REPORT

2020 Annual Groundwater Monitoring and Corrective Action Report

Georgia Power Company - Plant Branch
Ash Pond BCD

Submitted to:

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Certification Statement

This *2020 Annual Groundwater Monitoring & Corrective Action Report*, *Georgia Power Company Plant Branch Ash Pond BCD* (AP-BCD) 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.

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7/30/2020

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BS/RK

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 *2020 Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document groundwater monitoring activities conducted at Georgia Power Company (GPC's) Plant Branch Ash Ponds, B, C, and D, together referred to as a multi-unit AP-BCD. 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. This report documents the activities completed to establish the groundwater monitoring program in accordance with § 257.90(e) and Georgia EPD rule 391-3-4-.10(6)(a). For ease of reference, the US EPA CCR rules are cited within this report.

Three monitoring events were conducted during this monitoring period. An initial assessment monitoring event was conducted in August 2019, and two semi-annual assessment monitoring events conducted in October 2019 and March 2020. This report documents the activities completed at Branch AP-BCD between August 2019 and July 2020. Activities completed at Branch AP-E 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 and a detailed site map is included as Figure 1.

Plant Branch formerly operated as a coal-fired power plant since the 1960's until its retirement in 2015. Plant Branch is no longer active and is currently decommissioned. During its operation, five ash ponds were used for management of the CCR on the plant property. These 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 1960's 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 currently 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 the multi-unit AP-BCD.

Plant Branch ceased producing electricity prior to April 2015. Therefore, Ash Ponds B, C, and D are not subject to the Federal CCR Rule. A CCR Unit Solid Waste Handling Permit application for AP-BCD was submitted to GA EPD in November 2018 and is currently 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, and experience working in this geologic terrain.

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.

The near surface conditions were determined based upon available boring and monitoring well installation logs. Based on our review of this information, 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 or regolith.

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-BCD. Wells were 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 in 2014 to 2018 for groundwater monitoring in proximity to AP-BCD. In April 2020, the five AP-E upgradient background monitoring wells were added to the AP-BCD groundwater monitoring well network (BRGWA-2S, BRGWA-2I, BRGWA-5S, BRGWA-5I, BRGWA-6S). This was done to incorporate additional spatial variability in the upgradient groundwater data set for a robust statistical data evaluation. Table 1, Monitoring Well Network Summary includes the pertinent construction details for the AP-BCD 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 during the previous annual monitoring period (August 2019 through July 2020). Groundwater sampling was performed in accordance with § 257.93 and 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.

Pursuant to § 257.90(e)(3) and 391-3-4-.10(6), Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed for AP-BCD.

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 2019. 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. A site survey has recently been completed at Plant Branch by Metro Engineering & Surveying Co., Inc. This information has been incorporated into site summary tables and potentiometric surface maps. The certified surveyors report and well inspection log are included in Appendix A.

2.2 Assessment Monitoring

Pursuant to §257.94(e)(3), an assessment monitoring program has been initiated for AP-BCD 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-BCD during August 2019, October 2019, and March 2020. Resampling events were also completed during November and December 2019, and May 2020 due to laboratory error. During the initial assessment sampling event in August 2019, groundwater samples were collected and analyzed for Appendix IV to meet the requirement of §257.95(b). During the October 2019 and March 2020 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 2019 event. Results of sampling activities during this monitoring period are presented in Appendix A, Analytical Results, Field Data Forms, and Data Validation Summaries.

3.0 SAMPLE METHODOLOGY AND ANALYSIS

Sampling events completed during this reporting period for AP-BCD represent both the annual Appendix IV monitoring event as wells as two independent semi-annual assessment monitoring. 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 sampling event, 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-BCD Potentiometric Surface Elevation Contour Map – August 26, 2019, Figure 4, AP-BCD Potentiometric Surface Elevation Contour Map – October 19, 2019, Figure 5, AP-BCD Potentiometric Surface Elevation Contour Map – March 2, 2020, and Figure 6, AP-BCD Potentiometric Surface Elevation Contour Map – June 3, 2020. Review of Figures 3 through 5 shows that the general direction of groundwater flow across AP-BCD is to the south-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 Flow Velocity Calculations – October 2019 and Table 4B, Groundwater Flow Velocity Calculations - March 2020. An effective porosity of 0.20 was used based on the default values for effective porosity recommended by USEPA for a silty sand-type soil (USEPA, 1996).

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

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

Where:

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

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

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

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 and 4B.

As presented on Tables 4A and 4B groundwater flow velocity at the site ranges from approximately 0.18 to 0.88 feet per day (or approximately 65 to 322 feet per year) across AP-BCD. 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-BCD 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 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 (In-Situ field instrument) along with a separate turbidity meter to verify stabilization.

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

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

Any deviation from stabilization criteria, if applicable, is identified on field sampling forms. Following well stabilization, unfiltered samples were collected directly into appropriately preserved laboratory supplied sample containers, placed in iced coolers, and submitted to the laboratory following standard chain-of-custody protocol. Field information forms generated directly from the SmarTroll as well as chain-of-custody records are included in Appendix B.

Where sample turbidity was greater than 5 NTU and all other stabilization criteria were met, samplers continued purging for up to 3 additional hours in order to reduce the turbidity to 5 NTU or less. When turbidity remained above 5 NTU but was less than 10 NTU, and all other parameters are stabilized, the well was sampled. Where turbidity remained above 10 NTU, an additional unfiltered sample was collected followed by a filtered sample that

has passed through an in-line 0.45-micron filter attached to the discharge (sample collection) tube. The unfiltered sample data are used for compliance monitoring and in the statistical analysis database. Filtered sample data are used to assess the impacts of turbidity on groundwater quality. Additional details regarding filtered samples are recorded on the field information form and filtered samples are clearly identified as “filtered” on the laboratory reports.

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, and depth to water measurements at each monitoring location.

