10/2002
Residual free chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Total coliforms	SM 9223 B	Microbiology	NELAP	4/10/2002
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total nitrate-nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Total residual chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Turbidity	EPA 180.1	Secondary Inorganic Contaminants	NELAP	4/10/2002



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 200.7	Metals	NELAP	4/10/2002
Aluminum	EPA 200.8	Metals	NELAP	8/30/2004
Aluminum	EPA 6010	Metals	NELAP	7/1/2003
Aluminum	EPA 6020	Metals	NELAP	8/30/2004
Amenable cyanide	EPA 9010/9014	General Chemistry	NELAP	7/1/2003
Amenable cyanide	SM 4500-CN- G	General Chemistry	NELAP	10/15/2007
Antimony	EPA 200.7	Metals	NELAP	4/10/2002
Antimony	EPA 200.8	Metals	NELAP	8/30/2004
Antimony	EPA 6010	Metals	NELAP	7/1/2003
Antimony	EPA 6020	Metals	NELAP	8/30/2004
Arsenic	EPA 200.7	Metals	NELAP	4/10/2002
Arsenic	EPA 200.8	Metals	NELAP	8/30/2004
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6020	Metals	NELAP	8/30/2004
Barium	EPA 200.7	Metals	NELAP	4/10/2002
Barium	EPA 200.8	Metals	NELAP	8/30/2004
Barium	EPA 6010	Metals	NELAP	7/1/2003
Barium	EPA 6020	Metals	NELAP	8/30/2004
Beryllium	EPA 200.7	Metals	NELAP	4/10/2002
Beryllium	EPA 200.8	Metals	NELAP	8/30/2004
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	8/30/2004
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	4/10/2002
Boron	EPA 200.7	Metals	NELAP	4/10/2002
Boron	EPA 200.8	Metals	NELAP	11/6/2014
Boron	EPA 6010	Metals	NELAP	7/1/2003
Boron	EPA 6020	Metals	NELAP	8/30/2004
Cadmium	EPA 200.7	Metals	NELAP	4/10/2002
Cadmium	EPA 200.8	Metals	NELAP	8/30/2004
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6020	Metals	NELAP	8/30/2004
Calcium	EPA 200.7	Metals	NELAP	4/10/2002
Calcium	EPA 200.8	Metals	NELAP	11/6/2014
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Calcium	EPA 6020	Metals	NELAP	8/30/2004
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	4/10/2002

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 10/6/2020**

**Expiration Date: 6/30/2021**



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chromium	EPA 200.7	Metals	NELAP	4/10/2002
Chromium	EPA 200.8	Metals	NELAP	8/30/2004
Chromium	EPA 6010	Metals	NELAP	7/1/2003
Chromium	EPA 6020	Metals	NELAP	8/30/2004
Chromium VI	SM 3500-Cr B (20th/21st/22nd Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Cobalt	EPA 200.7	Metals	NELAP	4/10/2002
Cobalt	EPA 200.8	Metals	NELAP	8/30/2004
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	8/30/2004
Color	SM 2120 B	General Chemistry	NELAP	4/10/2002
Copper	EPA 200.7	Metals	NELAP	4/10/2002
Copper	EPA 200.8	Metals	NELAP	8/30/2004
Copper	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6020	Metals	NELAP	8/30/2004
Corrosivity (pH)	EPA 9040	General Chemistry	NELAP	7/1/2003
Cyanide	SM 4500-CN E	General Chemistry	NELAP	10/15/2007
Escherichia coli	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Fecal coliforms	COLILERT®-18 (Fecal Coliforms)	Microbiology	NELAP	11/6/2014
Fecal coliforms	SM 9222 D	Microbiology	NELAP	2/21/2002
Hardness	SM 2340 B	General Chemistry	NELAP	7/28/2009
Hardness (calc.)	EPA 200.7	Metals	NELAP	6/6/2002
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Iron	EPA 200.7	Metals	NELAP	4/10/2002
Iron	EPA 200.8	Metals	NELAP	11/6/2014
Iron	EPA 6010	Metals	NELAP	7/1/2003
Iron	EPA 6020	Metals	NELAP	8/30/2004
Iron	SM 3500-Fe D (18th/19th Ed.)/UV-VIS	General Chemistry	NELAP	2/5/2002
Iron-(II) (Ferrous Iron)	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Lead	EPA 200.7	Metals	NELAP	4/10/2002
Lead	EPA 200.8	Metals	NELAP	8/30/2004
Lead	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6020	Metals	NELAP	8/30/2004
Lithium	EPA 200.8	Metals	NELAP	10/6/2016

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 10/6/2020**

**Expiration Date: 6/30/2021**



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Lithium	EPA 6020	Metals	NELAP	10/6/2016
Magnesium	EPA 200.7	Metals	NELAP	4/10/2002
Magnesium	EPA 200.8	Metals	NELAP	11/6/2014
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Magnesium	EPA 6020	Metals	NELAP	8/30/2004
Manganese	EPA 200.7	Metals	NELAP	4/10/2002
Manganese	EPA 200.8	Metals	NELAP	8/30/2004
Manganese	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 6020	Metals	NELAP	8/30/2004
Mercury	EPA 245.1	Metals	NELAP	4/10/2002
Mercury	EPA 7470	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.7	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.8	Metals	NELAP	8/30/2004
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Molybdenum	EPA 6020	Metals	NELAP	8/30/2004
Nickel	EPA 200.7	Metals	NELAP	4/10/2002
Nickel	EPA 200.8	Metals	NELAP	8/30/2004
Nickel	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6020	Metals	NELAP	8/30/2004
Nitrate as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrite as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	General Chemistry	NELAP	4/10/2002
Oxygen, dissolved	ASTM D888-09C	General Chemistry	NELAP	11/6/2014
Oxygen, dissolved	SM 4500-O G	General Chemistry	NELAP	4/10/2002
pH	EPA 9040	General Chemistry	NELAP	7/1/2003
pH	SM 4500-H+-B	General Chemistry	NELAP	10/15/2007
Phosphorus, total	EPA 200.7	Metals	NELAP	9/27/2002
Phosphorus, total	EPA 6010	Metals	NELAP	7/1/2003
Potassium	EPA 200.7	Metals	NELAP	4/10/2002
Potassium	EPA 200.8	Metals	NELAP	11/6/2014
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6020	Metals	NELAP	8/30/2004
Residual free chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	10/15/2007
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	10/15/2007

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 10/6/2020**

**Expiration Date: 6/30/2021**





**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Residue-settleable	SM 2540 F	General Chemistry	NELAP	10/15/2007
Residue-total	SM 2540 B	General Chemistry	NELAP	10/15/2007
Residue-volatile	SM 2540 E	General Chemistry	NELAP	10/6/2016
Selenium	EPA 200.7	Metals	NELAP	4/10/2002
Selenium	EPA 200.8	Metals	NELAP	8/30/2004
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Selenium	EPA 6020	Metals	NELAP	8/30/2004
Silicon	EPA 200.7	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 200.7	Metals	NELAP	4/10/2002
Silver	EPA 200.8	Metals	NELAP	8/30/2004
Silver	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 6020	Metals	NELAP	8/30/2004
Sodium	EPA 200.7	Metals	NELAP	4/10/2002
Sodium	EPA 200.8	Metals	NELAP	11/6/2014
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Sodium	EPA 6020	Metals	NELAP	8/30/2004
Strontium	EPA 200.7	Metals	NELAP	9/27/2002
Strontium	EPA 6010	Metals	NELAP	7/1/2003
Strontium	EPA 6020	Metals	NELAP	8/30/2004
Thallium	EPA 200.7	Metals	NELAP	4/10/2002
Thallium	EPA 200.8	Metals	NELAP	8/30/2004
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	8/30/2004
Tin	EPA 200.7	Metals	NELAP	4/10/2002
Tin	EPA 200.8	Metals	NELAP	11/6/2014
Tin	EPA 6010	Metals	NELAP	7/1/2003
Tin	EPA 6020	Metals	NELAP	8/30/2004
Titanium	EPA 200.7	Metals	NELAP	4/10/2002
Titanium	EPA 200.8	Metals	NELAP	11/6/2014
Titanium	EPA 6010	Metals	NELAP	7/1/2003
Titanium	EPA 6020	Metals	NELAP	8/30/2004
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total cyanide	EPA 9010/9014	General Chemistry	NELAP	7/1/2003
Total residual chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Total, fixed, and volatile residue	SM 2540 G	General Chemistry	NELAP	9/27/2002

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 10/6/2020**

**Expiration Date: 6/30/2021**



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092**

Matrix: **Non-Potable Water**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Turbidity	EPA 180.1	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 200.7	Metals	NELAP	4/10/2002
Vanadium	EPA 200.8	Metals	NELAP	8/30/2004
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	8/30/2004
Zinc	EPA 200.7	Metals	NELAP	4/10/2002
Zinc	EPA 200.8	Metals	NELAP	8/30/2004
Zinc	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6020	Metals	NELAP	8/30/2004



**Laboratory Scope of Accreditation**

**Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.**

State Laboratory ID: **E87315**

EPA Lab Code: **GA00051**

**(770) 734-4200**

**E87315**

**Pace Analytical Services, LLC- Atlanta GA**

**110 Technology Parkway**

**Peachtree Corners, GA 30092**

Matrix: **Solid and Chemical Materials**

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 6010	Metals	NELAP	4/10/2002
Antimony	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Barium	EPA 6010	Metals	NELAP	4/10/2002
Beryllium	EPA 6010	Metals	NELAP	4/10/2002
Boron	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Calcium	EPA 6010	Metals	NELAP	4/10/2002
Chromium	EPA 6010	Metals	NELAP	4/10/2002
Cobalt	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6010	Metals	NELAP	4/10/2002
Fecal coliforms	SM 9222 D	Microbiology	NELAP	7/28/2009
Fixed Residue	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Iron	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6010	Metals	NELAP	4/10/2002
Magnesium	EPA 6010	Metals	NELAP	4/10/2002
Manganese	EPA 6010	Metals	NELAP	4/10/2002
Mercury	EPA 7471	Metals	NELAP	4/10/2002
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6010	Metals	NELAP	4/10/2002
pH	EPA 9045	General Chemistry	NELAP	4/10/2002
Phosphorus, total	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Residue-total	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Residue-volatile	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	4/10/2002
Silver	EPA 6010	Metals	NELAP	4/10/2002
Sodium	EPA 6010	Metals	NELAP	7/9/2002
Strontium	EPA 6010	Metals	NELAP	4/10/2002
Thallium	EPA 6010	Metals	NELAP	4/10/2002
Tin	EPA 6010	Metals	NELAP	4/10/2002
Titanium	EPA 6010	Metals	NELAP	9/27/2002
Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6010	Metals	NELAP	4/10/2002

**Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.**

**Issue Date: 10/6/2020**

**Expiration Date: 6/30/2021**



---

*Laboratory Scope of Accreditation*



**COMMONWEALTH of VIRGINIA**  
*Department of General Services*

*Division of Consolidated Laboratory Services*

*600 North 5th Street  
Richmond, Virginia 23219-3691  
(804) 648-4480  
FAX (804) 692-0416*

04/14/2021

Craig Tronzo  
Pace Analytical Services, LLC - Asheville NC  
2225 Riverside Drive  
Asheville NC 28804

VELAP ID: 460222

Dear Craig Tronzo:

The Virginia Environmental Laboratory Accreditation Program has completed processing the requested revision to your certificate. Enclosed with this letter is certificate # 11256. Certificate # 11256 and the associated Scope of Accreditation must be posted in a prominent place at the laboratory.

Please contact your lead assessor, Ila Meyer-Fritzsche, at [ila.meyer-fritzsche@dgs.virginia.gov](mailto:ila.meyer-fritzsche@dgs.virginia.gov) or (804) 648-4480 x306 if you have any questions.

Sincerely yours,

Cathy Westerman  
Manager, Laboratory Certification Program

Enclosures  
cc: Felicia Grogan



**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF GENERAL SERVICES  
DIVISION OF CONSOLIDATED LABORATORY SERVICES**



**Certifies that**

**VA Laboratory ID#: 460222  
Pace Analytical Services, LLC - Asheville NC  
2225 Riverside Drive  
Asheville, NC 28804**

**Owner: PAS PARENT, LLC  
Operator: PACE ANALYTICAL SERVICES, LLC  
Responsible Official: FELICIA GROGAN**

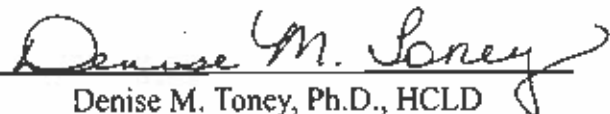
Having met the requirements of 1 VAC 30-46 and  
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute  
is hereby approved as an  
**Accredited Environmental Laboratory**

As more fully described in the attached Scope of Accreditation

**Effective Date: April 14, 2021**

**Expiration Date: June 14, 2021**

**Certificate # 11256**

  
Denise M. Toney, Ph.D., HCLD

DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.  
Certificate to be conspicuously displayed at the laboratory.  
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP)  
Scope of Accreditation.  
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 11256

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: April 14, 2021  
 Expiration Date: June 14, 2021

**DRINKING WATER**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4	COPPER	VA	EPA 200.8 REV 5.4	LEAD	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA	EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA
SM 2320 B-2011	ALKALINITY AS CaCO3	VA	SM 9223 COLISURE®	ESCHERICHIA COLI	VA
SM 9223 COLISURE®	TOTAL COLIFORMS	VA			

**NON-POTABLE WATER**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 1010 B	FLASHPOINT	VA	EPA 120.1	CONDUCTIVITY	VA
EPA 160.4	RESIDUE-VOLATILE	VA	EPA 1631 E	MERCURY	VA
EPA 180.1 REV 2	TURBIDITY	VA	EPA 200.7 REV 4.4	ALUMINUM	VA
EPA 200.7 REV 4.4	ANTIMONY	VA	EPA 200.7 REV 4.4	ARSENIC	VA
EPA 200.7 REV 4.4	BARIUM	VA	EPA 200.7 REV 4.4	BERYLLIUM	VA
EPA 200.7 REV 4.4	BORON	VA	EPA 200.7 REV 4.4	CADMIUM	VA
EPA 200.7 REV 4.4	CALCIUM	VA	EPA 200.7 REV 4.4	CHROMIUM	VA
EPA 200.7 REV 4.4	COBALT	VA	EPA 200.7 REV 4.4	COPPER	VA
EPA 200.7 REV 4.4	IRON	VA	EPA 200.7 REV 4.4	LEAD	VA
EPA 200.7 REV 4.4	MAGNESIUM	VA	EPA 200.7 REV 4.4	MANGANESE	VA
EPA 200.7 REV 4.4	MOLYBDENUM	VA	EPA 200.7 REV 4.4	NICKEL	VA
EPA 200.7 REV 4.4	POTASSIUM	VA	EPA 200.7 REV 4.4	SELENIUM	VA
EPA 200.7 REV 4.4	SILICA AS SiO2	VA	EPA 200.7 REV 4.4	SILVER	VA
EPA 200.7 REV 4.4	SODIUM	VA	EPA 200.7 REV 4.4	THALLIUM	VA
EPA 200.7 REV 4.4	TIN	VA	EPA 200.7 REV 4.4	TITANIUM	VA
EPA 200.7 REV 4.4	VANADIUM	VA	EPA 200.7 REV 4.4	ZINC	VA
EPA 200.8 REV 5.4	ALUMINUM	VA	EPA 200.8 REV 5.4	ANTIMONY	VA
EPA 200.8 REV 5.4	ARSENIC	VA	EPA 200.8 REV 5.4	BARIUM	VA
EPA 200.8 REV 5.4	BERYLLIUM	VA	EPA 200.8 REV 5.4	CADMIUM	VA
EPA 200.8 REV 5.4	CHROMIUM	VA	EPA 200.8 REV 5.4	COBALT	VA
EPA 200.8 REV 5.4	COPPER	VA	EPA 200.8 REV 5.4	LEAD	VA
EPA 200.8 REV 5.4	MANGANESE	VA	EPA 200.8 REV 5.4	MOLYBDENUM	VA
EPA 200.8 REV 5.4	NICKEL	VA	EPA 200.8 REV 5.4	SELENIUM	VA
EPA 200.8 REV 5.4	SILVER	VA	EPA 200.8 REV 5.4	THALLIUM	VA
EPA 200.8 REV 5.4	VANADIUM	VA	EPA 200.8 REV 5.4	ZINC	VA
EPA 200.8 REV 5.4 - EXTENDED	BORON	VA	EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	IRON	VA	EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	VA
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	VA	EPA 200.8 REV 5.4 - EXTENDED	SODIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 11256

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: April 14, 2021  
 Expiration Date: June 14, 2021

**NON-POTABLE WATER**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>	<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 200.8 REV 5.4 - EXTENDED	TIN	VA	EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	VA
EPA 218.6 REV 3.3	CHROMIUM VI	VA	EPA 245.1 REV 3	MERCURY	VA
EPA 300.0 REV 2.1	BROMIDE	VA	EPA 300.0 REV 2.1	CHLORIDE	VA
EPA 300.0 REV 2.1	FLUORIDE	VA	EPA 300.0 REV 2.1	NITRATE AS N	VA
EPA 300.0 REV 2.1	NITRATE/NITRITE	VA	EPA 300.0 REV 2.1	NITRITE AS N	VA
EPA 300.0 REV 2.1	SULFATE	VA	EPA 3005 A	PREP. ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	VA
EPA 3010 A	PREP. ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA	EPA 350.1 REV 2	AMMONIA AS N	VA
EPA 351.2 MINUS EPA 350.1	ORGANIC NITROGEN	VA	EPA 351.2 REV 2 (AS LACHAT 10-107-06-2-D)	KJELDAHL NITROGEN - TOTAL (TKN)	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1 A + C)	NITRATE AS N	VA	EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRATE/NITRITE	VA
EPA 353.2 REV 2 (AS LACHAT 10-107-04-1-A)	NITRITE AS N	VA	EPA 365.1 REV 2 (AS LACHAT 10-115-01-1-E)	PHOSPHORUS, TOTAL	VA
EPA 420.4 REV 1 (AS LACHAT 10-210-00-1-X)	TOTAL PHENOLICS	VA	EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ANTIMONY	VA	EPA 6010 D	ARSENIC	VA
EPA 6010 D	BARIUM	VA	EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	BORON	VA	EPA 6010 D	CADMIUM	VA
EPA 6010 D	CALCIUM	VA	EPA 6010 D	CHROMIUM	VA
EPA 6010 D	COBALT	VA	EPA 6010 D	COPPER	VA
EPA 6010 D	IRON	VA	EPA 6010 D	LEAD	VA
EPA 6010 D	LITHIUM	VA	EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MANGANESE	VA	EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	NICKEL	VA	EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SELENIUM	VA	EPA 6010 D	SILICA AS SiO2	VA
EPA 6010 D	SILVER	VA	EPA 6010 D	SODIUM	VA
EPA 6010 D	STRONTIUM	VA	EPA 6010 D	THALLIUM	VA
EPA 6010 D	TIN	VA	EPA 6010 D	TITANIUM	VA
EPA 6010 D	VANADIUM	VA	EPA 6010 D	ZINC	VA
EPA 6010 D - EXTENDED	SILICON	VA	EPA 6020 B	ALUMINUM	VA
EPA 6020 B	ANTIMONY	VA	EPA 6020 B	ARSENIC	VA
EPA 6020 B	BARIUM	VA	EPA 6020 B	BERYLLIUM	VA
EPA 6020 B	CADMIUM	VA	EPA 6020 B	CALCIUM	VA
EPA 6020 B	CHROMIUM	VA	EPA 6020 B	COBALT	VA
EPA 6020 B	COPPER	VA	EPA 6020 B	IRON	VA
EPA 6020 B	LEAD	VA	EPA 6020 B	MAGNESIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.





**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 11256

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: April 14, 2021  
 Expiration Date: June 14, 2021

**NON-POTABLE WATER**

METHOD	ANALYTE	PRIMARY
EPA 6020 B	MANGANESE	VA
EPA 6020 B	NICKEL	VA
EPA 6020 B	SELENIUM	VA
EPA 6020 B	SODIUM	VA
EPA 6020 B	TIN	VA
EPA 6020 B	ZINC	VA
EPA 6020 B - EXTENDED	BORON	VA
EPA 6020 B - EXTENDED	STRONTIUM	VA
EPA 6020 B - EXTENDED	URANIUM	VA
EPA 7470 A	MERCURY	VA
EPA 9012 B	AMENABLE CYANIDE	VA
EPA 9040 C	PH	VA
EPA 9056 A	CHLORIDE	VA
EPA 9056 A	NITRATE AS N	VA
EPA 9056 A	SULFATE	VA
EPA 9080 A	TOTAL ORGANIC CARBON (TOC)	VA
LACHAT QUIKCHEM 10-204-00-1-X	CYANIDE	VA
SM 2320 B-2011	ALKALINITY AS CaCO3	VA
SM 2540 B-2011	RESIDUE-TOTAL (TS)	VA
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	VA
SM 3500-CR B-2011	CHROMIUM VI	VA
SM 4500-CN <sup>-</sup> E-2011	CYANIDE	VA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	VA
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	VA
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	VA

METHOD	ANALYTE	PRIMARY
EPA 6020 B	MOLYBDENUM	VA
EPA 6020 B	POTASSIUM	VA
EPA 6020 B	SILVER	VA
EPA 6020 B	THALLIUM	VA
EPA 6020 B	VANADIUM	VA
EPA 6020 B - EXTENDED	BISMUTH	VA
EPA 6020 B - EXTENDED	LITHIUM	VA
EPA 6020 B - EXTENDED	TITANIUM	VA
EPA 7196 A	CHROMIUM VI	VA
EPA 9010 C	PREP: CYANIDE DISTILLATION	VA
EPA 9012 B	TOTAL CYANIDE	VA
EPA 9056 A	BROMIDE	VA
EPA 9056 A	FLUORIDE	VA
EPA 9056 A	NITRITE AS N	VA
EPA 9056 A - EXTENDED	NITRATE/NITRITE	VA
EPA 9095 B	FREE LIQUID	VA
SM 2130 B-2011	TURBIDITY	VA
SM 2340 B-2011	TOTAL HARDNESS AS CaCO3	VA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	VA
SM 2540 F-2011	RESIDUE-SETTLABLE	VA
SM 4500-CL <sup>-</sup> E-2011	CHLORIDE	VA
SM 4500-CN <sup>-</sup> G-2011	AMENABLE CYANIDE	VA
SM 4500-S2 <sup>-</sup> D-2011	SULFIDE	VA
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	VA
SM 5310 B-2011	TOTAL ORGANIC CARBON (TOC)	VA

**SOLID AND CHEMICAL MATERIALS**

METHOD	ANALYTE	PRIMARY
EPA 1010 B	FLASHPOINT	VA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	VA
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	VA
EPA 6010 D	ANTIMONY	VA
EPA 6010 D	BARIUM	VA
EPA 6010 D	BORON	VA
EPA 6010 D	CALCIUM	VA

METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	VA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	VA
EPA 6010 D	ALUMINUM	VA
EPA 6010 D	ARSENIC	VA
EPA 6010 D	BERYLLIUM	VA
EPA 6010 D	CADMIUM	VA
EPA 6010 D	CHROMIUM	VA

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



**Commonwealth of Virginia**  
 Department of General Services  
 Division of Consolidated Laboratory Services



**Scope of Accreditation**

VELAP Certificate No.: 11256

**Pace Analytical Services, LLC - Asheville NC**  
 2225 Riverside Drive  
 Asheville, NC 28804

**Virginia Laboratory ID: 460222**  
 Effective Date: April 14, 2021  
 Expiration Date: June 14, 2021

**SOLID AND CHEMICAL MATERIALS**

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	COBALT	VA
EPA 6010 D	IRON	VA
EPA 6010 D	MAGNESIUM	VA
EPA 6010 D	MOLYBDENUM	VA
EPA 6010 D	POTASSIUM	VA
EPA 6010 D	SILVER	VA
EPA 6010 D	STRONTIUM	VA
EPA 6010 D	TITANIUM	VA
EPA 6010 D	ZINC	VA
EPA 7471 B	MERCURY	VA
EPA 9060	TOTAL ORGANIC CARBON (TOC)	VA
EPA 9095 B	FREE LIQUID	VA

<u>METHOD</u>	<u>ANALYTE</u>	<u>PRIMARY</u>
EPA 6010 D	COPPER	VA
EPA 6010 D	LEAD	VA
EPA 6010 D	MANGANESE	VA
EPA 6010 D	NICKEL	VA
EPA 6010 D	SELENIUM	VA
EPA 6010 D	SODIUM	VA
EPA 6010 D	THALLIUM	VA
EPA 6010 D	VANADIUM	VA
EPA 6010 D - EXTENDED	SILICON	VA
EPA 9045 D	PH	VA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	VA



State of Florida  
Department of Health, Bureau of Public Health Laboratories  
This is to certify that



E87315

PACE ANALYTICAL SERVICES, LLC- ATLANTA GA  
110 TECHNOLOGY PARKWAY  
PEACHTREE CORNERS, GA 30092

has complied with Florida Administrative Code 64E-1,  
for the examination of environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, DRINKING WATER - PRIMARY INORGANIC CONTAMINANTS, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER - MICROBIOLOGY, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND CHEMICAL MATERIALS - MICROBIOLOGY

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1 regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and are on file at the Bureau of Public Health Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify with this agency the laboratory's certification status in Florida for particular methods and analytes.

Date Issued: October 06, 2020      Expiration Date: June 30, 2021



A handwritten signature in blue ink, appearing to read "P. Lewandowski".

Patty A. Lewandowski, MBA, MT(ASCP)  
Chief Bureau of Public Health Laboratories  
DH Form 1697, 7/04

NON-TRANSFERABLE E87315-49-10/06/2020  
Supersedes all previously issued certificates



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315      EPA Lab Code: GA00051      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Color	SM 2120 B	Secondary Inorganic Contaminants	NELAP	4/10/2002
Escherichia coli	SM 9223 B	Microbiology	NELAP	4/10/2002
Escherichia coli	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Nitrate	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	Primary Inorganic Contaminants	NELAP	4/10/2002
pH	SM 4500-H+-B	Primary Inorganic Contaminants,Secondary Inorganic Contaminants	NELAP	4/10/2002
Residual free chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Total coliforms	SM 9223 B	Microbiology	NELAP	4/10/2002
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total nitrate-nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Total residual chlorine	SM 4500-Cl G	Primary Inorganic Contaminants	NELAP	11/4/2010
Turbidity	EPA 180.1	Secondary Inorganic Contaminants	NELAP	4/10/2002



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315                      EPA Lab Code: GA00051                      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 200.7	Metals	NELAP	4/10/2002
Aluminum	EPA 200.8	Metals	NELAP	8/30/2004
Aluminum	EPA 6010	Metals	NELAP	7/1/2003
Aluminum	EPA 6020	Metals	NELAP	8/30/2004
Amenable cyanide	EPA 9010/9014	General Chemistry	NELAP	7/1/2003
Amenable cyanide	SM 4500-CN- G	General Chemistry	NELAP	10/15/2007
Antimony	EPA 200.7	Metals	NELAP	4/10/2002
Antimony	EPA 200.8	Metals	NELAP	8/30/2004
Antimony	EPA 6010	Metals	NELAP	7/1/2003
Antimony	EPA 6020	Metals	NELAP	8/30/2004
Arsenic	EPA 200.7	Metals	NELAP	4/10/2002
Arsenic	EPA 200.8	Metals	NELAP	8/30/2004
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6020	Metals	NELAP	8/30/2004
Barium	EPA 200.7	Metals	NELAP	4/10/2002
Barium	EPA 200.8	Metals	NELAP	8/30/2004
Barium	EPA 6010	Metals	NELAP	7/1/2003
Barium	EPA 6020	Metals	NELAP	8/30/2004
Beryllium	EPA 200.7	Metals	NELAP	4/10/2002
Beryllium	EPA 200.8	Metals	NELAP	8/30/2004
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	8/30/2004
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	4/10/2002
Boron	EPA 200.7	Metals	NELAP	4/10/2002
Boron	EPA 200.8	Metals	NELAP	11/6/2014
Boron	EPA 6010	Metals	NELAP	7/1/2003
Boron	EPA 6020	Metals	NELAP	8/30/2004
Cadmium	EPA 200.7	Metals	NELAP	4/10/2002
Cadmium	EPA 200.8	Metals	NELAP	8/30/2004
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6020	Metals	NELAP	8/30/2004
Calcium	EPA 200.7	Metals	NELAP	4/10/2002
Calcium	EPA 200.8	Metals	NELAP	11/6/2014
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Calcium	EPA 6020	Metals	NELAP	8/30/2004
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	4/10/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/6/2020

Expiration Date: 6/30/2021



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315      EPA Lab Code: GA00051      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chromium	EPA 200.7	Metals	NELAP	4/10/2002
Chromium	EPA 200.8	Metals	NELAP	8/30/2004
Chromium	EPA 6010	Metals	NELAP	7/1/2003
Chromium	EPA 6020	Metals	NELAP	8/30/2004
Chromium VI	SM 3500-Cr B (20th/21st/22nd Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Cobalt	EPA 200.7	Metals	NELAP	4/10/2002
Cobalt	EPA 200.8	Metals	NELAP	8/30/2004
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	8/30/2004
Color	SM 2120 B	General Chemistry	NELAP	4/10/2002
Copper	EPA 200.7	Metals	NELAP	4/10/2002
Copper	EPA 200.8	Metals	NELAP	8/30/2004
Copper	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6020	Metals	NELAP	8/30/2004
Corrosivity (pH)	EPA 9040	General Chemistry	NELAP	7/1/2003
Cyanide	SM 4500-CN E	General Chemistry	NELAP	10/15/2007
Escherichia coli	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Fecal coliforms	COLILERT®-18 (Fecal Coliforms)	Microbiology	NELAP	11/6/2014
Fecal coliforms	SM 9222 D	Microbiology	NELAP	2/21/2002
Hardness	SM 2340 B	General Chemistry	NELAP	7/28/2009
Hardness (calc.)	EPA 200.7	Metals	NELAP	6/6/2002
Heterotrophic plate count	SIMPLATE	Microbiology	NELAP	5/29/2012
Iron	EPA 200.7	Metals	NELAP	4/10/2002
Iron	EPA 200.8	Metals	NELAP	11/6/2014
Iron	EPA 6010	Metals	NELAP	7/1/2003
Iron	EPA 6020	Metals	NELAP	8/30/2004
Iron	SM 3500-Fe D (18th/19th Ed.)/UV-VIS	General Chemistry	NELAP	2/5/2002
Iron-(II) (Ferrous Iron)	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
Lead	EPA 200.7	Metals	NELAP	4/10/2002
Lead	EPA 200.8	Metals	NELAP	8/30/2004
Lead	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6020	Metals	NELAP	8/30/2004
Lithium	EPA 200.8	Metals	NELAP	10/6/2016

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/6/2020

Expiration Date: 6/30/2021



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315                      EPA Lab Code:              GA00051                      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Lithium	EPA 6020	Metals	NELAP	10/6/2016
Magnesium	EPA 200.7	Metals	NELAP	4/10/2002
Magnesium	EPA 200.8	Metals	NELAP	11/6/2014
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Magnesium	EPA 6020	Metals	NELAP	8/30/2004
Manganese	EPA 200.7	Metals	NELAP	4/10/2002
Manganese	EPA 200.8	Metals	NELAP	8/30/2004
Manganese	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 6020	Metals	NELAP	8/30/2004
Mercury	EPA 245.1	Metals	NELAP	4/10/2002
Mercury	EPA 7470	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.7	Metals	NELAP	4/10/2002
Molybdenum	EPA 200.8	Metals	NELAP	8/30/2004
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Molybdenum	EPA 6020	Metals	NELAP	8/30/2004
Nickel	EPA 200.7	Metals	NELAP	4/10/2002
Nickel	EPA 200.8	Metals	NELAP	8/30/2004
Nickel	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6020	Metals	NELAP	8/30/2004
Nitrate as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrite as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Orthophosphate as P	SM 4500-P E	General Chemistry	NELAP	4/10/2002
Oxygen, dissolved	ASTM D888-09C	General Chemistry	NELAP	11/6/2014
Oxygen, dissolved	SM 4500-O G	General Chemistry	NELAP	4/10/2002
pH	EPA 9040	General Chemistry	NELAP	7/1/2003
pH	SM 4500-H+-B	General Chemistry	NELAP	10/15/2007
Phosphorus, total	EPA 200.7	Metals	NELAP	9/27/2002
Phosphorus, total	EPA 6010	Metals	NELAP	7/1/2003
Potassium	EPA 200.7	Metals	NELAP	4/10/2002
Potassium	EPA 200.8	Metals	NELAP	11/6/2014
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6020	Metals	NELAP	8/30/2004
Residual free chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	10/15/2007
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	10/15/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/6/2020

Expiration Date: 6/30/2021



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315                      EPA Lab Code: GA00051                      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Residue-settleable	SM 2540 F	General Chemistry	NELAP	10/15/2007
Residue-total	SM 2540 B	General Chemistry	NELAP	10/15/2007
Residue-volatile	SM 2540 E	General Chemistry	NELAP	10/6/2016
Selenium	EPA 200.7	Metals	NELAP	4/10/2002
Selenium	EPA 200.8	Metals	NELAP	8/30/2004
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Selenium	EPA 6020	Metals	NELAP	8/30/2004
Silicon	EPA 200.7	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 200.7	Metals	NELAP	4/10/2002
Silver	EPA 200.8	Metals	NELAP	8/30/2004
Silver	EPA 6010	Metals	NELAP	7/1/2003
Silver	EPA 6020	Metals	NELAP	8/30/2004
Sodium	EPA 200.7	Metals	NELAP	4/10/2002
Sodium	EPA 200.8	Metals	NELAP	11/6/2014
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Sodium	EPA 6020	Metals	NELAP	8/30/2004
Strontium	EPA 200.7	Metals	NELAP	9/27/2002
Strontium	EPA 6010	Metals	NELAP	7/1/2003
Strontium	EPA 6020	Metals	NELAP	8/30/2004
Thallium	EPA 200.7	Metals	NELAP	4/10/2002
Thallium	EPA 200.8	Metals	NELAP	8/30/2004
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	8/30/2004
Tin	EPA 200.7	Metals	NELAP	4/10/2002
Tin	EPA 200.8	Metals	NELAP	11/6/2014
Tin	EPA 6010	Metals	NELAP	7/1/2003
Tin	EPA 6020	Metals	NELAP	8/30/2004
Titanium	EPA 200.7	Metals	NELAP	4/10/2002
Titanium	EPA 200.8	Metals	NELAP	11/6/2014
Titanium	EPA 6010	Metals	NELAP	7/1/2003
Titanium	EPA 6020	Metals	NELAP	8/30/2004
Total coliforms	SM 9223 B /QUANTI-TRAY	Microbiology	NELAP	11/4/2010
Total cyanide	EPA 9010/9014	General Chemistry	NELAP	7/1/2003
Total residual chlorine	SM 4500-Cl G	General Chemistry	NELAP	11/4/2010
Total, fixed, and volatile residue	SM 2540 G	General Chemistry	NELAP	9/27/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/6/2020

Expiration Date: 6/30/2021





Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315                      EPA Lab Code: GA00051                      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Turbidity	EPA 180.1	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 200.7	Metals	NELAP	4/10/2002
Vanadium	EPA 200.8	Metals	NELAP	8/30/2004
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	8/30/2004
Zinc	EPA 200.7	Metals	NELAP	4/10/2002
Zinc	EPA 200.8	Metals	NELAP	8/30/2004
Zinc	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6020	Metals	NELAP	8/30/2004



Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-49, expiration date June 30, 2021. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87315                      EPA Lab Code:            GA00051                      (770) 734-4200

E87315  
Pace Analytical Services, LLC- Atlanta GA  
110 Technology Parkway  
Peachtree Corners, GA 30092

Matrix:    Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 6010	Metals	NELAP	4/10/2002
Antimony	EPA 6010	Metals	NELAP	4/10/2002
Arsenic	EPA 6010	Metals	NELAP	4/10/2002
Barium	EPA 6010	Metals	NELAP	4/10/2002
Beryllium	EPA 6010	Metals	NELAP	4/10/2002
Boron	EPA 6010	Metals	NELAP	4/10/2002
Cadmium	EPA 6010	Metals	NELAP	4/10/2002
Calcium	EPA 6010	Metals	NELAP	4/10/2002
Chromium	EPA 6010	Metals	NELAP	4/10/2002
Cobalt	EPA 6010	Metals	NELAP	4/10/2002
Copper	EPA 6010	Metals	NELAP	4/10/2002
Fecal coliforms	SM 9222 D	Microbiology	NELAP	7/28/2009
Fixed Residue	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Iron	EPA 6010	Metals	NELAP	4/10/2002
Lead	EPA 6010	Metals	NELAP	4/10/2002
Magnesium	EPA 6010	Metals	NELAP	4/10/2002
Manganese	EPA 6010	Metals	NELAP	4/10/2002
Mercury	EPA 7471	Metals	NELAP	4/10/2002
Molybdenum	EPA 6010	Metals	NELAP	4/10/2002
Nickel	EPA 6010	Metals	NELAP	4/10/2002
pH	EPA 9045	General Chemistry	NELAP	4/10/2002
Phosphorus, total	EPA 6010	Metals	NELAP	4/10/2002
Potassium	EPA 6010	Metals	NELAP	4/10/2002
Residue-total	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Residue-volatile	SM 2540 G-2011	General Chemistry	NELAP	10/1/2020
Selenium	EPA 6010	Metals	NELAP	4/10/2002
Silicon	EPA 6010	Metals	NELAP	4/10/2002
Silver	EPA 6010	Metals	NELAP	4/10/2002
Sodium	EPA 6010	Metals	NELAP	7/9/2002
Strontium	EPA 6010	Metals	NELAP	4/10/2002
Thallium	EPA 6010	Metals	NELAP	4/10/2002
Tin	EPA 6010	Metals	NELAP	4/10/2002
Titanium	EPA 6010	Metals	NELAP	9/27/2002
Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6010	Metals	NELAP	4/10/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/6/2020

Expiration Date: 6/30/2021



**APPENDIX A**

# FIELD DATA FORMS

Product Name: Low-Flow System

Date: 2020-08-18 10:48:15

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 61.96 ft

Pump placement from TOC 61.96 ft

Well Information:

Well ID BRGWA-2I  
Well diameter 2 in  
Well Total Depth 66.96 ft  
Screen Length 10 ft  
Depth to Water 14.51 ft

Pumping Information:

Final Pumping Rate 140 mL/min  
Total System Volume 0.5698708 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 12.72 in  
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	10:25:28	300.03	21.69	6.45	177.10	6.49	15.95	0.42	90.36
Last 5	10:30:28	600.02	21.74	6.51	174.19	3.55	16.17	0.21	91.14
Last 5	10:35:28	900.02	21.91	6.59	173.69	2.21	16.18	0.15	87.65
Last 5	10:40:28	1200.03	22.31	6.60	174.62	1.50	16.09	0.12	86.54
Last 5	10:45:31	1503.03	22.54	6.59	174.99	1.68	15.57	0.11	85.00
Variance 0			0.17	0.08	-0.50			-0.06	-3.49
Variance 1			0.40	0.01	0.93			-0.02	-1.11
Variance 2			0.23	-0.01	0.37			-0.01	-1.54

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-18 11:39:38

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 42.39 ft

Pump placement from TOC 42.39 ft

Well Information:

Well ID BRGWA-2S  
Well diameter 2 in  
Well Total Depth 47.39 ft  
Screen Length 10 ft  
Depth to Water 14.67 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.4825216 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.44 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	11:17:52	300.03	23.54	6.19	62.00	3.09	14.73	1.37	44.07
Last 5	11:22:52	600.02	22.46	6.05	62.42	2.25	14.76	0.73	43.15
Last 5	11:27:52	900.03	22.18	6.06	62.43	2.07	14.76	0.39	39.67
Last 5	11:32:52	1200.03	22.00	6.02	62.21	1.26	14.79	0.31	40.09
Last 5	11:37:52	1500.03	21.63	6.06	61.63	0.78	14.79	0.28	39.15
Variance 0			-0.29	0.01	0.01			-0.34	-3.47
Variance 1			-0.18	-0.04	-0.22			-0.09	0.42
Variance 2			-0.36	0.04	-0.58			-0.03	-0.95

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-18 09:43:36

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 58.82 ft

Pump placement from TOC 58.82 ft

Well Information:

Well ID BRGWA-5I  
Well diameter 2 in  
Well Total Depth 63.82 ft  
Screen Length 10 ft  
Depth to Water 11.24 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.5558556 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.92 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	09:20:01	300.06	21.08	6.30	148.13	1.31	11.40	5.14	72.08
Last 5	09:25:01	600.02	21.10	6.24	147.10	1.90	11.40	5.89	68.32
Last 5	09:30:01	900.02	20.75	6.29	146.37	1.40	11.40	5.36	64.03
Last 5	09:35:01	1200.03	21.03	6.29	146.58	0.81	11.40	5.20	63.14
Last 5	09:40:01	1500.03	20.88	6.29	146.46	0.39	11.40	5.14	62.33
Variance 0			-0.35	0.05	-0.73			-0.53	-4.29
Variance 1			0.28	-0.01	0.21			-0.16	-0.90
Variance 2			-0.15	0.01	-0.12			-0.06	-0.81

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-18 10:14:55

Project Information:

Operator Name A. McClure  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter .17 in  
Tubing Length 38 ft

Pump placement from TOC 38 ft

Well Information:

Well ID BRGWA-5S  
Well diameter 2 in  
Well Total Depth 43.01 ft  
Screen Length 10 ft  
Depth to Water 11.31 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.271 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.44 in  
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	09:52:47	1800.02	21.63	6.40	158.28	4.91	11.43	2.38	65.53
Last 5	09:57:47	2100.02	21.99	6.39	133.54	5.37	11.43	2.48	62.66
Last 5	10:02:48	2401.02	22.23	6.38	159.50	5.68	11.43	2.20	61.68
Last 5	10:07:48	2701.02	21.90	6.40	159.53	5.12	11.43	2.29	60.21
Last 5	10:12:48	3001.02	21.89	6.41	159.64	4.36	11.43	2.22	61.14
Variance 0			0.23	-0.01	25.96			-0.28	-0.98
Variance 1			-0.33	0.02	0.03			0.09	-1.47
Variance 2			-0.01	0.00	0.10			-0.07	0.94

Notes

Grab Samples



Product Name: Low-Flow System

Date: 2020-08-18 12:51:27

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 47.90 ft

Pump placement from TOC 47.90 ft

Well Information:

Well ID BRGWA-6S  
Well diameter 2 in  
Well Total Depth 52.90 ft  
Screen Length 10 ft  
Depth to Water 24.67 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.5071151 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 7.2 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	12:28:27	300.06	21.68	6.32	56.31	2.84	25.21	6.95	47.49
Last 5	12:33:27	600.02	21.48	6.33	55.13	1.97	25.30	7.00	48.68
Last 5	12:38:27	900.03	21.66	6.30	55.01	2.68	25.27	6.88	51.37
Last 5	12:43:28	1201.03	21.73	6.35	54.96	2.73	25.28	6.84	51.09
Last 5	12:48:29	1502.03	21.82	6.33	55.30	3.15	25.27	6.75	52.98
Variance 0			0.18	-0.03	-0.12			-0.12	2.69
Variance 1			0.07	0.04	-0.06			-0.05	-0.28
Variance 2			0.09	-0.02	0.34			-0.09	1.89

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 16:28:50

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Alexis  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 7.88 ft

Pump placement from TOC 7.88 ft

Well Information:

Well ID BRGWC-17S  
Well diameter 2 in  
Well Total Depth 9.88 ft  
Screen Length 5 ft  
Depth to Water 6.22 ft

Pumping Information:

Final Pumping Rate 150 mL/min  
Total System Volume 0.1340986 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 9.36 in  
Total Volume Pumped 7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	16:07:13	1800.02	22.94	6.23	485.48	0.09	6.78	1.34	85.17
Last 5	16:12:13	2100.02	22.97	6.23	483.34	0.09	6.82	1.30	84.80
Last 5	16:17:13	2400.02	22.80	6.23	484.53	0.07	6.90	1.48	84.57
Last 5	16:22:13	2700.03	22.89	6.24	483.65	0.22	6.96	1.42	84.05
Last 5	16:27:13	3000.02	22.80	6.24	483.23	0.35	7.00	1.37	83.90
Variance 0			-0.17	-0.00	1.19			0.18	-0.23
Variance 1			0.09	0.01	-0.88			-0.06	-0.51
Variance 2			-0.09	0.00	-0.42			-0.05	-0.15

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 09:48:02

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 26.66 ft

Pump placement from TOC 26.66 ft

Well Information:

Well ID BRGWC-33S  
Well diameter 2 in  
Well Total Depth 31.66 ft  
Screen Length 10 ft  
Depth to Water 8.80 ft

Pumping Information:

Final Pumping Rate 250 mL/min  
Total System Volume 0.4123119 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.6 in  
Total Volume Pumped 6.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	09:26:45	300.07	21.11	5.12	398.27	2.37	8.85	0.13	118.55
Last 5	09:31:45	600.02	20.68	4.88	392.26	1.38	8.85	0.05	114.90
Last 5	09:36:45	900.02	20.61	4.79	392.62	1.78	8.85	0.04	114.65
Last 5	09:41:45	1200.02	20.60	4.80	392.25	0.66	8.85	0.03	113.20
Last 5	09:46:45	1500.02	20.60	4.78	392.38	0.38	8.85	0.03	112.61
Variance 0			-0.07	-0.09	0.35			-0.01	-0.25
Variance 1			-0.01	0.01	-0.37			-0.01	-1.45
Variance 2			-0.00	-0.02	0.13			-0.00	-0.58

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 10:36:00

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 47.64 ft

Pump placement from TOC 47.64 ft

Well Information:

Well ID BRGWC-34S  
Well diameter 2 in  
Well Total Depth 52.64 ft  
Screen Length 10 ft  
Depth to Water 2.74 ft

Pumping Information:

Final Pumping Rate 360 mL/min  
Total System Volume 0.5059546 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.6 in  
Total Volume Pumped 9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	10:14:26	300.03	21.51	5.69	680.28	1.40	2.79	0.18	94.34
Last 5	10:19:26	600.02	21.23	5.75	676.34	0.79	2.79	0.08	94.38
Last 5	10:24:26	900.02	21.11	5.79	676.72	0.27	2.79	0.05	92.82
Last 5	10:29:26	1200.02	21.13	5.79	672.35	0.37	2.79	0.03	93.12
Last 5	10:34:26	1500.01	21.19	5.78	668.59	0.18	2.79	0.02	92.89
Variance 0			-0.13	0.04	0.38			-0.03	-1.56
Variance 1			0.02	-0.00	-4.36			-0.02	0.30
Variance 2			0.07	-0.00	-3.77			-0.01	-0.23

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 11:26:39

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 30.34 ft

Pump placement from TOC 30.34 ft

Well Information:

Well ID BRGWC-35S  
Well diameter 2 in  
Well Total Depth 35.34 ft  
Screen Length 10 ft  
Depth to Water 2.17 ft

Pumping Information:

Final Pumping Rate 325 mL/min  
Total System Volume 0.4287374 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.96 in  
Total Volume Pumped 8.125 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	11:04:40	300.05	20.70	5.94	674.76	4.17	2.21	0.18	87.85
Last 5	11:09:40	600.02	20.57	5.96	675.20	2.85	2.24	0.08	86.87
Last 5	11:14:40	900.02	20.48	5.96	679.73	1.18	2.25	0.05	87.63
Last 5	11:19:40	1200.02	20.35	5.93	684.85	0.22	2.25	0.04	88.87
Last 5	11:24:40	1500.02	20.25	5.97	681.95	0.38	2.25	0.03	87.68
Variance 0			-0.09	-0.00	4.53			-0.03	0.76
Variance 1			-0.13	-0.02	5.12			-0.01	1.23
Variance 2			-0.10	0.03	-2.90			-0.01	-1.18

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 15:00:43

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Alexis  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 29.02 ft

Pump placement from TOC 29.02 ft

Well Information:

Well ID BRGWC-36S  
Well diameter 2 in  
Well Total Depth 34.02 ft  
Screen Length 10 ft  
Depth to Water 2.31 ft

Pumping Information:

Final Pumping Rate 250 mL/min  
Total System Volume 0.2418457 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.44 in  
Total Volume Pumped 6.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	14:38:45	300.03	30.07	5.46	614.94	1.45	2.43	2.29	115.11
Last 5	14:43:45	600.02	25.43	5.51	626.55	2.20	2.43	1.64	111.43
Last 5	14:48:45	900.02	25.09	5.52	628.15	1.39	2.43	1.68	109.31
Last 5	14:53:45	1200.02	24.96	5.52	626.91	4.83	2.43	1.78	108.40
Last 5	14:58:46	1501.02	24.63	5.53	624.01	1.68	2.43	1.78	107.65
Variance 0			-0.34	0.01	1.60			0.04	-2.12
Variance 1			-0.13	-0.00	-1.23			0.10	-0.90
Variance 2			-0.33	0.01	-2.91			-0.00	-0.76

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 12:24:26

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 63.73 ft

Pump placement from TOC 63.73 ft

Well Information:

Well ID BRGWC-37S  
Well diameter 2 in  
Well Total Depth 68.73 ft  
Screen Length 10 ft  
Depth to Water 47.89 ft

Pumping Information:

Final Pumping Rate 140 mL/min  
Total System Volume 0.5777711 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 6.48 in  
Total Volume Pumped 3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	12:02:54	300.06	22.94	5.87	55.13	0.14	48.37	8.00	75.16
Last 5	12:07:54	600.02	22.33	5.65	55.04	0.15	48.45	8.35	76.66
Last 5	12:12:54	900.02	22.44	5.65	54.75	0.14	48.42	8.30	74.96
Last 5	12:17:54	1200.02	22.71	5.68	54.36	0.06	48.43	8.28	76.05
Last 5	12:22:54	1500.06	22.63	5.66	54.01	0.11	48.43	8.19	78.97
Variance 0			0.11	0.01	-0.28			-0.05	-1.70
Variance 1			0.27	0.03	-0.40			-0.02	1.09
Variance 2			-0.08	-0.02	-0.35			-0.09	2.92

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-08-19 13:28:47

Project Information:

Operator Name Travis Martinez  
Company Name Golder  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 613229  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.17 in  
Tubing Length 38.66 ft

Pump placement from TOC 38.66 ft

Well Information:

Well ID BRGWC-38S  
Well diameter 2 in  
Well Total Depth 43.66 ft  
Screen Length 10 ft  
Depth to Water 21.16 ft

Pumping Information:

Final Pumping Rate 120 mL/min  
Total System Volume 0.465873 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 7.44 in  
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	13:05:34	600.02	22.18	4.10	809.48	0.75	21.59	1.88	116.40
Last 5	13:10:34	900.02	22.13	4.11	807.18	0.59	21.81	1.58	115.65
Last 5	13:15:34	1200.02	22.21	4.11	810.57	0.44	21.84	1.40	116.00
Last 5	13:20:34	1500.02	22.27	4.11	809.07	0.23	21.79	1.29	116.54
Last 5	13:25:34	1800.02	22.58	4.12	808.49	0.03	21.78	1.25	116.35
Variance 0			0.07	-0.00	3.39			-0.18	0.35
Variance 1			0.06	0.00	-1.50			-0.11	0.55
Variance 2			0.31	0.01	-0.58			-0.05	-0.19

Notes

Grab Samples



# Low-Flow Test Report:

Test Date / Time: 9/15/2020 3:22:54 PM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWA-2I</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 56.96 ft</b> <b>Total Depth: 66.96 ft</b> <b>Initial Depth to Water: 14.34 ft</b>	<b>Pump Type: QED Well Wizard</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 61.96 ft</b> <b>Estimated Total Volume Pumped: 6300 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 140 ml/min</b> <b>Final Draw Down: 1.79 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	--	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/15/2020 3:22 PM	00:00	6.69 pH	24.76 °C	178.06 µS/cm	6.06 mg/L	1.38 NTU	67.0 mV	14.34 ft	180.00 ml/min
9/15/2020 3:27 PM	05:00	5.81 pH	20.36 °C	172.76 µS/cm	1.06 mg/L	1.89 NTU	29.3 mV	15.49 ft	140.00 ml/min
9/15/2020 3:32 PM	10:00	6.11 pH	20.34 °C	174.53 µS/cm	0.50 mg/L	2.85 NTU	35.2 mV	15.74 ft	140.00 ml/min
9/15/2020 3:37 PM	15:00	6.24 pH	20.17 °C	175.35 µS/cm	0.32 mg/L	2.77 NTU	38.8 mV	15.88 ft	140.00 ml/min
9/15/2020 3:42 PM	20:00	6.38 pH	20.04 °C	176.45 µS/cm	0.22 mg/L	2.32 NTU	35.0 mV	16.04 ft	140.00 ml/min
9/15/2020 3:47 PM	25:00	6.45 pH	20.05 °C	177.37 µS/cm	0.16 mg/L	0.73 NTU	26.5 mV	16.13 ft	140.00 ml/min
9/15/2020 3:52 PM	30:00	6.51 pH	20.09 °C	178.42 µS/cm	0.13 mg/L	0.79 NTU	14.0 mV	16.15 ft	140.00 ml/min
9/15/2020 3:57 PM	35:00	6.58 pH	19.95 °C	185.19 µS/cm	0.10 mg/L	0.67 NTU	5.1 mV	16.13 ft	140.00 ml/min
9/15/2020 4:02 PM	40:00	6.63 pH	19.77 °C	191.33 µS/cm	0.09 mg/L	0.67 NTU	-17.3 mV	16.13 ft	140.00 ml/min
9/15/2020 4:07 PM	45:00	6.64 pH	19.89 °C	188.68 µS/cm	0.07 mg/L	0.91 NTU	2.2 mV	16.13 ft	140.00 ml/min

## Samples

Sample ID:	Description:
BRGWA-2I	

# Low-Flow Test Report:

Test Date / Time: 9/15/2020 2:30:26 PM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWA-2S</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 37.39 ft</b> <b>Total Depth: 47.39 ft</b> <b>Initial Depth to Water: 14.53 ft</b>	<b>Pump Type: QED Well Wizard</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 42.39 ft</b> <b>Estimated Total Volume Pumped: 6801.667 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 220 ml/min</b> <b>Final Draw Down: 0.12 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	--	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/15/2020 2:30 PM	00:00	5.25 pH	21.39 °C	66.23 µS/cm	2.74 mg/L	0.46 NTU	68.8 mV	14.53 ft	220.00 ml/min
9/15/2020 2:35 PM	05:00	5.62 pH	18.97 °C	67.73 µS/cm	1.38 mg/L	1.35 NTU	53.7 mV	14.74 ft	220.00 ml/min
9/15/2020 2:40 PM	10:00	5.91 pH	18.80 °C	67.11 µS/cm	0.77 mg/L	0.83 NTU	50.2 mV	14.65 ft	220.00 ml/min
9/15/2020 2:45 PM	15:00	5.99 pH	18.88 °C	66.37 µS/cm	0.57 mg/L	0.91 NTU	48.5 mV	14.65 ft	220.00 ml/min
9/15/2020 2:51 PM	20:55	6.02 pH	19.04 °C	66.51 µS/cm	0.64 mg/L	0.79 NTU	49.3 mV	14.65 ft	220.00 ml/min
9/15/2020 2:56 PM	25:55	5.97 pH	19.06 °C	65.86 µS/cm	0.55 mg/L	0.80 NTU	49.8 mV	14.65 ft	220.00 ml/min
9/15/2020 3:01 PM	30:55	6.01 pH	19.11 °C	65.68 µS/cm	0.58 mg/L	0.52 NTU	47.3 mV	14.65 ft	220.00 ml/min

## Samples

Sample ID:	Description:
BRGWA-2S	

# Low-Flow Test Report:

Test Date / Time: 9/15/2020 1:42:18 PM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWA-5I</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 53.82 ft</b> <b>Total Depth: 63.82 ft</b> <b>Initial Depth to Water: 11.63 ft</b>	<b>Pump Type: QED Well Wizard</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 58.82 ft</b> <b>Estimated Total Volume Pumped: 4600 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 230 ml/min</b> <b>Final Draw Down: 0.11 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	--	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/15/2020 1:42 PM	00:00	5.50 pH	20.57 °C	157.12 µS/cm	2.89 mg/L	1.30 NTU	59.7 mV	11.63 ft	230.00 ml/min
9/15/2020 1:47 PM	05:00	5.91 pH	19.41 °C	158.48 µS/cm	5.32 mg/L	0.86 NTU	54.4 mV	11.77 ft	230.00 ml/min
9/15/2020 1:52 PM	10:00	6.19 pH	19.19 °C	158.79 µS/cm	5.52 mg/L	0.50 NTU	53.9 mV	11.74 ft	230.00 ml/min
9/15/2020 1:57 PM	15:00	6.23 pH	19.19 °C	159.27 µS/cm	5.57 mg/L	0.61 NTU	55.0 mV	11.74 ft	230.00 ml/min
9/15/2020 2:02 PM	20:00	6.27 pH	19.14 °C	159.23 µS/cm	5.53 mg/L	0.62 NTU	54.6 mV	11.74 ft	230.00 ml/min

## Samples

Sample ID:	Description:
BRGWA-5I	

# Low-Flow Test Report:

**Test Date / Time:** 9/15/2020 12:59:46 PM

**Project:** Plant Branch

**Operator Name:** Travis Martinez

<b>Location Name:</b> BRGWA-5S <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 33.01 ft <b>Total Depth:</b> 43.01 ft <b>Initial Depth to Water:</b> 11.68 ft	<b>Pump Type:</b> QED Well Wizard <b>Tubing Type:</b> Polyethylene <b>Pump Intake From TOC:</b> 38.01 m <b>Estimated Total Volume Pumped:</b> 4600 ml <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 230 ml/min <b>Final Draw Down:</b> 0.06 ft	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 728550
---	---	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/15/2020 12:59 PM	00:00	6.18 pH	19.64 °C	163.98 µS/cm	1.97 mg/L	3.99 NTU	44.7 mV	11.68 ft	230.00 ml/min
9/15/2020 1:04 PM	05:00	6.19 pH	19.34 °C	159.39 µS/cm	1.84 mg/L	2.92 NTU	45.4 mV	11.85 ft	230.00 ml/min
9/15/2020 1:09 PM	10:00	6.24 pH	19.32 °C	165.69 µS/cm	1.77 mg/L	1.90 NTU	42.4 mV	11.74 ft	230.00 ml/min
9/15/2020 1:14 PM	15:00	6.24 pH	19.32 °C	165.18 µS/cm	1.80 mg/L	3.13 NTU	43.1 mV	11.74 ft	230.00 ml/min
9/15/2020 1:19 PM	20:00	6.25 pH	19.31 °C	164.34 µS/cm	1.78 mg/L	2.44 NTU	43.0 mV	11.74 ft	230.00 ml/min

## Samples

Sample ID:	Description:
BRGWA-5S	

Product Name: Low-Flow System

Date: 2020-09-15 09:46:57

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 465016  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 47.9 ft

Pump placement from TOC 47.9 ft

Well Information:

Well ID BRGWA-6S  
Well diameter 2 in  
Well Total Depth 52.90 ft  
Screen Length 10 ft  
Depth to Water 25.23 ft

Pumping Information:

Final Pumping Rate 300 mL/min  
Total System Volume 0.4937809 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 10.92 in  
Total Volume Pumped 7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	09:24:50	300.09	19.59	6.00	57.62	2.58	26.09	6.48	87.49
Last 5	09:29:49	600.00	19.63	6.30	56.99	0.89	26.09	6.64	73.88
Last 5	09:34:49	900.00	19.54	6.37	57.07	1.21	26.11	6.66	69.33
Last 5	09:39:49	1199.99	19.51	6.41	57.30	1.51	26.12	6.61	67.03
Last 5	09:44:52	1502.98	19.54	6.43	57.69	1.27	26.14	6.56	65.62
Variance 0			-0.09	0.07	0.09			0.02	-4.55
Variance 1			-0.03	0.04	0.22			-0.05	-2.30
Variance 2			0.03	0.02	0.39			-0.05	-1.41

Notes

Grab Samples

# Low-Flow Test Report:

Test Date / Time: 9/16/2020 11:56:05 AM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWC-17S</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 5 ft</b> <b>Top of Screen: 3.15 ft</b> <b>Total Depth: 8.15 ft</b> <b>Initial Depth to Water: 6.2 ft</b>	<b>Pump Type: Alexis Peri Pump</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 7.5 ft</b> <b>Estimated Total Volume Pumped: 3850 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 110 ml/min</b> <b>Final Draw Down: 0.48 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	---	--

## Test Notes:

Three well volumes purged

## Weather Conditions:

Raining

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/16/2020 11:56 AM	00:00	6.17 pH	19.18 °C	495.55 µS/cm	2.27 mg/L	10.85 NTU	58.5 mV	6.20 ft	110.00 ml/min
9/16/2020 12:01 PM	05:00	6.25 pH	19.80 °C	494.58 µS/cm	1.71 mg/L	7.01 NTU	69.8 mV	6.46 ft	110.00 ml/min
9/16/2020 12:06 PM	10:00	6.26 pH	19.86 °C	493.91 µS/cm	1.64 mg/L	4.62 NTU	50.0 mV	6.54 ft	110.00 ml/min
9/16/2020 12:11 PM	15:00	6.26 pH	19.94 °C	494.01 µS/cm	1.61 mg/L	3.33 NTU	48.4 mV	6.58 ft	110.00 ml/min
9/16/2020 12:16 PM	20:00	6.26 pH	20.00 °C	493.46 µS/cm	1.59 mg/L	2.50 NTU	47.1 mV	6.59 ft	110.00 ml/min
9/16/2020 12:21 PM	25:00	6.25 pH	20.00 °C	493.30 µS/cm	1.59 mg/L	1.78 NTU	46.9 mV	6.63 ft	110.00 ml/min
9/16/2020 12:26 PM	30:00	6.27 pH	20.00 °C	492.15 µS/cm	1.55 mg/L	1.60 NTU	58.7 mV	6.65 ft	110.00 ml/min
9/16/2020 12:31 PM	35:00	6.26 pH	19.97 °C	493.44 µS/cm	1.54 mg/L	1.10 NTU	46.4 mV	6.68 ft	110.00 ml/min

## Samples

Sample ID:	Description:
BRGWC-17S	

# Low-Flow Test Report:

Test Date / Time: 9/16/2020 10:37:06 AM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWC-33S</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 21.66 ft</b> <b>Total Depth: 31.66 ft</b> <b>Initial Depth to Water: 8.9 ft</b>	<b>Pump Type: QED Well Wizard</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 26.66 ft</b> <b>Estimated Total Volume Pumped: 7500 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 300 ml/min</b> <b>Final Draw Down: 0 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
--	---	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/16/2020 10:37 AM	00:00	4.45 pH	20.82 °C	406.75 µS/cm	1.14 mg/L	0.43 NTU	69.5 mV	8.90 ft	300.00 ml/min
9/16/2020 10:42 AM	05:00	4.65 pH	19.91 °C	395.08 µS/cm	0.06 mg/L	0.46 NTU	71.0 mV	8.90 ft	300.00 ml/min
9/16/2020 10:47 AM	10:00	4.78 pH	19.73 °C	392.05 µS/cm	0.04 mg/L	0.74 NTU	103.2 mV	8.90 ft	300.00 ml/min
9/16/2020 10:52 AM	15:00	4.79 pH	19.68 °C	393.02 µS/cm	0.03 mg/L	0.83 NTU	71.5 mV	8.90 ft	300.00 ml/min
9/16/2020 10:57 AM	20:00	4.79 pH	19.64 °C	393.12 µS/cm	0.02 mg/L	1.21 NTU	74.7 mV	8.90 ft	300.00 ml/min
9/16/2020 11:02 AM	25:00	4.78 pH	19.66 °C	391.97 µS/cm	0.02 mg/L	1.09 NTU	116.2 mV	8.90 ft	300.00 ml/min

## Samples

Sample ID:	Description:
BRGWC-33S	

# Low-Flow Test Report:

Test Date / Time: 9/16/2020 9:34:27 AM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWC-34S</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 42.64 ft</b> <b>Total Depth: 52.64 ft</b> <b>Initial Depth to Water: 2.78 ft</b>	<b>Pump Type: QED Well Wizard</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 47.74 ft</b> <b>Estimated Total Volume Pumped: 8750 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 350 ml/min</b> <b>Final Draw Down: 0.01 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	--	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/16/2020 9:34 AM	00:00	5.39 pH	20.95 °C	688.80 µS/cm	2.16 mg/L	0.54 NTU	87.8 mV	2.78 ft	350.00 ml/min
9/16/2020 9:39 AM	05:00	5.79 pH	20.81 °C	687.50 µS/cm	0.18 mg/L	0.81 NTU	61.4 mV	2.79 ft	350.00 ml/min
9/16/2020 9:44 AM	10:00	5.80 pH	20.70 °C	686.39 µS/cm	0.10 mg/L	0.64 NTU	78.1 mV	2.79 ft	350.00 ml/min
9/16/2020 9:49 AM	15:00	5.79 pH	20.62 °C	683.80 µS/cm	0.07 mg/L	1.04 NTU	53.1 mV	2.79 ft	350.00 ml/min
9/16/2020 9:54 AM	20:00	5.81 pH	20.62 °C	680.82 µS/cm	0.04 mg/L	0.31 NTU	50.2 mV	2.79 ft	350.00 ml/min
9/16/2020 9:59 AM	25:00	5.81 pH	20.56 °C	678.03 µS/cm	0.03 mg/L	0.29 NTU	66.8 mV	2.79 ft	350.00 ml/min

## Samples

Sample ID:	Description:
BRGWC-34S	



# Low-Flow Test Report:

**Test Date / Time:** 9/16/2020 8:45:35 AM

**Project:** Plant Branch

**Operator Name:** Travis Martinez

<b>Location Name:</b> BRGWC-35S <b>Well Diameter:</b> 2 in <b>Casing Type:</b> PVC <b>Screen Length:</b> 10 ft <b>Top of Screen:</b> 25.34 ft <b>Total Depth:</b> 35.34 ft <b>Initial Depth to Water:</b> 2.22 ft	<b>Pump Type:</b> QED Well Wizard <b>Tubing Type:</b> Polyethylene <b>Pump Intake From TOC:</b> 30.34 ft <b>Estimated Total Volume Pumped:</b> 7000 ml <b>Flow Cell Volume:</b> 90 ml <b>Final Flow Rate:</b> 350 ml/min <b>Final Draw Down:</b> 0.08 ft	<b>Instrument Used:</b> Aqua TROLL 400 <b>Serial Number:</b> 728550
---	--	--

## Test Notes:

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/16/2020 8:45 AM	00:00	6.02 pH	21.91 °C	709.59 µS/cm	5.31 mg/L	0.51 NTU	20.8 mV	2.22 ft	300.00 ml/min
9/16/2020 8:50 AM	05:00	5.86 pH	19.95 °C	674.73 µS/cm	0.68 mg/L	1.70 NTU	70.6 mV	2.30 ft	350.00 ml/min
9/16/2020 8:55 AM	10:00	5.95 pH	19.72 °C	675.61 µS/cm	0.17 mg/L	1.27 NTU	71.4 mV	2.30 ft	350.00 ml/min
9/16/2020 9:00 AM	15:00	5.96 pH	19.65 °C	679.11 µS/cm	0.11 mg/L	0.11 NTU	70.9 mV	2.30 ft	350.00 ml/min
9/16/2020 9:05 AM	20:00	5.96 pH	19.59 °C	683.60 µS/cm	0.09 mg/L	0.17 NTU	70.0 mV	2.30 ft	350.00 ml/min

## Samples

Sample ID:	Description:
BRGWC-35S	

# Low-Flow Test Report:

Test Date / Time: 9/16/2020 2:56:46 PM

Project: Plant Branch

Operator Name: Travis Martinez

<b>Location Name: BRGWC-36S</b> <b>Well Diameter: 2 in</b> <b>Casing Type: PVC</b> <b>Screen Length: 10 ft</b> <b>Top of Screen: 24.02 ft</b> <b>Total Depth: 34.02 ft</b> <b>Initial Depth to Water: 2.34 ft</b>	<b>Pump Type: Alexis Peri Pump</b> <b>Tubing Type: Polyethylene</b> <b>Pump Intake From TOC: 29.02 ft</b> <b>Estimated Total Volume Pumped: 7125 ml</b> <b>Flow Cell Volume: 90 ml</b> <b>Final Flow Rate: 285 ml/min</b> <b>Final Draw Down: 0.17 ft</b>	<b>Instrument Used: Aqua TROLL 400</b> <b>Serial Number: 728550</b>
---	---	--

## Test Notes:

## Weather Conditions:

Raining

## Low-Flow Readings:

Date Time	Elapsed Time	pH	Temperature	Specific Conductivity	RDO Concentration	Turbidity	ORP	Depth To Water	Flow
		+/- 0.1	+/- 5	+/- 5 %	+/- 10 %	+/- 5	+/- 25	+/- 0.3	
9/16/2020 2:56 PM	00:00	5.59 pH	19.51 °C	639.83 µS/cm	2.22 mg/L	2.32 NTU	79.9 mV	2.34 ft	285.00 ml/min
9/16/2020 3:01 PM	05:00	5.58 pH	19.37 °C	636.12 µS/cm	2.13 mg/L	0.71 NTU	69.9 mV	2.51 ft	285.00 ml/min
9/16/2020 3:06 PM	10:00	5.58 pH	19.33 °C	628.56 µS/cm	2.10 mg/L	0.42 NTU	90.0 mV	2.51 ft	285.00 ml/min
9/16/2020 3:11 PM	15:00	5.58 pH	19.32 °C	619.36 µS/cm	2.11 mg/L	0.69 NTU	64.1 mV	2.51 ft	285.00 ml/min
9/16/2020 3:16 PM	20:00	5.58 pH	19.26 °C	614.35 µS/cm	2.09 mg/L	0.74 NTU	61.9 mV	2.51 ft	285.00 ml/min
9/16/2020 3:21 PM	25:00	5.58 pH	19.24 °C	608.82 µS/cm	2.08 mg/L	0.74 NTU	80.3 mV	2.51 ft	285.00 ml/min

## Samples

Sample ID:	Description:
BRGWC-36S	

Product Name: Low-Flow System

Date: 2020-09-16 16:11:04

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 465016  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 63.73 ft

Pump placement from TOC 63.73 ft

Well Information:

Well ID BRGWC-37S  
Well diameter 2 in  
Well Total Depth 68.73 ft  
Screen Length 10 ft  
Depth to Water 48.3 ft

Pumping Information:

Final Pumping Rate 150 mL/min  
Total System Volume 0.5651957 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 7.32 in  
Total Volume Pumped 3.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	15:48:51	300.03	19.50	5.49	54.34	0.05	48.87	7.82	64.04
Last 5	15:53:51	600.01	19.59	5.74	53.54	0.02	48.89	8.22	57.69
Last 5	15:58:51	900.01	19.54	5.82	53.02	0.10	48.89	8.27	56.81
Last 5	16:03:51	1200.00	19.52	5.83	52.83	0.18	48.91	8.20	56.85
Last 5	16:08:51	1499.99	19.50	5.84	52.74	0.11	48.91	8.12	55.49
Variance 0			-0.05	0.08	-0.52			0.04	-0.89
Variance 1			-0.02	0.01	-0.19			-0.07	0.04
Variance 2			-0.02	0.01	-0.09			-0.08	-1.35

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-09-17 11:29:09

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name Plant Branch  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 465016  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 38.66 ft

Pump placement from TOC 38.66 ft

Well Information:

Well ID BRGWC-38S  
Well diameter 2 in  
Well Total Depth 43.66 ft  
Screen Length 10 ft  
Depth to Water 21.79 ft

Pumping Information:

Final Pumping Rate 150 mL/min  
Total System Volume 0.4536101 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 8.52 in  
Total Volume Pumped 3.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 10
Last 5	11:06:49	300.03	21.20	4.16	798.89	0.22	22.45	2.09	143.01
Last 5	11:11:49	600.01	21.03	4.16	795.08	0.03	22.48	1.91	125.61
Last 5	11:16:49	900.00	21.01	4.16	796.35	0.22	22.51	1.86	118.29
Last 5	11:21:49	1199.99	21.13	4.17	797.34	0.02	22.50	1.82	116.46
Last 5	11:26:49	1499.98	21.10	4.17	793.91	0.40	22.50	1.78	114.93
Variance 0			-0.02	0.00	1.27			-0.04	-7.32
Variance 1			0.12	0.00	0.99			-0.04	-1.83
Variance 2			-0.03	0.00	-3.42			-0.04	-1.53

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-01 16:42:56

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 541714  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethelene  
Tubing Diameter 0.170 in  
Tubing Length 62 ft

Pump placement from TOC 62 ft

Well Information:

Well ID BRGWA-2I  
Well diameter 2 in  
Well Total Depth 66.96 ft  
Screen Length 10 ft  
Depth to Water 10.94 ft

Pumping Information:

Final Pumping Rate 145 mL/min  
Total System Volume 0.7617322 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 23.04 in  
Total Volume Pumped 3.63 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	16:19:28	300.11	17.45	6.54	163.33	1.24	12.00	0.81	46.79
Last 5	16:24:28	600.02	17.56	6.63	168.01	1.27	12.42	0.43	48.86
Last 5	16:29:28	900.02	17.61	6.66	169.63	1.03	12.68	0.44	53.93
Last 5	16:34:29	1201.02	17.56	6.66	170.36	0.78	12.79	0.36	53.87
Last 5	16:39:34	1506.02	17.65	6.66	170.90	0.68	12.86	0.28	46.17
Variance 0			0.04	0.03	1.62			0.00	5.07
Variance 1			-0.05	-0.00	0.73			-0.07	-0.06
Variance 2			0.09	-0.00	0.54			-0.09	-7.70

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-02 12:06:54

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 42.39 ft

Pump placement from TOC 42.39 ft

Well Information:

Well ID BRGWA-2S  
Well diameter 2 in  
Well Total Depth 47.39 ft  
Screen Length 10 ft  
Depth to Water 11.12 ft

Pumping Information:

Final Pumping Rate 250 mL/min  
Total System Volume 0.6965216 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.44 in  
Total Volume Pumped 16.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	11:45:12	2704.98	16.92	6.19	59.59	2.12	11.24	1.00	57.81
Last 5	11:50:12	3004.97	16.87	6.22	59.50	1.92	11.24	0.73	52.70
Last 5	11:55:12	3304.96	16.92	6.21	59.51	2.06	11.24	0.51	43.97
Last 5	12:00:12	3604.96	16.88	6.18	59.22	2.08	11.24	0.59	43.08
Last 5	12:05:12	3904.94	16.90	6.20	59.28	2.11	11.24	0.56	40.75
Variance 0			0.05	-0.01	0.01			-0.22	-8.73
Variance 1			-0.04	-0.03	-0.29			0.07	-0.90
Variance 2			0.02	0.02	0.06			-0.02	-2.32

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-02 10:14:03

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 58.82 ft

Pump placement from TOC 58.82 ft

Well Information:

Well ID BRGWA-5I  
Well diameter 2 in  
Well Total Depth 63.82 ft  
Screen Length 10 ft  
Depth to Water 10.86 ft

Pumping Information:

Final Pumping Rate 250 mL/min  
Total System Volume 0.7661957 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.8 in  
Total Volume Pumped 5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	09:56:26	300.02	16.74	6.38	144.34	1.91	11.00	5.87	130.11
Last 5	10:01:26	600.01	16.83	6.44	144.41	1.99	11.01	6.41	121.58
Last 5	10:06:26	899.99	16.83	6.47	144.17	1.95	11.01	6.25	118.15
Last 5	10:11:27	1201.00	16.87	6.47	145.48	1.95	11.01	5.90	116.77
Last 5									
Variance 0			0.09	0.06	0.07			0.54	-8.53
Variance 1			0.00	0.03	-0.24			-0.16	-3.42
Variance 2			0.04	0.00	1.31			-0.35	-1.38

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-02 09:31:31

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 38.61 ft

Pump placement from TOC 38.61 ft

Well Information:

Well ID BRGWA-5S  
Well diameter 2 in  
Well Total Depth 43.61 ft  
Screen Length 10 ft  
Depth to Water 10.90 ft

Pumping Information:

Final Pumping Rate 250 mL/min  
Total System Volume 0.6796499 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.96 in  
Total Volume Pumped 11.25 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	09:08:56	1502.00	16.87	6.46	145.52	3.80	10.98	3.26	96.76
Last 5	09:13:56	1801.99	16.90	6.44	145.66	3.69	10.98	3.19	93.59
Last 5	09:18:56	2101.99	16.92	6.45	145.32	2.97	10.98	2.48	88.33
Last 5	09:23:56	2401.98	16.93	6.43	145.09	2.98	10.98	2.48	87.10
Last 5	09:28:56	2701.98	16.95	6.42	145.03	3.51	10.98	2.41	86.19
Variance 0			0.02	0.00	-0.34			-0.70	-5.26
Variance 1			0.01	-0.02	-0.23			-0.00	-1.23
Variance 2			0.02	-0.01	-0.05			-0.07	-0.91

Notes

Grab Samples



Product Name: Low-Flow System

Date: 2021-03-01 16:32:59

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 47.90 ft

Pump placement from TOC 47.90 ft

Well Information:

Well ID BRGWA-6S  
Well diameter 2 in  
Well Total Depth 52.90 ft  
Screen Length 10.00 ft  
Depth to Water 23.15 ft

Pumping Information:

Final Pumping Rate 225 mL/min  
Total System Volume 0.7211151 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 8.88 in  
Total Volume Pumped 5.63 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	16:10:46	300.06	18.48	6.80	60.48	3.95	23.76	5.55	135.63
Last 5	16:15:46	600.00	18.43	6.73	61.07	2.73	23.84	5.38	121.16
Last 5	16:20:46	900.01	18.43	6.72	60.56	2.78	23.88	5.47	117.03
Last 5	16:25:46	1200.00	18.40	6.71	60.11	3.02	23.83	5.51	117.31
Last 5	16:30:46	1500.00	18.39	6.70	59.96	2.95	23.89	5.48	115.01
Variance 0			-0.00	-0.01	-0.51			0.09	-4.13
Variance 1			-0.03	-0.01	-0.45			0.04	0.28
Variance 2			-0.01	-0.01	-0.15			-0.03	-2.30

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-04 15:38:59

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Alexis  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 6 ft

Pump placement from TOC 6 ft

Well Information:

Well ID BRGWC-17S  
Well diameter 2 in  
Well Total Depth 9.88 ft  
Screen Length 5 ft  
Depth to Water 5.71 ft

Pumping Information:

Final Pumping Rate 200 mL/min  
Total System Volume 0.1346342 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 1.68 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	15:16:25	1200.03	16.65	6.44	473.64	2.50	5.85	1.88	29.82
Last 5	15:21:27	1502.03	16.65	6.44	471.01	1.75	5.86	1.85	29.27
Last 5	15:26:27	1802.04	16.60	6.44	469.86	1.52	5.87	1.88	29.18
Last 5	15:31:27	2102.04	16.65	6.44	462.19	1.47	5.87	1.88	29.37
Last 5	15:36:27	2402.04	16.47	6.45	459.50	1.66	5.85	1.89	29.36
Variance 0			-0.04	0.00	-1.15			0.03	-0.09
Variance 1			0.04	0.01	-7.67			0.00	0.19
Variance 2			-0.18	0.00	-2.70			0.01	-0.01

Notes

Removed three well volumes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-03 09:05:57

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 541714  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethelene  
Tubing Diameter 0.170 in  
Tubing Length 26 ft

Pump placement from TOC 26 ft

Well Information:

Well ID BRGWC-33S  
Well diameter 2 in  
Well Total Depth 31.66 ft  
Screen Length 10 ft  
Depth to Water 8.28 ft

Pumping Information:

Final Pumping Rate 300 mL/min  
Total System Volume 0.601049 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.48 in  
Total Volume Pumped 7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	08:43:24	300.03	18.59	4.68	339.25	1.04	8.32	1.37	53.01
Last 5	08:48:24	600.04	19.00	4.82	342.67	0.56	8.32	0.94	54.94
Last 5	08:53:24	900.04	19.08	4.84	341.83	0.79	8.32	1.01	56.42
Last 5	08:58:24	1200.04	19.17	4.80	341.82	0.67	8.32	0.94	61.07
Last 5	09:03:25	1501.04	19.12	4.83	341.74	0.59	8.32	1.01	60.21
Variance 0			0.07	0.02	-0.84			0.07	1.48
Variance 1			0.09	-0.04	-0.01			-0.07	4.64
Variance 2			-0.05	0.04	-0.09			0.07	-0.86

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-03 10:10:31

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 541714  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethelene  
Tubing Diameter 0.170 in  
Tubing Length 47 ft

Pump placement from TOC 47 ft

Well Information:

Well ID BRGWC-34S  
Well diameter 2 in  
Well Total Depth 52.64 ft  
Screen Length 10 ft  
Depth to Water 2.37 ft

Pumping Information:

Final Pumping Rate 400 mL/min  
Total System Volume 0.6947809 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.36 in  
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	09:49:47	300.02	17.43	5.83	665.75	1.15	2.39	0.17	46.22
Last 5	09:54:47	600.02	17.46	5.86	666.43	0.65	2.40	0.12	50.10
Last 5	09:59:47	900.02	17.83	5.87	663.36	0.60	2.40	0.08	52.40
Last 5	10:04:51	1204.02	17.76	5.88	659.34	0.62	2.40	0.06	55.25
Last 5									
Variance 0			0.03	0.03	0.68			-0.05	3.88
Variance 1			0.37	0.01	-3.07			-0.04	2.30
Variance 2			-0.07	0.00	-4.02			-0.02	2.84

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-04 14:19:21

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 30.34 ft

Pump placement from TOC 30.34 ft

Well Information:

Well ID BRGWC-35S  
Well diameter 2 in  
Well Total Depth 35.34 ft  
Screen Length 10 ft  
Depth to Water 1.80 ft

Pumping Information:

Final Pumping Rate 445 mL/min  
Total System Volume 0.6427374 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 0.96 in  
Total Volume Pumped 11.13 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	13:57:18	300.03	18.52	6.16	678.42	2.15	1.83	0.71	18.64
Last 5	14:02:18	600.03	18.17	6.15	683.24	2.04	1.86	0.51	21.57
Last 5	14:07:18	900.03	18.17	6.15	686.70	3.10	1.88	0.36	21.63
Last 5	14:12:18	1200.03	18.24	6.14	689.39	2.03	1.88	0.30	20.54
Last 5	14:17:18	1500.03	18.23	6.14	691.84	1.76	1.88	0.25	20.35
Variance 0			-0.00	-0.01	3.46			-0.15	0.06
Variance 1			0.07	-0.00	2.69			-0.06	-1.09
Variance 2			-0.00	-0.01	2.45			-0.04	-0.20

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-03 16:18:30

Project Information:

Operator Name T. Martinez  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 642531  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type Alexis  
Tubing Type polyethylene  
Tubing Diameter 0.170 in  
Tubing Length 29 ft

Pump placement from TOC 29 ft

Well Information:

Well ID BRGWC-36S  
Well diameter 2 in  
Well Total Depth 34.02 ft  
Screen Length 10 ft  
Depth to Water 2.59 ft

Pumping Information:

Final Pumping Rate 300 mL/min  
Total System Volume 0.290854 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 2.04 in  
Total Volume Pumped 7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	15:56:15	300.04	15.92	6.24	621.82	3.32	2.79	1.98	82.62
Last 5	16:01:15	600.00	15.93	6.05	615.93	3.33	2.78	1.99	83.55
Last 5	16:06:15	899.97	15.93	5.96	603.56	2.45	2.77	2.03	84.06
Last 5	16:11:15	1199.97	15.96	5.90	601.34	1.98	2.77	2.06	84.24
Last 5	16:16:15	1499.96	15.93	5.86	598.10	2.12	2.76	2.06	84.60
Variance 0			0.00	-0.09	-12.36			0.04	0.51
Variance 1			0.03	-0.06	-2.23			0.02	0.18
Variance 2			-0.03	-0.03	-3.24			0.00	0.36

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-03 17:20:42

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 541714  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethelene  
Tubing Diameter 0.170 in  
Tubing Length 63 ft

Pump placement from TOC 63 ft

Well Information:

Well ID BRGWC-37S  
Well diameter 2 in  
Well Total Depth 68.73 ft  
Screen Length 10 ft  
Depth to Water 50.25 ft

Pumping Information:

Final Pumping Rate 180 mL/min  
Total System Volume 0.7661957 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 8.4 in  
Total Volume Pumped 3.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	17:03:05	300.03	19.08	5.75	53.99	1.39	51.12	7.85	31.00
Last 5	17:08:05	600.02	19.34	5.80	53.61	0.94	50.84	7.85	33.94
Last 5	17:13:06	900.42	19.27	5.87	53.22	0.72	50.94	7.89	35.08
Last 5	17:18:07	1201.42	19.25	5.87	52.87	0.64	50.95	7.83	35.68
Last 5									
Variance 0			0.26	0.05	-0.39			-0.00	2.93
Variance 1			-0.07	0.07	-0.38			0.04	1.14
Variance 2			-0.02	0.00	-0.35			-0.06	0.60

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2021-03-04 17:17:12

Project Information:

Operator Name A. McClure  
Company Name Golder Associates  
Project Name 166625421  
Site Name Plant Branch  
Latitude 0° 0' 0"  
Longitude 0° 0' 0"  
Sonde SN 541714  
Turbidity Make/Model LaMotte 2020we

Pump Information:

Pump Model/Type QED Well Wizard  
Tubing Type polyethelene  
Tubing Diameter 0.170 in  
Tubing Length 38 ft

Pump placement from TOC 38 ft

Well Information:

Well ID BRGWC-38S  
Well diameter 2 in  
Well Total Depth 43.66 ft  
Screen Length 10 ft  
Depth to Water 19.36 ft

Pumping Information:

Final Pumping Rate 160 mL/min  
Total System Volume 0.6546101 L  
Calculated Sample Rate 300 sec  
Stabilization Drawdown 10.44 in  
Total Volume Pumped 3.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond $\mu$ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	16:58:58	300.03	19.50	4.33	797.34	1.25	20.24	1.59	163.84
Last 5	17:03:58	600.02	19.43	4.24	794.47	0.78	20.22	1.43	186.65
Last 5	17:08:58	900.02	19.35	4.21	792.45	0.72	20.22	1.30	181.93
Last 5	17:14:04	1206.02	19.30	4.19	786.24	0.67	20.23	1.26	166.49
Last 5									
Variance 0			-0.06	-0.09	-2.87			-0.16	22.81
Variance 1			-0.09	-0.04	-2.02			-0.13	-4.72
Variance 2			-0.04	-0.01	-6.21			-0.04	-15.45

Notes

Grab Samples



Project Plant Branch  
 Field Staff A. McClure/T. Martinez

August App IV Event

Instrument Calibration

Date: 8/18 Date: 8/19 Date: 8/20 Date:  
 Time: 0805 Time: 0750 Time: 0750 Time:

Parameter	Units	Standard	SmarTROLL SN <u>612531</u>	SmarTROLL SN <u>612531</u>	SmarTROLL SN <u>612531</u>	SmarTROLL SN _____
DO	% saturation	100	93.6	92.7	92.8	
Conductivity	us/cm	4490	4483	4469	4460	
pH	S.U.	4.00	4.17	4.16	4.19	
pH	S.U.	7.00	7.07	6.98	7.01	
pH	S.U.	10.00	9.87	9.57	9.54	
ORP	mV	228.00	218.40	219.80	219.80	

Turbidity	Units	Standard	LaMotte SN <u>2283-2612</u>	LaMotte SN <u>2283-2612</u>	LaMotte SN <u>2283-2612</u>	LaMotte SN _____
	NTU	0.0	0.0	-0.0	0.0	
	NTU	1.0	0.97	1.62	0.98	
	NTU	10.0	10.02	10.01	10.00	

Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_  
 Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_

Parameter	Units	Standard	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Project Plant Branch  
 Field Staff A. McClure/ T. Martinez

August App IV Event

Instrument Calibration

Date: 8-18-20 Date: 8-19-20 Date: 8-20-20 Date:  
 Time: 0800 Time: 0815 Time: 0815 Time:

Parameter	Units	Standard	SmarTROLL SN 613229	SmarTROLL SN 613229	SmarTROLL SN 613229	SmarTROLL SN _____
DO	% saturation	100	91.1	91.0	91.5	
Conductivity	us/cm	4490	4823	4409	4490.32	
pH	S.U.	4.00	3.92	3.94	3.92	
pH	S.U.	7.00	6.89	6.90	6.90	
pH	S.U.	10.00	9.85	9.79	9.79	
ORP	mV	228.00	220.7	221.1	218.7	

Turbidity	Units	Standard	LaMotte SN 1510-4111	LaMotte SN 1510-4111	LaMotte SN 1510-4111	LaMotte SN _____
	NTU	0.0	0.00	0.06	0.00	
	NTU	1.0	1.09	1.22	0.92	
	NTU	10.0	9.17	9.49	10.33	

Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_  
 Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_

Parameter	Units	Standard	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Project Plant Branch  
 Field Staff A. McClure/ T. Martinez

September App III/IV Event

Instrument Calibration

Date: 9-15-2020 Date: 9-16-20 Date: 9-17 Date:  
 Time: 0748 Time: 0700 Time: 0700 Time:

Parameter	Units	Standard	SmarTROLL SN 728550	SmarTROLL SN 728550	SmarTROLL SN 728550	SmarTROLL SN _____
DO	% saturation	100	101	98.44	98.54	
Conductivity	us/cm	4490	4217	4421	4450	
pH	S.U.	4.00	3.99	3.99	4.05	
pH	S.U.	7.00	7.37	7.00	6.98	
pH	S.U.	10.00	10.67	9.99	10.02	
ORP	mV	228.00	263.0	234.5	227.4	

Turbidity	Units	Standard	LaMotte SN 7007-1416	LaMotte SN 7007-1416	LaMotte SN 7007.1416	LaMotte SN _____
	NTU	0.0	0.01	0.00	0.00	
	NTU	1.0	0.90	1.03	0.98	
	NTU	10.0	10.86	9.95	10.21	

Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_  
 Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_

Parameter	Units	Standard	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential;  
 mV - millivolts; NTU - Nephelometric Turbidity Units; NC - Not calibrated

Project Plant Branch  
 Field Staff A. McClure / T. Martinez

September App III/IV Event

**Instrument Calibration**

Date: 9/15/20 Date: 9/16/20 Date: 9/17/20 Date:  
 Time: 0755 Time: 0755 Time: 0755 Time:

Parameter	Units	Standard	SmarTROLL SN <u>465016</u>	SmarTROLL SN <u>465016</u>	SmarTROLL SN <u>465016</u>	SmarTROLL SN _____
DO	% saturation	100	96.3	94.3	96.2	
Conductivity	us/cm	4490	4548	4483	4482	
pH	S.U.	4.00	4.04	4.09	4.12	
pH	S.U.	7.00	7.00	6.98	6.98	
pH	S.U.	10.00	9.95	9.87	9.86	
ORP	mV	228.00	219.3	224.0	224.0	

Turbidity	Units	Standard	LaMotte SN <u>2279-2612</u>	LaMotte SN <u>2279-2612</u>	LaMotte SN <u>2279-2612</u>	LaMotte SN _____
	NTU	0.0	0.00	0.00	0.00	
	NTU	1.0	1.07	1.04	1.12	
	NTU	10.0	9.90	9.86	10.03	

Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_ Date: \_\_\_\_\_  
 Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_ Time: \_\_\_\_\_

Parameter	Units	Standard	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____	SmarTROLL SN _____
DO	% saturation	100				
Conductivity	us/cm	4490				
pH	S.U.	4.00				
pH	S.U.	7.00				
pH	S.U.	10.00				
ORP	mV	228.00				

Turbidity	Units	Standard	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____	LaMotte SN _____
	NTU	0.0				
	NTU	1.0				
	NTU	10.0				

Notes: DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential;  
 mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

# Instrument Calibration Log



Personnel: A. McClure

Project Name: Plant Branch

Project Number: 166625418.021A

Device Names: SmarTroll / Lamotte2020we

Serial Numbers: 541714 ; 1859-0912

Date: <u>3/1/21</u>	Time: <u>1505</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	<u>19340057</u>	<u>08/21</u>	7.0	<u>7.11</u>	<u>7.0</u>	—
pH 4.0 (S.U.)	<u>20010025</u>	<u>08/21</u>	4.0	<u>4.27</u>	<u>4</u>	—
pH 10.0 (S.U.)	<u>19320102</u>	<u>08/21</u>	10.0	<u>9.94</u>	<u>10</u>	—
Sp. Conductance (µS/cm)	<u>20010025</u>	<u>08/21</u>	4490 µS/cm	<u>4465</u>	<u>4490</u>	
ORP (mV)	<u>19460167</u>	<u>08/21</u>	228 mV	<u>228</u>	<u>228</u>	
Dissolved Oxygen	—	—	100%	<u>100.6</u>	<u>100</u>	
0.00 NTU	—	—	0	<u>0.0</u>	<u>0.0</u>	
1.0 NTU	—	—	1	<u>0.99</u>	<u>1.0</u>	
10.0 NTU	—	—	10	<u>10.0</u>	<u>10.0</u>	

Date: <u>3/2/21</u>	Time: <u>0730</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	Referred to 3/1/21	}	7.0	<u>7.10</u>	<u>7.0</u>	<u>7.09</u>
pH 4.0 (S.U.)			4.0	<u>4.36</u>	<u>4.0</u>	—
pH 10.0 (S.U.)			10.0	<u>9.97</u>	<u>10.0</u>	—
Sp. Conductance (µS/cm)			4490 µS/cm	<u>4403</u>	<u>4490</u>	
ORP (mV)			228 mV	<u>233.9</u>	<u>228</u>	
Dissolved Oxygen			100%	<u>99.9</u>	<u>100</u>	
0.00 NTU			0	<u>0.0</u>	<u>0.0</u>	
1.0 NTU	1	<u>0.92</u>	<u>1.0</u>			
10.0 NTU	10	<u>10.03</u>	<u>10.0</u>			

Date: <u>3/3/21</u>	Time: <u>0720</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	Referred to 3/1/21	}	7.0	<u>7.12</u>	<u>7.0</u>	<u>7.10</u>
pH 4.0 (S.U.)			4.0	<u>4.44</u>	<u>4.0</u>	—
pH 10.0 (S.U.)			10.0	<u>10.98</u>	<u>10.0</u>	—
Sp. Conductance (µS/cm)			4490 µS/cm	<u>4417</u>	<u>4490</u>	
ORP (mV)			228 mV	<u>240.7</u>	<u>228</u>	
Dissolved Oxygen			100%	<u>99.5</u>	<u>100</u>	
0.00 NTU			0	<u>0.0</u>	<u>0.0</u>	
1.0 NTU	1	<u>0.99</u>	<u>1.0</u>			
10.0 NTU	10	<u>10.0</u>	<u>10.0</u>			

Signature: A. McClure

# Instrument Calibration Log



Personnel: Andrea McCreure

Project Name: \_\_\_\_\_ Plant Branch \_\_\_\_\_

Project Number: 166625418.021A

Device Names: SmarTroll / Lamotte2020we

Serial Numbers: 541714 ; 1859-0412

Date: <u>0715</u>	Time: <u>3/4/21</u>	Location: _____ Office _____ <input checked="" type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	} Refer to 3/1/21		7.0	7.10	7.0	7.08
pH 4.0 (S.U.)			4.0	4.47	4.0	—
pH 10.0 (S.U.)			10.0	9.80	10.0	—
Sp. Conductance (µS/cm)			4490 µS/cm	4427	4490	
ORP (mV)			228 mV	237.6	228	
Dissolved Oxygen			100%	99.2	100	
0.00 NTU			0	0.0	0.0	
1.0 NTU			1	0.91	1.0	
10.0 NTU			10	9.97	10.0	

Date: <u>3/5/21</u>	Time: <u>0715</u>	Location: _____ Office _____ <input checked="" type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	} Refer to 3/1/21		7.0	7.07	7.0	—
pH 4.0 (S.U.)			4.0	4.44	4.0	—
pH 10.0 (S.U.)			10.0	9.82	10.0	—
Sp. Conductance (µS/cm)			4490 µS/cm	4408	4490	
ORP (mV)			228 mV	233.6	228	
Dissolved Oxygen			100%	99.4	100	
0.00 NTU			0	0.0	0.0	
1.0 NTU			1	0.99	1.0	
10.0 NTU			10	9.95	10.0	

Date: _____	Time: _____	Location: _____ Office _____ <input type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)			7.0			
pH 4.0 (S.U.)			4.0			
pH 10.0 (S.U.)			10.0			
Sp. Conductance (µS/cm)			4490 µS/cm			
ORP (mV)			228 mV			
Dissolved Oxygen			100%			
0.00 NTU			0			
1.0 NTU			1			
10.0 NTU			10			

Signature: Andrea McCreure

# Instrument Calibration Log



Personnel: T-Martinez

Project Name: \_\_\_\_\_ Plant Branch \_\_\_\_\_

Project Number: 166625421

Device Names: \_\_\_\_\_ SmarTroll / Lamotte2020we

Serial Numbers: 642531 / 2283-2612

Date: <u>3-4-21</u>	Time: <u>0715</u>	Location: _____ Office _____ <input checked="" type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	<u>19340057</u>	<u>8/21</u>	7.0	<u>6.99</u>	<u>7.04</u>	<u>7.21</u>
pH 4.0 (S.U.)	<u>20010025</u>	<u>8/21</u>	4.0	<u>4.42</u>	<u>4.00</u>	-
pH 10.0 (S.U.)	<u>19320162</u>	<u>8/21</u>	10.0	<u>9.68</u>	<u>10.04</u>	-
Sp. Conductance (µS/cm)	<u>20010025</u>	<u>8/21</u>	4490 µS/cm	<u>4394</u>	<u>4400</u>	
ORP (mV)	<u>19460167</u>	<u>8/27</u>	228 mV	<u>241.1</u>	<u>228</u>	
Dissolved Oxygen	-	-	100%	<u>90.2</u>	<u>100</u>	
0.00 NTU	-	-	0	<u>0.13</u>	<u>-0.04</u>	
1.0 NTU	-	-	1	<u>0.94</u>	<u>1.00</u>	
10.0 NTU	-	-	10	<u>9.79</u>	<u>10.00</u>	

Date: _____	Time: _____	Location: _____ Office _____ <input type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)			7.0			
pH 4.0 (S.U.)			4.0			
pH 10.0 (S.U.)			10.0			
Sp. Conductance (µS/cm)			4490 µS/cm			
ORP (mV)			228 mV			
Dissolved Oxygen			100%			
0.00 NTU			0			
1.0 NTU			1			
10.0 NTU			10			

Date: _____	Time: _____	Location: _____ Office _____ <input type="checkbox"/> Field _____ Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)			7.0			
pH 4.0 (S.U.)			4.0			
pH 10.0 (S.U.)			10.0			
Sp. Conductance (µS/cm)			4490 µS/cm			
ORP (mV)			228 mV			
Dissolved Oxygen			100%			
0.00 NTU			0			
1.0 NTU			1			
10.0 NTU			10			

Signature: [Signature]

# Instrument Calibration Log



Personnel: T. Martinez

Project Name: Plant Branch

Project Number: 166625421

Device Names: SmarTroll / Lamotte2020we

Serial Numbers: 642531 / 2283-2612

Date: <u>3-1-21</u>	Time: <u>1459</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	<u>19340057</u>	<u>8/21</u>	7.0	<u>6.94</u>	<u>7.02</u>	<u>7.16</u>
pH 4.0 (S.U.)	<u>20010025</u>	<u>8/21</u>	4.0	<u>4.22</u>	<u>4.00</u>	-
pH 10.0 (S.U.)	<u>19320102</u>	<u>8/21</u>	10.0	<u>9.76</u>	<u>10.04</u>	-
Sp. Conductance (µS/cm)	<u>20010025</u>	<u>8/21</u>	4490 µS/cm	<u>4664</u>	<u>4490</u>	
ORP (mV)	<u>19460167</u>	<u>8/21</u>	228 mV	<u>231.6</u>	<u>228</u>	
Dissolved Oxygen	-	-	100%	<u>90.2</u>	<u>100</u>	
0.00 NTU	-	-	0	<u>-0.00</u>	<u>0.00</u>	
1.0 NTU	-	-	1	<u>1.07</u>	<u>1.00</u>	
10.0 NTU	-	-	10	<u>9.40</u>	<u>10.00</u>	

Date: <u>3-2-21</u>	Time: <u>0727</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)	<u>see</u>		7.0	<u>7.00</u>	<u>7.02</u>	<u>7.14</u>
pH 4.0 (S.U.)	<u>3-1-21</u>		4.0	<u>4.37</u>	<u>4.00</u>	-
pH 10.0 (S.U.)			10.0	<u>9.73</u>	<u>10.04</u>	-
Sp. Conductance (µS/cm)			4490 µS/cm	<u>4346</u>	<u>4490</u>	
ORP (mV)			228 mV	<u>241.1</u>	<u>228</u>	
Dissolved Oxygen			100%	<u>90.2</u>	<u>100</u>	
0.00 NTU			0	<u>0.00</u>	<u>0.00</u>	
1.0 NTU			1	<u>1.13</u>	<u>1.00</u>	
10.0 NTU			10	<u>9.41</u>	<u>10.00</u>	

Date: <u>3-3-21</u>	Time: <u>715</u>	Location: <input type="checkbox"/> Office <input checked="" type="checkbox"/> Field <input type="checkbox"/> Other: _____				
Standard	Lot Number	Expiration Date	Concentration	Initial	Final	Mid Day pH Check
pH 7.0 (S.U.)			7.0	<u>6.99</u>	<u>7.04</u>	<u>7.19</u>
pH 4.0 (S.U.)	<u>see</u>		4.0	<u>4.41</u>	<u>4.00</u>	-
pH 10.0 (S.U.)	<u>3-1-21</u>		10.0	<u>9.66</u>	<u>10.04</u>	-
Sp. Conductance (µS/cm)			4490 µS/cm	<u>4390</u>	<u>4490</u>	
ORP (mV)			228 mV	<u>246.7</u>	<u>228</u>	
Dissolved Oxygen			100%	<u>90.7</u>	<u>100</u>	
0.00 NTU			0	<u>-0.02</u>	<u>0.00</u>	
1.0 NTU			1	<u>1.07</u>	<u>1.00</u>	
10.0 NTU			10	<u>9.97</u>	<u>10.00</u>	

Signature: [Signature]



**APPENDIX A**

# WELL INSPECTION LOGS

# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well properly identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well properly vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
PZ-49		✓	✓	✓	✓	NA
<del>IW-C-1</del> Sw-B-2		✓	✓	Slightly overgrown	✓	NA
IW-B-1		✓	✓	✓	✓	NA
IW-D-1		✓	✓	✓	✓	NA
IW-E-1		✓	✓	✓	✓	NA
<del>IW-C-1</del> Sw-C-1	Access difficult - path overgrown	✓	✓	✓	✓	NA
IW-C-2	Access difficult - overgrown	✓	✓	✓	✓	NA
IW-D-2	✓	✓	✓	✓	✓	NA
DW-01	Did not check during this event					NA
DW-02	Did not check during this event					NA
PB-15	NOTE: All of the PB wells are just the 2" PVC. No concrete pads, no well casings, no locks.					NA
PB-2D						
PB-4S						
PB-4D						
PB-7S						
PB-8D						
PB-8S						
PB-10D						
PB-10S						
PB-13D						
PB-13S						

NOTES:  
1. Provide pictures of any deficiencies.



INSPECTOR/DATE *[Signature]* 8-21-2020

# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well properly identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annular space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well properly vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
	↑ or ↓					
BRGWA-25	↑E	✓	✓	✓	✓	✓
BRGWA-21	↑E	✓	✓	✓	✓	✓
BRGWA-55	↑E	✓	✓	✓	✓	✓
BRGWA-51	↑E	✓	✓	✓	✓	✓
BRGWA-65	↑E	✓	✓	✓	✓	✓
BRGWA-125	↑BCD	✓	✓	✓	✓	✓
BRGWA-121	↑BCD	✓	✓	✓	✓	✓
BRGWA-235	↑BCD	✓	✓	✓	✓	✓
BRGWC-251	↓BCD	✓	✓	✓	✓	✓
BRGWC-271	↓BCD	✓	✓	✓	✓	✓
BRGWC-291	↓BCD	✓	✓	✓	✓	✓
BRGWC-301	↓BCD	✓	✓	✓	✓	✓
BRGWC-325	↓BCD	✓	✓	✓	✓	✓
BRGWC-335	↓E	✓	✓	✓	✓	✓
BRGWC-345	↓E	✓	✓	✓	✓	✓
BRGWC-355	↓E	✓	✓	✓	✓	✓
BRGWC-175	↓E	✓	✓	✓	✓	✓ no pump dedicated
BRGWC-365	↓E	✓	✓	✓	✓	✓ no pump dedicated
BRGWC-375	↓E	✓	✓	✓	✓	✓
BRGWC-385	↓E	✓	✓	✓	✓	✓
BRGWC-45	↓BCD	✓	✓	✓	✓	✓ no pump dedicated
BRGWC-47	↓BCD	✓	✓	Small CRACK in Pad	✓	✓
BRGWC-50	↓BCD	✓	✓	✓	✓	✓
PZ-515	↓E	✓	✓	✓	Depth=47.98 (5000 1.3kd)	✓



Well-ID	POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well properly identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annular space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well properly vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
	↑ or ↓					
PZ-165		✓	✓	Pad not stable	✓	/
PZ-161		✓	✓	Pad not stable	✓	/
PZ-171		✓	✓	✓	✓	/
PZ-185		✓	✓	✓	✓	/
PZ-181		✓	✓	✓	✓	/
PZ-195		✓	✓	✓	✓	/
PZ-191		✓	✓	✓	✓	/
PZ-205		✓	✓	✓	✓	/
PZ-201		✓	✓	✓	✓	/
PZ-215		✓	✓	✓	✓	/
PZ-211		✓	✓	✓	✓	/
PZ-225		✓	✓	✓	✓	/
PZ-245	✓	✓	✓	✓	✓	/
PZ-261	✓	✓	✓	✓	✓	/
PZ-281	✓	✓	✓	✓	✓	/
PZ-315	✓	✓	✓	✓	✓	/
PZ-231	✓	✓	✓	✓	✓	/
PZ-405	✓	✓	✓	✓	✓	/
PZ-415	✓	✓	✓	✓	✓	/
PZ-425	✓	✓	✓	✓	✓	/
PZ-43	✓		No casing	No Pad	Not vented	/
PZ-44	✓		✓	✓	✓	/
PZ-46	✓		✓	✓	✓	/
PZ-48	✓		✓	✓	✓	/

# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION  ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well property identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well property vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
BRGWA-2S	↑E	ok	ok	ok	ok	ok
BRGWA-2I	↑E	ok	ok	ok	ok	ok
BRGWA-5S	↑E	ok	ok	ok	ok	ok
BRGWA-5I	↑E	ok	ok	ok	ok	ok
BRGWA-6S	↑E	ok	ok	ok	ok	ok
BRGWA-12S	↑BCD	ok	ok	ok	ok	ok
BRGWA-12I	↑BCD	ok	ok	ok	ok	ok
BRGWA-23S	↑BCD	ok	ok	ok	ok	ok
BRGWC-25I	↓BCD	ok	ok	ok	ok	ok
BRGWC-27I	↓BCD	ok	ok	ok	ok	ok
BRGWC-29I	↓BCD	ok	ok	ok	ok	ok
BRGWC-30I	↓BCD	ok	ok	ok	ok	ok
BRGWC-32S	↓BCD	ok	ok	ok	ok	ok
BRGWC-33S	↓E	ok	ok	ok	ok	ok
BRGWC-34S	↓E	ok	ok	ok	ok	ok
BRGWC-35S	↓E	ok	ok	ok	ok	ok
BRGWC-17S	↓E	ok	ok	ok	ok	no dedicated pump - sampled via peri
BRGWC-36S	↓E	ok	ok	ok	ok	no dedicated pump - sampled via peri
BRGWC-37S	↓E	ok	ok	ok	ok	ok
BRGWC-38S	↓E	ok	ok	ok	ok	ok
BRGWC-45	↓BCD	ok	ok	ok	ok	no dedicated pump - samplepro
BRGWC-47	↓BCD	ok	ok	ok	ok	no dedicated pump - samplepro
BRGWC-50	↓BCD	ok	ok	ok	ok	no dedicated pump - samplepro

# WELL INSPECTION FORM

## PLANT BRANCH

Well-ID	POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well property identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debirs and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well property vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
	↑ or ↓					
PZ-51S	↓E	ok	ok	ok	ok	no dedicated pump - samplepro
PZ-51I	↓E	ok	ok	ok	ok	no dedicated pump - samplepro
BRGWC-52I	↓BCD	ok	ok	ok	ok	no dedicated pump - samplepro
PZ-1S		ok	ok	ok	ok	N/A
PZ -1I		ok	ok	ok	ok	N/A
PZ-1D		ok	ok	ok	ok	N/A
PZ -3S		ok	ok	ok	ok	N/A
PZ - 3I		ok	ok	ok	ok	N/A
PZ- 3D		ok	ok	ok	ok	N/A
PZ- 4S		ok	ok	ok	ok	N/A
PZ - 4I		ok	ok	ok	ok	N/A
PZ-7S		ok	ok	ok	ok	N/A
PZ- 8S		ok	ok	ok	ok	N/A
PZ-9S		ok	ok	ok	ok	N/A
PZ-10S		ok	ok	ok	ok	N/A
PZ-11S		ok	ok	ok	ok	N/A
PZ-12D		ok	ok	ok	ok	N/A
PZ-13S		ok	ok	ok	ok	N/A
PZ-14S		ok	ok	ok	ok	N/A
PZ -14I		ok	ok	ok	ok	N/A
PZ-15S		ok	ok	ok	ok	N/A
PZ -15I		ok	ok	ok	ok	N/A
PZ-16S		ok	ok	ok	ok	N/A
PZ -16I		ok	ok	ok	ok	N/A
PZ -17I		ok	ok	ok	ok	N/A

# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION  ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well property identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well property vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
PZ-18S		ok	ok	ok	ok	N/A
PZ -18I		ok	ok	ok	ok	N/A
PZ-19S		ok	ok	ok	ok	N/A
PZ -19I		ok	ok	ok	ok	N/A
PZ-20S		ok	ok	ok	ok	N/A
PZ -20I		ok	ok	ok	ok	N/A
PZ-21S		ok	ok	ok	ok	N/A
PZ -21I		ok	ok	ok	ok	N/A
PZ-22S		ok	ok	ok	ok	N/A
PZ-24S		ok	ok	ok	ok	N/A
PZ-26I		ok	ok	ok	ok	N/A
PZ-28I		ok	ok	ok	ok	N/A
PZ-31S		ok	ok	ok	ok	N/A
PZ-23I		ok	ok	ok	ok	N/A
PZ-40S		ok	ok	ok	ok	N/A
PZ-41S		ok	ok	ok	ok	N/A
PZ-42S		ok	ok	ok	ok	N/A
PZ-43		ok	no casing	no pad	ok	N/A
PZ-44		ok	ok	ok	ok	N/A
PZ-46		ok	ok	ok	ok	N/A
PZ-48		ok	ok	ok	ok	N/A
PZ-49		ok	ok	ok	ok	N/A
PZ-52D	↓E	ok	ok	ok	ok	N/A
PZ-53D	↓E	ok	ok	ok	ok	N/A
PZ-54	↓E	ok	ok	ok	ok	N/A



# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION  ↑ or ↓	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Is the well visible and accessible? b. Is the well property identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debris and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreign objects? c. Is the well property vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundwater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)
PZ-55		ok	ok	ok	ok	N/A
PZ-56		ok	ok	ok	ok	N/A
IW-C-1		Path to well overgrown	ok	ok	ok	N/A
IW-B-1		ok	ok	ok	ok	N/A
IW-D-1		ok	ok	ok	ok	N/A
IW-E-1		ok	ok	ok	ok	N/A
IW-B-2		ok	ok	Pad partially overgrown	ok	N/A
IW-C-2		Path to well overgrown	ok	ok	ok	N/A
IW-D-2		ok	ok	ok	ok	N/A
PB-1S		no well tag	no well casing	no pad	ok	N/A
PB-2D		no well tag	no well casing	no pad	ok	N/A
PB-4S		no well tag	no well casing	no pad	ok	N/A
PB-4D		no well tag	no well casing	no pad	ok	N/A
PB-7S		no well tag	no well casing	no pad	ok	N/A
PB-8D		no well tag	no well casing	no pad	ok	N/A
PB-8S		no well tag	no well casing	no pad	ok	N/A
PB-10D		no well tag	no well casing	no pad	ok	N/A
PB-10S		no well tag	no well casing	no pad	ok	N/A
PB-13D		no well tag	no well casing	no pad	ok	N/A
PB-13S		no well tag	no well casing	no pad	ok	N/A

# WELL INSPECTION FORM PLANT BRANCH

Well-ID	POSITION  <small>↑ or ↓</small>	<b>LOCATION / IDENTIFICATION</b> a. Is the well visible and accessible? b. Is the well property identified/Correct Well ID? c. Is the well in high traffic area require traffic Protection? d. Is the drainage around the well acceptable (No standing water)? (Y / N / NA)	<b>PROTECTIVE CASING</b> a. Is protective casing free from damage/ b. Is casing free of degradation or deterioration/ c. Does casing have functioning weep hole? d. Is the annual space clear of debirs and water, or filled with pea gravel? e. Is the well locked and in good condition? (Y / N / NA)	<b>SURFACE PAD</b> a. Pad in Good Condition b. Pad Sloped away from Well? c. In contact with Protective Casing? d. In Contact with Ground Surface and Stable? e. Free of Debris? (Y / N / NA)	<b>INTERNAL CASING</b> a. Does the cap prevent entry of foreign material? b. Is the casing free of kinks or bends or any obstruction from foreigh objects? c. Is the well property vented for equilibrium of air pressure? d. Is the survey point clearly marked on the inner casing? e. Is the depth of the well consistent with the well log? f. Is the casing stable? (Y / N / NA)	<b>SAMPLING (Groundwater Wells Only)</b> a. Does well recharge adequately when purged? b. If dedicated sampling equipment installed, is it in good condition and specified in the approved groundater plan for the facility? c. Does the well require redevelopment? (Y / N / NA)

NOTES:

- 1) Provide pictures of any deficiencies.
- 2) Notify SCS /GPC of any noted deficiencies.
- 3) Provide additional comments as necessary to address any deficiencies.
- 4) -- = no information provided.
- 5) Well depths not checked during the September 2020 event.

**WELL INSPECTION FORM**  
**PLANT Branch**

WELL-ID	MONITORING WELL POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage  (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition  (S) for Satisfactory Discrepancies identified below	a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified  (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Stable/immobile  (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment d. Other (please specify)  (S) for Satisfactory Discrepancies identified below
	↑ or ↓					
BRGWA-2S	↑BOTH	S	S	S	S	S
BRGWA-2I	↑BOTH	S	S	S	S	S
BRGWA-5S	↑BOTH	S	S	S	S	S
BRGWA-5I	↑BOTH	S	S	S	S	S
BRGWA-6S	↑BOTH	S	S	S	S	S
BRGWA-12S	↑BCD	S	S	S	S	S
BRGWA-12I	↑BCD	S	S	S	S	S
BRGWA-23S	↑BCD	S	S	S	S	S
BRGWC-25I	↓BCD	S	S	S	S	S
BRGWC-27I	↓BCD	S	S	S	S	S
BRGWC-29I	↓BCD	S	S	S	S	S
BRGWC-30I	↓BCD	S	S	S	S	S
BRGWC-32S	↓BCD	S	S	S	S	S
BRGWC-33S	↓E	S	S	S	S	S
BRGWC-34S	↓E	S	S	S	S	S
BRGWC-35S	↓E	S	S	S	S	S
BRGWC-17S	↓E	S	S	S	S	no pump (9 ft deep)
BRGWC-36S	↓E	S	S	S	S	no pump (perched)
BRGWC-37S	↓E	S	S	S	S	S
BRGWC-38S	↓E	S	S	S	S	S
BRGWC-45	↓BCD	S	S	S	S	no pump
BRGWC-47	↓BCD	S	S	S	S	no pump
BRGWC-50	↓BCD	S	S	S	S	no pump

**WELL INSPECTION FORM**  
**PLANT Branch**

WELL-ID	MONITORING WELL POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage  (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition  (S) for Satisfactory Discrepancies identified below	a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified  (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weephole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Stable/immobile  (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment d. Other (please specify)  (S) for Satisfactory Discrepancies identified below
	↑ or ↓					
BRGWC-52I	↓BCD	S	S	S	S	no pump
PZ-50D	↓BCD	S	S	S	S	no pump, inadequate recharge to perform low flow
PZ-51S	↓BCD	S	S	S	S	no pump
PZ-51I	↓BCD	S	S	S	S	no pump
PZ-51D	↓BCD	S	S	S	S	no pump
PZ-1S		S	S	S	S	--
PZ-1I		S	S	S	S	--
PZ-1D		S	S	S	S	--
PZ-3S		S	S	S	S	--
PZ-3I		S	S	S	S	--
PZ-3D		S	S	S	S	--
PZ-4S		S	S	S	S	--
PZ-4I		S	S	S	S	--
PZ-7S		S	S	S	S	--
PZ-8S		S	S	S	S	--
PZ-9S		S	S	S	S	--
PZ-10S		S	S	S	S	--
PZ-11S		S	S	S	S	--
PZ-12D		S	S	S	S	--
PZ-13S		S	S	S	S	--
PZ-14S		S	S	S	S	--
PZ-14I		S	S	S	S	--

**WELL INSPECTION FORM**  
**PLANT Branch**

WELL-ID	MONITORING WELL POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage  (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition  (S) for Satisfactory Discrepancies identified below	a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified  (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weep hole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Stable/immobile  (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment d. Other (please specify)  (S) for Satisfactory Discrepancies identified below
	↑ or ↓					
PZ-15S		S	S	S	S	--
PZ -15I		S	S	S	S	--
PZ-16S		S	S	Down Tree on top of pad	S	--
PZ -16I		S	S	S	S	--
PZ -17I		S	S	S	S	--
PZ-18S		S	S	S	S	--
PZ -18I		S	S	S	S	--
PZ-19S		S	S	S	S	--
PZ -19I		S	S	S	S	--
PZ-20S		S	S	S	S	--
PZ -20I		S	S	S	S	--
PZ-21S		S	S	S	S	--
PZ -21I		S	S	S	S	--
PZ-22S		S	S	S	S	--
BRGWC-24S		S	S	S	S	--
PZ-26I		S	S	S	S	--
PZ-28I		S	S	S	S	--
PZ-31S		S	S	S	S	--
PZ-23I		S	S	S	S	--
PZ-40S		S	S	S	S	--
PZ-41S		S	S	S	S	--
PZ-42S		S	S	S	S	--
PZ-43		Needs a Label	S	S	S	--

**WELL INSPECTION FORM**  
**PLANT Branch**

WELL-ID	MONITORING WELL POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage  (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition  (S) for Satisfactory Discrepancies identified below	a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified  (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weep hole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Stable/immobile  (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment d. Other (please specify)  (S) for Satisfactory Discrepancies identified below
	↑ or ↓					
PZ-44		S	S	S	S	--
PZ-46		S	S	S	S	--
PZ-48		S	S	S	S	--
PZ-49		S	S	S	S	--
PZ-53D		S	S	S	S	--
PZ-54		S	S	S	S	--
IW-C-1		S	S	S	S	--
IW-B-1		S	S	S	S	S
IW-D-1		S	S	S	S	--
IW-E-1		S	S	S	S	--
IW-B-2		S	S	S	S	S
IW-C-2		S	S	S	S	--
IW-D-2		S	S	S	S	--

**WELL INSPECTION FORM**  
**PLANT Branch**

WELL-ID	MONITORING WELL POSITION	LOCATION / IDENTIFICATION	PROTECTIVE CASING	SURFACE PAD	INTERNAL CASING	SAMPLING (Groundwater Wells Only)
		a. Visible and accessible b. Properly identified with correct ID c. Not in a high traffic area that requires traffic protection d. No standing water nearby, adequate surrounding drainage  (S) for Satisfactory Discrepancies identified below	a. Free from damage, degradation, or deterioration b. Functioning weep hole c. Annular space free of debris and water, and has enough pea gravel d. Functioning cap and lock and in good condition  (S) for Satisfactory Discrepancies identified below	a. In good condition b. Sloped away from the well c. In contact with protective casing d. Stable and in contact with ground surface e. Free of debris f. Survey pin clearly identified  (S) for Satisfactory Discrepancies identified below	a. Cap prevents entry of foreign material b. Free of kinks or bends or any obstruction from foreign objects c. Weep hole present and cap not too tight to allow equilibrium for air pressure d. Survey point clearly marked on the inner casing e. Stable/immobile  (S) for Satisfactory Discrepancies identified below	a. Well recharges adequately when purged b. If dedicated sampling equipment installed, it is in good condition and specified in the approved groundwater plan for the facility c. Does not require redevelopment d. Other (please specify)  (S) for Satisfactory Discrepancies identified below
	↑ or ↓					
PB-1S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-2D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-4S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-4D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-7S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-8D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-8S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-10D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-10S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-13D		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--
PB-13S		Labeled with Permanent Marker Only	No Protective Casing	No Pad	S	--

NOTES:

1. Provide pictures of any deficiencies.
2. Notify SCS /GPC of any noted deficiencies.
3. Provide additional comments as necessary to address any deficiencies.

Issue resolved

Requires immediate attention

**APPENDIX A**

# DATA VALIDATION SUMMARIES



---

## Appendix A Quality Control Review of Analytical Data submitted by Pace Analytical Plant Branch CCR Ash Pond E

This narrative presents results of the quality control (QC) data review performed on analytical data submitted by Pace Analytical Services, LLC for groundwater samples collected at the Plant Branch CCR Ash Pond AP-E between August 18, 2020 and September 17, 2020. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and IV. Test methods included Inductively Coupled Plasma- Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (Standard Methods 2540C), Radium-226 (USEPA Method 9315) and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program (CLP) Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0), US EPA Region IV Data Validation Standard Operating Procedures for CLP Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2.0), the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

### DATA QUALITY OBJECTIVES

<b>Laboratory Precision:</b>	Laboratory goals for precision were met
<b>Field Precision:</b>	Field goals for precision were met.
<b>Accuracy:</b>	Laboratory goals for accuracy were met with the exception of sulfate as described in the qualifications sections below.
<b>Detection Limits:</b>	Project goals for detection limits were met. Certain samples were diluted due to the concentration of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.
<b>Completeness:</b>	There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** All holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the Site were qualified on the basis of low precision or accuracy, or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the data validation process.

- J** The analyte was positively identified above the method detection limit; however, the concentration reported is an estimated.
- U** The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in SDGs 92491389, 92491663, 92495656, 92495654, 92495964, and 92495960 qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- Certain mercury results in SDG 92491663 were qualified as non-detect (U) as the analyte was detected at a similar level in an associated blank sample. As shown in Table 2, when the original sample result was below the reporting limit (RL), the results were qualified as non-detect (U) and the results were raised to the RL.
- The sulfate result in sample BRGWC-36S was qualified as estimated biased low (J-) as the associated matrix spike and/or matrix spike duplicate (MS/MSD) recovery was below the QC criteria.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Ponds between August 18, 2020 and September 17, 2020 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use.

## REFERENCE

Paar J.G. and Porterfield D.R., April 1997, US Department of Energy, *Evaluation of Radiochemical Data Usability*.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy*, Revision 2.0.

USEPA, January 2017, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review*, Revision 0.0.

**TABLE 1**  
**Sample Summary Table - Pond E**  
**SCS Plant Branch**

SDGs	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analysis					
						Total Metals (EPA 6020B)	Mercury (EPA 7470)	Calcium (EPA 6010D)	Anions (EPA 300.0)	TDS (SM 2540C)	Radium-226 & 228 (EPA 9315 & 9320)
92491389	BRGWA-5I	8/18/2020	92491389001	GW	-	X	X	-	X	-	X
92491389	BRGWA-5S	8/18/2020	92491389002	GW	-	X	X	-	X	-	X
92491389	BRGWA-2I	8/18/2020	92491389003	GW	-	X	X	-	X	-	X
92491389	BRGWA-2S	8/18/2020	92491389004	GW	-	X	X	-	X	-	X
92491389	BRGWA-6S	8/18/2020	92491389005	GW	-	X	X	-	X	-	X
92491663	DUP-1	8/19/2020	92491663001	GW	FD (BRGWC-34S)	X	X	-	X	-	X
92491663	BRGWC-33S	8/19/2020	92491663002	GW	-	X	X	-	X	-	X
92491663	BRGWC-34S	8/19/2020	92491663003	GW	-	X	X	-	X	-	X
92491663	FB-1	8/19/2020	92491663004	WQ	FB (BRGWC-34S)	X	X	-	X	-	X
92491663	BRGWC-35S	8/19/2020	92491663005	GW	-	X	X	-	X	-	X
92491663	BRGWC-37S	8/19/2020	92491663006	GW	-	X	X	-	X	-	X
92491663	BRGWC-38S	8/19/2020	92491663007	GW	-	X	X	-	X	-	X
92491663	BRGWC-36S	8/19/2020	92491663008	GW	-	X	X	-	X	-	X
92495656	BRGWA-6S	9/15/2020	92495656001	GW	-	X	X	X	X	X	-
92495656	BRGWA-5S	9/15/2020	92495656002	GW	-	X	X	X	X	X	-
92495656	BRGWA-5I	9/15/2020	92495656003	GW	-	X	X	X	X	X	-
92495656	BRGWA-2S	9/15/2020	92495656004	GW	-	X	X	X	X	X	-
92495656	BRGWA-2I	9/15/2020	92495656005	GW	-	X	X	X	X	X	-
92495654	BRGWA-6S	9/15/2020	92495654001	GW	-	-	-	-	-	-	X
92495964	BRGWA-5S	9/15/2020	92495654002	GW	-	-	-	-	-	-	X
92495964	BRGWA-5I	9/15/2020	92495654003	GW	-	-	-	-	-	-	X
92495964	BRGWA-2S	9/15/2020	92495654004	GW	-	-	-	-	-	-	X
92495964	BRGWA-2I	9/15/2020	92495654005	GW	-	-	-	-	-	-	X
92495964	BRGWC-35S	9/16/2020	92495964001	GW	-	X	X	X	X	X	-
92495964	BRGWC-34S	9/16/2020	92495964002	GW	-	X	X	X	X	X	-
92495964	BRGWC-33S	9/16/2020	92495964003	GW	-	X	X	X	X	X	-
92495964	BRGWC-17S	9/16/2020	92495964004	GW	-	X	X	X	X	X	-
92495964	BRGWC-36S	9/16/2020	92495964005	GW	-	X	X	X	X	X	-
92495964	BRGWC-37S	9/16/2020	92495964006	GW	-	X	X	X	X	X	-
92495964	FB-1	9/16/2020	92495964007	WQ	FB (BRGWC-34S)	X	X	X	X	X	-
92495964	DUP-2	9/16/2020	92495964008	GW	FD (BRGWC-36S)	X	X	X	X	X	-
92495964	BRGWC-38S	9/17/2020	92495964009	GW	-	X	X	X	X	X	-
92495960	BRGWC-35S	9/16/2020	92495960001	GW	-	-	-	-	-	-	X
92495960	BRGWC-34S	9/16/2020	92495960002	GW	-	-	-	-	-	-	X
92495960	BRGWC-33S	9/16/2020	92495960003	GW	-	-	-	-	-	-	X
92495960	BRGWC-17S	9/16/2020	92495960004	GW	-	-	-	-	-	-	X
92495960	BRGWC-36S	9/16/2020	92495960005	GW	-	-	-	-	-	-	X
92495960	BRGWC-37S	9/16/2020	92495960006	GW	-	-	-	-	-	-	X
92495960	FB-1	9/16/2020	92495960007	WQ	FB( BRGWC-34S)	-	-	-	-	-	X
92495960	DUP-2	9/16/2020	92495960008	GW	FD (BRGWC-36S)	-	-	-	-	-	X
92495960	BRGWC-38S	9/17/2020	92495960009	GW	-	-	-	-	-	-	X

**Abbreviations:**

- FB - Field blank
- FD - Field duplicate
- GW - Groundwater
- WQ - Water Quality
- TDS - Total Dissolved Solids
- SDG - Sample Delivery Group
- QC - Quality Control

**TABLE 2**  
**Qualifier Summary Table - Pond E**  
**Plant Branch**

<i>SDG</i>	<i>Sample Name</i>	<i>Constituent</i>	<i>New Result</i>	<i>New RL or MDC</i>	<i>Qualifier</i>	<i>Reason</i>
92495964	BRGWC-36S	Sulfate	-	-	J-	MS/MSD recovered below criteria
92491663	BRGWC-34S	Mercury	0.0002	-	U	Field blank detection

**Abbreviations:**

RL : Reporting Limit  
 SDG : Sample Delivery Group  
 MDC : Minimum Detectable Concentration  
 MS/MSD : Matrix Spike/Matrix Spike Duplicate

**Qualifiers:**

U : Non-detect result  
 J-: Estimated result, bias low

---

## Appendix A Quality Control Review of Analytical Data submitted by Pace Analytical Plant Branch CCR Ash Pond E

This narrative presents results of the quality control (QC) data review performed on analytical data submitted by Pace Analytical Services, LLC for groundwater samples collected at the Plant Branch CCR Ash Pond AP-E between March 1, 2021 and March 4, 2021. The chemical data were reviewed to identify quality issues which could affect the use of the data for decision making purposes.

Information regarding the primary sample locations, analytical parameters, QC samples, sampling dates, and laboratory sample delivery group (SDG) designations is summarized in Table 1. In accordance with groundwater monitoring and corrective action procedures discussed in Title 40 CFR, Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments, the samples were analyzed for detection monitoring constituents listed in 40 CFR, Part 257, Appendix III and IV. Test methods included Inductively Coupled Plasma- Mass Spectrometry (ICP-MS) (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Inductively Coupled Plasma (ICP) (6010D), Determination of Inorganic Anions By Ion Chromatography (USEPA Method 300.0), Total Dissolved Solids (TDS) (Standard Methods 2540C), Radium-226 (USEPA Method 9315) and Radium-228 (USEPA Method 9320).

Data were reviewed in accordance with the US EPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program (CLP) Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0), US EPA Region IV Data Validation Standard Operating Procedures for CLP Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2.0), the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017), and US Department of Energy, Evaluation of Radiochemical Data Usability (April 1997). The review included an assessment of the results for completeness, precision (laboratory duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples and matrix spike samples), and blank contamination (including field and laboratory blanks). Additionally, sample procedures, holding times and chains-of-custody were reviewed. Where there was a discrepancy between the QC criteria in the guidelines and the QC criterion established in the analytic methodology, method-specific criteria or professional judgment was used.

### DATA QUALITY OBJECTIVES

<b>Laboratory Precision:</b>	Laboratory goals for precision were met
<b>Field Precision:</b>	Field goals for precision were met.
<b>Accuracy:</b>	Laboratory goals for accuracy were met.
<b>Sensitivity:</b>	Project goals for detection limits were met. Certain samples were diluted due to the concentration of target analytes. Dilutions do not require qualifications based on USEPA guidelines. Detection and reporting limits of non-detect compounds are elevated proportional to the dilution when undiluted sample results are not provided by the laboratory. The data usability of diluted results was evaluated by the data user in the context of site-wide characterization.
<b>Completeness:</b>	There were no rejected analytical results for this event, resulting in a completion of 100%.

**Holding Times:** All holding time requirements were met.

## QUALIFICATIONS

In general, chemical results for the samples collected at the Site were qualified on the basis of low precision or accuracy, or on the basis of professional judgment. The following definitions provide brief explanations of the qualifiers which may have been assigned to data by the laboratory during the data validation process.

- J** The analyte was positively identified above the method detection limit; however, the concentration reported is an estimated.
- U** The analyte was not detected above the method detection limit.

The data generated as part of this sampling event met the QC criteria established in the respective analytical methods and data validation guidelines except as specified below. Although these qualifications were applied to some data from samples collected at the site and reported in SDGs 92524840, 92525657, 92524837, and 92525650 qualifications may not have been required or applied to all samples collected. No qualifications were required based on the data validation for Pond E.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Ponds between March 1, 2021 and March 4, 2021 in accordance with the analytical methods, the laboratory specific QC criteria, and the guidelines. As described above, 100% of the results were acceptable for project use. The data are considered usable for meeting project objectives and the results are considered valid.

## REFERENCE

Paar J.G. and Porterfield D.R., April 1997, US Department of Energy, *Evaluation of Radiochemical Data Usability*.

USEPA, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data By Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy*, Revision 2.0.

USEPA, January 2017, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review*, Revision 0.0.



**TABLE 1**  
**Sample Summary Table - Pond E**  
**SCS Plant Branch**

SDGs	Field Identification	Collection Date	Lab Identification	Matrix	QC Samples	Analysis						
						Field pH	Total Metals (EPA 6020B)	Calcium (EPA 6010D)	Mercury (SW 7470A)	Anions (EPA 300.0)	TDS (SM2540C-2011)	Radium-226/228 (EPA 9315/9320)
92524840	BRGWA-6S	3/1/2021	92524840001	GW	-	X	X	X	X	X	X	-
92524840	BRGWA-2I	3/1/2021	92524840002	GW	-	X	X	X	X	X	X	-
92524840	BRGWA-5S	3/2/2021	92524840003	GW	-	X	X	X	X	X	X	-
92524840	BRGWA-5I	3/2/2021	92524840004	GW	-	X	X	X	X	X	X	-
92524840	BRGWA-2S	3/2/2021	92524840005	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-33S	3/3/2021	92525657001	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-34S	3/3/2021	92525657002	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-36S	3/3/2021	92525657003	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-37S	3/3/2021	92525657004	GW	-	X	X	X	X	X	X	-
92525657	FB-1	3/3/2021	92525657005	WQ	FB	X	X	X	X	X	X	-
92525657	BRGWC-35S	3/4/2021	92525657006	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-17S	3/4/2021	92525657007	GW	-	X	X	X	X	X	X	-
92525657	BRGWC-38S	3/4/2021	92525657008	GW	-	X	X	X	X	X	X	-
92525657	DUP-2	3/4/2021	92525657009	GW	FD (BRGWC-35S)	X	X	X	X	X	X	-
92524837	BRGWA-6S	3/1/2021	92524837001	GW	-	-	-	-	-	-	-	X
92524837	BRGWA-2I	3/1/2021	92524837002	GW	-	-	-	-	-	-	-	X
92524837	BRGWA-5S	3/2/2021	92524837003	GW	-	-	-	-	-	-	-	X
92524837	BRGWA-5I	3/2/2021	92524837004	GW	-	-	-	-	-	-	-	X
92524837	BRGWA-2S	3/2/2021	92524837005	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-33S	3/3/2021	92525650001	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-34S	3/3/2021	92525650002	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-36S	3/3/2021	92525650003	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-37S	3/3/2021	92525650004	GW	-	-	-	-	-	-	-	X
92525650	FB-1	3/3/2021	92525650005	WQ	FB	-	-	-	-	-	-	X
92525650	BRGWC-35S	3/4/2021	92525650006	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-17S	3/4/2021	92525650007	GW	-	-	-	-	-	-	-	X
92525650	BRGWC-38S	3/4/2021	92525650008	GW	-	-	-	-	-	-	-	X
92525650	DUP-2	3/4/2021	92525650009	GW	FD (BRGWC-35S)	-	-	-	-	-	-	X

**Abbreviations:**  
 SDG - Sample Delivery Group  
 QC - Quality Control  
 TDS - Total Dissolved Solids  
 EPA - Environmental Protection Agency  
 SW - Solid Waste  
 SM - Standard Method  
 GW - Groundwater  
 WQ - Water Quality  
 FB - Field blank  
 FD - Field duplicate

**TABLE 2**  
**Qualifier Summary Table - Pond E**  
**Plant Branch**

<i>SDG</i>	<i>Sample Name</i>	<i>Constituent</i>	<i>New Result</i>	<i>New RL or MDC</i>	<i>Qualifier</i>	<i>Reason</i>
						No qualifications required.

**Abbreviations:**

SDG : Sample delivery group

MDC : Minimum detectable concentration

RL : Reporting limit

**APPENDIX B**

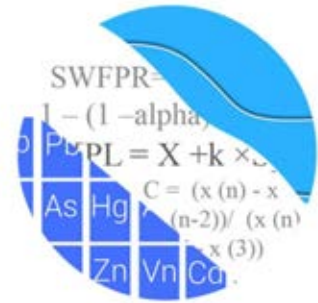
# STATISTICAL ANALYSES

## September 2020

# GROUNDWATER STATS CONSULTING

February 23, 2021

Southern Company Services  
Attn: Mr. Joju Abraham  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308-3374



Re: Plant Branch Pond E – September 2020 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the September 2020 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant Branch Pond E. 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 for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** BRGWA-2I, BRGWA-2S, BRGWA-5I, BRGWA-5S, BRGWA-6S
- **Downgradient wells:** BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-37S, BRGWC-38S

The monitoring program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter. A substitution of the most recent reporting limit is used for nondetect data.

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).

In earlier analyses, 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 with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

### **Summary of Statistical Methods – Appendix III Parameters:**

Based on the earlier evaluation described above, the following methods were selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of

data are nondetects, a nonparametric test is utilized. While the false positive rate associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected 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.

## **Summary of Background Screening – Conducted in March 2019**

### Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified

either visually or by Tukey's test, flagged in the computer database with "o" and deselected prior to construction of statistical limits. A list of flagged values is provided in the outlier summary (Figure C). Although outliers were screened for all wells, only outliers in upgradient wells will affect the interwell prediction limits.

When suspected outliers were evaluated using the Tukey box plot method during the previous screening, a few outliers were identified. In cases where the most recent value was identified as an outlier, values were not flagged in the database as they may represent a future trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

When any values are flagged in the database as outliers, they were plotted in a disconnected and lighter symbol on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. Note that the reporting limit for boron for this event was 0.1 mg/L; however, the historical reporting limit of 0.04 mg/L was substituted for all nondetects which provides more conservative (lower) statistical limits.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a handful of statistically significant decreasing and increasing trends for the Appendix III parameters. All trends noted were relatively low in magnitude when compared to average concentrations and were in downgradient wells; therefore, they did not affect the interwell limits, and no adjustments were made to the data sets. Trend test results were included with the background screening report.

### Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified no variation among upgradient well data for fluoride, making this constituent eligible for interwell analyses. Variation was noted for boron, calcium, chloride, pH, sulfate and TDS. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

### **Evaluation of Appendix III Parameters – September 2020**

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2020 (Figure D). Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). As mentioned above, due to an increased reporting limit (RL) of <0.1 mg/L for the most recent sample event, the historical reporting limit of 0.04 mg/L was substituted for nondetects for boron to maintain conservative statistical limits.

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 and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Prediction limit exceedances were noted for Appendix III parameters. A summary table of the background prediction limits follows this letter.

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. While several statistically significant decreasing trends were noted for upgradient and downgradient wells, two statistically significant increasing trends were identified for boron in well BRGWC-35S and chloride in well GRGWC-36S. A summary of the trend test results follows this letter.

### **Evaluation of Appendix IV Parameters – September 2020**

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new outliers were flagged. Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for chromium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a) (Figure G).

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

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified level have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the September 2020 sample event (Figure H). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well with detections (Figure H). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). 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. Exceedances were noted for beryllium in well BRGWC-38S and for cobalt in wells BRGWC-33S and BRGWC-38S. A summary of the confidence intervals follows this letter.

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Branch Pond E. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,



Kristina L. Rayner  
Groundwater Statistician

# Interwell Prediction Limit Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:16 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-33S	0.04	n/a	9/16/2020	1.1	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	9/16/2020	2.2	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	9/16/2020	1.9	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	9/16/2020	0.99	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	9/17/2020	1.4	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	9/16/2020	77.7	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	9/16/2020	61.8	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	9/16/2020	45.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	9/17/2020	33.1	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	9/16/2020	6.6	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	9/16/2020	6	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	9/16/2020	7.9	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	9/17/2020	6.1	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.3	n/a	9/17/2020	0.68	Yes	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
pH, Field (S.U)	BRGWC-33S	7.108	5.895	9/16/2020	4.78	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.108	5.895	9/16/2020	5.81	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.108	5.895	9/16/2020	5.58	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.108	5.895	9/17/2020	4.17	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.108	5.895	9/16/2020	5.84	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	9/16/2020	151	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	9/16/2020	154	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	9/16/2020	283	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	9/16/2020	270	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	9/16/2020	256	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	9/17/2020	356	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	9/16/2020	316	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	9/16/2020	392	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	9/16/2020	474	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	9/16/2020	463	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	9/17/2020	587	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

# Interwell Prediction Limit Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:16 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-17S	0.04	n/a	9/16/2020	0.0066J	No	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.04</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>1.1</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>68.33</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	BRGWC-34S	0.04	n/a	9/16/2020	2.2	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	9/16/2020	1.9	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	9/16/2020	0.99	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	9/17/2020	1.4	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-37S	0.04	n/a	9/16/2020	0.0062J	No	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	9/16/2020	77.7	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	9/16/2020	61.8	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	9/16/2020	45.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	9/17/2020	33.1	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-37S	24	n/a	9/16/2020	3.2	No	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-17S	4.8	n/a	9/16/2020	4.2	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-33S	4.8	n/a	9/16/2020	4.1	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-34S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>6.6</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-35S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>6</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>7.9</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-38S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>6.1</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	BRGWC-37S	4.8	n/a	9/16/2020	1.8	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-17S	0.3	n/a	9/16/2020	0.1	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-33S	0.3	n/a	9/16/2020	0.085J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-34S	0.3	n/a	9/16/2020	0.077J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-35S	0.3	n/a	9/16/2020	0.062J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-36S	0.3	n/a	9/16/2020	0.1ND	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.3</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>0.68</b>	<b>Yes</b>	<b>70</b>	<b>n/a</b>	<b>n/a</b>	<b>52.86</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0003866</b>	<b>NP Inter (NDs) 1 of 2</b>
Fluoride (mg/L)	BRGWC-37S	0.3	n/a	9/16/2020	0.1ND	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
pH, Field (S.U)	BRGWC-17S	7.108	5.895	9/16/2020	6.26	No	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
<b>pH, Field (S.U)</b>	<b>BRGWC-33S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>4.78</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-34S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.81</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
pH, Field (S.U)	BRGWC-35S	7.108	5.895	9/16/2020	5.96	No	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
<b>pH, Field (S.U)</b>	<b>BRGWC-36S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.58</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/17/2020</b>	<b>4.17</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-37S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.84</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	9/16/2020	151	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	9/16/2020	154	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	9/16/2020	283	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	9/16/2020	270	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	9/16/2020	256	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	9/17/2020	356	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-37S	7.5	n/a	9/16/2020	0.5ND	No	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-17S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>316</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-33S	299	n/a	9/16/2020	88	No	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>392</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-35S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>474</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>463</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>299</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>587</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-37S	299	n/a	9/16/2020	31	No	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

# Trend Test Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:24 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWC-35S	0.2452	52	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-34S	-6.103	-42	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-38S	-2.362	-40	-38	Yes	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-36S	1.313	52	38	Yes	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-2I (bg)	-0.1422	-59	-48	Yes	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-38S	-0.215	-63	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-34S	-38.53	-55	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-38S	-25.44	-41	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	-67.45	-48	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	-15.74	-41	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	-51.51	-52	-38	Yes	12	0	n/a	n/a	0.01	NP

# Trend Test Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:24 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-2I (bg)	-0.0003913	-9	-38	No	12	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	5	38	No	12	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-6	-38	No	12	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	-2	-38	No	12	75	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-33S	0.01641	7	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-34S	0.01111	8	38	No	12	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>BRGWC-35S</b>	<b>0.2452</b>	<b>52</b>	<b>38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	BRGWC-36S	0.05331	34	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-38S	-0.08681	-27	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	1.137	29	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.05889	-17	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.08584	-3	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.153	-4	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1455	32	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-17S	1.454	23	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-33S	-1.126	-16	-38	No	12	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-34S</b>	<b>-6.103</b>	<b>-42</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	BRGWC-35S	0.7703	13	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-36S	-1.111	-23	-38	No	12	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-38S</b>	<b>-2.362</b>	<b>-40</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWA-2I (bg)	-0.02706	-7	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0	0	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.1482	-21	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	-0.01532	-6	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0.01532	12	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-34S	-0.2166	-33	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-35S	0.08852	21	38	No	12	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>1.313</b>	<b>52</b>	<b>38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-38S	0.2779	14	38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2I (bg)	-0.01511	-39	-48	No	14	42.86	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	7	48	No	14	57.14	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	17	48	No	14	71.43	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.01067	-29	-48	No	14	35.71	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0	11	48	No	14	57.14	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-38S	0.04873	16	48	No	14	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWA-2I (bg)</b>	<b>-0.1422</b>	<b>-59</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWA-2S (bg)	-0.04353	-47	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.03452	-29	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.05503	-32	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-6S (bg)	-0.04101	-17	-43	No	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-33S	-0.01441	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-34S	0	-2	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-36S	-0.01515	-10	-43	No	13	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>-0.215</b>	<b>-63</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWC-37S	0.01714	1	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2I (bg)	-0.1119	-11	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.04767	13	38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	-0.1873	-8	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.07276	-22	-38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.01104	-8	-38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-17S	7.267	19	38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-33S	-13.69	-29	-38	No	12	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-34S</b>	<b>-38.53</b>	<b>-55</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWC-35S	0.9989	3	38	No	12	0	n/a	n/a	0.01	NP

# Trend Test Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:24 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate as SO4 (mg/L)	BRGWC-36S	-11.18	-19	-38	No	12	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-38S</b>	<b>-25.44</b>	<b>-41</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	-1.984	-2	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	4.612	11	38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-3.347	-9	-38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-3.649	-23	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	0.4269	1	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	-4.988	-8	-38	No	12	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>-67.45</b>	<b>-48</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	-1.794	-2	-38	No	12	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>-15.74</b>	<b>-41</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>-51.51</b>	<b>-52</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Tolerance Limit Summary Table

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:37 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	65	n/a	n/a	89.23	n/a	n/a	0.03565	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	65	n/a	n/a	73.85	n/a	n/a	0.03565	NP Inter(normality)
Barium (mg/L)	n/a	0.063	65	n/a	n/a	0	n/a	n/a	0.03565	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01356	65	0.005521	0.004018	20	Kaplan-Meier	No	0.05	Inter
Cobalt (mg/L)	n/a	0.005	63	n/a	n/a	49.21	n/a	n/a	0.0395	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	1.42	65	0.676	0.3721	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.3	70	n/a	n/a	52.86	n/a	n/a	0.02758	NP Inter(normality)
Lead (mg/L)	n/a	0.005	65	n/a	n/a	75.38	n/a	n/a	0.03565	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	65	n/a	n/a	47.69	n/a	n/a	0.03565	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	55	n/a	n/a	90.91	n/a	n/a	0.05954	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	65	n/a	n/a	70.77	n/a	n/a	0.03565	NP Inter(normality)
Selenium (mg/L)	n/a	0.01	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)



<b>PLANT BRANCH POND E GWPS</b>			
<b>Constituent Name</b>	<b>MCL</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006	0.003	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.063	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.014	0.1
Cobalt, Total (mg/L)	n/a	0.005	0.005
Combined Radium, Total (pCi/L)	5	1.42	5
Fluoride, Total (mg/L)	4	0.3	4
Lead, Total (mg/L)	n/a	0.005	0.005
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

*\*MCL = Maximum Contaminant Level*

*\*GWPS = Groundwater Protection Standard*

# Confidence Interval Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	BRGWC-38S	0.009752	0.008206	0.004	Yes 14	0.008979	0.001091	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-33S	0.05413	0.04206	0.005	Yes 14	0.04809	0.008521	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-38S	0.2679	0.2199	0.005	Yes 13	0.2439	0.03224	0	None	No	0.01	Param.

# Confidence Interval Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-17S	0.003	0.0009	0.006	No	13	0.002838	0.0005824	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-36S	0.003	0.00049	0.006	No	13	0.002418	0.001106	76.92	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-38S	0.003	0.0007	0.006	No	13	0.002823	0.0006379	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-17S	0.005	0.0006	0.01	No	13	0.003862	0.001897	69.23	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	13	0.004656	0.00124	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-33S	0.005	0.0006	0.01	No	14	0.004369	0.001605	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-35S	0.005	0.00044	0.01	No	13	0.003957	0.001983	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-36S	0.005	0.0007	0.01	No	13	0.004012	0.001882	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-38S	0.003132	0.001411	0.01	No	13	0.002783	0.001583	15.38	Kaplan-Meier	sqrt(x)	0.01	Param.
Barium (mg/L)	BRGWC-17S	0.04297	0.03814	2	No	13	0.04055	0.003253	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04652	0.02982	2	No	13	0.03817	0.01123	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-33S	0.02281	0.02023	2	No	14	0.02152	0.001822	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-34S	0.03631	0.02575	2	No	13	0.03103	0.007105	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-35S	0.0627	0.0382	2	No	13	0.05178	0.02009	0	None	ln(x)	0.01	Param.
Barium (mg/L)	BRGWC-36S	0.04729	0.03286	2	No	13	0.04039	0.01069	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	BRGWC-38S	0.0272	0.01589	2	No	13	0.02192	0.008686	7.692	None	x^(1/3)	0.01	Param.
Beryllium (mg/L)	BRGWC-33S	0.0022	0.0017	0.004	No	14	0.002507	0.002189	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-34S	0.003	0.00012	0.004	No	13	0.001875	0.003691	23.08	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-35S	0.003	0.0001	0.004	No	13	0.001868	0.003694	23.08	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-36S	0.01	0.00009	0.004	No	14	0.003133	0.004571	35.71	None	No	0.01	NP (normality)
<b>Beryllium (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.009752</b>	<b>0.008206</b>	<b>0.004</b>	<b>Yes</b>	<b>14</b>	<b>0.008979</b>	<b>0.001091</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cadmium (mg/L)	BRGWC-32S	0.0025	0.001	0.005	No	14	0.002051	0.0009155	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-33S	0.0006	0.00032	0.005	No	14	0.00059	0.0005785	14.29	None	No	0.01	NP (normality)
Cadmium (mg/L)	BRGWC-34S	0.001	0.00017	0.005	No	13	0.0007062	0.0008324	23.08	None	No	0.01	NP (normality)
Cadmium (mg/L)	BRGWC-36S	0.0025	0.0001	0.005	No	14	0.002156	0.0008752	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-38S	0.001	0.0005	0.005	No	13	0.0007615	0.0005414	15.38	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-17S	0.01324	0.00978	0.1	No	13	0.01155	0.002474	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	BRGWC-32S	0.01	0.0011	0.1	No	13	0.004808	0.004293	38.46	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-33S	0.01	0.00049	0.1	No	14	0.009321	0.002542	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-35S	0.006756	0.004114	0.1	No	13	0.006315	0.00236	15.38	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	BRGWC-36S	0.008908	0.007461	0.1	No	13	0.008185	0.0009728	7.692	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-38S	0.0044	0.0028	0.1	No	13	0.004215	0.001921	7.692	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.01	0.0025	0.005	No	14	0.005179	0.001539	92.86	None	No	0.01	NP (NDs)
<b>Cobalt (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.05413</b>	<b>0.04206</b>	<b>0.005</b>	<b>Yes</b>	<b>14</b>	<b>0.04809</b>	<b>0.008521</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	BRGWC-34S	0.005	0.0029	0.005	No	13	0.004238	0.001843	15.38	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-35S	0.01	0.0004	0.005	No	13	0.004138	0.002638	69.23	None	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.2679</b>	<b>0.2199</b>	<b>0.005</b>	<b>Yes</b>	<b>13</b>	<b>0.2439</b>	<b>0.03224</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	BRGWC-17S	0.8565	0.3066	5	No	13	0.5816	0.3698	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.163	0.4582	5	No	13	0.8107	0.474	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-33S	1.316	0.6697	5	No	13	0.9926	0.4342	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-34S	1.113	0.7181	5	No	13	0.9157	0.2657	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-35S	1.114	0.4588	5	No	13	0.7863	0.4404	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-36S	1.289	0.6698	5	No	13	0.9795	0.4165	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-38S	3.222	2.02	5	No	13	2.621	0.8083	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-17S	0.1689	0.07726	4	No	14	0.1269	0.07314	7.143	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.15	0.09	4	No	14	0.1257	0.06248	64.29	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-33S	0.2587	0.1184	4	No	15	0.1955	0.1142	6.667	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-34S	0.1657	0.07895	4	No	14	0.1324	0.08901	14.29	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-35S	0.1302	0.05494	4	No	14	0.1074	0.07988	21.43	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-36S	0.15	0.07	4	No	14	0.1265	0.1172	57.14	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-38S	0.9706	0.7063	4	No	14	0.8493	0.219	0	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-17S	0.005	0.000054	0.005	No	13	0.00462	0.001372	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-33S	0.005	0.00007	0.005	No	14	0.001501	0.002297	28.57	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-34S	0.005	0.0003	0.005	No	13	0.004261	0.001805	84.62	None	No	0.01	NP (NDs)

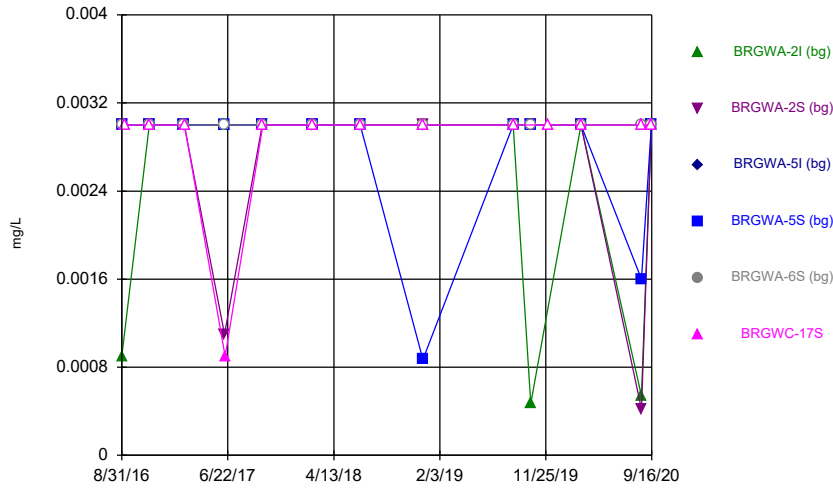
# Confidence Interval Summary - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	BRGWC-35S	0.005	0.00012	0.005	No	13	0.003871	0.002146	76.92	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-36S	0.005	0.000047	0.005	No	13	0.004619	0.001374	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-38S	0.0005	0.00032	0.005	No	13	0.0007431	0.00128	7.692	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-17S	0.03	0.00097	0.089	No	13	0.02107	0.01394	69.23	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-32S	0.03	0.002	0.089	No	13	0.006446	0.01045	15.38	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-33S	0.011	0.0092	0.089	No	14	0.01141	0.005392	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-34S	0.03	0.00082	0.089	No	13	0.02103	0.014	69.23	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-35S	0.0023	0.002	0.089	No	13	0.004277	0.007729	7.692	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-36S	0.03	0.0022	0.089	No	13	0.006685	0.01035	15.38	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-38S	0.0254	0.02	0.089	No	13	0.02225	0.002833	7.692	None	No	0.01	NP (normality)
Mercury (mg/L)	BRGWC-17S	0.0005	0.000084	0.002	No	11	0.0004222	0.0001732	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0005	0.00009	0.002	No	11	0.0003884	0.0001912	72.73	None	No	0.006	NP (normality)
Mercury (mg/L)	BRGWC-33S	0.0005	0.00007	0.002	No	12	0.0004258	0.0001733	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-34S	0.0005	0.00007	0.002	No	11	0.0003845	0.0001986	72.73	None	No	0.006	NP (normality)
Mercury (mg/L)	BRGWC-35S	0.0005	0.00013	0.002	No	11	0.0004273	0.0001624	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-36S	0.0005	0.00013	0.002	No	11	0.0004273	0.0001624	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-38S	0.0001571	0.00008094	0.002	No	11	0.0002	0.0001536	18.18	Kaplan-Meier In(x)		0.01	Param.
Selenium (mg/L)	BRGWC-17S	0.01	0.0018	0.05	No	13	0.004769	0.003691	30.77	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-32S	0.1	0.0019	0.05	No	14	0.04472	0.04778	28.57	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-33S	0.01	0.0018	0.05	No	14	0.006421	0.003759	50	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-36S	0.006061	0.00315	0.05	No	13	0.004685	0.002163	7.692	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-38S	0.04305	0.03317	0.05	No	13	0.03811	0.006644	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-17S	0.001	0.000066	0.002	No	13	0.0009282	0.000259	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	BRGWC-33S	0.00024	0.00018	0.002	No	14	0.0002536	0.000216	7.143	None	No	0.01	NP (normality)
Thallium (mg/L)	BRGWC-38S	0.001	0.00018	0.002	No	13	0.0004085	0.0003404	23.08	None	No	0.01	NP (normality)

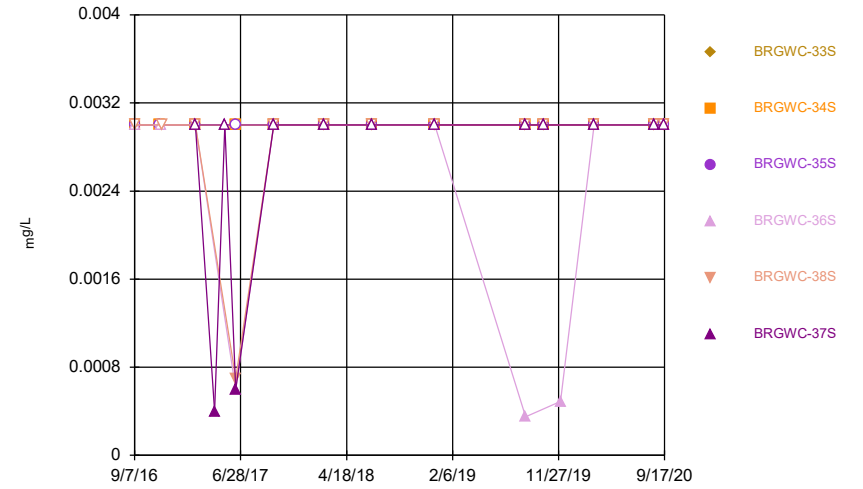
FIGURE A.

Time Series



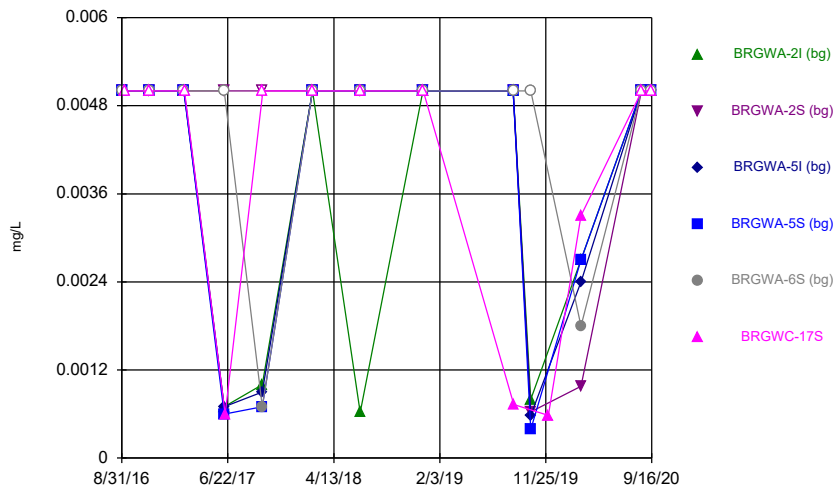
Constituent: Antimony Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



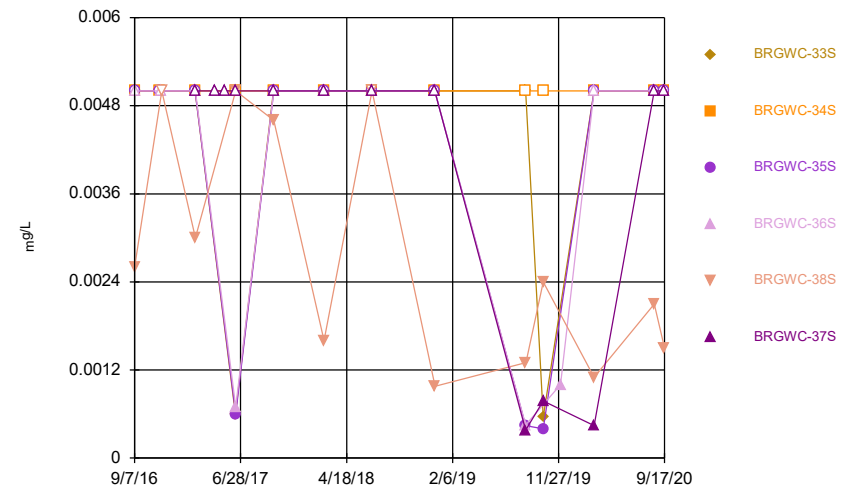
Constituent: Antimony Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



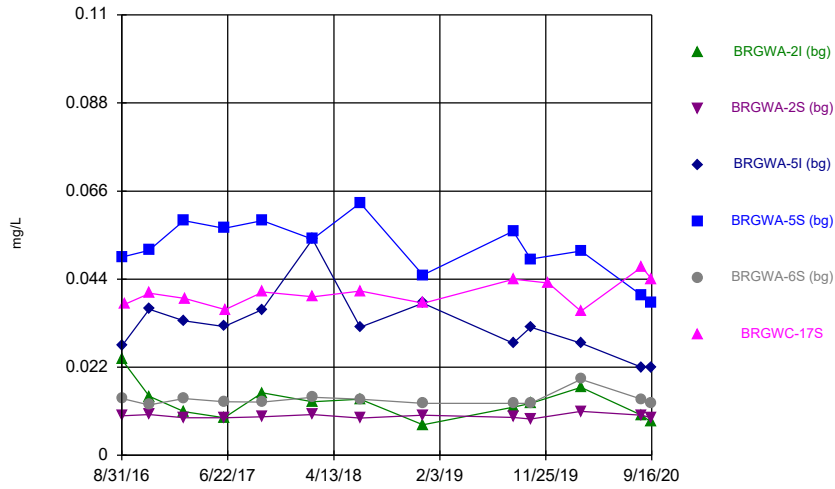
Constituent: Arsenic Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



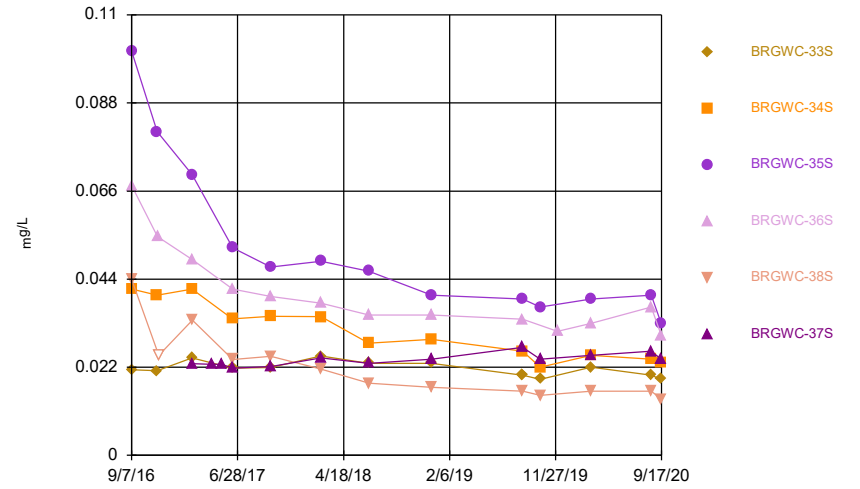
Constituent: Arsenic Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



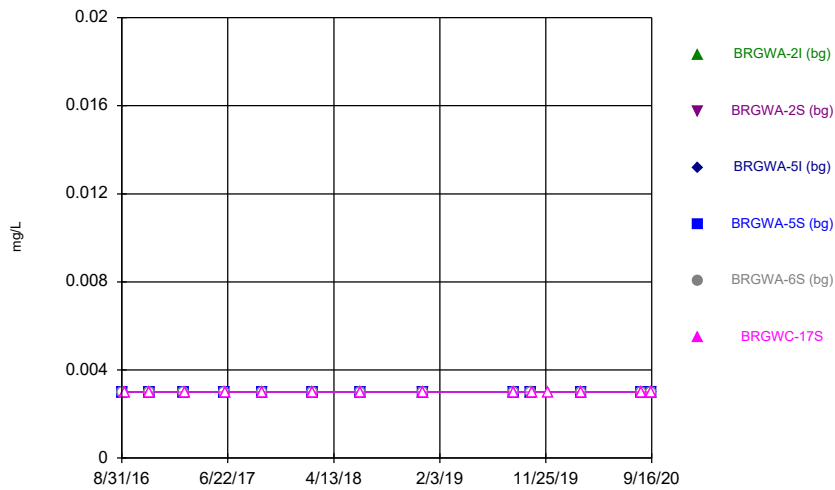
Constituent: Barium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



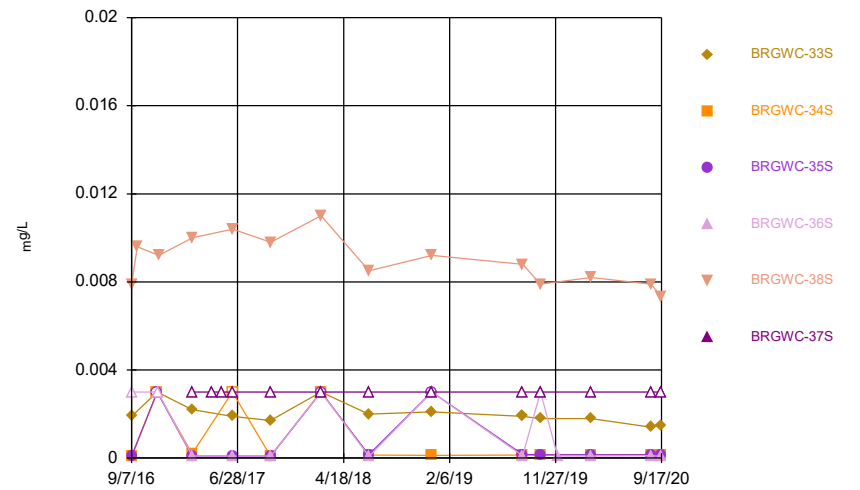
Constituent: Barium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



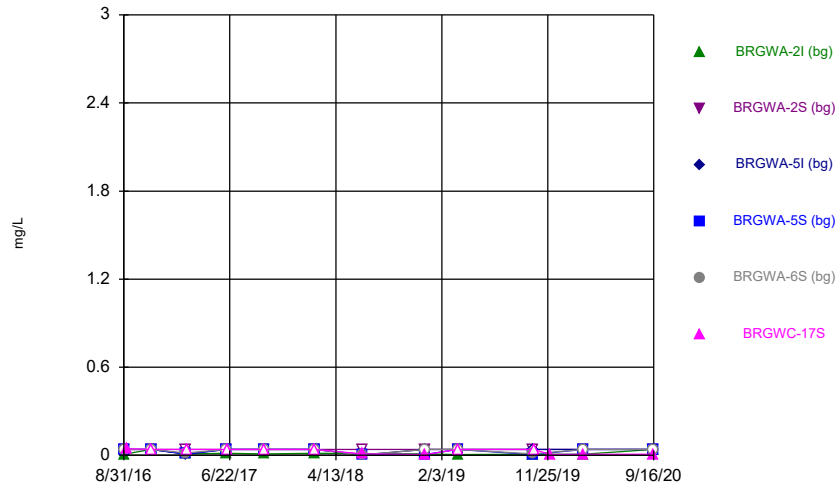
Constituent: Beryllium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



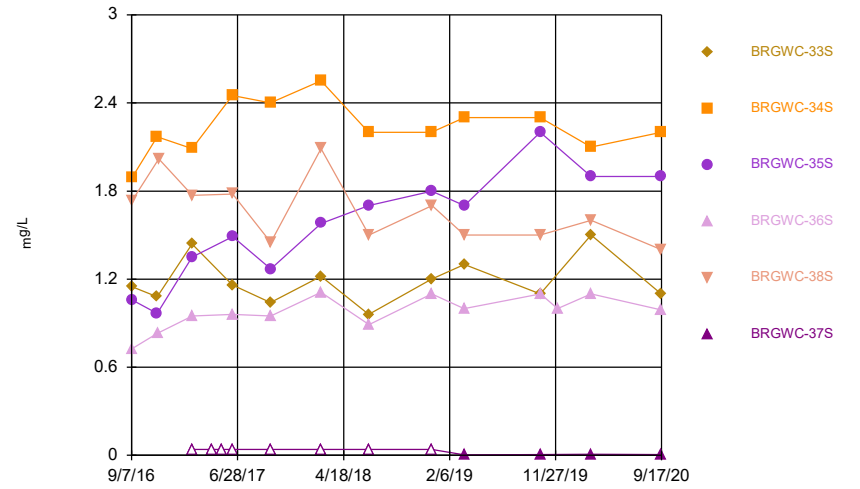
Constituent: Beryllium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



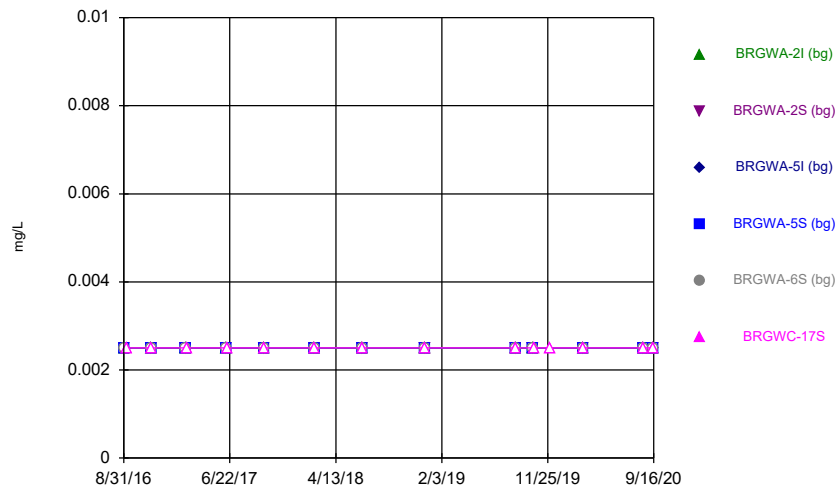
Constituent: Boron Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



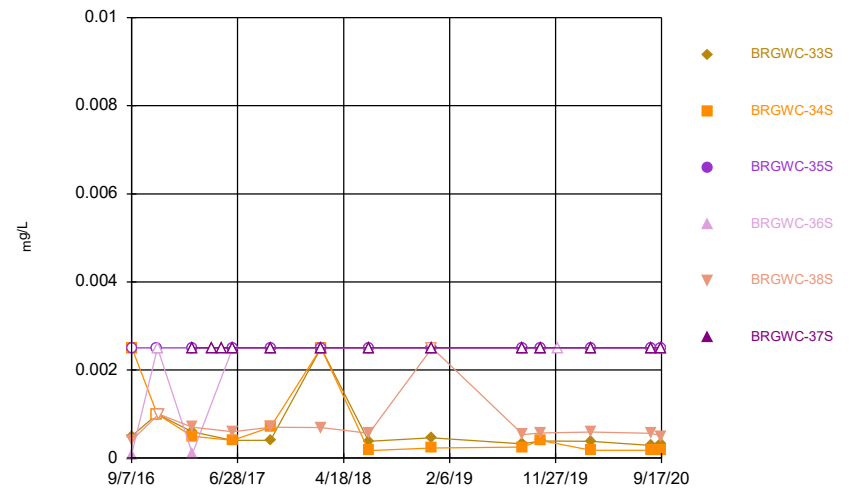
Constituent: Boron Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



Constituent: Cadmium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

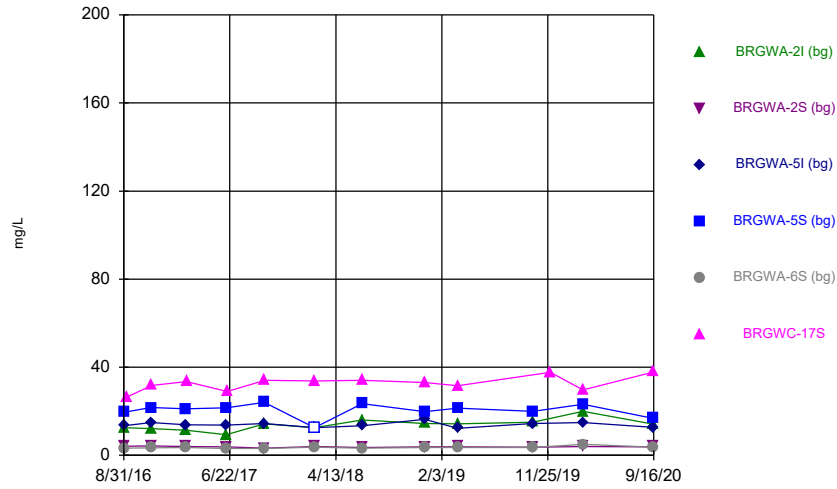
Time Series



Constituent: Cadmium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

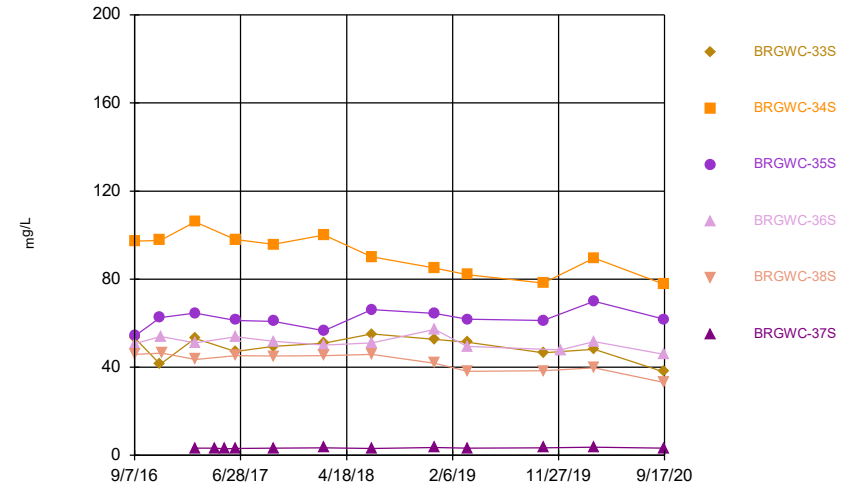


Time Series



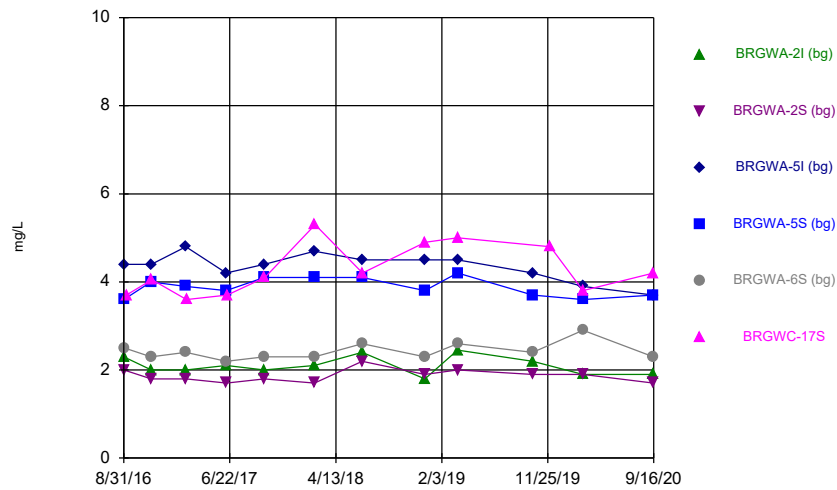
Constituent: Calcium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



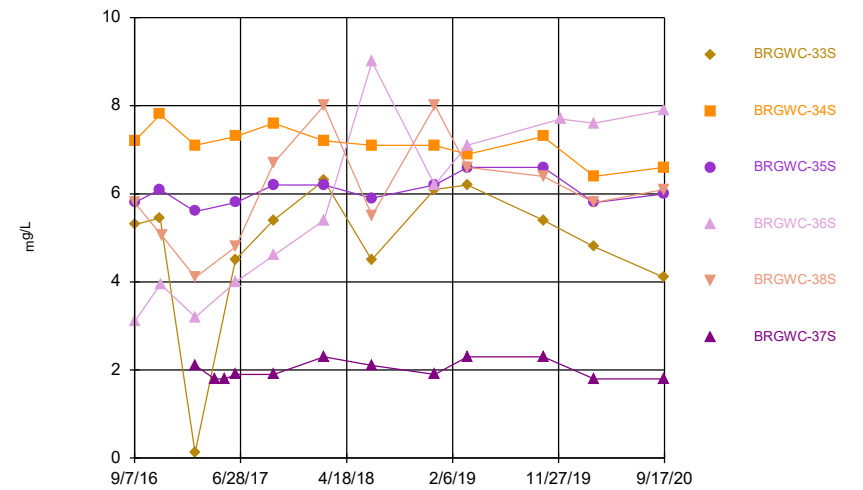
Constituent: Calcium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



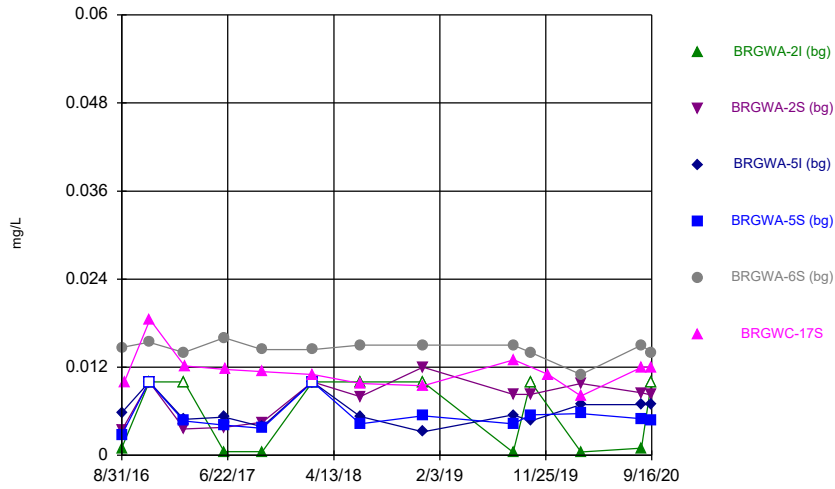
Constituent: Chloride, Total Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



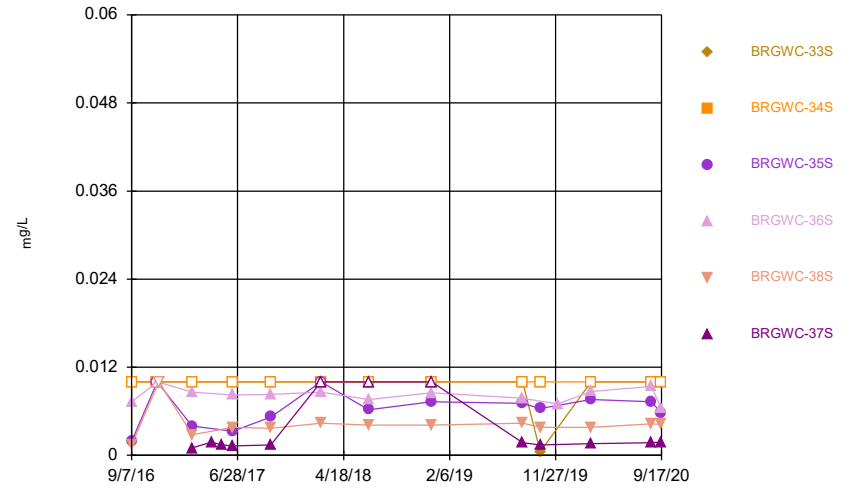
Constituent: Chloride, Total Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



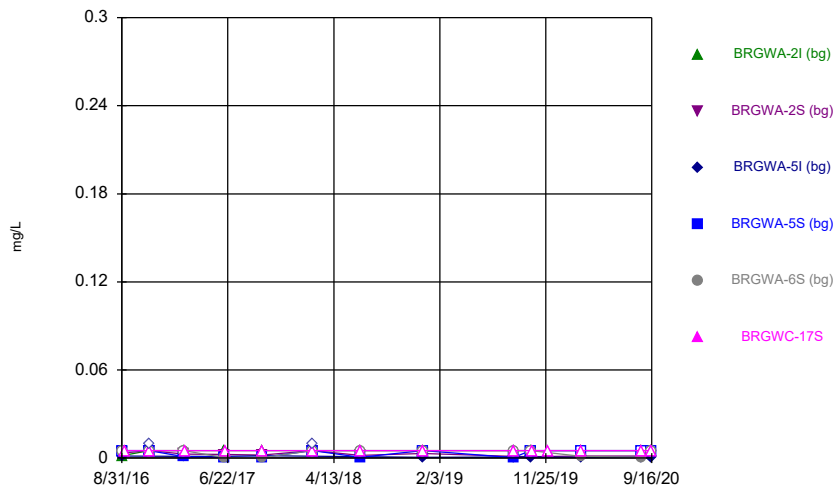
Constituent: Chromium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



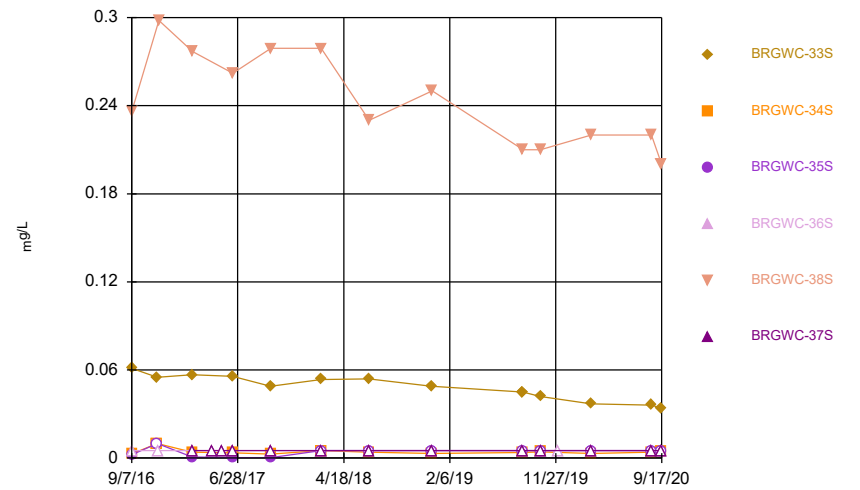
Constituent: Chromium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



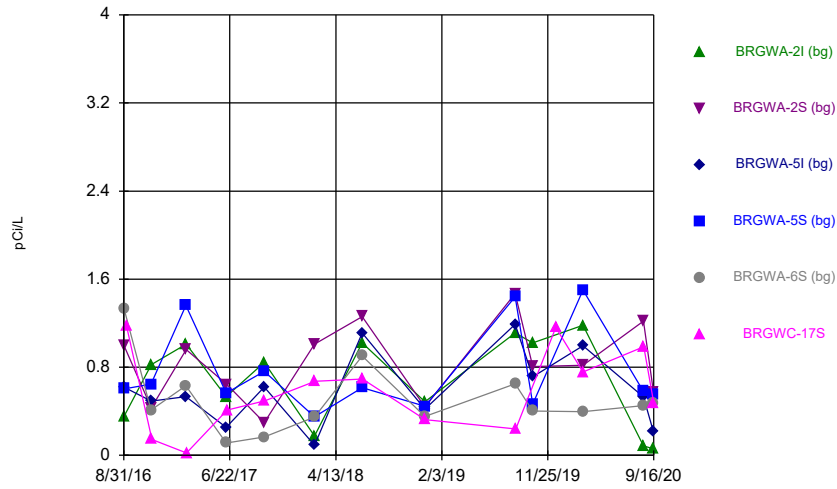
Constituent: Cobalt Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



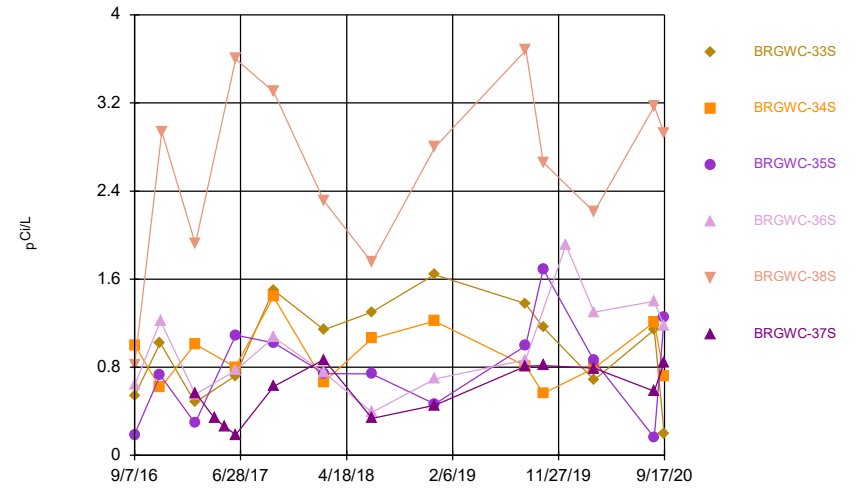
Constituent: Cobalt Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



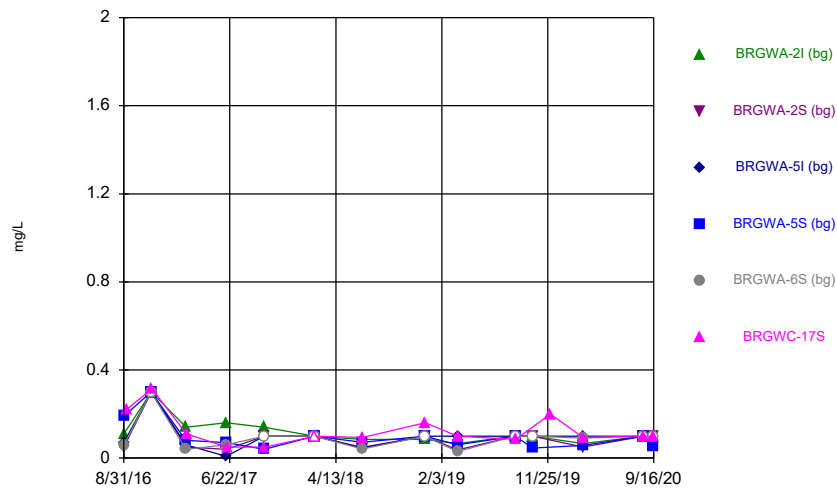
Constituent: Combined Radium 226 + 228 Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



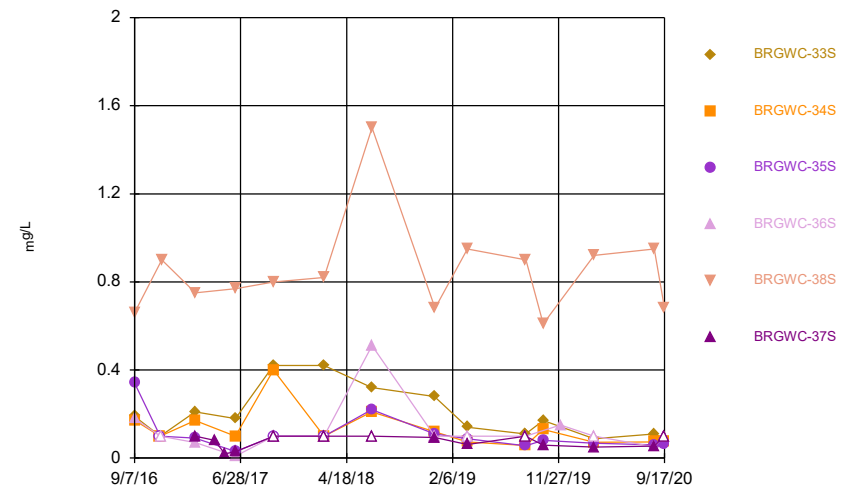
Constituent: Combined Radium 226 + 228 Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



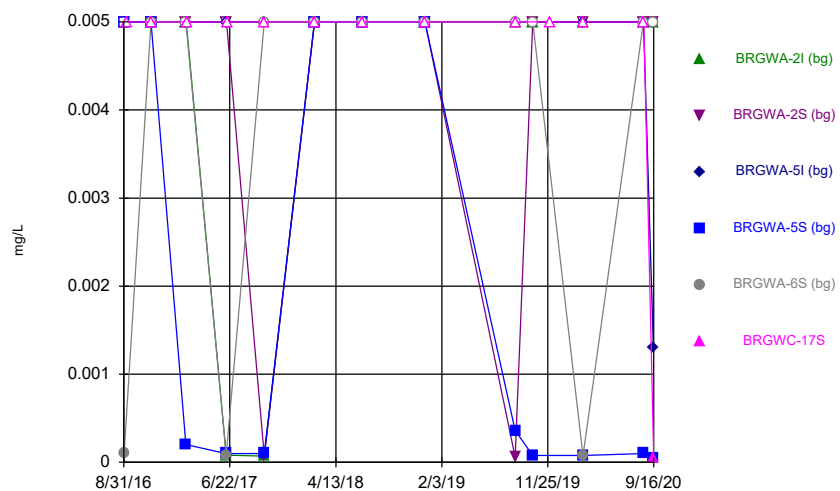
Constituent: Fluoride Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



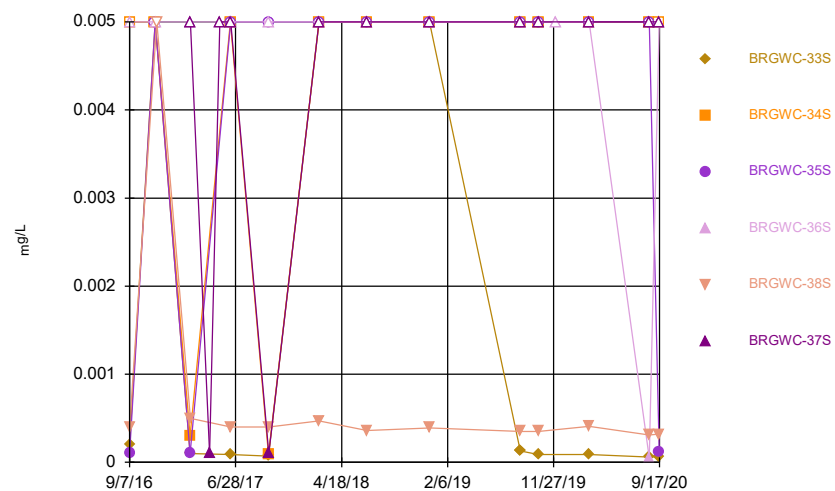
Constituent: Fluoride Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



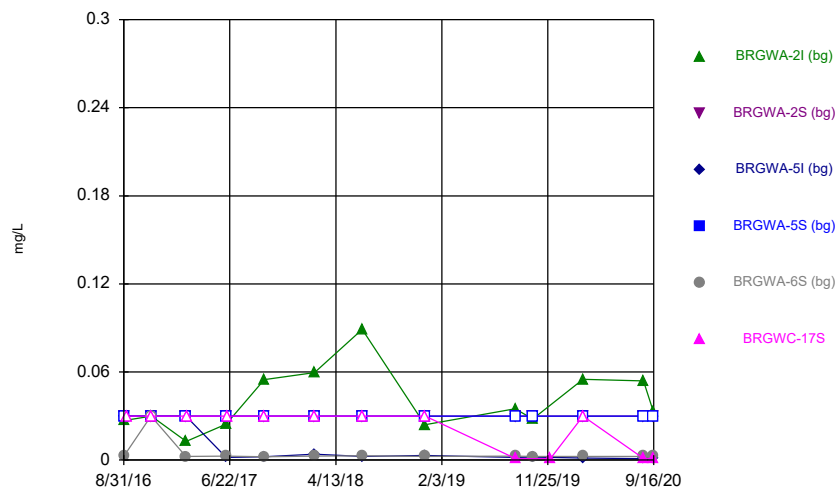
Constituent: Lead Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



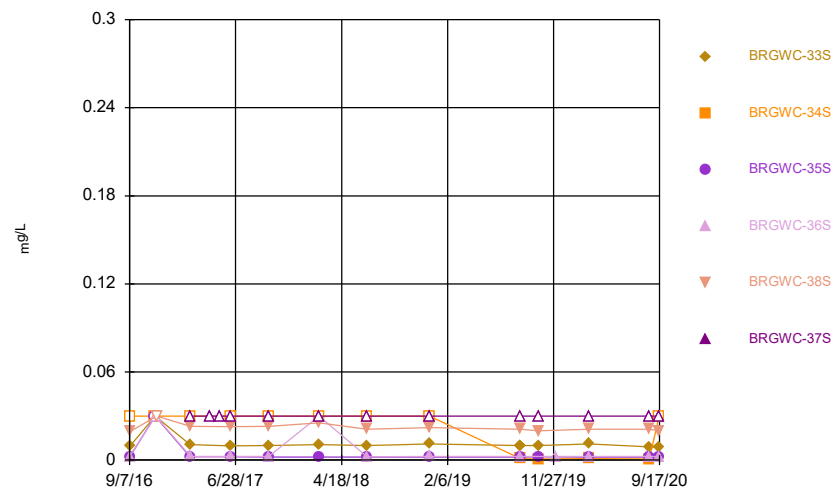
Constituent: Lead Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



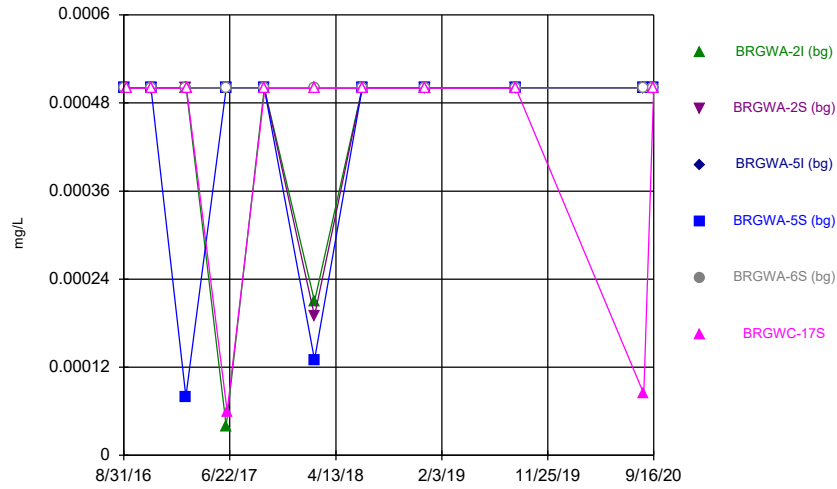
Constituent: Lithium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



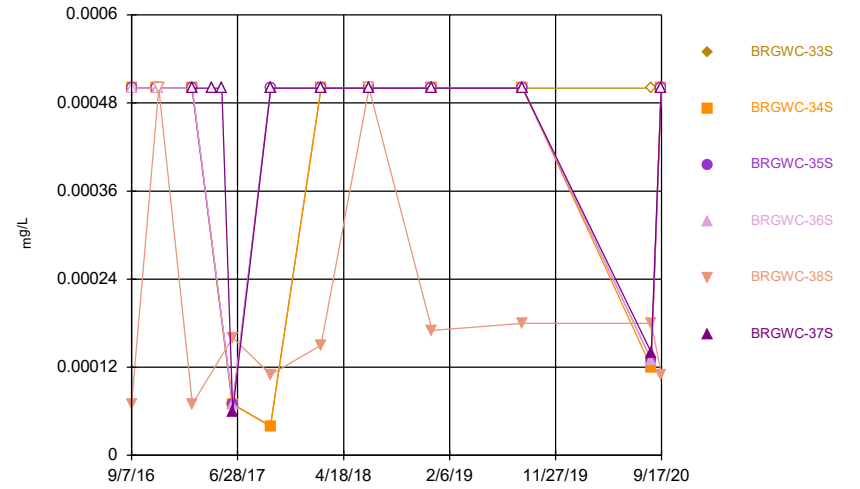
Constituent: Lithium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