3.4 Laboratory Analyses

Groundwater samples were collected during August and October in 2019, and one event in March 2020. During the August 2019 sampling event, wells were sampled and analyzed for Appendix IV monitoring parameters pursuant to 40 CFR § 257.90(e)(3). The October 2019 and March 2020 events represent two semi-annual sampling events for AP-BCD at Plant Branch. Since AP-BCD is currently in assessment monitoring, groundwater samples from wells in the detection 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, present a tabulated summary of the 2019 and 2020 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 maintain a NELAP certification for all parameters analyzed for this project. NELAP certification for Pace for 2019 and 2020 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 USEPA guidance (USEPA, 2011) and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestions spikes, laboratory and field duplicate relative percent difference (RPDs), field and equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags are applied to the data using USEPA procedures as guidance (USEPA, 2017). Data validation summaries provided Environmental Standards and Golder are provided in Appendix A. Flagged data are identified in the statistical analysis reports described in the following section.

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. Laboratory reporting limits are used as background values for state groundwater protection standards (GWPS) where detected values are "J" flagged. During validation, data were flagged as outliers or results were not in line with historical values. As such, resampling was conducted to verify the initial sample results.

4.0 STATISTICAL ANALYSES

Statistical analysis of Appendix III groundwater monitoring data was performed pursuant to § 257.93 and 391-3-4-.10(6) following the established statistical method for AP-BCD.

4.1 Statistical Method

The selected statistical method for AP-BCD 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, (USEPA, 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 USEPA regulations and guidance as recommended in the USEPA (2009) document.

Table 4.1.1 Plant Branch AP-BCD Statistical Method Summary provides a summary of the statistical methodology used at AP-BCD for the groundwater monitoring conducted in March 2020 and will be used for any routine monitoring in the future.

Table 4.1.1: PLANT BRANCH AP-BCD STATISTICAL METHOD SUMMARY

Monitoring Well Network	Upgradient Wells	BRGWA-2S, BRGWA-2I, BRGWA-5S, BRGWA-5I, BRGWA-6S, BRGWA-12S, BRGWA-12I, and BRGWA-23S
	Downgradient Wells	BRGWC-25I, BRGWC- 27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I
CCR Monitoring Parameters	Appendix III (Detection Monitoring)	Boron, Calcium, Chloride, Fluoride, pH, Sulfate, Total Dissolved Solids
	Appendix IV (Assessment Monitoring) Note: Mercury and Molybdenum were not detected during the August Appendix IV event and therefore are not required for semi-annual statistical analyses.	Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, ~~Mercury, Molybdenum~~, Selenium, Thallium, Combined 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.

4.1.1 Appendix III 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 October 2019 detection monitoring event 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 significant increase (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 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 Georgia EPD Rule 391-3-4-.10(6)(a).

USEPA revised the Federal CCR Rule on July 30, 2018, specifying GWPS for cobalt, lead, lithium, and molybdenum as described in 40 CFR § 257.95(h)(2). Presently those rule-specified GWPS have not yet been incorporated in the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, under 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 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 federal and state rule requirements, GWPSs were established for statistical comparison of Appendix IV constituents. Table 4.1.2, Summary of Background Levels and GWPSs, presented below, 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 statistically significant level (SSL) exceedance is identified.

Table 4.1.2: SUMMARY OF BACKGROUND LEVELS AND GWPSs					
Analyte	Units	MCL	Site Specific Background October 2019[1]	Site Specific Background March 2020[1]	State-Derived GWPS[2]
Antimony	mg/L	0.006	0.012	0.012	0.012
Arsenic	mg/L	0.01	0.005	0.005	0.01
Barium	mg/L	2	0.13	0.13	2
Beryllium	mg/L	0.004	0.000074	0.003	0.004
Cadmium	mg/L	0.005	0.001	0.0025	0.005
Chromium	mg/L	0.1	0.01	0.016	0.1
Cobalt	mg/L	NA	0.0135	0.0135	0.0135
Fluoride	mg/L	4	0.42	0.42	4
Lead	mg/L	NA	0.005	0.005	0.005
Lithium[3]	mg/L	NA	0.03	0.089	0.089
Mercury	mg/L	0.002	0.0005	0.0005	0.002
Molybdenum	mg/L	NA	0.01	0.01	0.01
Radium (226 + 228)	pCi/L	5	2.593	1.903	5
Selenium	mg/L	0.05	0.01	0.01	0.05
Thallium	mg/L	0.002	0.000052	0.001	0.002

Notes:

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

MCL = Maximum Contaminant Level;

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

[2] Under 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.

[3] The background tolerance limit (TL) used to evaluate GWPS for lithium is equal to the most recent laboratory specified reporting limit (RL). Per the SAP, and in accordance with the Unified Guidance, a non-parametric limit approach was used since the data set contains greater than 50% non-detect results for this analyte. Under this approach, the TL equals the highest value reported, for which is the laboratory RL. However, the highest laboratory RL used was 0.05 mg/L. As a result, we have modified the GWPS to be equal to the most recently used RL (0.03 mg/L).

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 2020. 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 October 2019 and March 2020 at AP-BCD have been statistically analyzed in accordance with the site's Statistical Analysis Plan. Verification resampling to confirm initial SSIs was performed; therefore, initial SSIs are considered verified. The statistical results of the October 2019 and March 2020 monitoring event are included in Appendix B, Statistical Analyses.

4.2.1 October 2019 Appendix III Statistical Results

Based on the statistical results presented in Appendix B, SSIs of boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids at various wells were identified following the October 2019 assessment monitoring event. A detailed list of the noted exceedances is provided in Appendix B.

Based on review of the Appendix III statistical analysis presented in Appendix B, Appendix III constituents have not returned to background levels and assessment monitoring should continue pursuant to 40 CFR 257.95(f).

4.2.2 October 2019 Assessment Monitoring Statistical Results

Analytical data from the October 2019 monitoring event at AP-BCD 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 EPD Rule 391-3-4-.10(6)(a), the following SSLs were identified:

AP-BCD October 2019 Confidence Interval Statistically Significant Level Exceedances	
AP-BCD Monitoring Well	**Appendix IV Parameter**
BRGWC-47	Lithium
BRGWC-50	Cadmium, Cobalt

4.2.3 March 2020 Appendix III Statistical Results

Based on the statistical results presented in Appendix B, SSIs of boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids at various wells were identified following the March 2020 assessment monitoring event. A detailed list of the noted exceedances is provided in Appendix B.