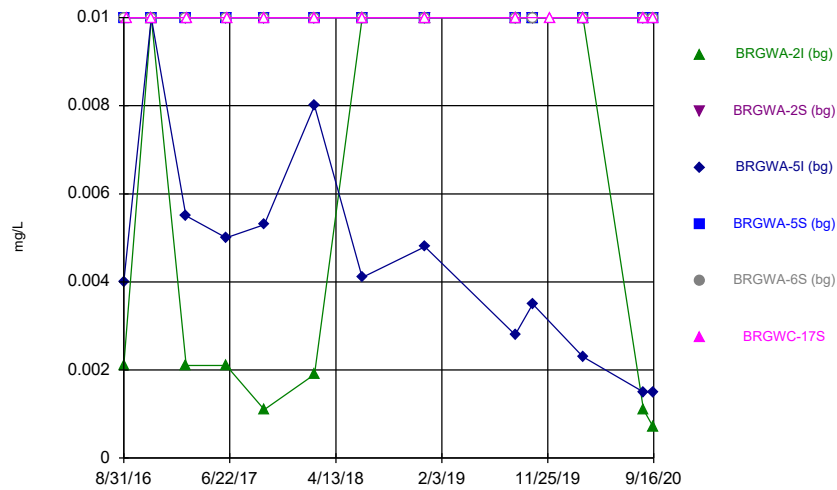
Constituent: Mercury Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



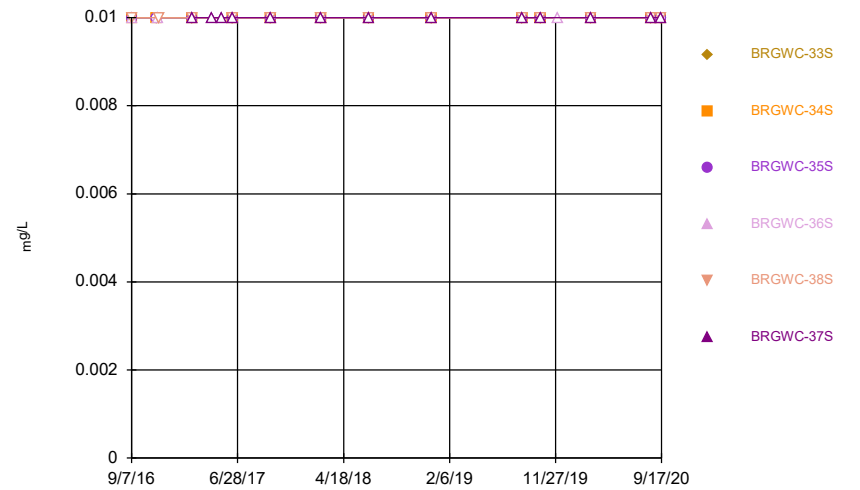
Constituent: Mercury Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



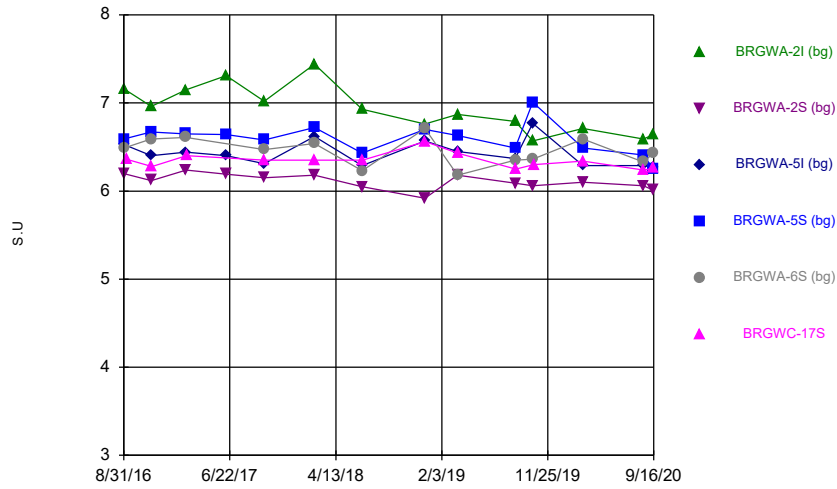
Constituent: Molybdenum Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



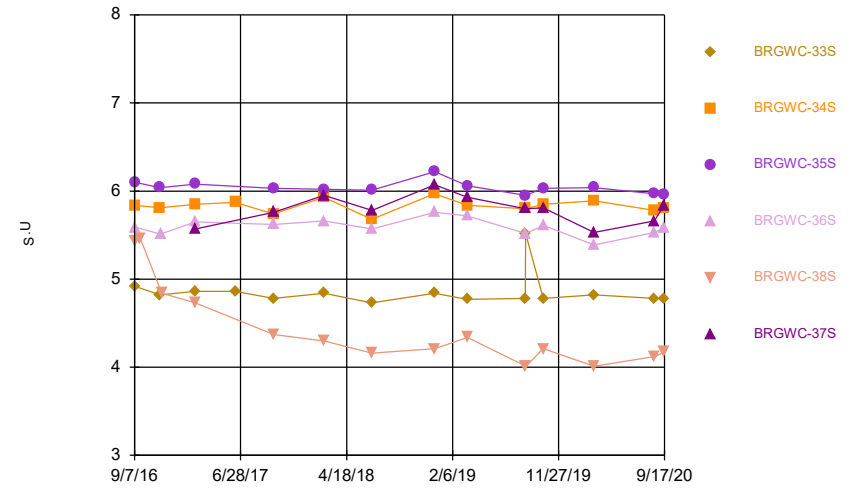
Constituent: Molybdenum Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



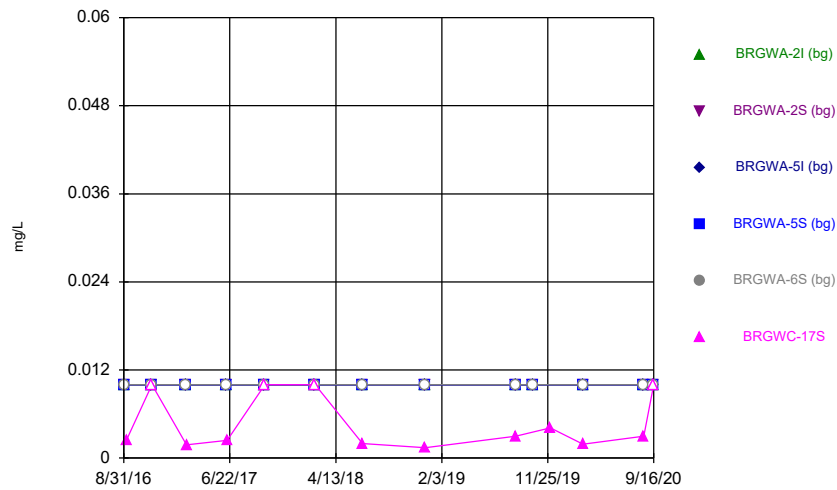
Constituent: pH, Field Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



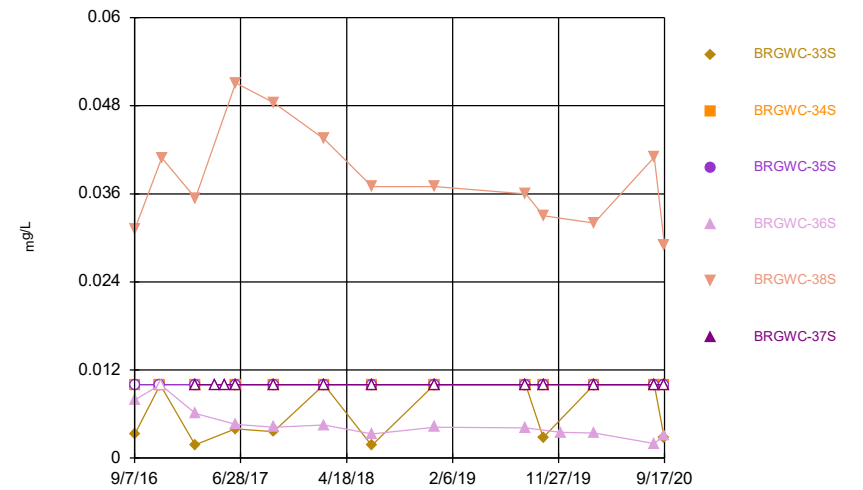
Constituent: pH, Field Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



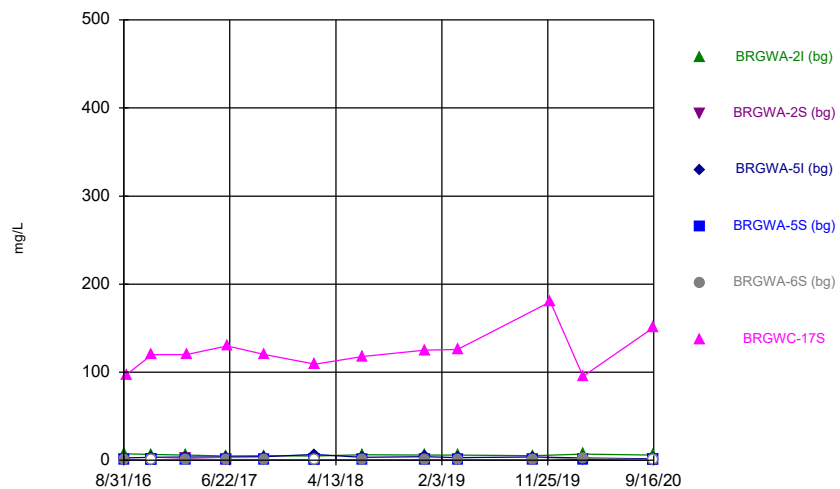
Constituent: Selenium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



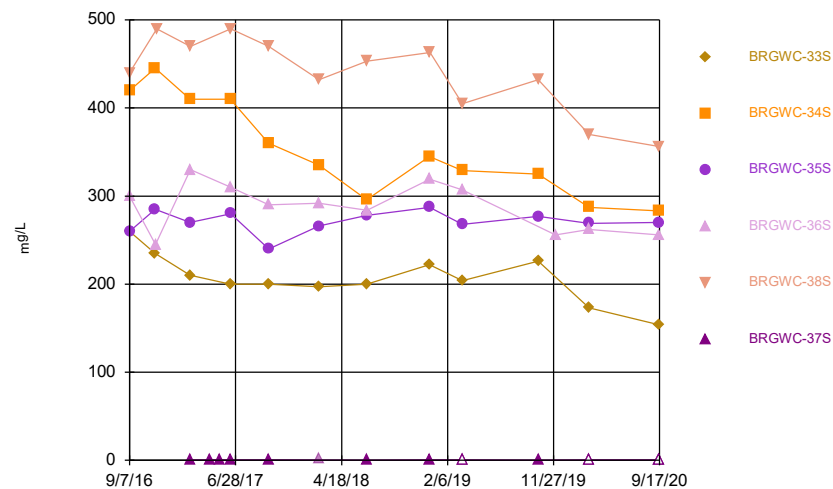
Constituent: Selenium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



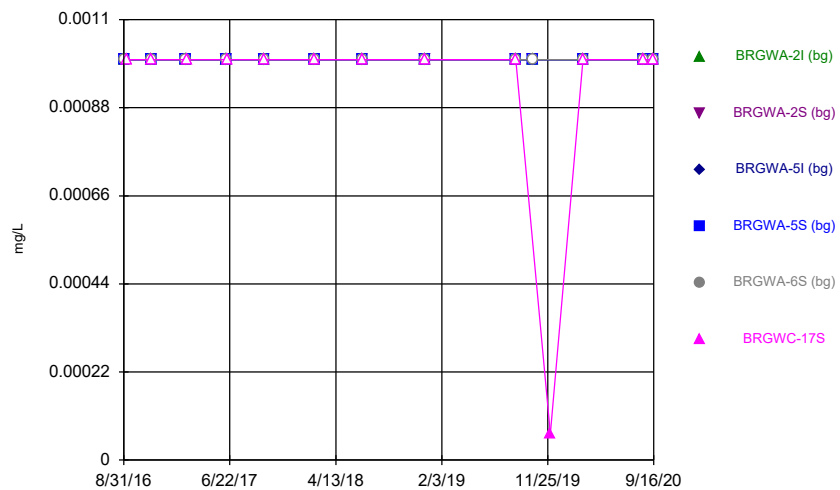
Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



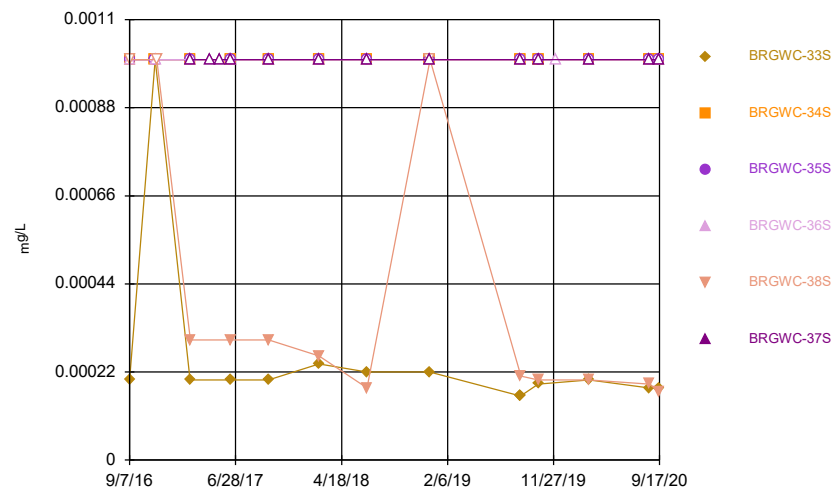
Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



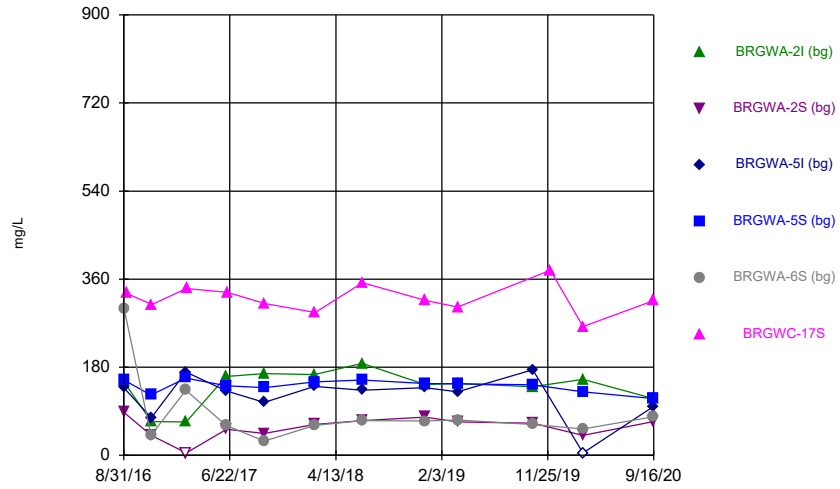
Constituent: Thallium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



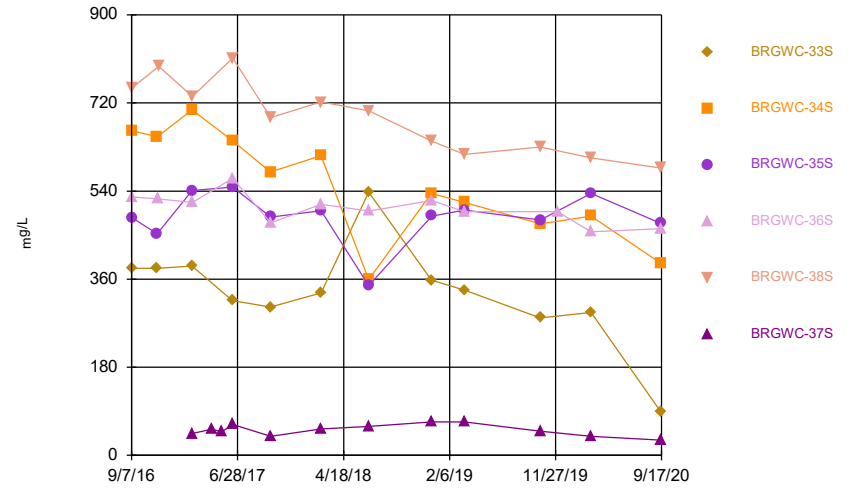
Constituent: Thallium Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:44 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP



# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0009 (J)	<0.003	<0.003	<0.003					
9/1/2016					<0.003				
9/7/2016						<0.003	<0.003		<0.003
9/8/2016								<0.003	
11/15/2016				<0.003	<0.003				
11/16/2016	<0.003	<0.003	<0.003						
11/17/2016						<0.003	<0.003	<0.003	<0.003
2/20/2017			<0.003	<0.003	<0.003				
2/21/2017	<0.003	<0.003							
2/22/2017						<0.003	<0.003	<0.003	<0.003
6/12/2017	<0.003		<0.003	<0.003	<0.003				
6/13/2017		0.0011 (J)							
6/14/2017							<0.003	<0.003	
6/15/2017						0.0009 (J)			<0.003
9/26/2017	<0.003	<0.003	<0.003	<0.003	<0.003				
9/27/2017							<0.003	<0.003	
9/28/2017						<0.003			<0.003
2/13/2018	<0.003	<0.003	<0.003	<0.003	<0.003				
2/15/2018						<0.003	<0.003	<0.003	<0.003
6/26/2018	<0.003	<0.003	<0.003	<0.003	<0.003				
6/27/2018						<0.003	<0.003	<0.003	<0.003
12/18/2018	<0.003	<0.003	<0.003	0.00087 (J)	<0.003		<0.003	<0.003	
12/19/2018						<0.003			<0.003
8/27/2019	<0.003	<0.003	<0.003	<0.003	<0.003		<0.003		
8/28/2019						<0.003	<0.003	<0.003	<0.003
10/15/2019	0.00047 (J)	<0.003	<0.003	<0.003	<0.003				
10/16/2019							<0.003	<0.003	<0.003
12/3/2019						<0.003			
3/3/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003			
3/5/2020							<0.003	<0.003	<0.003
8/18/2020	0.00054 (J)	0.00042 (J)	<0.003	0.0016 (J)	<0.003				
8/19/2020						<0.003	<0.003	<0.003	<0.003
9/15/2020	<0.003	<0.003	<0.003	<0.003	<0.003				
9/16/2020						<0.003	<0.003	<0.003	<0.003

# Time Series

Constituent: Antimony (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.003	<0.003	
11/18/2016	<0.003 (JB)		
11/21/2016		<0.003 (J)	
2/23/2017	<0.003	<0.003	<0.003
4/17/2017			0.0004 (J)
5/15/2017			<0.003
6/15/2017	0.0006 (J)	0.0007 (J)	0.0006 (J)
9/28/2017	<0.003	<0.003	<0.003
2/15/2018	<0.003	<0.003	<0.003
6/28/2018	<0.003	<0.003	<0.003
12/19/2018	<0.003		<0.003
12/20/2018		<0.003	
8/28/2019	0.00035 (J)		<0.003
8/29/2019		<0.003	
10/16/2019		<0.003	<0.003
12/3/2019	0.00049 (J)		
3/5/2020	<0.003	<0.003	<0.003
8/19/2020	<0.003	<0.003	<0.003
9/16/2020	<0.003		<0.003
9/17/2020		<0.003	

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.005	<0.005	<0.005	<0.005					
9/1/2016					<0.005				
9/7/2016						<0.005	<0.005		<0.005
9/8/2016								<0.005	
11/15/2016				<0.005	<0.005				
11/16/2016	<0.005	<0.005	<0.005						
11/17/2016						<0.005	<0.005	<0.005	<0.005
2/20/2017			<0.005	<0.005	<0.005				
2/21/2017	<0.005	<0.005							
2/22/2017						<0.005	<0.005	<0.005	<0.005
6/12/2017	0.0007 (J)		0.0007 (J)	0.0006 (J)	<0.005				
6/13/2017		<0.005							
6/14/2017							0.0006 (J)	<0.005	
6/15/2017						0.0006 (J)			0.0006 (J)
9/26/2017	0.001 (J)	<0.005	0.0009 (J)	0.0007 (J)	0.0007 (J)				
9/27/2017							<0.005	<0.005	
9/28/2017						<0.005			<0.005
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005				
2/15/2018						<0.005	<0.005	<0.005	<0.005
6/26/2018	0.00062 (J)	<0.005	<0.005	<0.005	<0.005				
6/27/2018						<0.005	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005 (X)	<0.005 (X)	<0.005 (X)	<0.005 (X)		<0.005 (X)	<0.005	
12/19/2018						<0.005			<0.005
8/27/2019	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005		
8/28/2019						0.00073 (J)	<0.005	<0.005	0.00044 (J)
10/15/2019	0.0008 (J)	0.00063 (J)	0.00058 (J)	0.00039 (J)	<0.005				
10/16/2019							0.00056 (J)	<0.005	0.0004 (J)
12/3/2019						0.00058 (J)			
3/3/2020	0.0027 (J)	0.00098 (J)	0.0024 (J)	0.0027 (J)	0.0018 (J)	0.0033 (J)			
3/5/2020							<0.005	<0.005	<0.005
8/18/2020	<0.005	<0.005	<0.005	<0.005	<0.005				
8/19/2020						<0.005	<0.005	<0.005	<0.005
9/15/2020	<0.005	<0.005	<0.005	<0.005	<0.005				
9/16/2020						<0.005	<0.005	<0.005	<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.005	0.0026 (J)	
11/18/2016	<0.005		
11/21/2016		<0.005 (J)	
2/23/2017	<0.005	0.003 (J)	<0.005
4/17/2017			<0.005
5/15/2017			<0.005
6/15/2017	0.0007 (J)	0.005 (J)	<0.005
9/28/2017	<0.005	0.0046 (J)	<0.005
2/15/2018	<0.005	0.0016 (J)	<0.005
6/28/2018	<0.005 (X)	<0.005 (X)	<0.005 (X)
12/19/2018	<0.005		<0.005
12/20/2018		0.00098 (J)	
8/28/2019	0.00045 (J)		0.00038 (J)
8/29/2019		0.0013 (J)	
10/16/2019		0.0024 (J)	0.00078 (J)
12/3/2019	0.001 (J)		
3/5/2020	<0.005	0.0011 (J)	0.00044 (J)
8/19/2020	<0.005	0.0021 (J)	<0.005
9/16/2020	<0.005		<0.005
9/17/2020		0.0015 (J)	

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0239	0.0099 (J)	0.0273	0.0495					
9/1/2016					0.0142				
9/7/2016						0.0377	0.0214		0.101
9/8/2016								0.0415	
11/15/2016				0.0512	0.0126				
11/16/2016	0.0147	0.0102	0.0365						
11/17/2016						0.0405	0.0211	0.04	0.0808
2/20/2017			0.0336	0.0586	0.0142				
2/21/2017	0.0109	0.0094 (J)							
2/22/2017						0.0392	0.0243	0.0415	0.0701
6/12/2017	0.0094 (J)		0.0322	0.0567	0.0134				
6/13/2017		0.0094 (J)							
6/14/2017							0.0218	0.0341	
6/15/2017						0.0364			0.0518
9/26/2017	0.0156	0.0096 (J)	0.0364	0.0586	0.0133				
9/27/2017							0.0219	0.0347	
9/28/2017						0.0408			0.047
2/13/2018	0.0134	0.0102	0.054	0.054	0.0145				
2/15/2018						0.0396	0.0248	0.0346	0.0485
6/26/2018	0.014	0.0093 (J)	0.032	0.063	0.014				
6/27/2018						0.041	0.023	0.028	0.046
12/18/2018	0.0076 (J)	0.01	0.038	0.045	0.013		0.023	0.029	
12/19/2018						0.038			0.04
8/27/2019	0.012	0.0095 (J)	0.028	0.056	0.013		0.02		
8/28/2019						0.044	0.02	0.026	0.039
10/15/2019	0.013	0.0091 (J)	0.032	0.049	0.013				
10/16/2019							0.019	0.022	0.037
12/3/2019						0.043			
3/3/2020	0.017	0.011	0.028	0.051	0.019	0.036			
3/5/2020							0.022	0.025	0.039
8/18/2020	0.01 (J)	0.01	0.022	0.04	0.014				
8/19/2020						0.047	0.02	0.024	0.04
9/15/2020	0.0083 (J)	0.0094 (J)	0.022	0.038	0.013				
9/16/2020						0.044	0.019	0.023	0.033

# Time Series

Constituent: Barium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.0674	0.044	
11/18/2016	0.0546		
11/21/2016		<0.05 (JB)	
2/23/2017	0.0489	0.0338	0.0229
4/17/2017			0.0227
5/15/2017			0.0227
6/15/2017	0.0415	0.0239	0.0218
9/28/2017	0.0397	0.0247	0.0222
2/15/2018	0.038	0.0215	0.0243
6/28/2018	0.035	0.018	0.023
12/19/2018	0.035		0.024
12/20/2018		0.017	
8/28/2019	0.034		0.027
8/29/2019		0.016	
10/16/2019		0.015	0.024
12/3/2019	0.031		
3/5/2020	0.033	0.016	0.025
8/19/2020	0.037	0.016	0.026
9/16/2020	0.03		0.024
9/17/2020		0.014	

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.003	<0.003	<0.003	<0.003					
9/1/2016					<0.003				
9/7/2016						<0.003	0.0019 (J)		9E-05 (J)
9/8/2016								0.0001 (J)	
11/15/2016				<0.003	<0.003				
11/16/2016	<0.003	<0.003	<0.003						
11/17/2016						<0.003	<0.003 (J)	<0.003 (J)	<0.003 (J)
2/20/2017			<0.003	<0.003	<0.003				
2/21/2017	<0.003	<0.003							
2/22/2017						<0.003	0.0022 (J)	0.0002 (J)	0.0001 (J)
6/12/2017	<0.003		<0.003	<0.003	<0.003				
6/13/2017		<0.003							
6/14/2017							0.0019 (J)	<0.003	
6/15/2017						<0.003			0.0001 (J)
9/26/2017	<0.003	<0.003	<0.003	<0.003	<0.003				
9/27/2017							0.0017 (J)	0.0001 (J)	
9/28/2017						<0.003			0.0001 (J)
2/13/2018	<0.003	<0.003	<0.003	<0.003	<0.003				
2/15/2018						<0.003	<0.003	<0.003	<0.003
6/26/2018	<0.003	<0.003	<0.003	<0.003	<0.003				
6/27/2018						<0.003	0.002 (J)	0.00013 (J)	0.00015 (J)
12/18/2018	<0.003	<0.003	<0.003	<0.003	<0.003		0.0021 (J)	0.00012 (J)	
12/19/2018						<0.003			<0.003 (X)
8/27/2019	<0.003	<0.003	<0.003	<0.003	<0.003		0.0019 (J)		
8/28/2019						<0.003	0.0019 (J)	0.00014 (J)	0.00016 (J)
10/15/2019	<0.003	<0.003	<0.003	<0.003	<0.003				
10/16/2019							0.0018 (J)	0.00014 (J)	0.00015 (J)
10/17/2019						<0.003			
12/3/2019						<0.003			
3/3/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003			
3/5/2020							0.0018 (J)	0.00015 (J)	0.00015 (J)
8/18/2020	<0.003	<0.003	<0.003	<0.003	<0.003				
8/19/2020						<0.003	0.0014 (J)	0.00015 (J)	0.00015 (J)
9/15/2020	<0.003	<0.003	<0.003	<0.003	<0.003				
9/16/2020						<0.003	0.0015 (J)	0.00014 (J)	0.00014 (J)

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.003	0.0079	
9/23/2016		0.0096 (R)	
11/18/2016	<0.003 (J)		
11/21/2016		0.0092	
2/23/2017	0.0001 (J)	0.01	<0.003
4/17/2017			<0.003
5/15/2017			<0.003
6/15/2017	9E-05 (J)	0.0104	<0.003
9/28/2017	0.0001 (J)	0.0098	<0.003
2/15/2018	<0.003	0.011 (J)	<0.003
6/28/2018	8.1E-05 (J)	0.0085	<0.003
12/19/2018	<0.003 (X)		<0.003
12/20/2018		0.0092	
8/28/2019	0.00011 (J)		<0.003
8/29/2019		0.0088	
10/16/2019		0.0079	<0.003
10/17/2019	<0.003		
12/3/2019	9.7E-05 (J)		
3/5/2020	9.2E-05 (J)	0.0082	<0.003
8/19/2020	0.00011 (J)	0.0079	<0.003
9/16/2020	8E-05 (J)		<0.003
9/17/2020		0.0073	



# Time Series

Constituent: Boron (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0072 (J)	<0.04	<0.04	<0.04					
9/1/2016					<0.04				
9/7/2016						0.0449 (J)	1.15		1.06
9/8/2016								1.89	
11/15/2016				<0.04 (B)	<0.04 (B)				
11/16/2016	<0.04	<0.04	<0.04						
11/17/2016						<0.04	1.08	2.17	0.967
2/20/2017			0.0066 (J)	0.0093 (J)	0.0157 (J)				
2/21/2017	0.0088 (J)	<0.04							
2/22/2017						<0.04	1.44	2.09	1.35
6/12/2017	0.0133 (J)		<0.04	<0.04	<0.04				
6/13/2017		<0.04							
6/14/2017							1.16	2.45	
6/15/2017						<0.04			1.49
9/26/2017	0.0093 (J)	<0.04	<0.04	<0.04	<0.04				
9/27/2017							1.04	2.4	
9/28/2017						<0.04			1.27
2/13/2018	0.0141 (J)	<0.04	<0.04	<0.04	<0.04				
2/15/2018						<0.04	1.22	2.55	1.58
6/26/2018	0.012 (J)	<0.04	0.0042 (J)	0.0056 (J)	0.0041 (J)				
6/27/2018						0.0088 (J+X)	0.96 (J+X)	2.2 (J+X)	1.7 (J+X)
12/18/2018	0.0086 (J)	<0.04	<0.04	0.0062 (J)	<0.04		1.2	2.2	
12/19/2018						0.0045 (J)			1.8
3/19/2019	0.00565 (JD)	<0.04	<0.04	<0.04	<0.04	<0.04			
3/20/2019							1.3	2.3	1.7
10/15/2019	0.0067 (J)	<0.04	<0.04	0.006 (J)	0.01 (J)				
10/16/2019							1.1	2.3	2.2
10/17/2019						<0.04			
12/3/2019						0.0063 (J)			
3/3/2020	0.0082 (J)	<0.04	<0.04	<0.04	<0.04	0.0075 (J)			
3/5/2020							1.5	2.1	1.9
9/15/2020	<0.04	<0.04	<0.04	<0.04	<0.04				
9/16/2020						0.0066 (J)	1.1	2.2	1.9

# Time Series

Constituent: Boron (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.725	1.73	
11/18/2016	0.831		
11/21/2016		2.02	
2/23/2017	0.949	1.77	<0.04
4/17/2017			<0.04
5/15/2017			<0.04
6/15/2017	0.961	1.78	<0.04
9/28/2017	0.948	1.45	<0.04
2/15/2018	1.11	2.09	<0.04
6/28/2018	0.89	1.5	<0.04 (X)
12/19/2018	1.1		<0.04
12/20/2018		1.7	
3/19/2019	1		
3/20/2019		1.5	0.004 (J)
10/16/2019		1.5	0.0055 (J)
10/17/2019	1.1		
12/3/2019	1		
3/5/2020	1.1	1.6	0.0076 (J)
9/16/2020	0.99		0.0062 (J)
9/17/2020		1.4	

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.0025	<0.0025	<0.0025	<0.0025					
9/1/2016					<0.0025				
9/7/2016						<0.0025	0.0005 (J)		<0.0025
9/8/2016								<0.0025	
11/15/2016				<0.0025	<0.0025				
11/16/2016	<0.0025	<0.0025	<0.0025						
11/17/2016						<0.0025	<0.001 (J)	<0.001 (J)	<0.0025
2/20/2017			<0.0025	<0.0025	<0.0025				
2/21/2017	<0.0025	<0.0025							
2/22/2017						<0.0025	0.0006 (J)	0.0005 (J)	<0.0025
6/12/2017	<0.0025		<0.0025	<0.0025	<0.0025				
6/13/2017		<0.0025							
6/14/2017							0.0004 (J)	0.0004 (J)	
6/15/2017						<0.0025			<0.0025
9/26/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
9/27/2017							0.0004 (J)	0.0007 (J)	
9/28/2017						<0.0025			<0.0025
2/13/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
2/15/2018						<0.0025	<0.0025	<0.0025	<0.0025
6/26/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
6/27/2018						<0.0025	0.00038 (J)	0.00017 (J)	<0.0025
12/18/2018	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		0.00046 (J)	0.00023 (J)	
12/19/2018						<0.0025			<0.0025
8/27/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025		0.00032 (J)		
8/28/2019						<0.0025	0.00032 (J)	0.00025 (J)	<0.0025
10/15/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
10/16/2019							0.00039 (J)	0.0004 (J)	<0.0025
10/17/2019						<0.0025			
12/3/2019						<0.0025			
3/3/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025			
3/5/2020							0.00038 (J)	0.00018 (J)	<0.0025
8/18/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
8/19/2020						<0.0025	0.00029 (J)	0.00018 (J)	<0.0025
9/15/2020	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025				
9/16/2020						<0.0025	0.00032 (J)	0.00017 (J)	<0.0025

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	8E-05 (J)	0.0004 (J)	
11/18/2016	<0.0025		
11/21/2016		<0.001 (J)	
2/23/2017	0.0001 (J)	0.0007 (J)	<0.0025
4/17/2017			<0.0025
5/15/2017			<0.0025
6/15/2017	<0.0025	0.0006 (J)	<0.0025
9/28/2017	<0.0025	0.0007 (J)	<0.0025
2/15/2018	<0.0025	0.00069 (J)	<0.0025
6/28/2018	<0.0025	0.00056 (J)	<0.0025
12/19/2018	<0.0025 (X)		<0.0025
12/20/2018		<0.0025 (X)	
8/28/2019	<0.0025		<0.0025
8/29/2019		0.00053 (J)	
10/16/2019		0.00057 (J)	<0.0025
10/17/2019	<0.0025		
12/3/2019	<0.0025		
3/5/2020	<0.0025	0.00059 (J)	<0.0025
8/19/2020	<0.0025	0.00056 (J)	<0.0025
9/16/2020	<0.0025		<0.0025
9/17/2020		0.0005 (J)	

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	12.6	4.09	13.5	19.6					
9/1/2016					3.3				
9/7/2016						26.3	53.4		54.1
9/8/2016								97.3	
11/15/2016				21.7	3.44				
11/16/2016	12.1	4.25	14.9						
11/17/2016						31.8	41.3	97.6	62.6
2/20/2017			13.9	21.1	3.52				
2/21/2017	11.4	4.02							
2/22/2017						33.5	53.1	106	64.6
6/12/2017	9.34		13.7	21.5	3.11				
6/13/2017		3.84							
6/14/2017							47.1	98	
6/15/2017						29			61.3
9/26/2017	14.3	3.31	14.4	24	3.15				
9/27/2017							49.5	95.8	
9/28/2017						34.1			60.8
2/13/2018	<25	3.94	<25	<25	3.65				
2/15/2018						33.8	50.9	100	56.6
6/26/2018	16 (J)	3.6	13.5 (J)	23.5 (J)	3.3				
6/27/2018						34.1	55.1	90.1	66.2
12/18/2018	14.5 (J)	3.8	16.4 (J)	19.8 (J)	3.5		52.7	85.1	
12/19/2018						33.1			64.4
3/19/2019	14.3 (JD)	3.9	12.3 (J)	21.4 (J)	3.6	31.6			
3/20/2019							51.4	82	61.8
10/15/2019	15.1	3.7	14.4	20	3.5				
10/16/2019							46.5	78.2	61.2
12/3/2019						37.7			
3/3/2020	20	4	14.9	23.2	5	29.7			
3/5/2020							48.1	89.6	69.9
9/15/2020	14.1	3.9	12.7	16.8	3.7				
9/16/2020						37.9	37.9	77.7	61.8

# Time Series

Constituent: Calcium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	50.6	45.9	
11/18/2016	53.9		
11/21/2016		46.4	
2/23/2017	51	43.5	3.26
4/17/2017			3.23
5/15/2017			2.97 (B-01)
6/15/2017	53.8	45.3	3.15
9/28/2017	51.8	45.1	3.26
2/15/2018	50.1	45.3	3.39
6/28/2018	51	45.9	3.1
12/19/2018	57.1		3.6
12/20/2018		41.8	
3/19/2019	49.5		
3/20/2019		38.2	3.3
10/16/2019		38.4	3.4
12/3/2019	47.8		
3/5/2020	51.7	39.8	3.7
9/16/2020	45.9		3.2
9/17/2020		33.1	

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	2.3	2	4.4	3.6					
9/1/2016					2.5				
9/7/2016						3.7	5.3		5.8
9/8/2016								7.2	
11/15/2016				4	2.3				
11/16/2016	2	1.8	4.4						
11/17/2016						4.05 (D)	5.45 (D)	7.8 (D)	6.1 (D)
2/20/2017			4.8	3.9	2.4				
2/21/2017	2	1.8							
2/22/2017						3.6	0.12 (J)	7.1	5.6
6/12/2017	2.1		4.2	3.8	2.2				
6/13/2017		1.7							
6/14/2017							4.5	7.3	
6/15/2017						3.7			5.8
9/26/2017	2	1.8	4.4	4.1	2.3				
9/27/2017							5.4	7.6	
9/28/2017						4.1			6.2
2/13/2018	2.1	1.7	4.7	4.1	2.3				
2/15/2018						5.3	6.3	7.2	6.2
6/26/2018	2.4	2.2	4.5	4.1	2.6				
6/27/2018						4.2	4.5	7.1	5.9
12/18/2018	1.8	1.9	4.5	3.8	2.3		6.1	7.1	
12/19/2018						4.9 (J-X)			6.2 (J-X)
3/19/2019	2.45 (D)	2	4.5	4.2	2.6	5			
3/20/2019							6.2	6.9	6.6
10/15/2019	2.2	1.9	4.2	3.7	2.4				
10/16/2019							5.4	7.3	6.6
12/3/2019						4.8			
3/3/2020	1.9	1.9	3.9	3.6	2.9	3.8			
3/5/2020							4.8	6.4	5.8
9/15/2020	1.9	1.7	3.7	3.7	2.3				
9/16/2020						4.2	4.1	6.6	6

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	3.1	5.8	
11/18/2016	3.95 (D)		
11/21/2016		5.05 (D)	
2/23/2017	3.2	4.1	2.1
4/17/2017			1.8
5/15/2017			1.8
6/15/2017	4	4.8	1.9
9/28/2017	4.6	6.7	1.9
2/15/2018	5.4	8	2.3
6/28/2018	9 (J-X)	5.5 (J-X)	2.1 (J-X)
12/19/2018	6.2 (J-X)		1.9 (J-X)
12/20/2018		8 (J-X)	
3/19/2019	7.1		
3/20/2019		6.6	2.3
10/16/2019		6.4	2.3
12/3/2019	7.7		
3/5/2020	7.6	5.8	1.8
9/16/2020	7.9		1.8
9/17/2020		6.1	



# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.001 (J)	0.0034 (J)	0.0058 (J)	0.0028 (J)					
9/1/2016					0.0147				
9/7/2016						0.01 (J)	<0.01		0.0019 (J)
9/8/2016								<0.01	
11/15/2016				<0.01 (JB)	0.0154 (B)				
11/16/2016	<0.01	<0.01 (J)	<0.01 (J)						
11/17/2016						0.0185	<0.01	<0.01	<0.01 (J)
2/20/2017			0.0049 (J)	0.0047 (J)	0.014				
2/21/2017	<0.01	0.0036 (J)							
2/22/2017						0.0122	<0.01	<0.01	0.004 (J)
6/12/2017	0.0005 (J)		0.0052 (J)	0.0041 (J)	0.016				
6/13/2017		0.0038 (J)							
6/14/2017							<0.01	<0.01	
6/15/2017						0.0117			0.0033 (J)
9/26/2017	0.0005 (J)	0.0045 (J)	0.0039 (J)	0.0037 (J)	0.0144				
9/27/2017							<0.01	<0.01	
9/28/2017						0.0114			0.0052 (J)
2/13/2018	<0.01	<0.01	<0.01	<0.01	0.0144				
2/15/2018						0.011	<0.01	<0.01	<0.01
6/26/2018	<0.01	0.008 (J)	0.0053 (J)	0.0043 (J)	0.015				
6/27/2018						0.0098 (J)	<0.01	<0.01	0.0062 (J)
12/18/2018	<0.01	0.012	0.0032 (J)	0.0054 (J)	0.015		<0.01	<0.01	
12/19/2018						0.0095 (J)			0.0073 (J)
8/27/2019	0.0004 (J)	0.0083 (J)	0.0055 (J)	0.0043 (J)	0.015		<0.01		
8/28/2019						0.013	<0.01	<0.01	0.0071 (J)
10/15/2019	<0.01	0.0083 (J)	0.0047 (J)	0.0055 (J)	0.014				
10/16/2019							0.00049 (J)	<0.01	0.0064 (J)
12/3/2019						0.011			
3/3/2020	0.00047 (J)	0.0098 (J)	0.0069 (J)	0.0057 (J)	0.011	0.0081 (J)			
3/5/2020							<0.01	<0.01	0.0076 (J)
8/18/2020	0.00096 (J)	0.0085 (J)	0.0069 (J)	0.005 (J)	0.015				
8/19/2020						0.012	<0.01	<0.01	0.0073 (J)
9/15/2020	<0.01	0.0082 (J)	0.0069 (J)	0.0048 (J)	0.014				
9/16/2020						0.012	<0.01	<0.01	0.0058 (J)

# Time Series

Constituent: Chromium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.0073 (J)	0.0014 (J)	
11/18/2016	<0.01 (J)		
11/21/2016		<0.01 (J)	
2/23/2017	0.0086 (J)	0.0028 (J)	0.001 (J)
4/17/2017			0.0018 (J)
5/15/2017			0.0014 (J)
6/15/2017	0.0082 (J)	0.0038 (J)	0.0013 (J)
9/28/2017	0.0083 (J)	0.0037 (J)	0.0014 (J)
2/15/2018	0.0086 (J)	0.0044 (J)	<0.01
6/28/2018	0.0076 (J)	0.0041 (J)	<0.01
12/19/2018	0.0085 (J)		<0.01
12/20/2018		0.0041 (J)	
8/28/2019	0.0078 (J)		0.0017 (J)
8/29/2019		0.0044 (J)	
10/16/2019		0.0038 (J)	0.0014 (J)
12/3/2019	0.007 (J)		
3/5/2020	0.0087 (J)	0.0038 (J)	0.0016 (J)
8/19/2020	0.0094 (J)	0.0043 (J)	0.0017 (J)
9/16/2020	0.0064 (J)		0.0018 (J)
9/17/2020		0.0042 (J)	

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0016 (J)	0.0034 (J)	0.0013 (J)	<0.005					
9/1/2016					<0.005				
9/7/2016						<0.005	0.0612		0.0023 (J)
9/8/2016								0.0029 (J)	
11/15/2016				<0.005	<0.005				
11/16/2016	<0.005	<0.005	<0.01 (o)						
11/17/2016						<0.005	0.0551	<0.01 (J)	<0.01 (J)
2/20/2017			0.0012 (J)	0.0009 (J)	<0.005				
2/21/2017	<0.005	0.0028 (J)							
2/22/2017						<0.005	0.0567	0.0041 (J)	0.0008 (J)
6/12/2017	<0.005		0.0011 (J)	0.0006 (J)	0.0003 (J)				
6/13/2017		0.0025 (J)							
6/14/2017							0.0557	0.0036 (J)	
6/15/2017						<0.005			0.0004 (J)
9/26/2017	<0.005	0.002 (J)	0.0016 (J)	0.0005 (J)	0.0003 (J)				
9/27/2017							0.049	0.0028 (J)	
9/28/2017						<0.005			0.0003 (J)
2/13/2018	<0.005	<0.005	<0.01 (o)	<0.005	<0.005				
2/15/2018						<0.005	0.0536	<0.005	<0.005
6/26/2018	<0.005	0.0019 (J)	0.0009 (J)	0.00052 (J)	<0.005				
6/27/2018						<0.005	0.054	0.0041 (J)	<0.005
12/18/2018	<0.005	0.0032 (J)	0.00062 (J)	<0.005	<0.005		0.049	0.0032 (J)	
12/19/2018						<0.005			<0.005
8/27/2019	<0.005	0.0012 (J)	0.00068 (J)	0.00042 (J)	<0.005		0.045		
8/28/2019						<0.005	0.045	0.0037 (J)	<0.005
10/15/2019	<0.005	0.00097 (J)	0.00083 (J)	<0.005	<0.005				
10/16/2019							0.042	0.0043 (J)	<0.005
10/17/2019						<0.005			
12/3/2019						<0.005			
3/3/2020	<0.005	0.0015 (J)	0.00043 (J)	<0.005	0.0011 (J)	<0.005			
3/5/2020							0.037	0.0031 (J)	<0.005
8/18/2020	<0.005	0.0014 (J)	0.00048 (J)	<0.005	0.00061 (J)				
8/19/2020						<0.005	0.036	0.0041 (J)	<0.005
9/15/2020	<0.005	0.001 (J)	0.0005 (J)	<0.005	<0.005				
9/16/2020						<0.005	0.034	0.0042 (J)	<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.005	0.236	
11/18/2016	<0.005		
11/21/2016		0.298	
2/23/2017	<0.005	0.277	<0.005
4/17/2017			<0.005
5/15/2017			<0.005
6/15/2017	<0.005	0.262	<0.005
9/28/2017	<0.005	0.279	<0.005
2/15/2018	<0.005	0.279	<0.005
6/28/2018	<0.005	0.23	<0.005
12/19/2018	<0.005		<0.005
12/20/2018		0.25	
8/28/2019	<0.005		<0.005
8/29/2019		0.21	
10/16/2019		0.21	<0.005
10/17/2019	<0.005		
12/3/2019	<0.005		
3/5/2020	<0.005	0.22	<0.005
8/19/2020	<0.005	0.22	<0.005
9/16/2020	<0.005		<0.005
9/17/2020		0.2	

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.351 (U)	1 (U)	0.62 (U)	0.603 (U)					
9/1/2016					1.33				
9/7/2016						1.18	0.541 (U)		0.189 (U)
9/8/2016								0.998 (U)	
11/15/2016				0.645 (U)	0.412 (U)				
11/16/2016	0.824 (U)	0.43 (U)	0.493 (U)						
11/17/2016						0.145 (U)	1.02 (U)	0.613	0.729 (U)
2/20/2017			0.534 (U)	1.36	0.633 (U)				
2/21/2017	1.01 (U)	0.96 (U)							
2/22/2017						0.0213 (U)	0.482 (U)	1.01 (U)	0.293 (U)
6/12/2017	0.532 (U)		0.254 (U)	0.566 (U)	0.112 (U)				
6/13/2017		0.645 (U)							
6/14/2017							0.723 (U)	0.801 (U)	
6/15/2017						0.41 (U)			1.09
9/26/2017	0.845 (U)	0.299 (U)	0.62 (U)	0.762 (U)	0.167 (U)				
9/27/2017							1.5	1.44	
9/28/2017						0.496 (U)			1.02 (U)
2/13/2018	0.176 (U)	1.01 (U)	0.0914 (U)	0.349 (U)	0.347 (U)				
2/15/2018						0.672 (U)	1.14 (U)	0.668 (U)	0.742 (U)
6/26/2018	1.02 (U)	1.26 (J+X)	1.11 (U)	0.614 (U)	0.903 (U)				
6/27/2018						0.692 (U)	1.3 (U)	1.06 (U)	0.739 (U)
12/18/2018	0.487 (U)	0.44 (U)	0.42 (U)	0.445 (U)	0.353 (U)		1.64 (UX)	1.22	
12/19/2018						0.325 (U)			0.465 (U)
8/27/2019	1.11	1.47	1.19	1.44	0.65 (U)		1.38		
8/28/2019						0.24 (U)		0.811 (U)	0.995 (U)
10/15/2019	1.02 (U)	0.807 (U)	0.714 (U)	0.467 (U)	0.402 (U)				
10/16/2019							1.16 (U)	0.561 (U)	1.69
12/18/2019						1.16 (U)			
3/3/2020	1.18 (U)	0.818 (U)	0.996 (U)	1.5	0.397 (U)	0.756 (U)			
3/5/2020							0.683 (U)	0.792 (U)	0.858 (U)
8/18/2020	0.0861 (U)	1.22 (U)	0.53 (U)	0.581 (U)	0.453 (U)				
8/19/2020						0.985 (U)	1.14 (U)	1.21 (U)	0.162 (U)
9/15/2020	0.0583 (U)	0.579 (U)	0.215 (U)	0.55 (U)	0.474 (U)				
9/16/2020						0.478 (U)	0.195 (U)	0.72 (U)	1.25 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.638 (U)	0.816 (U)	
11/18/2016	1.22 (U)		
11/21/2016		2.94	
2/23/2017	0.554 (U)	1.92	0.567 (U)
4/17/2017			0.335 (U)
5/15/2017			0.261 (U)
6/15/2017	0.77 (U)	3.6	0.188 (U)
9/28/2017	1.07 (U)	3.3	0.627 (U)
2/15/2018	0.751 (U)	2.31 (J+X)	0.869 (U)
6/28/2018	0.392 (U)	1.75 (UX)	0.336 (U)
12/19/2018	0.693 (U)		0.454 (U)
12/20/2018		2.8 (J+X)	
8/28/2019	0.866 (U)		0.809 (U)
8/29/2019		3.68	
10/16/2019		2.66	0.815 (U)
12/18/2019	1.91		
3/5/2020	1.3	2.21	0.791 (U)
8/19/2020	1.4	3.17	0.582 (U)
9/16/2020	1.17 (U)		0.844 (U)
9/17/2020		2.92	

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.11 (J)	0.05 (J)	0.07 (J)	0.19 (J)					
9/1/2016					0.06 (J)				
9/7/2016						0.22 (J)	0.19 (J)		0.34
9/8/2016								0.17 (J)	
11/15/2016				<0.3 (J)	<0.3 (J)				
11/16/2016	<0.3 (J)	<0.3 (J)	<0.3 (J)						
11/17/2016						0.315 (D)	<0.1 (D)	<0.1 (D)	<0.1 (D)
2/20/2017			0.06 (J)	0.08 (J)	0.04 (J)				
2/21/2017	0.14 (J)	0.05 (J)							
2/22/2017						0.11 (J)	0.21 (J)	0.17 (J)	0.09 (J)
6/12/2017	0.16 (J)		0.008 (J)	0.07 (J)	0.06 (J)				
6/13/2017		0.04 (J)							
6/14/2017							0.18 (J)	0.1 (J)	
6/15/2017						0.05 (J)			0.03 (J)
9/26/2017	0.14 (J)	<0.1	<0.1	0.04 (J)	<0.1				
9/27/2017							0.42	0.4	
9/28/2017						0.05 (J)			<0.1
2/13/2018	<0.1	<0.1	<0.1	<0.1	<0.1				
2/15/2018						<0.1	0.42	<0.1	<0.1
6/26/2018	0.085 (J)	0.048 (J)	0.045 (J)	0.072 (J)	0.041 (J)				
6/27/2018						0.093 (J)	0.32	0.21 (J)	0.22 (J)
12/18/2018	0.085 (J)	<0.1	<0.1	<0.1	<0.1		0.28 (J)	0.12 (J)	
12/19/2018						0.16 (J)			0.11 (J)
3/19/2019	0.0655 (JD)	0.037 (J)	<0.1	0.06 (J)	0.03 (J)	0.1 (J)			
3/20/2019							0.14 (J)	0.074 (J)	0.088 (J)
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1		0.11 (J)		
8/28/2019						0.085 (J)	0.11 (J)	0.057 (J)	0.056 (J)
10/15/2019	<0.1	<0.1	<0.1	0.045 (J)	<0.1				
10/16/2019							0.17 (J)	0.13 (J)	0.08 (J)
12/3/2019						0.2 (J)			
3/3/2020	0.066 (J)	0.05 (J)	<0.1	0.057 (J)	0.09 (J)	0.093 (J)			
3/5/2020							0.088 (J)	0.072 (J)	0.067 (J)
8/18/2020	<0.1	<0.1	<0.1	<0.1	<0.1				
8/19/2020						0.1	0.11	0.074 (J)	0.06 (J)
9/15/2020	<0.1	<0.1	<0.1	0.051 (J)	<0.1				
9/16/2020						0.1	0.085 (J)	0.077 (J)	0.062 (J)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.18 (J)	0.66	
11/18/2016	<0.1 (D)		
11/21/2016		0.9 (D)	
2/23/2017	0.07 (J)	0.75	0.1 (J)
4/17/2017			0.08 (J)
5/15/2017			0.02 (J)
6/15/2017	0.01 (J)	0.77	0.03 (J)
9/28/2017	<0.1	0.8	<0.1
2/15/2018	<0.1	0.82	<0.1
6/28/2018	0.51 (J+X)	1.5 (J+X)	<0.1
12/19/2018	<0.1		0.094 (J)
12/20/2018		0.68	
3/19/2019	<0.1		
3/20/2019		0.95	0.062 (J)
8/28/2019	<0.1		<0.1
8/29/2019		0.9	
10/16/2019		0.61	0.059 (J)
12/3/2019	0.15 (J)		
3/5/2020	<0.1	0.92	0.05 (J)
8/19/2020	0.051 (J)	0.95	0.055 (J)
9/16/2020	<0.1		<0.1
9/17/2020		0.68	



# Time Series

Constituent: Lead (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.005	<0.005	<0.005	<0.005					
9/1/2016					0.0001 (J)				
9/7/2016						<0.005	0.0002 (J)		0.0001 (J)
9/8/2016								<0.005	
11/15/2016				<0.005	<0.005				
11/16/2016	<0.005	<0.005	<0.005						
11/17/2016						<0.005 (J)	<0.005 (J)	<0.005 (J)	<0.005 (J)
2/20/2017			<0.005	0.0002 (J)	<0.005				
2/21/2017	<0.005	<0.005							
2/22/2017						<0.005	0.0001 (J)	0.0003 (J)	0.0001 (J)
6/12/2017	8E-05 (J)		<0.005	0.0001 (J)	8E-05 (J)				
6/13/2017		<0.005							
6/14/2017							9E-05 (J)	<0.005	
6/15/2017						<0.005			<0.005
9/26/2017	7E-05 (J)	7E-05 (J)	<0.005	0.0001 (J)	<0.005				
9/27/2017							7E-05 (J)	9E-05 (J)	
9/28/2017						<0.005			<0.005
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005				
2/15/2018						<0.005	<0.005	<0.005	<0.005
6/26/2018	<0.005	<0.005	<0.005	<0.005	<0.005				
6/27/2018						<0.005	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	
12/19/2018						<0.005			<0.005
8/27/2019	<0.005	5.8E-05 (J)	<0.005	0.00036 (J)	<0.005		0.00013 (J)		
8/28/2019						<0.005	0.00013 (J)	<0.005	<0.005
10/15/2019	<0.005	<0.005	<0.005	7.9E-05 (J)	<0.005				
10/16/2019							8.8E-05 (J)	<0.005	<0.005
12/3/2019						<0.005			
3/3/2020	<0.005	<0.005	<0.005	7.9E-05 (J)	7.3E-05 (J)	<0.005			
3/5/2020							8.7E-05 (J)	<0.005	<0.005
8/18/2020	<0.005	<0.005	<0.005	0.0001 (J)	<0.005				
8/19/2020						<0.005	6E-05 (J)	<0.005	<0.005
9/15/2020	<0.005	<0.005	0.0013 (J)	4.3E-05 (J)	<0.005				
9/16/2020						5.4E-05 (J)	6.3E-05 (J)	<0.005	0.00012 (J)

# Time Series

Constituent: Lead (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.005	0.0004 (J)	
11/18/2016	<0.005		
11/21/2016		<0.005 (J)	
2/23/2017	<0.005	0.0005 (J)	<0.005
4/17/2017			0.0001 (J)
5/15/2017			<0.005
6/15/2017	<0.005	0.0004 (J)	<0.005
9/28/2017	<0.005	0.0004 (J)	0.0001 (J)
2/15/2018	<0.005	0.00047 (J)	<0.005
6/28/2018	<0.005	0.00036 (J)	<0.005
12/19/2018	<0.005		<0.005
12/20/2018		0.00039 (J)	
8/28/2019	<0.005		<0.005
8/29/2019		0.00035 (J)	
10/16/2019		0.00035 (J)	<0.005
12/3/2019	<0.005		
3/5/2020	<0.005	0.00041 (J)	<0.005
8/19/2020	4.7E-05 (J)	0.00031 (J)	<0.005
9/16/2020	<0.005		<0.005
9/17/2020		0.00032 (J)	

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0268 (J)	<0.03	<0.03	<0.03					
9/1/2016					0.003 (J)				
9/7/2016						<0.03	0.0092 (J)		0.0021 (J)
9/8/2016								<0.03	
11/15/2016				<0.03	<0.03				
11/16/2016	<0.03	<0.03	<0.03						
11/17/2016						<0.03	<0.03	<0.03	<0.03
2/20/2017			<0.03	<0.03	0.0025 (J)				
2/21/2017	0.0128 (J)	<0.03							
2/22/2017						<0.03	0.0106 (J)	<0.03	0.0023 (J)
6/12/2017	0.0245 (J)		0.0019 (J)	<0.03	0.0027 (J)				
6/13/2017		<0.03							
6/14/2017							0.0097 (J)	<0.03	
6/15/2017						<0.03			0.0023 (J)
9/26/2017	0.0549	<0.03	0.0022 (J)	<0.03	0.0023 (J)				
9/27/2017							0.0099 (J)	<0.03	
9/28/2017						<0.03			0.0021 (J)
2/13/2018	0.0595	<0.03	0.0041 (J)	<0.03	0.0027 (J)				
2/15/2018						<0.03	0.0106 (J)	<0.03	0.0021 (J)
6/26/2018	0.089	<0.03	0.0025 (J)	<0.03	0.0029 (J)				
6/27/2018						<0.03	0.01 (J)	<0.03	0.0021 (J)
12/18/2018	0.024 (J)	<0.03	0.0032 (J)	<0.03	0.0026 (J)		0.011 (J)	<0.03	
12/19/2018						<0.03			0.0021 (J)
8/27/2019	0.035	<0.03	0.0019 (J)	<0.03	0.0028 (J)		0.01 (J)		
8/28/2019						0.00097 (J)	0.01 (J)	0.0009 (J)	0.0021 (J)
10/15/2019	0.028 (J)	<0.03	0.002 (J)	<0.03	0.0024 (J)				
10/16/2019							0.0098 (J)	0.00078 (J)	0.0022 (J)
12/3/2019						0.001 (J)			
3/3/2020	0.055	<0.03	0.0013 (J)	<0.03	0.0026 (J)	<0.03			
3/5/2020							0.011 (J)	0.00089 (J)	0.0021 (J)
8/18/2020	0.054	<0.03	0.00095 (J)	<0.03	0.0026 (J)				
8/19/2020						0.001 (J)	0.009 (J)	0.00082 (J)	0.0021 (J)
9/15/2020	0.033	<0.03	0.001 (J)	<0.03	0.0027 (J)				
9/16/2020						0.00096 (J)	0.0089 (J)	<0.03	0.002 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.0024 (J)	0.0193 (J)	
11/18/2016	<0.03		
11/21/2016		<0.03	
2/23/2017	0.0026 (J)	0.0229 (J)	<0.03
4/17/2017			<0.03
5/15/2017			<0.03
6/15/2017	0.0026 (J)	0.0227 (J)	<0.03
9/28/2017	0.0025 (J)	0.023 (J)	<0.03
2/15/2018	<0.03	0.0254 (J)	<0.03
6/28/2018	0.0022 (J)	0.021 (J)	<0.03
12/19/2018	0.0026 (J)		<0.03
12/20/2018		0.022 (J)	
8/28/2019	0.0025 (J)		<0.03
8/29/2019		0.021 (J)	
10/16/2019		0.02 (J)	<0.03
12/3/2019	0.0024 (J)		
3/5/2020	0.0025 (J)	0.021 (J)	<0.03
8/19/2020	0.0024 (J)	0.021 (J)	<0.03
9/16/2020	0.0022 (J)		<0.03
9/17/2020		0.02 (J)	

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005					
9/1/2016					<0.0005				
9/7/2016						<0.0005	<0.0005		<0.0005
9/8/2016								<0.0005	
11/15/2016				<0.0005	<0.0005				
11/16/2016	<0.0005	<0.0005	<0.0005						
11/17/2016						<0.0005	<0.0005	<0.0005	<0.0005
2/20/2017			<0.0005	8E-05 (J)	<0.0005				
2/21/2017	<0.0005	<0.0005							
2/22/2017						<0.0005	<0.0005	<0.0005	<0.0005
6/12/2017	4E-05 (J)		<0.0005	<0.0005	<0.0005				
6/13/2017		<0.0005							
6/14/2017							7E-05 (J)	7E-05 (J)	
6/15/2017						6E-05 (J)			7E-05 (J)
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
9/27/2017							4E-05 (J)	4E-05 (J)	
9/28/2017						<0.0005			<0.0005
2/13/2018	0.00021	0.00019 (J)	<0.0005	0.00013 (J)	<0.0005				
2/15/2018						<0.0005	<0.0005	<0.0005	<0.0005
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
6/27/2018						<0.0005	<0.0005	<0.0005	<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	
12/19/2018						<0.0005			<0.0005
8/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005		
8/28/2019						<0.0005	<0.0005	<0.0005	<0.0005
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
8/19/2020						8.4E-05 (J)	<0.0005	0.00012 (J)	0.00013 (J)
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
9/16/2020						<0.0005	<0.0005	<0.0005	<0.0005

# Time Series

Constituent: Mercury (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.0005	7E-05 (J)	
11/18/2016	<0.0005		
11/21/2016		<0.0005 (J)	
2/23/2017	<0.0005	7E-05 (J)	<0.0005
4/17/2017			<0.0005
5/15/2017			<0.0005
6/15/2017	7E-05 (J)	0.00016 (J)	6E-05 (J)
9/28/2017	<0.0005	0.00011 (J)	<0.0005
2/15/2018	<0.0005	0.00015 (J)	<0.0005
6/28/2018	<0.0005	<0.0005 (X)	<0.0005
12/19/2018	<0.0005		<0.0005
12/20/2018		0.00017 (J)	
8/28/2019	<0.0005		<0.0005
8/29/2019		0.00018 (J)	
8/19/2020	0.00013 (J)	0.00018 (J)	0.00014 (J)
9/16/2020	<0.0005		<0.0005
9/17/2020		0.00011 (J)	

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	0.0021 (J)	<0.01	0.004 (J)	<0.01					
9/1/2016					<0.01				
9/7/2016						<0.01	<0.01		<0.01
9/8/2016								<0.01	
11/15/2016				<0.01	<0.01				
11/16/2016	<0.01	<0.01	<0.01 (J)						
11/17/2016						<0.01	<0.01	<0.01	<0.01
2/20/2017			0.0055 (J)	<0.01	<0.01				
2/21/2017	0.0021 (J)	<0.01							
2/22/2017						<0.01	<0.01	<0.01	<0.01
6/12/2017	0.0021 (J)		0.005 (J)	<0.01	<0.01				
6/13/2017		<0.01							
6/14/2017							<0.01	<0.01	
6/15/2017						<0.01			<0.01
9/26/2017	0.0011 (J)	<0.01	0.0053 (J)	<0.01	<0.01				
9/27/2017							<0.01	<0.01	
9/28/2017						<0.01			<0.01
2/13/2018	0.0019 (J)	<0.01	0.008 (J)	<0.01	<0.01				
2/15/2018						<0.01	<0.01	<0.01	<0.01
6/26/2018	<0.01	<0.01	0.0041 (J)	<0.01	<0.01				
6/27/2018						<0.01	<0.01	<0.01	<0.01
12/18/2018	<0.01	<0.01	0.0048 (J)	<0.01	<0.01		<0.01	<0.01	
12/19/2018						<0.01			<0.01
8/27/2019	<0.01	<0.01	0.0028 (J)	<0.01	<0.01		<0.01		
8/28/2019						<0.01	<0.01	<0.01	<0.01
10/15/2019	<0.01	<0.01	0.0035 (J)	<0.01	<0.01				
10/16/2019							<0.01	<0.01	<0.01
12/3/2019						<0.01			
3/3/2020	<0.01	<0.01	0.0023 (J)	<0.01	<0.01	<0.01			
3/5/2020							<0.01	<0.01	<0.01
8/18/2020	0.0011 (J)	<0.01	0.0015 (J)	<0.01	<0.01				
8/19/2020						<0.01	<0.01	<0.01	<0.01
9/15/2020	0.0007 (J)	<0.01	0.0015 (J)	<0.01	<0.01				
9/16/2020						<0.01	<0.01	<0.01	<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.01	<0.01	
11/18/2016	<0.01		
11/21/2016		<0.01	
2/23/2017	<0.01	<0.01	<0.01
4/17/2017			<0.01
5/15/2017			<0.01
6/15/2017	<0.01	<0.01	<0.01
9/28/2017	<0.01	<0.01	<0.01
2/15/2018	<0.01	<0.01	<0.01
6/28/2018	<0.01	<0.01	<0.01
12/19/2018	<0.01		<0.01
12/20/2018		<0.01	
8/28/2019	<0.01		<0.01
8/29/2019		<0.01	
10/16/2019		<0.01	<0.01
12/3/2019	<0.01		
3/5/2020	<0.01	<0.01	<0.01
8/19/2020	<0.01	<0.01	<0.01
9/16/2020	<0.01		<0.01
9/17/2020		<0.01	



# Time Series

Constituent: pH, Field (S.U) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	7.16	6.2	6.53	6.59					
9/1/2016					6.49				
9/7/2016						6.36	4.92		6.1
9/8/2016								5.84	
11/15/2016				6.67	6.59				
11/16/2016	6.96	6.12	6.4						
11/17/2016						6.28	4.82	5.81	6.04
2/20/2017			6.44	6.65	6.61				
2/21/2017	7.15	6.24							
2/22/2017						6.4	4.86	5.85	6.08
6/12/2017	7.31		6.4	6.64					
6/13/2017		6.19							
6/14/2017							4.86	5.87	
9/26/2017	7.02	6.15	6.31	6.58	6.47				
9/27/2017							4.78	5.74	
9/28/2017						6.35			6.03
2/13/2018	7.44	6.18	6.62	6.72	6.54				
2/15/2018						6.35	4.84	5.93	6.02
6/26/2018	6.93	6.05	6.29	6.43	6.23				
6/27/2018						6.35	4.73	5.68	6.01
12/18/2018	6.76	5.92	6.57	6.7	6.71		4.84	5.97	
12/19/2018						6.56			6.22
3/19/2019	6.87	6.18	6.45	6.63	6.18	6.43			
3/20/2019							4.77	5.84	6.06
8/27/2019	6.79	6.09	6.37	6.49	6.35		4.78		
8/28/2019						6.25	5.52	5.8	5.95
10/15/2019	6.57	6.06	6.77	7.01	6.36				
10/16/2019							4.78	5.85	6.03
10/17/2019						6.3			
3/3/2020	6.71	6.1	6.29	6.49	6.59	6.34			
3/5/2020							4.82	5.89	6.04
8/18/2020	6.59	6.06	6.29	6.41	6.33				
8/19/2020						6.24	4.78	5.78	5.97
9/15/2020	6.64	6.01	6.27	6.25	6.43				
9/16/2020						6.26	4.78	5.81	5.96

# Time Series

Constituent: pH, Field (S.U) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	5.59	5.43	
9/23/2016		5.46	
11/18/2016	5.51		
11/21/2016		4.84	
2/23/2017	5.65	4.73	5.57
9/28/2017	5.62	4.37	5.76
2/15/2018	5.66	4.3	5.95
6/28/2018	5.57	4.16	5.78
12/19/2018	5.76		6.07
12/20/2018		4.21	
3/19/2019	5.72		
3/20/2019		4.34	5.93
8/28/2019	5.52		5.8
8/29/2019		4.01	
10/16/2019		4.21	5.81
10/17/2019	5.61		
3/5/2020	5.39	4.01	5.53
8/19/2020	5.53	4.12	5.66
9/16/2020	5.58		5.84
9/17/2020		4.17	

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.01	<0.01	<0.01	<0.01					
9/1/2016					<0.01				
9/7/2016						0.0024 (J)	0.0032 (J)		<0.01
9/8/2016								<0.01	
11/15/2016				<0.01	<0.01				
11/16/2016	<0.01	<0.01	<0.01						
11/17/2016						<0.01 (J)	<0.01 (J)	<0.01	<0.01
2/20/2017			<0.01	<0.01	<0.01				
2/21/2017	<0.01	<0.01							
2/22/2017						0.0018 (J)	0.0018 (J)	<0.01	<0.01
6/12/2017	<0.01		<0.01	<0.01	<0.01				
6/13/2017		<0.01							
6/14/2017							0.004 (J)	<0.01	
6/15/2017						0.0024 (J)			<0.01
9/26/2017	<0.01	<0.01	<0.01	<0.01	<0.01				
9/27/2017							0.0036 (J)	<0.01	
9/28/2017						<0.01			<0.01
2/13/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
2/15/2018						<0.01	<0.01	<0.01	<0.01
6/26/2018	<0.01	<0.01	<0.01	<0.01	<0.01				
6/27/2018						0.002 (J)	0.0017 (J)	<0.01	<0.01
12/18/2018	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	
12/19/2018						0.0014 (J)			<0.01
8/27/2019	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01		
8/28/2019						0.003 (J)	<0.01	<0.01	<0.01
10/15/2019	<0.01	<0.01	<0.01	<0.01	<0.01				
10/16/2019							0.0028 (J)	<0.01	<0.01
12/3/2019						0.0041 (J)			
3/3/2020	<0.01	<0.01	<0.01	<0.01	<0.01	0.0019 (J)			
3/5/2020							<0.01	<0.01	<0.01
8/18/2020	<0.01	<0.01	<0.01	<0.01	<0.01				
8/19/2020						0.003 (J)	<0.01	<0.01	<0.01
9/15/2020	<0.01	<0.01	<0.01	<0.01	<0.01				
9/16/2020						<0.01	0.0028 (J)	<0.01	<0.01

# Time Series

Constituent: Selenium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	0.0079 (J)	0.0311	
11/18/2016	<0.01 (J)		
11/21/2016		0.0409	
2/23/2017	0.0061 (J)	0.0354	<0.01
4/17/2017			<0.01
5/15/2017			<0.01
6/15/2017	0.0046 (J)	0.0511	<0.01
9/28/2017	0.0042 (J)	0.0484	<0.01
2/15/2018	0.0045 (J)	0.0435	<0.01
6/28/2018	0.0033 (J)	0.037	<0.01
12/19/2018	0.0042 (J)		<0.01
12/20/2018		0.037	
8/28/2019	0.0041 (J)		<0.01
8/29/2019		0.036	
10/16/2019		0.033	<0.01
12/3/2019	0.0035 (J)		
3/5/2020	0.0034 (J)	0.032	<0.01
8/19/2020	0.002 (J)	0.041	<0.01
9/16/2020	0.0031 (J)		<0.01
9/17/2020		0.029	

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	7.5	0.38 (J)	2.7	0.81 (J)					
9/1/2016					0.6 (J)				
9/7/2016						97	260		260
9/8/2016								420	
11/15/2016				<1 (J)	<1 (J)				
11/16/2016	6.6	<1 (J)	3.4						
11/17/2016						120 (D)	235 (D)	445 (D)	285 (D)
2/20/2017			3.9 (B-01)	1 (B-01)	0.98 (J)				
2/21/2017	6.1	1.5							
2/22/2017						120	210	410	270
6/12/2017	5		3.7	0.94 (J)	0.54 (J)				
6/13/2017		0.67 (J)							
6/14/2017							200	410	
6/15/2017						130			280
9/26/2017	5.4	0.62 (J)	4.1	0.92 (J)	0.53 (J)				
9/27/2017							200	360	
9/28/2017						120			240
2/13/2018	4.7 (J)	<1	6.6	<1	<1				
2/15/2018						109	197	335	266
6/26/2018	6.2	0.69 (J)	3.5	0.91 (J)	0.54 (J)				
6/27/2018						118	200	296	278
12/18/2018	5.9	0.72 (J)	4.3	0.68 (J)	0.39 (J)		222	345	
12/19/2018						125			287
3/19/2019	6 (D)	0.78 (J)	3	0.74 (J)	0.68 (J)	126			
3/20/2019							204	329	268
10/15/2019	5.2	0.47 (J)	3.8	0.68 (J)	0.48 (J)				
10/16/2019							226	325	277
12/3/2019						180			
3/3/2020	7.1	0.93 (J)	2.8	0.71 (J)	2.5	95.4			
3/5/2020							173	287	269
9/15/2020	5.9	<1	1.7	<1	<1				
9/16/2020						151	154	283	270

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	300	440	
11/18/2016	245 (D)		
11/21/2016		490 (D)	
2/23/2017	330	470	0.55 (J)
4/17/2017			0.44 (J)
5/15/2017			0.45 (J)
6/15/2017	310	490	0.46 (J)
9/28/2017	290	470	0.49 (J)
2/15/2018	292	432	1.9 (J,o)
6/28/2018	284	453	0.24 (J)
12/19/2018	319		0.4 (J)
12/20/2018		463	
3/19/2019	307		
3/20/2019		405	<1 (X)
10/16/2019		432	0.29 (J)
12/3/2019	256		
3/5/2020	262	370	<1
9/16/2020	256		<1
9/17/2020		356	

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	<0.001	<0.001	<0.001	<0.001					
9/1/2016					<0.001				
9/7/2016						<0.001	0.0002 (J)		<0.001
9/8/2016								<0.001	
11/15/2016				<0.001	<0.001				
11/16/2016	<0.001	<0.001	<0.001						
11/17/2016						<0.001	<0.001 (J)	<0.001	<0.001
2/20/2017			<0.001	<0.001	<0.001				
2/21/2017	<0.001	<0.001							
2/22/2017						<0.001	0.0002 (J)	<0.001	<0.001
6/12/2017	<0.001		<0.001	<0.001	<0.001				
6/13/2017		<0.001							
6/14/2017							0.0002 (J)	<0.001	
6/15/2017						<0.001			<0.001
9/26/2017	<0.001	<0.001	<0.001	<0.001	<0.001				
9/27/2017							0.0002 (J)	<0.001	
9/28/2017						<0.001			<0.001
2/13/2018	<0.001	<0.001	<0.001	<0.001	<0.001				
2/15/2018						<0.001	0.00024 (J)	<0.001	<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001				
6/27/2018						<0.001	0.00022 (J)	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001		0.00022 (J)	<0.001	
12/19/2018						<0.001			<0.001
8/27/2019	<0.001	<0.001	<0.001	<0.001	<0.001		0.00016 (J)		
8/28/2019						<0.001	0.00016 (J)	<0.001	<0.001
10/15/2019	<0.001	<0.001	<0.001	<0.001	<0.001				
10/16/2019							0.00019 (J)	<0.001	<0.001
12/3/2019						6.6E-05 (J)			
3/3/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
3/5/2020							0.0002 (J)	<0.001	<0.001
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
8/19/2020						<0.001	0.00018 (J)	<0.001	<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
9/16/2020						<0.001	0.00018 (J)	<0.001	<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	<0.001	<0.001	
11/18/2016	<0.001		
11/21/2016		<0.001 (J)	
2/23/2017	<0.001	0.0003 (J)	<0.001
4/17/2017			<0.001
5/15/2017			<0.001
6/15/2017	<0.001	0.0003 (J)	<0.001
9/28/2017	<0.001	0.0003 (J)	<0.001
2/15/2018	<0.001	0.00026 (J)	<0.001
6/28/2018	<0.001	0.00018 (J)	<0.001
12/19/2018	<0.001		<0.001
12/20/2018		<0.001 (X)	
8/28/2019	<0.001		<0.001
8/29/2019		0.00021 (J)	
10/16/2019		0.0002 (J)	<0.001
12/3/2019	<0.001		
3/5/2020	<0.001	0.0002 (J)	<0.001
8/19/2020	<0.001	0.00019 (J)	<0.001
9/16/2020	<0.001		<0.001
9/17/2020		0.00017 (J)	



# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-33S	BRGWC-34S	BRGWC-35S
8/31/2016	151	88	138	154					
9/1/2016					299				
9/7/2016						331	382		486
9/8/2016								663	
11/15/2016				123	41				
11/16/2016	69	41	77						
11/17/2016						308	382	651	453
2/20/2017			170	158	133				
2/21/2017	68	<10							
2/22/2017						341	387	706	541
6/12/2017	161		132	142	61				
6/13/2017		53							
6/14/2017							316	643	
6/15/2017						333			548
9/26/2017	167	45	108	138	29				
9/27/2017							303	579	
9/28/2017						310			487
2/13/2018	165	63	141	150	61				
2/15/2018						292	332	612	500
6/26/2018	188	71	133	154	71				
6/27/2018						353 (X)	538 (X)	359 (X)	347 (X)
12/18/2018	145 (X)	78 (X)	138 (X)	147	70 (X)		358	535	
12/19/2018						317			489
3/19/2019	146.5 (D)	68	130	146	72	303			
3/20/2019							338	517	501
10/15/2019	140	66	175	144	63				
10/16/2019							281	473	481
12/3/2019						378			
3/3/2020	155	41	<10	130	54	263			
3/5/2020							292	489	535
9/15/2020	116	69	100	116	79				
9/16/2020						316	88	392	474

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/1/2020 11:46 AM View: Descriptive Pond E

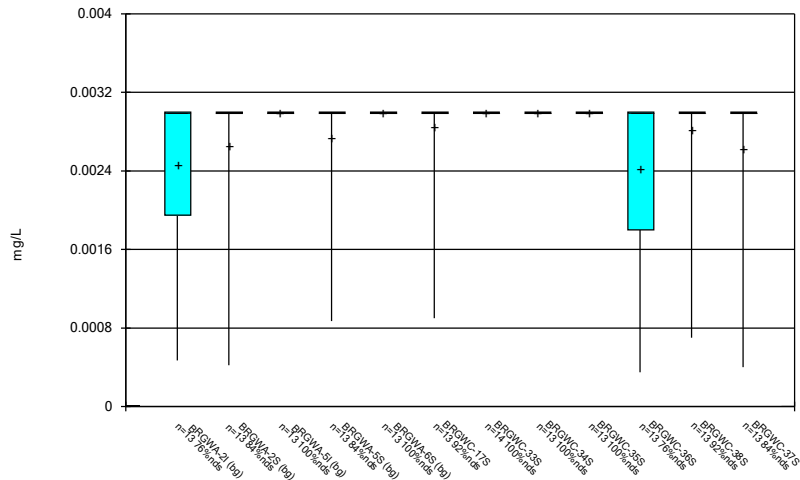
Plant Branch Client: Southern Company Data: Plant Branch AP

---

	BRGWC-36S	BRGWC-38S	BRGWC-37S
9/7/2016	528	750	
11/18/2016	524		
11/21/2016		795	
2/23/2017	517	733	45
4/17/2017			53
5/15/2017			48
6/15/2017	566	812	63
9/28/2017	475	690	39
2/15/2018	513	722	54
6/28/2018	499	704	59 (X)
12/19/2018	521		68
12/20/2018		642	
3/19/2019	498		
3/20/2019		615	68 (X)
10/16/2019		630	49
12/3/2019	498		
3/5/2020	457	608	39
9/16/2020	463		31
9/17/2020		587	

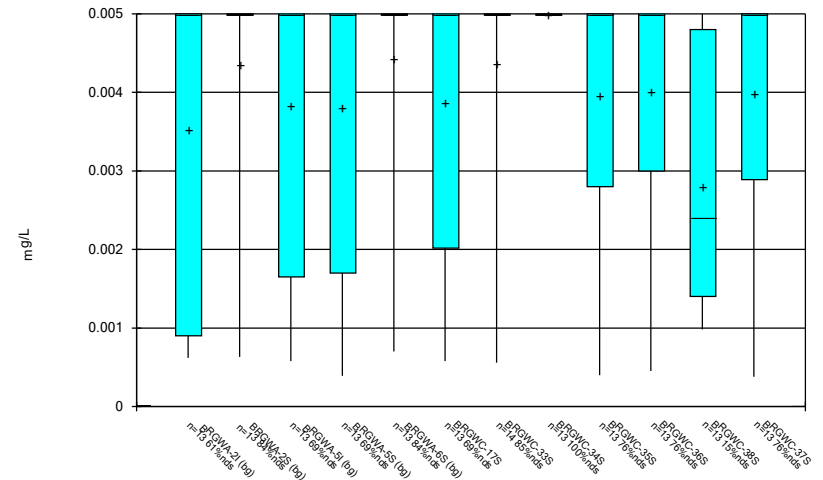
FIGURE B.

Box & Whiskers Plot



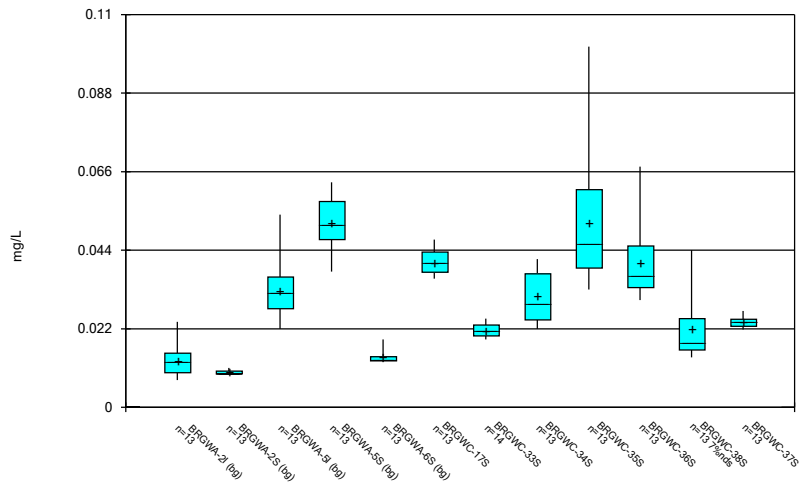
Constituent: Antimony Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



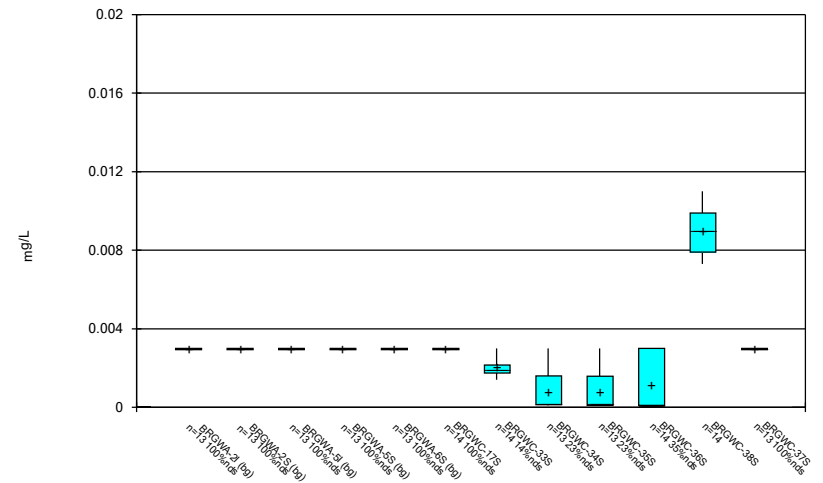
Constituent: Arsenic Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



Constituent: Barium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

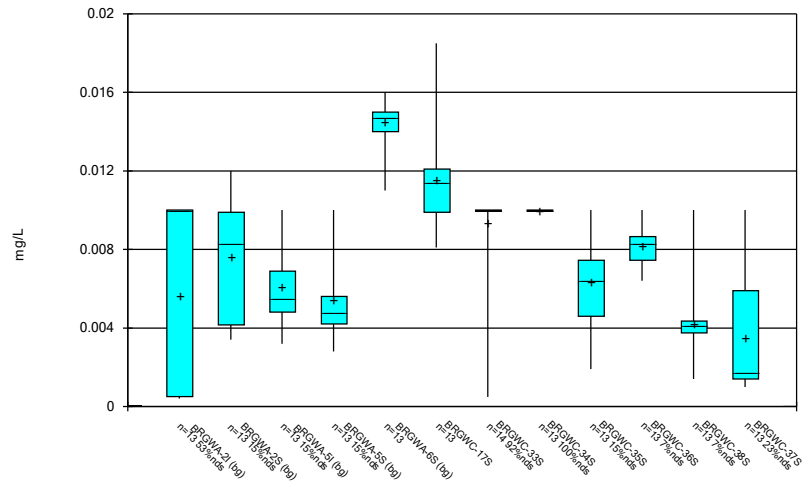
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

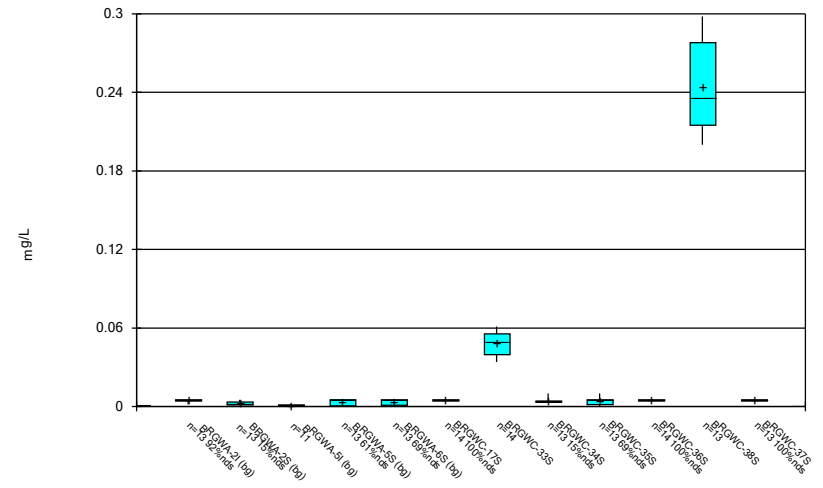


Box & Whiskers Plot



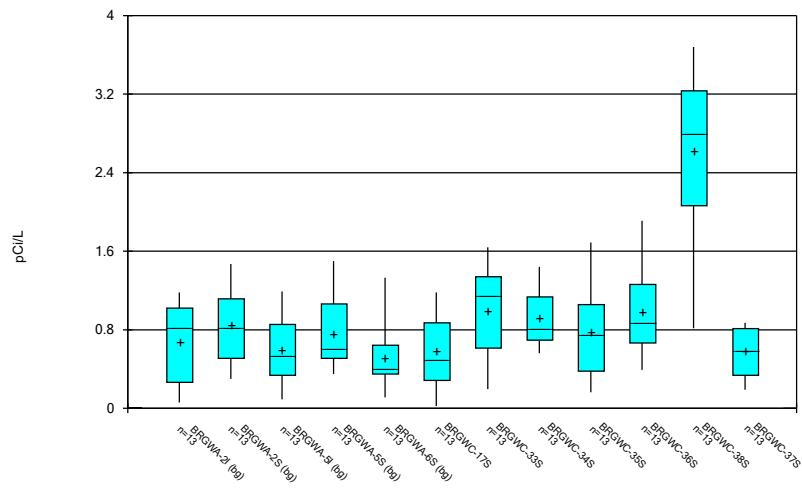
Constituent: Chromium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



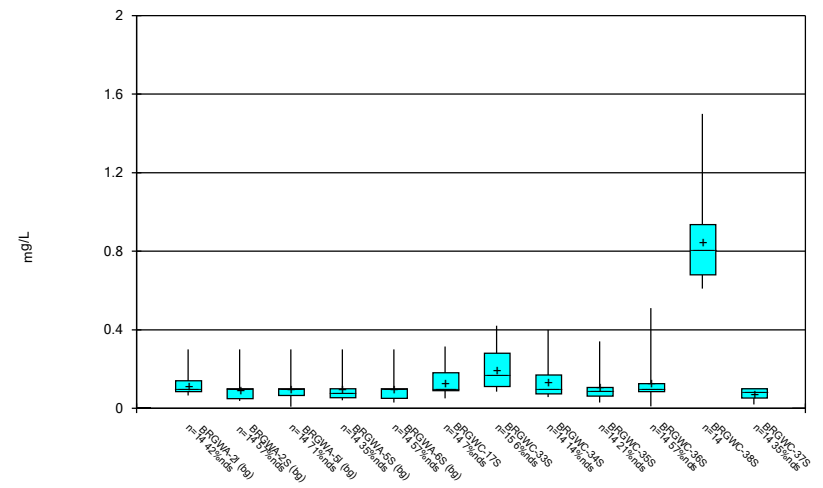
Constituent: Cobalt Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



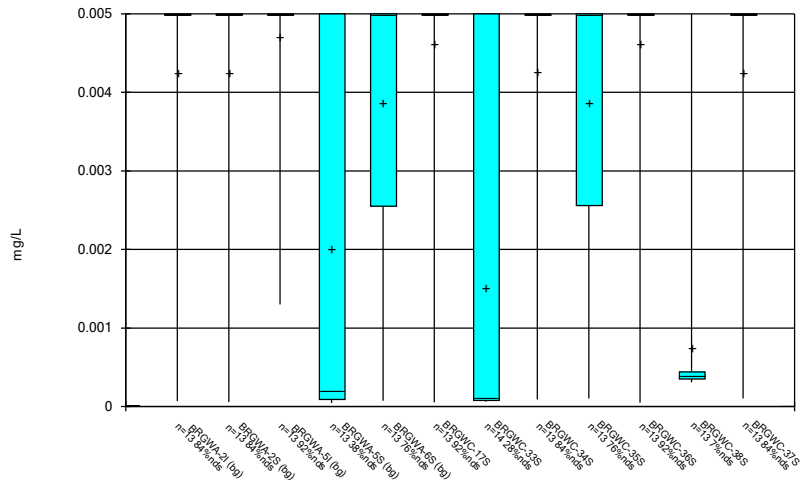
Constituent: Combined Radium 226 + 228 Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



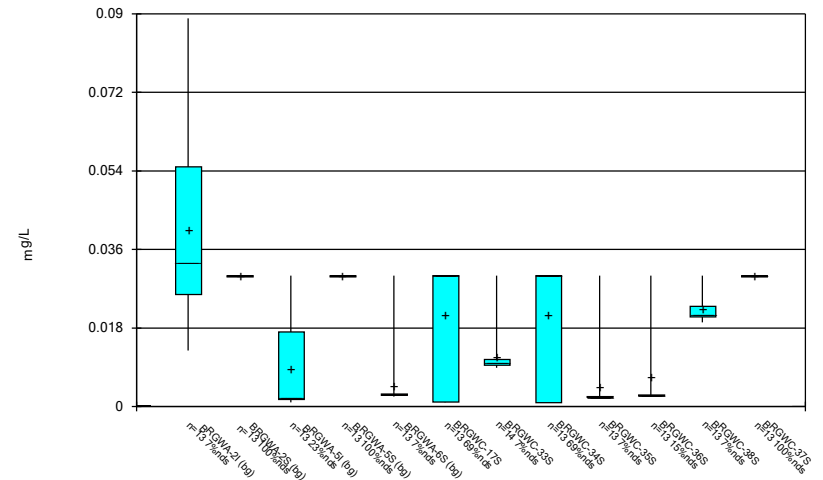
Constituent: Fluoride Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



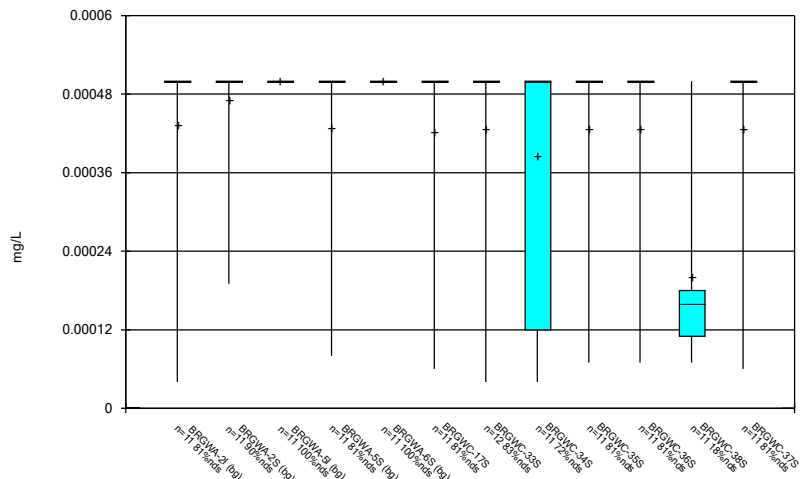
Constituent: Lead Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



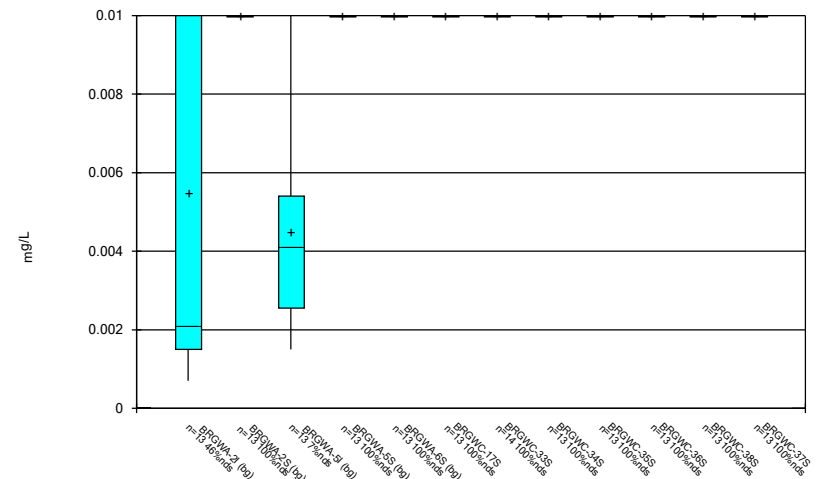
Constituent: Lithium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



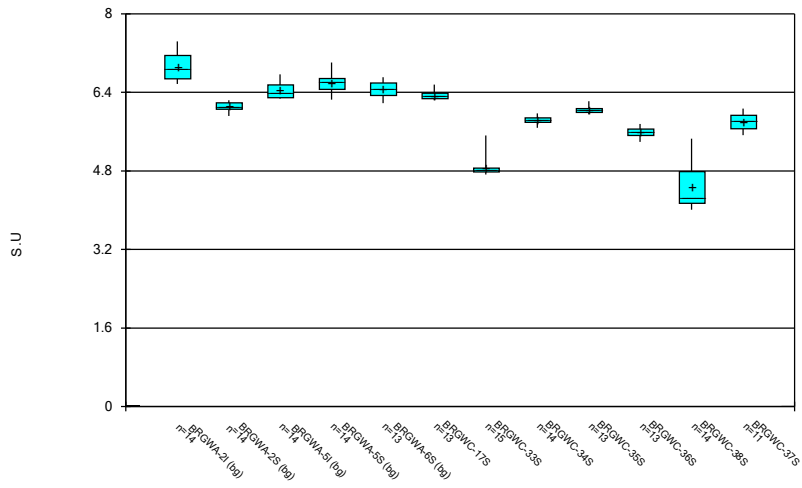
Constituent: Mercury Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



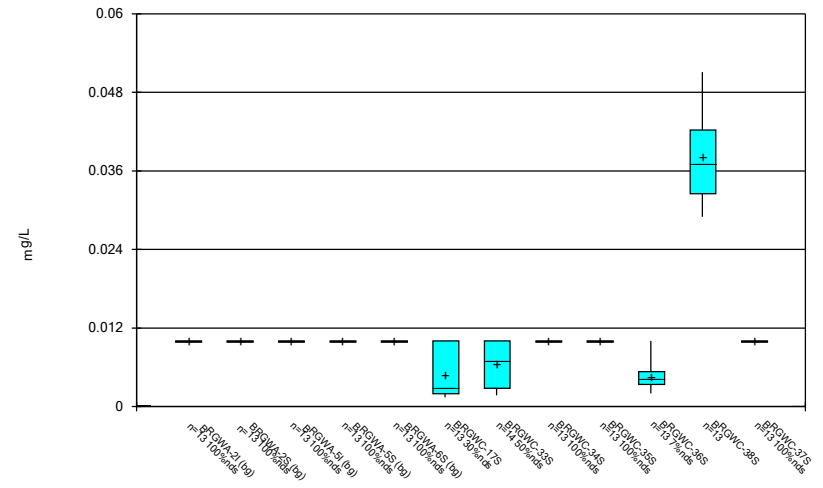
Constituent: Molybdenum Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



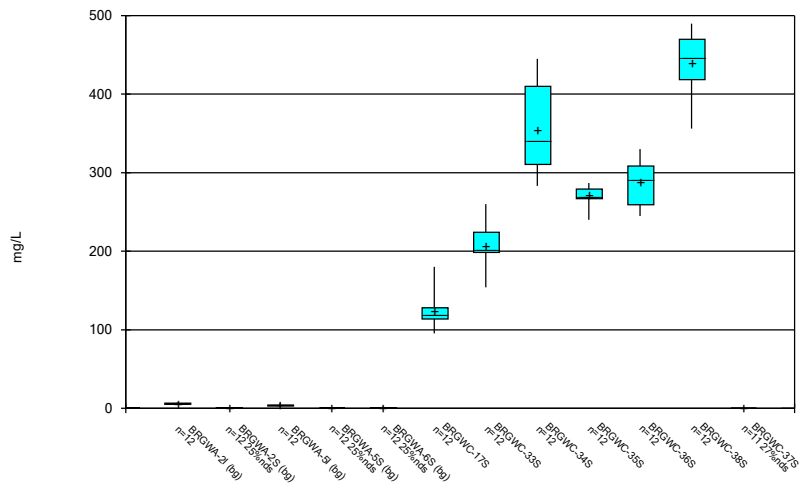
Constituent: pH, Field Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



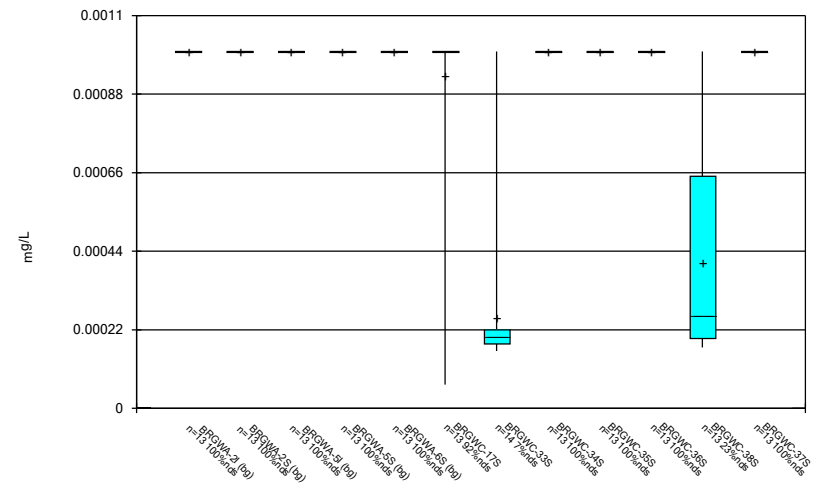
Constituent: Selenium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

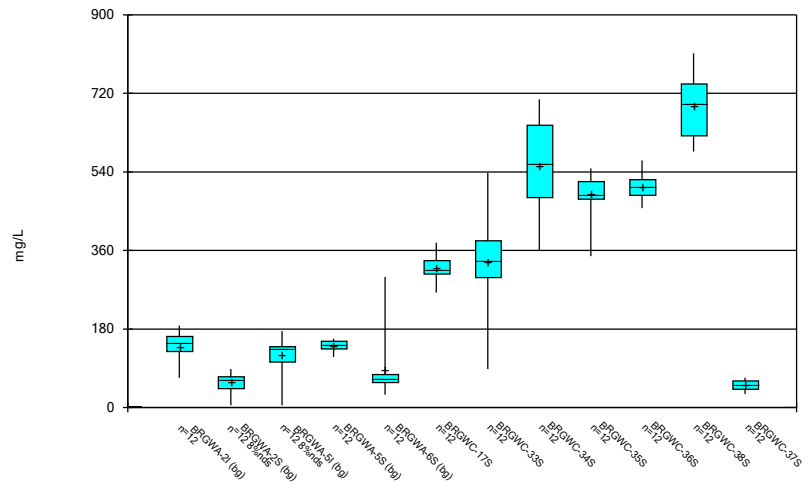
Box & Whiskers Plot



Constituent: Thallium Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP



### Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:48 AM View: Descriptive Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE C.

# Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:31 AM

---

BRGWA-5I Cobalt (mg/L)  
BRGWC-37S Sulfate as SO4 (mg/L)

11/16/2016	<0.01 (o)	
2/13/2018	<0.01 (o)	
2/15/2018		1.9 (J.o)

FIGURE D.

# Interwell Prediction Limit Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:16 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-33S	0.04	n/a	9/16/2020	1.1	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	9/16/2020	2.2	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	9/16/2020	1.9	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	9/16/2020	0.99	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	9/17/2020	1.4	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	9/16/2020	77.7	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	9/16/2020	61.8	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	9/16/2020	45.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	9/17/2020	33.1	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	9/16/2020	6.6	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	9/16/2020	6	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	9/16/2020	7.9	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	9/17/2020	6.1	Yes	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.3	n/a	9/17/2020	0.68	Yes	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
pH, Field (S.U)	BRGWC-33S	7.108	5.895	9/16/2020	4.78	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.108	5.895	9/16/2020	5.81	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.108	5.895	9/16/2020	5.58	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.108	5.895	9/17/2020	4.17	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.108	5.895	9/16/2020	5.84	Yes	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	9/16/2020	151	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	9/16/2020	154	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	9/16/2020	283	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	9/16/2020	270	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	9/16/2020	256	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	9/17/2020	356	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	9/16/2020	316	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	9/16/2020	392	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	9/16/2020	474	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	9/16/2020	463	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	9/17/2020	587	Yes	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

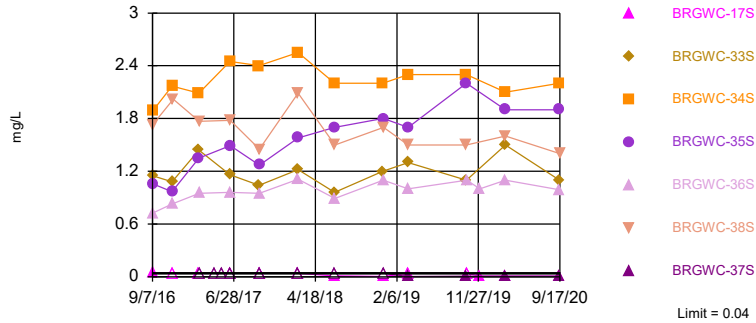
# Interwell Prediction Limit Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:16 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-17S	0.04	n/a	9/16/2020	0.0066J	No	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
<b>Boron (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.04</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>1.1</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>68.33</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (NDs) 1 of 2</b>
Boron (mg/L)	BRGWC-34S	0.04	n/a	9/16/2020	2.2	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	9/16/2020	1.9	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	9/16/2020	0.99	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	9/17/2020	1.4	Yes	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-37S	0.04	n/a	9/16/2020	0.0062J	No	60	n/a	n/a	68.33	n/a	n/a	0.0005205	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	9/16/2020	37.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	9/16/2020	77.7	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	9/16/2020	61.8	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	9/16/2020	45.9	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	9/17/2020	33.1	Yes	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-37S	24	n/a	9/16/2020	3.2	No	60	n/a	n/a	5	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-17S	4.8	n/a	9/16/2020	4.2	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-33S	4.8	n/a	9/16/2020	4.1	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-34S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>6.6</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-35S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>6</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>7.9</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-38S</b>	<b>4.8</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>6.1</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Chloride, Total (mg/L)	BRGWC-37S	4.8	n/a	9/16/2020	1.8	No	60	n/a	n/a	0	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-17S	0.3	n/a	9/16/2020	0.1	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-33S	0.3	n/a	9/16/2020	0.085J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-34S	0.3	n/a	9/16/2020	0.077J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-35S	0.3	n/a	9/16/2020	0.062J	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-36S	0.3	n/a	9/16/2020	0.1ND	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
<b>Fluoride (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.3</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>0.68</b>	<b>Yes</b>	<b>70</b>	<b>n/a</b>	<b>n/a</b>	<b>52.86</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0003866</b>	<b>NP Inter (NDs) 1 of 2</b>
Fluoride (mg/L)	BRGWC-37S	0.3	n/a	9/16/2020	0.1ND	No	70	n/a	n/a	52.86	n/a	n/a	0.0003866	NP Inter (NDs) 1 of 2
pH, Field (S.U)	BRGWC-17S	7.108	5.895	9/16/2020	6.26	No	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
<b>pH, Field (S.U)</b>	<b>BRGWC-33S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>4.78</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-34S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.81</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
pH, Field (S.U)	BRGWC-35S	7.108	5.895	9/16/2020	5.96	No	69	6.501	0.3176	0	None	No	0.0005373	Param Inter 1 of 2
<b>pH, Field (S.U)</b>	<b>BRGWC-36S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.58</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/17/2020</b>	<b>4.17</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
<b>pH, Field (S.U)</b>	<b>BRGWC-37S</b>	<b>7.108</b>	<b>5.895</b>	<b>9/16/2020</b>	<b>5.84</b>	<b>Yes</b>	<b>69</b>	<b>6.501</b>	<b>0.3176</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.0005373</b>	<b>Param Inter 1 of 2</b>
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	9/16/2020	151	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	9/16/2020	154	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	9/16/2020	283	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	9/16/2020	270	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	9/16/2020	256	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	9/17/2020	356	Yes	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-37S	7.5	n/a	9/16/2020	0.5ND	No	60	n/a	n/a	15	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-17S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>316</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-33S	299	n/a	9/16/2020	88	No	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>392</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-35S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>474</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>299</b>	<b>n/a</b>	<b>9/16/2020</b>	<b>463</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>299</b>	<b>n/a</b>	<b>9/17/2020</b>	<b>587</b>	<b>Yes</b>	<b>60</b>	<b>n/a</b>	<b>n/a</b>	<b>3.333</b>	<b>n/a</b>	<b>n/a</b>	<b>0.0005205</b>	<b>NP Inter (normality) 1 of 2</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-37S	299	n/a	9/16/2020	31	No	60	n/a	n/a	3.333	n/a	n/a	0.0005205	NP Inter (normality) 1 of 2

Exceeds Limit: BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

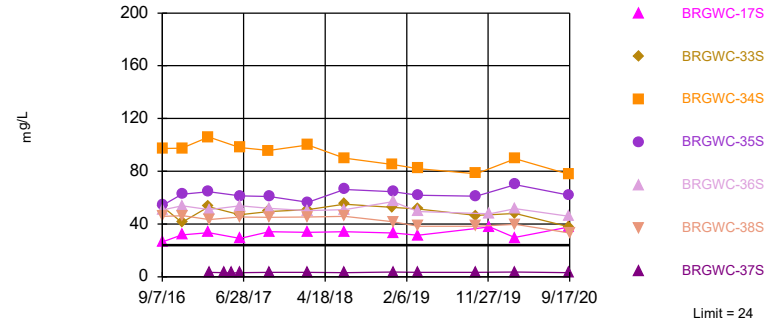


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 60 background values. 68.33% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 11/1/2020 11:13 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

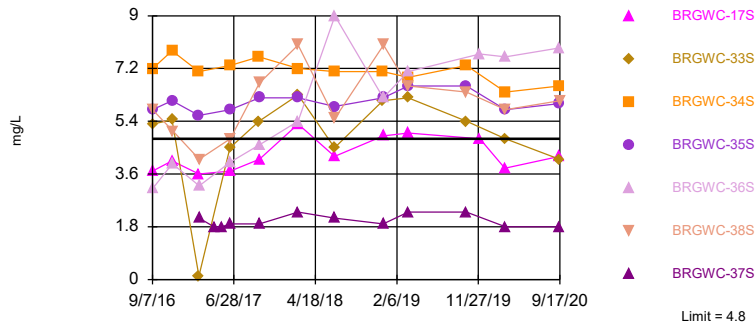


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 5% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

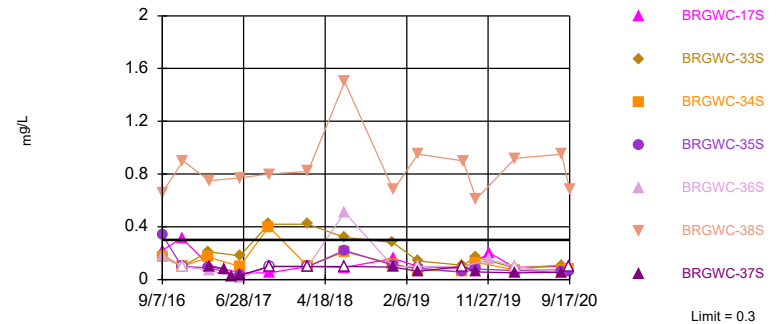


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride, Total Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-38S

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 70 background values. 52.86% NDs. Annual per-constituent alpha = 0.005399. Individual comparison alpha = 0.0003866 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP





# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-17S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	0.0449 (J)		
9/8/2016		1.89	
11/15/2016			
11/16/2016			
11/17/2016	<0.04	2.17	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	<0.04	2.09	
2/23/2017			<0.04
4/17/2017			<0.04
5/15/2017			<0.04
6/12/2017			
6/13/2017			
6/14/2017		2.45	
6/15/2017	<0.04		<0.04
9/26/2017			
9/27/2017		2.4	
9/28/2017	<0.04		<0.04
2/13/2018			
2/15/2018	<0.04	2.55	<0.04
6/26/2018			
6/27/2018	0.0088 (J+X)	2.2 (J+X)	
6/28/2018			<0.04 (X)
12/18/2018		2.2	
12/19/2018	0.0045 (J)		<0.04
12/20/2018			
3/19/2019	<0.04		
3/20/2019		2.3	0.004 (J)
10/15/2019			
10/16/2019		2.3	0.0055 (J)
10/17/2019	<0.04		
12/3/2019	0.0063 (J)		
3/3/2020	0.0075 (J)		
3/5/2020		2.1	0.0076 (J)
9/15/2020			
9/16/2020	0.0066 (J)	2.2	0.0062 (J)
9/17/2020			



# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-17S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	26.3		
9/8/2016		97.3	
11/15/2016			
11/16/2016			
11/17/2016	31.8	97.6	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	33.5	106	
2/23/2017			3.26
4/17/2017			3.23
5/15/2017			2.97 (B-01)
6/12/2017			
6/13/2017			
6/14/2017		98	
6/15/2017	29		3.15
9/26/2017			
9/27/2017		95.8	
9/28/2017	34.1		3.26
2/13/2018			
2/15/2018	33.8	100	3.39
6/26/2018			
6/27/2018	34.1	90.1	
6/28/2018			3.1
12/18/2018		85.1	
12/19/2018	33.1		3.6
12/20/2018			
3/19/2019	31.6		
3/20/2019		82	3.3
10/15/2019			
10/16/2019		78.2	3.4
12/3/2019	37.7		
3/3/2020	29.7		
3/5/2020		89.6	3.7
9/15/2020			
9/16/2020	37.9	77.7	3.2
9/17/2020			



# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-17S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	3.7		
9/8/2016		7.2	
11/15/2016			
11/16/2016			
11/17/2016	4.05 (D)	7.8 (D)	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	3.6	7.1	
2/23/2017			2.1
4/17/2017			1.8
5/15/2017			1.8
6/12/2017			
6/13/2017			
6/14/2017		7.3	
6/15/2017	3.7		1.9
9/26/2017			
9/27/2017		7.6	
9/28/2017	4.1		1.9
2/13/2018			
2/15/2018	5.3	7.2	2.3
6/26/2018			
6/27/2018	4.2	7.1	
6/28/2018			2.1 (J-X)
12/18/2018		7.1	
12/19/2018	4.9 (J-X)		1.9 (J-X)
12/20/2018			
3/19/2019	5		
3/20/2019		6.9	2.3
10/15/2019			
10/16/2019		7.3	2.3
12/3/2019	4.8		
3/3/2020	3.8		
3/5/2020		6.4	1.8
9/15/2020			
9/16/2020	4.2	6.6	1.8
9/17/2020			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-38S	BRGWC-36S	BRGWC-35S	BRGWC-17S
8/31/2016	0.11 (J)	0.19 (J)	0.07 (J)	0.05 (J)					
9/1/2016					0.06 (J)				
9/7/2016						0.66	0.18 (J)	0.34	0.22 (J)
9/8/2016									
11/15/2016		<0.3 (J)			<0.3 (J)				
11/16/2016	<0.3 (J)		<0.3 (J)	<0.3 (J)					
11/17/2016								<0.1 (D)	0.315 (D)
11/18/2016							<0.1 (D)		
11/21/2016						0.9 (D)			
2/20/2017		0.08 (J)	0.06 (J)		0.04 (J)				
2/21/2017	0.14 (J)			0.05 (J)					
2/22/2017								0.09 (J)	0.11 (J)
2/23/2017						0.75	0.07 (J)		
4/17/2017									
5/15/2017									
6/12/2017	0.16 (J)	0.07 (J)	0.008 (J)		0.06 (J)				
6/13/2017				0.04 (J)					
6/14/2017									
6/15/2017						0.77	0.01 (J)	0.03 (J)	0.05 (J)
9/26/2017	0.14 (J)	0.04 (J)	<0.1	<0.1	<0.1				
9/27/2017									
9/28/2017						0.8	<0.1	<0.1	0.05 (J)
2/13/2018	<0.1	<0.1	<0.1	<0.1	<0.1				
2/15/2018						0.82	<0.1	<0.1	<0.1
6/26/2018	0.085 (J)	0.072 (J)	0.045 (J)	0.048 (J)	0.041 (J)				
6/27/2018								0.22 (J)	0.093 (J)
6/28/2018						1.5 (J+X)	0.51 (J+X)		
12/18/2018	0.085 (J)	<0.1	<0.1	<0.1	<0.1				
12/19/2018							<0.1	0.11 (J)	0.16 (J)
12/20/2018						0.68			
3/19/2019	0.0655 (JD)	0.06 (J)	<0.1	0.037 (J)	0.03 (J)		<0.1		0.1 (J)
3/20/2019						0.95		0.088 (J)	
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1				
8/28/2019							<0.1	0.056 (J)	0.085 (J)
8/29/2019						0.9			
10/15/2019	<0.1	0.045 (J)	<0.1	<0.1	<0.1				
10/16/2019						0.61		0.08 (J)	
12/3/2019							0.15 (J)		0.2 (J)
3/3/2020	0.066 (J)	0.057 (J)	<0.1	0.05 (J)	0.09 (J)				0.093 (J)
3/5/2020						0.92	<0.1	0.067 (J)	
8/18/2020	<0.1	<0.1	<0.1	<0.1	<0.1				
8/19/2020						0.95	0.051 (J)	0.06 (J)	0.1
9/15/2020	<0.1	0.051 (J)	<0.1	<0.1	<0.1				
9/16/2020							<0.1	0.062 (J)	0.1
9/17/2020						0.68			

# Prediction Limit

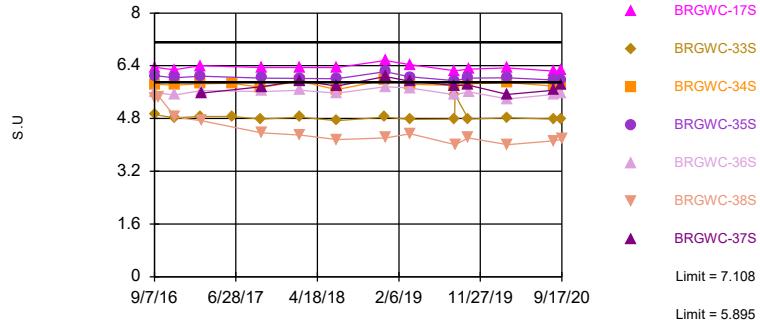
Constituent: Fluoride (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	0.19 (J)		
9/8/2016		0.17 (J)	
11/15/2016			
11/16/2016			
11/17/2016	<0.1 (D)	<0.1 (D)	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	0.21 (J)	0.17 (J)	
2/23/2017			0.1 (J)
4/17/2017			0.08 (J)
5/15/2017			0.02 (J)
6/12/2017			
6/13/2017			
6/14/2017	0.18 (J)	0.1 (J)	
6/15/2017			0.03 (J)
9/26/2017			
9/27/2017	0.42	0.4	
9/28/2017			<0.1
2/13/2018			
2/15/2018	0.42	<0.1	<0.1
6/26/2018			
6/27/2018	0.32	0.21 (J)	
6/28/2018			<0.1
12/18/2018	0.28 (J)	0.12 (J)	
12/19/2018			0.094 (J)
12/20/2018			
3/19/2019			
3/20/2019	0.14 (J)	0.074 (J)	0.062 (J)
8/27/2019	0.11 (J)		
8/28/2019	0.11 (J)	0.057 (J)	<0.1
8/29/2019			
10/15/2019			
10/16/2019	0.17 (J)	0.13 (J)	0.059 (J)
12/3/2019			
3/3/2020			
3/5/2020	0.088 (J)	0.072 (J)	0.05 (J)
8/18/2020			
8/19/2020	0.11	0.074 (J)	0.055 (J)
9/15/2020			
9/16/2020	0.085 (J)	0.077 (J)	<0.1
9/17/2020			

Exceeds Limit: BRGWC-33S, BRGWC-34S, BRGWC-36S, BRGWC-38S, BRGWC-37S

Prediction Limit  
Interwell Parametric

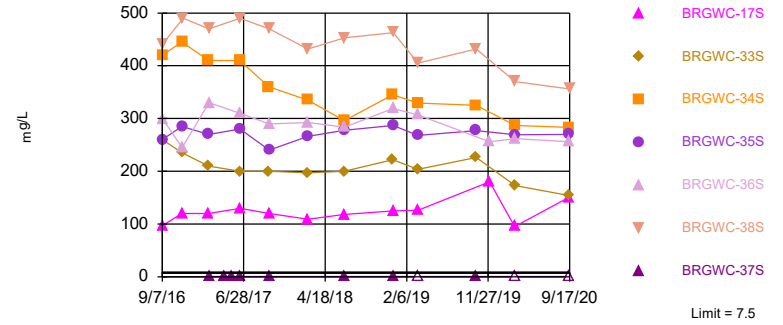


Background Data Summary: Mean=6.501, Std. Dev.=0.3176, n=69. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9657, critical = 0.951. Kappa = 1.909 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005373. Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

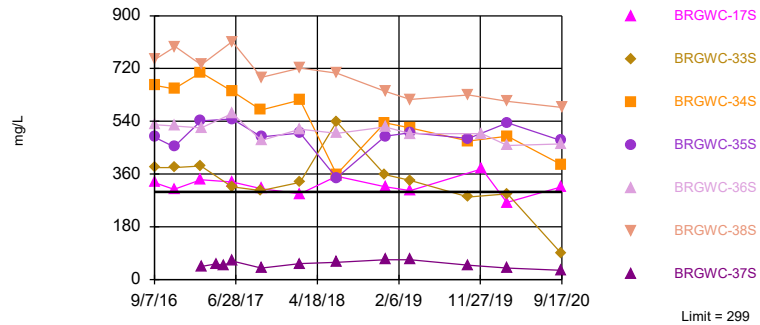


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 15% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 60 background values. 3.333% NDs. Annual per-constituent alpha = 0.007263. Individual comparison alpha = 0.0005205 (1 of 2). Comparing 7 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:14 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



# Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-38S	BRGWC-36S	BRGWC-17S	BRGWC-35S
8/31/2016	7.16	6.53	6.59	6.2					
9/1/2016					6.49				
9/7/2016						5.43	5.59	6.36	6.1
9/8/2016									
9/23/2016						5.46			
11/15/2016			6.67		6.59				
11/16/2016	6.96	6.4		6.12					
11/17/2016								6.28	6.04
11/18/2016							5.51		
11/21/2016						4.84			
2/20/2017		6.44	6.65		6.61				
2/21/2017	7.15			6.24					
2/22/2017								6.4	6.08
2/23/2017						4.73	5.65		
6/12/2017	7.31	6.4	6.64						
6/13/2017				6.19					
6/14/2017									
9/26/2017	7.02	6.31	6.58	6.15	6.47				
9/27/2017									
9/28/2017						4.37	5.62	6.35	6.03
2/13/2018	7.44	6.62	6.72	6.18	6.54				
2/15/2018						4.3	5.66	6.35	6.02
6/26/2018	6.93	6.29	6.43	6.05	6.23				
6/27/2018								6.35	6.01
6/28/2018						4.16	5.57		
12/18/2018	6.76	6.57	6.7	5.92	6.71				
12/19/2018							5.76	6.56	6.22
12/20/2018						4.21			
3/19/2019	6.87	6.45	6.63	6.18	6.18		5.72	6.43	
3/20/2019						4.34			6.06
8/27/2019	6.79	6.37	6.49	6.09	6.35				
8/28/2019							5.52	6.25	5.95
8/29/2019						4.01			
10/15/2019	6.57	6.77	7.01	6.06	6.36				
10/16/2019						4.21			6.03
10/17/2019							5.61	6.3	
3/3/2020	6.71	6.29	6.49	6.1	6.59			6.34	
3/5/2020						4.01	5.39		6.04
8/18/2020	6.59	6.29	6.41	6.06	6.33				
8/19/2020						4.12	5.53	6.24	5.97
9/15/2020	6.64	6.27	6.25	6.01	6.43				
9/16/2020							5.58	6.26	5.96
9/17/2020						4.17			

# Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	4.92		
9/8/2016		5.84	
9/23/2016			
11/15/2016			
11/16/2016			
11/17/2016	4.82	5.81	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	4.86	5.85	
2/23/2017			5.57
6/12/2017			
6/13/2017			
6/14/2017	4.86	5.87	
9/26/2017			
9/27/2017	4.78	5.74	
9/28/2017			5.76
2/13/2018			
2/15/2018	4.84	5.93	5.95
6/26/2018			
6/27/2018	4.73	5.68	
6/28/2018			5.78
12/18/2018	4.84	5.97	
12/19/2018			6.07
12/20/2018			
3/19/2019			
3/20/2019	4.77	5.84	5.93
8/27/2019	4.78		
8/28/2019	5.52	5.8	5.8
8/29/2019			
10/15/2019			
10/16/2019	4.78	5.85	5.81
10/17/2019			
3/3/2020			
3/5/2020	4.82	5.89	5.53
8/18/2020			
8/19/2020	4.78	5.78	5.66
9/15/2020			
9/16/2020	4.78	5.81	5.84
9/17/2020			

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-17S	BRGWC-38S	BRGWC-35S	BRGWC-33S
8/31/2016	7.5	0.81 (J)	2.7	0.38 (J)					
9/1/2016					0.6 (J)				
9/7/2016						97	440	260	260
9/8/2016									
11/15/2016		<1 (J)			<1 (J)				
11/16/2016	6.6		3.4	<1 (J)					
11/17/2016						120 (D)		285 (D)	235 (D)
11/18/2016									
11/21/2016							490 (D)		
2/20/2017		1 (B-01)	3.9 (B-01)		0.98 (J)				
2/21/2017	6.1			1.5					
2/22/2017						120		270	210
2/23/2017							470		
4/17/2017									
5/15/2017									
6/12/2017	5	0.94 (J)	3.7		0.54 (J)				
6/13/2017				0.67 (J)					
6/14/2017									200
6/15/2017						130	490	280	
9/26/2017	5.4	0.92 (J)	4.1	0.62 (J)	0.53 (J)				
9/27/2017									200
9/28/2017						120	470	240	
2/13/2018	4.7 (J)	<1	6.6	<1	<1				
2/15/2018						109	432	266	197
6/26/2018	6.2	0.91 (J)	3.5	0.69 (J)	0.54 (J)				
6/27/2018						118		278	200
6/28/2018							453		
12/18/2018	5.9	0.68 (J)	4.3	0.72 (J)	0.39 (J)				222
12/19/2018						125		287	
12/20/2018							463		
3/19/2019	6 (D)	0.74 (J)	3	0.78 (J)	0.68 (J)	126			
3/20/2019							405	268	204
10/15/2019	5.2	0.68 (J)	3.8	0.47 (J)	0.48 (J)				
10/16/2019							432	277	226
12/3/2019						180			
3/3/2020	7.1	0.71 (J)	2.8	0.93 (J)	2.5	95.4			
3/5/2020							370	269	173
9/15/2020	5.9	<1	1.7	<1	<1				
9/16/2020						151		270	154
9/17/2020							356		

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	300		
9/8/2016		420	
11/15/2016			
11/16/2016			
11/17/2016		445 (D)	
11/18/2016	245 (D)		
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017		410	
2/23/2017	330		0.55 (J)
4/17/2017			0.44 (J)
5/15/2017			0.45 (J)
6/12/2017			
6/13/2017			
6/14/2017		410	
6/15/2017	310		0.46 (J)
9/26/2017			
9/27/2017		360	
9/28/2017	290		0.49 (J)
2/13/2018			
2/15/2018	292	335	1.9 (J,o)
6/26/2018			
6/27/2018		296	
6/28/2018	284		0.24 (J)
12/18/2018		345	
12/19/2018	319		0.4 (J)
12/20/2018			
3/19/2019	307		
3/20/2019		329	<1 (X)
10/15/2019			
10/16/2019		325	0.29 (J)
12/3/2019	256		
3/3/2020			
3/5/2020	262	287	<1
9/15/2020			
9/16/2020	256	283	<1
9/17/2020			



# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 11/1/2020 11:16 AM View: PL's Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-17S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	331		
9/8/2016		663	
11/15/2016			
11/16/2016			
11/17/2016	308	651	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	341	706	
2/23/2017			45
4/17/2017			53
5/15/2017			48
6/12/2017			
6/13/2017			
6/14/2017		643	
6/15/2017	333		63
9/26/2017			
9/27/2017		579	
9/28/2017	310		39
2/13/2018			
2/15/2018	292	612	54
6/26/2018			
6/27/2018	353 (X)	359 (X)	
6/28/2018			59 (X)
12/18/2018		535	
12/19/2018	317		68
12/20/2018			
3/19/2019	303		
3/20/2019		517	68 (X)
10/15/2019			
10/16/2019		473	49
12/3/2019	378		
3/3/2020	263		
3/5/2020		489	39
9/15/2020			
9/16/2020	316	392	31
9/17/2020			

FIGURE E.

# Trend Test Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:24 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWC-35S	0.2452	52	38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-34S	-6.103	-42	-38	Yes	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-38S	-2.362	-40	-38	Yes	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-36S	1.313	52	38	Yes	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-2I (bg)	-0.1422	-59	-48	Yes	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-38S	-0.215	-63	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-34S	-38.53	-55	-38	Yes	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-38S	-25.44	-41	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	-67.45	-48	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	-15.74	-41	-38	Yes	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	-51.51	-52	-38	Yes	12	0	n/a	n/a	0.01	NP



# Trend Test Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:24 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-2I (bg)	-0.0003913	-9	-38	No	12	16.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	0	38	No	12	100	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	5	38	No	12	83.33	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-6	-38	No	12	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	-2	-38	No	12	75	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-33S	0.01641	7	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-34S	0.01111	8	38	No	12	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>BRGWC-35S</b>	<b>0.2452</b>	<b>52</b>	<b>38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	BRGWC-36S	0.05331	34	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-38S	-0.08681	-27	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	1.137	29	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.05889	-17	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.08584	-3	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.153	-4	-38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1455	32	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-17S	1.454	23	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-33S	-1.126	-16	-38	No	12	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-34S</b>	<b>-6.103</b>	<b>-42</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	BRGWC-35S	0.7703	13	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-36S	-1.111	-23	-38	No	12	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-38S</b>	<b>-2.362</b>	<b>-40</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWA-2I (bg)	-0.02706	-7	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0	0	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.1482	-21	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	-0.01532	-6	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0.01532	12	38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-34S	-0.2166	-33	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-35S	0.08852	21	38	No	12	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>1.313</b>	<b>52</b>	<b>38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-38S	0.2779	14	38	No	12	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2I (bg)	-0.01511	-39	-48	No	14	42.86	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	7	48	No	14	57.14	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	17	48	No	14	71.43	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.01067	-29	-48	No	14	35.71	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0	11	48	No	14	57.14	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-38S	0.04873	16	48	No	14	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWA-2I (bg)</b>	<b>-0.1422</b>	<b>-59</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWA-2S (bg)	-0.04353	-47	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.03452	-29	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.05503	-32	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-6S (bg)	-0.04101	-17	-43	No	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-33S	-0.01441	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-34S	0	-2	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-36S	-0.01515	-10	-43	No	13	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>-0.215</b>	<b>-63</b>	<b>-48</b>	<b>Yes</b>	<b>14</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWC-37S	0.01714	1	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2I (bg)	-0.1119	-11	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.04767	13	38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	-0.1873	-8	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.07276	-22	-38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.01104	-8	-38	No	12	25	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-17S	7.267	19	38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-33S	-13.69	-29	-38	No	12	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-34S</b>	<b>-38.53</b>	<b>-55</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWC-35S	0.9989	3	38	No	12	0	n/a	n/a	0.01	NP

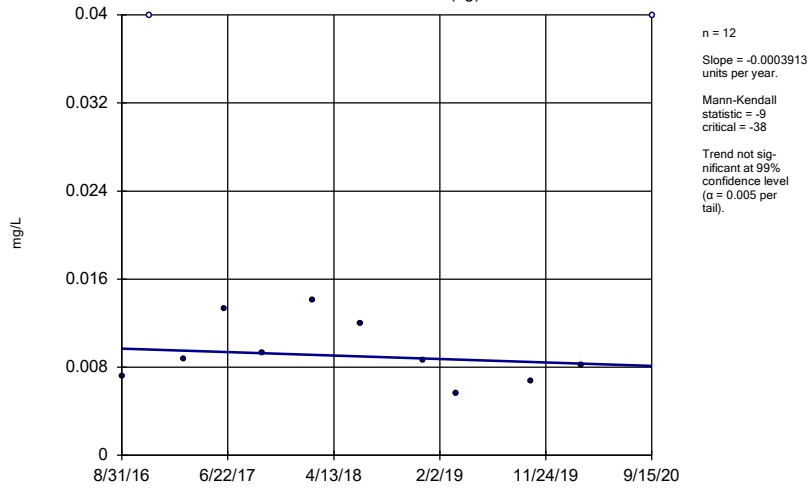
# Trend Test Summary - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:24 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Sulfate as SO4 (mg/L)	BRGWC-36S	-11.18	-19	-38	No	12	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-38S</b>	<b>-25.44</b>	<b>-41</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	-1.984	-2	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	4.612	11	38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-3.347	-9	-38	No	12	8.333	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-3.649	-23	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	0.4269	1	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	-4.988	-8	-38	No	12	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>-67.45</b>	<b>-48</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	-1.794	-2	-38	No	12	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>-15.74</b>	<b>-41</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>-51.51</b>	<b>-52</b>	<b>-38</b>	<b>Yes</b>	<b>12</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

### Sen's Slope Estimator

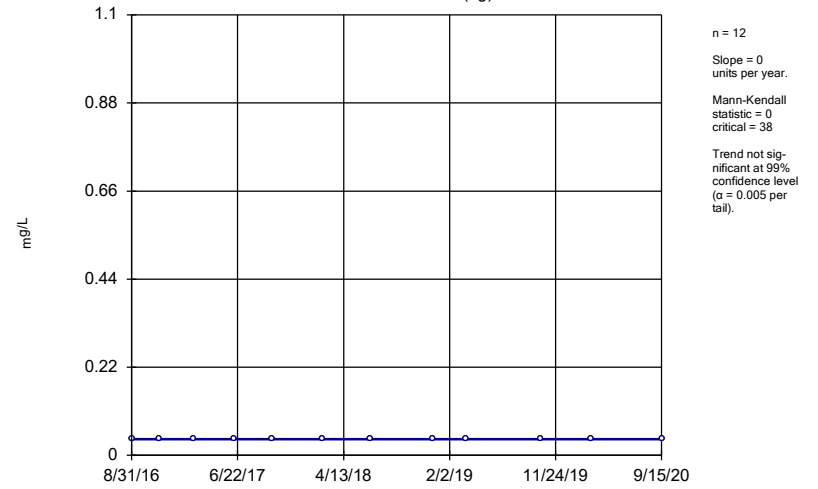
BRGWA-2I (bg)



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

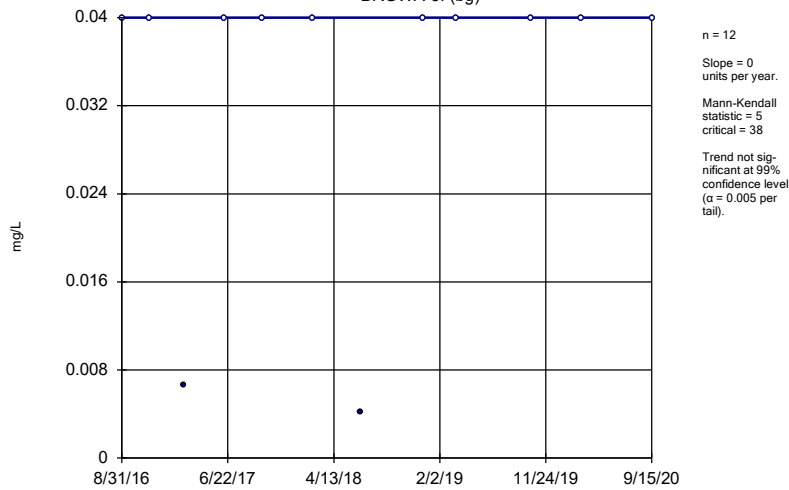
BRGWA-2S (bg)



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

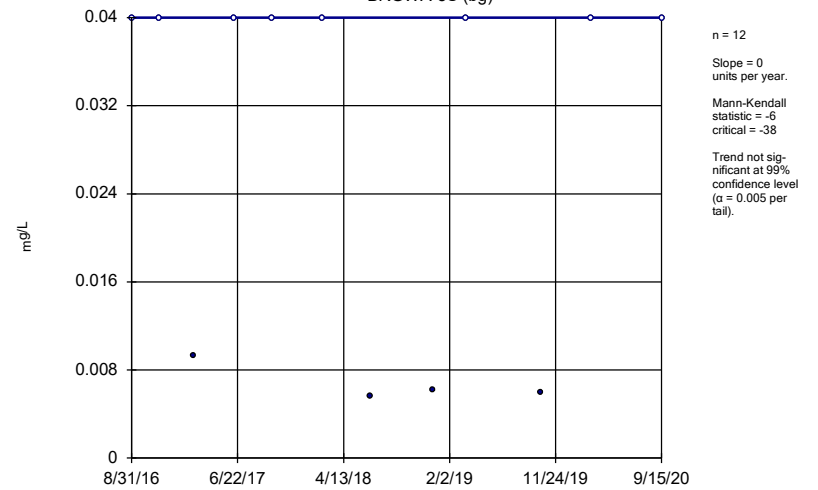
BRGWA-5I (bg)



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

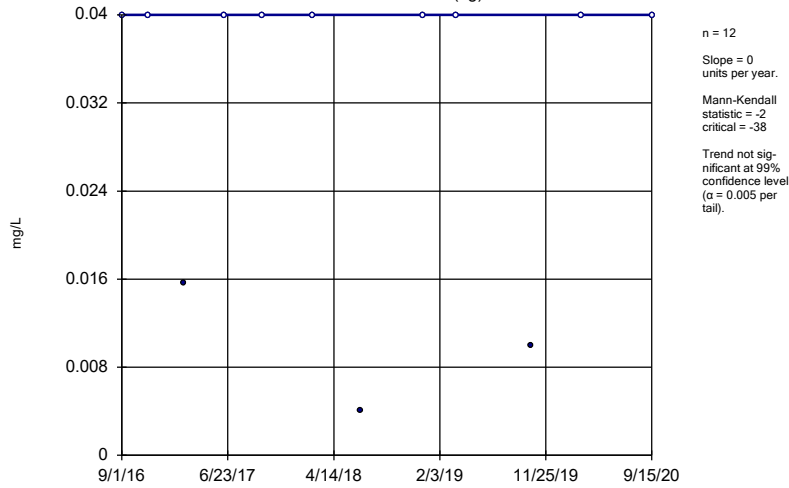
BRGWA-5S (bg)



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

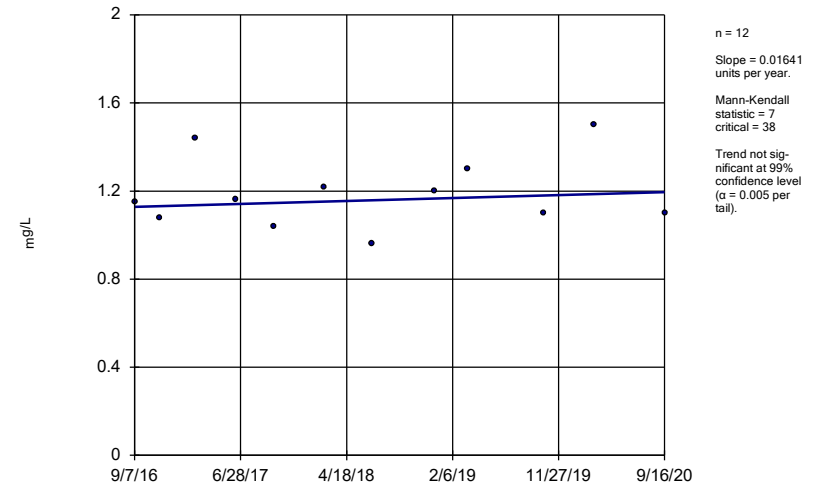
BRGWA-6S (bg)



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

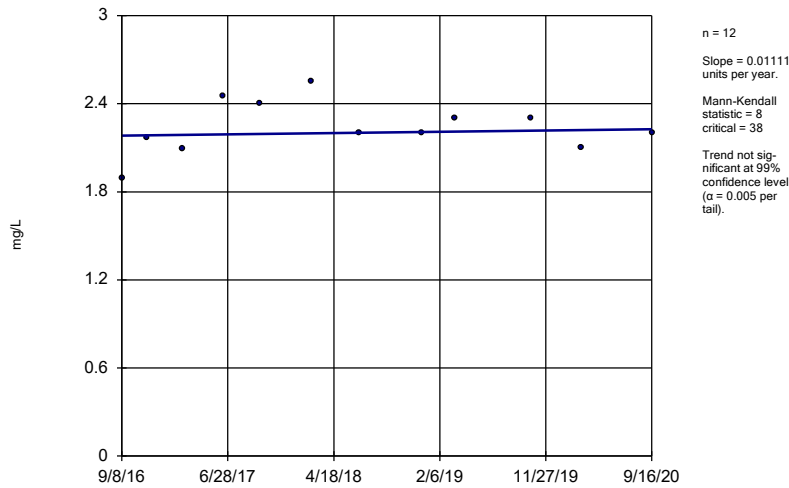
BRGWC-33S



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

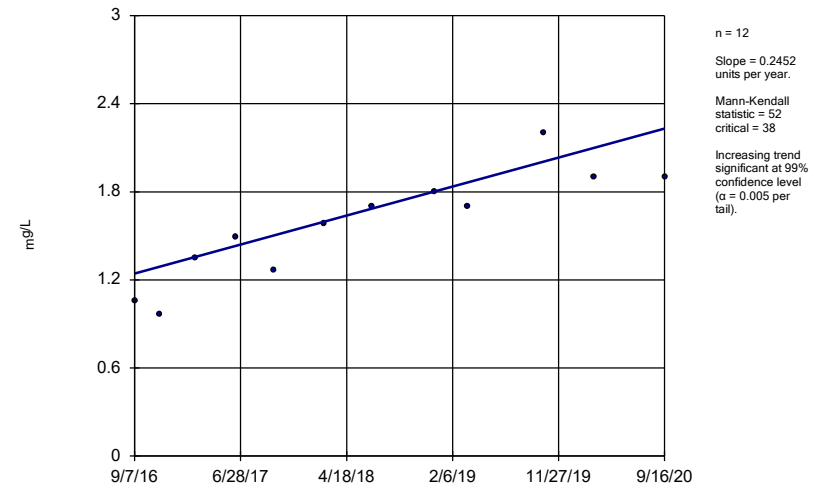
BRGWC-34S



Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

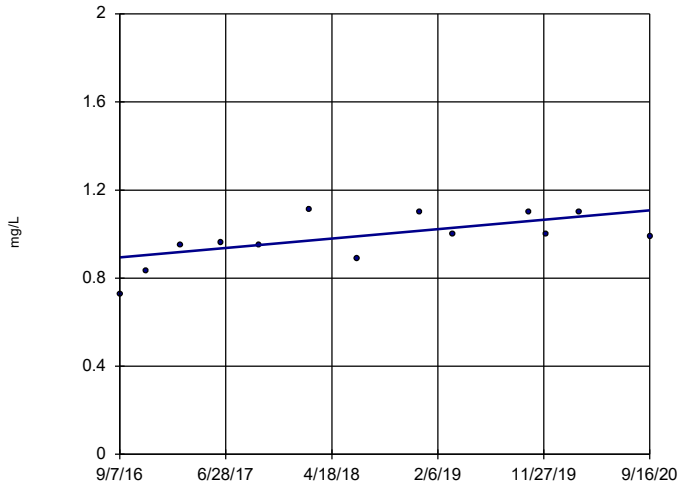
### Sen's Slope Estimator

BRGWC-35S



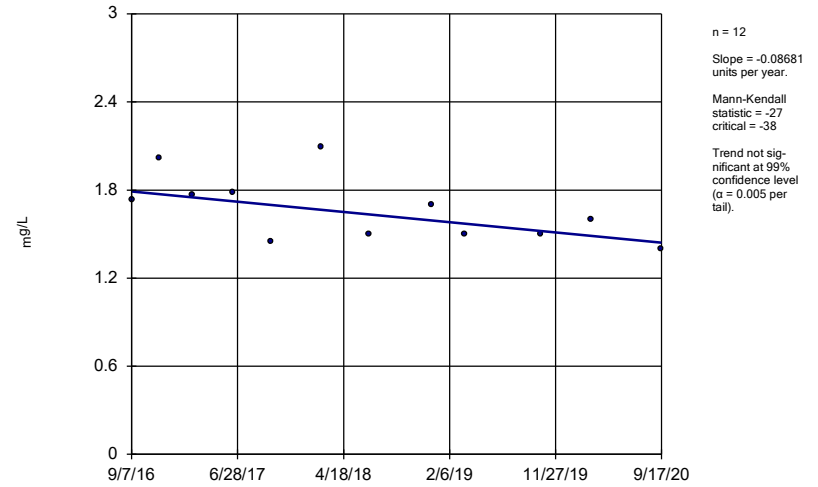
Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-36S



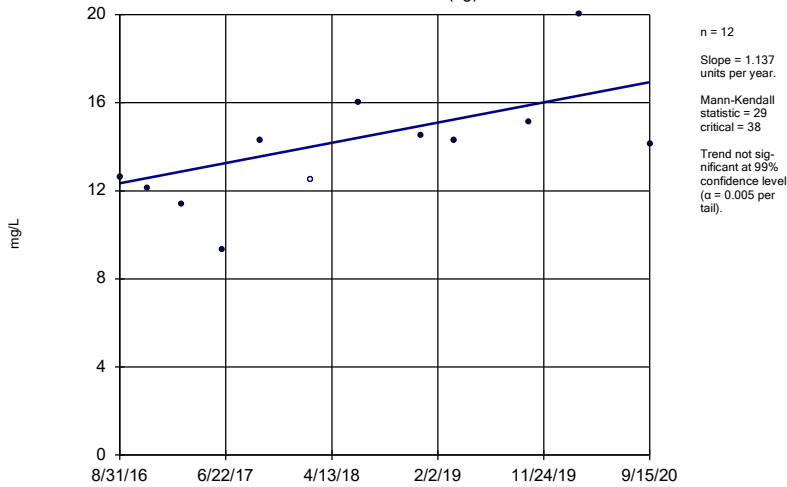
Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



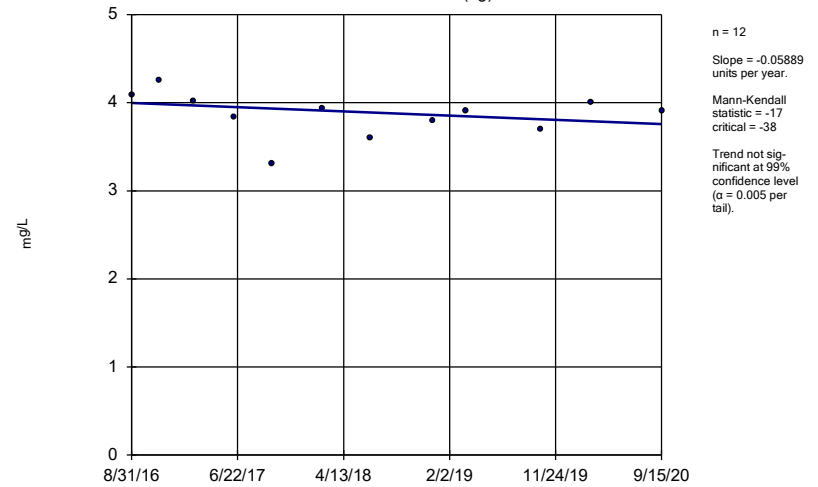
Constituent: Boron Analysis Run 11/1/2020 11:20 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

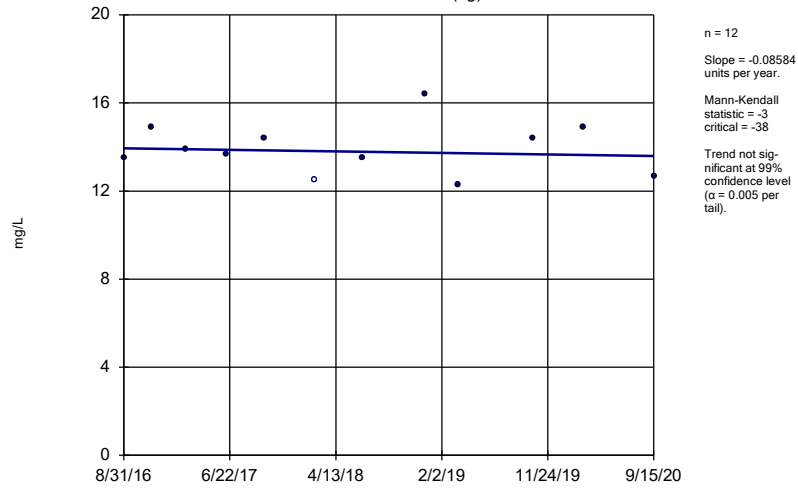
Sen's Slope Estimator  
BRGWA-2S (bg)



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

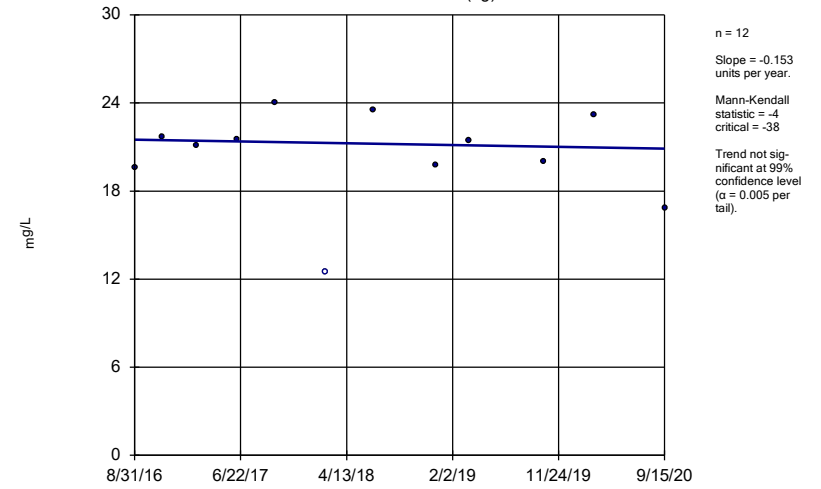
BRGWA-5I (bg)



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

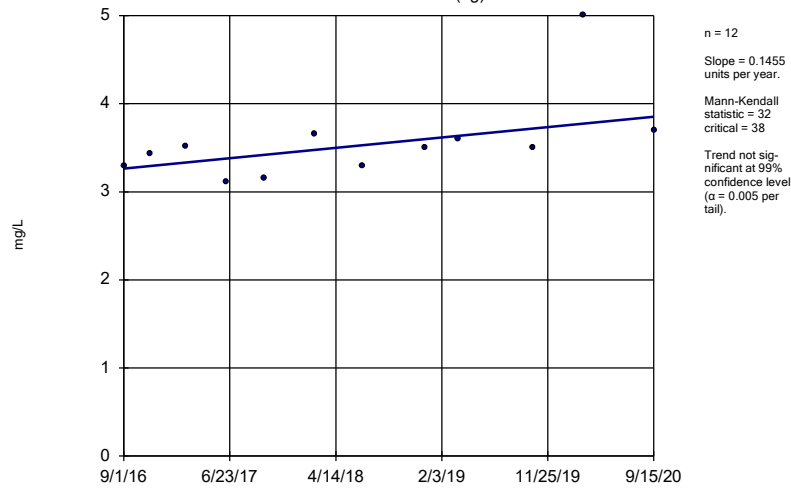
BRGWA-5S (bg)



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

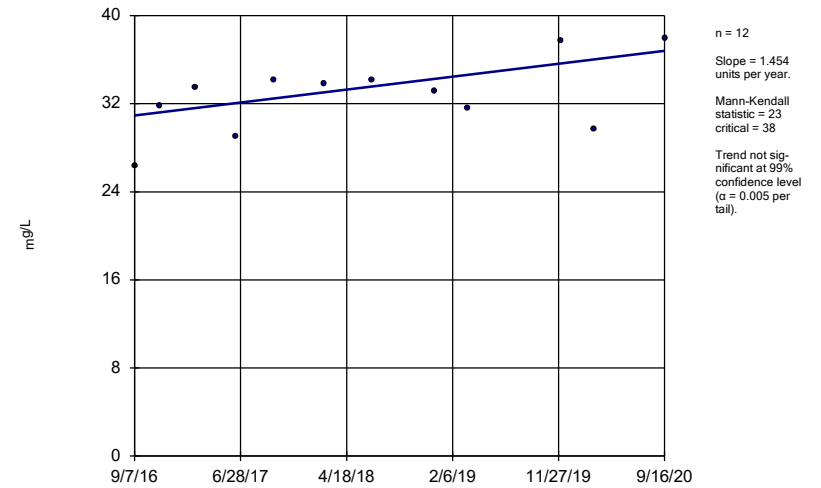
BRGWA-6S (bg)



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

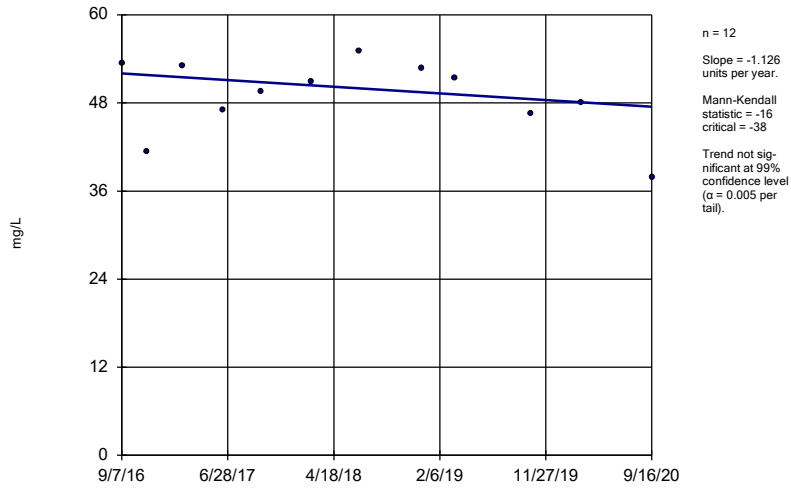
BRGWC-17S



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

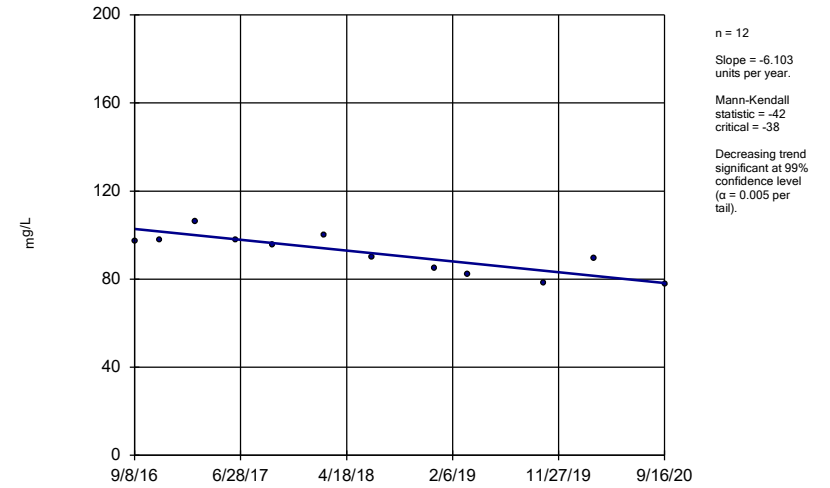
BRGWC-33S



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

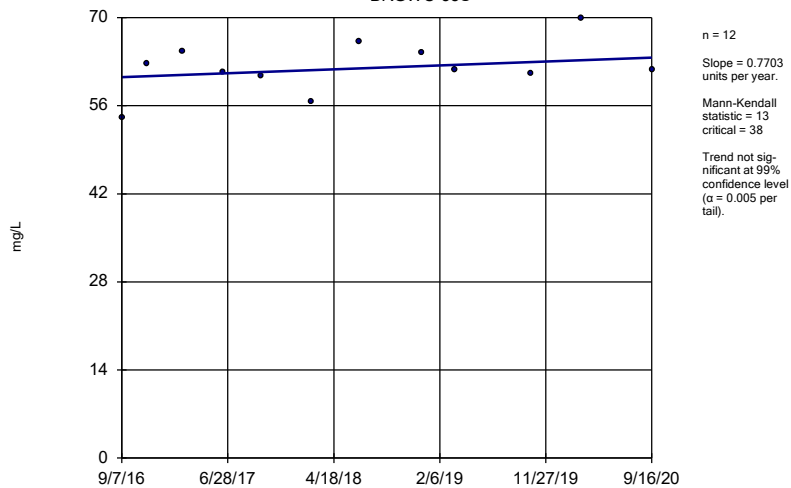
BRGWC-34S



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

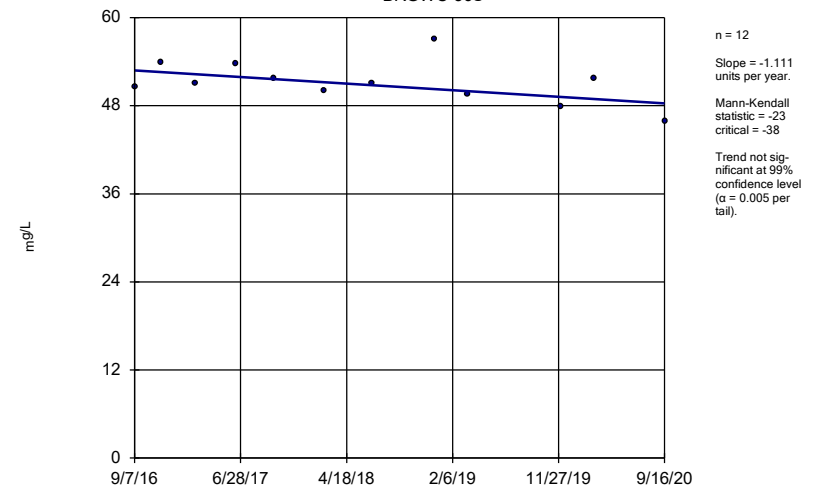
BRGWC-35S



Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

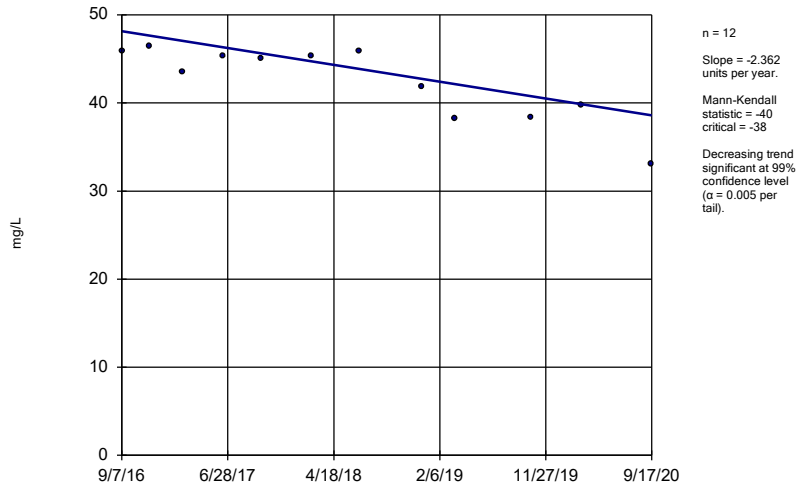
### Sen's Slope Estimator

BRGWC-36S



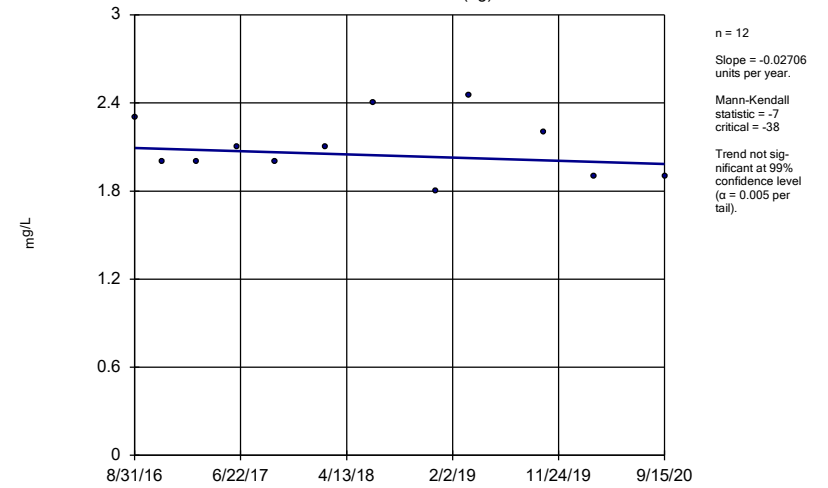
Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



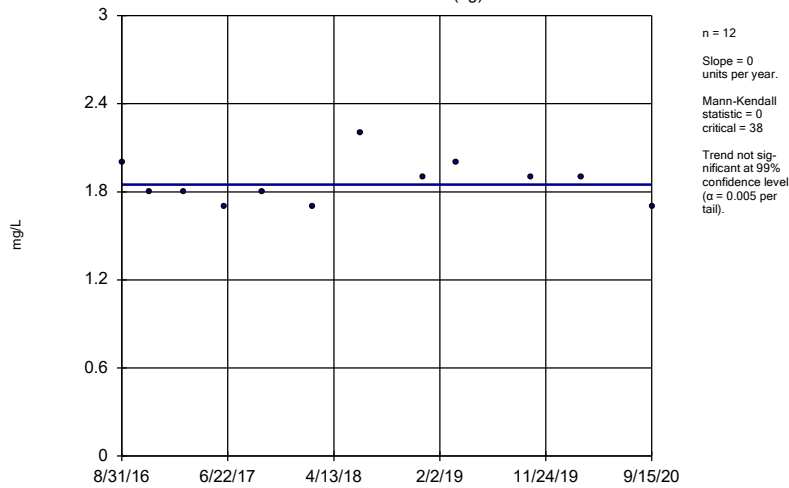
Constituent: Calcium Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



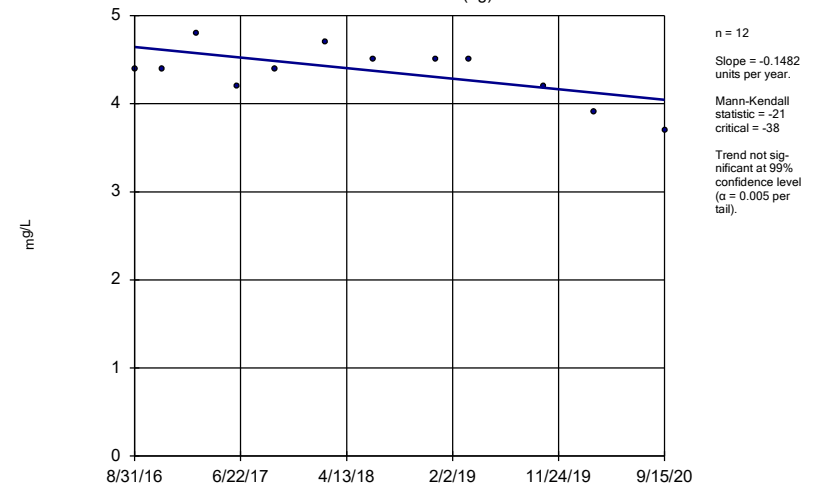
Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2S (bg)



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-5I (bg)

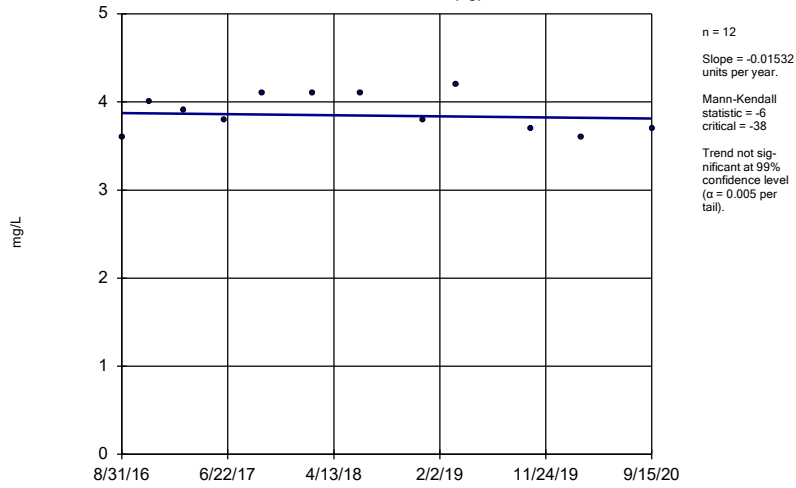


Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



### Sen's Slope Estimator

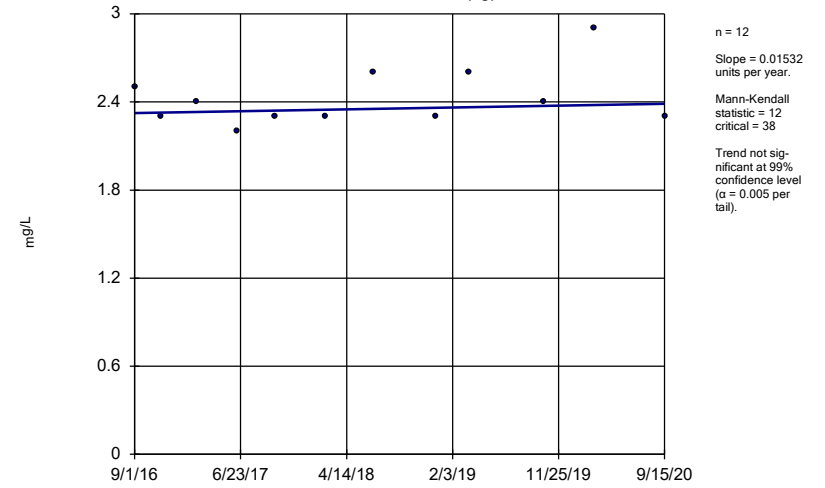
BRGWA-5S (bg)



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

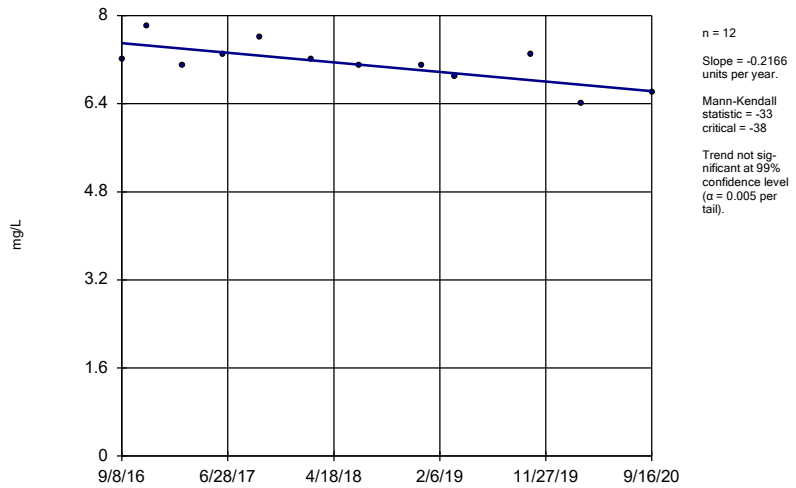
BRGWA-6S (bg)



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

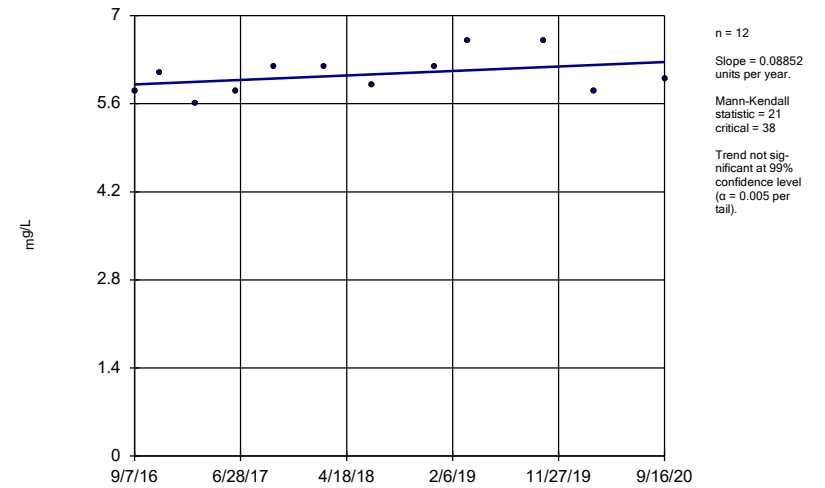
BRGWC-34S



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

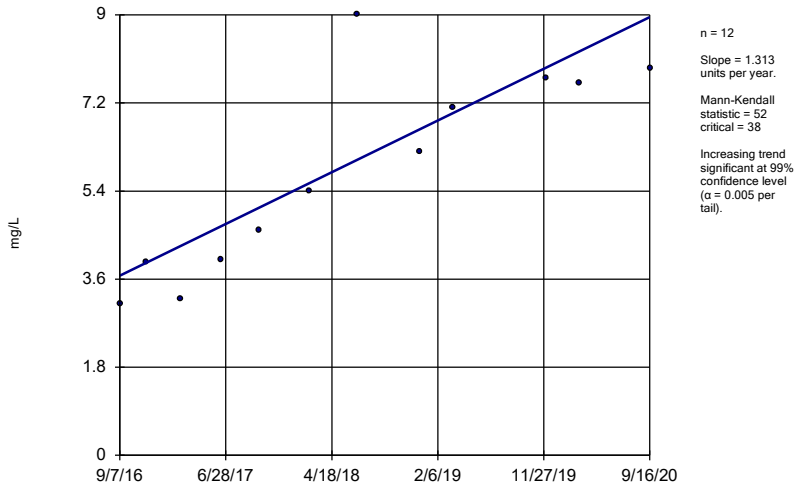
BRGWC-35S



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

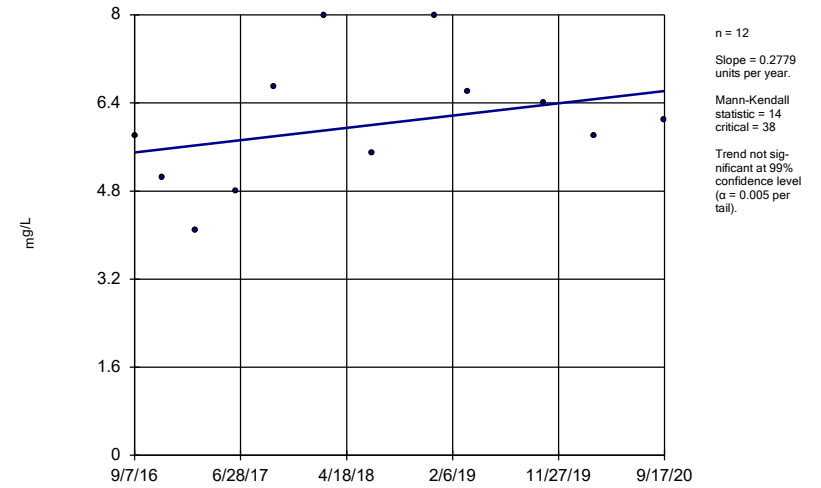
BRGWC-36S



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

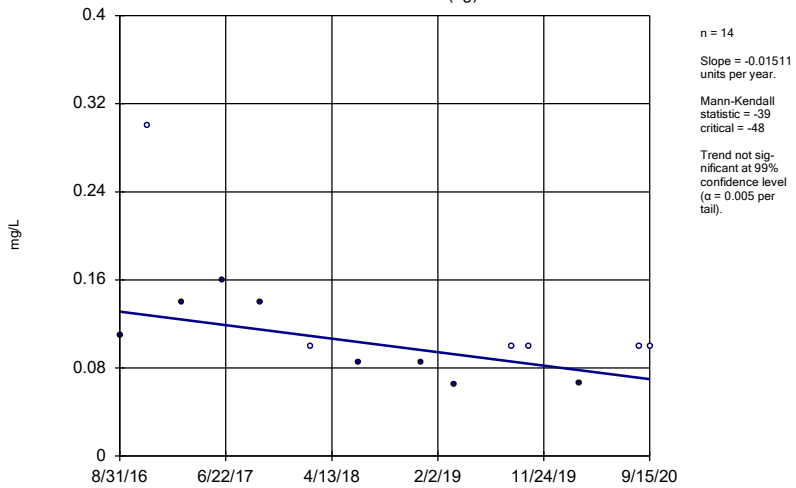
BRGWC-38S



Constituent: Chloride, Total Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

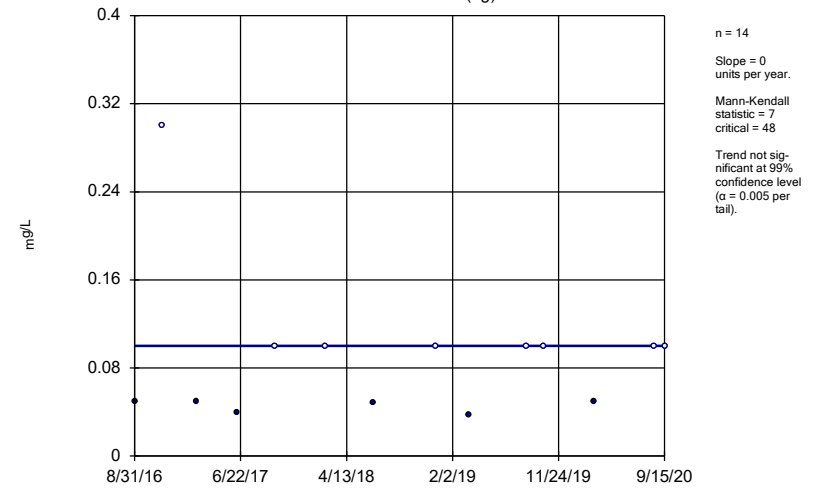
BRGWA-2I (bg)



Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

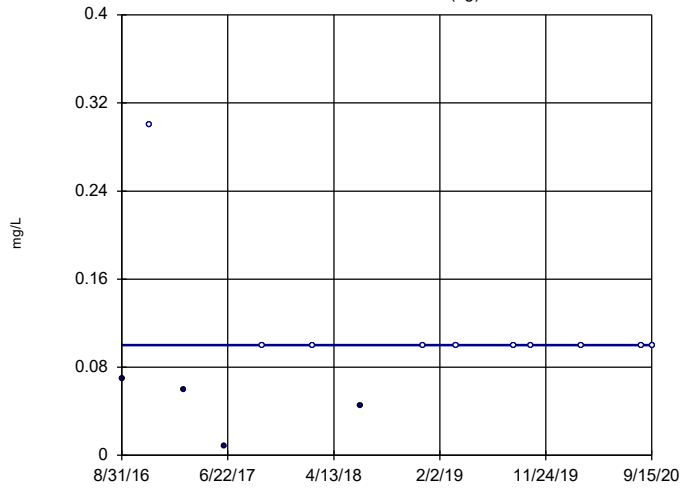
BRGWA-2S (bg)



Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5I (bg)

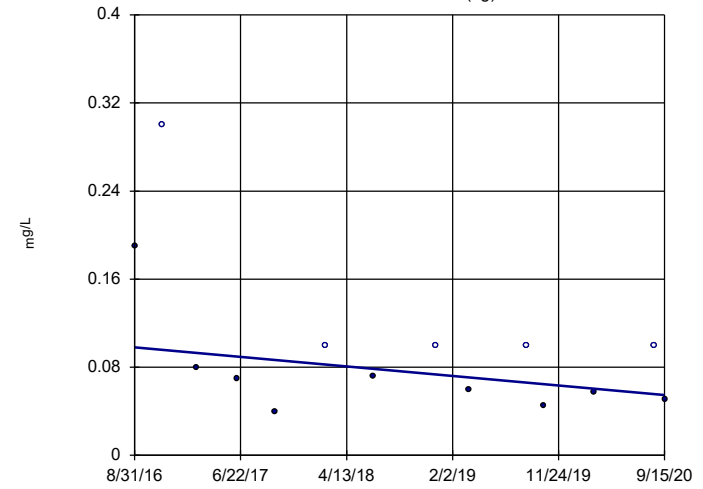


n = 14  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 17  
critical = 48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5S (bg)

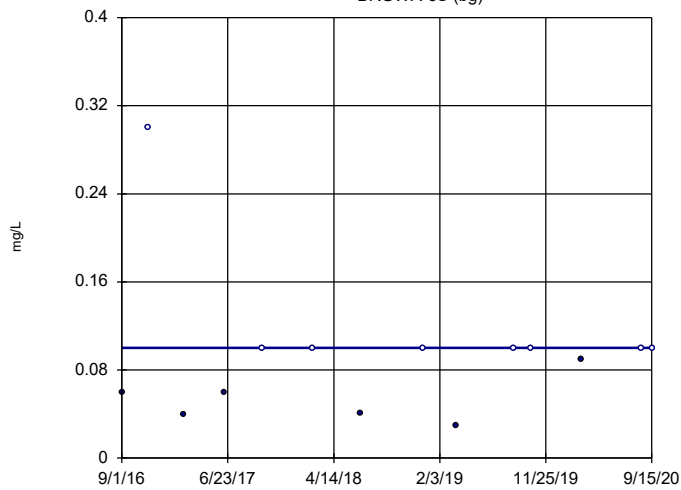


n = 14  
Slope = -0.01067  
units per year.  
Mann-Kendall  
statistic = -29  
critical = -48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-6S (bg)

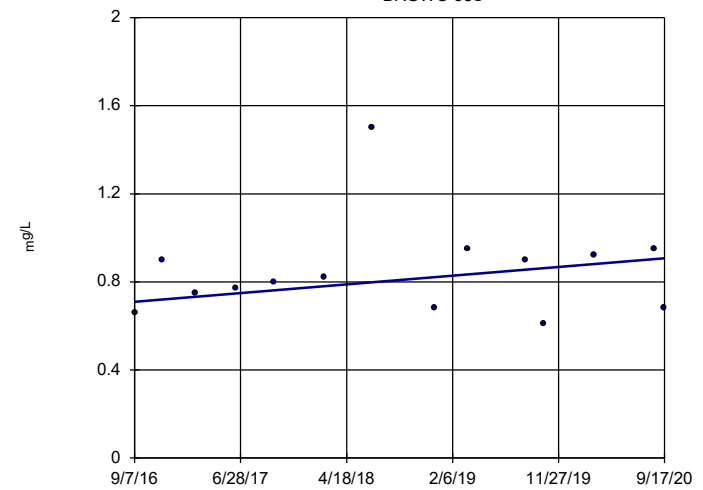


n = 14  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 11  
critical = 48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-38S

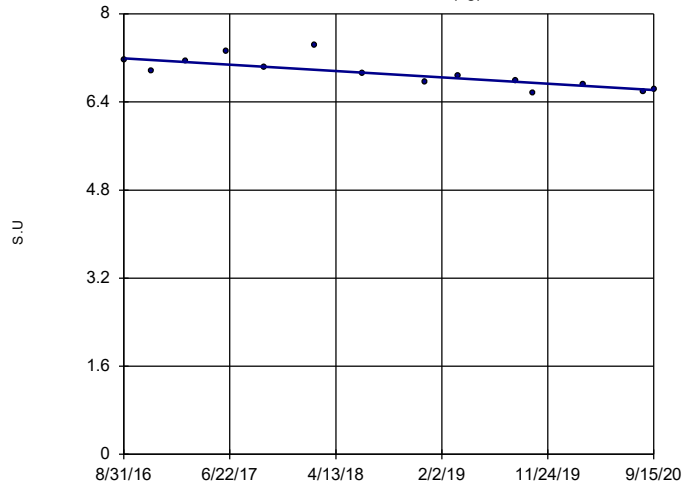


n = 14  
Slope = 0.04873  
units per year.  
Mann-Kendall  
statistic = 16  
critical = 48  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

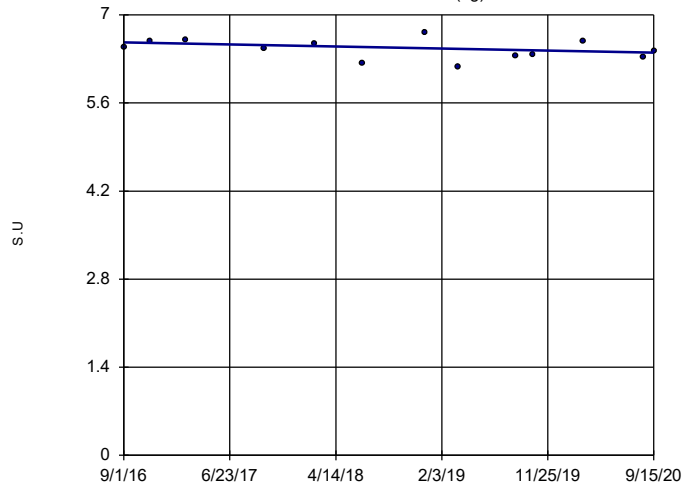
### Sen's Slope Estimator

BRGWA-2I (bg)



### Sen's Slope Estimator

BRGWA-6S (bg)

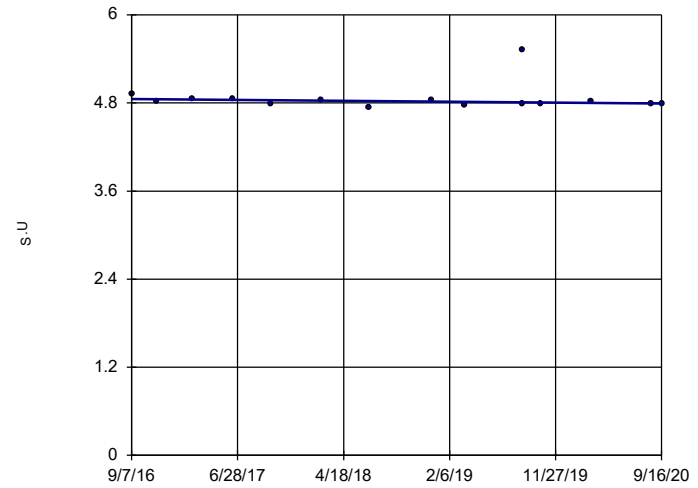


n = 13  
 Slope = -0.04101 units per year.  
 Mann-Kendall statistic = -17  
 critical = -43  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-33S

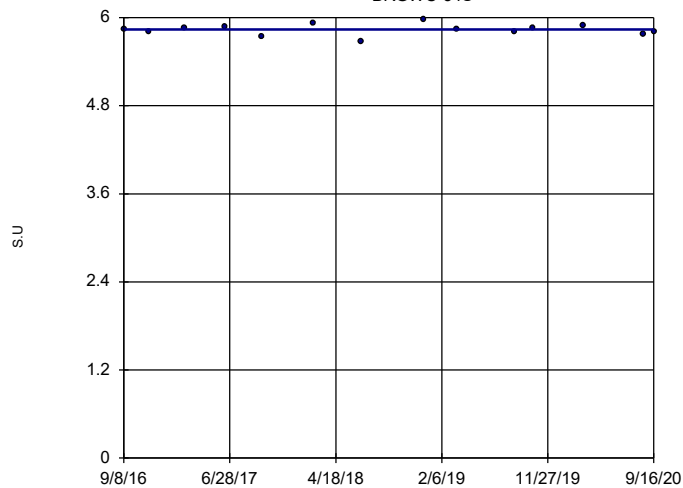


n = 15  
 Slope = -0.01441 units per year.  
 Mann-Kendall statistic = -30  
 critical = -53  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-34S

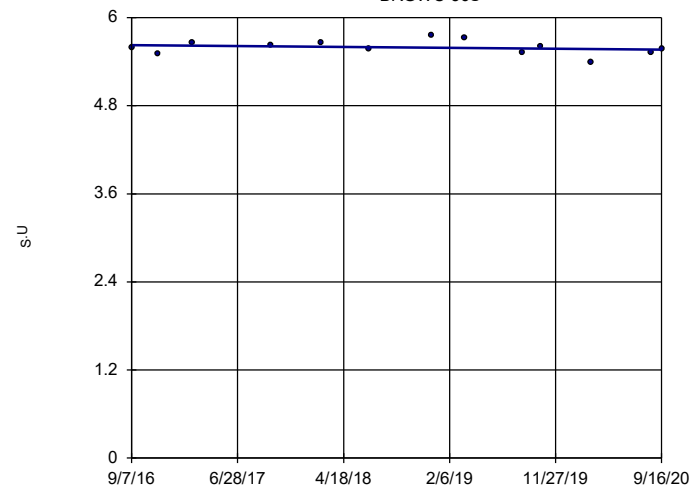


n = 14  
 Slope = 0 units per year.  
 Mann-Kendall statistic = -2  
 critical = -48  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-36S



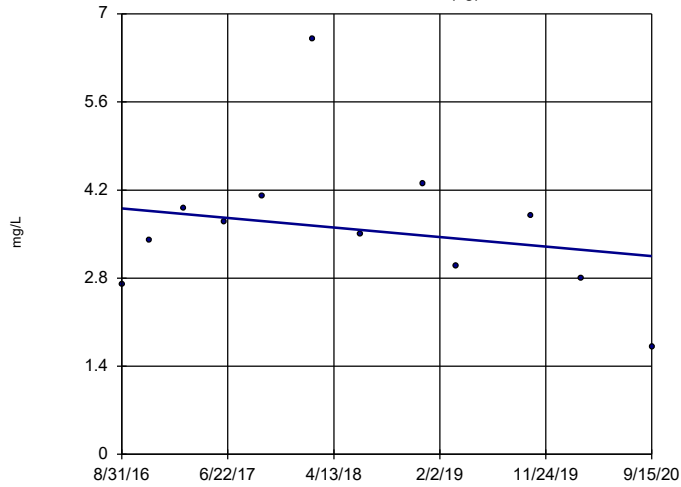
n = 13  
 Slope = -0.01515 units per year.  
 Mann-Kendall statistic = -10  
 critical = -43  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP



### Sen's Slope Estimator

BRGWA-5I (bg)



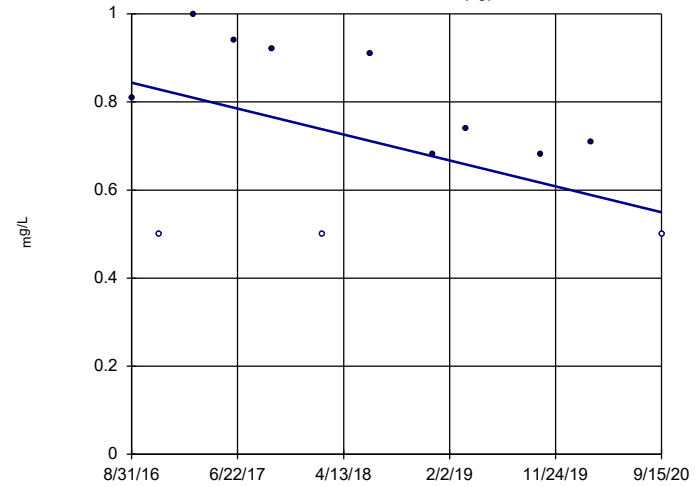
n = 12  
 Slope = -0.1873 units per year.  
 Mann-Kendall statistic = -8  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Hollow symbols indicate censored values.

### Sen's Slope Estimator

BRGWA-5S (bg)



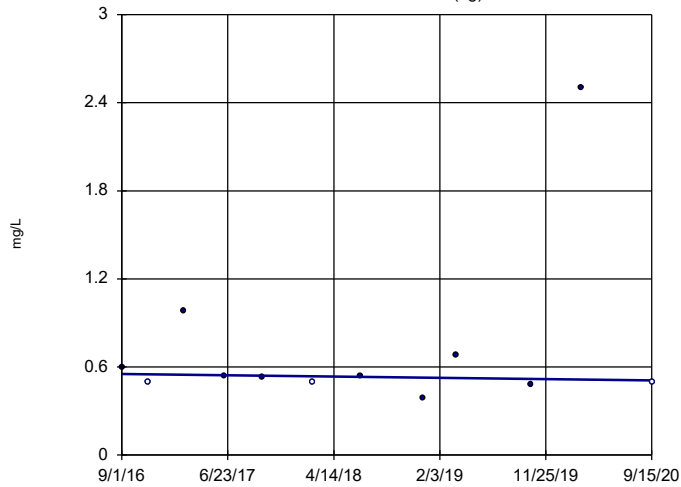
n = 12  
 Slope = -0.07276 units per year.  
 Mann-Kendall statistic = -22  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Hollow symbols indicate censored values.