Based on review of the Appendix III statistical analysis presented in Appendix B, Appendix III constituents have not returned to background levels and assessment monitoring should continue pursuant to 40 CFR 257.95(f).

4.2.4 March 2020 Assessment Monitoring Statistical Results

Analytical data from the March 2020 monitoring event at AP-BCD 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 EPD Rule 391-3-4-.10(6)(a), the following SSLs were identified:

AP-BCD March 2020 Confidence Interval Statistically Significant Level Exceedances	
AP-BCD Monitoring Well	**Appendix IV Parameter**
BRGWC-50	Cadmium, Cobalt

Based on the updated background dataset that included additional upgradient wells for spatial variability across the site, the confidence interval for lithium no longer exceeds the GWPS at AP-BCD.

Pursuant to the options of 40 CFR 257.95 as adopted by 391-3-4-.10, Plant Branch is evaluating alternate sources for the identified SSLs, namely, cadmium, and cobalt.

5.0 MONITORING PROGRAM STATUS

Statistical evaluations of the groundwater monitoring data for AP-BCD confirms SSIs of Appendix III groundwater monitoring parameters above background and SSLs of Appendix IV groundwater monitoring parameter above the established GWPS. Based on the results of the October 2019 and March 2020 sampling events, Georgia Power will initiate an assessment of corrective measures at AP-BCD per Georgia EPD Rule 391-3-4-.10(6).

6.0 CONCLUSIONS AND FUTURE ACTIONS

This *2020 Annual Groundwater Monitoring and Corrective Action Report, Georgia Power Plant Branch AP-BCD* has been prepared to fulfill the requirements of Georgia EPD Rules of Solid Waste Management 391-3-4-.10(6). The groundwater flow direction and rates interpreted during the October 2019 and March 2020 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. Although lithium was initially identified as an SSL exceedance in the October 2019 statistical analysis, following the network modification to include upgradient pond E wells into the well network to capture spatial variability, the GWPS for lithium was not exceeded. Therefore, when incorporating the site wide background lithium concentrations, it is no longer an SSL exceedance as presented in the March 2020 statistical analysis. Plant Branch will complete an assessment of corrective measures for cobalt, and cadmium as required in Georgia EPD Rule 391-3-4-.10(6).

Based on the findings presented herein, Plant Branch will continue with assessment groundwater monitoring and reporting. The next scheduled sampling event is tentatively scheduled for August 2020.

7.0 REFERENCES

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Figures & Tables

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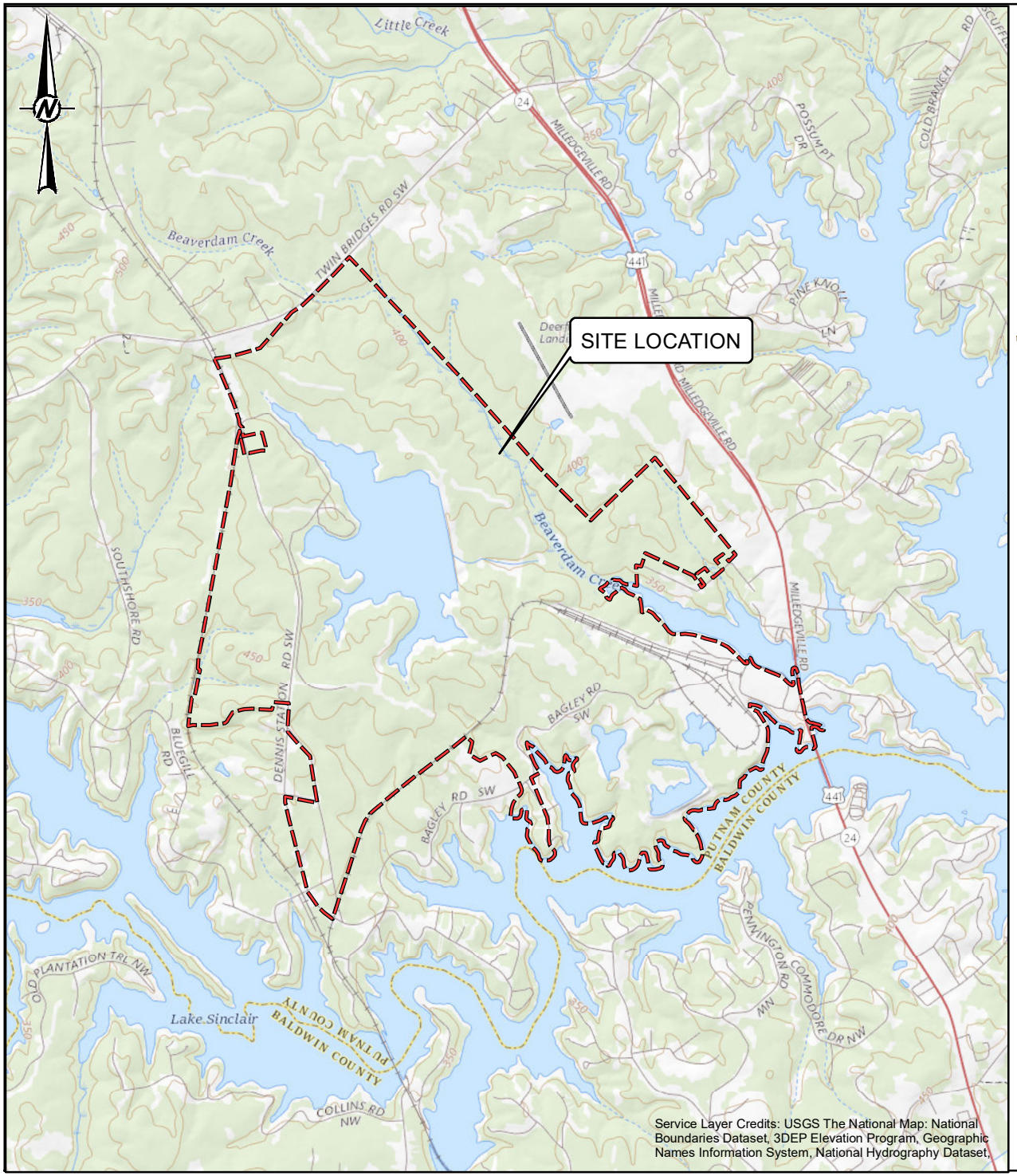