### Sen's Slope Estimator

BRGWA-6S (bg)

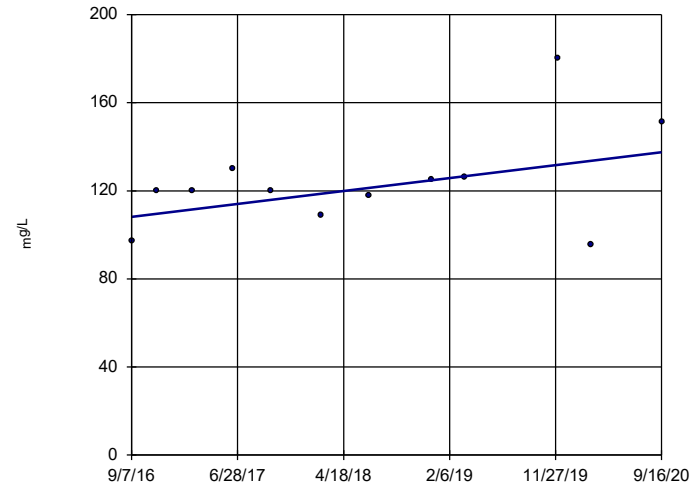


n = 12  
 Slope = -0.01104 units per year.  
 Mann-Kendall statistic = -8  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

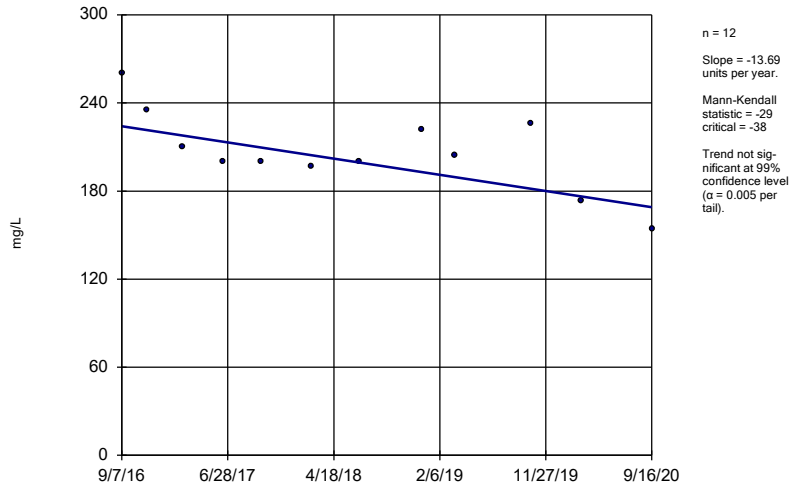
BRGWC-17S



n = 12  
 Slope = 7.267 units per year.  
 Mann-Kendall statistic = 19  
 critical = 38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

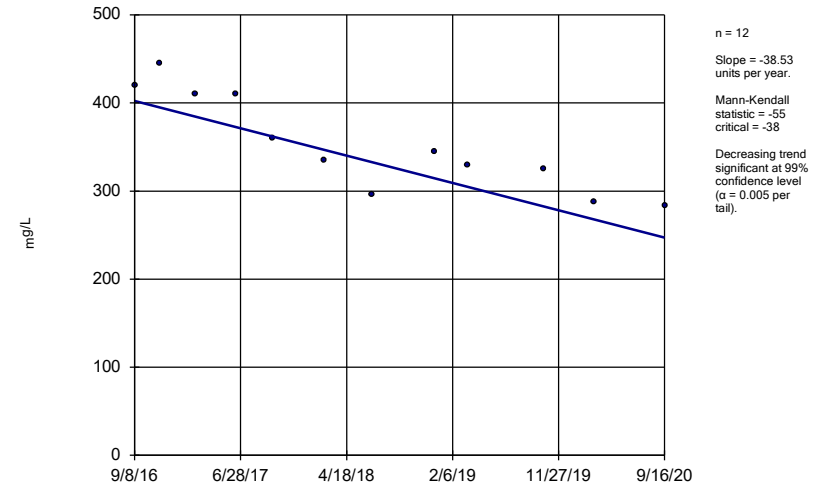
Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-33S



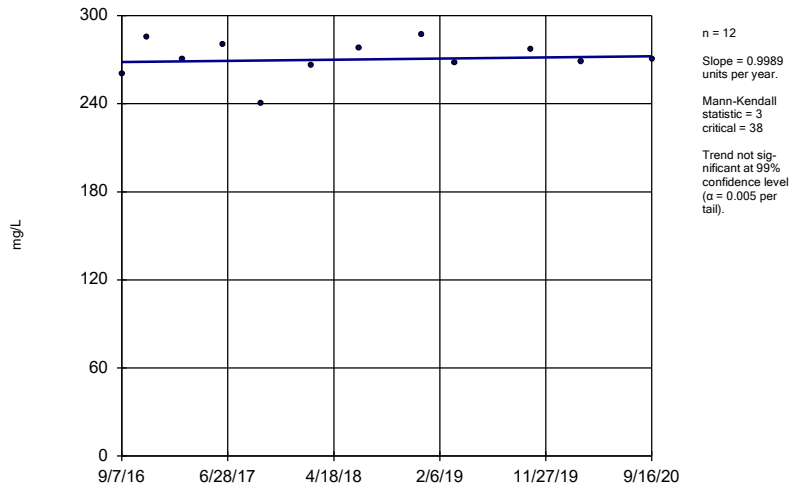
Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-34S



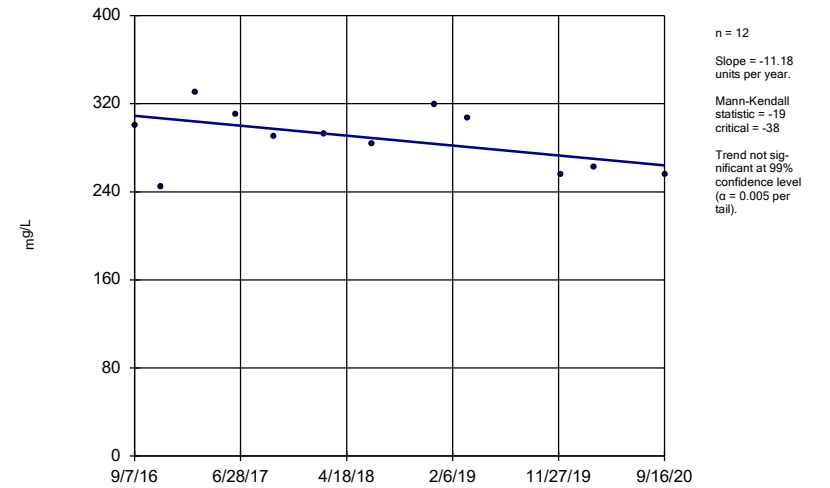
Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-35S



Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-36S

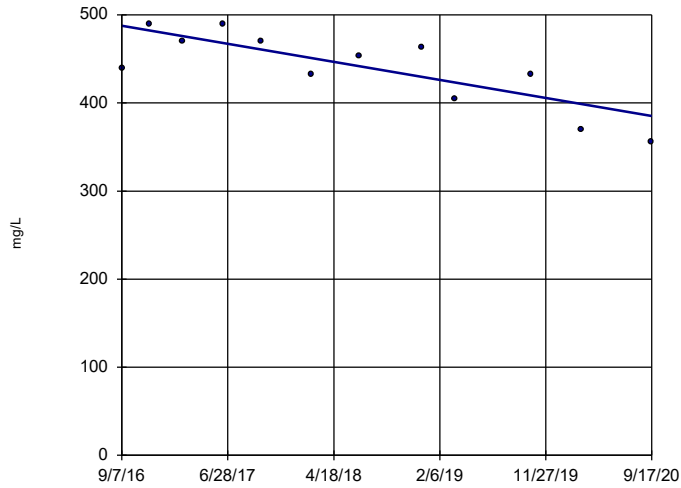


Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



### Sen's Slope Estimator

BRGWC-38S

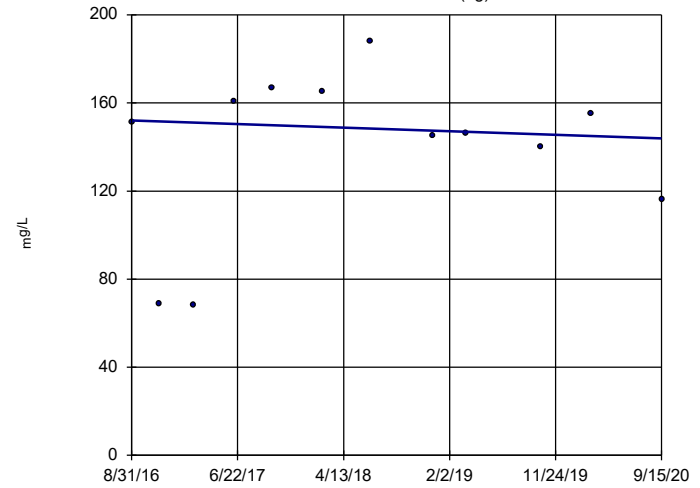


n = 12  
 Slope = -25.44 units per year.  
 Mann-Kendall statistic = -41  
 critical = -38  
 Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-2I (bg)

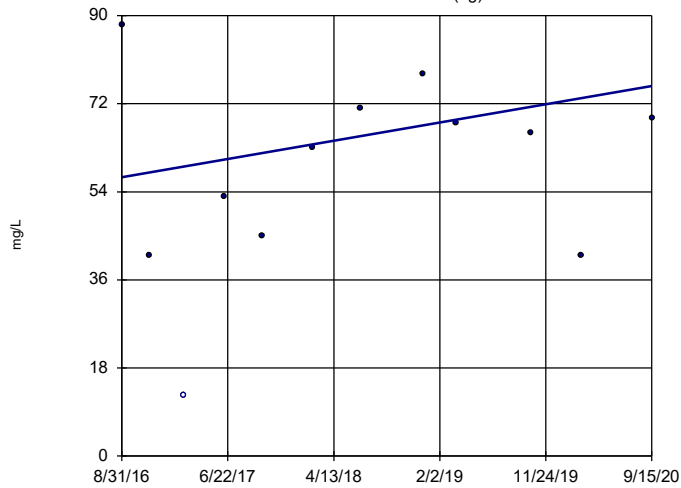


n = 12  
 Slope = -1.984 units per year.  
 Mann-Kendall statistic = -2  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-2S (bg)

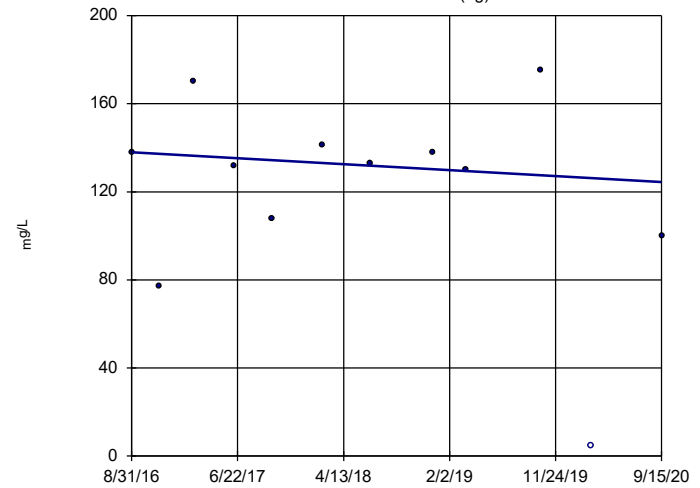


n = 12  
 Slope = 4.612 units per year.  
 Mann-Kendall statistic = 11  
 critical = 38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5I (bg)

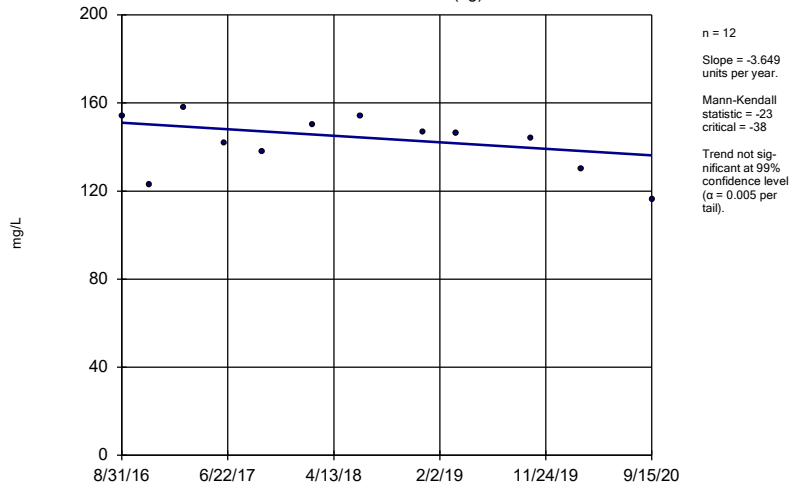


n = 12  
 Slope = -3.347 units per year.  
 Mann-Kendall statistic = -9  
 critical = -38  
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

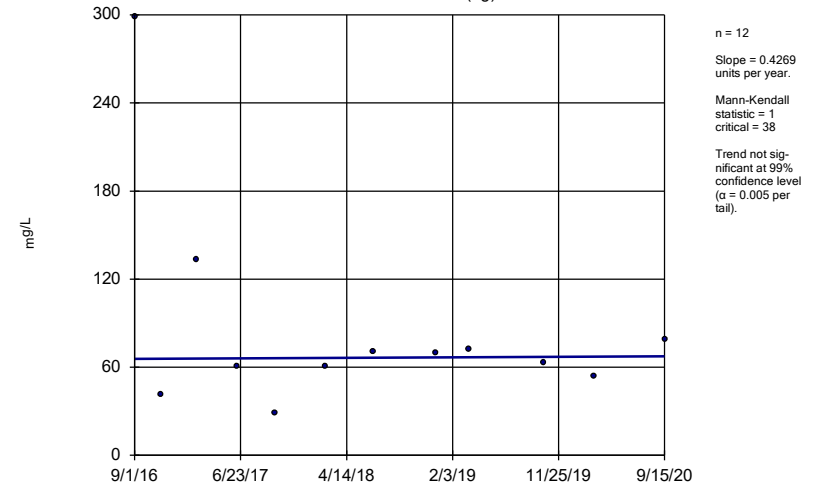
BRGWA-5S (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

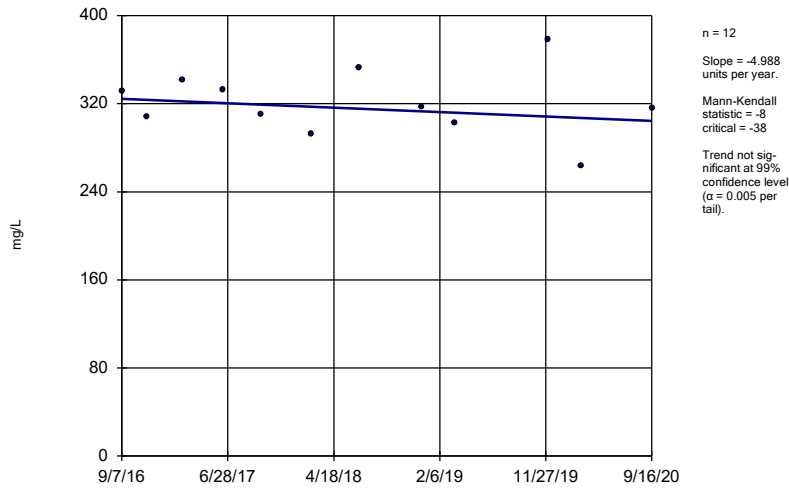
BRGWA-6S (bg)



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

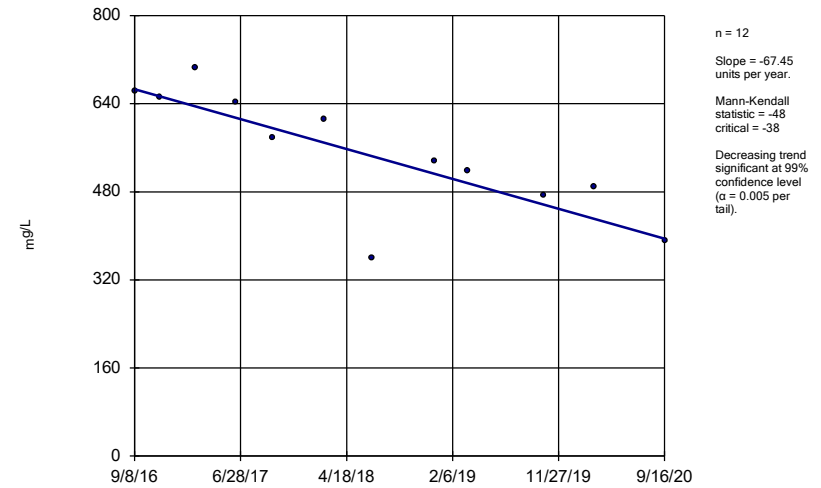
BRGWC-17S



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

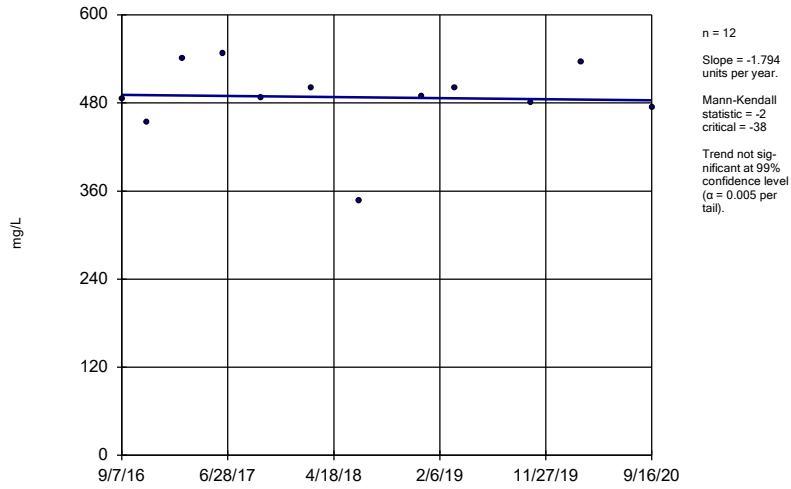
BRGWC-34S



Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-35S

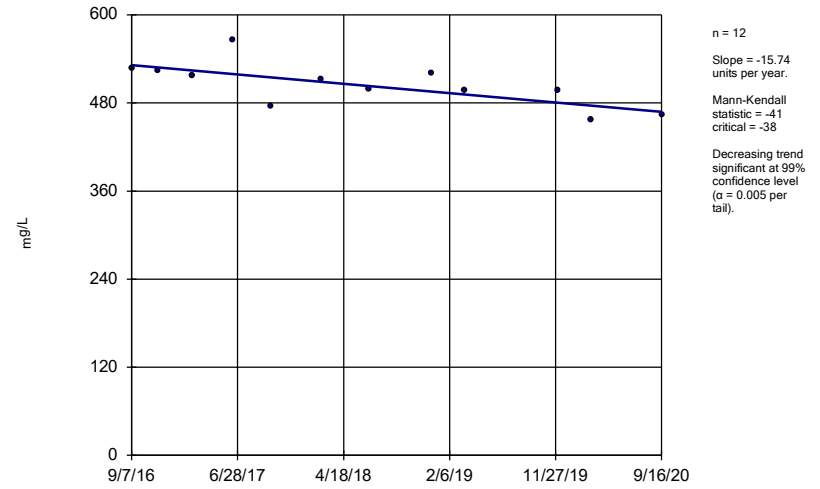


n = 12  
 Slope = -1.794 units per year.  
 Mann-Kendall statistic = -2  
 critical = -38  
 Trend not significant at 99% confidence level (alpha = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-36S

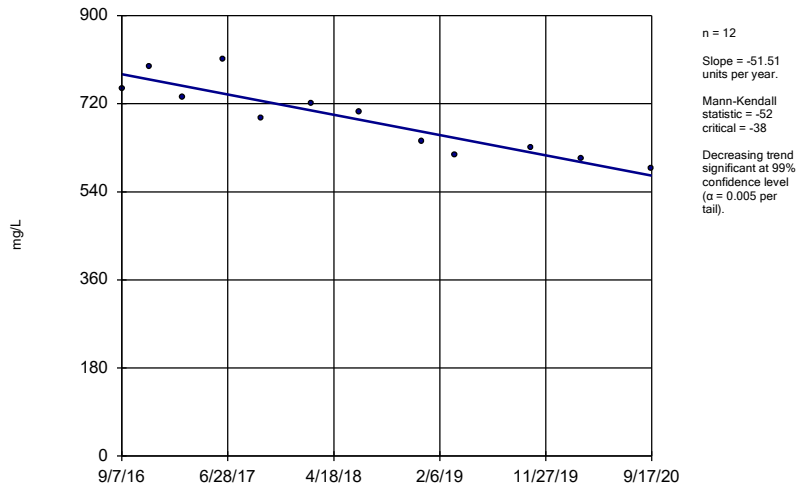


n = 12  
 Slope = -15.74 units per year.  
 Mann-Kendall statistic = -41  
 critical = -38  
 Decreasing trend significant at 99% confidence level (alpha = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator

BRGWC-38S



n = 12  
 Slope = -51.51 units per year.  
 Mann-Kendall statistic = -52  
 critical = -38  
 Decreasing trend significant at 99% confidence level (alpha = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 11/1/2020 11:21 AM View: Trend Tests Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE F.

# Tolerance Limit Summary Table

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:37 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Bg N</u>	<u>Bg Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Antimony (mg/L)	n/a	0.003	65	n/a	n/a	89.23	n/a	n/a	0.03565	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	65	n/a	n/a	73.85	n/a	n/a	0.03565	NP Inter(normality)
Barium (mg/L)	n/a	0.063	65	n/a	n/a	0	n/a	n/a	0.03565	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Chromium (mg/L)	n/a	0.01356	65	0.005521	0.004018	20	Kaplan-Meier	No	0.05	Inter
Cobalt (mg/L)	n/a	0.005	63	n/a	n/a	49.21	n/a	n/a	0.0395	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	n/a	1.42	65	0.676	0.3721	0	None	No	0.05	Inter
Fluoride (mg/L)	n/a	0.3	70	n/a	n/a	52.86	n/a	n/a	0.02758	NP Inter(normality)
Lead (mg/L)	n/a	0.005	65	n/a	n/a	75.38	n/a	n/a	0.03565	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	65	n/a	n/a	47.69	n/a	n/a	0.03565	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	55	n/a	n/a	90.91	n/a	n/a	0.05954	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	65	n/a	n/a	70.77	n/a	n/a	0.03565	NP Inter(normality)
Selenium (mg/L)	n/a	0.01	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	65	n/a	n/a	100	n/a	n/a	0.03565	NP Inter(NDs)

FIGURE G.

<b>PLANT BRANCH POND E GWPS</b>			
<b>Constituent Name</b>	<b>MCL</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006	0.003	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.063	2
Beryllium, Total (mg/L)	0.004	0.003	0.004
Cadmium, Total (mg/L)	0.005	0.0025	0.005
Chromium, Total (mg/L)	0.1	0.014	0.1
Cobalt, Total (mg/L)	n/a	0.005	0.005
Combined Radium, Total (pCi/L)	5	1.42	5
Fluoride, Total (mg/L)	4	0.3	4
Lead, Total (mg/L)	n/a	0.005	0.005
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

*\*MCL = Maximum Contaminant Level*

*\*GWPS = Groundwater Protection Standard*

FIGURE H.



# Confidence Interval Summary - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	BRGWC-38S	0.009752	0.008206	0.004	Yes 14	0.008979	0.001091	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-33S	0.05413	0.04206	0.005	Yes 14	0.04809	0.008521	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-38S	0.2679	0.2199	0.005	Yes 13	0.2439	0.03224	0	None	No	0.01	Param.

# Confidence Interval Summary - All Results

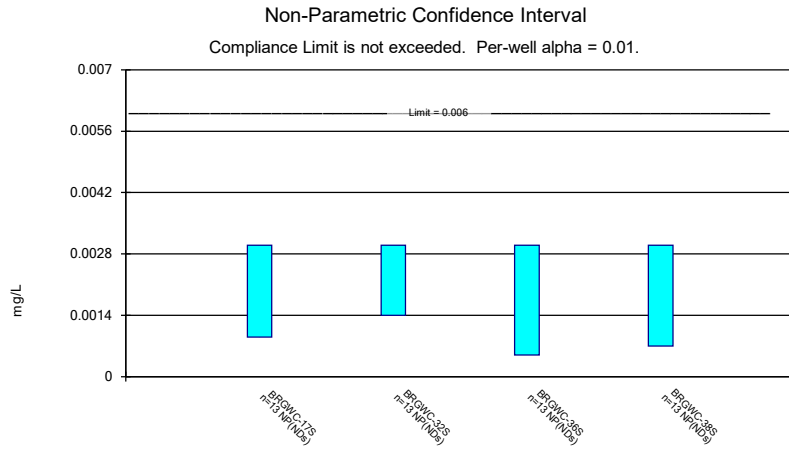
Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 11/1/2020, 11:55 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-17S	0.003	0.0009	0.006	No	13	0.002838	0.0005824	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-36S	0.003	0.00049	0.006	No	13	0.002418	0.001106	76.92	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-38S	0.003	0.0007	0.006	No	13	0.002823	0.0006379	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-17S	0.005	0.0006	0.01	No	13	0.003862	0.001897	69.23	None	No	0.01	NP (normality)
Arsenic (mg/L)	BRGWC-32S	0.005	0.00053	0.01	No	13	0.004656	0.00124	92.31	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-33S	0.005	0.0006	0.01	No	14	0.004369	0.001605	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-35S	0.005	0.00044	0.01	No	13	0.003957	0.001983	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-36S	0.005	0.0007	0.01	No	13	0.004012	0.001882	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-38S	0.003132	0.001411	0.01	No	13	0.002783	0.001583	15.38	Kaplan-Meier	sqrt(x)	0.01	Param.
Barium (mg/L)	BRGWC-17S	0.04297	0.03814	2	No	13	0.04055	0.003253	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04652	0.02982	2	No	13	0.03817	0.01123	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-33S	0.02281	0.02023	2	No	14	0.02152	0.001822	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-34S	0.03631	0.02575	2	No	13	0.03103	0.007105	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-35S	0.0627	0.0382	2	No	13	0.05178	0.02009	0	None	ln(x)	0.01	Param.
Barium (mg/L)	BRGWC-36S	0.04729	0.03286	2	No	13	0.04039	0.01069	0	None	x^(1/3)	0.01	Param.
Barium (mg/L)	BRGWC-38S	0.0272	0.01589	2	No	13	0.02192	0.008686	7.692	None	x^(1/3)	0.01	Param.
Beryllium (mg/L)	BRGWC-33S	0.0022	0.0017	0.004	No	14	0.002507	0.002189	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-34S	0.003	0.00012	0.004	No	13	0.001875	0.003691	23.08	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-35S	0.003	0.0001	0.004	No	13	0.001868	0.003694	23.08	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-36S	0.01	0.00009	0.004	No	14	0.003133	0.004571	35.71	None	No	0.01	NP (normality)
<b>Beryllium (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.009752</b>	<b>0.008206</b>	<b>0.004</b>	<b>Yes</b>	<b>14</b>	<b>0.008979</b>	<b>0.001091</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cadmium (mg/L)	BRGWC-32S	0.0025	0.001	0.005	No	14	0.002051	0.0009155	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-33S	0.0006	0.00032	0.005	No	14	0.00059	0.0005785	14.29	None	No	0.01	NP (normality)
Cadmium (mg/L)	BRGWC-34S	0.001	0.00017	0.005	No	13	0.0007062	0.0008324	23.08	None	No	0.01	NP (normality)
Cadmium (mg/L)	BRGWC-36S	0.0025	0.0001	0.005	No	14	0.002156	0.0008752	85.71	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-38S	0.001	0.0005	0.005	No	13	0.0007615	0.0005414	15.38	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-17S	0.01324	0.00978	0.1	No	13	0.01155	0.002474	0	None	sqrt(x)	0.01	Param.
Chromium (mg/L)	BRGWC-32S	0.01	0.0011	0.1	No	13	0.004808	0.004293	38.46	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-33S	0.01	0.00049	0.1	No	14	0.009321	0.002542	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-35S	0.006756	0.004114	0.1	No	13	0.006315	0.00236	15.38	Kaplan-Meier	No	0.01	Param.
Chromium (mg/L)	BRGWC-36S	0.008908	0.007461	0.1	No	13	0.008185	0.0009728	7.692	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-38S	0.0044	0.0028	0.1	No	13	0.004215	0.001921	7.692	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.01	0.0025	0.005	No	14	0.005179	0.001539	92.86	None	No	0.01	NP (NDs)
<b>Cobalt (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.05413</b>	<b>0.04206</b>	<b>0.005</b>	<b>Yes</b>	<b>14</b>	<b>0.04809</b>	<b>0.008521</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	BRGWC-34S	0.005	0.0029	0.005	No	13	0.004238	0.001843	15.38	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-35S	0.01	0.0004	0.005	No	13	0.004138	0.002638	69.23	None	No	0.01	NP (normality)
<b>Cobalt (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.2679</b>	<b>0.2199</b>	<b>0.005</b>	<b>Yes</b>	<b>13</b>	<b>0.2439</b>	<b>0.03224</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	BRGWC-17S	0.8565	0.3066	5	No	13	0.5816	0.3698	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.163	0.4582	5	No	13	0.8107	0.474	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-33S	1.316	0.6697	5	No	13	0.9926	0.4342	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-34S	1.113	0.7181	5	No	13	0.9157	0.2657	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-35S	1.114	0.4588	5	No	13	0.7863	0.4404	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-36S	1.289	0.6698	5	No	13	0.9795	0.4165	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-38S	3.222	2.02	5	No	13	2.621	0.8083	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-17S	0.1689	0.07726	4	No	14	0.1269	0.07314	7.143	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.15	0.09	4	No	14	0.1257	0.06248	64.29	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-33S	0.2587	0.1184	4	No	15	0.1955	0.1142	6.667	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-34S	0.1657	0.07895	4	No	14	0.1324	0.08901	14.29	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-35S	0.1302	0.05494	4	No	14	0.1074	0.07988	21.43	Kaplan-Meier	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-36S	0.15	0.07	4	No	14	0.1265	0.1172	57.14	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-38S	0.9706	0.7063	4	No	14	0.8493	0.219	0	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-17S	0.005	0.000054	0.005	No	13	0.00462	0.001372	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-33S	0.005	0.00007	0.005	No	14	0.001501	0.002297	28.57	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-34S	0.005	0.0003	0.005	No	13	0.004261	0.001805	84.62	None	No	0.01	NP (NDs)

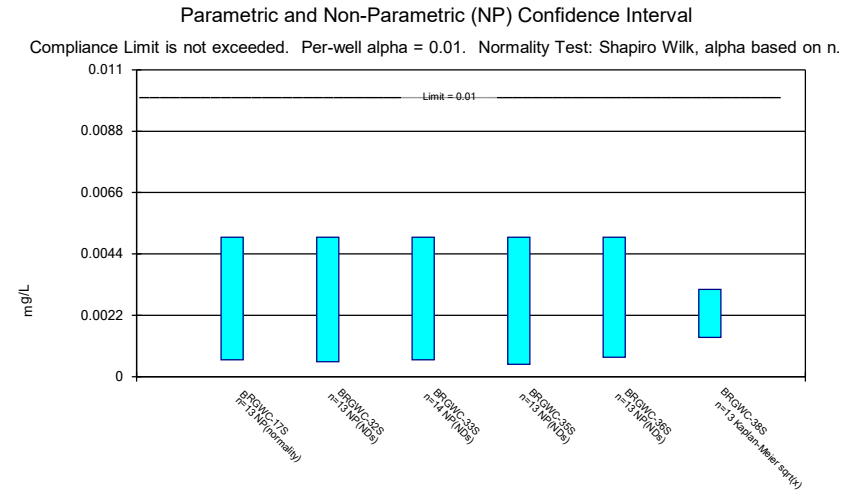
# Confidence Interval Summary - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 11/1/2020, 11:55 AM

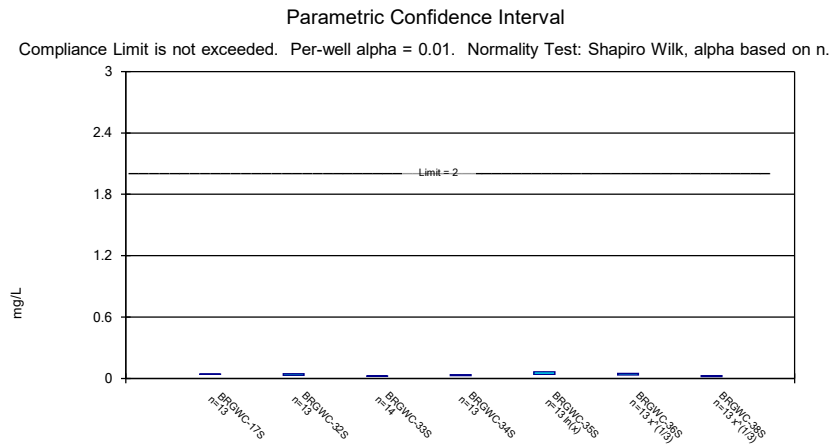
Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/L)	BRGWC-35S	0.005	0.00012	0.005	No	13	0.003871	0.002146	76.92	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-36S	0.005	0.000047	0.005	No	13	0.004619	0.001374	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-38S	0.0005	0.00032	0.005	No	13	0.0007431	0.00128	7.692	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-17S	0.03	0.00097	0.089	No	13	0.02107	0.01394	69.23	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-32S	0.03	0.002	0.089	No	13	0.006446	0.01045	15.38	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-33S	0.011	0.0092	0.089	No	14	0.01141	0.005392	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-34S	0.03	0.00082	0.089	No	13	0.02103	0.014	69.23	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-35S	0.0023	0.002	0.089	No	13	0.004277	0.007729	7.692	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-36S	0.03	0.0022	0.089	No	13	0.006685	0.01035	15.38	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-38S	0.0254	0.02	0.089	No	13	0.02225	0.002833	7.692	None	No	0.01	NP (normality)
Mercury (mg/L)	BRGWC-17S	0.0005	0.000084	0.002	No	11	0.0004222	0.0001732	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0005	0.00009	0.002	No	11	0.0003884	0.0001912	72.73	None	No	0.006	NP (normality)
Mercury (mg/L)	BRGWC-33S	0.0005	0.00007	0.002	No	12	0.0004258	0.0001733	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-34S	0.0005	0.00007	0.002	No	11	0.0003845	0.0001986	72.73	None	No	0.006	NP (normality)
Mercury (mg/L)	BRGWC-35S	0.0005	0.00013	0.002	No	11	0.0004273	0.0001624	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-36S	0.0005	0.00013	0.002	No	11	0.0004273	0.0001624	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	BRGWC-38S	0.0001571	0.00008094	0.002	No	11	0.0002	0.0001536	18.18	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	BRGWC-17S	0.01	0.0018	0.05	No	13	0.004769	0.003691	30.77	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-32S	0.1	0.0019	0.05	No	14	0.04472	0.04778	28.57	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-33S	0.01	0.0018	0.05	No	14	0.006421	0.003759	50	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-36S	0.006061	0.00315	0.05	No	13	0.004685	0.002163	7.692	None	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-38S	0.04305	0.03317	0.05	No	13	0.03811	0.006644	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-17S	0.001	0.000066	0.002	No	13	0.0009282	0.000259	92.31	None	No	0.01	NP (NDs)
Thallium (mg/L)	BRGWC-33S	0.00024	0.00018	0.002	No	14	0.0002536	0.000216	7.143	None	No	0.01	NP (normality)
Thallium (mg/L)	BRGWC-38S	0.001	0.00018	0.002	No	13	0.0004085	0.0003404	23.08	None	No	0.01	NP (normality)



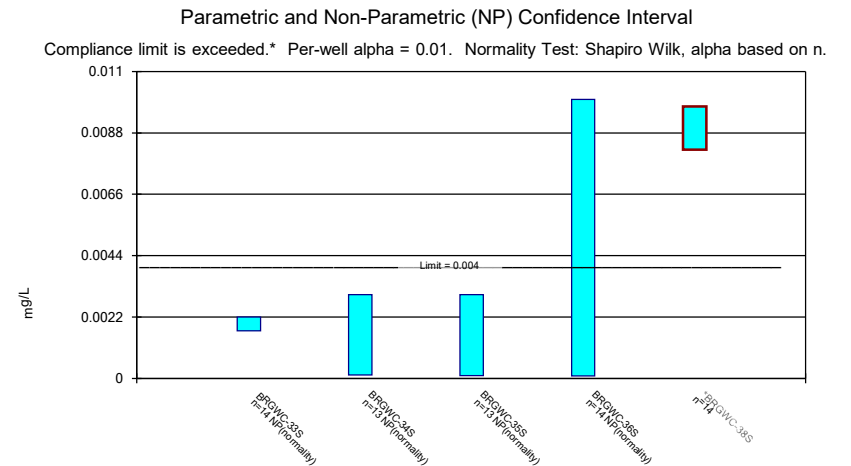
Constituent: Antimony Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



Constituent: Arsenic Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



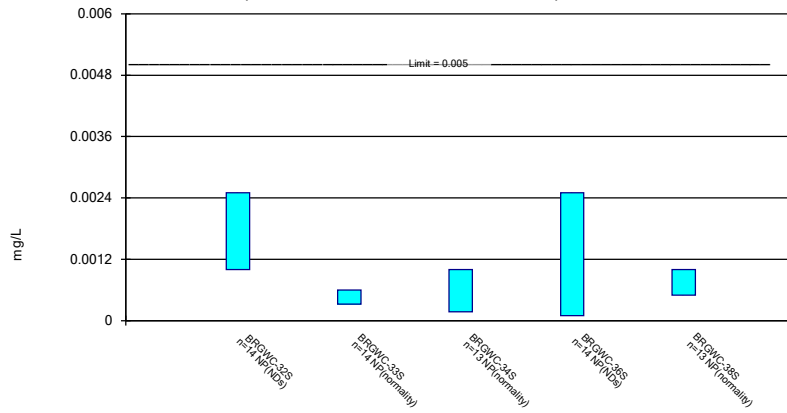
Constituent: Barium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP



Constituent: Beryllium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Non-Parametric Confidence Interval

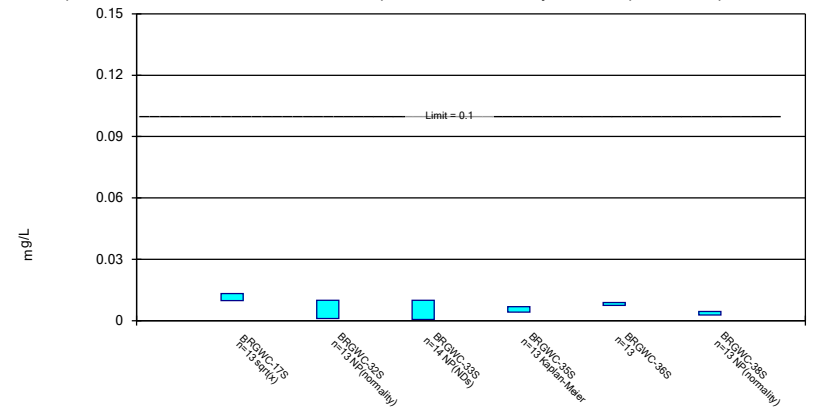
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Cadmium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

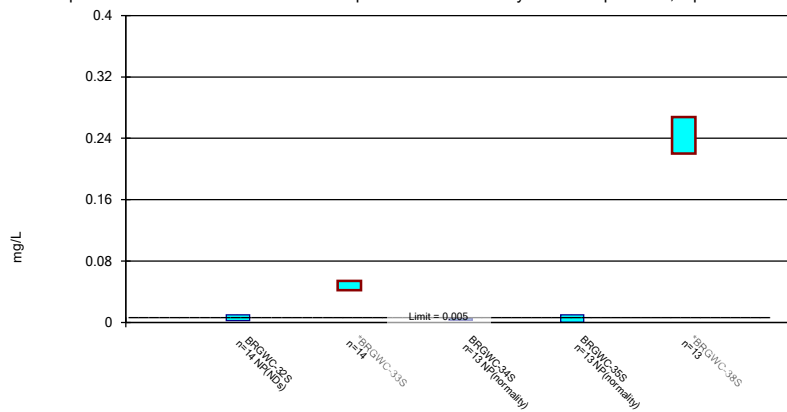
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

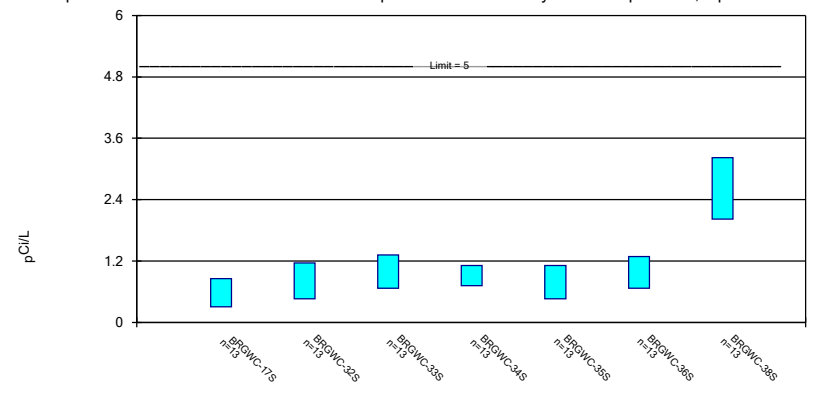
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric Confidence Interval

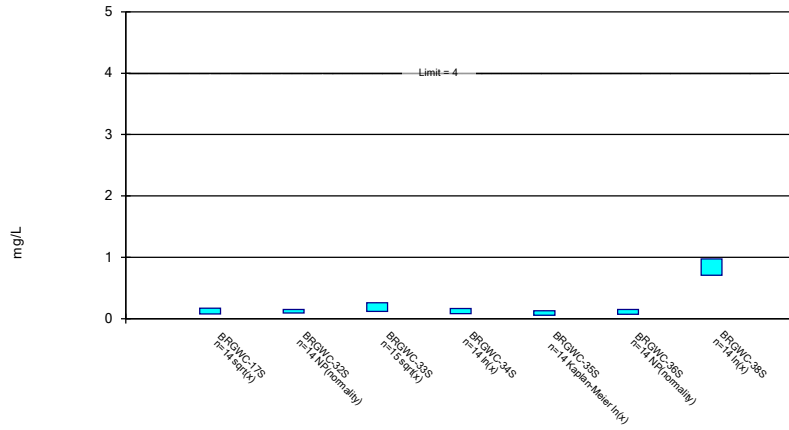
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

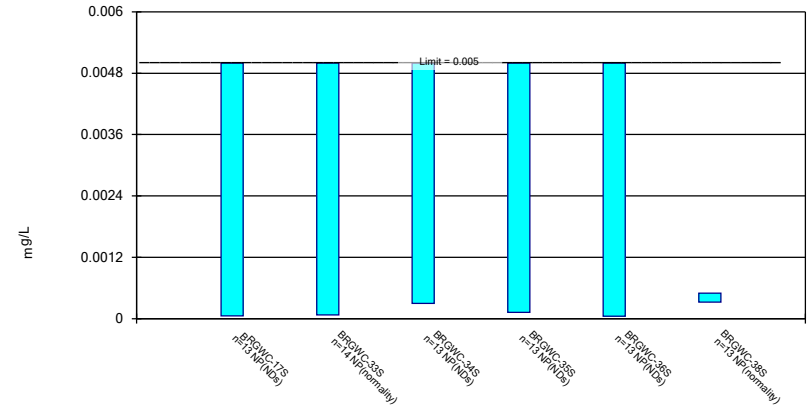
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Non-Parametric Confidence Interval

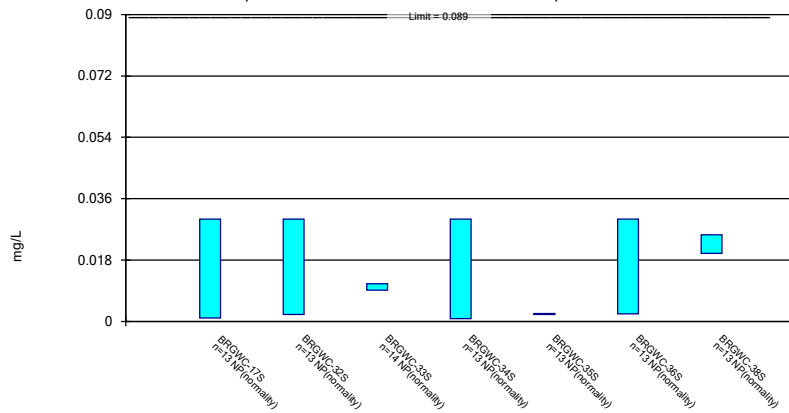
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lead Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Non-Parametric Confidence Interval

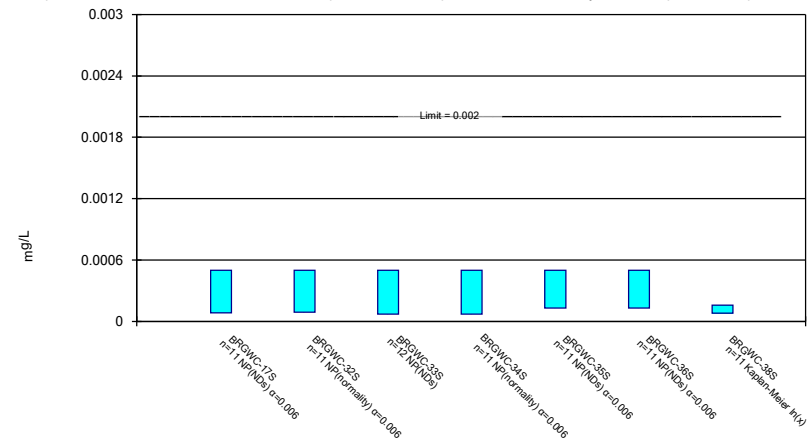
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Lithium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

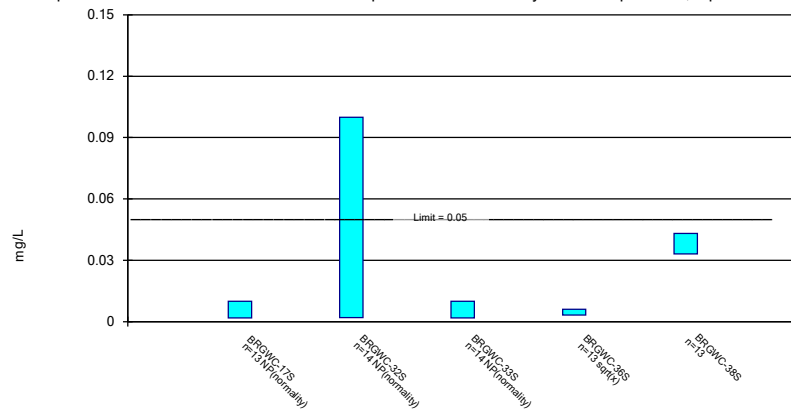
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Mercury Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

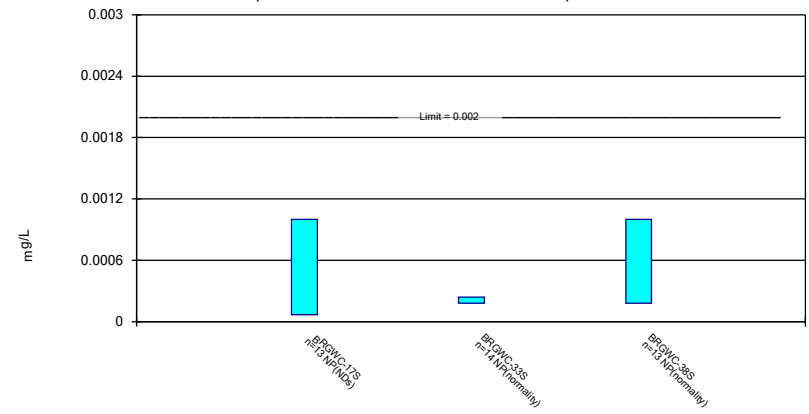
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Thallium Analysis Run 11/1/2020 11:51 AM View: Confidence Intervals Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

**APPENDIX B**

# STATISTICAL ANALYSES

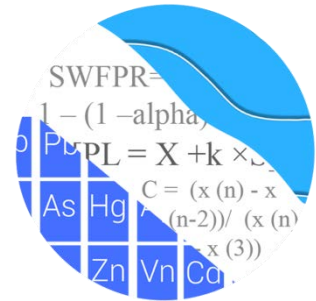
## March 2021



# GROUNDWATER STATS CONSULTING

July 27, 2021

Southern Company Services  
Attn: Mr. Joju Abraham  
241 Ralph McGill Blvd NE, Bin 10160  
Atlanta, Georgia 30308-3374



Re: Plant Branch Pond E – March 2021 Semi-Annual Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 Semi-Annual Groundwater Detection and Assessment Monitoring Statistical Analysis of groundwater data for Georgia Power Company's Plant Branch Pond E. 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 for the Appendix III parameters began in 2016, and at least 8 background samples were collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of Appendix IV constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations. A list of all parameters is provided below.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient well:** BRGWA-2I, BRGWA-2S, BRGWA-5I, BRGWA-5S, and BRGWA-6S
- **Downgradient wells:** BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-37S, and BRGWC-38S

The monitoring program consists of the following constituents:

- **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A summary of well/constituent pairs with 100% nondetects follows this letter.

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).

In earlier analyses, 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 with the previous screening to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations.

### **Summary of Statistical Methods – Appendix III Parameters:**

Based on the earlier evaluation described above, the following methods were selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate

associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for nondetects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% nondetects, the Kaplan-Meier nondetect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% nondetects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected 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.

## **Summary of Background Screening – Conducted in March 2019**

### Outlier and Trend Testing

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective, in proposed background data. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified either visually or by Tukey's test, flagged in the computer database with "o" and

deselected prior to construction of statistical limits. A list of flagged values is provided in the outlier summary (Figure C). Although outliers were screened for all wells, only outliers in upgradient wells will affect the interwell prediction limits.

When suspected outliers were evaluated using the Tukey box plot method during the previous screening, a few outliers were identified. In cases where the most recent value was identified as an outlier, values were not flagged in the database as they may represent a future trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

When any values are flagged in the database as outliers, they were plotted in a disconnected and lighter symbol on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data in upgradient wells are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, earlier data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When the historical records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed a handful of statistically significant decreasing and increasing trends for the Appendix III parameters. All trends noted were relatively low in magnitude when compared to average concentrations and were in downgradient wells;

therefore, they did not affect the interwell limits, and no adjustments were made to the data sets. Trend test results were included with the background screening report.

### Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells would not be conservative from a regulatory perspective; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified no variation among upgradient well data for fluoride, making this constituent eligible for interwell analyses. Variation was noted for boron, calcium, chloride, pH, sulfate and TDS. While data were further tested for intrawell eligibility during the screening, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

### **Evaluation of Appendix III Parameters – March 2021**

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through March 2021 (Figure D). Background (upgradient) well data were re-assessed for potential outliers during this analysis and no new values were flagged. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs).

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 and, 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 follows this letter. Exceedances were identified for the following well/constituent pairs:

- Boron: BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, and BRGWC-38S
- Calcium: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, and BRGWC-38S
- Chloride: BRGWC-34S, BRGWC-35S, BRGWC-36S, and BRGWC-38S
- Fluoride: BRGWC-38S
- pH: BRGWC-33S, BRGWC-34S, BRGWC-36S, BRGWC-37S, and BRGWC-38S
- Sulfate: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, and BRGWC-38S
- TDS: BRGWC-17S, BRGWC-34S, BRGWC-35S, BRGWC-36S, and BRGWC-38S

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. While several statistically significant decreasing trends were noted for upgradient and downgradient wells, only two statistically significant increasing trends were identified for boron in well BRGWC-35S and chloride in well BRGWC-36S. A summary of the trend test results follows this letter.

### **Evaluation of Appendix IV Parameters – March 2021**

Data from all wells for Appendix IV parameters are reassessed using visual screening from the time series for outliers during each analysis and no new outliers were flagged. Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for chromium and radium. 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 Georgia EPD Rule 391-3-4-.10(6)(a). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements, GWPS were established for statistical comparison of Appendix IV constituents for the March 2021 sample event according to the state rules (Figure G). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well with detections (Figure H). The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the Georgia EPD Rules 391-3-4-.10(6)(a). 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. Note that reporting limits decreased for the following constituents during this analysis:

- Beryllium from <0.003 mg/L to <0.0005 mg/L
- Cadmium from <0.0025 mg/L to <0.0005 mg/L
- Chromium from <0.01 mg/L to <0.005 mg/L
- Lead from <0.005 mg/L to <0.001 mg/L
- Mercury from <0.0005 mg/L to <0.0002 mg/L
- Selenium from <0.01 mg/L to <0.005 mg/L

As a result, background limits were lower for these constituents, with the exception of chromium. However, in all cases, except for lead which uses the background limit as the GWPS, the established MCL was higher than the background limits. Therefore, the GWPS were not affected. Additionally, some of the confidence intervals constructed on downgradient wells resulted in decreased upper and lower confidence limits since all historical nondetects within a given well are replaced with the most recent reporting limit.

A summary of the confidence intervals follows this letter. Exceedances were noted for the following well/constituent pairs:

- Beryllium: BRGWC-38S
- Cobalt: BRGWC-33S and BRGWC-38S

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Branch Pond E. 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



# 100% Non-Detects

Analysis Run 4/5/2021 3:54 PM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

Antimony (mg/L)  
BRGWC-33S, BRGWC-34S, BRGWC-35S

Arsenic (mg/L)  
BRGWC-34S

Beryllium (mg/L)  
BRGWC-17S, BRGWC-37S

Cadmium (mg/L)  
BRGWC-17S, BRGWC-35S, BRGWC-37S

Chromium (mg/L)  
BRGWC-34S

Cobalt (mg/L)  
BRGWC-17S, BRGWC-36S, BRGWC-37S

Lithium (mg/L)  
BRGWC-37S

Molybdenum (mg/L)  
BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-37S, BRGWC-38S

Selenium (mg/L)  
BRGWC-34S, BRGWC-35S, BRGWC-37S

Thallium (mg/L)  
BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-37S

# Appendix III Interwell Prediction Limits - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-33S	0.04	n/a	3/3/2021	1.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	3/3/2021	2.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	3/4/2021	1.9	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	3/3/2021	1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	3/4/2021	1.5	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	3/4/2021	41.2	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	3/3/2021	37.5	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	3/3/2021	88.6	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	3/4/2021	71.8	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	3/3/2021	53	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	3/4/2021	41	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	3/3/2021	6.4	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	3/4/2021	5.8	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	3/3/2021	8.1	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	3/4/2021	5.6	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.19	n/a	3/4/2021	0.83	Yes	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-33S	7.091	5.91	3/3/2021	4.83	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.091	5.91	3/3/2021	5.88	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.091	5.91	3/3/2021	5.86	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.091	5.91	3/3/2021	5.87	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.091	5.91	3/4/2021	4.19	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	3/4/2021	122	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	3/3/2021	133	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	3/3/2021	277	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	3/4/2021	251	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	3/3/2021	252	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	3/4/2021	325	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	3/4/2021	316	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	3/3/2021	422	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	3/4/2021	480	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	3/3/2021	442	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	3/4/2021	540	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2

# Appendix III Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-17S	0.04	n/a	3/4/2021	0.04ND	No	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-33S	0.04	n/a	3/3/2021	1.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	3/3/2021	2.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	3/4/2021	1.9	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	3/3/2021	1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-37S	0.04	n/a	3/3/2021	0.04ND	No	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	3/4/2021	1.5	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	3/4/2021	41.2	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	3/3/2021	37.5	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	3/3/2021	88.6	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	3/4/2021	71.8	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	3/3/2021	53	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-37S	24	n/a	3/3/2021	3.6	No	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	3/4/2021	41	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-17S	4.8	n/a	3/4/2021	4.6	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-33S	4.8	n/a	3/3/2021	3.9	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	3/3/2021	6.4	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	3/4/2021	5.8	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	3/3/2021	8.1	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-37S	4.8	n/a	3/3/2021	1.9	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	3/4/2021	5.6	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-17S	0.19	n/a	3/4/2021	0.096J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-33S	0.19	n/a	3/3/2021	0.069J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-34S	0.19	n/a	3/3/2021	0.071J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-35S	0.19	n/a	3/4/2021	0.076J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-36S	0.19	n/a	3/3/2021	0.1ND	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-37S	0.19	n/a	3/3/2021	0.1ND	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.19	n/a	3/4/2021	0.83	Yes	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-17S	7.091	5.91	3/4/2021	6.45	No	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-33S	7.091	5.91	3/3/2021	4.83	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.091	5.91	3/3/2021	5.88	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-35S	7.091	5.91	3/4/2021	6.14	No	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.091	5.91	3/3/2021	5.86	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.091	5.91	3/3/2021	5.87	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.091	5.91	3/4/2021	4.19	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	3/4/2021	122	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	3/3/2021	133	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	3/3/2021	277	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	3/4/2021	251	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	3/3/2021	252	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-37S	7.5	n/a	3/3/2021	0.5ND	No	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	3/4/2021	325	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	3/4/2021	316	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-33S	299	n/a	3/3/2021	212	No	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	3/3/2021	422	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	3/4/2021	480	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	3/3/2021	442	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-37S	299	n/a	3/3/2021	33	No	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	3/4/2021	540	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2

# Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWC-35S	0.2086	60	43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-34S	-5.275	-46	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-38S	-1.939	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-34S	-0.228	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-36S	1.207	62	43	Yes	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-2I (bg)	-0.1304	-67	-53	Yes	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-38S	-0.1877	-67	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-34S	-35.67	-67	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-38S	-32.33	-53	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	-61.79	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	-17.42	-53	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	-52.37	-64	-43	Yes	13	0	n/a	n/a	0.01	NP

# Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-21 (bg)	0.001014	9	43	No	13	15.38	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	10	43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	2	43	No	13	69.23	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-5	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	10	43	No	13	69.23	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-33S	0.002329	3	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-34S	0	1	43	No	13	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>BRGWC-35S</b>	<b>0.2086</b>	<b>60</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	BRGWC-36S	0.03939	37	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-38S	-0.07857	-32	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-21 (bg)	0.9466	37	43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.02603	-12	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.153	-9	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4992	-13	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1738	42	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-17S	1.679	35	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-33S	-1.692	-28	-43	No	13	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-34S</b>	<b>-5.275</b>	<b>-46</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	BRGWC-35S	1.909	25	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-36S	-0.6968	-17	-43	No	13	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-38S</b>	<b>-1.939</b>	<b>-44</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWA-21 (bg)	-0.03735	-18	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0	-9	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.1525	-31	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	-0.03667	-12	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0	0	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-34S</b>	<b>-0.228</b>	<b>-44</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-35S	0.04876	14	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>1.207</b>	<b>62</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-38S	0.1854	10	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-21 (bg)	-0.002473	-20	-53	No	15	40	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	28	53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	39	53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.007584	-25	-53	No	15	33.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0.008561	34	53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-38S	0.01986	18	53	No	15	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWA-21 (bg)</b>	<b>-0.1304</b>	<b>-67</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWA-2S (bg)	-0.03108	-36	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.02929	-23	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.05707	-42	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-6S (bg)	-0.01346	-6	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-33S	-0.01054	-27	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-34S	0.003222	6	53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-36S	0.004501	3	48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-37S	0.02373	6	38	No	12	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>-0.1877</b>	<b>-67</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWA-21 (bg)	-0.2264	-22	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.02052	8	43	No	13	30.77	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	-0.2884	-18	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.08299	-31	-43	No	13	30.77	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.01212	-7	-43	No	13	15.38	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-17S	4.067	21	43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-33S	-16.75	-41	-43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-34S</b>	<b>-35.67</b>	<b>-67</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWC-35S	-1.125	-7	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-36S	-11.18	-29	-43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-38S</b>	<b>-32.33</b>	<b>-53</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	-4.318	-10	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	1.233	5	43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-8.777	-17	-43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-6.157	-35	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	-4.662	-9	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	-3.532	-9	-43	No	13	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>-61.79</b>	<b>-56</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	-2.009	-8	-43	No	13	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>-17.42</b>	<b>-53</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>-52.37</b>	<b>-64</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

# Upper Tolerance Limits

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:59 AM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	70	n/a	n/a	90	n/a	n/a	0.02758	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	70	n/a	n/a	75.71	n/a	n/a	0.02758	NP Inter(NDs)
Barium (mg/L)	0.063	n/a	n/a	70	n/a	n/a	0	n/a	n/a	0.02758	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Chromium (mg/L)	0.016	n/a	n/a	70	n/a	n/a	15.71	n/a	n/a	0.02758	NP Inter(normality)
Cobalt (mg/L)	0.005	n/a	n/a	68	n/a	n/a	47.06	n/a	n/a	0.03056	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	1.389	n/a	n/a	70	0.6485	0.3731	0	None	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	75	n/a	n/a	49.33	n/a	n/a	0.02134	NP Inter(normality)
Lead (mg/L)	0.0013	n/a	n/a	70	n/a	n/a	75.71	n/a	n/a	0.02758	NP Inter(NDs)
Lithium (mg/L)	0.089	n/a	n/a	70	n/a	n/a	42.86	n/a	n/a	0.02758	NP Inter(normality)
Mercury (mg/L)	0.00021	n/a	n/a	60	n/a	n/a	91.67	n/a	n/a	0.04607	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	70	n/a	n/a	70	n/a	n/a	0.02758	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)

<b>PLANT BRANCH POND E GWPS</b>			
<b>Constituent Name</b>	<b>MCL</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006	0.003	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.063	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.016	0.1
Cobalt, Total (mg/L)	n/a	0.005	0.005
Combined Radium, Total (pCi/L)	5	1.39	5
Fluoride, Total (mg/L)	4	0.19	4
Lead, Total (mg/L)	n/a	0.0013	0.0013
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.005	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

*\*MCL = Maximum Contaminant Level*

*\*GWPS = Groundwater Protection Standard*



# Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 10:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	BRGWC-38S	0.00964	0.008146	0.004	Yes15	0.008893	0.001102	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-33S	0.05333	0.04017	0.005	Yes15	0.04675	0.009713	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-38S	0.2643	0.2173	0.005	Yes14	0.2408	0.03313	0	None	No	0.01	Param.

# Confidence Intervals - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 4/12/2021, 10:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-17S	0.003	0.0009	0.006	No 14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-36S	0.003	0.0006	0.006	No 14	0.00236	0.001085	71.43	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-37S	0.003	0.0006	0.006	No 14	0.002643	0.0009087	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-38S	0.003	0.0009	0.006	No 14	0.002686	0.0007999	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-17S	0.005	0.00073	0.01	No 14	0.003944	0.001848	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-33S	0.005	0.0006	0.01	No 15	0.004411	0.001555	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-35S	0.005	0.0006	0.01	No 14	0.004031	0.001925	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-36S	0.005	0.001	0.01	No 14	0.004082	0.001827	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-37S	0.005	0.00078	0.01	No 14	0.004043	0.001904	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-38S	0.003667	0.001687	0.01	No 14	0.002677	0.001398	7.143	None	No	0.01	Param.
Barium (mg/L)	BRGWC-17S	0.04268	0.03821	2	No 14	0.04044	0.003152	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-33S	0.02264	0.0202	2	No 15	0.02142	0.001799	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-34S	0.03554	0.02551	2	No 14	0.03053	0.00708	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-35S	0.0701	0.037	2	No 14	0.05051	0.01988	0	None	No	0.01	NP (normality)
Barium (mg/L)	BRGWC-36S	0.04562	0.03273	2	No 14	0.03972	0.01058	0	None	ln(x)	0.01	Param.
Barium (mg/L)	BRGWC-37S	0.02486	0.0228	2	No 14	0.02383	0.00145	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-38S	0.0338	0.015	2	No 14	0.02269	0.01027	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-33S	0.0021	0.0015	0.004	No 15	0.002027	0.0008598	6.667	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-34S	0.0002	0.0001	0.004	No 14	0.00083	0.001767	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-35S	0.00016	0.0001	0.004	No 14	0.0008221	0.00177	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-36S	0.005	0.000081	0.004	No 15	0.001403	0.002245	26.67	None	No	0.01	NP (normality)
<b>Beryllium (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.00964</b>	<b>0.008146</b>	<b>0.004</b>	<b>Yes15</b>	<b>0.008893</b>	<b>0.001102</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cadmium (mg/L)	BRGWC-33S	0.000466	0.0003313	0.005	No 15	0.0003987	0.00009935	6.667	None	No	0.01	Param.
Cadmium (mg/L)	BRGWC-34S	0.0005082	0.0002118	0.005	No 14	0.0003736	0.0002282	14.29	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	BRGWC-36S	0.0005	0.0001	0.005	No 15	0.0004453	0.0001443	86.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-38S	0.0006254	0.0004918	0.005	No 14	0.0005586	0.00009429	7.143	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-17S	0.01295	0.009807	0.1	No 14	0.01144	0.002413	0	None	x^(1/3)	0.01	Param.
Chromium (mg/L)	BRGWC-33S	0.005	0.00049	0.1	No 15	0.004699	0.001164	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-35S	0.006654	0.004032	0.1	No 14	0.005343	0.001851	7.143	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-36S	0.008539	0.007332	0.1	No 14	0.007936	0.0008518	0	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-37S	0.005	0.0013	0.1	No 14	0.00225	0.001506	21.43	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-38S	0.004199	0.003398	0.1	No 14	0.0037	0.0008143	0	None	x^3	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.05333</b>	<b>0.04017</b>	<b>0.005</b>	<b>Yes15</b>	<b>0.04675</b>	<b>0.009713</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	BRGWC-34S	0.004248	0.003252	0.005	No 14	0.00375	0.0007036	7.143	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-35S	0.005	0.0008	0.005	No 14	0.003571	0.002039	64.29	None	No	0.01	NP (NDs)
<b>Cobalt (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.2643</b>	<b>0.2173</b>	<b>0.005</b>	<b>Yes14</b>	<b>0.2408</b>	<b>0.03313</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	BRGWC-17S	0.8217	0.3126	5	No 14	0.5672	0.3593	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-33S	1.273	0.6719	5	No 14	0.9723	0.4241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-34S	1.115	0.7454	5	No 14	0.9303	0.261	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-35S	1.069	0.4571	5	No 14	0.7631	0.432	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-36S	1.242	0.6208	5	No 14	0.9315	0.4387	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-37S	0.808	0.4203	5	No 14	0.6141	0.2737	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-38S	3.139	2.013	5	No 14	2.576	0.7947	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-17S	0.1398	0.0794	4	No 15	0.1118	0.04762	6.667	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-33S	0.2479	0.1143	4	No 16	0.1889	0.1138	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-34S	0.1547	0.07415	4	No 15	0.1257	0.08875	6.667	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-35S	0.1416	0.06108	4	No 15	0.1079	0.07789	13.33	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-36S	0.15	0.051	4	No 15	0.1201	0.1157	53.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-37S	0.1	0.05	4	No 15	0.07667	0.02831	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-38S	0.9588	0.7152	4	No 15	0.848	0.2111	0	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-17S	0.001	0.0001	0.0013	No 14	0.0008681	0.0003353	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-33S	0.001	0.000063	0.0013	No 15	0.0002851	0.0003726	20	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-34S	0.001	0.0003	0.0013	No 14	0.0008207	0.0003593	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-35S	0.001	0.00012	0.0013	No 14	0.0007514	0.0004085	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-36S	0.001	0.000047	0.0013	No 14	0.0009319	0.0002547	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-37S	0.001	0.0001	0.0013	No 14	0.0008714	0.0003268	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-38S	0.0004364	0.0003493	0.0013	No 14	0.0003929	0.00006145	0	None	No	0.01	Param.

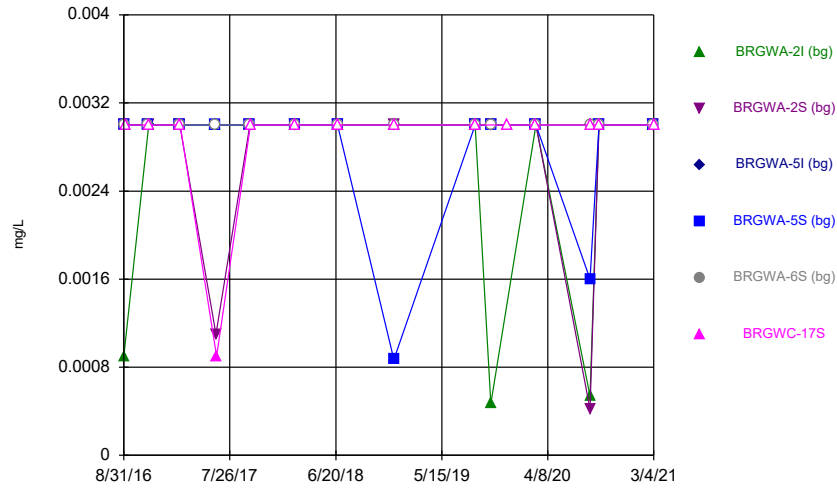
# Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 10:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	BRGWC-17S	0.03	0.00097	0.089	No 14	0.01963	0.01444	64.29	None	No	0.01	NP (NDs)
Lithium (mg/L)	BRGWC-33S	0.01036	0.009356	0.089	No 15	0.00986	0.0007443	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-34S	0.03	0.00089	0.089	No 14	0.0196	0.01448	64.29	None	No	0.01	NP (NDs)
Lithium (mg/L)	BRGWC-35S	0.0022	0.002	0.089	No 14	0.002136	0.00008419	0	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-36S	0.0026	0.0022	0.089	No 14	0.004421	0.007363	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-38S	0.02273	0.0205	0.089	No 14	0.02161	0.001573	0	None	No	0.01	Param.
Mercury (mg/L)	BRGWC-17S	0.0002	0.000084	0.002	No 12	0.0001787	0.00005009	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-33S	0.0002	0.00007	0.002	No 13	0.0001777	0.0000548	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-34S	0.0002	0.00007	0.002	No 12	0.0001692	0.00005838	75	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-35S	0.0002	0.00013	0.002	No 12	0.0001833	0.00004097	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-36S	0.0002	0.00013	0.002	No 12	0.0001833	0.00004097	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-37S	0.0002	0.00014	0.002	No 12	0.0001833	0.0000425	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-38S	0.0001694	0.00009806	0.002	No 12	0.0001337	0.00004548	8.333	None	No	0.01	Param.
Selenium (mg/L)	BRGWC-17S	0.002802	0.001778	0.05	No 14	0.0032	0.001348	28.57	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-33S	0.005	0.0018	0.05	No 15	0.003847	0.001251	46.67	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-36S	0.0057	0.003086	0.05	No 14	0.004393	0.001845	0	None	No	0.01	Param.
Selenium (mg/L)	BRGWC-38S	0.0427	0.03365	0.05	No 14	0.03817	0.006387	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-17S	0.001	0.000066	0.002	No 14	0.0009333	0.0002496	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	BRGWC-33S	0.00021	0.0001806	0.002	No 15	0.0001953	0.00002167	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-38S	0.001	0.00019	0.002	No 14	0.0004079	0.000327	21.43	None	No	0.01	NP (normality)

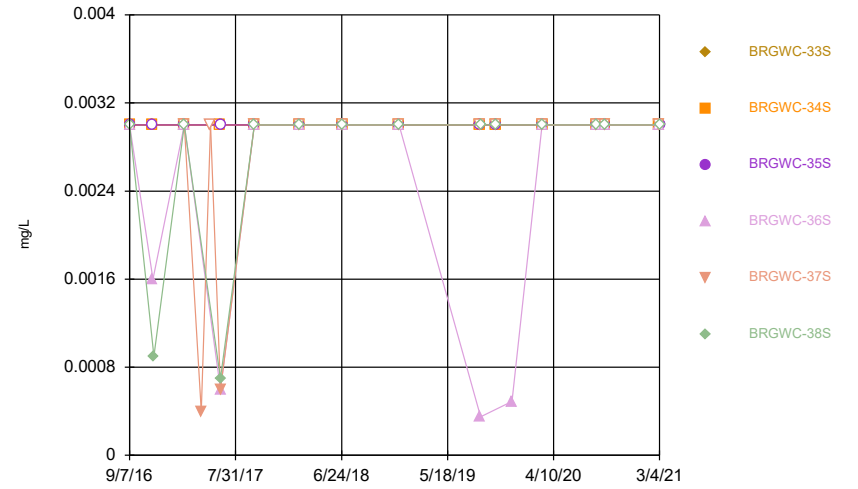
FIGURE A.

Time Series



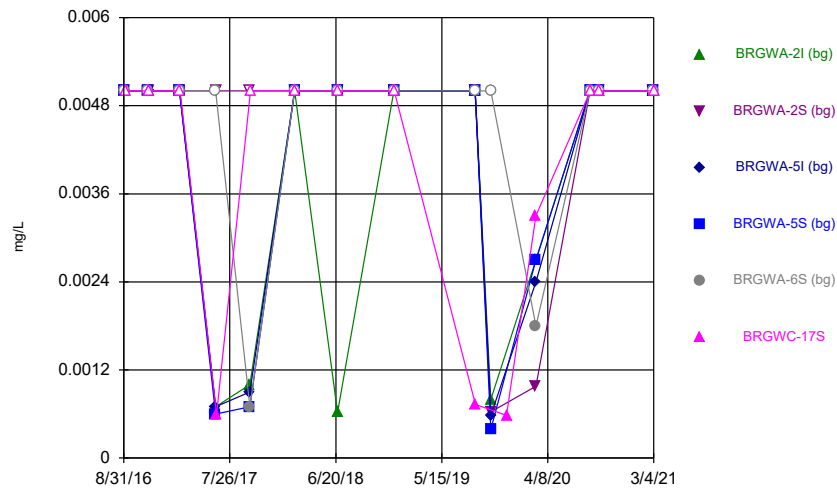
Constituent: Antimony Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



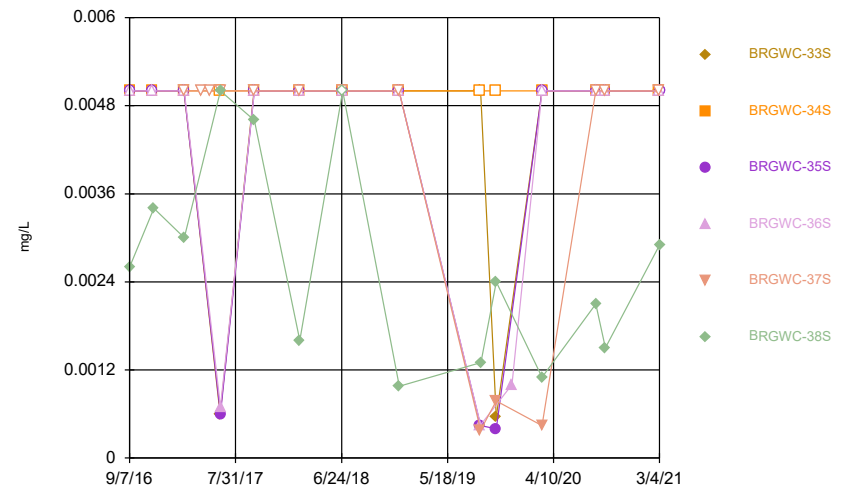
Constituent: Antimony Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



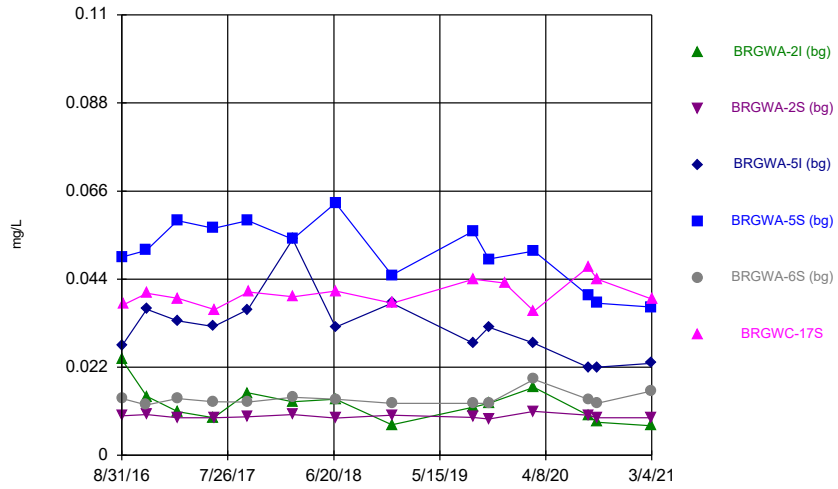
Constituent: Arsenic Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



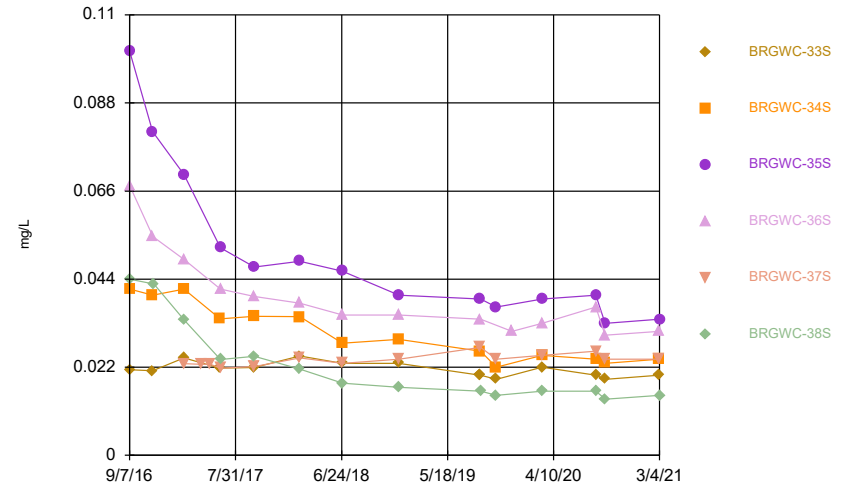
Constituent: Arsenic Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



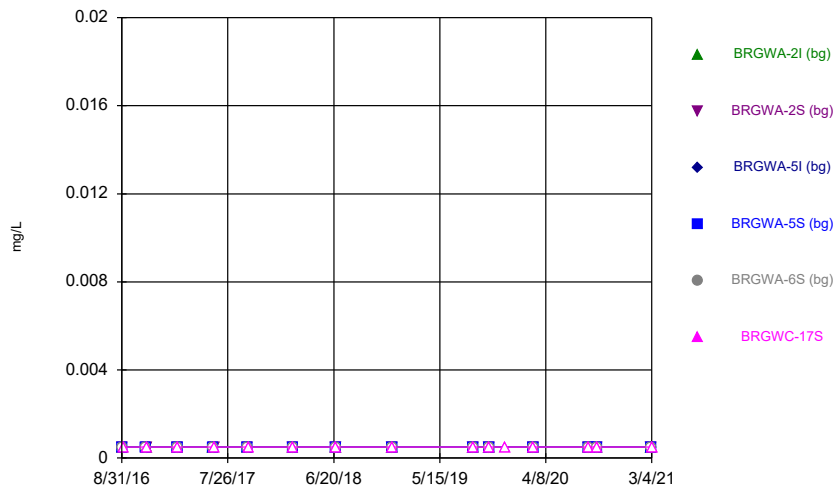
Constituent: Barium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



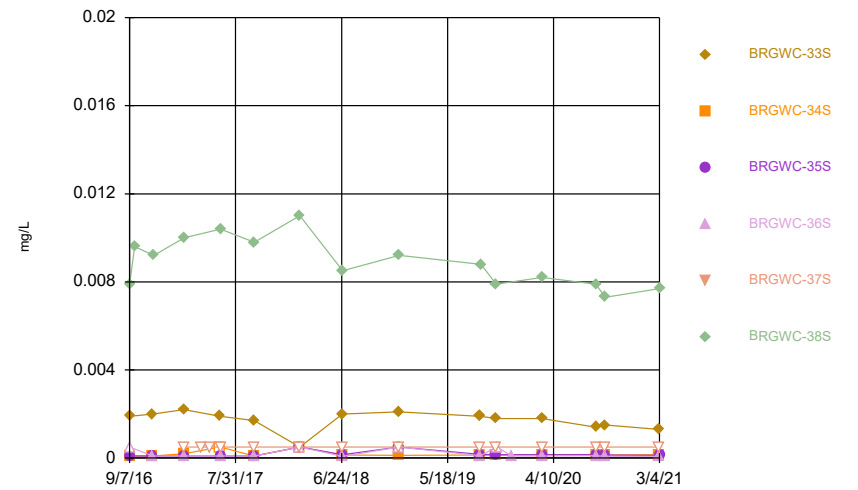
Constituent: Barium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



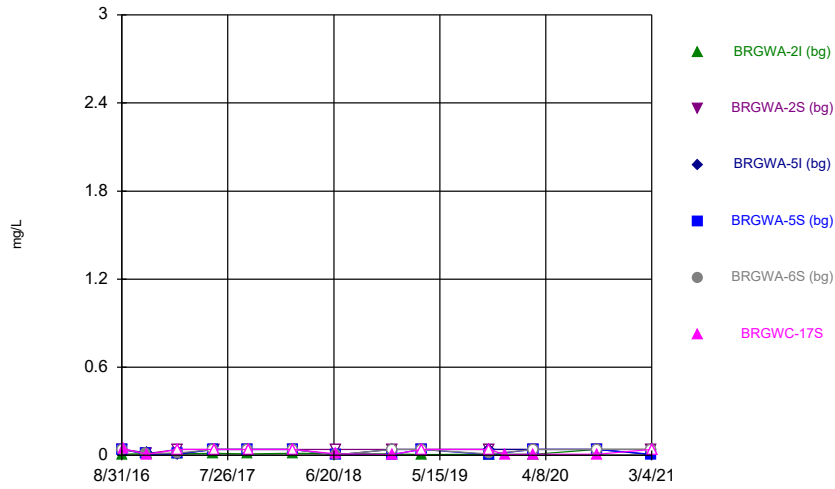
Constituent: Beryllium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



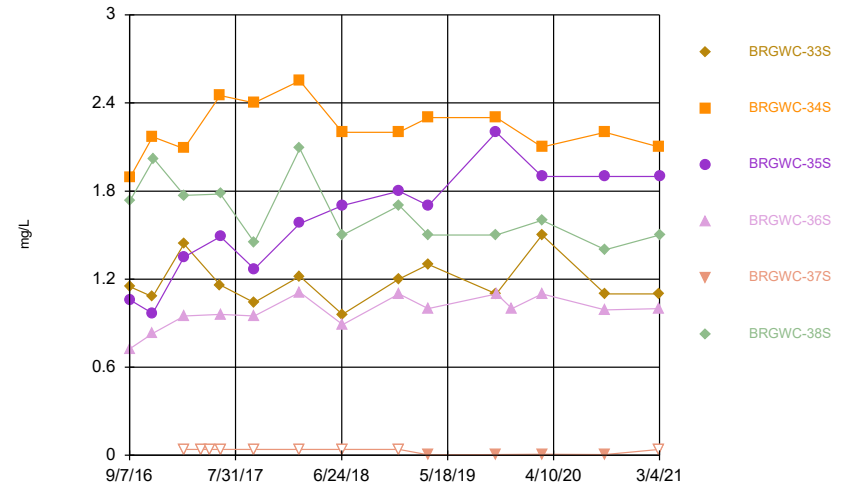
Constituent: Beryllium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



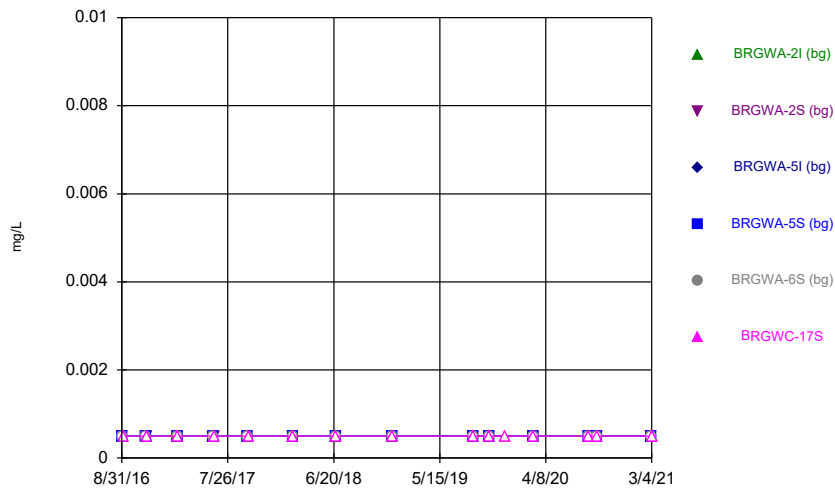
Constituent: Boron Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



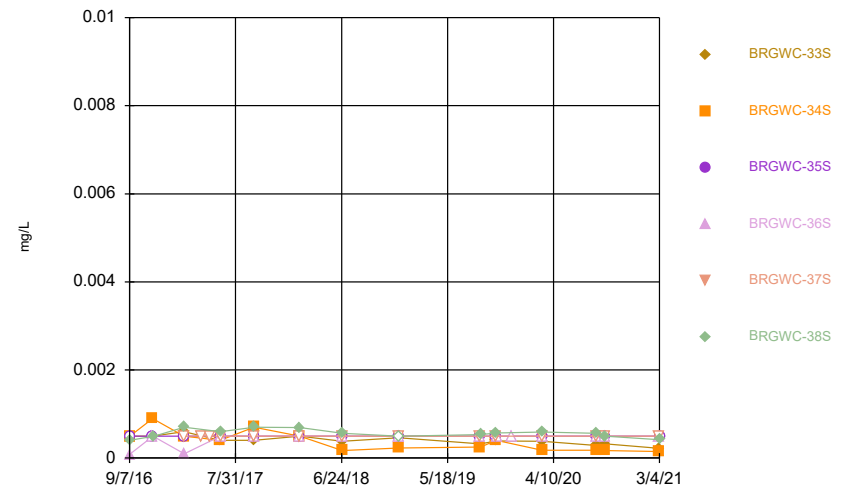
Constituent: Boron Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



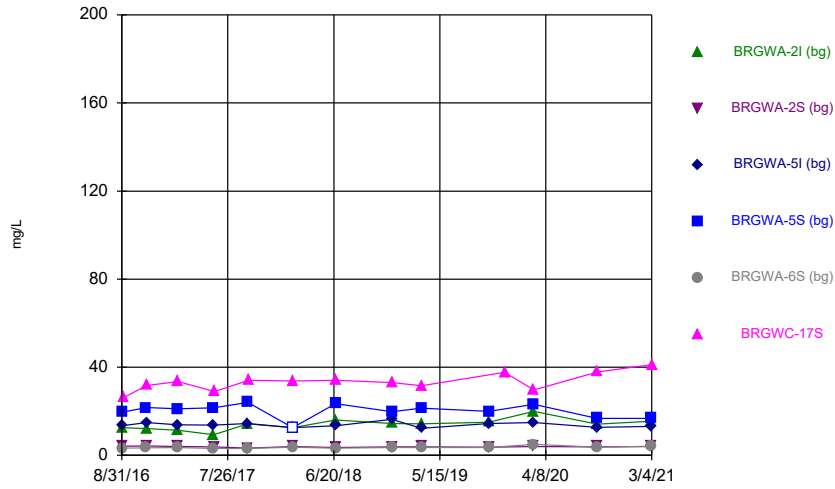
Constituent: Cadmium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



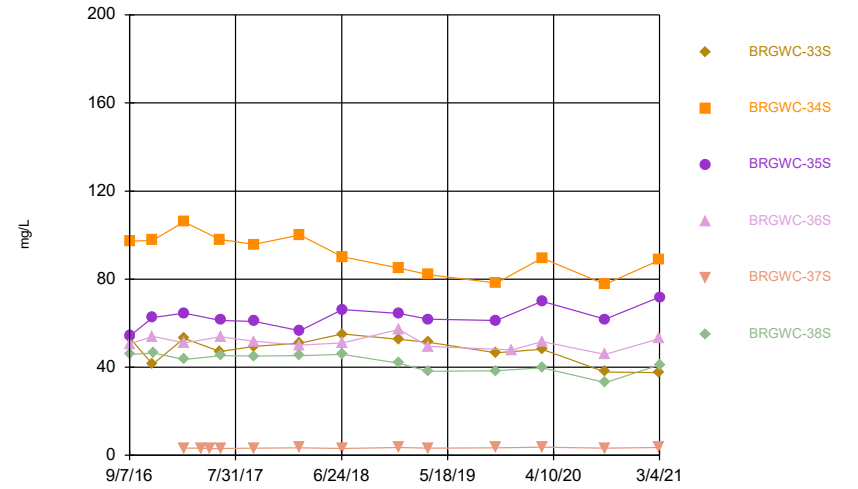
Constituent: Cadmium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



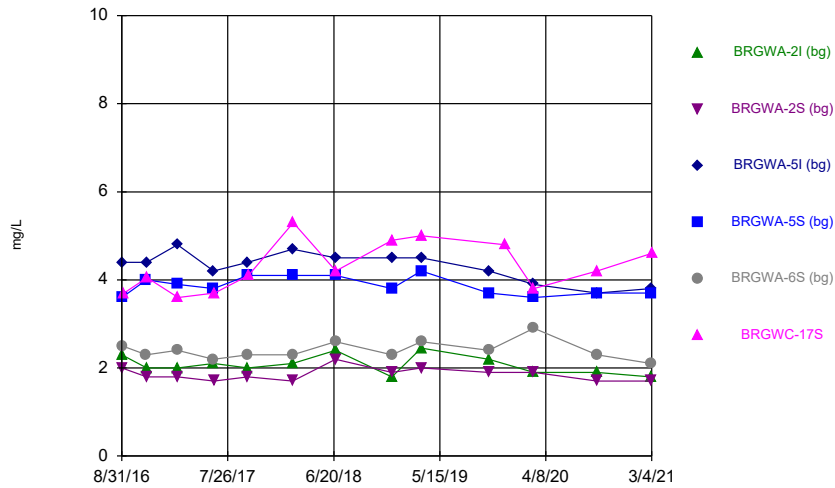
Constituent: Calcium Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



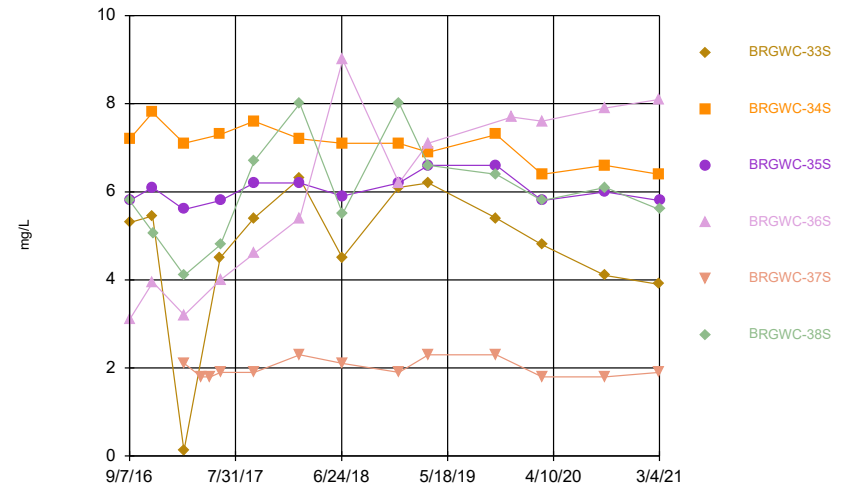
Constituent: Calcium Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



Constituent: Chloride, Total Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

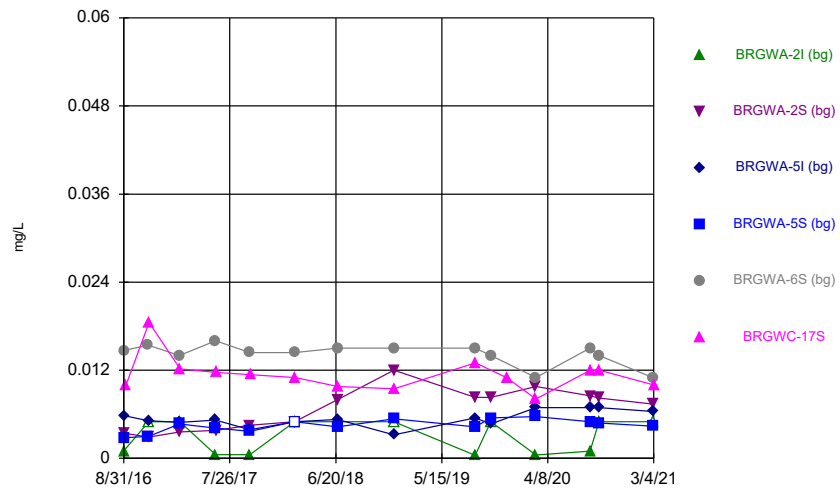
Time Series



Constituent: Chloride, Total Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

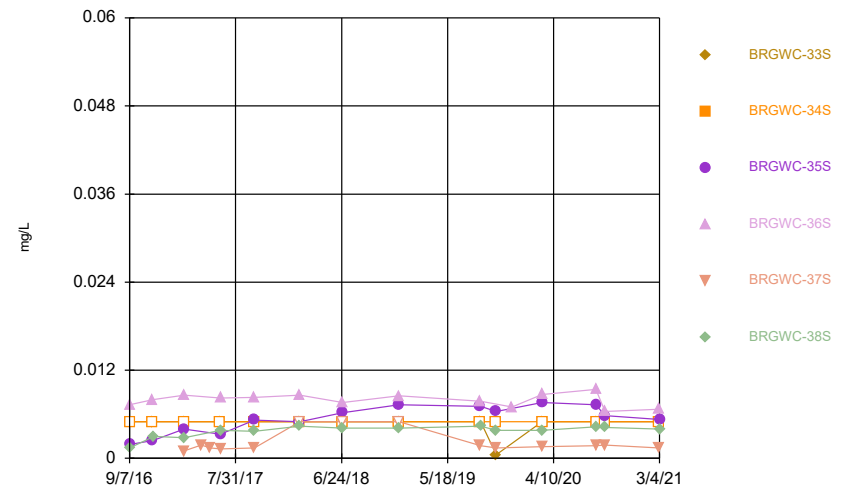


Time Series



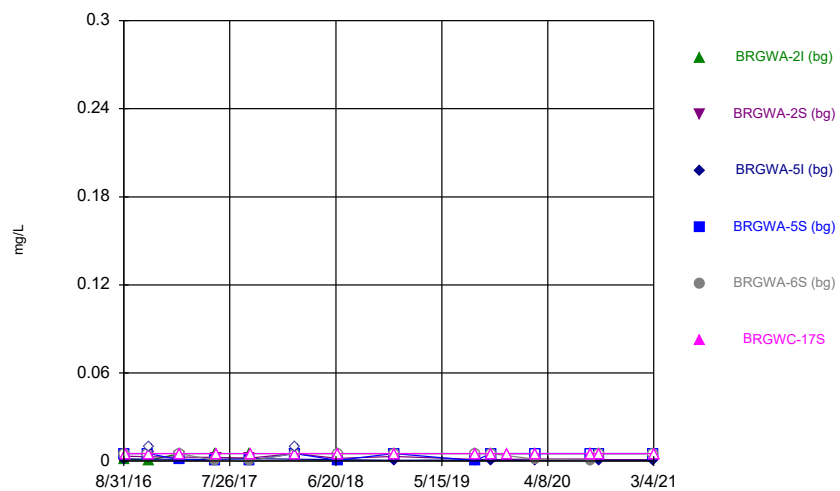
Constituent: Chromium Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



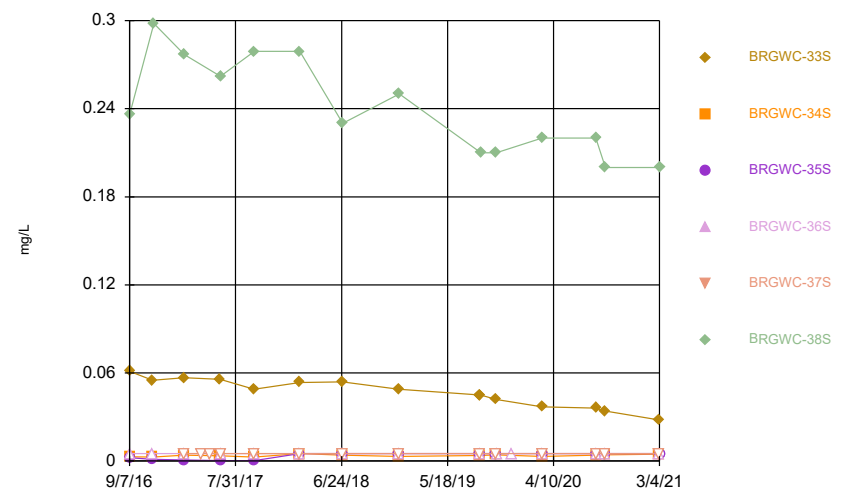
Constituent: Chromium Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



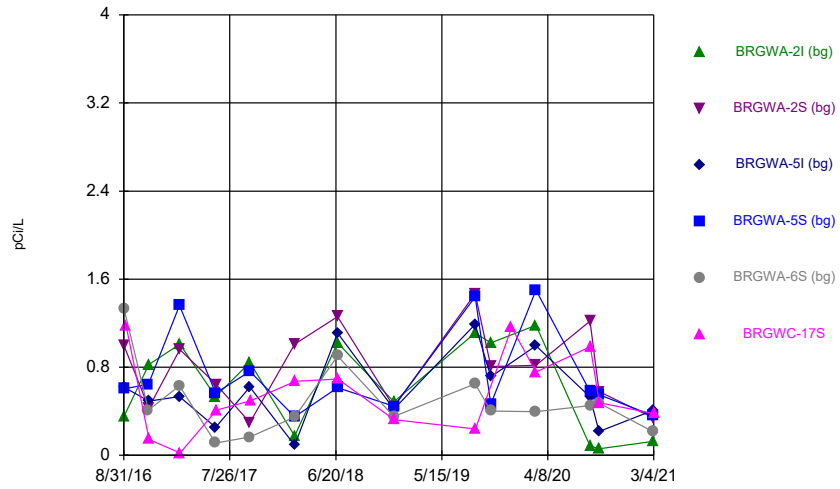
Constituent: Cobalt Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



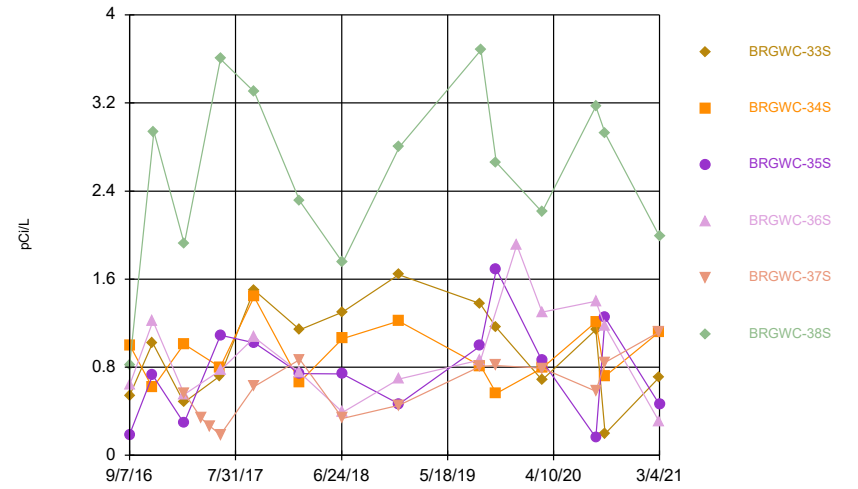
Constituent: Cobalt Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



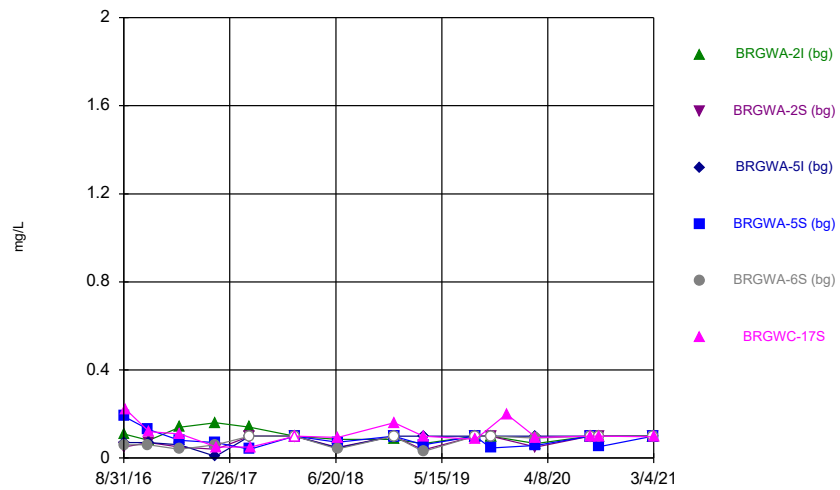
Constituent: Combined Radium 226 + 228 Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



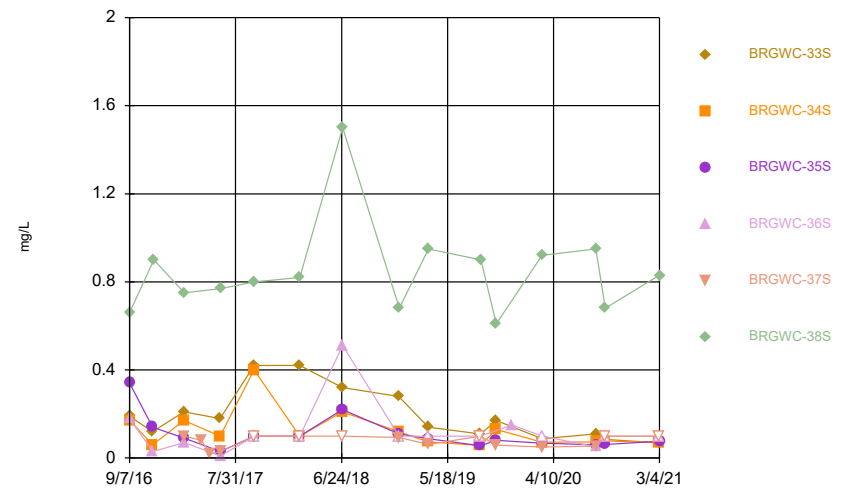
Constituent: Combined Radium 226 + 228 Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



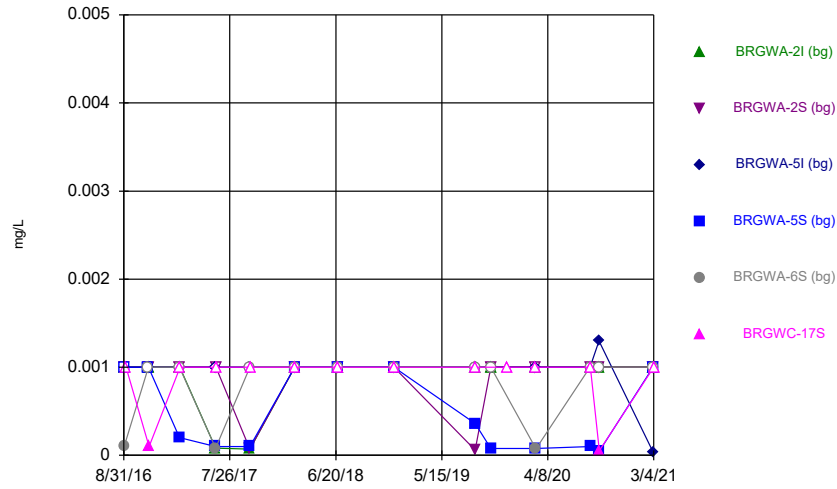
Constituent: Fluoride Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



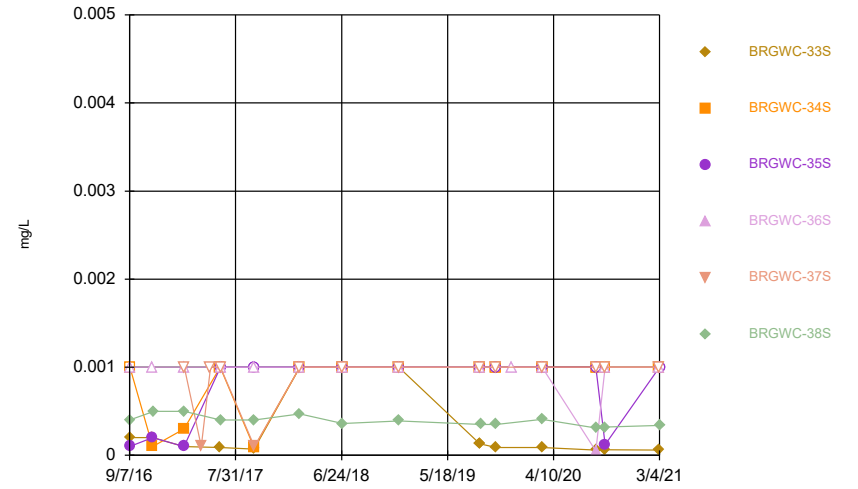
Constituent: Fluoride Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



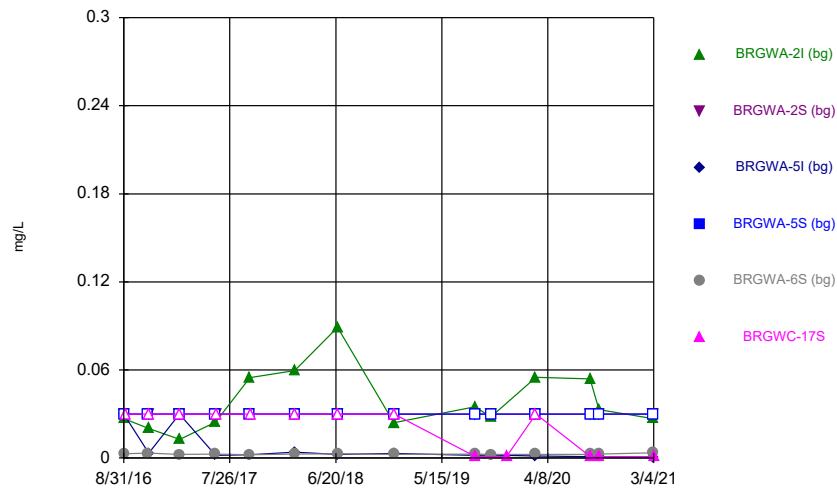
Constituent: Lead Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



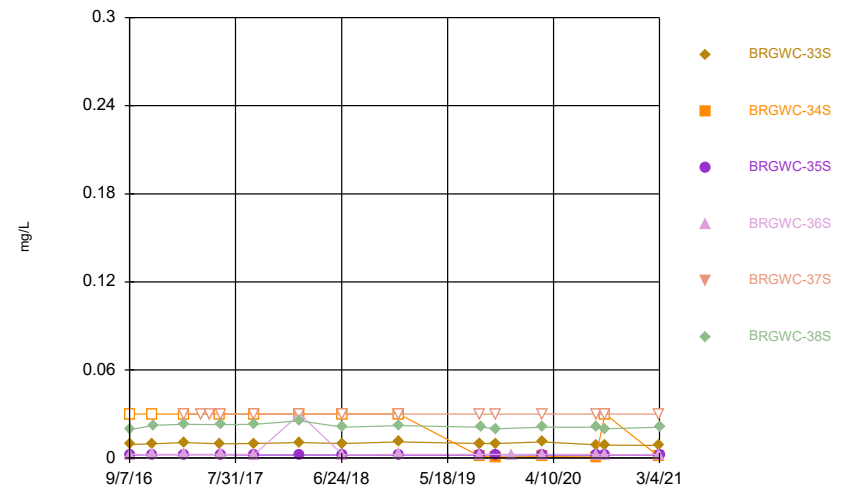
Constituent: Lead Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



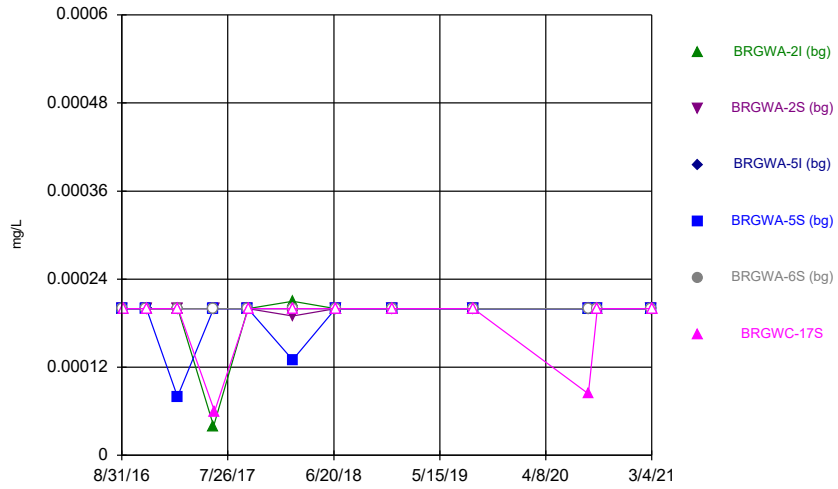
Constituent: Lithium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



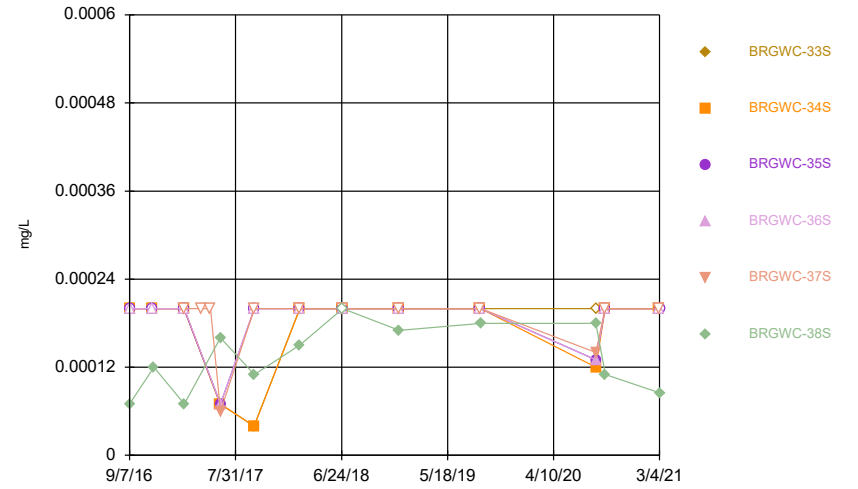
Constituent: Lithium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



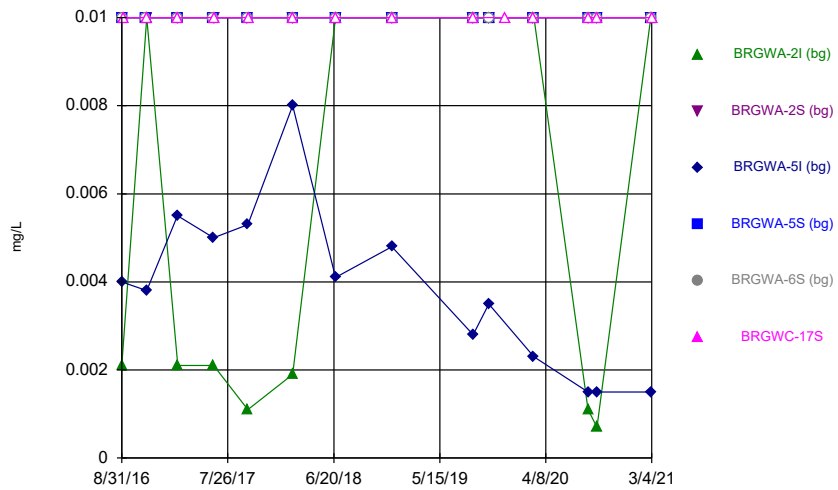
Constituent: Mercury Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



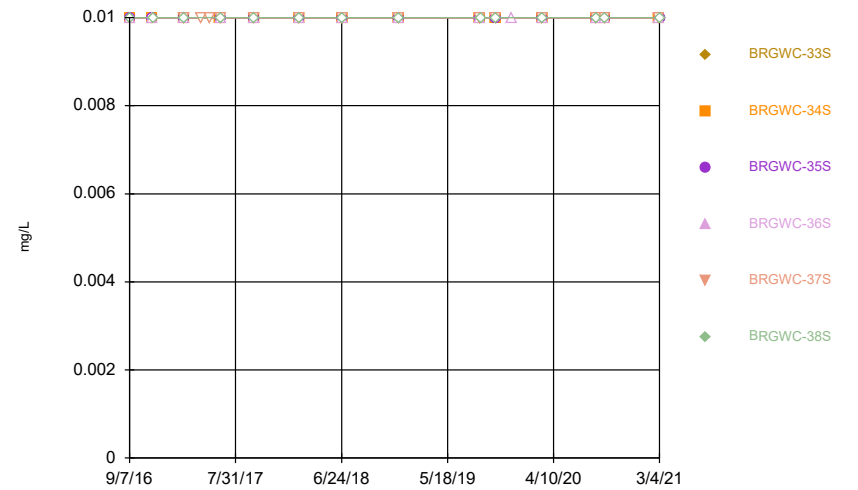
Constituent: Mercury Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



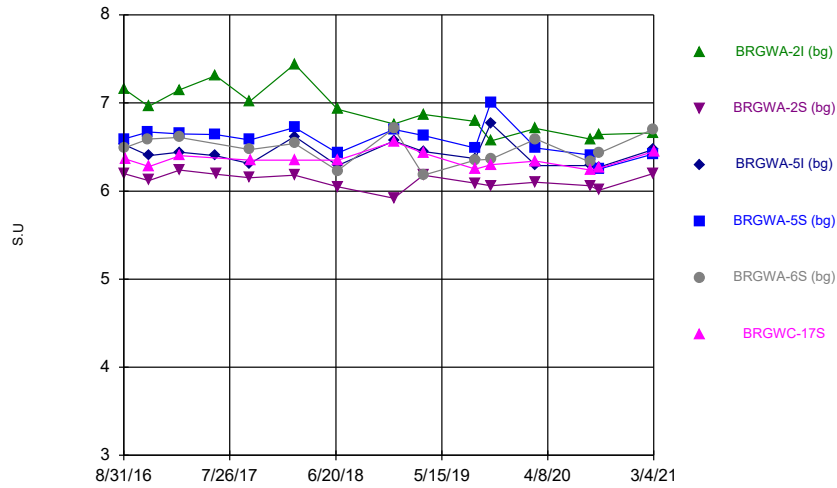
Constituent: Molybdenum Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



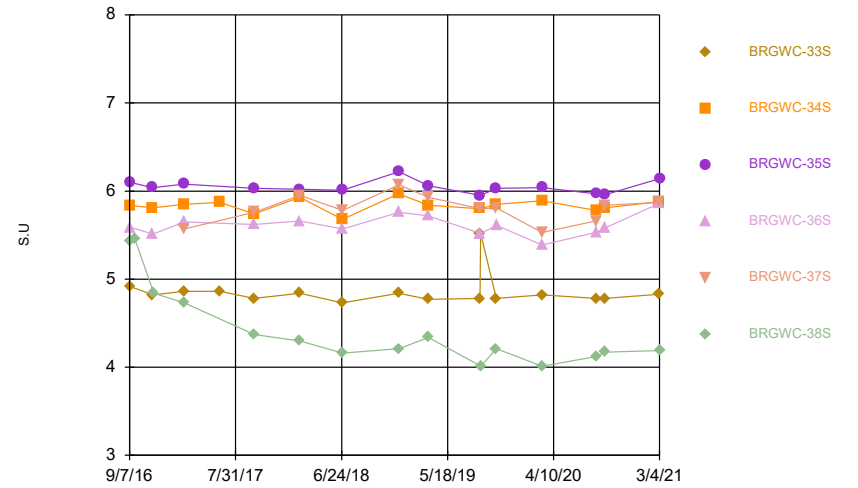
Constituent: Molybdenum Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



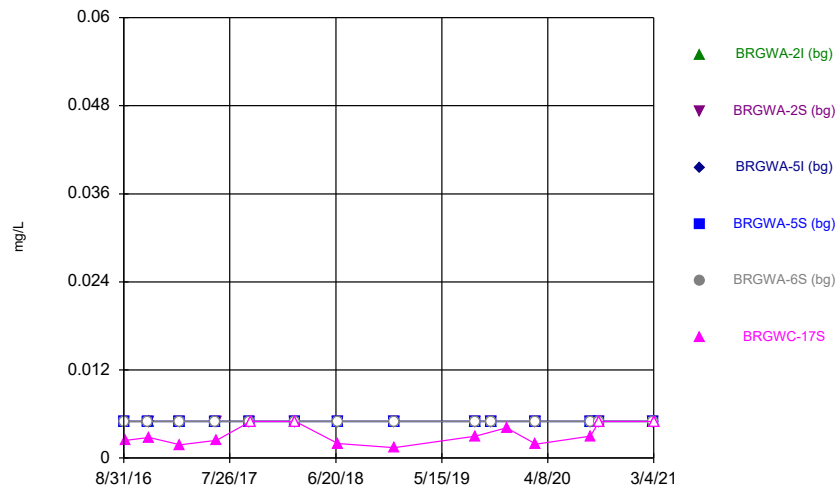
Constituent: pH, Field Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



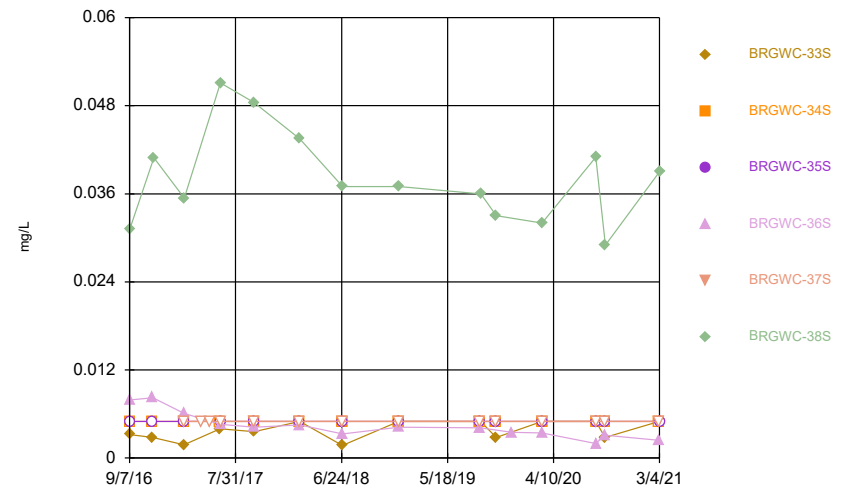
Constituent: pH, Field Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



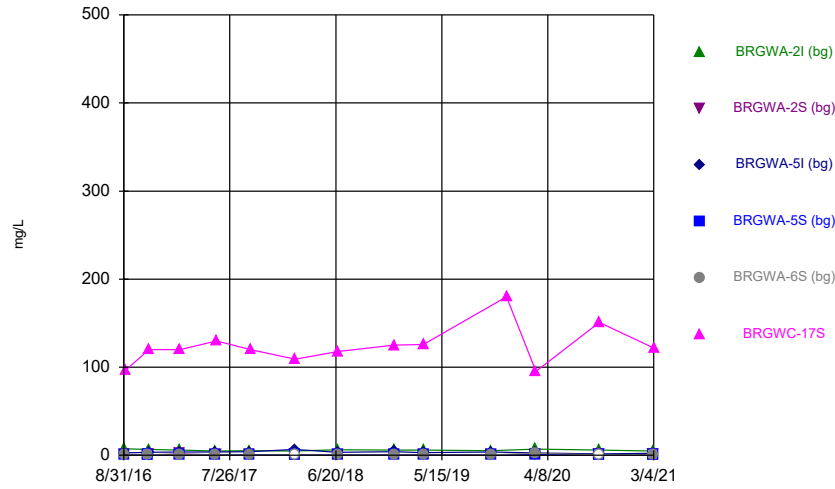
Constituent: Selenium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



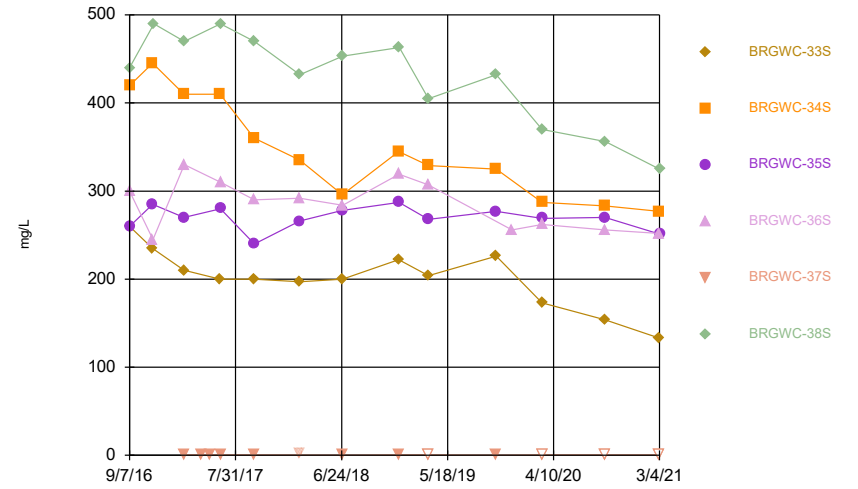
Constituent: Selenium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



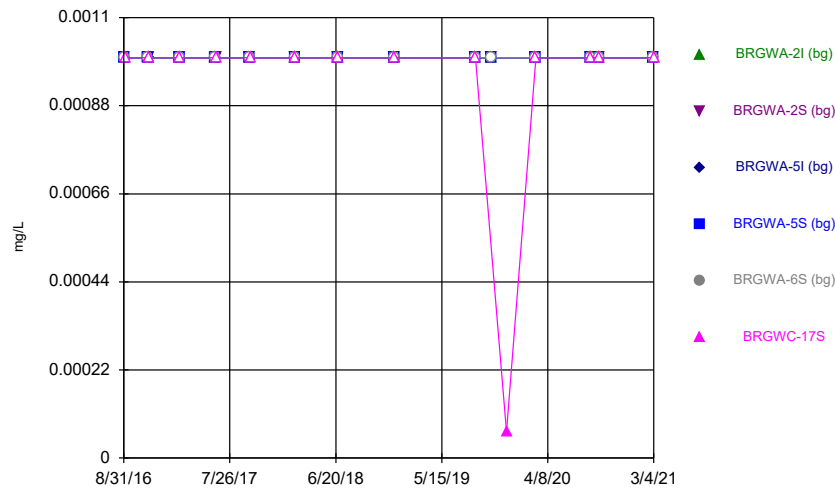
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



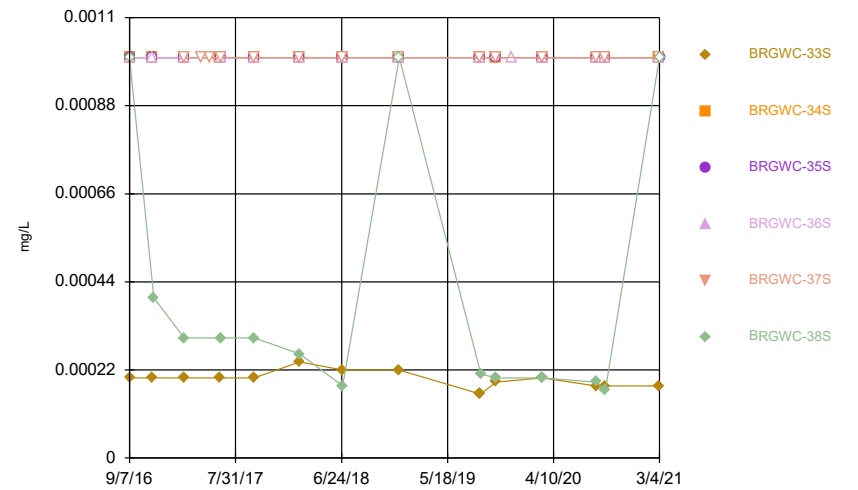
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



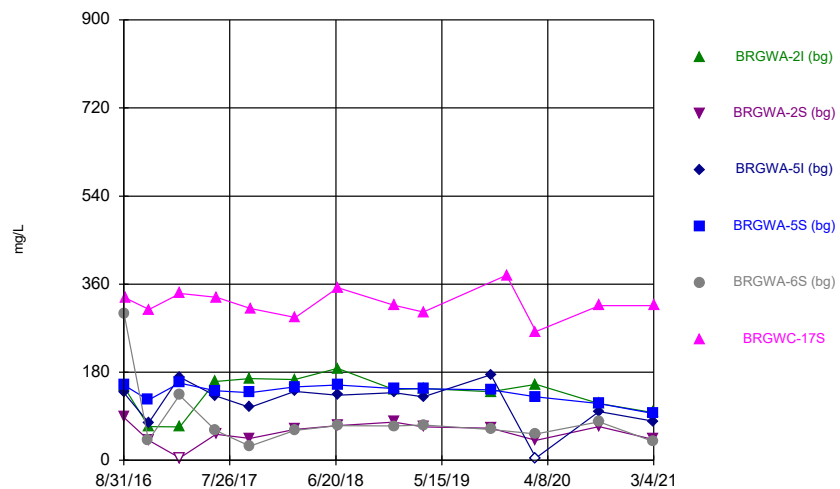
Constituent: Thallium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Time Series



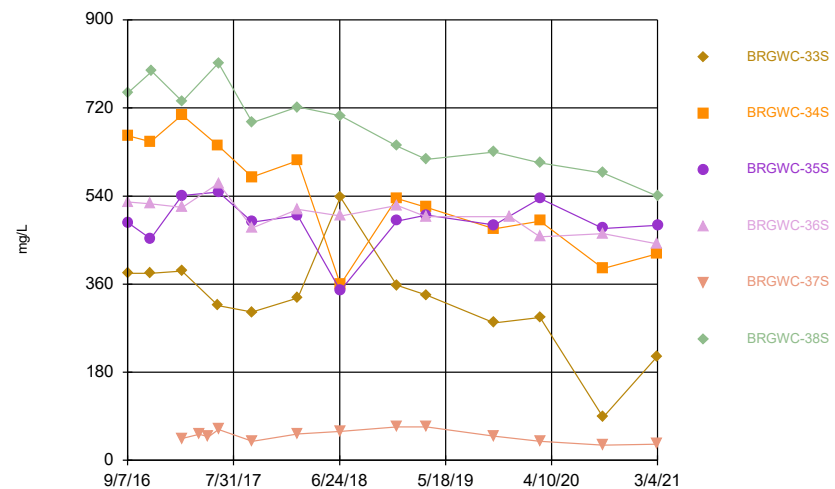
Constituent: Thallium Analysis Run 4/12/2021 8:59 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 8:59 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0009 (J)	<0.003	<0.003	<0.003		
9/1/2016					<0.003	
9/7/2016						<0.003
11/15/2016				<0.003	<0.003	
11/16/2016	<0.003	<0.003	<0.003			
11/17/2016						<0.003
2/20/2017			<0.003	<0.003	<0.003	
2/21/2017	<0.003	<0.003				
2/22/2017						<0.003
6/12/2017	<0.003		<0.003	<0.003	<0.003	
6/13/2017		0.0011 (J)				
6/15/2017						0.0009 (J)
9/26/2017	<0.003	<0.003	<0.003	<0.003	<0.003	
9/28/2017						<0.003
2/13/2018	<0.003	<0.003	<0.003	<0.003	<0.003	
2/15/2018						<0.003
6/26/2018	<0.003	<0.003	<0.003	<0.003	<0.003	
6/27/2018						<0.003
12/18/2018	<0.003	<0.003	<0.003	0.00087 (J)	<0.003	
12/19/2018						<0.003
8/27/2019	<0.003	<0.003	<0.003	<0.003	<0.003	
8/28/2019						<0.003
10/15/2019	0.00047 (J)	<0.003	<0.003	<0.003	<0.003	
12/3/2019						<0.003
3/3/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/18/2020	0.00054 (J)	0.00042 (J)	<0.003	0.0016 (J)	<0.003	
8/19/2020						<0.003
9/15/2020	<0.003	<0.003	<0.003	<0.003	<0.003	
9/16/2020						<0.003
3/1/2021	<0.003				<0.003	
3/2/2021		<0.003	<0.003	<0.003		
3/4/2021						<0.003



# Time Series

Constituent: Antimony (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	<0.003		<0.003	<0.003		<0.003
9/8/2016		<0.003				
11/17/2016	<0.003	<0.003	<0.003			
11/18/2016				0.0016 (J)		
11/21/2016						0.0009 (J)
2/22/2017	<0.003	<0.003	<0.003			
2/23/2017				<0.003	<0.003	<0.003
4/17/2017					0.0004 (J)	
5/15/2017					<0.003	
6/14/2017	<0.003	<0.003				
6/15/2017			<0.003	0.0006 (J)	0.0006 (J)	0.0007 (J)
9/27/2017	<0.003	<0.003				
9/28/2017			<0.003	<0.003	<0.003	<0.003
2/15/2018	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
6/27/2018	<0.003	<0.003	<0.003			
6/28/2018				<0.003	<0.003	<0.003
12/18/2018	<0.003	<0.003				
12/19/2018			<0.003	<0.003	<0.003	
12/20/2018						<0.003
8/27/2019	<0.003					
8/28/2019	<0.003	<0.003	<0.003	0.00035 (J)	<0.003	
8/29/2019						<0.003
10/16/2019	<0.003	<0.003	<0.003		<0.003	<0.003
12/3/2019				0.00049 (J)		
3/5/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
8/19/2020	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
9/16/2020	<0.003	<0.003	<0.003	<0.003	<0.003	
9/17/2020						<0.003
3/3/2021	<0.003	<0.003		<0.003	<0.003	
3/4/2021			<0.003			<0.003

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.005	<0.005	<0.005	<0.005		
9/1/2016					<0.005	
9/7/2016						<0.005
11/15/2016				<0.005	<0.005	
11/16/2016	<0.005	<0.005	<0.005			
11/17/2016						<0.005
2/20/2017			<0.005	<0.005	<0.005	
2/21/2017	<0.005	<0.005				
2/22/2017						<0.005
6/12/2017	0.0007 (J)		0.0007 (J)	0.0006 (J)	<0.005	
6/13/2017		<0.005				
6/15/2017						0.0006 (J)
9/26/2017	0.001 (J)	<0.005	0.0009 (J)	0.0007 (J)	0.0007 (J)	
9/28/2017						<0.005
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005	
2/15/2018						<0.005
6/26/2018	0.00062 (J)	<0.005	<0.005	<0.005	<0.005	
6/27/2018						<0.005
12/18/2018	<0.005	<0.005 (X)	<0.005 (X)	<0.005 (X)	<0.005 (X)	
12/19/2018						<0.005
8/27/2019	<0.005	<0.005	<0.005	<0.005	<0.005	
8/28/2019						0.00073 (J)
10/15/2019	0.0008 (J)	0.00063 (J)	0.00058 (J)	0.00039 (J)	<0.005	
12/3/2019						0.00058 (J)
3/3/2020	0.0027 (J)	0.00098 (J)	0.0024 (J)	0.0027 (J)	0.0018 (J)	0.0033 (J)
8/18/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
8/19/2020						<0.005
9/15/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
9/16/2020						<0.005
3/1/2021	<0.005				<0.005	
3/2/2021		<0.005	<0.005	<0.005		
3/4/2021						<0.005

# Time Series

Constituent: Arsenic (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	<0.005		<0.005	<0.005		0.0026 (J)
9/8/2016		<0.005				
11/17/2016	<0.005	<0.005	<0.005			
11/18/2016				<0.005		
11/21/2016						0.0034 (J)
2/22/2017	<0.005	<0.005	<0.005			
2/23/2017				<0.005	<0.005	0.003 (J)
4/17/2017					<0.005	
5/15/2017					<0.005	
6/14/2017	0.0006 (J)	<0.005				
6/15/2017			0.0006 (J)	0.0007 (J)	<0.005	0.005 (J)
9/27/2017	<0.005	<0.005				
9/28/2017			<0.005	<0.005	<0.005	0.0046 (J)
2/15/2018	<0.005	<0.005	<0.005	<0.005	<0.005	0.0016 (J)
6/27/2018	<0.005	<0.005	<0.005			
6/28/2018				<0.005 (X)	<0.005 (X)	<0.005 (X)
12/18/2018	<0.005 (X)	<0.005				
12/19/2018			<0.005	<0.005	<0.005	
12/20/2018						0.00098 (J)
8/27/2019	<0.005					
8/28/2019	<0.005	<0.005	0.00044 (J)	0.00045 (J)	0.00038 (J)	
8/29/2019						0.0013 (J)
10/16/2019	0.00056 (J)	<0.005	0.0004 (J)		0.00078 (J)	0.0024 (J)
12/3/2019				0.001 (J)		
3/5/2020	<0.005	<0.005	<0.005	<0.005	0.00044 (J)	0.0011 (J)
8/19/2020	<0.005	<0.005	<0.005	<0.005	<0.005	0.0021 (J)
9/16/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
9/17/2020						0.0015 (J)
3/3/2021	<0.005	<0.005		<0.005	<0.005	
3/4/2021			<0.005			0.0029 (J)

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0239	0.0099 (J)	0.0273	0.0495		
9/1/2016					0.0142	
9/7/2016						0.0377
11/15/2016				0.0512	0.0126	
11/16/2016	0.0147	0.0102	0.0365			
11/17/2016						0.0405
2/20/2017			0.0336	0.0586	0.0142	
2/21/2017	0.0109	0.0094 (J)				
2/22/2017						0.0392
6/12/2017	0.0094 (J)		0.0322	0.0567	0.0134	
6/13/2017		0.0094 (J)				
6/15/2017						0.0364
9/26/2017	0.0156	0.0096 (J)	0.0364	0.0586	0.0133	
9/28/2017						0.0408
2/13/2018	0.0134	0.0102	0.054	0.054	0.0145	
2/15/2018						0.0396
6/26/2018	0.014	0.0093 (J)	0.032	0.063	0.014	
6/27/2018						0.041
12/18/2018	0.0076 (J)	0.01	0.038	0.045	0.013	
12/19/2018						0.038
8/27/2019	0.012	0.0095 (J)	0.028	0.056	0.013	
8/28/2019						0.044
10/15/2019	0.013	0.0091 (J)	0.032	0.049	0.013	
12/3/2019						0.043
3/3/2020	0.017	0.011	0.028	0.051	0.019	0.036
8/18/2020	0.01 (J)	0.01	0.022	0.04	0.014	
8/19/2020						0.047
9/15/2020	0.0083 (J)	0.0094 (J)	0.022	0.038	0.013	
9/16/2020						0.044
3/1/2021	0.0074				0.016	
3/2/2021		0.0094	0.023	0.037		
3/4/2021						0.039

# Time Series

Constituent: Barium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0214		0.101	0.0674		0.044
9/8/2016		0.0415				
11/17/2016	0.0211	0.04	0.0808			
11/18/2016				0.0546		
11/21/2016						0.0428 (J)
2/22/2017	0.0243	0.0415	0.0701			
2/23/2017				0.0489	0.0229	0.0338
4/17/2017					0.0227	
5/15/2017					0.0227	
6/14/2017	0.0218	0.0341				
6/15/2017			0.0518	0.0415	0.0218	0.0239
9/27/2017	0.0219	0.0347				
9/28/2017			0.047	0.0397	0.0222	0.0247
2/15/2018	0.0248	0.0346	0.0485	0.038	0.0243	0.0215
6/27/2018	0.023	0.028	0.046			
6/28/2018				0.035	0.023	0.018
12/18/2018	0.023	0.029				
12/19/2018			0.04	0.035	0.024	
12/20/2018						0.017
8/27/2019	0.02					
8/28/2019	0.02	0.026	0.039	0.034	0.027	
8/29/2019						0.016
10/16/2019	0.019	0.022	0.037		0.024	0.015
12/3/2019				0.031		
3/5/2020	0.022	0.025	0.039	0.033	0.025	0.016
8/19/2020	0.02	0.024	0.04	0.037	0.026	0.016
9/16/2020	0.019	0.023	0.033	0.03	0.024	
9/17/2020						0.014
3/3/2021	0.02	0.024		0.031	0.024	
3/4/2021			0.034			0.015

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016					<0.0005	
9/7/2016						<0.0005
11/15/2016				<0.0005	<0.0005	
11/16/2016	<0.0005	<0.0005	<0.0005			
11/17/2016						<0.0005
2/20/2017			<0.0005	<0.0005	<0.0005	
2/21/2017	<0.0005	<0.0005				
2/22/2017						<0.0005
6/12/2017	<0.0005		<0.0005	<0.0005	<0.0005	
6/13/2017		<0.0005				
6/15/2017						<0.0005
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/28/2017						<0.0005
2/13/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
2/15/2018						<0.0005
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
6/27/2018						<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
12/19/2018						<0.0005
8/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/28/2019						<0.0005
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
10/17/2019						<0.0005
12/3/2019						<0.0005
3/3/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/19/2020						<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/16/2020						<0.0005
3/1/2021	<0.0005				<0.0005	
3/2/2021		<0.0005	<0.0005	<0.0005		
3/4/2021						<0.0005

# Time Series

Constituent: Beryllium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0019 (J)		9E-05 (J)	<0.0005		0.0079
9/8/2016		0.0001 (J)				
9/23/2016						0.0096 (R)
11/17/2016	0.002 (J)	0.0001 (J)	0.0001 (J)			
11/18/2016				0.0001 (J)		
11/21/2016						0.0092
2/22/2017	0.0022 (J)	0.0002 (J)	0.0001 (J)			
2/23/2017				0.0001 (J)	<0.0005	0.01
4/17/2017					<0.0005	
5/15/2017					<0.0005	
6/14/2017	0.0019 (J)	<0.0005				
6/15/2017			0.0001 (J)	9E-05 (J)	<0.0005	0.0104
9/27/2017	0.0017 (J)	0.0001 (J)				
9/28/2017			0.0001 (J)	0.0001 (J)	<0.0005	0.0098
2/15/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.011 (J)
6/27/2018	0.002 (J)	0.00013 (J)	0.00015 (J)			
6/28/2018				8.1E-05 (J)	<0.0005	0.0085
12/18/2018	0.0021 (J)	0.00012 (J)				
12/19/2018			<0.0005 (X)	<0.0005 (X)	<0.0005	
12/20/2018						0.0092
8/27/2019	0.0019 (J)					
8/28/2019	0.0019 (J)	0.00014 (J)	0.00016 (J)	0.00011 (J)	<0.0005	
8/29/2019						0.0088
10/16/2019	0.0018 (J)	0.00014 (J)	0.00015 (J)		<0.0005	0.0079
10/17/2019				<0.0005		
12/3/2019				9.7E-05 (J)		
3/5/2020	0.0018 (J)	0.00015 (J)	0.00015 (J)	9.2E-05 (J)	<0.0005	0.0082
8/19/2020	0.0014 (J)	0.00015 (J)	0.00015 (J)	0.00011 (J)	<0.0005	0.0079
9/16/2020	0.0015 (J)	0.00014 (J)	0.00014 (J)	8E-05 (J)	<0.0005	
9/17/2020						0.0073
3/3/2021	0.0013	0.00015 (J)		7.9E-05 (J)	<0.0005	
3/4/2021			0.00012 (J)			0.0077

# Time Series

Constituent: Boron (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0072 (J)	<0.04	<0.04	<0.04		
9/1/2016					<0.04	
9/7/2016						0.0449 (J)
11/15/2016				0.0085 (J)	0.0123 (J)	
11/16/2016	0.0117 (J)	0.0109 (J)	0.0187 (J)			
11/17/2016						0.0067 (J)
2/20/2017			0.0066 (J)	0.0093 (J)	0.0157 (J)	
2/21/2017	0.0088 (J)	<0.04				
2/22/2017						<0.04
6/12/2017	0.0133 (J)		<0.04	<0.04	<0.04	
6/13/2017		<0.04				
6/15/2017						<0.04
9/26/2017	0.0093 (J)	<0.04	<0.04	<0.04	<0.04	
9/28/2017						<0.04
2/13/2018	0.0141 (J)	<0.04	<0.04	<0.04	<0.04	
2/15/2018						<0.04
6/26/2018	0.012 (J)	<0.04	0.0042 (J)	0.0056 (J)	0.0041 (J)	
6/27/2018						0.0088 (J+X)
12/18/2018	0.0086 (J)	<0.04	<0.04	0.0062 (J)	<0.04	
12/19/2018						0.0045 (J)
3/19/2019	0.00565 (JD)	<0.04	<0.04	<0.04	<0.04	<0.04
10/15/2019	0.0067 (J)	<0.04	<0.04	0.006 (J)	0.01 (J)	
10/17/2019						<0.04
12/3/2019						0.0063 (J)
3/3/2020	0.0082 (J)	<0.04	<0.04	<0.04	<0.04	0.0075 (J)
9/15/2020	<0.04	<0.04	<0.04	<0.04	<0.04	
9/16/2020						0.0066 (J)
3/1/2021	<0.04				<0.04	
3/2/2021		<0.04	0.0053 (J)	0.0071 (J)		
3/4/2021						<0.04



# Time Series

Constituent: Boron (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	1.15		1.06	0.725		1.73
9/8/2016		1.89				
11/17/2016	1.08	2.17	0.967			
11/18/2016				0.831		
11/21/2016						2.02
2/22/2017	1.44	2.09	1.35			
2/23/2017				0.949	<0.04	1.77
4/17/2017					<0.04	
5/15/2017					<0.04	
6/14/2017	1.16	2.45				
6/15/2017			1.49	0.961	<0.04	1.78
9/27/2017	1.04	2.4				
9/28/2017			1.27	0.948	<0.04	1.45
2/15/2018	1.22	2.55	1.58	1.11	<0.04	2.09
6/27/2018	0.96 (J+X)	2.2 (J+X)	1.7 (J+X)			
6/28/2018				0.89	<0.04 (X)	1.5
12/18/2018	1.2	2.2				
12/19/2018			1.8	1.1	<0.04	
12/20/2018						1.7
3/19/2019				1		
3/20/2019	1.3	2.3	1.7		0.004 (J)	1.5
10/16/2019	1.1	2.3	2.2		0.0055 (J)	1.5
10/17/2019				1.1		
12/3/2019				1		
3/5/2020	1.5	2.1	1.9	1.1	0.0076 (J)	1.6
9/16/2020	1.1	2.2	1.9	0.99	0.0062 (J)	
9/17/2020						1.4
3/3/2021	1.1	2.1		1	<0.04	
3/4/2021			1.9			1.5

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.0005	<0.0005	<0.0005	<0.0005		
9/1/2016					<0.0005	
9/7/2016						<0.0005
11/15/2016				<0.0005	<0.0005	
11/16/2016	<0.0005	<0.0005	<0.0005			
11/17/2016						<0.0005
2/20/2017			<0.0005	<0.0005	<0.0005	
2/21/2017	<0.0005	<0.0005				
2/22/2017						<0.0005
6/12/2017	<0.0005		<0.0005	<0.0005	<0.0005	
6/13/2017		<0.0005				
6/15/2017						<0.0005
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/28/2017						<0.0005
2/13/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
2/15/2018						<0.0005
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
6/27/2018						<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
12/19/2018						<0.0005
8/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/28/2019						<0.0005
10/15/2019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
10/17/2019						<0.0005
12/3/2019						<0.0005
3/3/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/18/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
8/19/2020						<0.0005
9/15/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9/16/2020						<0.0005
3/1/2021	<0.0005				<0.0005	
3/2/2021		<0.0005	<0.0005	<0.0005		
3/4/2021						<0.0005

# Time Series

Constituent: Cadmium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0005 (J)		<0.0005	8E-05 (J)		0.0004 (J)
9/8/2016		<0.0005				
11/17/2016	0.0005 (J)	0.0009 (J)	<0.0005			
11/18/2016				<0.0005		
11/21/2016						0.0005 (J)
2/22/2017	0.0006 (J)	0.0005 (J)	<0.0005			
2/23/2017				0.0001 (J)	<0.0005	0.0007 (J)
4/17/2017					<0.0005	
5/15/2017					<0.0005	
6/14/2017	0.0004 (J)	0.0004 (J)				
6/15/2017			<0.0005	<0.0005	<0.0005	0.0006 (J)
9/27/2017	0.0004 (J)	0.0007 (J)				
9/28/2017			<0.0005	<0.0005	<0.0005	0.0007 (J)
2/15/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.00069 (J)
6/27/2018	0.00038 (J)	0.00017 (J)	<0.0005			
6/28/2018				<0.0005	<0.0005	0.00056 (J)
12/18/2018	0.00046 (J)	0.00023 (J)				
12/19/2018			<0.0005	<0.0005 (X)	<0.0005	
12/20/2018						<0.0005 (X)
8/27/2019	0.00032 (J)					
8/28/2019	0.00032 (J)	0.00025 (J)	<0.0005	<0.0005	<0.0005	
8/29/2019						0.00053 (J)
10/16/2019	0.00039 (J)	0.0004 (J)	<0.0005		<0.0005	0.00057 (J)
10/17/2019				<0.0005		
12/3/2019				<0.0005		
3/5/2020	0.00038 (J)	0.00018 (J)	<0.0005	<0.0005	<0.0005	0.00059 (J)
8/19/2020	0.00029 (J)	0.00018 (J)	<0.0005	<0.0005	<0.0005	0.00056 (J)
9/16/2020	0.00032 (J)	0.00017 (J)	<0.0005	<0.0005	<0.0005	
9/17/2020						0.0005 (J)
3/3/2021	0.00022 (J)	0.00015 (J)		<0.0005	<0.0005	
3/4/2021			<0.0005			0.00042 (J)

# Time Series

Constituent: Calcium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	12.6	4.09	13.5	19.6		
9/1/2016					3.3	
9/7/2016						26.3
11/15/2016				21.7	3.44	
11/16/2016	12.1	4.25	14.9			
11/17/2016						31.8
2/20/2017			13.9	21.1	3.52	
2/21/2017	11.4	4.02				
2/22/2017						33.5
6/12/2017	9.34		13.7	21.5	3.11	
6/13/2017		3.84				
6/15/2017						29
9/26/2017	14.3	3.31	14.4	24	3.15	
9/28/2017						34.1
2/13/2018	<25	3.94	<25	<25	3.65	
2/15/2018						33.8
6/26/2018	16 (J)	3.6	13.5 (J)	23.5 (J)	3.3	
6/27/2018						34.1
12/18/2018	14.5 (J)	3.8	16.4 (J)	19.8 (J)	3.5	
12/19/2018						33.1
3/19/2019	14.3 (JD)	3.9	12.3 (J)	21.4 (J)	3.6	31.6
10/15/2019	15.1	3.7	14.4	20	3.5	
12/3/2019						37.7
3/3/2020	20	4	14.9	23.2	5	29.7
9/15/2020	14.1	3.9	12.7	16.8	3.7	
9/16/2020						37.9
3/1/2021	15.4				4.2	
3/2/2021		4	13.2	16.8		
3/4/2021						41.2

# Time Series

Constituent: Calcium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	53.4		54.1	50.6		45.9
9/8/2016		97.3				
11/17/2016	41.3	97.6	62.6			
11/18/2016				53.9		
11/21/2016						46.4
2/22/2017	53.1	106	64.6			
2/23/2017				51	3.26	43.5
4/17/2017					3.23	
5/15/2017					2.97 (B-01)	
6/14/2017	47.1	98				
6/15/2017			61.3	53.8	3.15	45.3
9/27/2017	49.5	95.8				
9/28/2017			60.8	51.8	3.26	45.1
2/15/2018	50.9	100	56.6	50.1	3.39	45.3
6/27/2018	55.1	90.1	66.2			
6/28/2018				51	3.1	45.9
12/18/2018	52.7	85.1				
12/19/2018			64.4	57.1	3.6	
12/20/2018						41.8
3/19/2019				49.5		
3/20/2019	51.4	82	61.8		3.3	38.2
10/16/2019	46.5	78.2	61.2		3.4	38.4
12/3/2019				47.8		
3/5/2020	48.1	89.6	69.9	51.7	3.7	39.8
9/16/2020	37.9	77.7	61.8	45.9	3.2	
9/17/2020						33.1
3/3/2021	37.5	88.6		53	3.6	
3/4/2021			71.8			41

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	2.3	2	4.4	3.6		
9/1/2016					2.5	
9/7/2016						3.7
11/15/2016				4	2.3	
11/16/2016	2	1.8	4.4			
11/17/2016						4.05 (D)
2/20/2017			4.8	3.9	2.4	
2/21/2017	2	1.8				
2/22/2017						3.6
6/12/2017	2.1		4.2	3.8	2.2	
6/13/2017		1.7				
6/15/2017						3.7
9/26/2017	2	1.8	4.4	4.1	2.3	
9/28/2017						4.1
2/13/2018	2.1	1.7	4.7	4.1	2.3	
2/15/2018						5.3
6/26/2018	2.4	2.2	4.5	4.1	2.6	
6/27/2018						4.2
12/18/2018	1.8	1.9	4.5	3.8	2.3	
12/19/2018						4.9 (J-X)
3/19/2019	2.45 (D)	2	4.5	4.2	2.6	5
10/15/2019	2.2	1.9	4.2	3.7	2.4	
12/3/2019						4.8
3/3/2020	1.9	1.9	3.9	3.6	2.9	3.8
9/15/2020	1.9	1.7	3.7	3.7	2.3	
9/16/2020						4.2
3/1/2021	1.8				2.1	
3/2/2021		1.7	3.8	3.7		
3/4/2021						4.6

# Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	5.3		5.8	3.1		5.8
9/8/2016		7.2				
11/17/2016	5.45 (D)	7.8 (D)	6.1 (D)			
11/18/2016				3.95 (D)		
11/21/2016						5.05 (D)
2/22/2017	0.12 (J)	7.1	5.6			
2/23/2017				3.2	2.1	4.1
4/17/2017					1.8	
5/15/2017					1.8	
6/14/2017	4.5	7.3				
6/15/2017			5.8	4	1.9	4.8
9/27/2017	5.4	7.6				
9/28/2017			6.2	4.6	1.9	6.7
2/15/2018	6.3	7.2	6.2	5.4	2.3	8
6/27/2018	4.5	7.1	5.9			
6/28/2018				9 (J-X)	2.1 (J-X)	5.5 (J-X)
12/18/2018	6.1	7.1				
12/19/2018			6.2 (J-X)	6.2 (J-X)	1.9 (J-X)	
12/20/2018						8 (J-X)
3/19/2019				7.1		
3/20/2019	6.2	6.9	6.6		2.3	6.6
10/16/2019	5.4	7.3	6.6		2.3	6.4
12/3/2019				7.7		
3/5/2020	4.8	6.4	5.8	7.6	1.8	5.8
9/16/2020	4.1	6.6	6	7.9	1.8	
9/17/2020						6.1
3/3/2021	3.9	6.4		8.1	1.9	
3/4/2021			5.8			5.6

# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.001 (J)	0.0034 (J)	0.0058 (J)	0.0028 (J)		
9/1/2016					0.0147	
9/7/2016						0.01 (J)
11/15/2016				0.003 (J)	0.0154 (B)	
11/16/2016	<0.005	0.0029 (J)	0.0051 (J)			
11/17/2016						0.0185
2/20/2017			0.0049 (J)	0.0047 (J)	0.014	
2/21/2017	<0.005	0.0036 (J)				
2/22/2017						0.0122
6/12/2017	0.0005 (J)		0.0052 (J)	0.0041 (J)	0.016	
6/13/2017		0.0038 (J)				
6/15/2017						0.0117
9/26/2017	0.0005 (J)	0.0045 (J)	0.0039 (J)	0.0037 (J)	0.0144	
9/28/2017						0.0114
2/13/2018	<0.005	<0.005	<0.005	<0.005	0.0144	
2/15/2018						0.011
6/26/2018	<0.005	0.008 (J)	0.0053 (J)	0.0043 (J)	0.015	
6/27/2018						0.0098 (J)
12/18/2018	<0.005	0.012	0.0032 (J)	0.0054 (J)	0.015	
12/19/2018						0.0095 (J)
8/27/2019	0.0004 (J)	0.0083 (J)	0.0055 (J)	0.0043 (J)	0.015	
8/28/2019						0.013
10/15/2019	<0.005	0.0083 (J)	0.0047 (J)	0.0055 (J)	0.014	
12/3/2019						0.011
3/3/2020	0.00047 (J)	0.0098 (J)	0.0069 (J)	0.0057 (J)	0.011	0.0081 (J)
8/18/2020	0.00096 (J)	0.0085 (J)	0.0069 (J)	0.005 (J)	0.015	
8/19/2020						0.012
9/15/2020	<0.005	0.0082 (J)	0.0069 (J)	0.0048 (J)	0.014	
9/16/2020						0.012
3/1/2021	<0.005				0.011	
3/2/2021		0.0074	0.0064	0.0044 (J)		
3/4/2021						0.01



# Time Series

Constituent: Chromium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	<0.005		0.0019 (J)	0.0073 (J)		0.0014 (J)
9/8/2016		<0.005				
11/17/2016	<0.005	<0.005	0.0024 (J)			
11/18/2016				0.008 (J)		
11/21/2016						0.003 (J)
2/22/2017	<0.005	<0.005	0.004 (J)			
2/23/2017				0.0086 (J)	0.001 (J)	0.0028 (J)
4/17/2017					0.0018 (J)	
5/15/2017					0.0014 (J)	
6/14/2017	<0.005	<0.005				
6/15/2017			0.0033 (J)	0.0082 (J)	0.0013 (J)	0.0038 (J)
9/27/2017	<0.005	<0.005				
9/28/2017			0.0052 (J)	0.0083 (J)	0.0014 (J)	0.0037 (J)
2/15/2018	<0.005	<0.005	<0.005	0.0086 (J)	<0.005	0.0044 (J)
6/27/2018	<0.005	<0.005	0.0062 (J)			
6/28/2018				0.0076 (J)	<0.005	0.0041 (J)
12/18/2018	<0.005	<0.005				
12/19/2018			0.0073 (J)	0.0085 (J)	<0.005	
12/20/2018						0.0041 (J)
8/27/2019	<0.005					
8/28/2019	<0.005	<0.005	0.0071 (J)	0.0078 (J)	0.0017 (J)	
8/29/2019						0.0044 (J)
10/16/2019	0.00049 (J)	<0.005	0.0064 (J)		0.0014 (J)	0.0038 (J)
12/3/2019				0.007 (J)		
3/5/2020	<0.005	<0.005	0.0076 (J)	0.0087 (J)	0.0016 (J)	0.0038 (J)
8/19/2020	<0.005	<0.005	0.0073 (J)	0.0094 (J)	0.0017 (J)	0.0043 (J)
9/16/2020	<0.005	<0.005	0.0058 (J)	0.0064 (J)	0.0018 (J)	
9/17/2020						0.0042 (J)
3/3/2021	<0.005	<0.005		0.0067	0.0014 (J)	
3/4/2021			0.0053			0.004 (J)

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0016 (J)	0.0034 (J)	0.0013 (J)	<0.005		
9/1/2016					<0.005	
9/7/2016						<0.005
11/15/2016				<0.005	<0.005	
11/16/2016	0.0006 (J)	0.003 (J)	<0.01 (o)			
11/17/2016						<0.005
2/20/2017			0.0012 (J)	0.0009 (J)	<0.005	
2/21/2017	<0.005	0.0028 (J)				
2/22/2017						<0.005
6/12/2017	<0.005		0.0011 (J)	0.0006 (J)	0.0003 (J)	
6/13/2017		0.0025 (J)				
6/15/2017						<0.005
9/26/2017	<0.005	0.002 (J)	0.0016 (J)	0.0005 (J)	0.0003 (J)	
9/28/2017						<0.005
2/13/2018	<0.005	<0.005	<0.01 (o)	<0.005	<0.005	
2/15/2018						<0.005
6/26/2018	<0.005	0.0019 (J)	0.0009 (J)	0.00052 (J)	<0.005	
6/27/2018						<0.005
12/18/2018	<0.005	0.0032 (J)	0.00062 (J)	<0.005	<0.005	
12/19/2018						<0.005
8/27/2019	<0.005	0.0012 (J)	0.00068 (J)	0.00042 (J)	<0.005	
8/28/2019						<0.005
10/15/2019	<0.005	0.00097 (J)	0.00083 (J)	<0.005	<0.005	
10/17/2019						<0.005
12/3/2019						<0.005
3/3/2020	<0.005	0.0015 (J)	0.00043 (J)	<0.005	0.0011 (J)	<0.005
8/18/2020	<0.005	0.0014 (J)	0.00048 (J)	<0.005	0.00061 (J)	
8/19/2020						<0.005
9/15/2020	<0.005	0.001 (J)	0.0005 (J)	<0.005	<0.005	
9/16/2020						<0.005
3/1/2021	<0.005				<0.005	
3/2/2021		0.001 (J)	0.00053 (J)	<0.005		
3/4/2021						<0.005

# Time Series

Constituent: Cobalt (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0612		0.0023 (J)	<0.005		0.236
9/8/2016		0.0029 (J)				
11/17/2016	0.0551	0.0028 (J)	0.0012 (J)			
11/18/2016				<0.005		
11/21/2016						0.298
2/22/2017	0.0567	0.0041 (J)	0.0008 (J)			
2/23/2017				<0.005	<0.005	0.277
4/17/2017					<0.005	
5/15/2017					<0.005	
6/14/2017	0.0557	0.0036 (J)				
6/15/2017			0.0004 (J)	<0.005	<0.005	0.262
9/27/2017	0.049	0.0028 (J)				
9/28/2017			0.0003 (J)	<0.005	<0.005	0.279
2/15/2018	0.0536	<0.005	<0.005	<0.005	<0.005	0.279
6/27/2018	0.054	0.0041 (J)	<0.005			
6/28/2018				<0.005	<0.005	0.23
12/18/2018	0.049	0.0032 (J)				
12/19/2018			<0.005	<0.005	<0.005	
12/20/2018						0.25
8/27/2019	0.045					
8/28/2019	0.045	0.0037 (J)	<0.005	<0.005	<0.005	
8/29/2019						0.21
10/16/2019	0.042	0.0043 (J)	<0.005		<0.005	0.21
10/17/2019				<0.005		
12/3/2019				<0.005		
3/5/2020	0.037	0.0031 (J)	<0.005	<0.005	<0.005	0.22
8/19/2020	0.036	0.0041 (J)	<0.005	<0.005	<0.005	0.22
9/16/2020	0.034	0.0042 (J)	<0.005	<0.005	<0.005	
9/17/2020						0.2
3/3/2021	0.028	0.0046 (J)		<0.005	<0.005	
3/4/2021			<0.005			0.2

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.351 (U)	1 (U)	0.62 (U)	0.603 (U)		
9/1/2016					1.33	
9/7/2016						1.18
11/15/2016				0.645 (U)	0.412 (U)	
11/16/2016	0.824 (U)	0.43 (U)	0.493 (U)			
11/17/2016						0.145 (U)
2/20/2017			0.534 (U)	1.36	0.633 (U)	
2/21/2017	1.01 (U)	0.96 (U)				
2/22/2017						0.0213 (U)
6/12/2017	0.532 (U)		0.254 (U)	0.566 (U)	0.112 (U)	
6/13/2017		0.645 (U)				
6/15/2017						0.41 (U)
9/26/2017	0.845 (U)	0.299 (U)	0.62 (U)	0.762 (U)	0.167 (U)	
9/28/2017						0.496 (U)
2/13/2018	0.176 (U)	1.01 (U)	0.0914 (U)	0.349 (U)	0.347 (U)	
2/15/2018						0.672 (U)
6/26/2018	1.02 (U)	1.26 (J+X)	1.11 (U)	0.614 (U)	0.903 (U)	
6/27/2018						0.692 (U)
12/18/2018	0.487 (U)	0.44 (U)	0.42 (U)	0.445 (U)	0.353 (U)	
12/19/2018						0.325 (U)
8/27/2019	1.11	1.47	1.19	1.44	0.65 (U)	
8/28/2019						0.24 (U)
10/15/2019	1.02 (U)	0.807 (U)	0.714 (U)	0.467 (U)	0.402 (U)	
12/18/2019						1.16 (U)
3/3/2020	1.18 (U)	0.818 (U)	0.996 (U)	1.5	0.397 (U)	0.756 (U)
8/18/2020	0.0861 (U)	1.22 (U)	0.53 (U)	0.581 (U)	0.453 (U)	
8/19/2020						0.985 (U)
9/15/2020	0.0583 (U)	0.579 (U)	0.215 (U)	0.55 (U)	0.474 (U)	
9/16/2020						0.478 (U)
3/1/2021	0.127 (U)				0.215 (U)	
3/2/2021		0.342 (U)	0.409 (U)	0.362 (U)		
3/4/2021						0.38 (U)

# Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.541 (U)		0.189 (U)	0.638 (U)		0.816 (U)
9/8/2016		0.998 (U)				
11/17/2016	1.02 (U)	0.613	0.729 (U)			
11/18/2016				1.22 (U)		
11/21/2016						2.94
2/22/2017	0.482 (U)	1.01 (U)	0.293 (U)			
2/23/2017				0.554 (U)	0.567 (U)	1.92
4/17/2017					0.335 (U)	
5/15/2017					0.261 (U)	
6/14/2017	0.723 (U)	0.801 (U)				
6/15/2017			1.09	0.77 (U)	0.188 (U)	3.6
9/27/2017	1.5	1.44				
9/28/2017			1.02 (U)	1.07 (U)	0.627 (U)	3.3
2/15/2018	1.14 (U)	0.668 (U)	0.742 (U)	0.751 (U)	0.869 (U)	2.31 (J+X)
6/27/2018	1.3 (U)	1.06 (U)	0.739 (U)			
6/28/2018				0.392 (U)	0.336 (U)	1.75 (UX)
12/18/2018	1.64 (UX)	1.22				
12/19/2018			0.465 (U)	0.693 (U)	0.454 (U)	
12/20/2018						2.8 (J+X)
8/27/2019	1.38					
8/28/2019		0.811 (U)	0.995 (U)	0.866 (U)	0.809 (U)	
8/29/2019						3.68
10/16/2019	1.16 (U)	0.561 (U)	1.69		0.815 (U)	2.66
12/18/2019				1.91		
3/5/2020	0.683 (U)	0.792 (U)	0.858 (U)	1.3	0.791 (U)	2.21
8/19/2020	1.14 (U)	1.21 (U)	0.162 (U)	1.4	0.582 (U)	3.17
9/16/2020	0.195 (U)	0.72 (U)	1.25 (U)	1.17 (U)	0.844 (U)	
9/17/2020						2.92
3/3/2021	0.708 (U)	1.12		0.307 (U)	1.12	
3/4/2021			0.461 (U)			1.99

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.11 (J)	0.05 (J)	0.07 (J)	0.19 (J)		
9/1/2016					0.06 (J)	
9/7/2016						0.22 (J)
11/15/2016				0.13 (J)	0.06 (J)	
11/16/2016	0.08 (J)	0.07 (J)	0.07 (J)			
11/17/2016						0.12 (J)
2/20/2017			0.06 (J)	0.08 (J)	0.04 (J)	
2/21/2017	0.14 (J)	0.05 (J)				
2/22/2017						0.11 (J)
6/12/2017	0.16 (J)		0.008 (J)	0.07 (J)	0.06 (J)	
6/13/2017		0.04 (J)				
6/15/2017						0.05 (J)
9/26/2017	0.14 (J)	<0.1	<0.1	0.04 (J)	<0.1	
9/28/2017						0.05 (J)
2/13/2018	<0.1	<0.1	<0.1	<0.1	<0.1	
2/15/2018						<0.1
6/26/2018	0.085 (J)	0.048 (J)	0.045 (J)	0.072 (J)	0.041 (J)	
6/27/2018						0.093 (J)
12/18/2018	0.085 (J)	<0.1	<0.1	<0.1	<0.1	
12/19/2018						0.16 (J)
3/19/2019	0.0655 (JD)	0.037 (J)	<0.1	0.06 (J)	0.03 (J)	0.1 (J)
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1	
8/28/2019						0.085 (J)
10/15/2019	<0.1	<0.1	<0.1	0.045 (J)	<0.1	
12/3/2019						0.2 (J)
3/3/2020	0.066 (J)	0.05 (J)	<0.1	0.057 (J)	0.09 (J)	0.093 (J)
8/18/2020	<0.1	<0.1	<0.1	<0.1	<0.1	
8/19/2020						0.1
9/15/2020	<0.1	<0.1	<0.1	0.051 (J)	<0.1	
9/16/2020						0.1
3/1/2021	<0.1				<0.1	
3/2/2021		<0.1	<0.1	<0.1		
3/4/2021						0.096 (J)

# Time Series

Constituent: Fluoride (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.19 (J)		0.34	0.18 (J)		0.66
9/8/2016		0.17 (J)				
11/17/2016	0.12 (J)	0.06 (J)	0.14 (J)			
11/18/2016				0.03 (J)		
11/21/2016						0.9 (D)
2/22/2017	0.21 (J)	0.17 (J)	0.09 (J)			
2/23/2017				0.07 (J)	0.1 (J)	0.75
4/17/2017					0.08 (J)	
5/15/2017					0.02 (J)	
6/14/2017	0.18 (J)	0.1 (J)				
6/15/2017			0.03 (J)	0.01 (J)	0.03 (J)	0.77
9/27/2017	0.42	0.4				
9/28/2017			<0.1	<0.1	<0.1	0.8
2/15/2018	0.42	<0.1	<0.1	<0.1	<0.1	0.82
6/27/2018	0.32	0.21 (J)	0.22 (J)			
6/28/2018				0.51 (J+X)	<0.1	1.5 (J+X)
12/18/2018	0.28 (J)	0.12 (J)				
12/19/2018			0.11 (J)	<0.1	0.094 (J)	
12/20/2018						0.68
3/19/2019				<0.1		
3/20/2019	0.14 (J)	0.074 (J)	0.088 (J)		0.062 (J)	0.95
8/27/2019	0.11 (J)					
8/28/2019	0.11 (J)	0.057 (J)	0.056 (J)	<0.1	<0.1	
8/29/2019						0.9
10/16/2019	0.17 (J)	0.13 (J)	0.08 (J)		0.059 (J)	0.61
12/3/2019				0.15 (J)		
3/5/2020	0.088 (J)	0.072 (J)	0.067 (J)	<0.1	0.05 (J)	0.92
8/19/2020	0.11	0.074 (J)	0.06 (J)	0.051 (J)	0.055 (J)	0.95
9/16/2020	0.085 (J)	0.077 (J)	0.062 (J)	<0.1	<0.1	
9/17/2020						0.68
3/3/2021	0.069 (J)	0.071 (J)		<0.1	<0.1	
3/4/2021			0.076 (J)			0.83

# Time Series

Constituent: Lead (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.001	<0.001	<0.001	<0.001		
9/1/2016					0.0001 (J)	
9/7/2016						<0.001
11/15/2016				<0.001	<0.001	
11/16/2016	<0.001	<0.001	<0.001			
11/17/2016						0.0001 (J)
2/20/2017			<0.001	0.0002 (J)	<0.001	
2/21/2017	<0.001	<0.001				
2/22/2017						<0.001
6/12/2017	8E-05 (J)		<0.001	0.0001 (J)	8E-05 (J)	
6/13/2017		<0.001				
6/15/2017						<0.001
9/26/2017	7E-05 (J)	7E-05 (J)	<0.001	0.0001 (J)	<0.001	
9/28/2017						<0.001
2/13/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
2/15/2018						<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
6/27/2018						<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
12/19/2018						<0.001
8/27/2019	<0.001	5.8E-05 (J)	<0.001	0.00036 (J)	<0.001	
8/28/2019						<0.001
10/15/2019	<0.001	<0.001	<0.001	7.9E-05 (J)	<0.001	
12/3/2019						<0.001
3/3/2020	<0.001	<0.001	<0.001	7.9E-05 (J)	7.3E-05 (J)	<0.001
8/18/2020	<0.001	<0.001	<0.001	0.0001 (J)	<0.001	
8/19/2020						<0.001
9/15/2020	<0.001	<0.001	0.0013 (J)	4.3E-05 (J)	<0.001	
9/16/2020						5.4E-05 (J)
3/1/2021	<0.001				<0.001	
3/2/2021		<0.001	3.7E-05 (J)	<0.001		
3/4/2021						<0.001



# Time Series

Constituent: Lead (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0002 (J)		0.0001 (J)	<0.001		0.0004 (J)
9/8/2016		<0.001				
11/17/2016	0.0002 (J)	0.0001 (J)	0.0002 (J)			
11/18/2016				<0.001		
11/21/2016						0.0005 (J)
2/22/2017	0.0001 (J)	0.0003 (J)	0.0001 (J)			
2/23/2017				<0.001	<0.001	0.0005 (J)
4/17/2017					0.0001 (J)	
5/15/2017					<0.001	
6/14/2017	9E-05 (J)	<0.001				
6/15/2017			<0.001	<0.001	<0.001	0.0004 (J)
9/27/2017	7E-05 (J)	9E-05 (J)				
9/28/2017			<0.001	<0.001	0.0001 (J)	0.0004 (J)
2/15/2018	<0.001	<0.001	<0.001	<0.001	<0.001	0.00047 (J)
6/27/2018	<0.001	<0.001	<0.001			
6/28/2018				<0.001	<0.001	0.00036 (J)
12/18/2018	<0.001	<0.001				
12/19/2018			<0.001	<0.001	<0.001	
12/20/2018						0.00039 (J)
8/27/2019	0.00013 (J)					
8/28/2019	0.00013 (J)	<0.001	<0.001	<0.001	<0.001	
8/29/2019						0.00035 (J)
10/16/2019	8.8E-05 (J)	<0.001	<0.001		<0.001	0.00035 (J)
12/3/2019				<0.001		
3/5/2020	8.7E-05 (J)	<0.001	<0.001	<0.001	<0.001	0.00041 (J)
8/19/2020	6E-05 (J)	<0.001	<0.001	4.7E-05 (J)	<0.001	0.00031 (J)
9/16/2020	6.3E-05 (J)	<0.001	0.00012 (J)	<0.001	<0.001	
9/17/2020						0.00032 (J)
3/3/2021	5.8E-05 (J)	<0.001		<0.001	<0.001	
3/4/2021			<0.001			0.00034 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0268 (J)	<0.03	<0.03	<0.03		
9/1/2016					0.003 (J)	
9/7/2016						<0.03
11/15/2016				<0.03	0.0033 (J)	
11/16/2016	0.0201 (J)	<0.03	0.0033 (J)			
11/17/2016						<0.03
2/20/2017			<0.03	<0.03	0.0025 (J)	
2/21/2017	0.0128 (J)	<0.03				
2/22/2017						<0.03
6/12/2017	0.0245 (J)		0.0019 (J)	<0.03	0.0027 (J)	
6/13/2017		<0.03				
6/15/2017						<0.03
9/26/2017	0.0549	<0.03	0.0022 (J)	<0.03	0.0023 (J)	
9/28/2017						<0.03
2/13/2018	0.0595	<0.03	0.0041 (J)	<0.03	0.0027 (J)	
2/15/2018						<0.03
6/26/2018	0.089	<0.03	0.0025 (J)	<0.03	0.0029 (J)	
6/27/2018						<0.03
12/18/2018	0.024 (J)	<0.03	0.0032 (J)	<0.03	0.0026 (J)	
12/19/2018						<0.03
8/27/2019	0.035	<0.03	0.0019 (J)	<0.03	0.0028 (J)	
8/28/2019						0.00097 (J)
10/15/2019	0.028 (J)	<0.03	0.002 (J)	<0.03	0.0024 (J)	
12/3/2019						0.001 (J)
3/3/2020	0.055	<0.03	0.0013 (J)	<0.03	0.0026 (J)	<0.03
8/18/2020	0.054	<0.03	0.00095 (J)	<0.03	0.0026 (J)	
8/19/2020						0.001 (J)
9/15/2020	0.033	<0.03	0.001 (J)	<0.03	0.0027 (J)	
9/16/2020						0.00096 (J)
3/1/2021	0.027 (J)				0.0036 (J)	
3/2/2021		<0.03	0.00081 (J)	<0.03		
3/4/2021						0.00086 (J)

# Time Series

Constituent: Lithium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0092 (J)		0.0021 (J)	0.0024 (J)		0.0193 (J)
9/8/2016		<0.03				
11/17/2016	0.0097 (J)	<0.03	0.0022 (J)			
11/18/2016				0.0026 (J)		
11/21/2016						0.0223 (J)
2/22/2017	0.0106 (J)	<0.03	0.0023 (J)			
2/23/2017				0.0026 (J)	<0.03	0.0229 (J)
4/17/2017					<0.03	
5/15/2017					<0.03	
6/14/2017	0.0097 (J)	<0.03				
6/15/2017			0.0023 (J)	0.0026 (J)	<0.03	0.0227 (J)
9/27/2017	0.0099 (J)	<0.03				
9/28/2017			0.0021 (J)	0.0025 (J)	<0.03	0.023 (J)
2/15/2018	0.0106 (J)	<0.03	0.0021 (J)	<0.03	<0.03	0.0254 (J)
6/27/2018	0.01 (J)	<0.03	0.0021 (J)			
6/28/2018				0.0022 (J)	<0.03	0.021 (J)
12/18/2018	0.011 (J)	<0.03				
12/19/2018			0.0021 (J)	0.0026 (J)	<0.03	
12/20/2018						0.022 (J)
8/27/2019	0.01 (J)					
8/28/2019	0.01 (J)	0.0009 (J)	0.0021 (J)	0.0025 (J)	<0.03	
8/29/2019						0.021 (J)
10/16/2019	0.0098 (J)	0.00078 (J)	0.0022 (J)		<0.03	0.02 (J)
12/3/2019				0.0024 (J)		
3/5/2020	0.011 (J)	0.00089 (J)	0.0021 (J)	0.0025 (J)	<0.03	0.021 (J)
8/19/2020	0.009 (J)	0.00082 (J)	0.0021 (J)	0.0024 (J)	<0.03	0.021 (J)
9/16/2020	0.0089 (J)	<0.03	0.002 (J)	0.0022 (J)	<0.03	
9/17/2020						0.02 (J)
3/3/2021	0.0085 (J)	0.00096 (J)		0.0024 (J)	<0.03	
3/4/2021			0.0021 (J)			0.021 (J)

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.0002	<0.0002	<0.0002	<0.0002		
9/1/2016					<0.0002	
9/7/2016						<0.0002
11/15/2016				<0.0002	<0.0002	
11/16/2016	<0.0002	<0.0002	<0.0002			
11/17/2016						<0.0002
2/20/2017			<0.0002	8E-05 (J)	<0.0002	
2/21/2017	<0.0002	<0.0002				
2/22/2017						<0.0002
6/12/2017	4E-05 (J)		<0.0002	<0.0002	<0.0002	
6/13/2017		<0.0002				
6/15/2017						6E-05 (J)
9/26/2017	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/28/2017						<0.0002
2/13/2018	0.00021	0.00019 (J)	<0.0002	0.00013 (J)	<0.0002	
2/15/2018						<0.0002
6/26/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
6/27/2018						<0.0002
12/18/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
12/19/2018						<0.0002
8/27/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/28/2019						<0.0002
8/18/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/19/2020						8.4E-05 (J)
9/15/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/16/2020						<0.0002
3/1/2021	<0.0002				<0.0002	
3/2/2021		<0.0002	<0.0002	<0.0002		
3/4/2021						<0.0002

# Time Series

Constituent: Mercury (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	<0.0002		<0.0002	<0.0002		7E-05 (J)
9/8/2016		<0.0002				
11/17/2016	<0.0002	<0.0002	<0.0002			
11/18/2016				<0.0002		
11/21/2016						0.00012 (J)
2/22/2017	<0.0002	<0.0002	<0.0002			
2/23/2017				<0.0002	<0.0002	7E-05 (J)
4/17/2017					<0.0002	
5/15/2017					<0.0002	
6/14/2017	7E-05 (J)	7E-05 (J)				
6/15/2017			7E-05 (J)	7E-05 (J)	6E-05 (J)	0.00016 (J)
9/27/2017	4E-05 (J)	4E-05 (J)				
9/28/2017			<0.0002	<0.0002	<0.0002	0.00011 (J)
2/15/2018	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00015 (J)
6/27/2018	<0.0002	<0.0002	<0.0002			
6/28/2018				<0.0002	<0.0002	<0.0002 (X)
12/18/2018	<0.0002	<0.0002				
12/19/2018			<0.0002	<0.0002	<0.0002	
12/20/2018						0.00017 (J)
8/27/2019	<0.0002					
8/28/2019	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
8/29/2019						0.00018 (J)
8/19/2020	<0.0002	0.00012 (J)	0.00013 (J)	0.00013 (J)	0.00014 (J)	0.00018 (J)
9/16/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
9/17/2020						0.00011 (J)
3/3/2021	<0.0002	<0.0002		<0.0002	<0.0002	
3/4/2021			<0.0002			8.5E-05 (J)

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	0.0021 (J)	<0.01	0.004 (J)	<0.01		
9/1/2016					<0.01	
9/7/2016						<0.01
11/15/2016				<0.01	<0.01	
11/16/2016	<0.01	<0.01	0.0038 (J)			
11/17/2016						<0.01
2/20/2017			0.0055 (J)	<0.01	<0.01	
2/21/2017	0.0021 (J)	<0.01				
2/22/2017						<0.01
6/12/2017	0.0021 (J)		0.005 (J)	<0.01	<0.01	
6/13/2017		<0.01				
6/15/2017						<0.01
9/26/2017	0.0011 (J)	<0.01	0.0053 (J)	<0.01	<0.01	
9/28/2017						<0.01
2/13/2018	0.0019 (J)	<0.01	0.008 (J)	<0.01	<0.01	
2/15/2018						<0.01
6/26/2018	<0.01	<0.01	0.0041 (J)	<0.01	<0.01	
6/27/2018						<0.01
12/18/2018	<0.01	<0.01	0.0048 (J)	<0.01	<0.01	
12/19/2018						<0.01
8/27/2019	<0.01	<0.01	0.0028 (J)	<0.01	<0.01	
8/28/2019						<0.01
10/15/2019	<0.01	<0.01	0.0035 (J)	<0.01	<0.01	
12/3/2019						<0.01
3/3/2020	<0.01	<0.01	0.0023 (J)	<0.01	<0.01	<0.01
8/18/2020	0.0011 (J)	<0.01	0.0015 (J)	<0.01	<0.01	
8/19/2020						<0.01
9/15/2020	0.0007 (J)	<0.01	0.0015 (J)	<0.01	<0.01	
9/16/2020						<0.01
3/1/2021	<0.01				<0.01	
3/2/2021		<0.01	0.0015 (J)	<0.01		
3/4/2021						<0.01

# Time Series

Constituent: Molybdenum (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	<0.01		<0.01	<0.01		<0.01
9/8/2016		<0.01				
11/17/2016	<0.01	<0.01	<0.01			
11/18/2016				<0.01		
11/21/2016						<0.01
2/22/2017	<0.01	<0.01	<0.01			
2/23/2017				<0.01	<0.01	<0.01
4/17/2017					<0.01	
5/15/2017					<0.01	
6/14/2017	<0.01	<0.01				
6/15/2017			<0.01	<0.01	<0.01	<0.01
9/27/2017	<0.01	<0.01				
9/28/2017			<0.01	<0.01	<0.01	<0.01
2/15/2018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
6/27/2018	<0.01	<0.01	<0.01			
6/28/2018				<0.01	<0.01	<0.01
12/18/2018	<0.01	<0.01				
12/19/2018			<0.01	<0.01	<0.01	
12/20/2018						<0.01
8/27/2019	<0.01					
8/28/2019	<0.01	<0.01	<0.01	<0.01	<0.01	
8/29/2019						<0.01
10/16/2019	<0.01	<0.01	<0.01		<0.01	<0.01
12/3/2019				<0.01		
3/5/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
8/19/2020	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
9/16/2020	<0.01	<0.01	<0.01	<0.01	<0.01	
9/17/2020						<0.01
3/3/2021	<0.01	<0.01		<0.01	<0.01	
3/4/2021			<0.01			<0.01

# Time Series

Constituent: pH, Field (S.U) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	7.16	6.2	6.53	6.59		
9/1/2016					6.49	
9/7/2016						6.36
11/15/2016				6.67	6.59	
11/16/2016	6.96	6.12	6.4			
11/17/2016						6.28
2/20/2017			6.44	6.65	6.61	
2/21/2017	7.15	6.24				
2/22/2017						6.4
6/12/2017	7.31		6.4	6.64		
6/13/2017		6.19				
9/26/2017	7.02	6.15	6.31	6.58	6.47	
9/28/2017						6.35
2/13/2018	7.44	6.18	6.62	6.72	6.54	
2/15/2018						6.35
6/26/2018	6.93	6.05	6.29	6.43	6.23	
6/27/2018						6.35
12/18/2018	6.76	5.92	6.57	6.7	6.71	
12/19/2018						6.56
3/19/2019	6.87	6.18	6.45	6.63	6.18	6.43
8/27/2019	6.79	6.09	6.37	6.49	6.35	
8/28/2019						6.25
10/15/2019	6.57	6.06	6.77	7.01	6.36	
10/17/2019						6.3
3/3/2020	6.71	6.1	6.29	6.49	6.59	6.34
8/18/2020	6.59	6.06	6.29	6.41	6.33	
8/19/2020						6.24
9/15/2020	6.64	6.01	6.27	6.25	6.43	
9/16/2020						6.26
3/1/2021	6.66				6.7	
3/2/2021		6.2	6.47	6.42		
3/4/2021						6.45



# Time Series

Constituent: pH, Field (S.U) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	4.92		6.1	5.59		5.43
9/8/2016		5.84				
9/23/2016						5.46
11/17/2016	4.82	5.81	6.04			
11/18/2016				5.51		
11/21/2016						4.84
2/22/2017	4.86	5.85	6.08			
2/23/2017				5.65	5.57	4.73
6/14/2017	4.86	5.87				
9/27/2017	4.78	5.74				
9/28/2017			6.03	5.62	5.76	4.37
2/15/2018	4.84	5.93	6.02	5.66	5.95	4.3
6/27/2018	4.73	5.68	6.01			
6/28/2018				5.57	5.78	4.16
12/18/2018	4.84	5.97				
12/19/2018			6.22	5.76	6.07	
12/20/2018						4.21
3/19/2019				5.72		
3/20/2019	4.77	5.84	6.06		5.93	4.34
8/27/2019	4.78					
8/28/2019	5.52	5.8	5.95	5.52	5.8	
8/29/2019						4.01
10/16/2019	4.78	5.85	6.03		5.81	4.21
10/17/2019				5.61		
3/5/2020	4.82	5.89	6.04	5.39	5.53	4.01
8/19/2020	4.78	5.78	5.97	5.53	5.66	4.12
9/16/2020	4.78	5.81	5.96	5.58	5.84	
9/17/2020						4.17
3/3/2021	4.83	5.88		5.86	5.87	
3/4/2021			6.14			4.19

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.005	<0.005	<0.005	<0.005		
9/1/2016					<0.005	
9/7/2016						0.0024 (J)
11/15/2016				<0.005	<0.005	
11/16/2016	<0.005	<0.005	<0.005			
11/17/2016						0.0028 (J)
2/20/2017			<0.005	<0.005	<0.005	
2/21/2017	<0.005	<0.005				
2/22/2017						0.0018 (J)
6/12/2017	<0.005		<0.005	<0.005	<0.005	
6/13/2017		<0.005				
6/15/2017						0.0024 (J)
9/26/2017	<0.005	<0.005	<0.005	<0.005	<0.005	
9/28/2017						<0.005
2/13/2018	<0.005	<0.005	<0.005	<0.005	<0.005	
2/15/2018						<0.005
6/26/2018	<0.005	<0.005	<0.005	<0.005	<0.005	
6/27/2018						0.002 (J)
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005	
12/19/2018						0.0014 (J)
8/27/2019	<0.005	<0.005	<0.005	<0.005	<0.005	
8/28/2019						0.003 (J)
10/15/2019	<0.005	<0.005	<0.005	<0.005	<0.005	
12/3/2019						0.0041 (J)
3/3/2020	<0.005	<0.005	<0.005	<0.005	<0.005	0.0019 (J)
8/18/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
8/19/2020						0.003 (J)
9/15/2020	<0.005	<0.005	<0.005	<0.005	<0.005	
9/16/2020						<0.005
3/1/2021	<0.005				<0.005	
3/2/2021		<0.005	<0.005	<0.005		
3/4/2021						<0.005

# Time Series

Constituent: Selenium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0032 (J)		<0.005	0.0079 (J)		0.0311
9/8/2016		<0.005				
11/17/2016	0.0028 (J)	<0.005	<0.005			
11/18/2016				0.0082 (J)		
11/21/2016						0.0409
2/22/2017	0.0018 (J)	<0.005	<0.005			
2/23/2017				0.0061 (J)	<0.005	0.0354
4/17/2017					<0.005	
5/15/2017					<0.005	
6/14/2017	0.004 (J)	<0.005				
6/15/2017			<0.005	0.0046 (J)	<0.005	0.0511
9/27/2017	0.0036 (J)	<0.005				
9/28/2017			<0.005	0.0042 (J)	<0.005	0.0484
2/15/2018	<0.005	<0.005	<0.005	0.0045 (J)	<0.005	0.0435
6/27/2018	0.0017 (J)	<0.005	<0.005			
6/28/2018				0.0033 (J)	<0.005	0.037
12/18/2018	<0.005	<0.005				
12/19/2018			<0.005	0.0042 (J)	<0.005	
12/20/2018						0.037
8/27/2019	<0.005					
8/28/2019	<0.005	<0.005	<0.005	0.0041 (J)	<0.005	
8/29/2019						0.036
10/16/2019	0.0028 (J)	<0.005	<0.005		<0.005	0.033
12/3/2019				0.0035 (J)		
3/5/2020	<0.005	<0.005	<0.005	0.0034 (J)	<0.005	0.032
8/19/2020	<0.005	<0.005	<0.005	0.002 (J)	<0.005	0.041
9/16/2020	0.0028 (J)	<0.005	<0.005	0.0031 (J)	<0.005	
9/17/2020						0.029
3/3/2021	<0.005	<0.005		0.0024 (J)	<0.005	
3/4/2021			<0.005			0.039

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	7.5	0.38 (J)	2.7	0.81 (J)		
9/1/2016					0.6 (J)	
9/7/2016						97
11/15/2016				<1 (J)	0.68 (J)	
11/16/2016	6.6	<1 (J)	3.4			
11/17/2016						120 (D)
2/20/2017			3.9 (B-01)	1 (B-01)	0.98 (J)	
2/21/2017	6.1	1.5				
2/22/2017						120
6/12/2017	5		3.7	0.94 (J)	0.54 (J)	
6/13/2017		0.67 (J)				
6/15/2017						130
9/26/2017	5.4	0.62 (J)	4.1	0.92 (J)	0.53 (J)	
9/28/2017						120
2/13/2018	4.7 (J)	<1	6.6	<1	<1	
2/15/2018						109
6/26/2018	6.2	0.69 (J)	3.5	0.91 (J)	0.54 (J)	
6/27/2018						118
12/18/2018	5.9	0.72 (J)	4.3	0.68 (J)	0.39 (J)	
12/19/2018						125
3/19/2019	6 (D)	0.78 (J)	3	0.74 (J)	0.68 (J)	126
10/15/2019	5.2	0.47 (J)	3.8	0.68 (J)	0.48 (J)	
12/3/2019						180
3/3/2020	7.1	0.93 (J)	2.8	0.71 (J)	2.5	95.4
9/15/2020	5.9	<1	1.7	<1	<1	
9/16/2020						151
3/1/2021	4.7				0.74 (J)	
3/2/2021		<1	2.2	<1		
3/4/2021						122

# Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	260		260	300		440
9/8/2016		420				
11/17/2016	235 (D)	445 (D)	285 (D)			
11/18/2016				245 (D)		
11/21/2016						490 (D)
2/22/2017	210	410	270			
2/23/2017				330	0.55 (J)	470
4/17/2017					0.44 (J)	
5/15/2017					0.45 (J)	
6/14/2017	200	410				
6/15/2017			280	310	0.46 (J)	490
9/27/2017	200	360				
9/28/2017			240	290	0.49 (J)	470
2/15/2018	197	335	266	292	1.9 (o)	432
6/27/2018	200	296	278			
6/28/2018				284	0.24 (J)	453
12/18/2018	222	345				
12/19/2018			287	319	0.4 (J)	
12/20/2018						463
3/19/2019				307		
3/20/2019	204	329	268		<1 (X)	405
10/16/2019	226	325	277		0.29 (J)	432
12/3/2019				256		
3/5/2020	173	287	269	262	<1	370
9/16/2020	154	283	270	256	<1	
9/17/2020						356
3/3/2021	133	277		252	<1	
3/4/2021			251			325

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	<0.001	<0.001	<0.001	<0.001		
9/1/2016					<0.001	
9/7/2016						<0.001
11/15/2016				<0.001	<0.001	
11/16/2016	<0.001	<0.001	<0.001			
11/17/2016						<0.001
2/20/2017			<0.001	<0.001	<0.001	
2/21/2017	<0.001	<0.001				
2/22/2017						<0.001
6/12/2017	<0.001		<0.001	<0.001	<0.001	
6/13/2017		<0.001				
6/15/2017						<0.001
9/26/2017	<0.001	<0.001	<0.001	<0.001	<0.001	
9/28/2017						<0.001
2/13/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
2/15/2018						<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
6/27/2018						<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001	
12/19/2018						<0.001
8/27/2019	<0.001	<0.001	<0.001	<0.001	<0.001	
8/28/2019						<0.001
10/15/2019	<0.001	<0.001	<0.001	<0.001	<0.001	
12/3/2019						6.6E-05 (J)
3/3/2020	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
8/18/2020	<0.001	<0.001	<0.001	<0.001	<0.001	
8/19/2020						<0.001
9/15/2020	<0.001	<0.001	<0.001	<0.001	<0.001	
9/16/2020						<0.001
3/1/2021	<0.001				<0.001	
3/2/2021		<0.001	<0.001	<0.001		
3/4/2021						<0.001

# Time Series

Constituent: Thallium (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	0.0002 (J)		<0.001	<0.001		<0.001
9/8/2016		<0.001				
11/17/2016	0.0002 (J)	<0.001	<0.001			
11/18/2016				<0.001		
11/21/2016						0.0004 (J)
2/22/2017	0.0002 (J)	<0.001	<0.001			
2/23/2017				<0.001	<0.001	0.0003 (J)
4/17/2017					<0.001	
5/15/2017					<0.001	
6/14/2017	0.0002 (J)	<0.001				
6/15/2017			<0.001	<0.001	<0.001	0.0003 (J)
9/27/2017	0.0002 (J)	<0.001				
9/28/2017			<0.001	<0.001	<0.001	0.0003 (J)
2/15/2018	0.00024 (J)	<0.001	<0.001	<0.001	<0.001	0.00026 (J)
6/27/2018	0.00022 (J)	<0.001	<0.001			
6/28/2018				<0.001	<0.001	0.00018 (J)
12/18/2018	0.00022 (J)	<0.001				
12/19/2018			<0.001	<0.001	<0.001	
12/20/2018						<0.001 (X)
8/27/2019	0.00016 (J)					
8/28/2019	0.00016 (J)	<0.001	<0.001	<0.001	<0.001	
8/29/2019						0.00021 (J)
10/16/2019	0.00019 (J)	<0.001	<0.001		<0.001	0.0002 (J)
12/3/2019				<0.001		
3/5/2020	0.0002 (J)	<0.001	<0.001	<0.001	<0.001	0.0002 (J)
8/19/2020	0.00018 (J)	<0.001	<0.001	<0.001	<0.001	0.00019 (J)
9/16/2020	0.00018 (J)	<0.001	<0.001	<0.001	<0.001	
9/17/2020						0.00017 (J)
3/3/2021	0.00018 (J)	<0.001		<0.001	<0.001	
3/4/2021			<0.001			<0.001

# Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-17S
8/31/2016	151	88	138	154		
9/1/2016					299	
9/7/2016						331
11/15/2016				123	41	
11/16/2016	69	41	77			
11/17/2016						308
2/20/2017			170	158	133	
2/21/2017	68	<10				
2/22/2017						341
6/12/2017	161		132	142	61	
6/13/2017		53				
6/15/2017						333
9/26/2017	167	45	108	138	29	
9/28/2017						310
2/13/2018	165	63	141	150	61	
2/15/2018						292
6/26/2018	188	71	133	154	71	
6/27/2018						353 (X)
12/18/2018	145 (X)	78 (X)	138 (X)	147	70 (X)	
12/19/2018						317
3/19/2019	146.5 (D)	68	130	146	72	303
10/15/2019	140	66	175	144	63	
12/3/2019						378
3/3/2020	155	41	<10	130	54	263
9/15/2020	116	69	100	116	79	
9/16/2020						316
3/1/2021	98				39	
3/2/2021		43	80	96		
3/4/2021						316



# Time Series

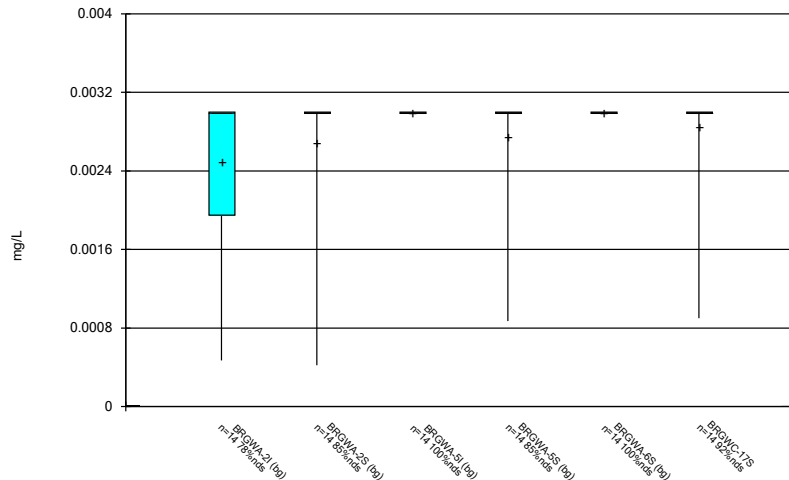
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/12/2021 9:12 AM View: Pond E

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-35S	BRGWC-36S	BRGWC-37S	BRGWC-38S
9/7/2016	382		486	528		750
9/8/2016		663				
11/17/2016	382	651	453			
11/18/2016				524		
11/21/2016						795
2/22/2017	387	706	541			
2/23/2017				517	45	733
4/17/2017					53	
5/15/2017					48	
6/14/2017	316	643				
6/15/2017			548	566	63	812
9/27/2017	303	579				
9/28/2017			487	475	39	690
2/15/2018	332	612	500	513	54	722
6/27/2018	538 (X)	359 (X)	347 (X)			
6/28/2018				499	59 (X)	704
12/18/2018	358	535				
12/19/2018			489	521	68	
12/20/2018						642
3/19/2019				498		
3/20/2019	338	517	501		68 (X)	615
10/16/2019	281	473	481		49	630
12/3/2019				498		
3/5/2020	292	489	535	457	39	608
9/16/2020	88	392	474	463	31	
9/17/2020						587
3/3/2021	212	422		442	33	
3/4/2021			480			540

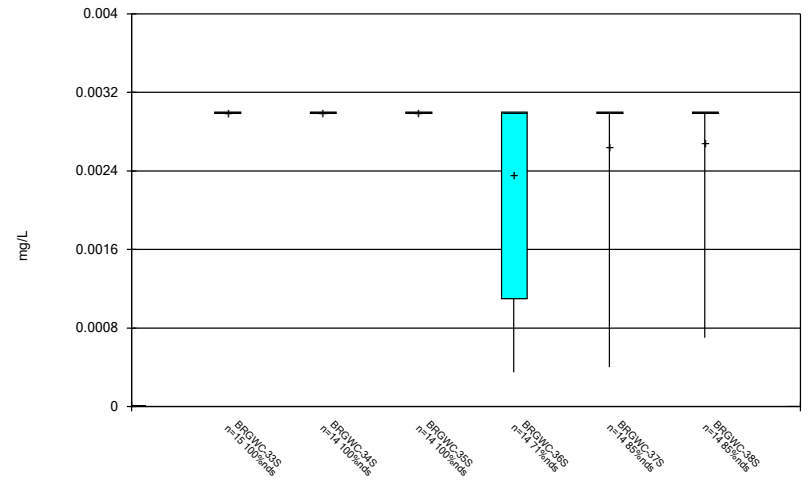
FIGURE B.