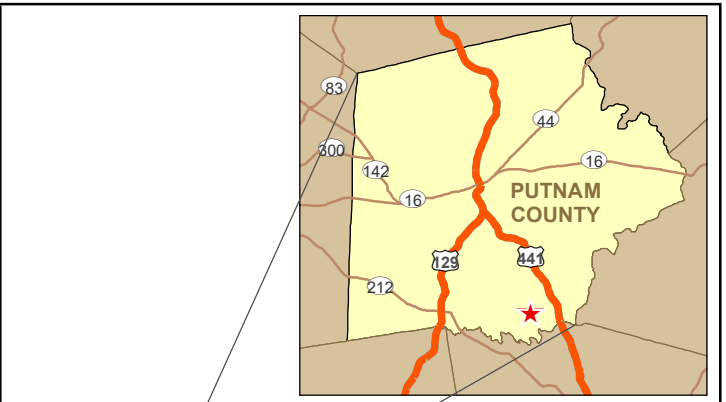

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Georgia Power

PROJECT
GROUNDWATER MONITORING

TITLE
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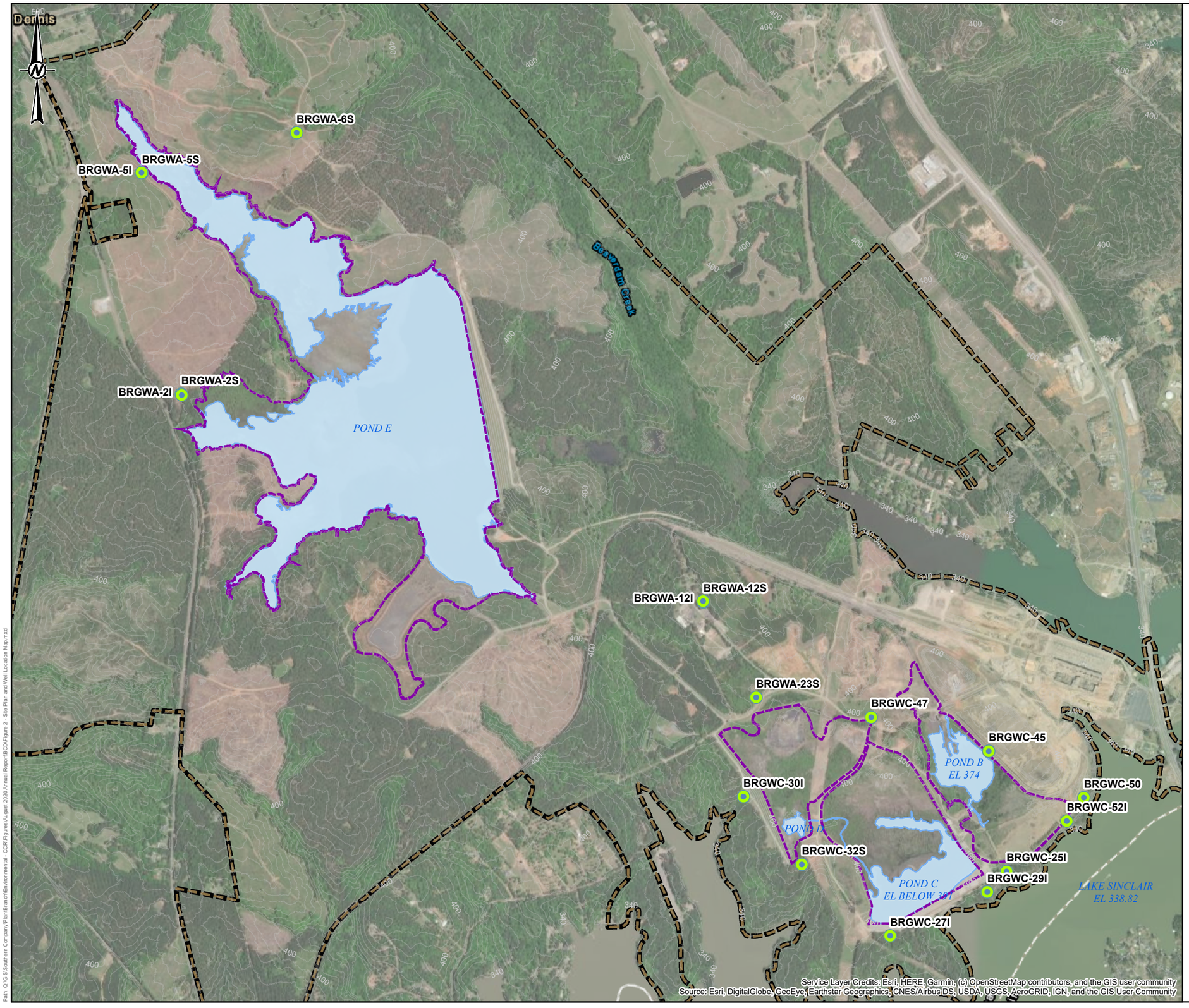

LEGEND

- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- APPROXIMATE ASH POND BOUNDARY
- APPROXIMATE SURFACE WATER LIMITS

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, AEROGRID, IGN, AND THE GIS USER COMMUNITY