Box & Whiskers Plot



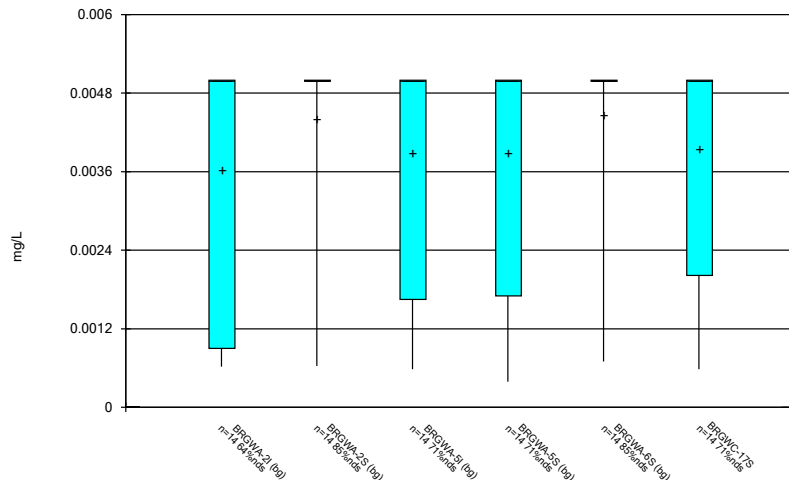
Constituent: Antimony Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



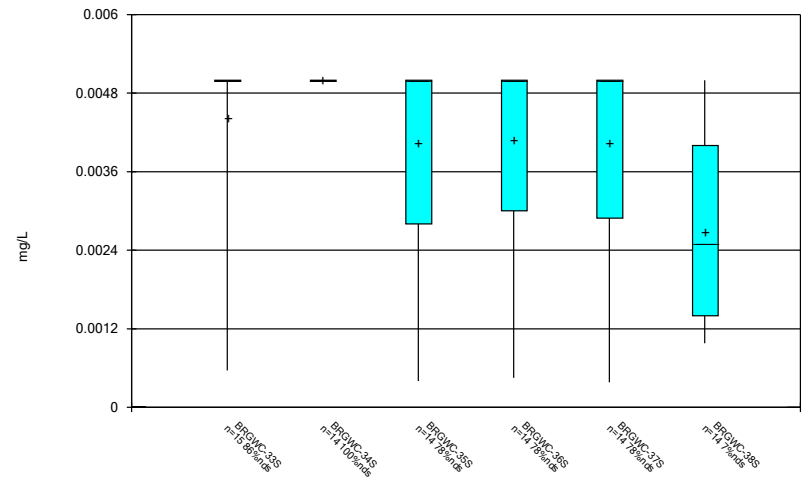
Constituent: Antimony Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



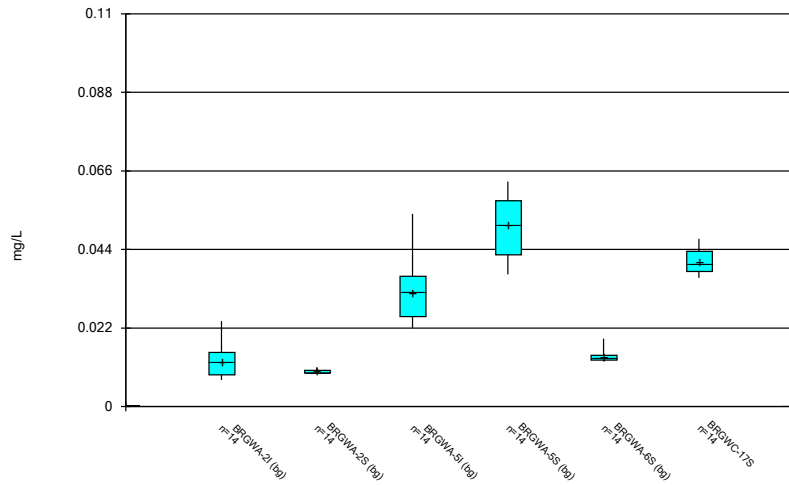
Constituent: Arsenic Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



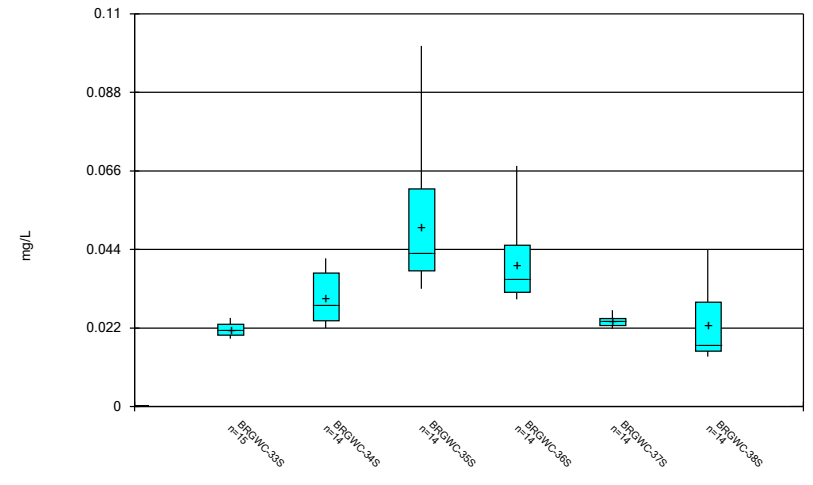
Constituent: Arsenic Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



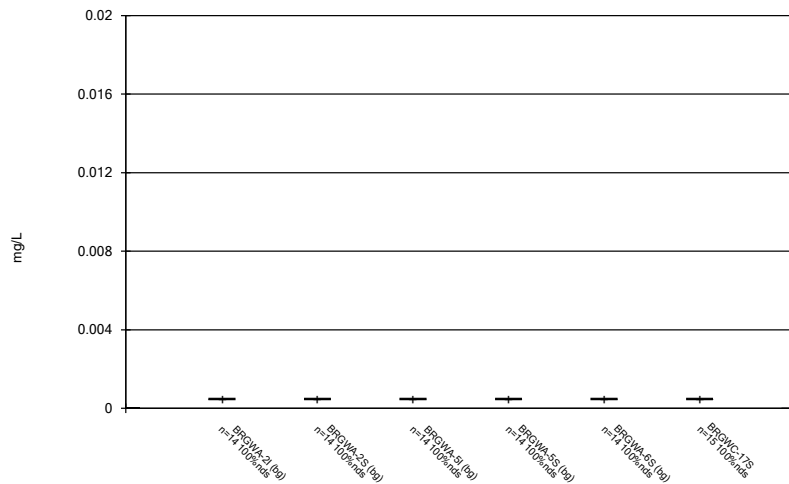
Constituent: Barium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



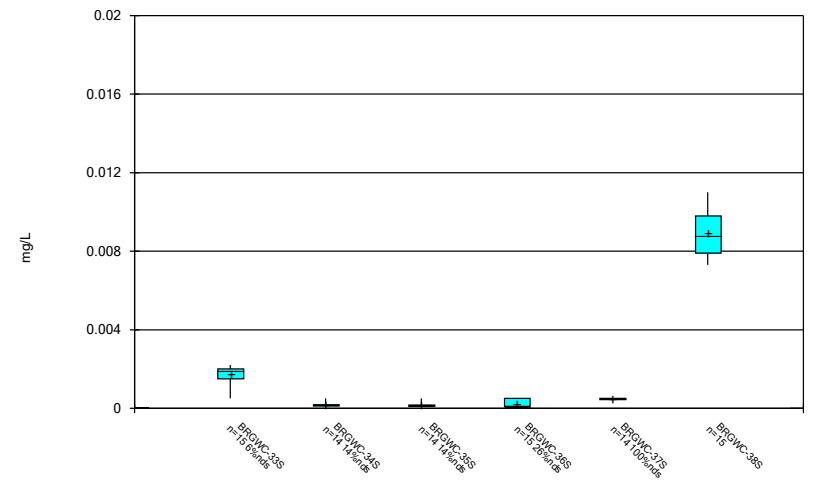
Constituent: Barium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



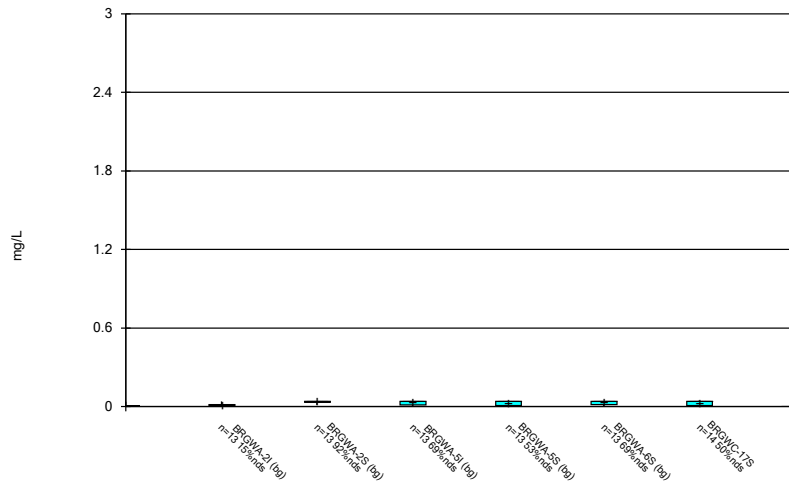
Constituent: Beryllium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



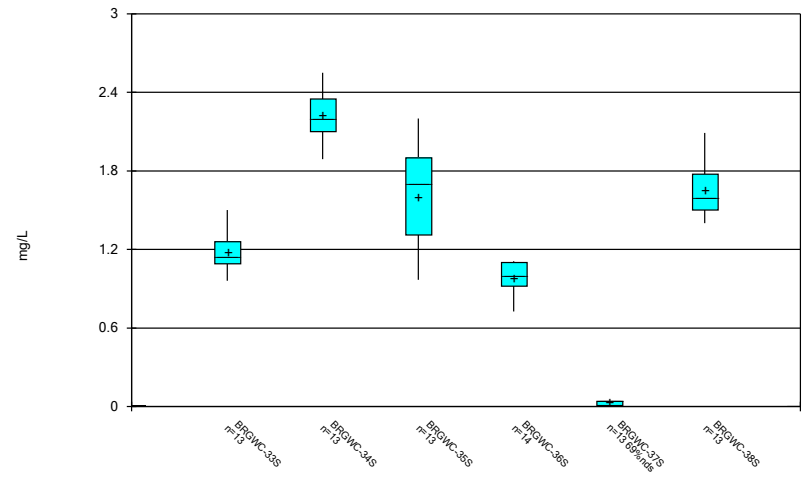
Constituent: Beryllium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



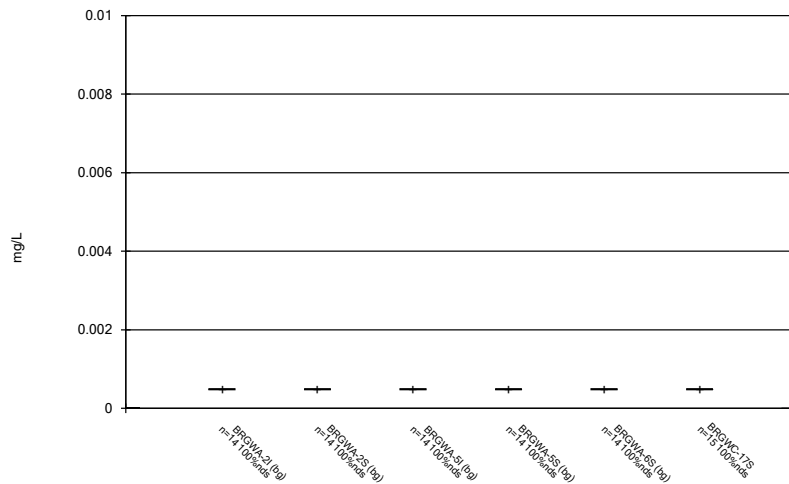
Constituent: Boron Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



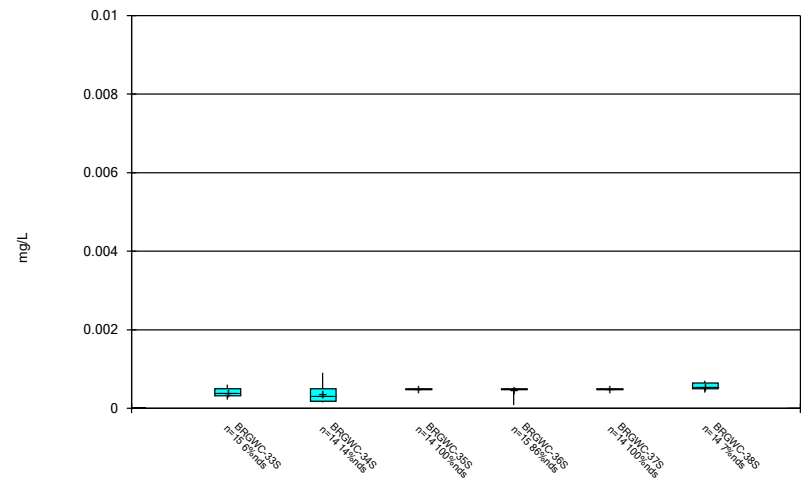
Constituent: Boron Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



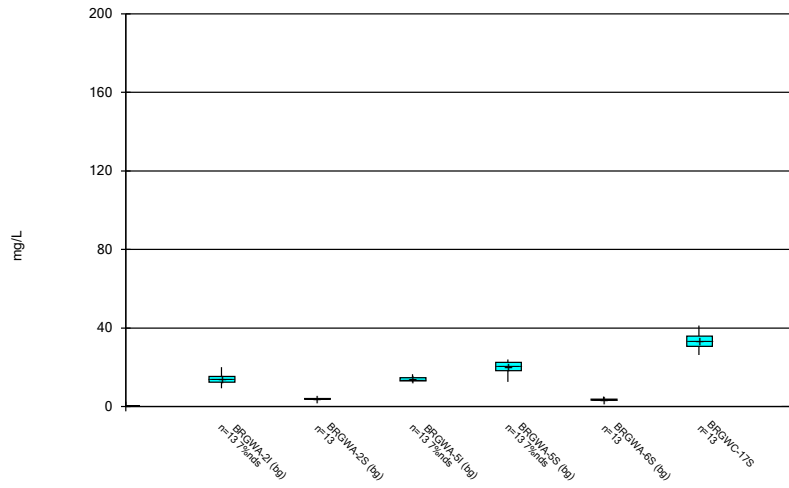
Constituent: Cadmium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



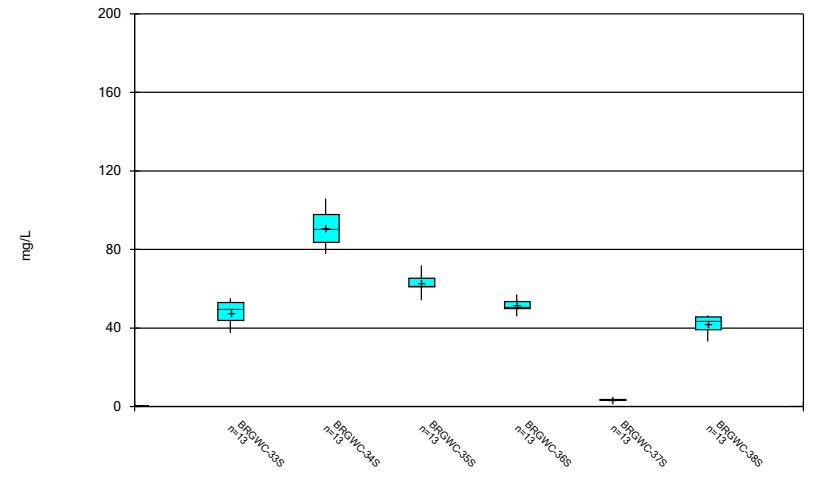
Constituent: Cadmium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



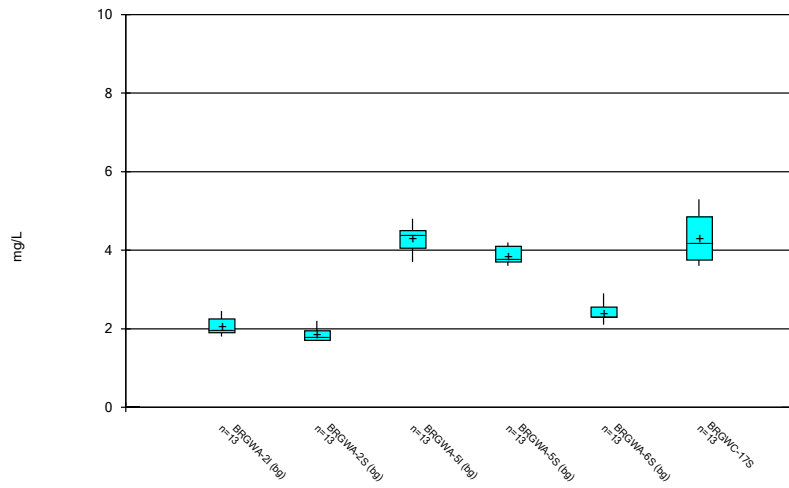
Constituent: Calcium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



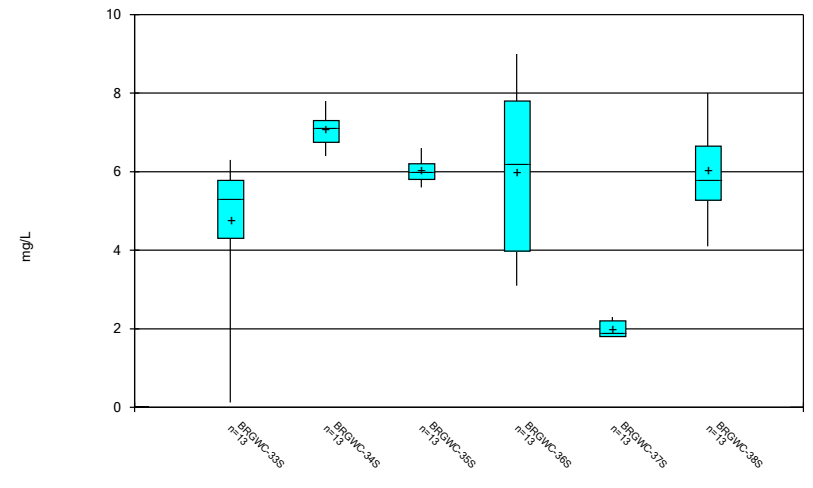
Constituent: Calcium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



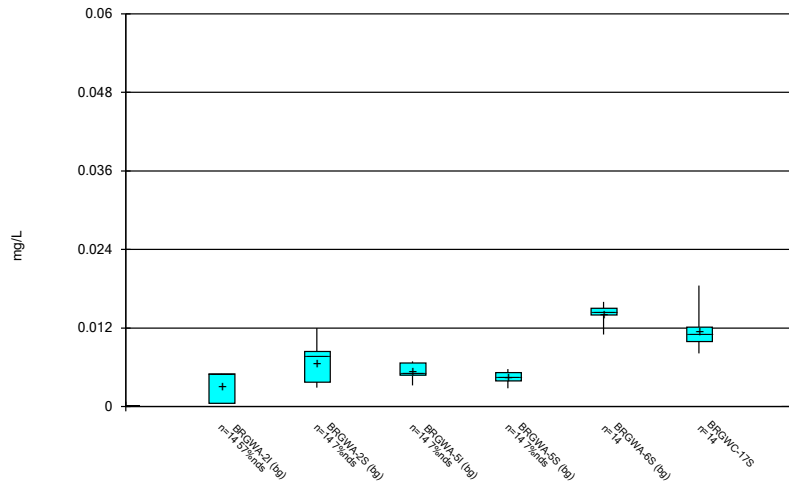
Constituent: Chloride, Total Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



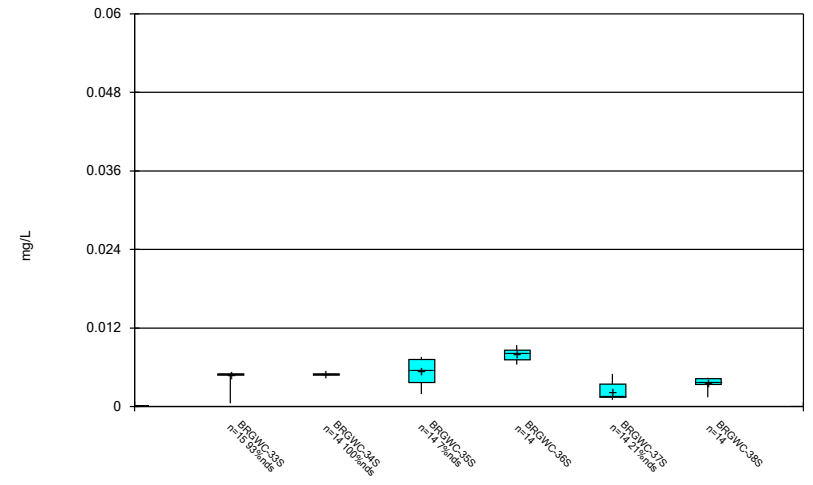
Constituent: Chloride, Total Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



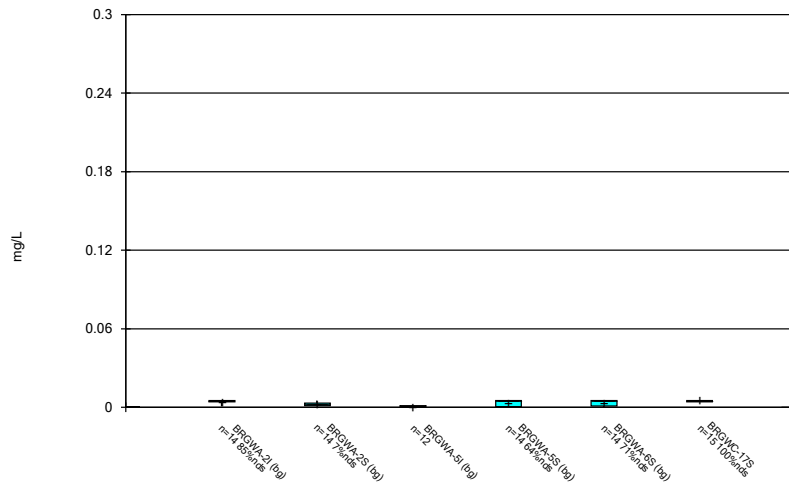
Constituent: Chromium Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



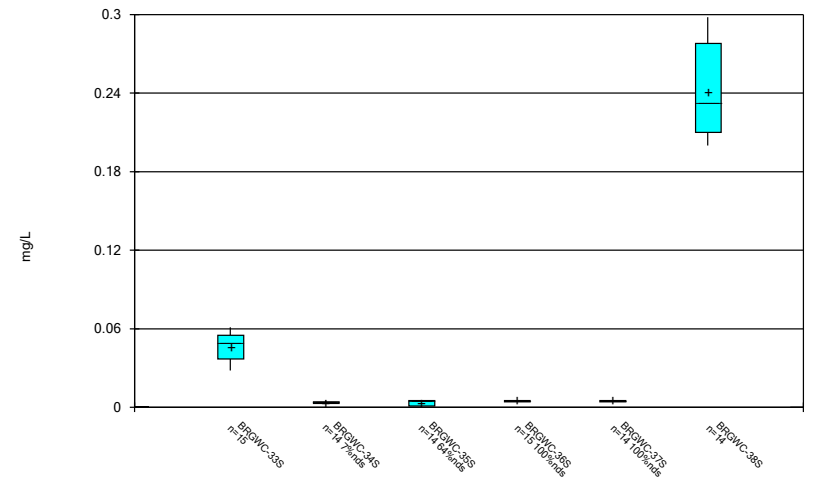
Constituent: Chromium Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



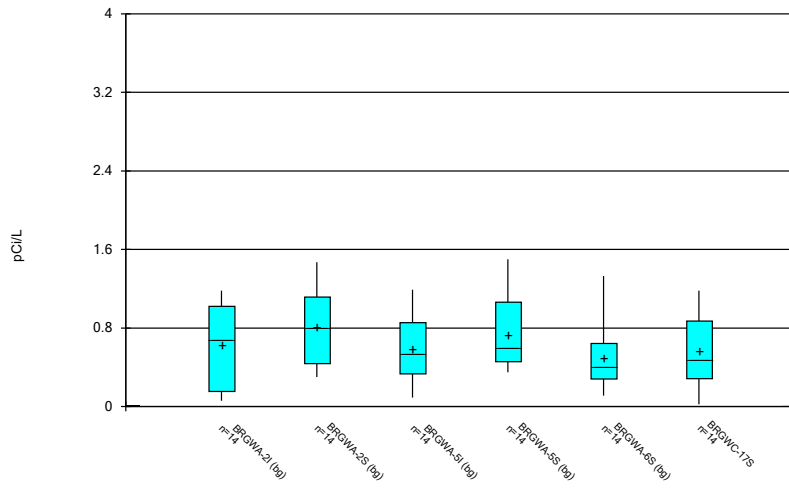
Constituent: Cobalt Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



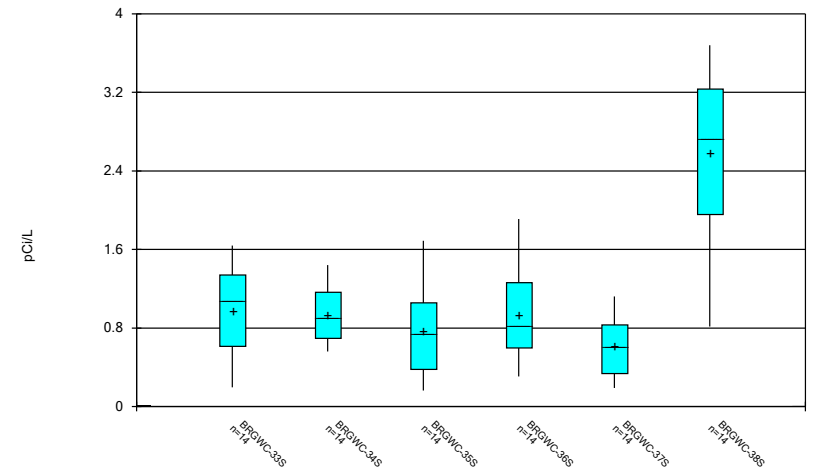
Constituent: Cobalt Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Box & Whiskers Plot



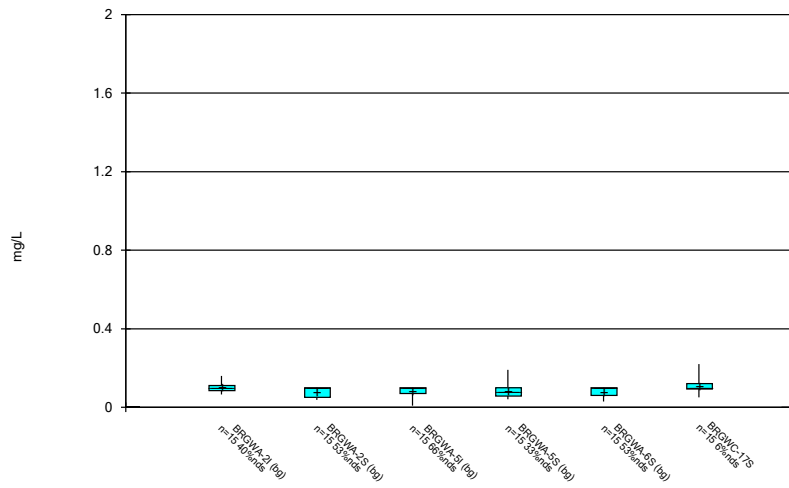
Constituent: Combined Radium 226 + 228 Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Box & Whiskers Plot



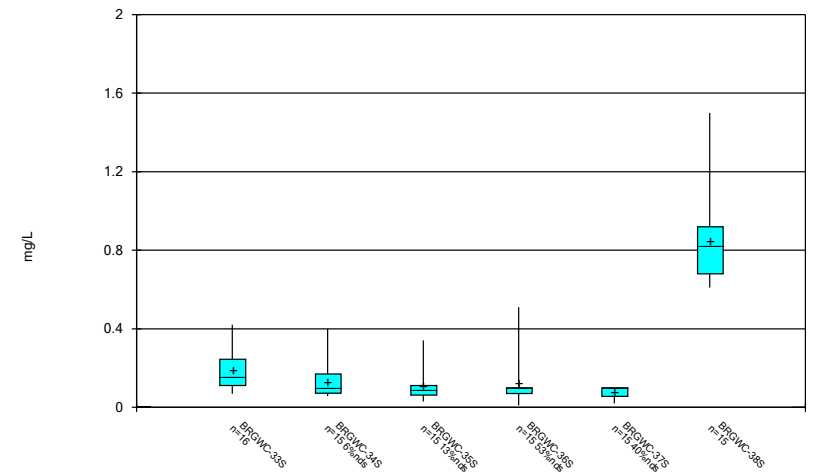
Constituent: Combined Radium 226 + 228 Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

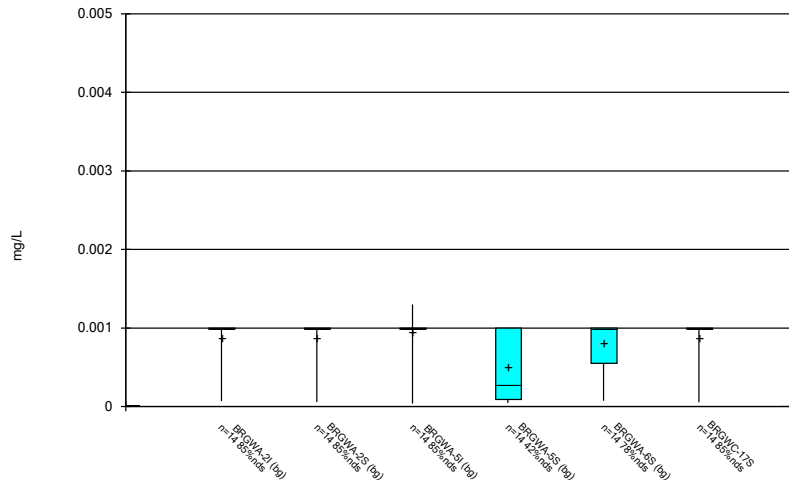
### Box & Whiskers Plot



Constituent: Fluoride Analysis Run 4/12/2021 9:37 AM View: Pond E  
Plant Branch Client: Southern Company Data: Plant Branch AP

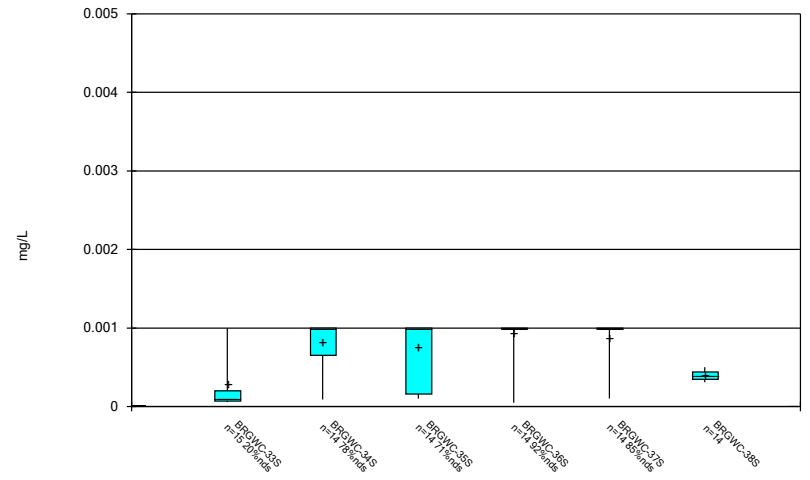


Box & Whiskers Plot



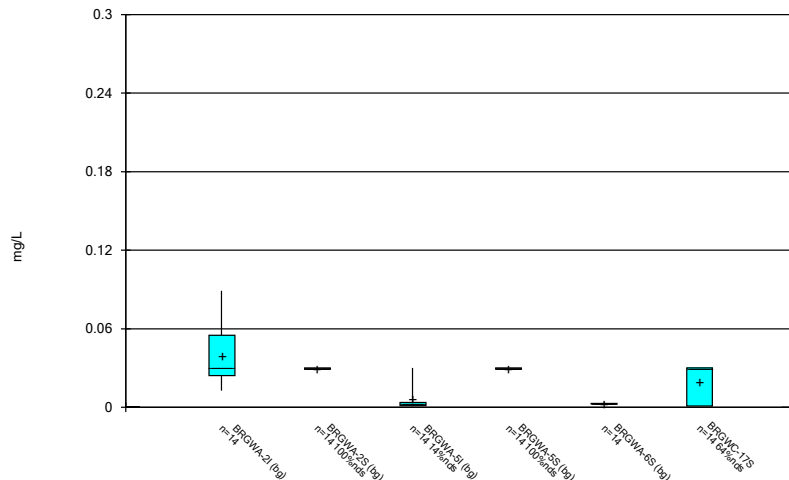
Constituent: Lead Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



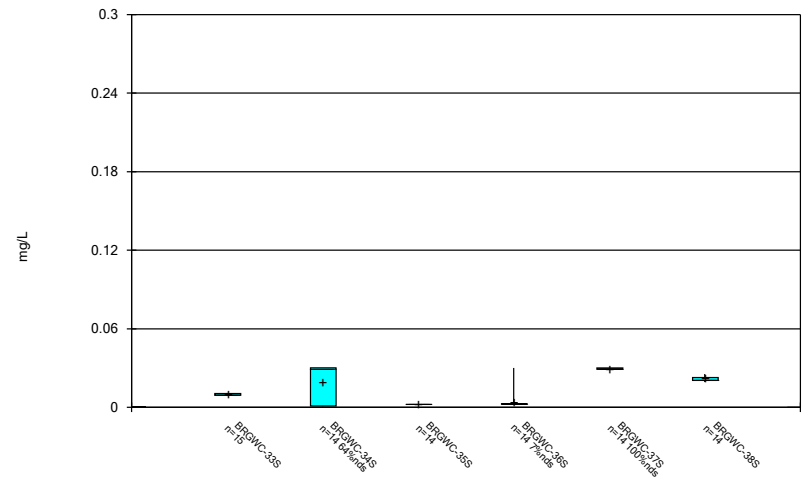
Constituent: Lead Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



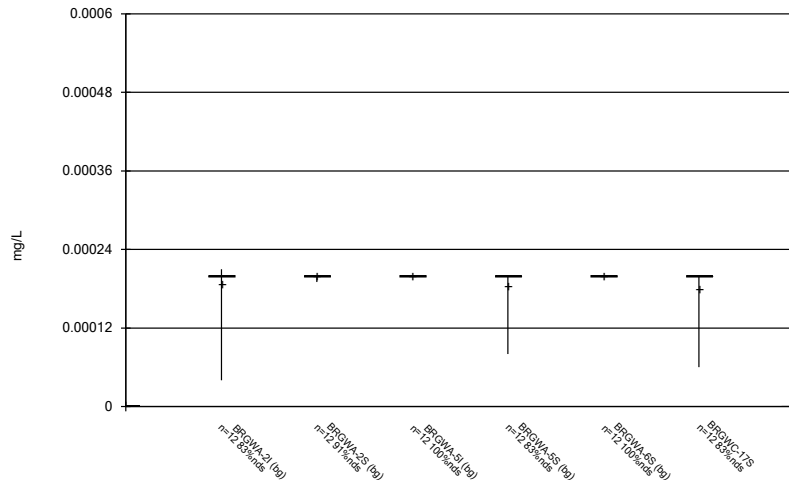
Constituent: Lithium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



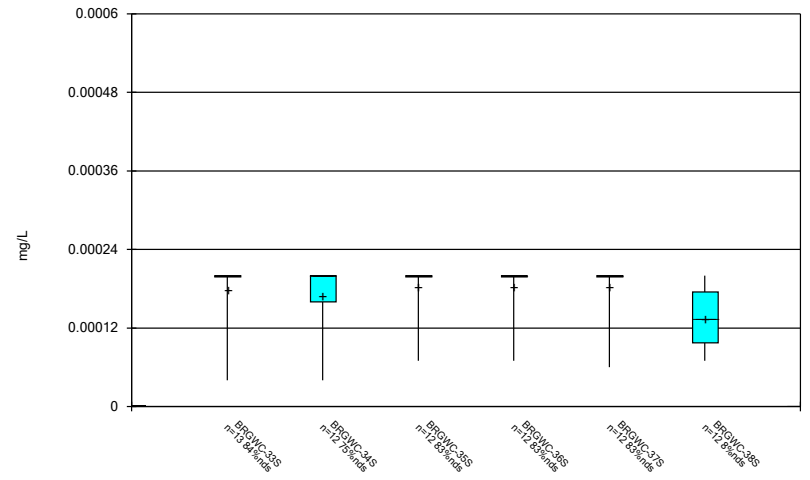
Constituent: Lithium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



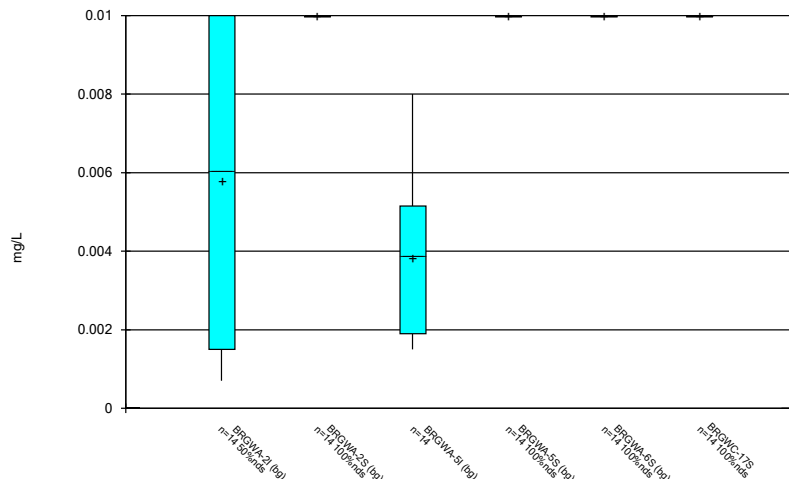
Constituent: Mercury Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



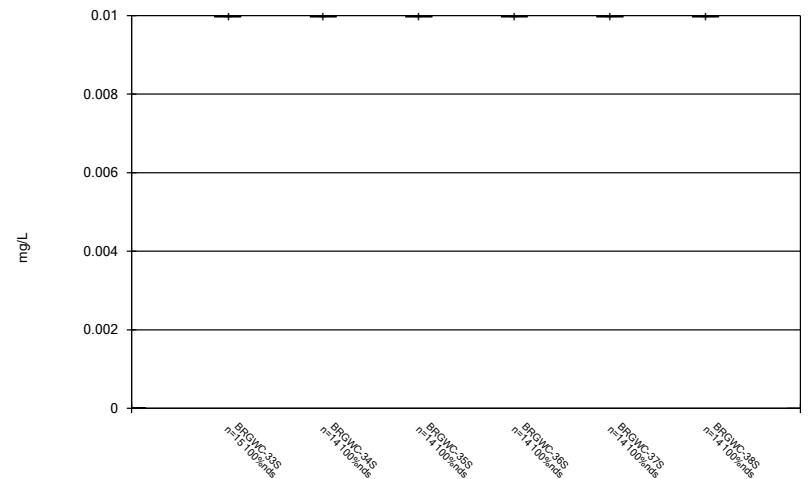
Constituent: Mercury Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



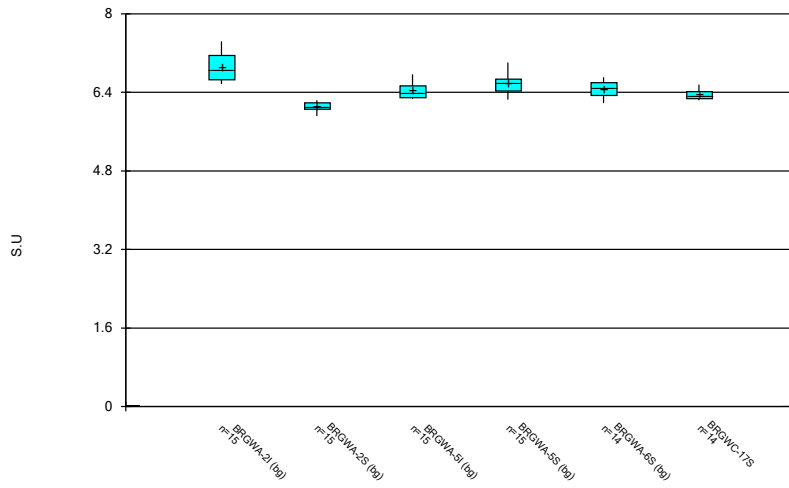
Constituent: Molybdenum Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



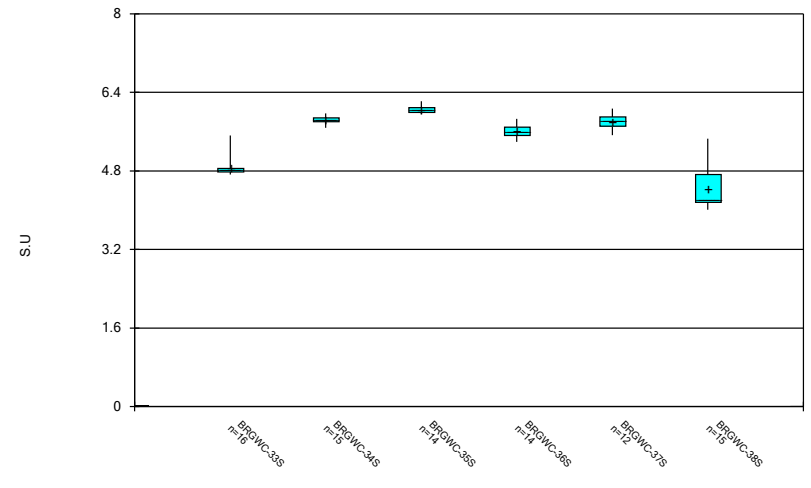
Constituent: Molybdenum Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



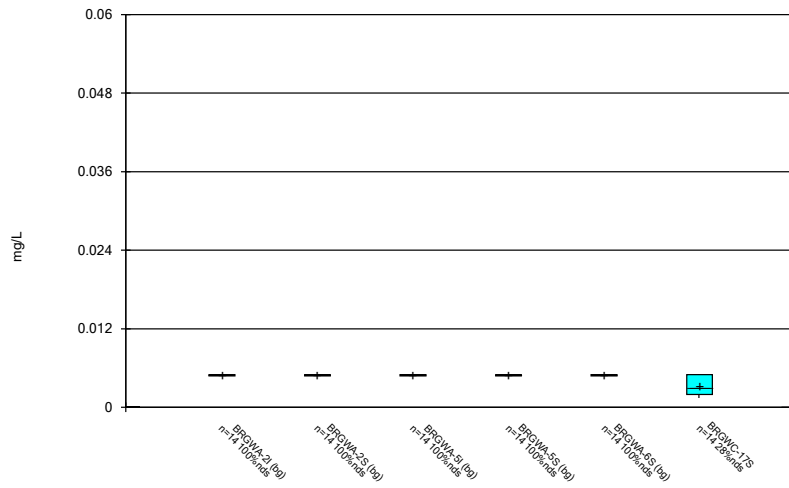
Constituent: pH, Field Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



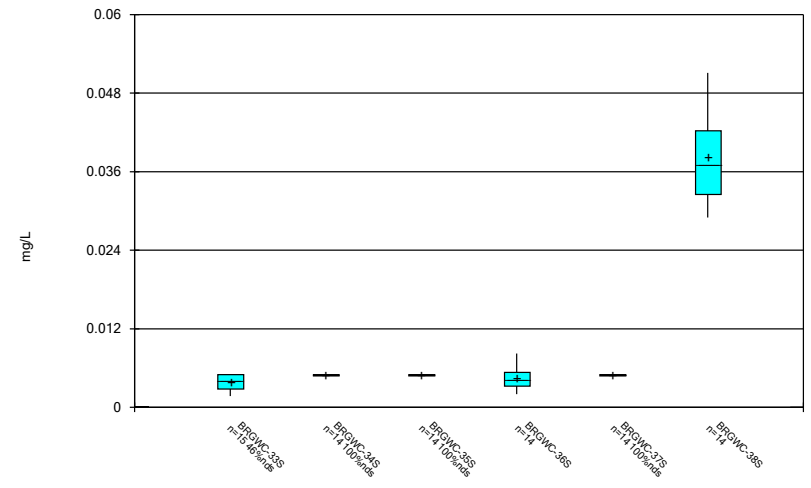
Constituent: pH, Field Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



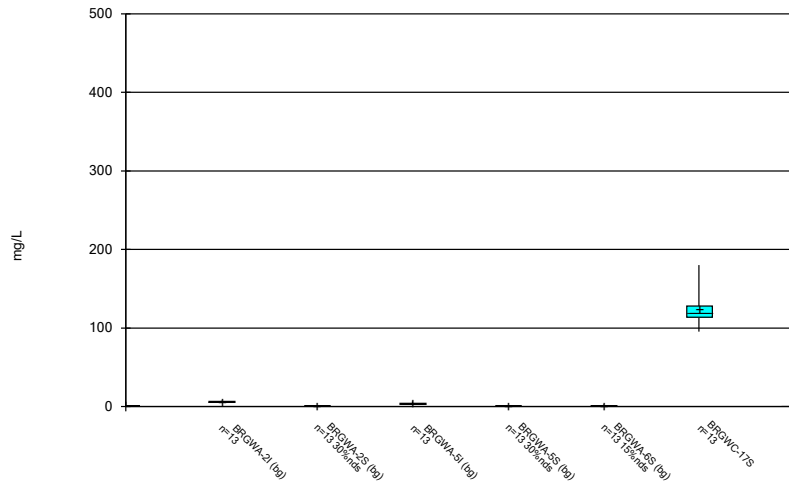
Constituent: Selenium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



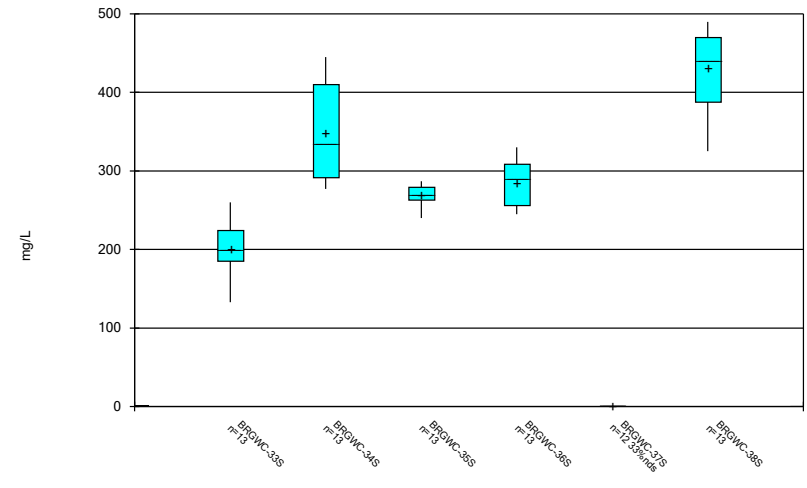
Constituent: Selenium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



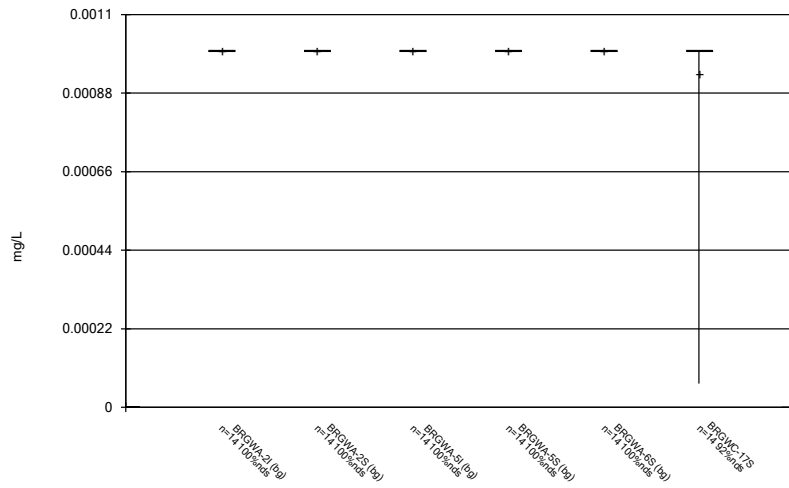
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



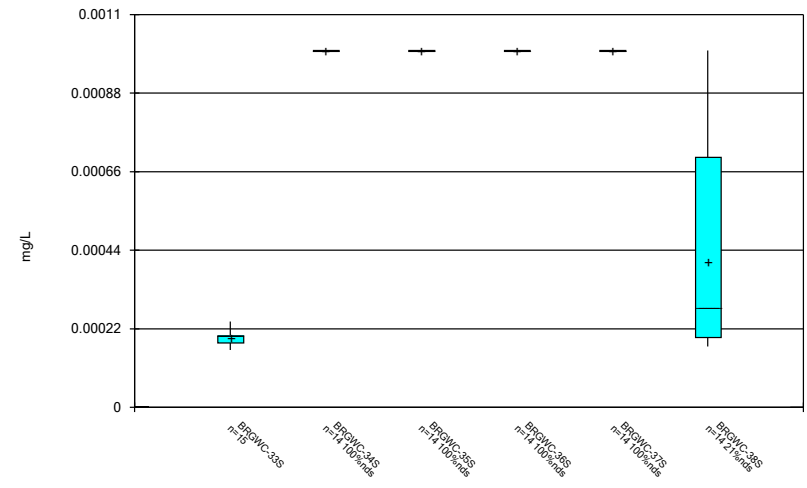
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



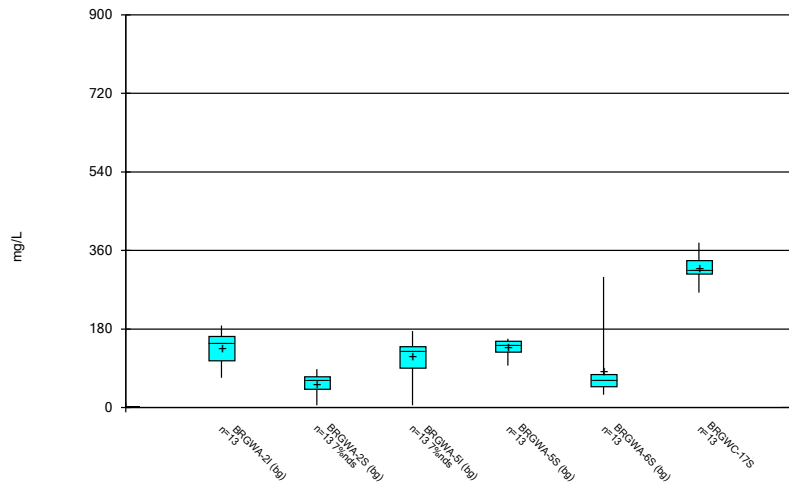
Constituent: Thallium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



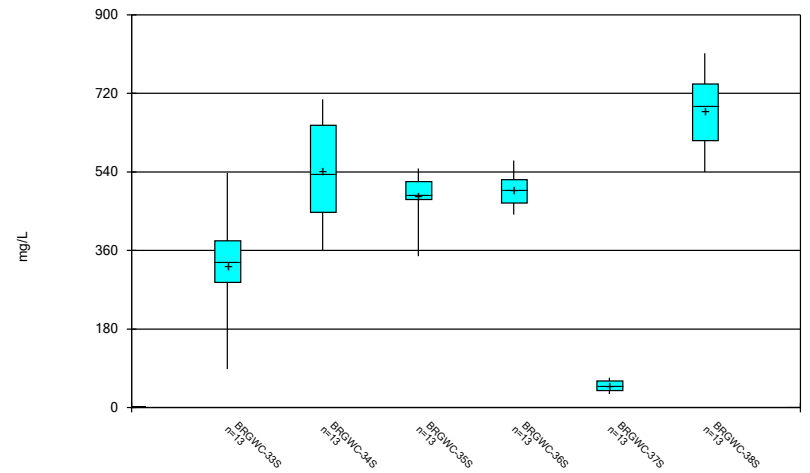
Constituent: Thallium Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:37 AM View: Pond E  
 Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE C.

# Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/5/2021, 3:08 PM

	BRGWA-51 Cobalt (mg/L)	BRGWC-37S Sulfate as SO4 (mg/L)
11/16/2016	<0.01 (o)	
2/13/2018	<0.01 (o)	
2/15/2018		1.9 (Jo)

FIGURE D.



# Appendix III Interwell Prediction Limits - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-33S	0.04	n/a	3/3/2021	1.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	3/3/2021	2.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	3/4/2021	1.9	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	3/3/2021	1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	3/4/2021	1.5	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	3/4/2021	41.2	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	3/3/2021	37.5	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	3/3/2021	88.6	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	3/4/2021	71.8	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	3/3/2021	53	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	3/4/2021	41	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	3/3/2021	6.4	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	3/4/2021	5.8	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	3/3/2021	8.1	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	3/4/2021	5.6	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.19	n/a	3/4/2021	0.83	Yes	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-33S	7.091	5.91	3/3/2021	4.83	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.091	5.91	3/3/2021	5.88	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.091	5.91	3/3/2021	5.86	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.091	5.91	3/3/2021	5.87	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.091	5.91	3/4/2021	4.19	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	3/4/2021	122	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	3/3/2021	133	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	3/3/2021	277	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	3/4/2021	251	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	3/3/2021	252	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	3/4/2021	325	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	3/4/2021	316	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	3/3/2021	422	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	3/4/2021	480	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	3/3/2021	442	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	3/4/2021	540	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2

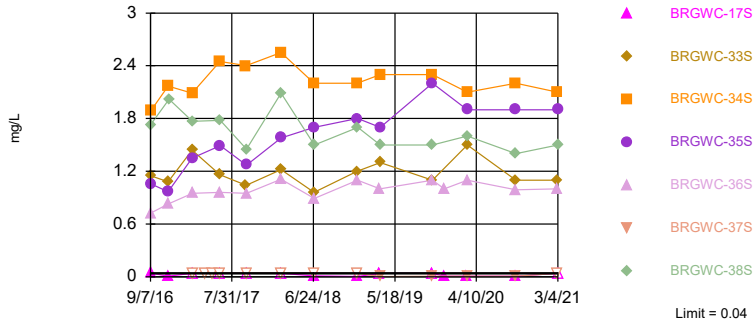
# Appendix III Interwell Prediction Limits - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	BRGWC-17S	0.04	n/a	3/4/2021	0.04ND	No	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-33S	0.04	n/a	3/3/2021	1.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-34S	0.04	n/a	3/3/2021	2.1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-35S	0.04	n/a	3/4/2021	1.9	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-36S	0.04	n/a	3/3/2021	1	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-37S	0.04	n/a	3/3/2021	0.04ND	No	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-38S	0.04	n/a	3/4/2021	1.5	Yes	65	n/a	n/a	60	n/a	n/a	0.0004535	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-17S	24	n/a	3/4/2021	41.2	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-33S	24	n/a	3/3/2021	37.5	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-34S	24	n/a	3/3/2021	88.6	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-35S	24	n/a	3/4/2021	71.8	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-36S	24	n/a	3/3/2021	53	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-37S	24	n/a	3/3/2021	3.6	No	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-38S	24	n/a	3/4/2021	41	Yes	65	n/a	n/a	4.615	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-17S	4.8	n/a	3/4/2021	4.6	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-33S	4.8	n/a	3/3/2021	3.9	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-34S	4.8	n/a	3/3/2021	6.4	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-35S	4.8	n/a	3/4/2021	5.8	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-36S	4.8	n/a	3/3/2021	8.1	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-37S	4.8	n/a	3/3/2021	1.9	No	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-38S	4.8	n/a	3/4/2021	5.6	Yes	65	n/a	n/a	0	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-17S	0.19	n/a	3/4/2021	0.096J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-33S	0.19	n/a	3/3/2021	0.069J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-34S	0.19	n/a	3/3/2021	0.071J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-35S	0.19	n/a	3/4/2021	0.076J	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-36S	0.19	n/a	3/3/2021	0.1ND	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-37S	0.19	n/a	3/3/2021	0.1ND	No	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-38S	0.19	n/a	3/4/2021	0.83	Yes	75	n/a	n/a	49.33	n/a	n/a	0.0003425	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-17S	7.091	5.91	3/4/2021	6.45	No	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-33S	7.091	5.91	3/3/2021	4.83	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-34S	7.091	5.91	3/3/2021	5.88	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-35S	7.091	5.91	3/4/2021	6.14	No	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-36S	7.091	5.91	3/3/2021	5.86	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-37S	7.091	5.91	3/3/2021	5.87	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-38S	7.091	5.91	3/4/2021	4.19	Yes	74	6.501	0.3102	0	None	No	0.0005373	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-17S	7.5	n/a	3/4/2021	122	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-33S	7.5	n/a	3/3/2021	133	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-34S	7.5	n/a	3/3/2021	277	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-35S	7.5	n/a	3/4/2021	251	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-36S	7.5	n/a	3/3/2021	252	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-37S	7.5	n/a	3/3/2021	0.5ND	No	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-38S	7.5	n/a	3/4/2021	325	Yes	65	n/a	n/a	15.38	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	299	n/a	3/4/2021	316	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-33S	299	n/a	3/3/2021	212	No	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	299	n/a	3/3/2021	422	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	299	n/a	3/4/2021	480	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	299	n/a	3/3/2021	442	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-37S	299	n/a	3/3/2021	33	No	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	299	n/a	3/4/2021	540	Yes	65	n/a	n/a	3.077	n/a	n/a	0.0004535	NP Inter (normality) 1 of 2

Exceeds Limit: BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

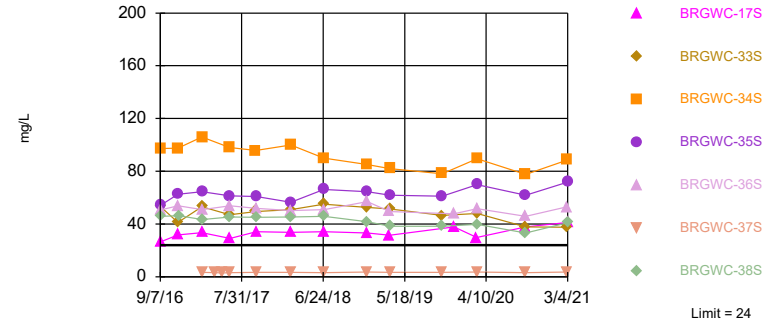


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 65 background values. 60% NDs. Annual per-constituent alpha = 0.006331. Individual comparison alpha = 0.0004535 (1 of 2). Comparing 7 points to limit.

Constituent: Boron Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

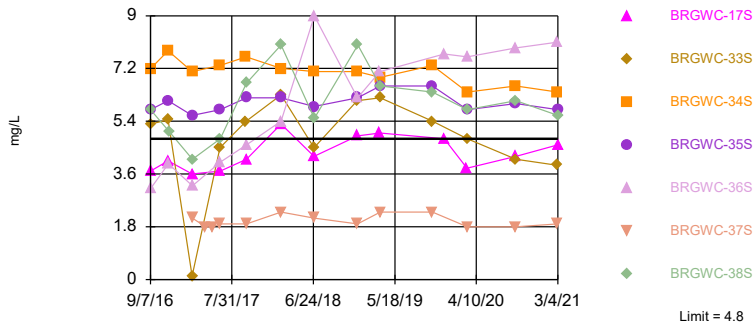


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 65 background values. 4.615% NDs. Annual per-constituent alpha = 0.006331. Individual comparison alpha = 0.0004535 (1 of 2). Comparing 7 points to limit.

Constituent: Calcium Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

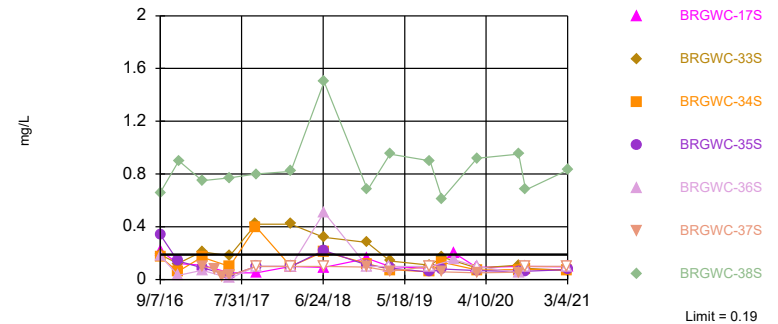


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 65 background values. Annual per-constituent alpha = 0.006331. Individual comparison alpha = 0.0004535 (1 of 2). Comparing 7 points to limit.

Constituent: Chloride, Total Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-38S

Prediction Limit  
Interwell Non-parametric

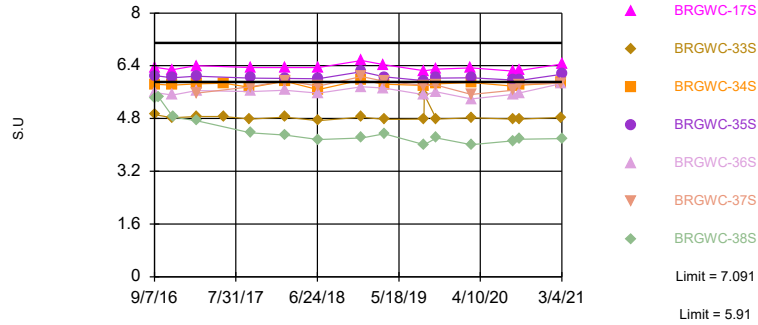


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 75 background values. 49.33% NDs. Annual per-constituent alpha = 0.004784. Individual comparison alpha = 0.0003425 (1 of 2). Comparing 7 points to limit.

Constituent: Fluoride Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limits: BRGWC-33S, BRGWC-34S, BRGWC-36S, BRGWC-37S, BRGWC-38S

Prediction Limit  
Interwell Parametric

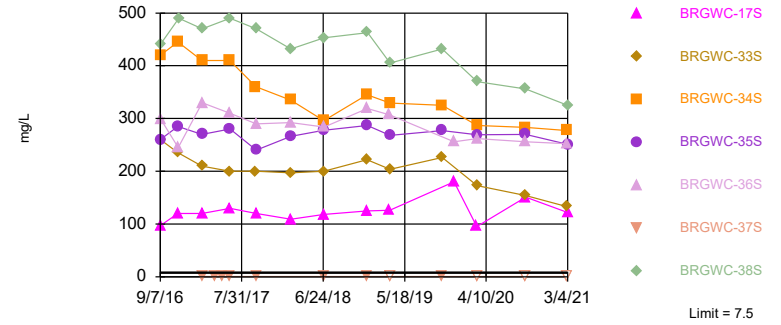


Background Data Summary: Mean=6.501, Std. Dev.=0.3102, n=74. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9656, critical = 0.956. Kappa = 1.903 (c=7, w=7, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005373. Comparing 7 points to limit.

Constituent: pH, Field Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-33S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric

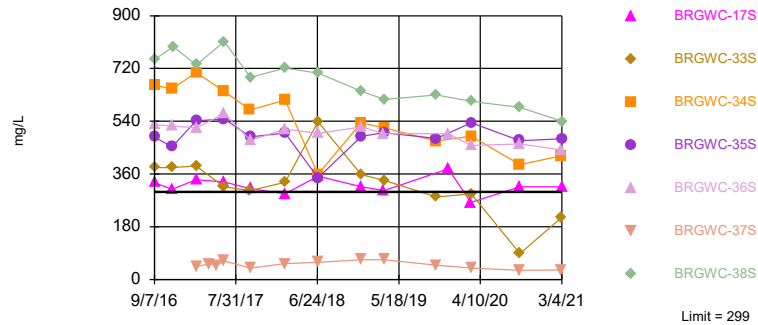


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 65 background values. 15.38% NDs. Annual per-constituent alpha = 0.006331. Individual comparison alpha = 0.0004535 (1 of 2). Comparing 7 points to limit.

Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

Exceeds Limit: BRGWC-17S, BRGWC-34S, BRGWC-35S, BRGWC-36S, BRGWC-38S

Prediction Limit  
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 65 background values. 3.077% NDs. Annual per-constituent alpha = 0.006331. Individual comparison alpha = 0.0004535 (1 of 2). Comparing 7 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:44 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-33S	BRGWC-35S	BRGWC-36S	BRGWC-38S
8/31/2016	0.0072 (J)	<0.04	<0.04	<0.04					
9/1/2016					<0.04				
9/7/2016						1.15	1.06	0.725	1.73
9/8/2016									
11/15/2016		0.0085 (J)			0.0123 (J)				
11/16/2016	0.0117 (J)		0.0187 (J)	0.0109 (J)					
11/17/2016						1.08	0.967		
11/18/2016								0.831	
11/21/2016									2.02
2/20/2017		0.0093 (J)	0.0066 (J)		0.0157 (J)				
2/21/2017	0.0088 (J)			<0.04					
2/22/2017						1.44	1.35		
2/23/2017								0.949	1.77
4/17/2017									
5/15/2017									
6/12/2017	0.0133 (J)	<0.04	<0.04		<0.04				
6/13/2017				<0.04					
6/14/2017						1.16			
6/15/2017							1.49	0.961	1.78
9/26/2017	0.0093 (J)	<0.04	<0.04	<0.04	<0.04				
9/27/2017						1.04			
9/28/2017							1.27	0.948	1.45
2/13/2018	0.0141 (J)	<0.04	<0.04	<0.04	<0.04				
2/15/2018						1.22	1.58	1.11	2.09
6/26/2018	0.012 (J)	0.0056 (J)	0.0042 (J)	<0.04	0.0041 (J)				
6/27/2018						0.96 (J+X)	1.7 (J+X)		
6/28/2018								0.89	1.5
12/18/2018	0.0086 (J)	0.0062 (J)	<0.04	<0.04	<0.04	1.2			
12/19/2018							1.8	1.1	
12/20/2018									1.7
3/19/2019	0.00565 (JD)	<0.04	<0.04	<0.04	<0.04			1	
3/20/2019						1.3	1.7		1.5
10/15/2019	0.0067 (J)	0.006 (J)	<0.04	<0.04	0.01 (J)				
10/16/2019						1.1	2.2		1.5
10/17/2019								1.1	
12/3/2019								1	
3/3/2020	0.0082 (J)	<0.04	<0.04	<0.04	<0.04				
3/5/2020						1.5	1.9	1.1	1.6
9/15/2020	<0.04	<0.04	<0.04	<0.04	<0.04				
9/16/2020						1.1	1.9	0.99	
9/17/2020									1.4
3/1/2021	<0.04				<0.04				
3/2/2021		0.0071 (J)	0.0053 (J)	<0.04					
3/3/2021						1.1		1	
3/4/2021							1.9		1.5

# Prediction Limit

Constituent: Boron (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III  
 Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-17S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	0.0449 (J)		
9/8/2016		1.89	
11/15/2016			
11/16/2016			
11/17/2016	0.0067 (J)	2.17	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	<0.04	2.09	
2/23/2017			<0.04
4/17/2017			<0.04
5/15/2017			<0.04
6/12/2017			
6/13/2017			
6/14/2017		2.45	
6/15/2017	<0.04		<0.04
9/26/2017			
9/27/2017		2.4	
9/28/2017	<0.04		<0.04
2/13/2018			
2/15/2018	<0.04	2.55	<0.04
6/26/2018			
6/27/2018	0.0088 (J+X)	2.2 (J+X)	
6/28/2018			<0.04 (X)
12/18/2018		2.2	
12/19/2018	0.0045 (J)		<0.04
12/20/2018			
3/19/2019	<0.04		
3/20/2019		2.3	0.004 (J)
10/15/2019			
10/16/2019		2.3	0.0055 (J)
10/17/2019	<0.04		
12/3/2019	0.0063 (J)		
3/3/2020	0.0075 (J)		
3/5/2020		2.1	0.0076 (J)
9/15/2020			
9/16/2020	0.0066 (J)	2.2	0.0062 (J)
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021		2.1	<0.04
3/4/2021	<0.04		

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-35S	BRGWC-33S	BRGWC-17S	BRGWC-38S
8/31/2016	12.6	19.6	13.5	4.09					
9/1/2016					3.3				
9/7/2016						54.1	53.4	26.3	45.9
9/8/2016									
11/15/2016		21.7			3.44				
11/16/2016	12.1		14.9	4.25					
11/17/2016						62.6	41.3	31.8	
11/18/2016									
11/21/2016									46.4
2/20/2017		21.1	13.9		3.52				
2/21/2017	11.4			4.02					
2/22/2017						64.6	53.1	33.5	
2/23/2017									43.5
4/17/2017									
5/15/2017									
6/12/2017	9.34	21.5	13.7		3.11				
6/13/2017				3.84					
6/14/2017							47.1		
6/15/2017						61.3		29	45.3
9/26/2017	14.3	24	14.4	3.31	3.15				
9/27/2017							49.5		
9/28/2017						60.8		34.1	45.1
2/13/2018	<25	<25	<25	3.94	3.65				
2/15/2018						56.6	50.9	33.8	45.3
6/26/2018	16 (J)	23.5 (J)	13.5 (J)	3.6	3.3				
6/27/2018						66.2	55.1	34.1	
6/28/2018									45.9
12/18/2018	14.5 (J)	19.8 (J)	16.4 (J)	3.8	3.5		52.7		
12/19/2018						64.4		33.1	
12/20/2018									41.8
3/19/2019	14.3 (JD)	21.4 (J)	12.3 (J)	3.9	3.6			31.6	
3/20/2019						61.8	51.4		38.2
10/15/2019	15.1	20	14.4	3.7	3.5				
10/16/2019						61.2	46.5		38.4
12/3/2019								37.7	
3/3/2020	20	23.2	14.9	4	5			29.7	
3/5/2020						69.9	48.1		39.8
9/15/2020	14.1	16.8	12.7	3.9	3.7				
9/16/2020						61.8	37.9	37.9	
9/17/2020									33.1
3/1/2021	15.4				4.2				
3/2/2021		16.8	13.2	4					
3/3/2021							37.5		
3/4/2021						71.8		41.2	41

# Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	50.6		
9/8/2016		97.3	
11/15/2016			
11/16/2016			
11/17/2016		97.6	
11/18/2016	53.9		
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017		106	
2/23/2017	51		3.26
4/17/2017			3.23
5/15/2017			2.97 (B-01)
6/12/2017			
6/13/2017			
6/14/2017		98	
6/15/2017	53.8		3.15
9/26/2017			
9/27/2017		95.8	
9/28/2017	51.8		3.26
2/13/2018			
2/15/2018	50.1	100	3.39
6/26/2018			
6/27/2018		90.1	
6/28/2018	51		3.1
12/18/2018		85.1	
12/19/2018	57.1		3.6
12/20/2018			
3/19/2019	49.5		
3/20/2019		82	3.3
10/15/2019			
10/16/2019		78.2	3.4
12/3/2019	47.8		
3/3/2020			
3/5/2020	51.7	89.6	3.7
9/15/2020			
9/16/2020	45.9	77.7	3.2
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021	53	88.6	3.6
3/4/2021			



# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-35S	BRGWC-33S	BRGWC-17S	BRGWC-38S
8/31/2016	2.3	3.6	4.4	2					
9/1/2016					2.5				
9/7/2016						5.8	5.3	3.7	5.8
9/8/2016									
11/15/2016		4			2.3				
11/16/2016	2		4.4	1.8					
11/17/2016						6.1 (D)	5.45 (D)	4.05 (D)	
11/18/2016									
11/21/2016									5.05 (D)
2/20/2017		3.9	4.8		2.4				
2/21/2017	2			1.8					
2/22/2017						5.6	0.12 (J)	3.6	
2/23/2017									4.1
4/17/2017									
5/15/2017									
6/12/2017	2.1	3.8	4.2		2.2				
6/13/2017				1.7					
6/14/2017							4.5		
6/15/2017						5.8		3.7	4.8
9/26/2017	2	4.1	4.4	1.8	2.3				
9/27/2017							5.4		
9/28/2017						6.2		4.1	6.7
2/13/2018	2.1	4.1	4.7	1.7	2.3				
2/15/2018						6.2	6.3	5.3	8
6/26/2018	2.4	4.1	4.5	2.2	2.6				
6/27/2018						5.9	4.5	4.2	
6/28/2018									5.5 (J-X)
12/18/2018	1.8	3.8	4.5	1.9	2.3		6.1		
12/19/2018						6.2 (J-X)		4.9 (J-X)	
12/20/2018									8 (J-X)
3/19/2019	2.45 (D)	4.2	4.5	2	2.6			5	
3/20/2019						6.6	6.2		6.6
10/15/2019	2.2	3.7	4.2	1.9	2.4				
10/16/2019						6.6	5.4		6.4
12/3/2019								4.8	
3/3/2020	1.9	3.6	3.9	1.9	2.9			3.8	
3/5/2020						5.8	4.8		5.8
9/15/2020	1.9	3.7	3.7	1.7	2.3				
9/16/2020						6	4.1	4.2	
9/17/2020									6.1
3/1/2021	1.8				2.1				
3/2/2021		3.7	3.8	1.7					
3/3/2021							3.9		
3/4/2021						5.8		4.6	5.6

# Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	3.1		
9/8/2016		7.2	
11/15/2016			
11/16/2016			
11/17/2016		7.8 (D)	
11/18/2016	3.95 (D)		
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017		7.1	
2/23/2017	3.2		2.1
4/17/2017			1.8
5/15/2017			1.8
6/12/2017			
6/13/2017			
6/14/2017		7.3	
6/15/2017	4		1.9
9/26/2017			
9/27/2017		7.6	
9/28/2017	4.6		1.9
2/13/2018			
2/15/2018	5.4	7.2	2.3
6/26/2018			
6/27/2018		7.1	
6/28/2018	9 (J-X)		2.1 (J-X)
12/18/2018		7.1	
12/19/2018	6.2 (J-X)		1.9 (J-X)
12/20/2018			
3/19/2019	7.1		
3/20/2019		6.9	2.3
10/15/2019			
10/16/2019		7.3	2.3
12/3/2019	7.7		
3/3/2020			
3/5/2020	7.6	6.4	1.8
9/15/2020			
9/16/2020	7.9	6.6	1.8
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021	8.1	6.4	1.9
3/4/2021			

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-38S	BRGWC-36S	BRGWC-35S	BRGWC-17S
8/31/2016	0.11 (J)	0.19 (J)	0.07 (J)	0.05 (J)					
9/1/2016					0.06 (J)				
9/7/2016						0.66	0.18 (J)	0.34	0.22 (J)
9/8/2016									
11/15/2016		0.13 (J)			0.06 (J)				
11/16/2016	0.08 (J)		0.07 (J)	0.07 (J)					
11/17/2016								0.14 (J)	0.12 (J)
11/18/2016							0.03 (J)		
11/21/2016						0.9 (D)			
2/20/2017		0.08 (J)	0.06 (J)		0.04 (J)				
2/21/2017	0.14 (J)			0.05 (J)					
2/22/2017								0.09 (J)	0.11 (J)
2/23/2017						0.75	0.07 (J)		
4/17/2017									
5/15/2017									
6/12/2017	0.16 (J)	0.07 (J)	0.008 (J)		0.06 (J)				
6/13/2017				0.04 (J)					
6/14/2017									
6/15/2017						0.77	0.01 (J)	0.03 (J)	0.05 (J)
9/26/2017	0.14 (J)	0.04 (J)	<0.1	<0.1	<0.1				
9/27/2017									
9/28/2017						0.8	<0.1	<0.1	0.05 (J)
2/13/2018	<0.1	<0.1	<0.1	<0.1	<0.1				
2/15/2018						0.82	<0.1	<0.1	<0.1
6/26/2018	0.085 (J)	0.072 (J)	0.045 (J)	0.048 (J)	0.041 (J)				
6/27/2018								0.22 (J)	0.093 (J)
6/28/2018						1.5 (J+X)	0.51 (J+X)		
12/18/2018	0.085 (J)	<0.1	<0.1	<0.1	<0.1				
12/19/2018							<0.1	0.11 (J)	0.16 (J)
12/20/2018						0.68			
3/19/2019	0.0655 (JD)	0.06 (J)	<0.1	0.037 (J)	0.03 (J)		<0.1		0.1 (J)
3/20/2019						0.95		0.088 (J)	
8/27/2019	<0.1	<0.1	<0.1	<0.1	<0.1				
8/28/2019							<0.1	0.056 (J)	0.085 (J)
8/29/2019						0.9			
10/15/2019	<0.1	0.045 (J)	<0.1	<0.1	<0.1				
10/16/2019						0.61		0.08 (J)	
12/3/2019							0.15 (J)		0.2 (J)
3/3/2020	0.066 (J)	0.057 (J)	<0.1	0.05 (J)	0.09 (J)				0.093 (J)
3/5/2020						0.92	<0.1	0.067 (J)	
8/18/2020	<0.1	<0.1	<0.1	<0.1	<0.1				
8/19/2020						0.95	0.051 (J)	0.06 (J)	0.1
9/15/2020	<0.1	0.051 (J)	<0.1	<0.1	<0.1				
9/16/2020							<0.1	0.062 (J)	0.1
9/17/2020						0.68			
3/1/2021	<0.1				<0.1				
3/2/2021		<0.1	<0.1	<0.1					
3/3/2021							<0.1		
3/4/2021						0.83		0.076 (J)	0.096 (J)

# Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III  
 Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-33S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	0.19 (J)		
9/8/2016		0.17 (J)	
11/15/2016			
11/16/2016			
11/17/2016	0.12 (J)	0.06 (J)	
11/18/2016			
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017	0.21 (J)	0.17 (J)	
2/23/2017			0.1 (J)
4/17/2017			0.08 (J)
5/15/2017			0.02 (J)
6/12/2017			
6/13/2017			
6/14/2017	0.18 (J)	0.1 (J)	
6/15/2017			0.03 (J)
9/26/2017			
9/27/2017	0.42	0.4	
9/28/2017			<0.1
2/13/2018			
2/15/2018	0.42	<0.1	<0.1
6/26/2018			
6/27/2018	0.32	0.21 (J)	
6/28/2018			<0.1
12/18/2018	0.28 (J)	0.12 (J)	
12/19/2018			0.094 (J)
12/20/2018			
3/19/2019			
3/20/2019	0.14 (J)	0.074 (J)	0.062 (J)
8/27/2019	0.11 (J)		
8/28/2019	0.11 (J)	0.057 (J)	<0.1
8/29/2019			
10/15/2019			
10/16/2019	0.17 (J)	0.13 (J)	0.059 (J)
12/3/2019			
3/3/2020			
3/5/2020	0.088 (J)	0.072 (J)	0.05 (J)
8/18/2020			
8/19/2020	0.11	0.074 (J)	0.055 (J)
9/15/2020			
9/16/2020	0.085 (J)	0.077 (J)	<0.1
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021	0.069 (J)	0.071 (J)	<0.1
3/4/2021			

# Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-35S	BRGWC-33S	BRGWC-17S	BRGWC-38S
8/31/2016	7.16	6.59	6.53	6.2					
9/1/2016					6.49				
9/7/2016						6.1	4.92	6.36	5.43
9/8/2016									
9/23/2016									5.46
11/15/2016		6.67			6.59				
11/16/2016	6.96		6.4	6.12					
11/17/2016						6.04	4.82	6.28	
11/18/2016									
11/21/2016									4.84
2/20/2017		6.65	6.44		6.61				
2/21/2017	7.15			6.24					
2/22/2017						6.08	4.86	6.4	
2/23/2017									4.73
6/12/2017	7.31	6.64	6.4						
6/13/2017				6.19					
6/14/2017							4.86		
9/26/2017	7.02	6.58	6.31	6.15	6.47				
9/27/2017							4.78		
9/28/2017						6.03		6.35	4.37
2/13/2018	7.44	6.72	6.62	6.18	6.54				
2/15/2018						6.02	4.84	6.35	4.3
6/26/2018	6.93	6.43	6.29	6.05	6.23				
6/27/2018						6.01	4.73	6.35	
6/28/2018									4.16
12/18/2018	6.76	6.7	6.57	5.92	6.71		4.84		
12/19/2018						6.22		6.56	
12/20/2018									4.21
3/19/2019	6.87	6.63	6.45	6.18	6.18			6.43	
3/20/2019						6.06	4.77		4.34
8/27/2019	6.79	6.49	6.37	6.09	6.35		4.78		
8/28/2019						5.95	5.52	6.25	
8/29/2019									4.01
10/15/2019	6.57	7.01	6.77	6.06	6.36				
10/16/2019						6.03	4.78		4.21
10/17/2019								6.3	
3/3/2020	6.71	6.49	6.29	6.1	6.59			6.34	
3/5/2020						6.04	4.82		4.01
8/18/2020	6.59	6.41	6.29	6.06	6.33				
8/19/2020						5.97	4.78	6.24	4.12
9/15/2020	6.64	6.25	6.27	6.01	6.43				
9/16/2020						5.96	4.78	6.26	
9/17/2020									4.17
3/1/2021	6.66				6.7				
3/2/2021		6.42	6.47	6.2					
3/3/2021							4.83		
3/4/2021						6.14		6.45	4.19

# Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III  
Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	5.59		
9/8/2016		5.84	
9/23/2016			
11/15/2016			
11/16/2016			
11/17/2016		5.81	
11/18/2016	5.51		
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017		5.85	
2/23/2017	5.65		5.57
6/12/2017			
6/13/2017			
6/14/2017		5.87	
9/26/2017			
9/27/2017		5.74	
9/28/2017	5.62		5.76
2/13/2018			
2/15/2018	5.66	5.93	5.95
6/26/2018			
6/27/2018		5.68	
6/28/2018	5.57		5.78
12/18/2018		5.97	
12/19/2018	5.76		6.07
12/20/2018			
3/19/2019	5.72		
3/20/2019		5.84	5.93
8/27/2019			
8/28/2019	5.52	5.8	5.8
8/29/2019			
10/15/2019			
10/16/2019		5.85	5.81
10/17/2019	5.61		
3/3/2020			
3/5/2020	5.39	5.89	5.53
8/18/2020			
8/19/2020	5.53	5.78	5.66
9/15/2020			
9/16/2020	5.58	5.81	5.84
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021	5.86	5.88	5.87
3/4/2021			

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-33S	BRGWC-35S	BRGWC-36S	BRGWC-17S
8/31/2016	7.5	0.81 (J)	2.7	0.38 (J)					
9/1/2016					0.6 (J)				
9/7/2016						260	260	300	97
9/8/2016									
11/15/2016		<1 (J)			0.68 (J)				
11/16/2016	6.6		3.4	<1 (J)					
11/17/2016						235 (D)	285 (D)		120 (D)
11/18/2016								245 (D)	
11/21/2016									
2/20/2017		1 (B-01)	3.9 (B-01)		0.98 (J)				
2/21/2017	6.1			1.5					
2/22/2017						210	270		120
2/23/2017								330	
4/17/2017									
5/15/2017									
6/12/2017	5	0.94 (J)	3.7		0.54 (J)				
6/13/2017				0.67 (J)					
6/14/2017						200			
6/15/2017							280	310	130
9/26/2017	5.4	0.92 (J)	4.1	0.62 (J)	0.53 (J)				
9/27/2017						200			
9/28/2017							240	290	120
2/13/2018	4.7 (J)	<1	6.6	<1	<1				
2/15/2018						197	266	292	109
6/26/2018	6.2	0.91 (J)	3.5	0.69 (J)	0.54 (J)				
6/27/2018						200	278		118
6/28/2018								284	
12/18/2018	5.9	0.68 (J)	4.3	0.72 (J)	0.39 (J)	222			
12/19/2018							287	319	125
12/20/2018									
3/19/2019	6 (D)	0.74 (J)	3	0.78 (J)	0.68 (J)			307	126
3/20/2019						204	268		
10/15/2019	5.2	0.68 (J)	3.8	0.47 (J)	0.48 (J)				
10/16/2019						226	277		
12/3/2019								256	180
3/3/2020	7.1	0.71 (J)	2.8	0.93 (J)	2.5				95.4
3/5/2020						173	269	262	
9/15/2020	5.9	<1	1.7	<1	<1				
9/16/2020						154	270	256	151
9/17/2020									
3/1/2021	4.7				0.74 (J)				
3/2/2021		<1	2.2	<1					
3/3/2021						133		252	
3/4/2021							251		122

# Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-38S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	440		
9/8/2016		420	
11/15/2016			
11/16/2016			
11/17/2016		445 (D)	
11/18/2016			
11/21/2016	490 (D)		
2/20/2017			
2/21/2017			
2/22/2017		410	
2/23/2017	470		0.55 (J)
4/17/2017			0.44 (J)
5/15/2017			0.45 (J)
6/12/2017			
6/13/2017			
6/14/2017		410	
6/15/2017	490		0.46 (J)
9/26/2017			
9/27/2017		360	
9/28/2017	470		0.49 (J)
2/13/2018			
2/15/2018	432	335	1.9 (o)
6/26/2018			
6/27/2018		296	
6/28/2018	453		0.24 (J)
12/18/2018		345	
12/19/2018			0.4 (J)
12/20/2018	463		
3/19/2019			
3/20/2019	405	329	<1 (X)
10/15/2019			
10/16/2019	432	325	0.29 (J)
12/3/2019			
3/3/2020			
3/5/2020	370	287	<1
9/15/2020			
9/16/2020		283	<1
9/17/2020	356		
3/1/2021			
3/2/2021			
3/3/2021		277	<1
3/4/2021	325		



# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-6S (bg)	BRGWC-35S	BRGWC-33S	BRGWC-17S	BRGWC-38S
8/31/2016	151	154	138	88					
9/1/2016					299				
9/7/2016						486	382	331	750
9/8/2016									
11/15/2016		123			41				
11/16/2016	69		77	41					
11/17/2016						453	382	308	
11/18/2016									
11/21/2016									795
2/20/2017		158	170		133				
2/21/2017	68			<10					
2/22/2017						541	387	341	
2/23/2017									733
4/17/2017									
5/15/2017									
6/12/2017	161	142	132		61				
6/13/2017				53					
6/14/2017							316		
6/15/2017						548		333	812
9/26/2017	167	138	108	45	29				
9/27/2017							303		
9/28/2017						487		310	690
2/13/2018	165	150	141	63	61				
2/15/2018						500	332	292	722
6/26/2018	188	154	133	71	71				
6/27/2018						347 (X)	538 (X)	353 (X)	
6/28/2018									704
12/18/2018	145 (X)	147	138 (X)	78 (X)	70 (X)		358		
12/19/2018						489		317	
12/20/2018									642
3/19/2019	146.5 (D)	146	130	68	72			303	
3/20/2019						501	338		615
10/15/2019	140	144	175	66	63				
10/16/2019						481	281		630
12/3/2019								378	
3/3/2020	155	130	<10	41	54			263	
3/5/2020						535	292		608
9/15/2020	116	116	100	69	79				
9/16/2020						474	88	316	
9/17/2020									587
3/1/2021	98				39				
3/2/2021		96	80	43					
3/3/2021							212		
3/4/2021						480		316	540

# Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 4/12/2021 9:52 AM View: Pond E - Appendix III

Plant Branch Client: Southern Company Data: Plant Branch AP

	BRGWC-36S	BRGWC-34S	BRGWC-37S
8/31/2016			
9/1/2016			
9/7/2016	528		
9/8/2016		663	
11/15/2016			
11/16/2016			
11/17/2016		651	
11/18/2016	524		
11/21/2016			
2/20/2017			
2/21/2017			
2/22/2017		706	
2/23/2017	517		45
4/17/2017			53
5/15/2017			48
6/12/2017			
6/13/2017			
6/14/2017		643	
6/15/2017	566		63
9/26/2017			
9/27/2017		579	
9/28/2017	475		39
2/13/2018			
2/15/2018	513	612	54
6/26/2018			
6/27/2018		359 (X)	
6/28/2018	499		59 (X)
12/18/2018		535	
12/19/2018	521		68
12/20/2018			
3/19/2019	498		
3/20/2019		517	68 (X)
10/15/2019			
10/16/2019		473	49
12/3/2019	498		
3/3/2020			
3/5/2020	457	489	39
9/15/2020			
9/16/2020	463	392	31
9/17/2020			
3/1/2021			
3/2/2021			
3/3/2021	442	422	33
3/4/2021			

FIGURE E.

# Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWC-35S	0.2086	60	43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-34S	-5.275	-46	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-38S	-1.939	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-34S	-0.228	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-36S	1.207	62	43	Yes	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-2I (bg)	-0.1304	-67	-53	Yes	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-38S	-0.1877	-67	-53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-34S	-35.67	-67	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-38S	-32.33	-53	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-34S	-61.79	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-36S	-17.42	-53	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-38S	-52.37	-64	-43	Yes	13	0	n/a	n/a	0.01	NP

# Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-21 (bg)	0.001014	9	43	No	13	15.38	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	10	43	No	13	92.31	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	2	43	No	13	69.23	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-5	-43	No	13	53.85	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	10	43	No	13	69.23	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-33S	0.002329	3	43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-34S	0	1	43	No	13	0	n/a	n/a	0.01	NP
<b>Boron (mg/L)</b>	<b>BRGWC-35S</b>	<b>0.2086</b>	<b>60</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Boron (mg/L)	BRGWC-36S	0.03939	37	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-38S	-0.07857	-32	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-21 (bg)	0.9466	37	43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.02603	-12	-43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	-0.153	-9	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	-0.4992	-13	-43	No	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1738	42	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-17S	1.679	35	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-33S	-1.692	-28	-43	No	13	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-34S</b>	<b>-5.275</b>	<b>-46</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Calcium (mg/L)	BRGWC-35S	1.909	25	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-36S	-0.6968	-17	-43	No	13	0	n/a	n/a	0.01	NP
<b>Calcium (mg/L)</b>	<b>BRGWC-38S</b>	<b>-1.939</b>	<b>-44</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWA-21 (bg)	-0.03735	-18	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0	-9	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.1525	-31	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	-0.03667	-12	-43	No	13	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0	0	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-34S</b>	<b>-0.228</b>	<b>-44</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-35S	0.04876	14	43	No	13	0	n/a	n/a	0.01	NP
<b>Chloride, Total (mg/L)</b>	<b>BRGWC-36S</b>	<b>1.207</b>	<b>62</b>	<b>43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Chloride, Total (mg/L)	BRGWC-38S	0.1854	10	43	No	13	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-21 (bg)	-0.002473	-20	-53	No	15	40	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-2S (bg)	0	28	53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5I (bg)	0	39	53	No	15	66.67	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-5S (bg)	-0.007584	-25	-53	No	15	33.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWA-6S (bg)	0.008561	34	53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	BRGWC-38S	0.01986	18	53	No	15	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWA-21 (bg)</b>	<b>-0.1304</b>	<b>-67</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
pH, Field (S.U)	BRGWA-2S (bg)	-0.03108	-36	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.02929	-23	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.05707	-42	-53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-6S (bg)	-0.01346	-6	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-33S	-0.01054	-27	-58	No	16	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-34S	0.003222	6	53	No	15	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-36S	0.004501	3	48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-37S	0.02373	6	38	No	12	0	n/a	n/a	0.01	NP
<b>pH, Field (S.U)</b>	<b>BRGWC-38S</b>	<b>-0.1877</b>	<b>-67</b>	<b>-53</b>	<b>Yes</b>	<b>15</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWA-21 (bg)	-0.2264	-22	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.02052	8	43	No	13	30.77	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	-0.2884	-18	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.08299	-31	-43	No	13	30.77	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.01212	-7	-43	No	13	15.38	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-17S	4.067	21	43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-33S	-16.75	-41	-43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-34S</b>	<b>-35.67</b>	<b>-67</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Sulfate as SO4 (mg/L)	BRGWC-35S	-1.125	-7	-43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-36S	-11.18	-29	-43	No	13	0	n/a	n/a	0.01	NP
<b>Sulfate as SO4 (mg/L)</b>	<b>BRGWC-38S</b>	<b>-32.33</b>	<b>-53</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

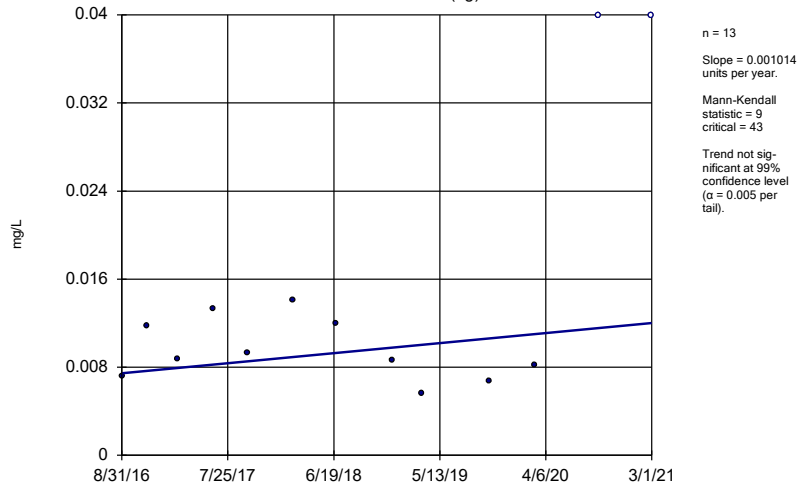
# Trend Tests - Prediction Limit Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:56 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	-4.318	-10	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	1.233	5	43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-8.777	-17	-43	No	13	7.692	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-6.157	-35	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	-4.662	-9	-43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-17S	-3.532	-9	-43	No	13	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-34S</b>	<b>-61.79</b>	<b>-56</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
Total Dissolved Solids [TDS] (mg/L)	BRGWC-35S	-2.009	-8	-43	No	13	0	n/a	n/a	0.01	NP
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-36S</b>	<b>-17.42</b>	<b>-53</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>
<b>Total Dissolved Solids [TDS] (mg/L)</b>	<b>BRGWC-38S</b>	<b>-52.37</b>	<b>-64</b>	<b>-43</b>	<b>Yes</b>	<b>13</b>	<b>0</b>	<b>n/a</b>	<b>n/a</b>	<b>0.01</b>	<b>NP</b>

### Sen's Slope Estimator

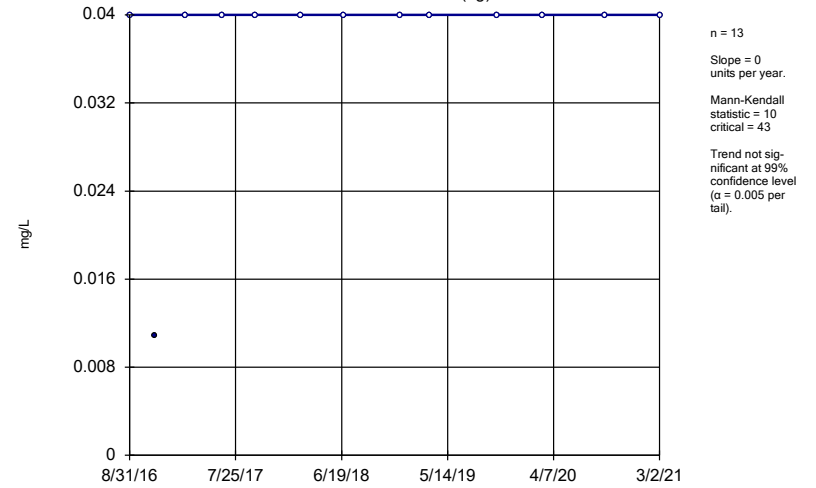
BRGWA-2I (bg)



Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

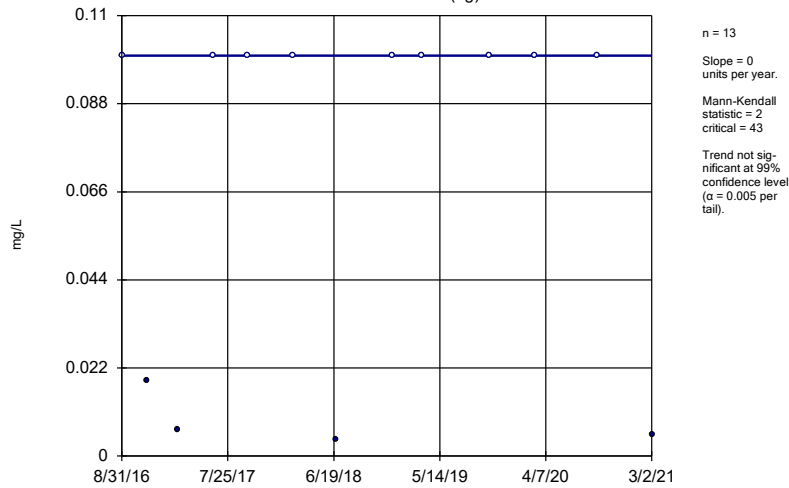
BRGWA-2S (bg)



Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

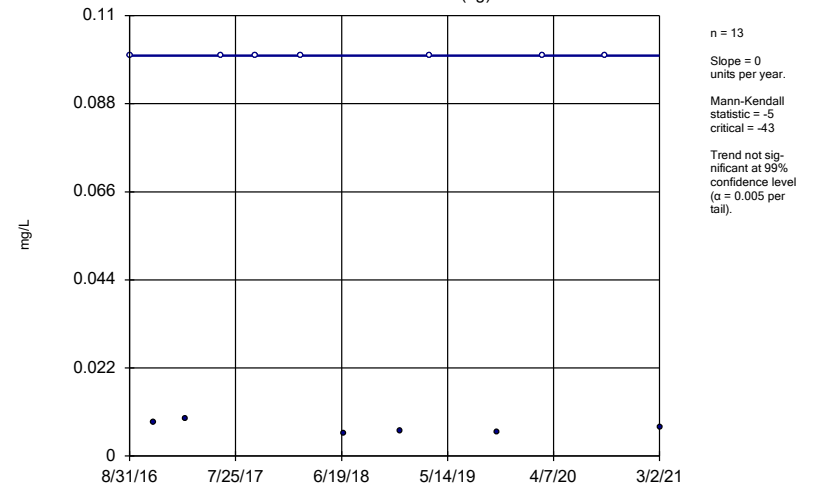
BRGWA-5I (bg)



Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

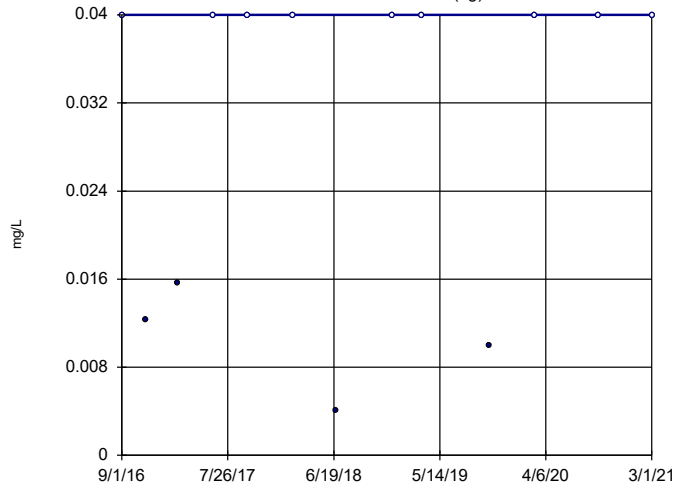
BRGWA-5S (bg)



Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-6S (bg)

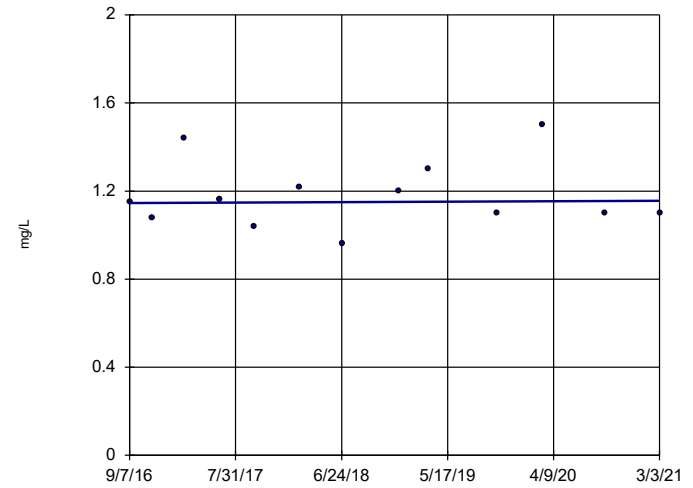


n = 13  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 10  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-33S

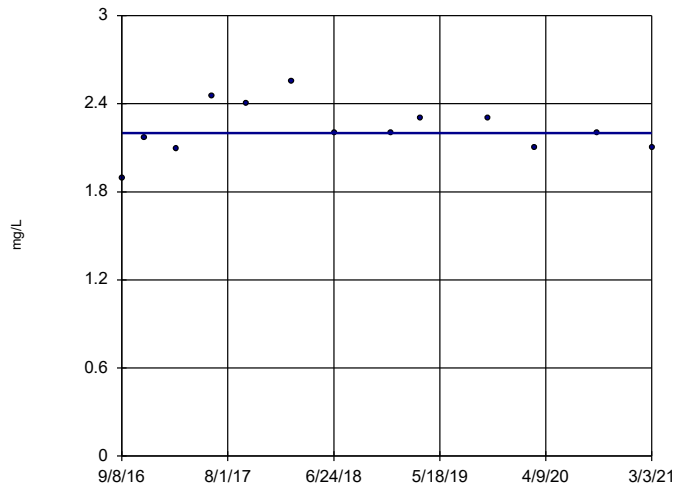


n = 13  
 Slope = 0.002329  
 units per year.  
 Mann-Kendall  
 statistic = 3  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-34S

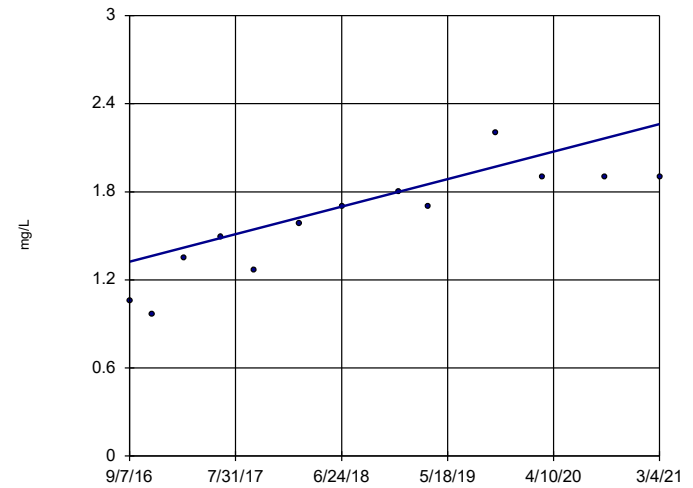


n = 13  
 Slope = 0  
 units per year.  
 Mann-Kendall  
 statistic = 1  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-35S

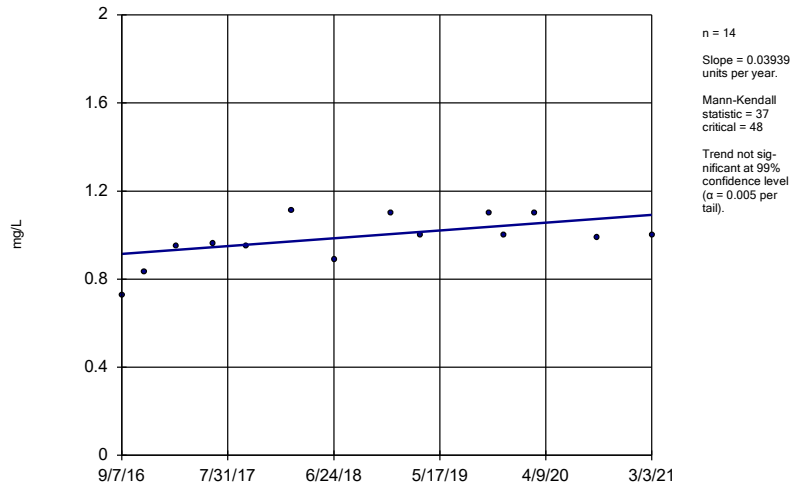


n = 13  
 Slope = 0.2086  
 units per year.  
 Mann-Kendall  
 statistic = 60  
 critical = 43  
 Increasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

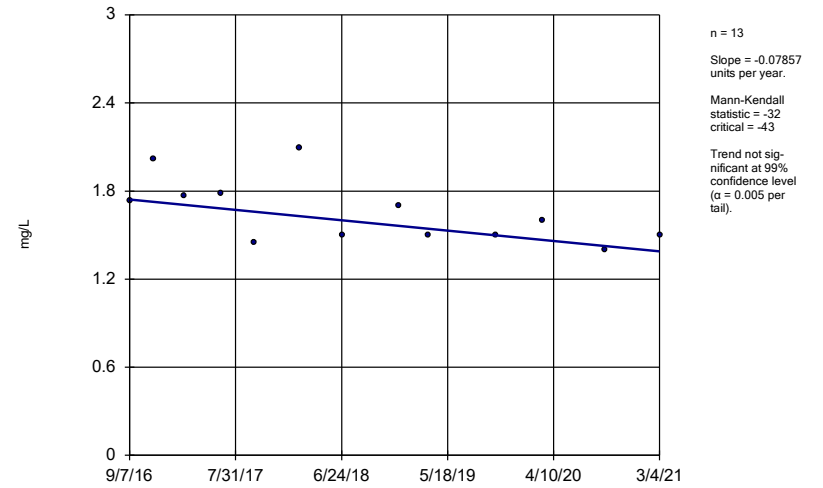


Sen's Slope Estimator  
BRGWC-36S



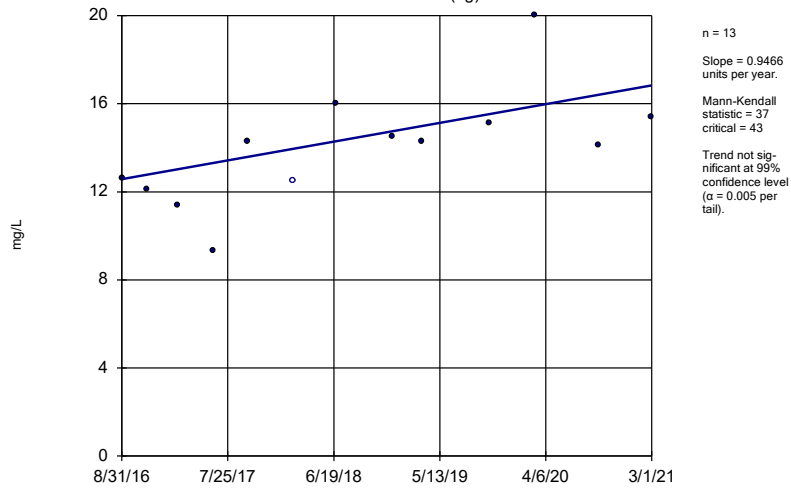
Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



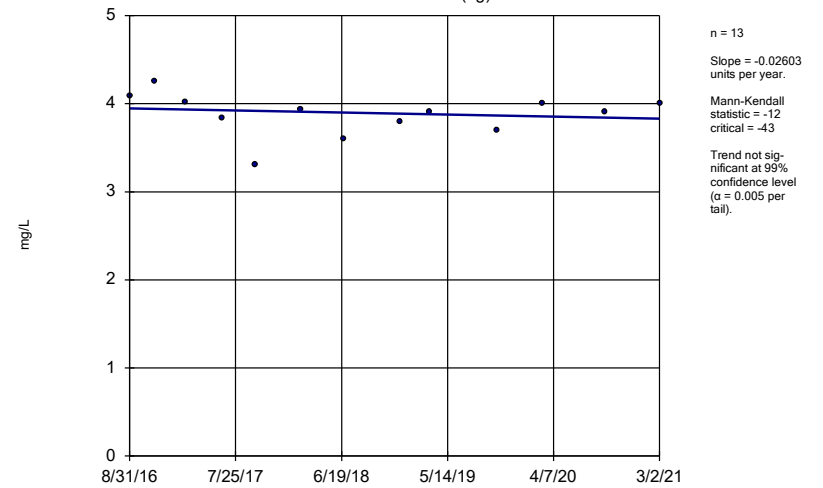
Constituent: Boron Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