2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

3. BORING/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.

1500 750 0 1500
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

Georgia Power

PROJECT
GROUNDWATER MONITORING PROGRAM

TITLE
SITE PLAN AND DETECTION MONITORING WELL LOCATION MAP

CONSULTANT
GOLDER

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

PROJECT No.	CONTROL	Rev.	FIGURE
166625418	1666254V001-GIS.mxd	0	**2**

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

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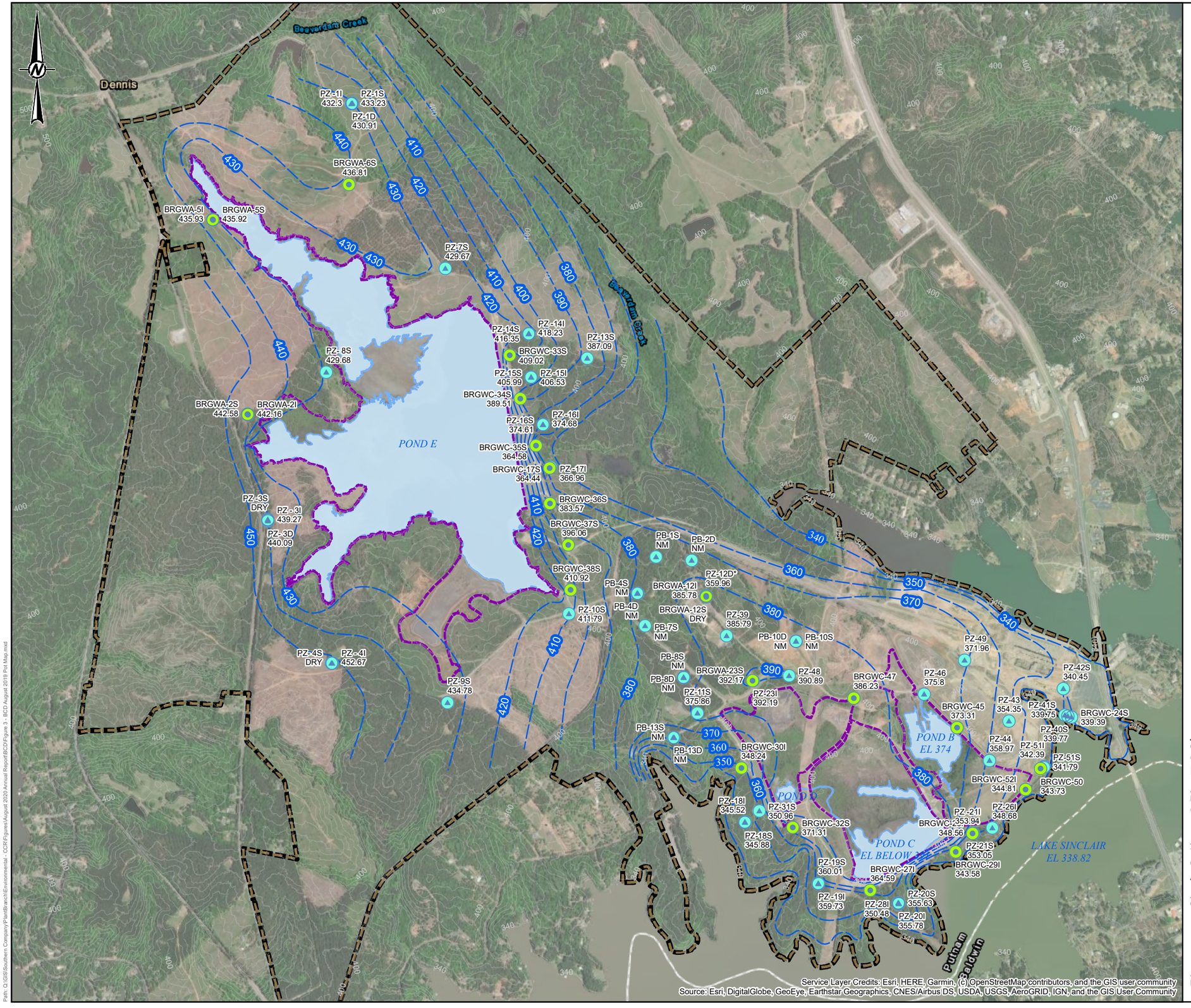

LEGEND

- MONITORING WELL (ELEVATION feet NAVD88)
- PIEZOMETER (ELEVATION feet NAVD88)
- PROPERTY BOUNDARY
- GROUNDWATER SURFACE CONTOUR (feet 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. PZ-12D* DATA NOT USED FOR CONTOURING.

4. NAVD88=NORTH AMERICAN VERTICAL DATUM 88

5. GROUNDWATER ELEVATIONS RECORDED AUGUST 26, 2019.

6. NM = NOT MEASURED

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, AEROGRID, IGN, AND THE GIS USER COMMUNITY

2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

3. BORING/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.

KEY MAP

1500 750 0 1500
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

Georgia Power

PROJECT
GROUNDWATER MONITORING PROGRAM

TITLE
GROUNDWATER SURFACE CONTOUR MAP
AUGUST 26, 2019

CONSULTANT
GOLDER

YYYY-MM-DD	2020-06-23
PREPARED	DJC
DESIGN	ED
REVIEW	RK
APPROVED	DJC

PROJECT No. 166625418 | CONTROL 1666254V001-GIS.mxd | Rev. 0 | FIGURE 3

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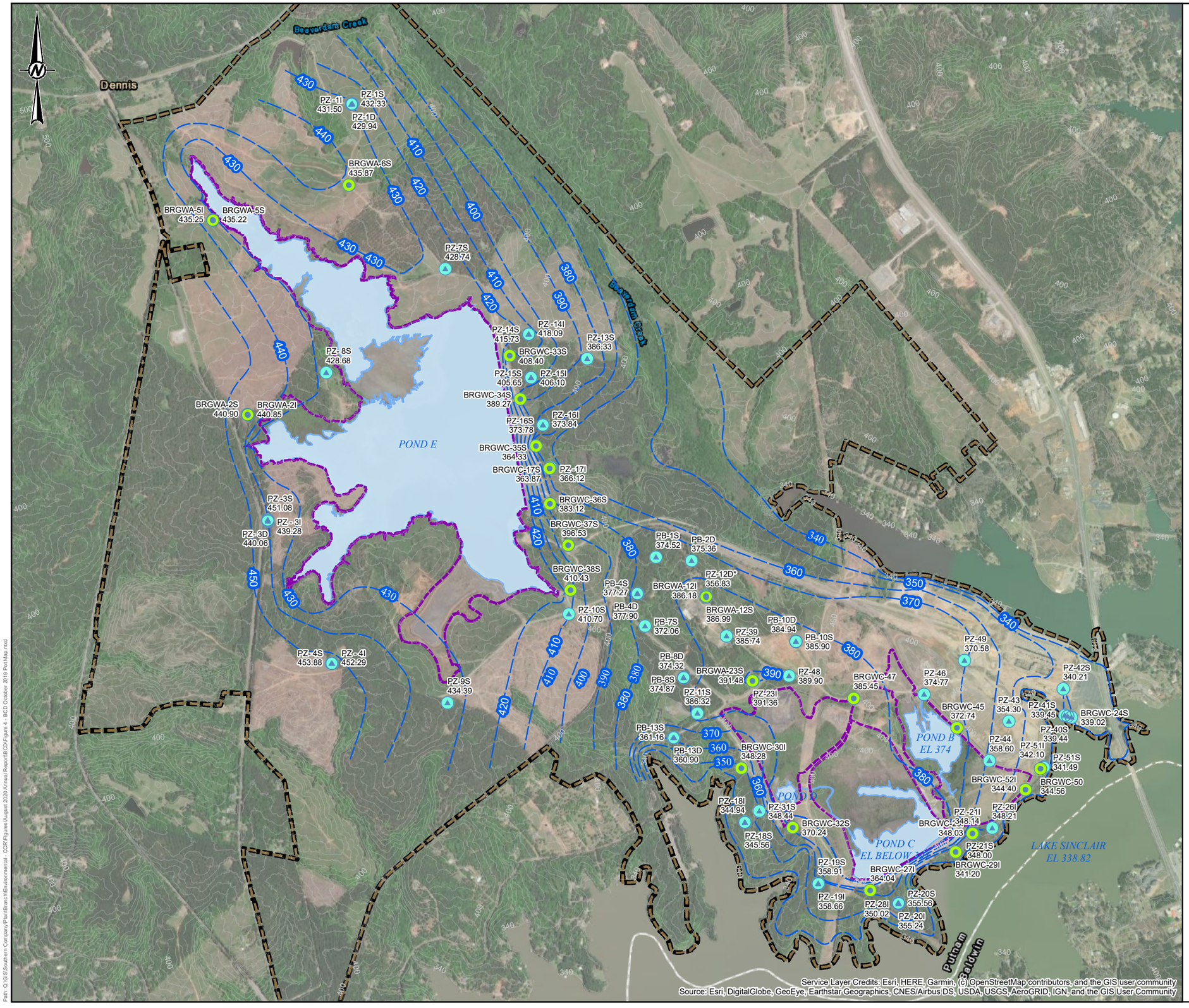

LEGEND

- MONITORING WELL (ELEVATION feet NAVD88)
- PIEZOMETER (ELEVATION feet NAVD88)
- PROPERTY BOUNDARY
- GROUNDWATER SURFACE CONTOUR (feet 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. PZ-12D* DATA NOT USED FOR CONTOURING.

4. NAVD88=NORTH AMERICAN VERTICAL DATUM 88

5. GROUNDWATER ELEVATIONS RECORDED OCTOBER 14, 2019.

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, AEROGRID, IGN, AND THE GIS USER COMMUNITY

2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

3. BORING/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY SOUTHERN COMPANY SERVICES.

1500 750 0 1500
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

Georgia Power

PROJECT
GROUNDWATER MONITORING PROGRAM

TITLE
GROUNDWATER SURFACE CONTOUR MAP
OCTOBER 14, 2019

CONSULTANT
GOLDER

YYYY-MM-DD	2020-05-21
PREPARED	DJC
DESIGN	ED
REVIEW	RK
APPROVED	DLP

PROJECT No. 166625418 | CONTROL 1666254V001-GIS.mxd | Rev. 0 | FIGURE **4**

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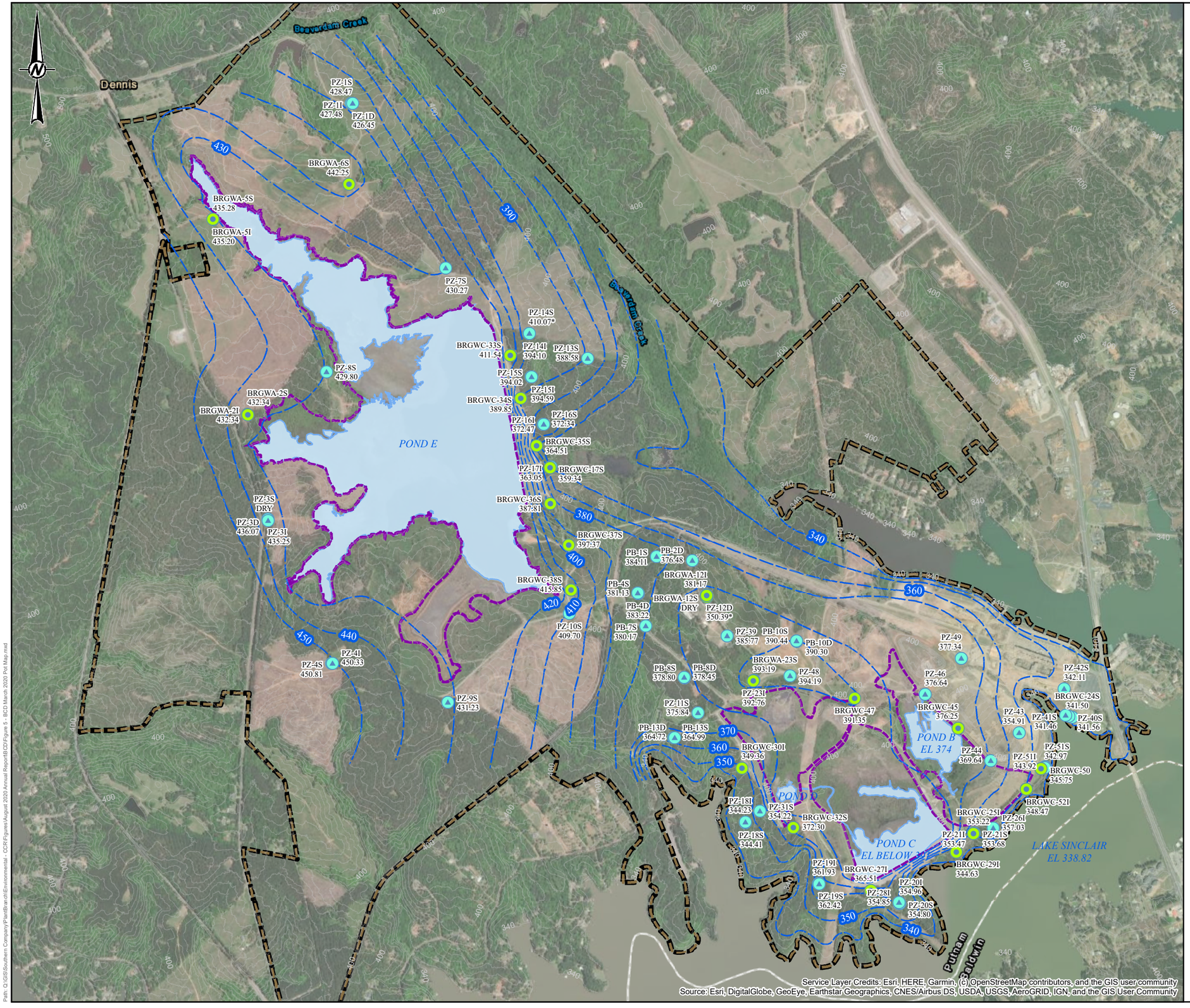