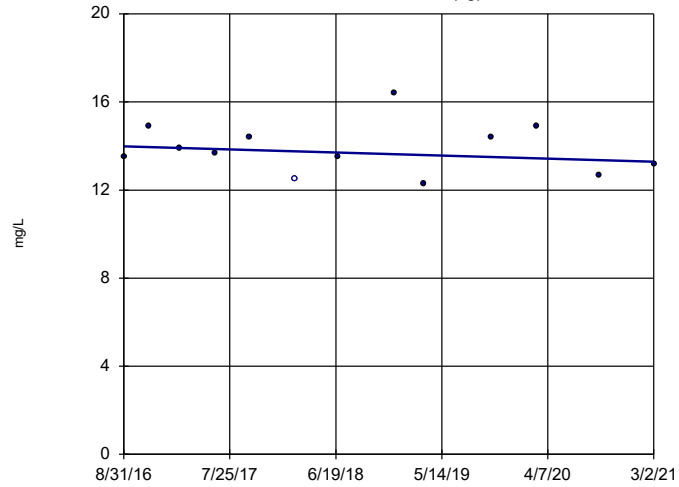
Sen's Slope Estimator  
BRGWA-2S (bg)



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

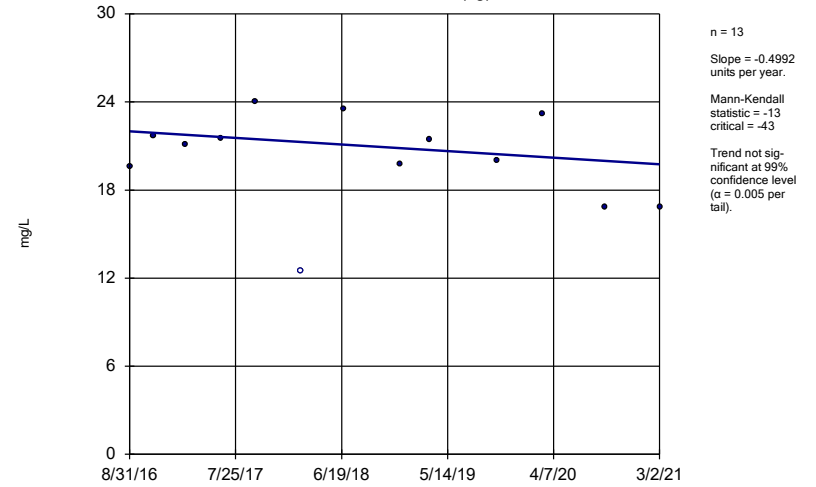
BRGWA-5I (bg)



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

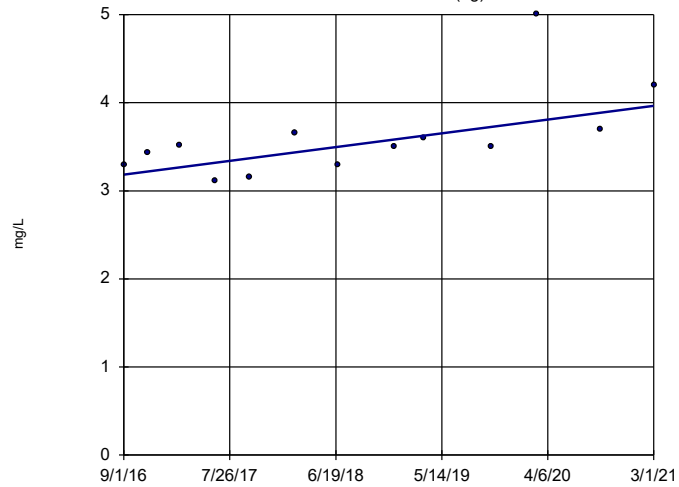
BRGWA-5S (bg)



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

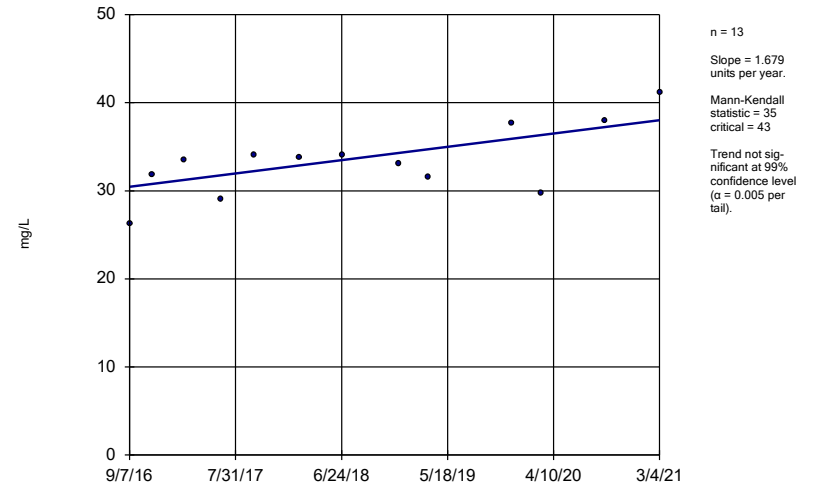
BRGWA-6S (bg)



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

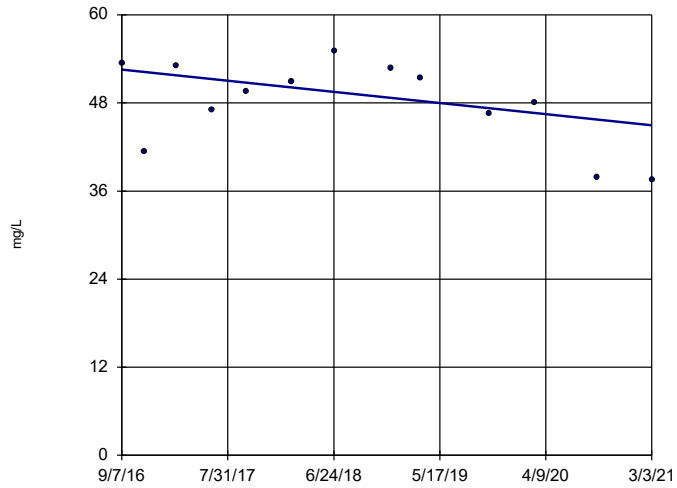
### Sen's Slope Estimator

BRGWC-17S



Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

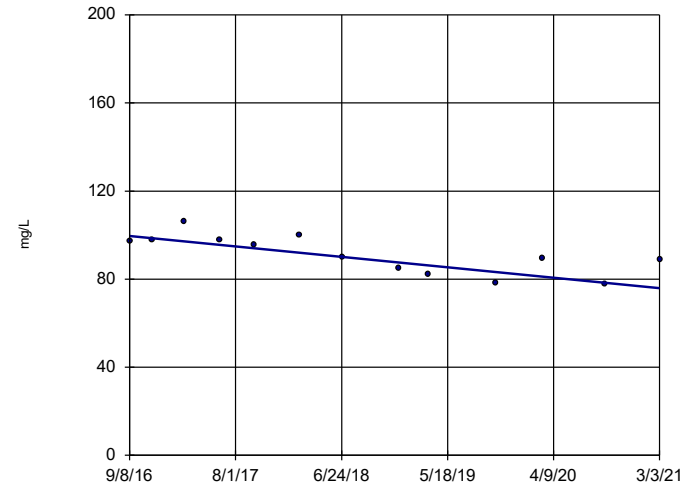
### Sen's Slope Estimator BRGWC-33S



n = 13  
 Slope = -1.692  
 units per year.  
 Mann-Kendall  
 statistic = -28  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

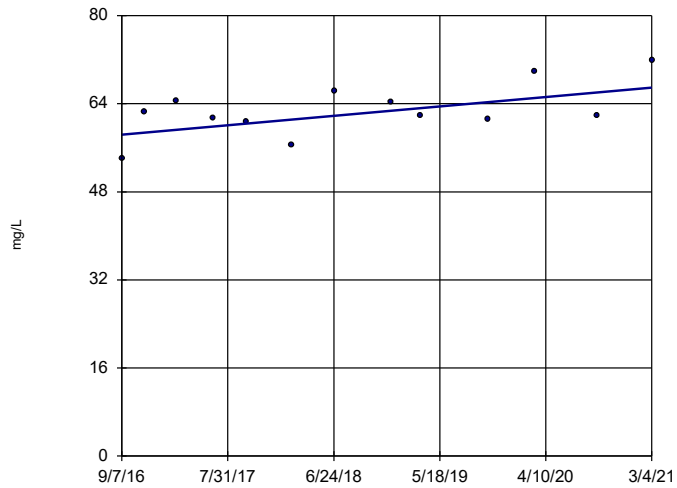
### Sen's Slope Estimator BRGWC-34S



n = 13  
 Slope = -5.275  
 units per year.  
 Mann-Kendall  
 statistic = -46  
 critical = -43  
 Decreasing trend  
 significant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

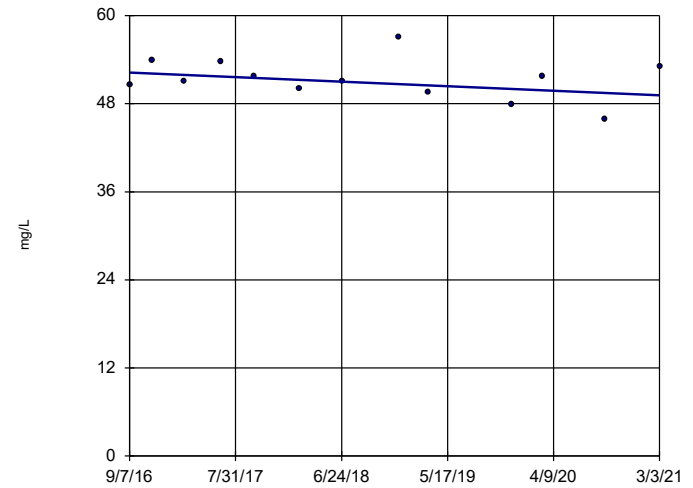
### Sen's Slope Estimator BRGWC-35S



n = 13  
 Slope = 1.909  
 units per year.  
 Mann-Kendall  
 statistic = 25  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

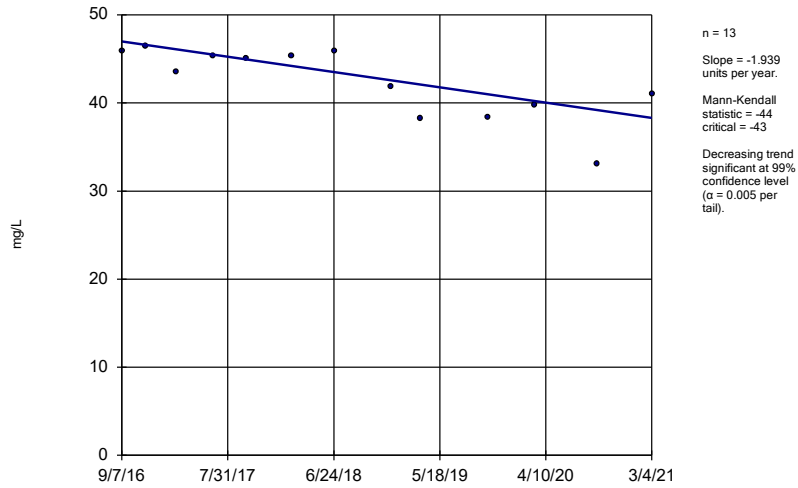
### Sen's Slope Estimator BRGWC-36S



n = 13  
 Slope = -0.6968  
 units per year.  
 Mann-Kendall  
 statistic = -17  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

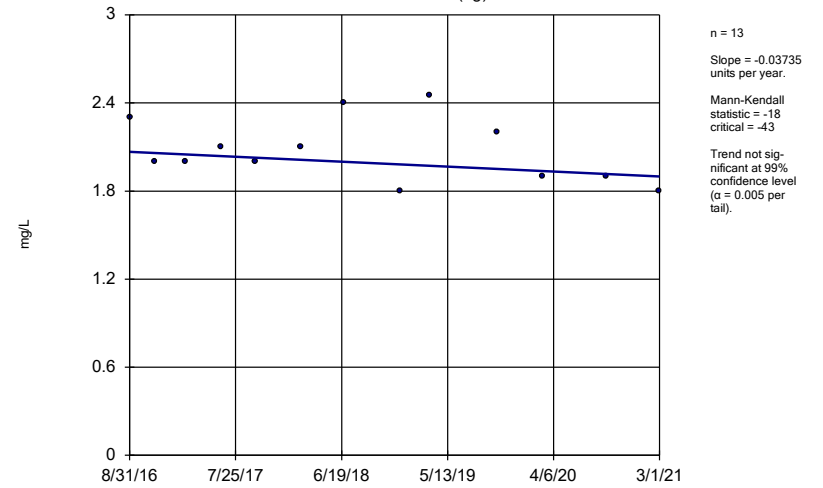
Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



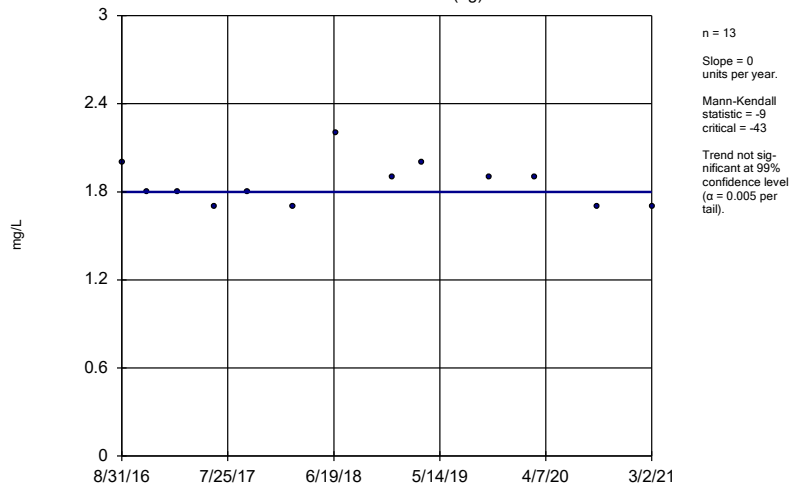
Constituent: Calcium Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



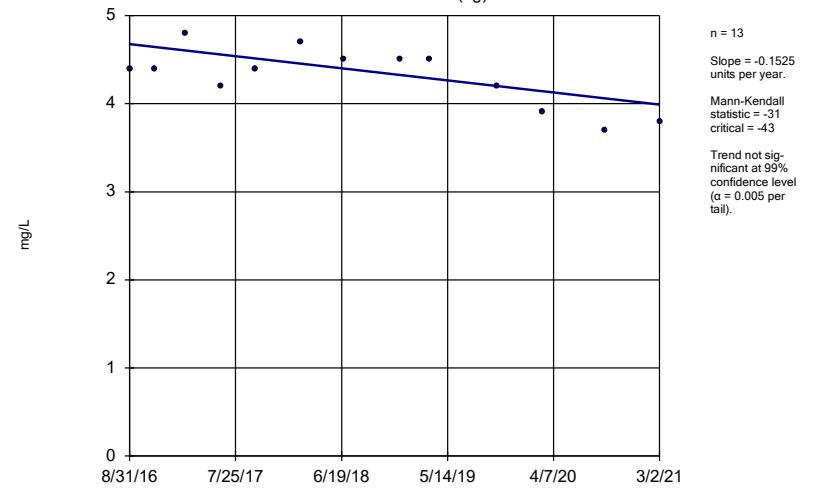
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2S (bg)



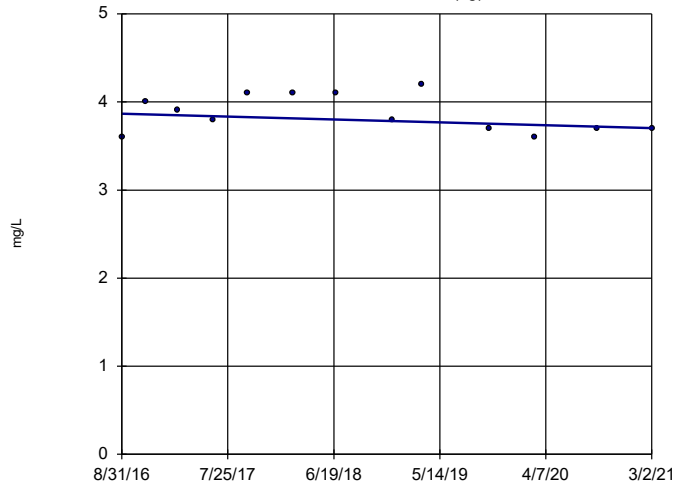
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-5I (bg)



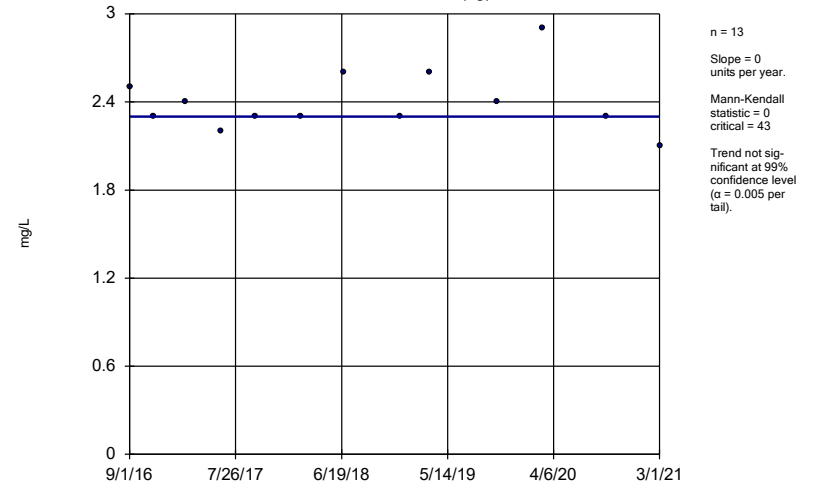
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-5S (bg)



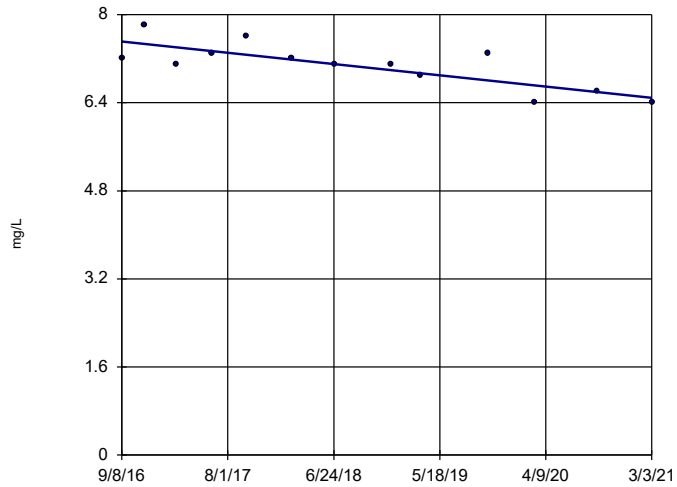
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-6S (bg)



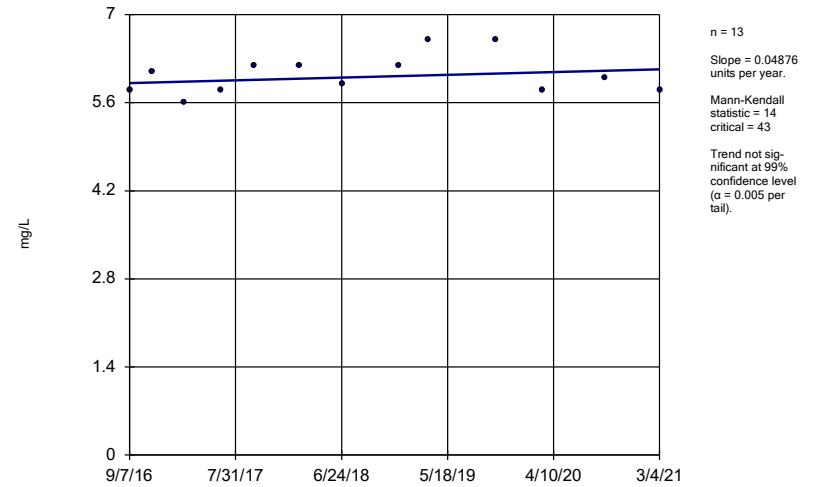
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-34S



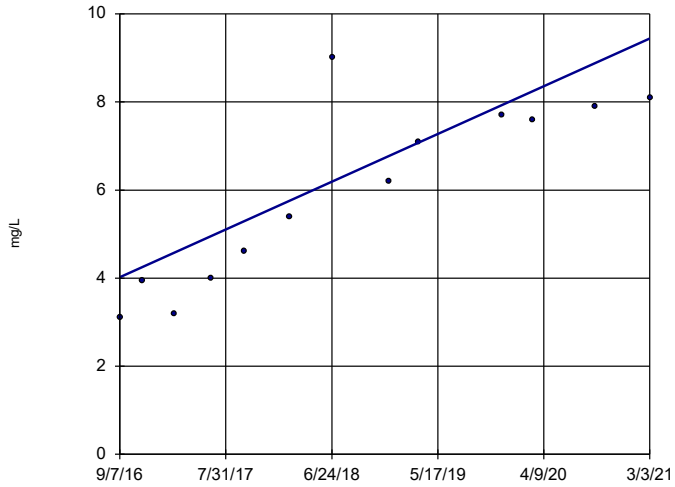
Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-35S



Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

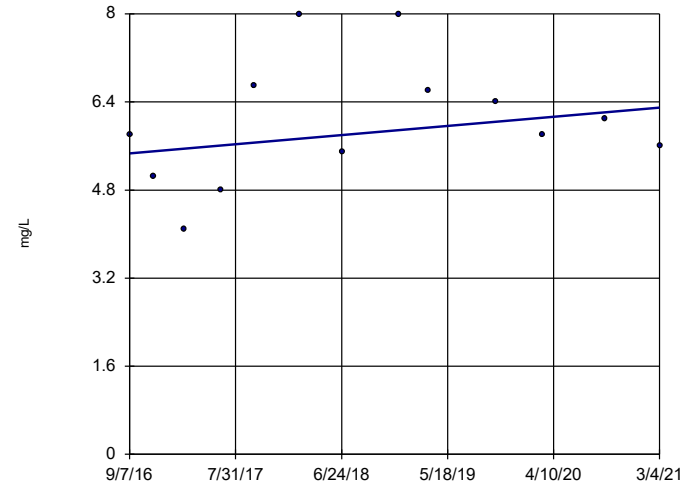
Sen's Slope Estimator  
BRGWC-36S



n = 13  
Slope = 1.207  
units per year.  
Mann-Kendall  
statistic = 62  
critical = 43  
Increasing trend  
significant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

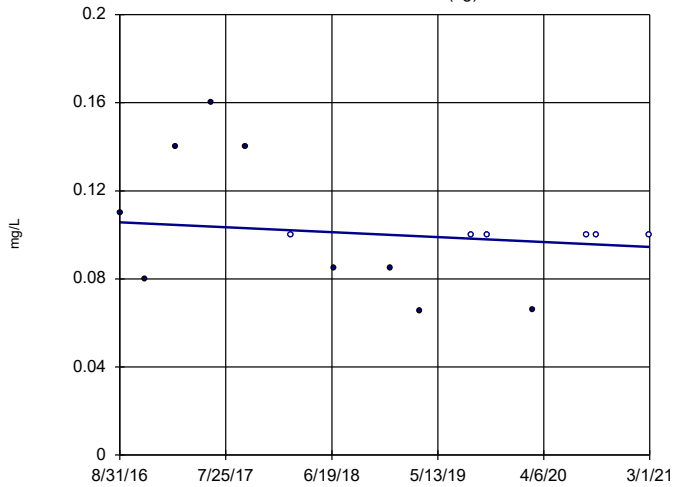
Sen's Slope Estimator  
BRGWC-38S



n = 13  
Slope = 0.1854  
units per year.  
Mann-Kendall  
statistic = 10  
critical = 43  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Chloride, Total Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

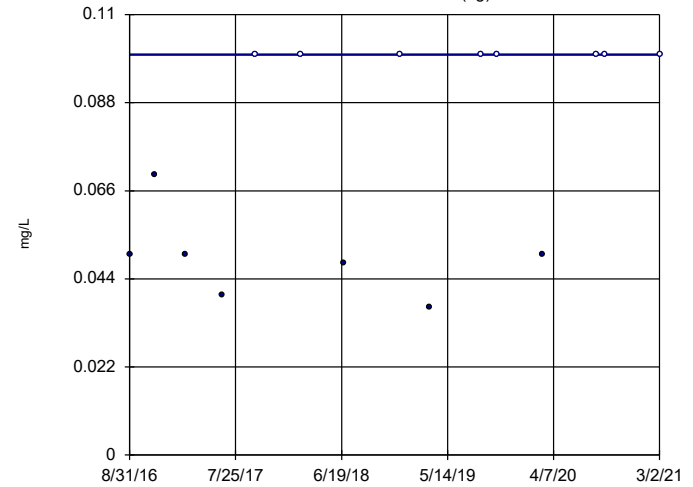
Sen's Slope Estimator  
BRGWA-2I (bg)



n = 15  
Slope = -0.002473  
units per year.  
Mann-Kendall  
statistic = -20  
critical = -53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2S (bg)

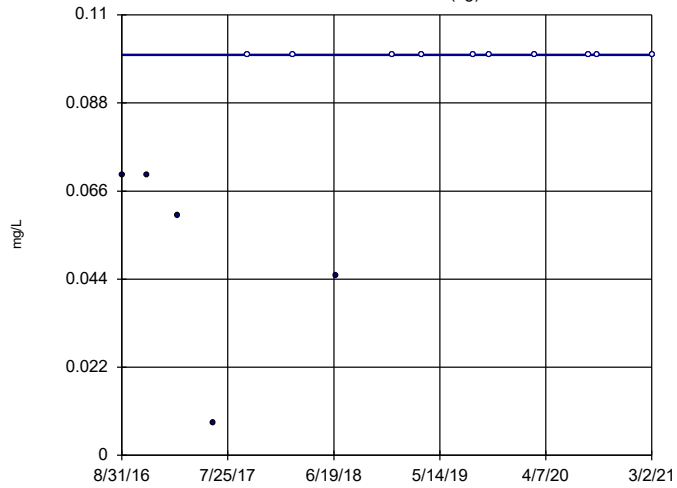


n = 15  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 28  
critical = 53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:53 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5I (bg)

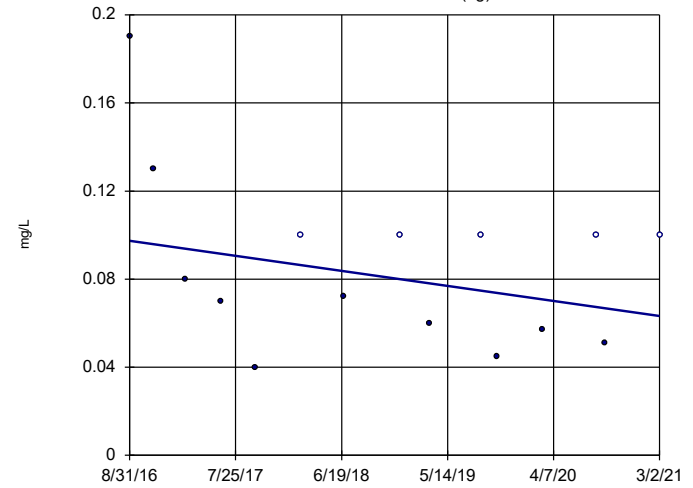


n = 15  
Slope = 0  
units per year.  
Mann-Kendall  
statistic = 39  
critical = 53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5S (bg)

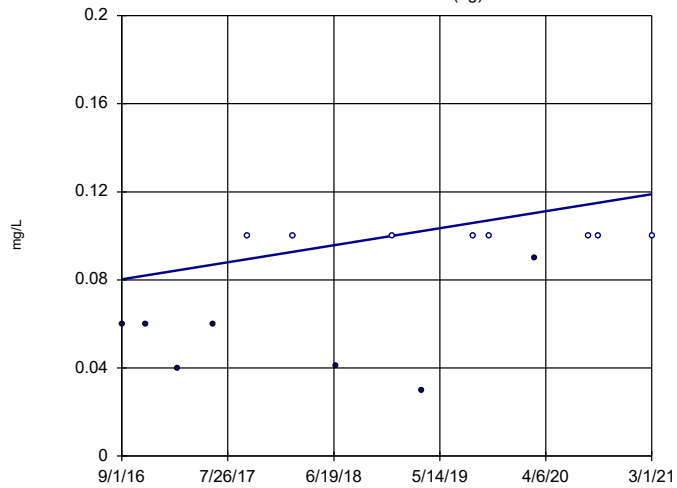


n = 15  
Slope = -0.007584  
units per year.  
Mann-Kendall  
statistic = -.25  
critical = -53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-6S (bg)

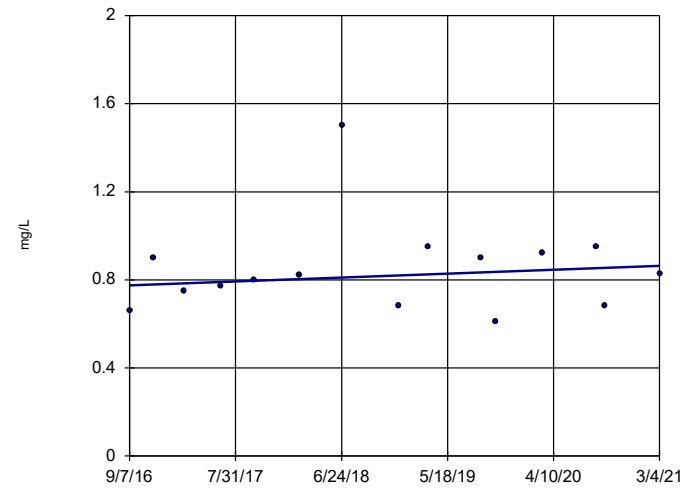


n = 15  
Slope = 0.008561  
units per year.  
Mann-Kendall  
statistic = 34  
critical = 53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-38S

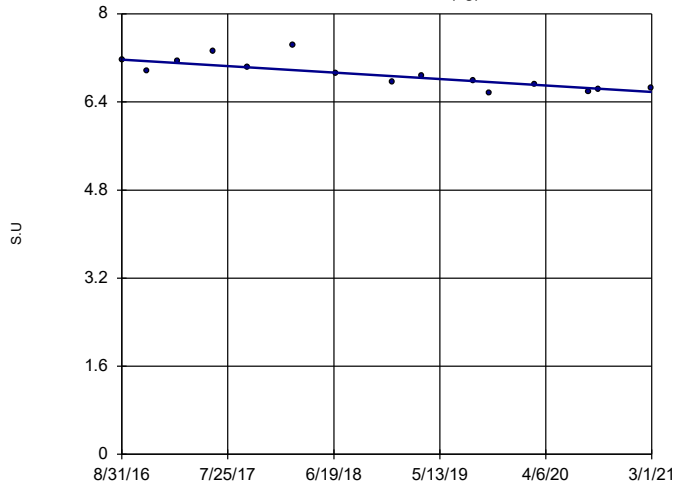


n = 15  
Slope = 0.01986  
units per year.  
Mann-Kendall  
statistic = 18  
critical = 53  
Trend not sig-  
nificant at 99%  
confidence level  
( $\alpha = 0.005$  per  
tail).

Constituent: Fluoride Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-2I (bg)

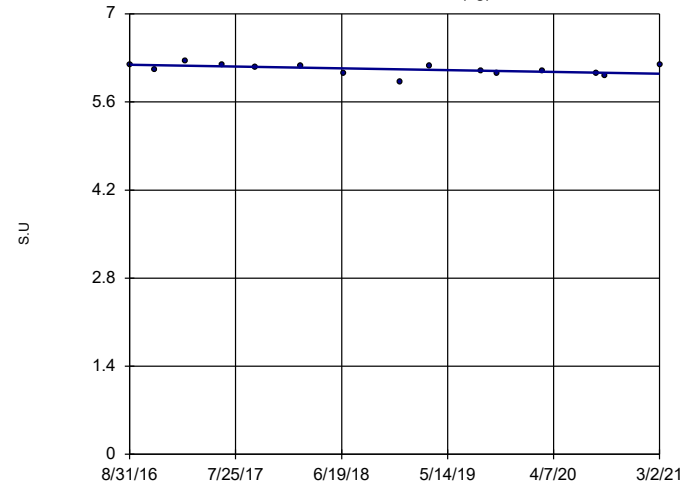


n = 15  
 Slope = -0.1304  
 units per year.  
 Mann-Kendall  
 statistic = -67  
 critical = -53  
 Decreasing trend  
 significant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-2S (bg)

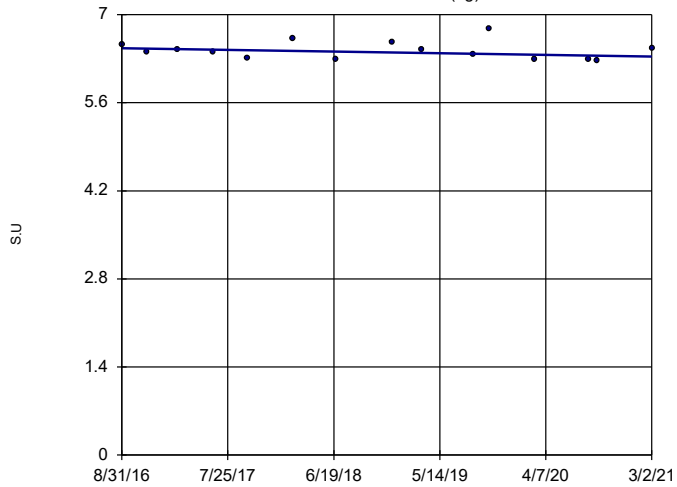


n = 15  
 Slope = -0.03108  
 units per year.  
 Mann-Kendall  
 statistic = -36  
 critical = -53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5I (bg)

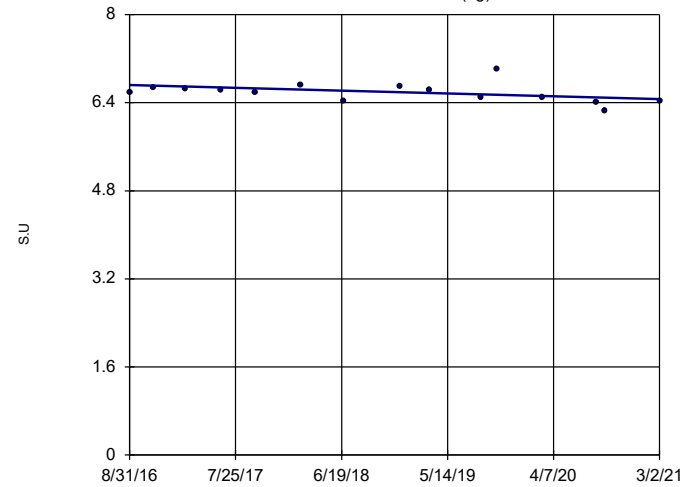


n = 15  
 Slope = -0.02929  
 units per year.  
 Mann-Kendall  
 statistic = -23  
 critical = -53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5S (bg)



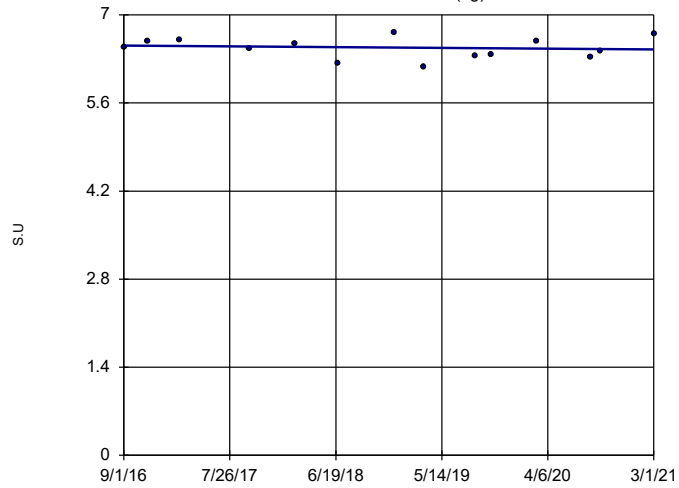
n = 15  
 Slope = -0.05707  
 units per year.  
 Mann-Kendall  
 statistic = -42  
 critical = -53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP



### Sen's Slope Estimator

BRGWA-6S (bg)

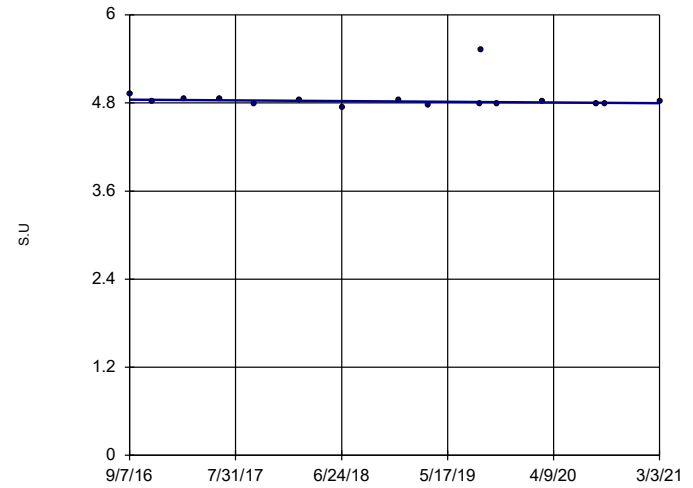


n = 14  
 Slope = -0.01346  
 units per year.  
 Mann-Kendall  
 statistic = -6  
 critical = -48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-33S

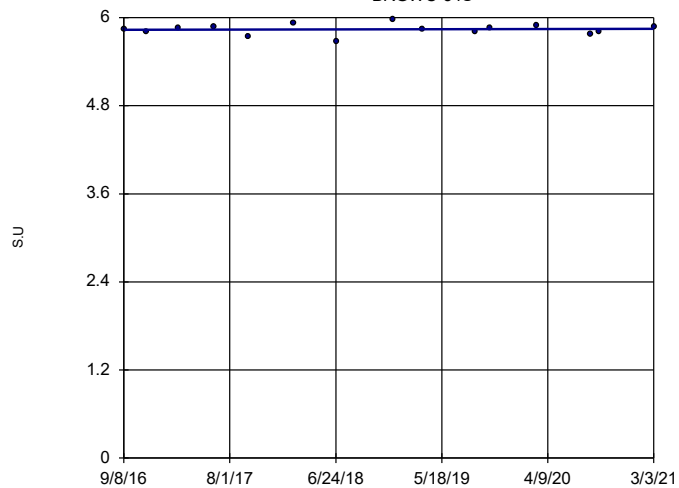


n = 16  
 Slope = -0.01054  
 units per year.  
 Mann-Kendall  
 statistic = -27  
 critical = -58  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWC-34S

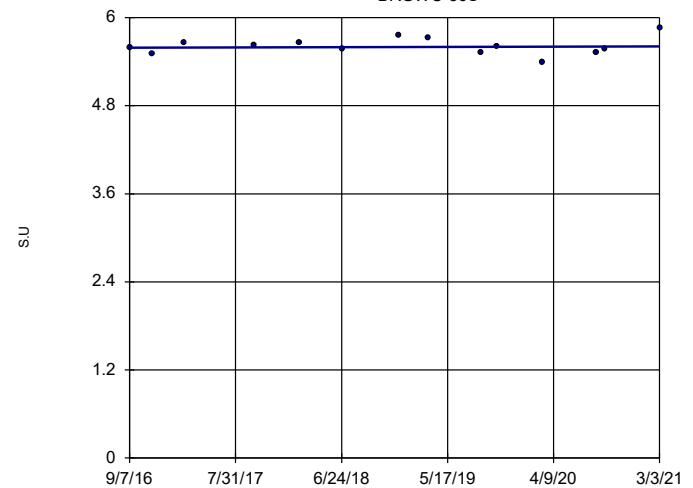


n = 15  
 Slope = 0.003222  
 units per year.  
 Mann-Kendall  
 statistic = 6  
 critical = 53  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

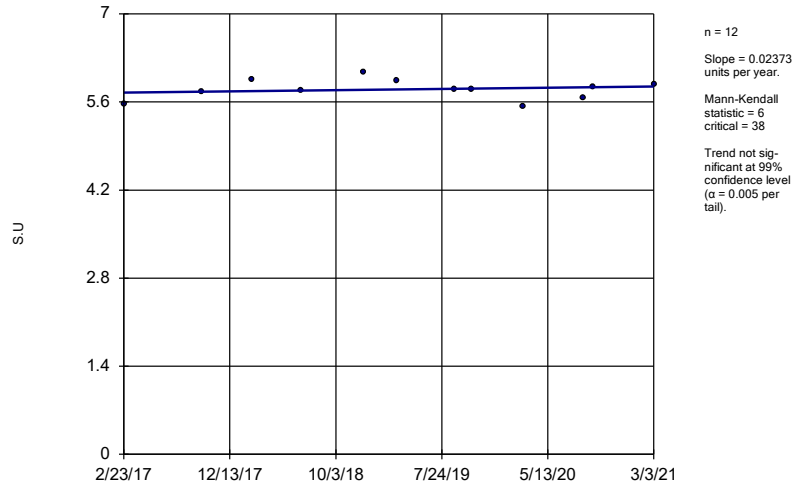
BRGWC-36S



n = 14  
 Slope = 0.004501  
 units per year.  
 Mann-Kendall  
 statistic = 3  
 critical = 48  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 ( $\alpha = 0.005$  per  
 tail).

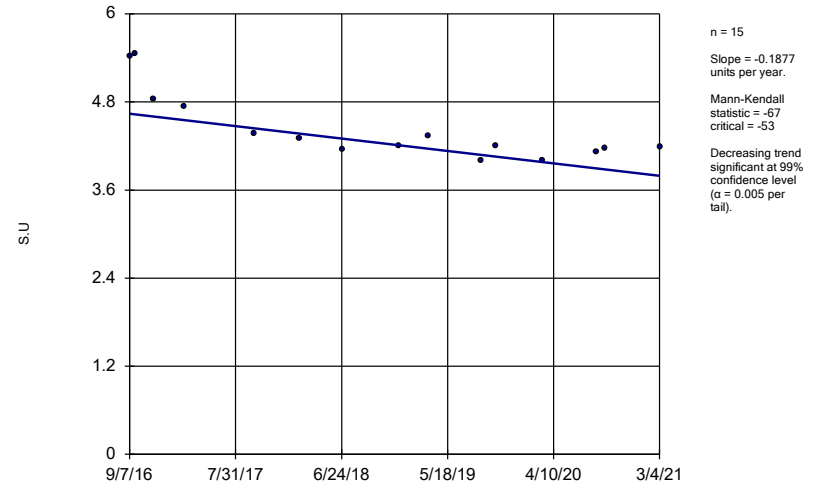
Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-37S



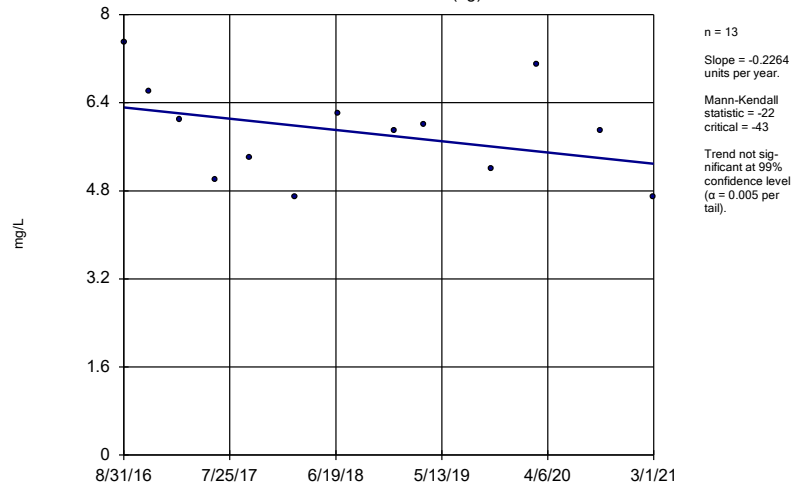
Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



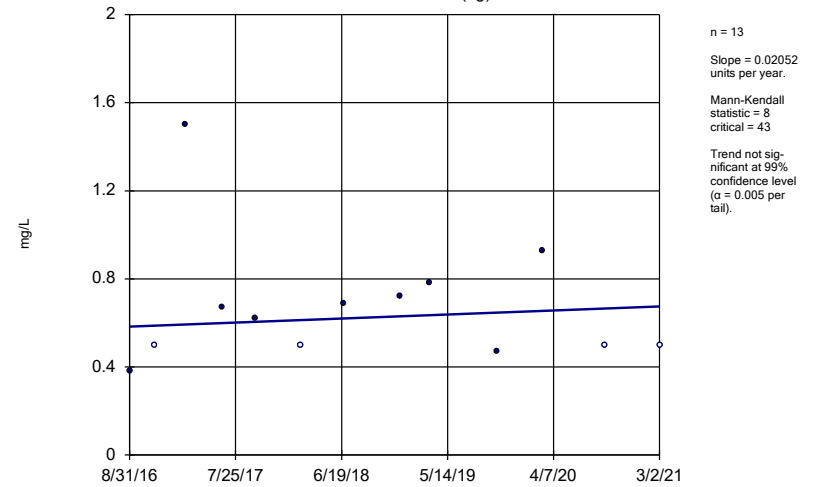
Constituent: pH, Field Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

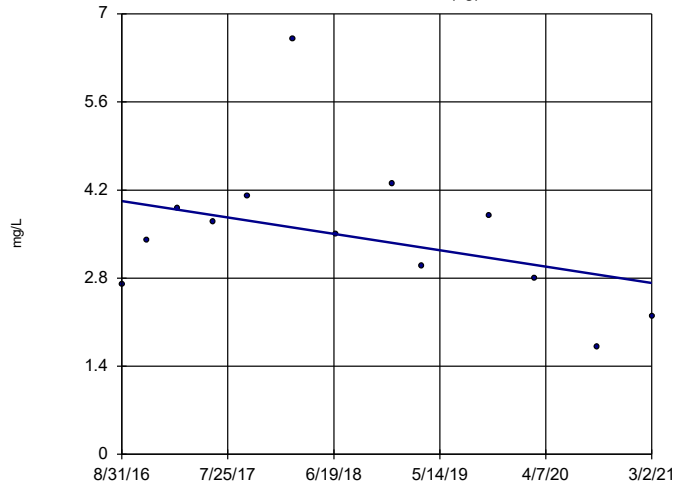
Sen's Slope Estimator  
BRGWA-2S (bg)



Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5I (bg)

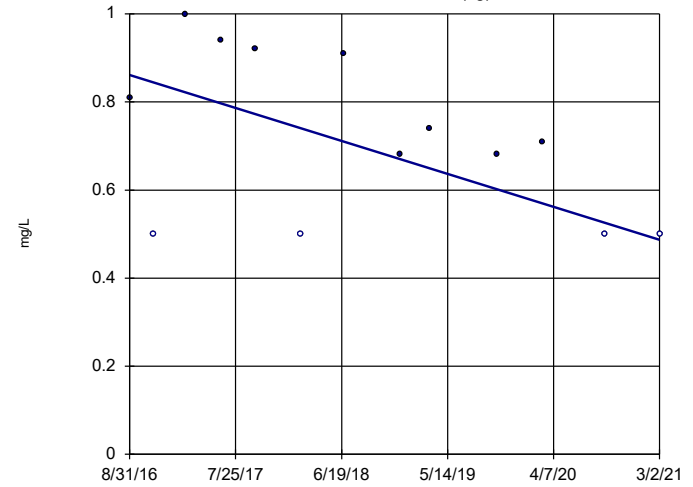


n = 13  
 Slope = -0.2884  
 units per year.  
 Mann-Kendall  
 statistic = -18  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-5S (bg)

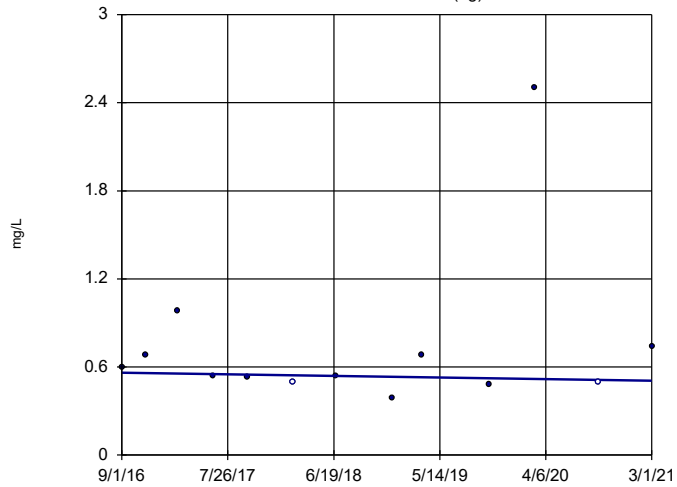


n = 13  
 Slope = -0.08299  
 units per year.  
 Mann-Kendall  
 statistic = -31  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

BRGWA-6S (bg)

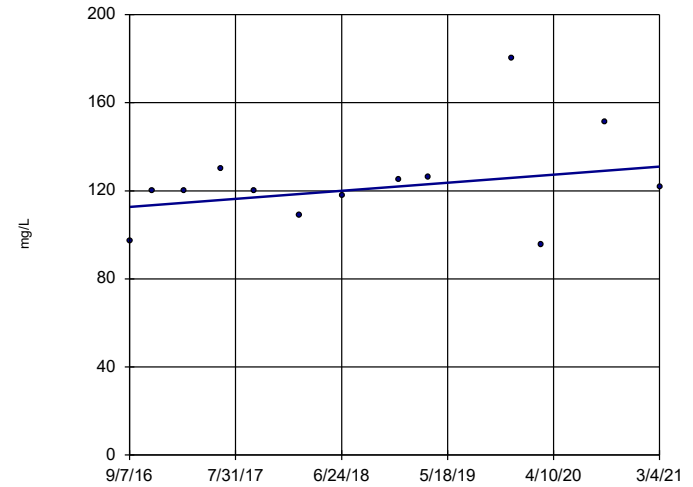


n = 13  
 Slope = -0.01212  
 units per year.  
 Mann-Kendall  
 statistic = -7  
 critical = -43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator

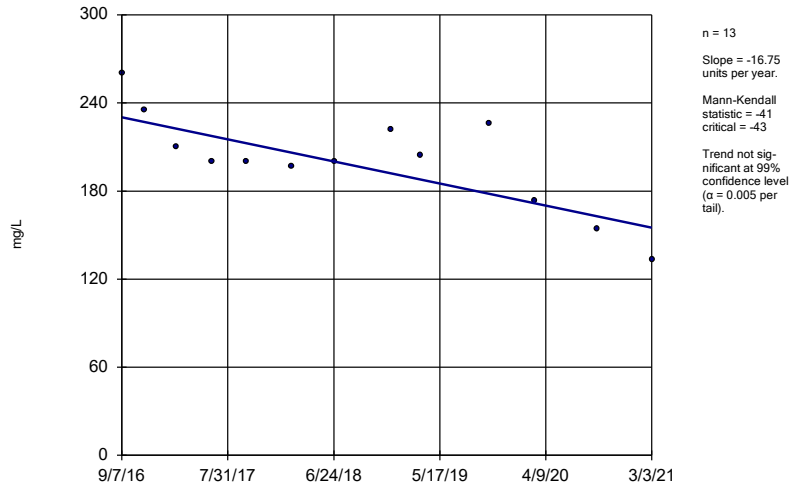
BRGWC-17S



n = 13  
 Slope = 4.067  
 units per year.  
 Mann-Kendall  
 statistic = 21  
 critical = 43  
 Trend not sig-  
 nificant at 99%  
 confidence level  
 (α = 0.005 per  
 tail).

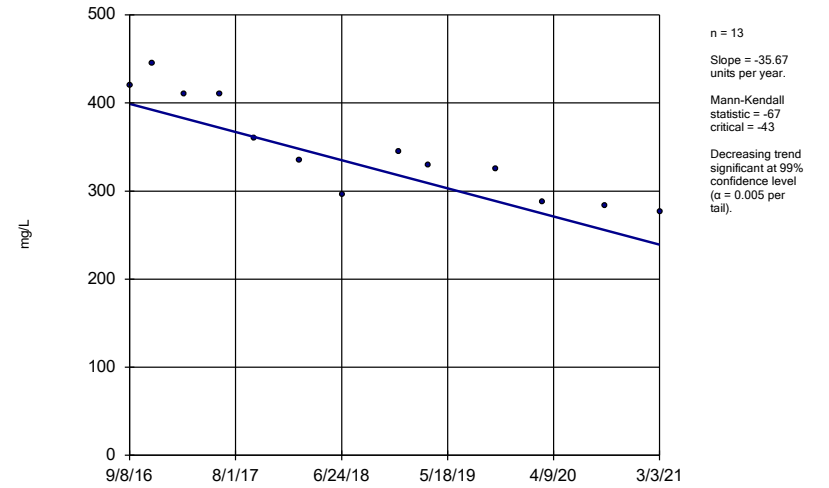
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-33S



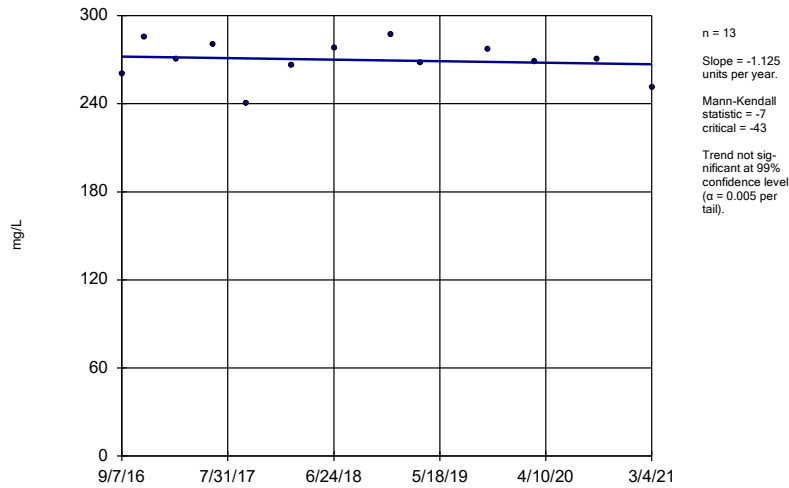
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-34S



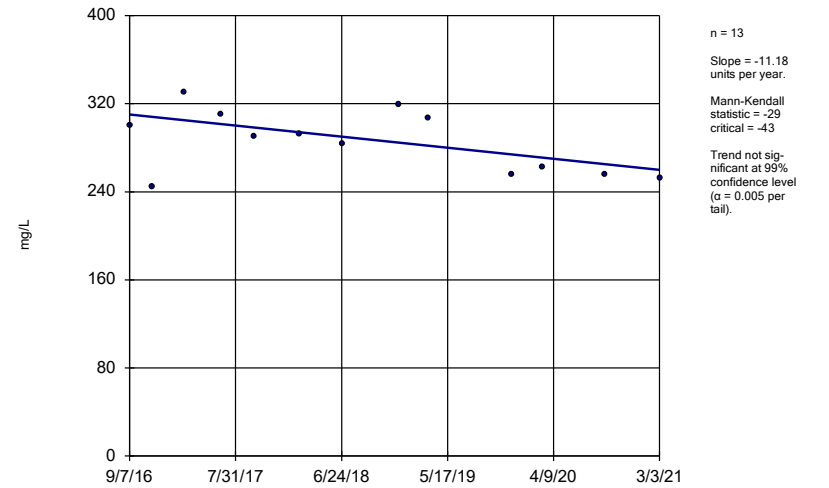
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-35S



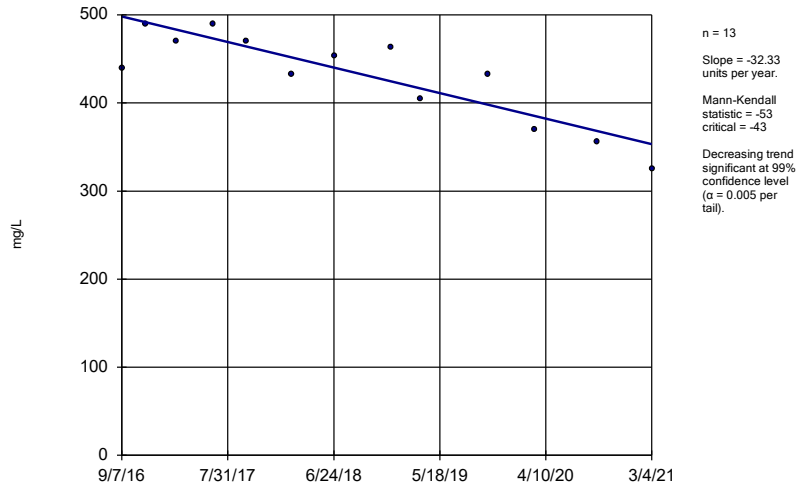
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-36S



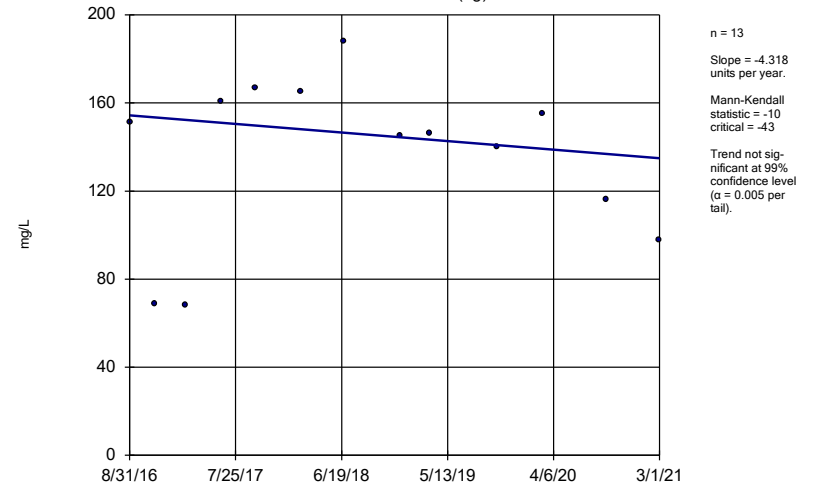
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-38S



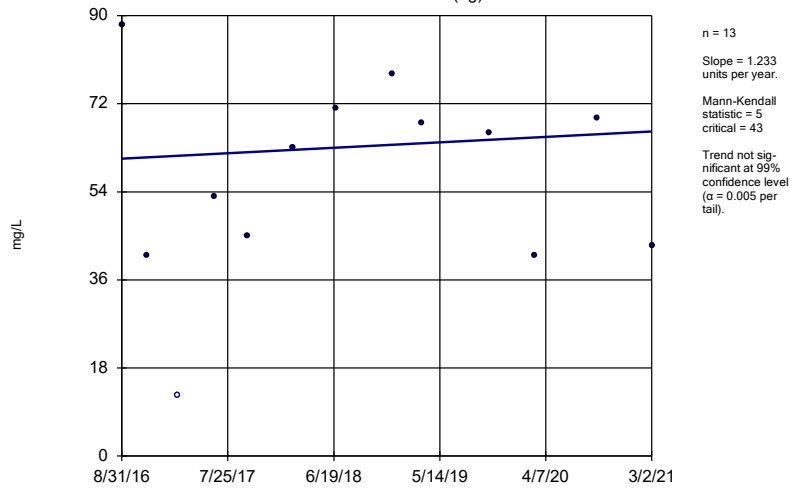
Constituent: Sulfate as SO4 Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2I (bg)



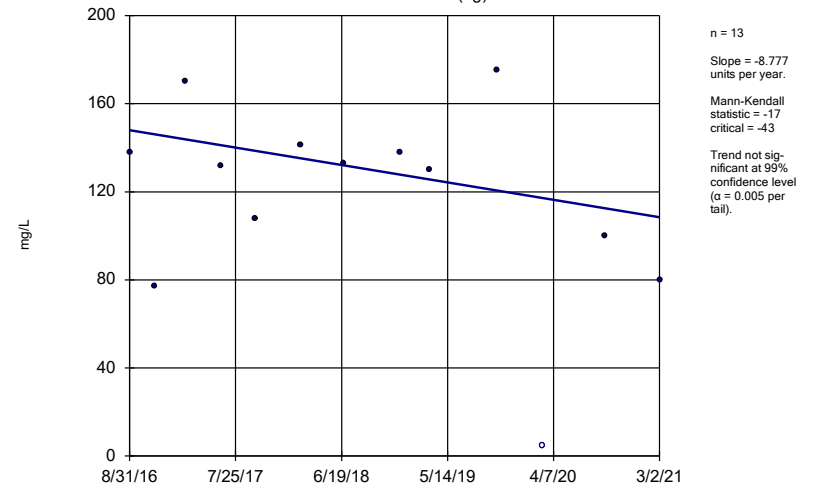
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-2S (bg)



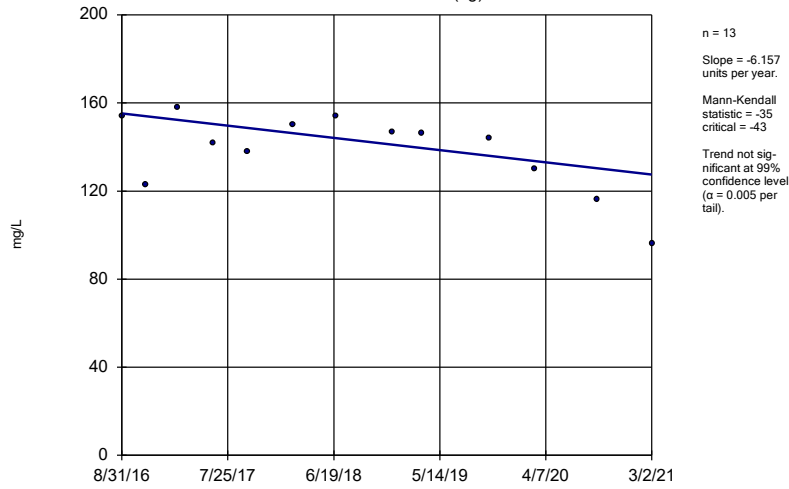
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-5I (bg)



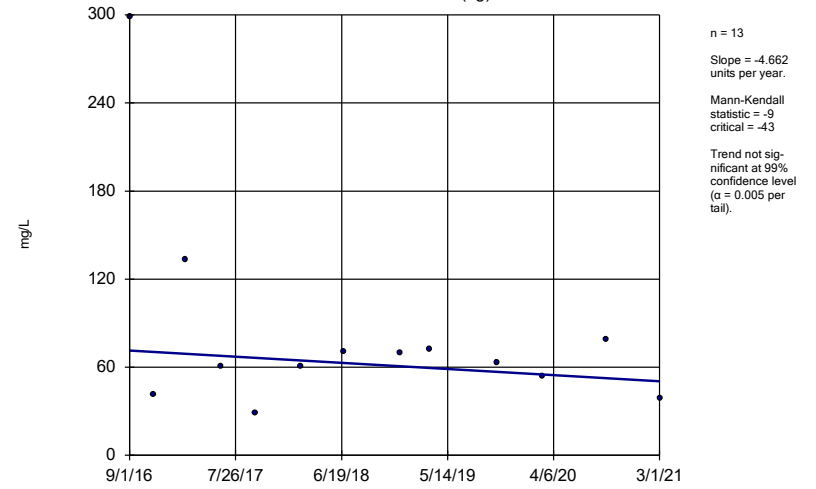
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-5S (bg)



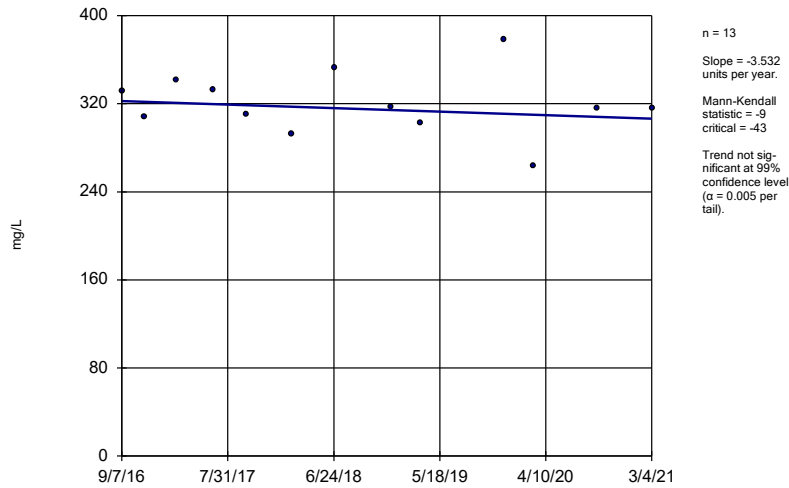
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWA-6S (bg)



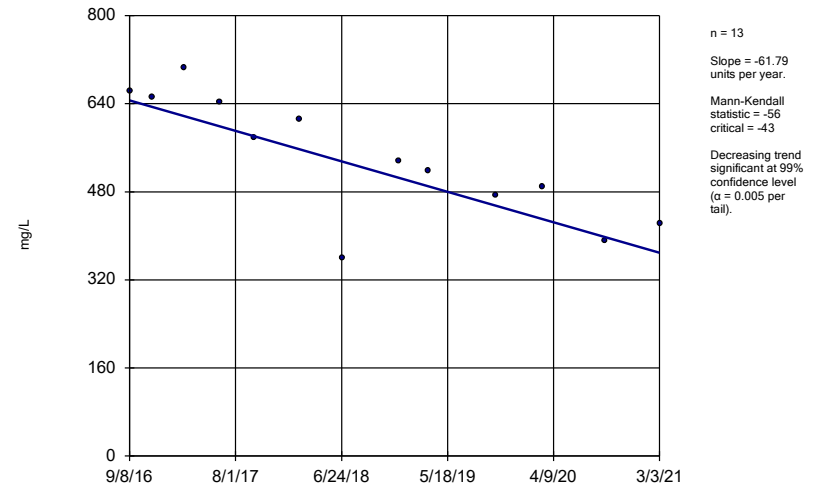
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-17S



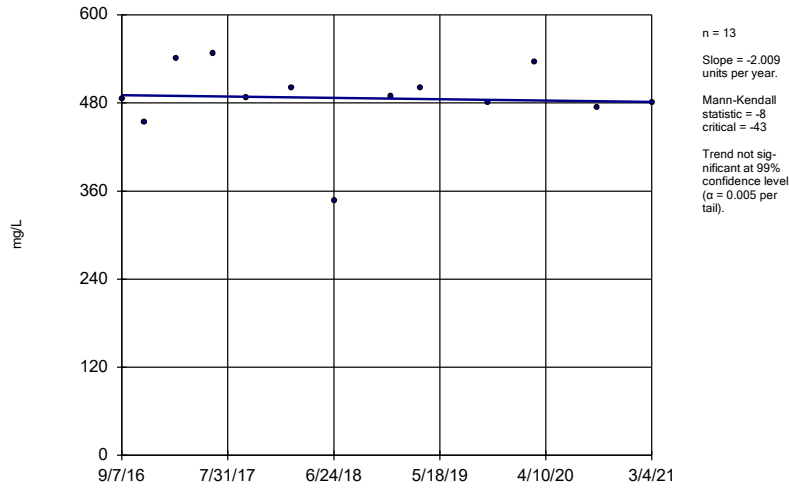
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

Sen's Slope Estimator  
BRGWC-34S



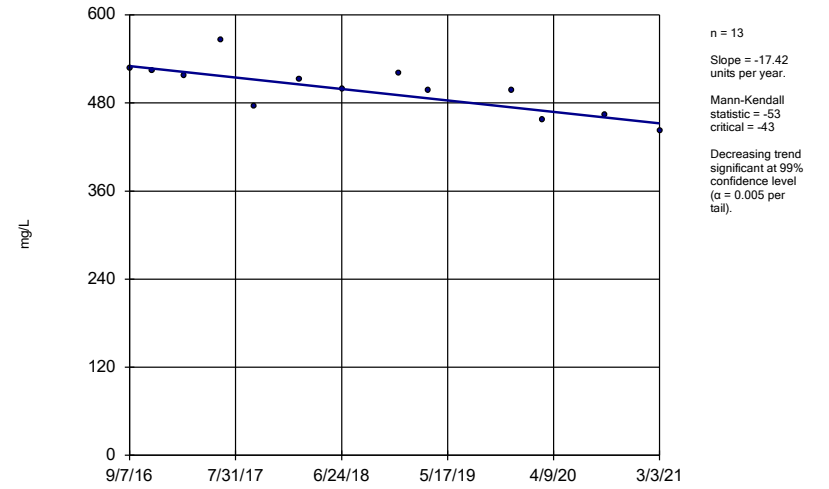
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator BRGWC-35S



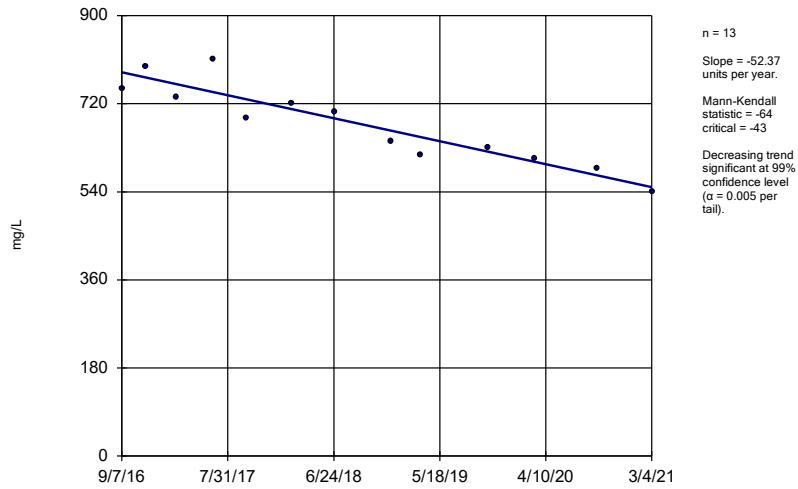
Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator BRGWC-36S



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

### Sen's Slope Estimator BRGWC-38S



Constituent: Total Dissolved Solids [TDS] Analysis Run 4/12/2021 9:54 AM View: Pond E - Trend Tests  
Plant Branch Client: Southern Company Data: Plant Branch AP

FIGURE F.



# Upper Tolerance Limits

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 9:59 AM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.003	n/a	n/a	70	n/a	n/a	90	n/a	n/a	0.02758	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	70	n/a	n/a	75.71	n/a	n/a	0.02758	NP Inter(NDs)
Barium (mg/L)	0.063	n/a	n/a	70	n/a	n/a	0	n/a	n/a	0.02758	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Chromium (mg/L)	0.016	n/a	n/a	70	n/a	n/a	15.71	n/a	n/a	0.02758	NP Inter(normality)
Cobalt (mg/L)	0.005	n/a	n/a	68	n/a	n/a	47.06	n/a	n/a	0.03056	NP Inter(normality)
Combined Radium 226 + 228 (pCi/L)	1.389	n/a	n/a	70	0.6485	0.3731	0	None	No	0.05	Inter
Fluoride (mg/L)	0.19	n/a	n/a	75	n/a	n/a	49.33	n/a	n/a	0.02134	NP Inter(normality)
Lead (mg/L)	0.0013	n/a	n/a	70	n/a	n/a	75.71	n/a	n/a	0.02758	NP Inter(NDs)
Lithium (mg/L)	0.089	n/a	n/a	70	n/a	n/a	42.86	n/a	n/a	0.02758	NP Inter(normality)
Mercury (mg/L)	0.00021	n/a	n/a	60	n/a	n/a	91.67	n/a	n/a	0.04607	NP Inter(NDs)
Molybdenum (mg/L)	0.01	n/a	n/a	70	n/a	n/a	70	n/a	n/a	0.02758	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	70	n/a	n/a	100	n/a	n/a	0.02758	NP Inter(NDs)

FIGURE G.

<b>PLANT BRANCH POND E GWPS</b>			
<b>Constituent Name</b>	<b>MCL</b>	<b>Background Limit</b>	<b>GWPS</b>
Antimony, Total (mg/L)	0.006	0.003	0.006
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.063	2
Beryllium, Total (mg/L)	0.004	0.0005	0.004
Cadmium, Total (mg/L)	0.005	0.0005	0.005
Chromium, Total (mg/L)	0.1	0.016	0.1
Cobalt, Total (mg/L)	n/a	0.005	0.005
Combined Radium, Total (pCi/L)	5	1.39	5
Fluoride, Total (mg/L)	4	0.19	4
Lead, Total (mg/L)	n/a	0.0013	0.0013
Lithium, Total (mg/L)	n/a	0.089	0.089
Mercury, Total (mg/L)	0.002	0.00021	0.002
Molybdenum, Total (mg/L)	n/a	0.01	0.01
Selenium, Total (mg/L)	0.05	0.005	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

*\*MCL = Maximum Contaminant Level*

*\*GWPS = Groundwater Protection Standard*

FIGURE H.

# Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch AP Printed 4/12/2021, 10:28 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Beryllium (mg/L)	BRGWC-38S	0.00964	0.008146	0.004	Yes15	0.008893	0.001102	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-33S	0.05333	0.04017	0.005	Yes15	0.04675	0.009713	0	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-38S	0.2643	0.2173	0.005	Yes14	0.2408	0.03313	0	None	No	0.01	Param.

# Confidence Intervals - All Results

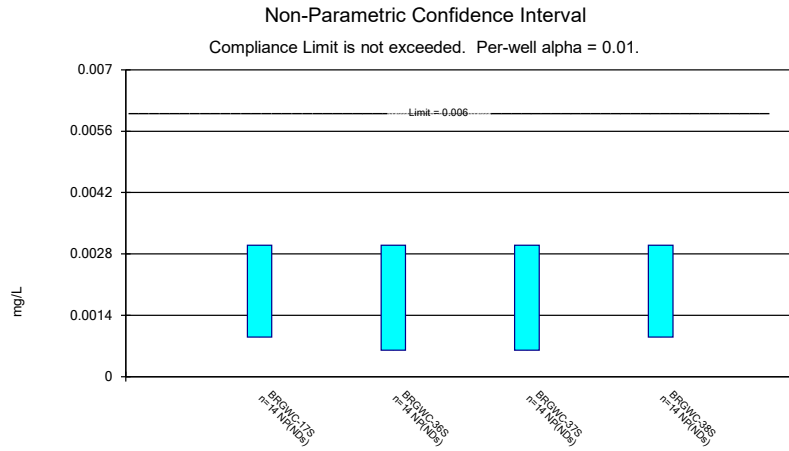
Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 4/12/2021, 10:28 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig. N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-17S	0.003	0.0009	0.006	No 14	0.00285	0.0005612	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-36S	0.003	0.0006	0.006	No 14	0.00236	0.001085	71.43	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-37S	0.003	0.0006	0.006	No 14	0.002643	0.0009087	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-38S	0.003	0.0009	0.006	No 14	0.002686	0.0007999	85.71	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-17S	0.005	0.00073	0.01	No 14	0.003944	0.001848	71.43	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-33S	0.005	0.0006	0.01	No 15	0.004411	0.001555	86.67	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-35S	0.005	0.0006	0.01	No 14	0.004031	0.001925	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-36S	0.005	0.001	0.01	No 14	0.004082	0.001827	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-37S	0.005	0.00078	0.01	No 14	0.004043	0.001904	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-38S	0.003667	0.001687	0.01	No 14	0.002677	0.001398	7.143	None	No	0.01	Param.
Barium (mg/L)	BRGWC-17S	0.04268	0.03821	2	No 14	0.04044	0.003152	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-33S	0.02264	0.0202	2	No 15	0.02142	0.001799	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-34S	0.03554	0.02551	2	No 14	0.03053	0.00708	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-35S	0.0701	0.037	2	No 14	0.05051	0.01988	0	None	No	0.01	NP (normality)
Barium (mg/L)	BRGWC-36S	0.04562	0.03273	2	No 14	0.03972	0.01058	0	None	ln(x)	0.01	Param.
Barium (mg/L)	BRGWC-37S	0.02486	0.0228	2	No 14	0.02383	0.00145	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-38S	0.0338	0.015	2	No 14	0.02269	0.01027	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-33S	0.0021	0.0015	0.004	No 15	0.002027	0.0008598	6.667	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-34S	0.0002	0.0001	0.004	No 14	0.00083	0.001767	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-35S	0.00016	0.0001	0.004	No 14	0.0008221	0.00177	14.29	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-36S	0.005	0.000081	0.004	No 15	0.001403	0.002245	26.67	None	No	0.01	NP (normality)
<b>Beryllium (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.00964</b>	<b>0.008146</b>	<b>0.004</b>	<b>Yes15</b>	<b>0.008893</b>	<b>0.001102</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cadmium (mg/L)	BRGWC-33S	0.000466	0.0003313	0.005	No 15	0.0003987	0.00009935	6.667	None	No	0.01	Param.
Cadmium (mg/L)	BRGWC-34S	0.0005082	0.0002118	0.005	No 14	0.0003736	0.0002282	14.29	None	sqrt(x)	0.01	Param.
Cadmium (mg/L)	BRGWC-36S	0.0005	0.0001	0.005	No 15	0.0004453	0.0001443	86.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-38S	0.0006254	0.0004918	0.005	No 14	0.0005586	0.00009429	7.143	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-17S	0.01295	0.009807	0.1	No 14	0.01144	0.002413	0	None	x^(1/3)	0.01	Param.
Chromium (mg/L)	BRGWC-33S	0.005	0.00049	0.1	No 15	0.004699	0.001164	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-35S	0.006654	0.004032	0.1	No 14	0.005343	0.001851	7.143	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-36S	0.008539	0.007332	0.1	No 14	0.007936	0.0008518	0	None	No	0.01	Param.
Chromium (mg/L)	BRGWC-37S	0.005	0.0013	0.1	No 14	0.00225	0.001506	21.43	None	No	0.01	NP (normality)
Chromium (mg/L)	BRGWC-38S	0.004199	0.003398	0.1	No 14	0.0037	0.0008143	0	None	x^3	0.01	Param.
<b>Cobalt (mg/L)</b>	<b>BRGWC-33S</b>	<b>0.05333</b>	<b>0.04017</b>	<b>0.005</b>	<b>Yes15</b>	<b>0.04675</b>	<b>0.009713</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Cobalt (mg/L)	BRGWC-34S	0.004248	0.003252	0.005	No 14	0.00375	0.0007036	7.143	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-35S	0.005	0.0008	0.005	No 14	0.003571	0.002039	64.29	None	No	0.01	NP (NDs)
<b>Cobalt (mg/L)</b>	<b>BRGWC-38S</b>	<b>0.2643</b>	<b>0.2173</b>	<b>0.005</b>	<b>Yes14</b>	<b>0.2408</b>	<b>0.03313</b>	<b>0</b>	<b>None</b>	<b>No</b>	<b>0.01</b>	<b>Param.</b>
Combined Radium 226 + 228 (pCi/L)	BRGWC-17S	0.8217	0.3126	5	No 14	0.5672	0.3593	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-33S	1.273	0.6719	5	No 14	0.9723	0.4241	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-34S	1.115	0.7454	5	No 14	0.9303	0.261	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-35S	1.069	0.4571	5	No 14	0.7631	0.432	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-36S	1.242	0.6208	5	No 14	0.9315	0.4387	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-37S	0.808	0.4203	5	No 14	0.6141	0.2737	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-38S	3.139	2.013	5	No 14	2.576	0.7947	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-17S	0.1398	0.0794	4	No 15	0.1118	0.04762	6.667	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-33S	0.2479	0.1143	4	No 16	0.1889	0.1138	0	None	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-34S	0.1547	0.07415	4	No 15	0.1257	0.08875	6.667	None	ln(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-35S	0.1416	0.06108	4	No 15	0.1079	0.07789	13.33	None	x^(1/3)	0.01	Param.
Fluoride (mg/L)	BRGWC-36S	0.15	0.051	4	No 15	0.1201	0.1157	53.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-37S	0.1	0.05	4	No 15	0.07667	0.02831	40	None	No	0.01	NP (normality)
Fluoride (mg/L)	BRGWC-38S	0.9588	0.7152	4	No 15	0.848	0.2111	0	None	ln(x)	0.01	Param.
Lead (mg/L)	BRGWC-17S	0.001	0.0001	0.0013	No 14	0.0008681	0.0003353	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-33S	0.001	0.000063	0.0013	No 15	0.0002851	0.0003726	20	None	No	0.01	NP (normality)
Lead (mg/L)	BRGWC-34S	0.001	0.0003	0.0013	No 14	0.0008207	0.0003593	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-35S	0.001	0.00012	0.0013	No 14	0.0007514	0.0004085	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-36S	0.001	0.000047	0.0013	No 14	0.0009319	0.0002547	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-37S	0.001	0.0001	0.0013	No 14	0.0008714	0.0003268	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-38S	0.0004364	0.0003493	0.0013	No 14	0.0003929	0.00006145	0	None	No	0.01	Param.

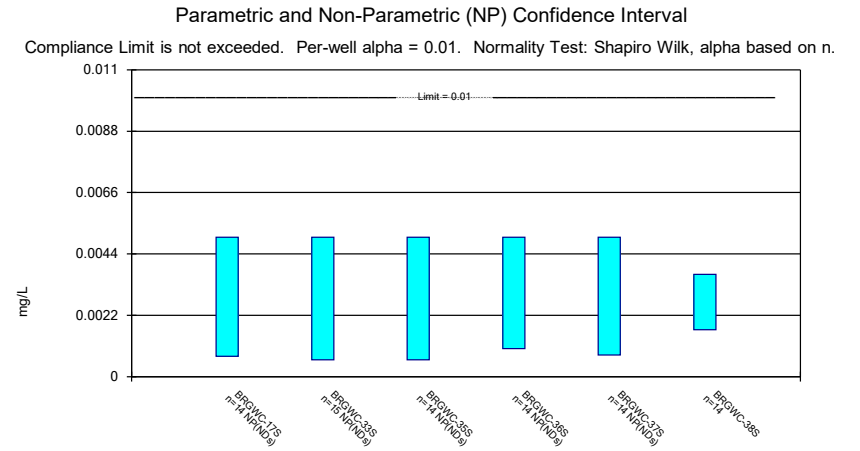
# Confidence Intervals - All Results

Plant Branch    Client: Southern Company    Data: Plant Branch AP    Printed 4/12/2021, 10:28 AM

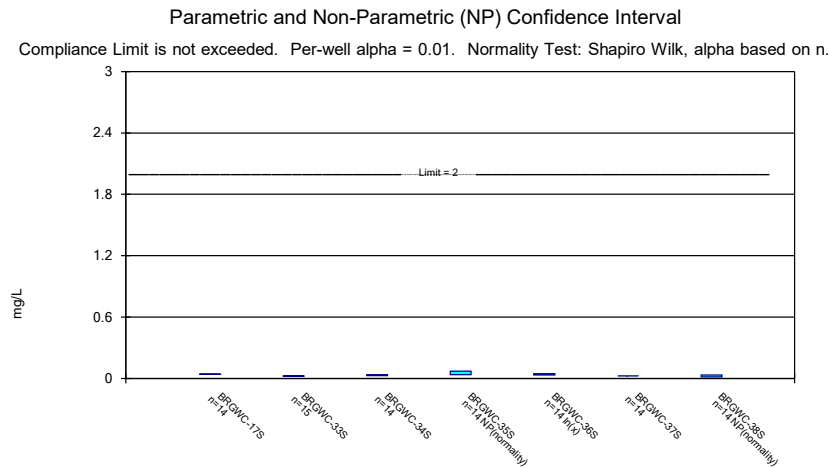
<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Compliance</u>	<u>Sig. N</u>	<u>Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Lithium (mg/L)	BRGWC-17S	0.03	0.00097	0.089	No 14	0.01963	0.01444	64.29	None	No	0.01	NP (NDs)
Lithium (mg/L)	BRGWC-33S	0.01036	0.009356	0.089	No 15	0.00986	0.0007443	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-34S	0.03	0.00089	0.089	No 14	0.0196	0.01448	64.29	None	No	0.01	NP (NDs)
Lithium (mg/L)	BRGWC-35S	0.0022	0.002	0.089	No 14	0.002136	0.00008419	0	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-36S	0.0026	0.0022	0.089	No 14	0.004421	0.007363	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	BRGWC-38S	0.02273	0.0205	0.089	No 14	0.02161	0.001573	0	None	No	0.01	Param.
Mercury (mg/L)	BRGWC-17S	0.0002	0.000084	0.002	No 12	0.0001787	0.00005009	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-33S	0.0002	0.00007	0.002	No 13	0.0001777	0.0000548	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-34S	0.0002	0.00007	0.002	No 12	0.0001692	0.00005838	75	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-35S	0.0002	0.00013	0.002	No 12	0.0001833	0.00004097	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-36S	0.0002	0.00013	0.002	No 12	0.0001833	0.00004097	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-37S	0.0002	0.00014	0.002	No 12	0.0001833	0.0000425	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	BRGWC-38S	0.0001694	0.00009806	0.002	No 12	0.0001337	0.00004548	8.333	None	No	0.01	Param.
Selenium (mg/L)	BRGWC-17S	0.002802	0.001778	0.05	No 14	0.0032	0.001348	28.57	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-33S	0.005	0.0018	0.05	No 15	0.003847	0.001251	46.67	None	No	0.01	NP (normality)
Selenium (mg/L)	BRGWC-36S	0.0057	0.003086	0.05	No 14	0.004393	0.001845	0	None	No	0.01	Param.
Selenium (mg/L)	BRGWC-38S	0.0427	0.03365	0.05	No 14	0.03817	0.006387	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-17S	0.001	0.000066	0.002	No 14	0.0009333	0.0002496	92.86	None	No	0.01	NP (NDs)
Thallium (mg/L)	BRGWC-33S	0.00021	0.0001806	0.002	No 15	0.0001953	0.00002167	0	None	No	0.01	Param.
Thallium (mg/L)	BRGWC-38S	0.001	0.00019	0.002	No 14	0.0004079	0.000327	21.43	None	No	0.01	NP (normality)



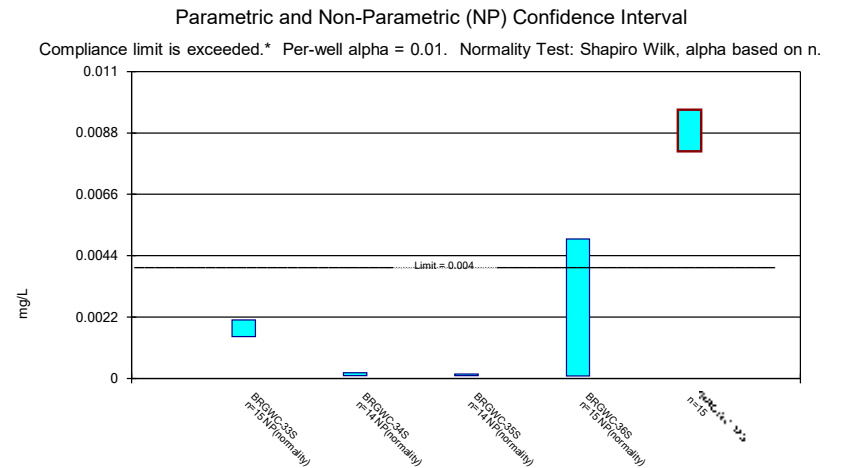
Constituent: Antimony Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP



Constituent: Arsenic Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP



Constituent: Barium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

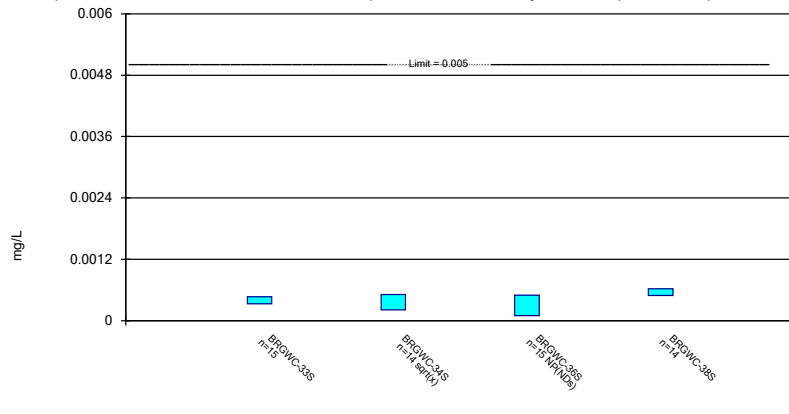


Constituent: Beryllium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP



Parametric and Non-Parametric (NP) Confidence Interval

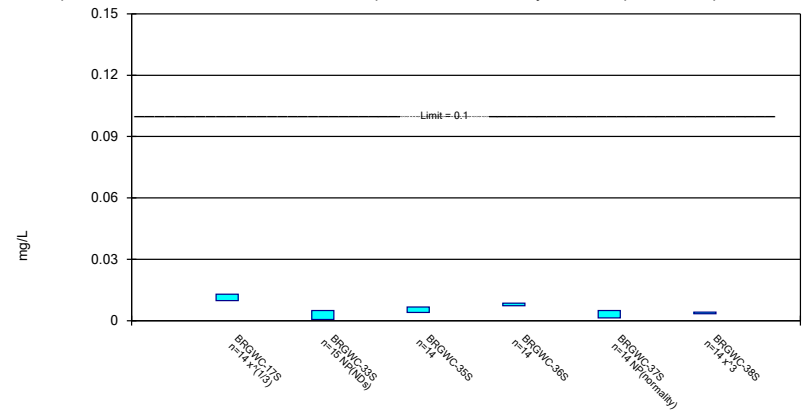
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

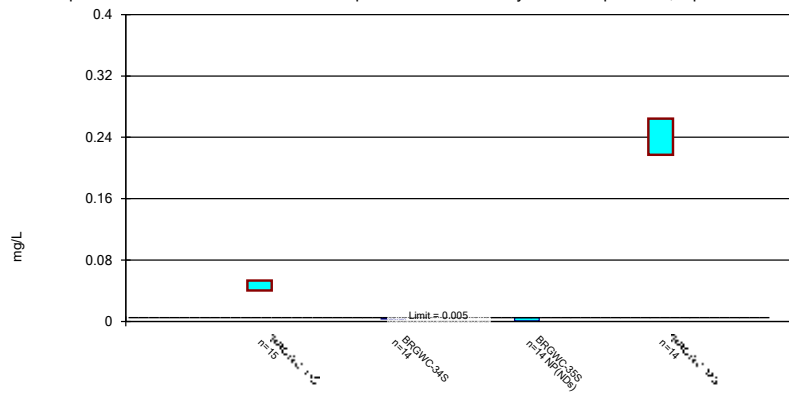
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

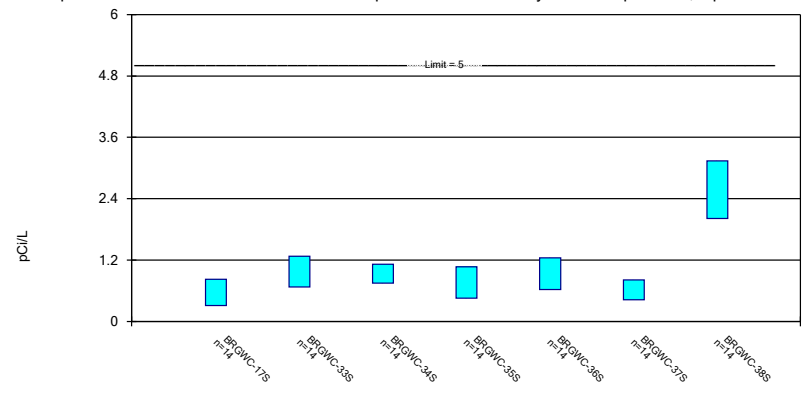
Compliance limit is exceeded.\* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric Confidence Interval

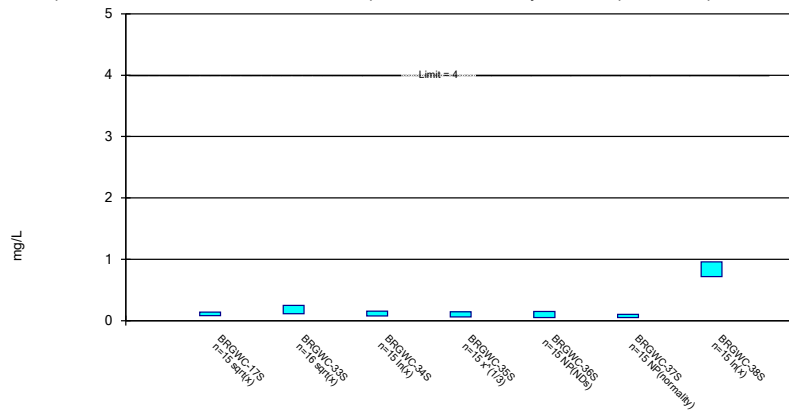
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

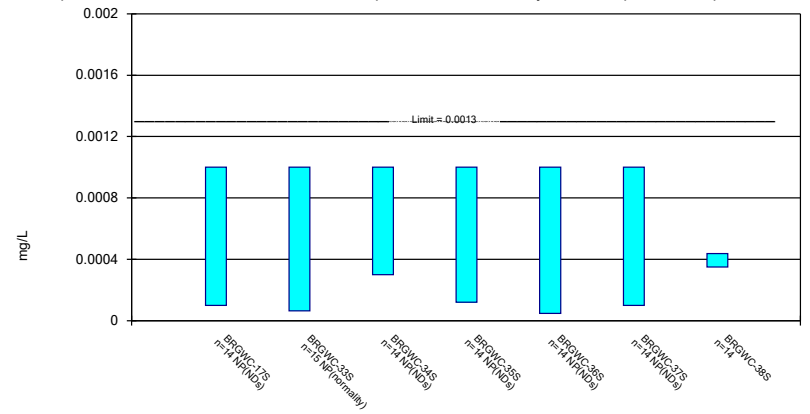
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

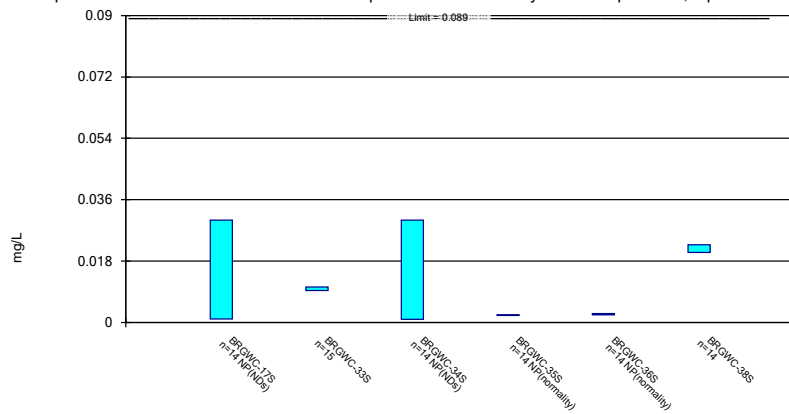
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

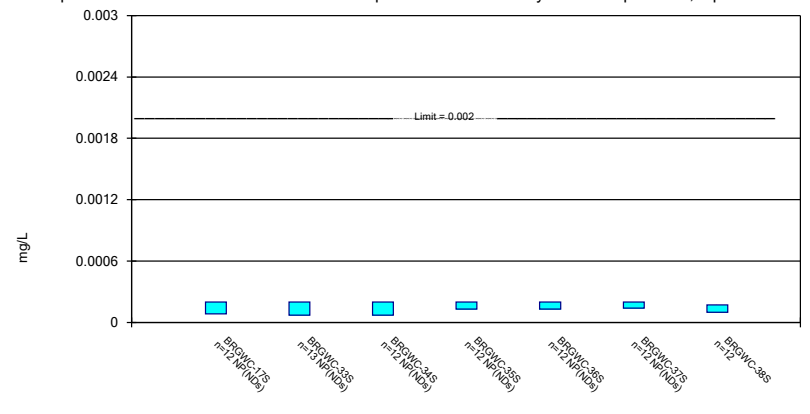
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP

Parametric and Non-Parametric (NP) Confidence Interval

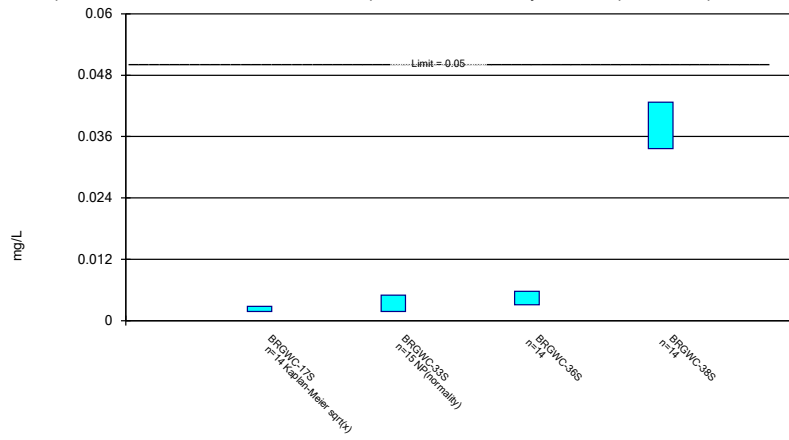
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Mercury Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

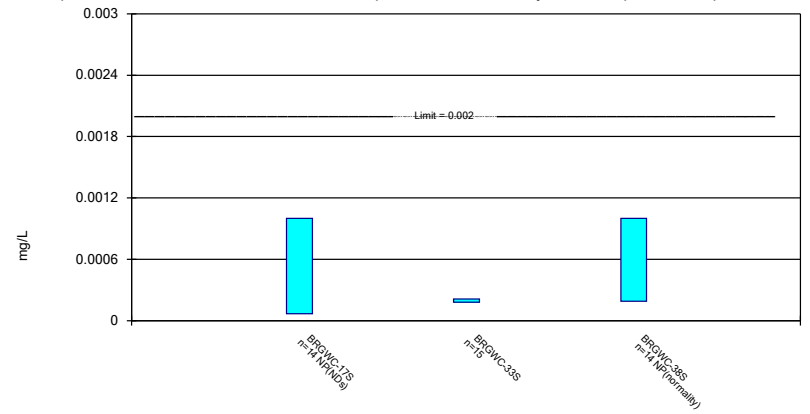
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP

### Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 4/12/2021 10:27 AM View: Pond E - Confidence Intervals  
 Plant Branch Client: Southern Company Data: Plant Branch AP



**[golder.com](http://golder.com)**