LEGEND

- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (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. PZ-14S* AND PZ-12D* DATA NOT USED FOR CONTOURING.

4. NAVD88=NORTH AMERICAN VERTICAL DATUM 88

5. GROUNDWATER ELEVATIONS RECORDED MARCH 2, 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, AEROGRID, IGN, AND THE GIS USER COMMUNITY

2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

3. BORING/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.

1500 750 0 1500
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

Georgia Power

PROJECT
GROUNDWATER MONITORING PROGRAM

TITLE
GROUNDWATER SURFACE CONTOUR MAP
MARCH 2, 2020

CONSULTANT
GOLDER

YYYY-MM-DD	2020-07-22
PREPARED	DJC
DESIGN	ED
REVIEW	RK
APPROVED	DLP

PROJECT No.	CONTROL	Rev.	FIGURE
166625418	1666254V001-GIS.mxd	1	5

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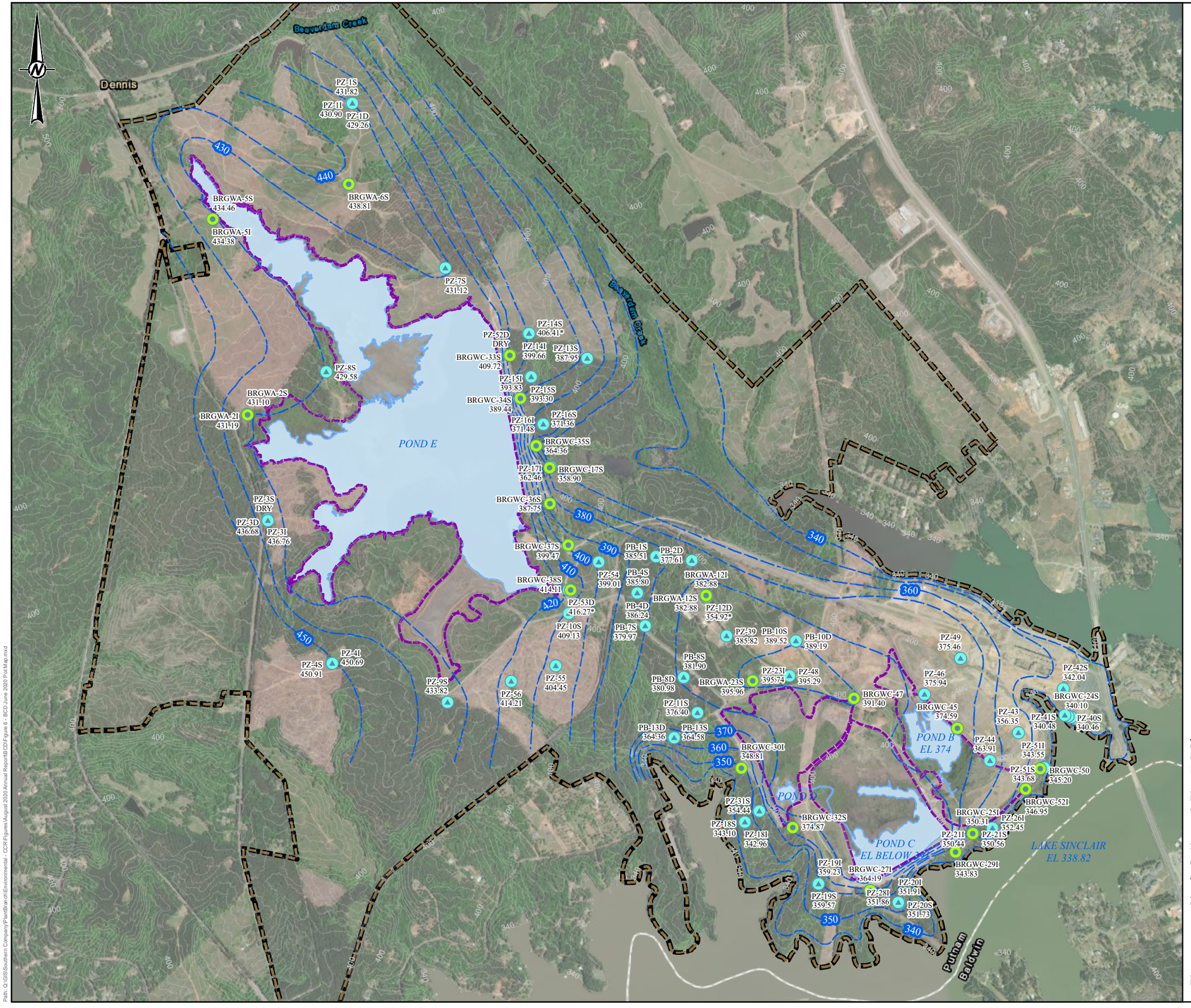

LEGEND

- MONITORING WELL
- PIEZOMETER
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (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. PZ-53D*, PZ-14S*, AND PZ-12D* DATA NOT USED FOR CONTOURING.

4. NAVD88=NORTH AMERICAN VERTICAL DATUM 88

5. GROUNDWATER ELEVATIONS RECORDED JUNE 3, 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, AEROGRID, IGN, AND THE GIS USER COMMUNITY

2. COORDINATE SYSTEM: NAD 1983 STATE PLAN GEORGIA WEST (U.S. FEET).

3. BORING/PIEZOMETER LOCATIONS AND PROPERTY LINE PROVIDED BY METRO ENGINEERING & SURVEYING CO., INC.

1500 750 0 1500
Feet

CLIENT
GEORGIA POWER COMPANY
PLANT BRANCH

Georgia Power

PROJECT
GROUNDWATER MONITORING PROGRAM

TITLE
GROUNDWATER SURFACE CONTOUR MAP
JUNE 3, 2020

CONSULTANT
GOLDER

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

PROJECT No.	CONTROL	Rev.	FIGURE
166625418	1666254V001-GIS.mxd	1	6

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TABLE 1
MONITORING WELL NETWORK SUMMARY (AP-BCD)
Georgia Power - Plant Branch
Milledgeville, GA

Well-ID	Old Well-ID	Location	Geologic Unit Screened [3]	Latitude	Longitude	Ground Surface Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1]	Total Depth (feet bgs)[2]	Top of Screen Elevation (feet NAVD88)[1]	Screen Tip Elevation (feet NAVD88)[1]	Screen Length	Date of Installation
POND BCD												
BRGWA-6S	PZ-6S	Upgradient E	Saprolite	33.215780	-83.333008	455.8	458.96	51.0	416.10	406.10	10.0	4/1/2014
BRGWA-5S	PZ-5S	Upgradient E	Saprolite	33.214300	-83.339971	440.8	443.86	40.0	410.80	400.80	10.0	4/3/2014
BRGWA-5I	PZ - 5I	Upgradient E	Amphibolite Gneiss	33.214317	-83.339996	441.1	443.79	61.2	389.90	379.90	10.0	4/3/2014
BRGWA-2S	PZ-2S	Upgradient E	Saprolite	33.205940	-83.338294	440.4	443.20	44.6	405.80	395.80	10.0	4/2/2014
BRGWA-2I	PZ -2I	Upgradient E	Amphibolite Gneiss	33.205913	-83.338279	440.5	443.14	64.3	386.20	376.20	10.0	3/14/2014
BRGWA-12S	PZ-12S	Upgradient ABCD	Saprolite	33.197941	-83.314864	431.6	434.64	58.3	383.30	373.30	10.0	3/4/2014
BRGWA-12I	PZ -12I	Upgradient ABCD	Biotote gneiss	33.197981	-83.314877	431.5	434.39	77.6	363.90	353.90	10.0	2/20/2014
BRGWA-23S	PZ-23S	Upgradient ABCD	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	21.0	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	21.0	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	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	97.0	327.20	317.20	10.0	1/25/2018
BRGWC-50	PZ-50	Downgradient B	TWR/Biotite Gneiss	33.190421	-83.297841	378.8	381.35	67.0	324.19	314.19	10.0	1/31/2018
BRGWC-52I	PZ-52	Downgradient B	Biotite Gneiss	33.189551	-83.298594	381.2	383.87	75.0	317.03	307.03	10.0	8/6/2018

Notes:
1. feet NAVD88 = feet North American Vertical Datum 1988
2. feet bgs = feet below ground surface
3. TWR = Transitionally Weathered Rock

TABLE 2
GROUNDWATER SAMPLING EVENT SUMMARY
Georgia Power Company - Plant Branch
Milledgeville, Georgia

Well ID	Hydraulic Location	Summary of Sampling Events			Status of Monitoring Well
		August 2019	October 2019	March 2020	
Purpose of Sampling Event		Initial	Assessment	Assessment	
ASH PONDS B, C, and D (AP-BCD)					
BRGWA-2S	Upgradient	I01	A02	A03	Assessment
BRGWA-2I	Upgradient	I01	A02	A03	Assessment
BRGWA-5S	Upgradient	I01	A02	A03	Assessment
BRGWA-5I	Upgradient	I01	A02	A03	Assessment
BRGWA-6S	Upgradient	I01	A02	A03	Assessment
BRGWA-12S	Upgradient	I01	A02	A03	Assessment
BRGWA-12I	Upgradient	I01	A02	A03	Assessment
BRGWA-23S	Upgradient	I01	A02	A03	Assessment
BRGWC-25I	Downgradient	I01	A02	A03	Assessment
BRGWC-27I	Downgradient	I01	A02	A03	Assessment
BRGWC-29I	Downgradient	I01	A02	A03	Assessment
BRGWC-30I	Downgradient	I01	A02	A03	Assessment
BRGWC-32S	Downgradient	I01	A02	A03	Assessment
BRGWC-45	Downgradient	I01	A02	A03	Assessment
BRGWC-47	Downgradient	I01	A02	A03	Assessment
BRGWC-50	Downgradient	I01	A02	A03	Assessment
BRGWC-52I	Downgradient	I01	A02	A03	Assessment

Notes:

I## = Initial Event Number

A## = Assessment Event Number

TABLE 3
Summary of Groundwater Elevations
Georgia Power Company- Plant Branch
Milledgeville, Georgia

Well-ID	Top of Casing Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1,2]	GROUNDWATER ELEVATIONS (FEET NAVD88)			
			8/26/2019	10/14/2019	3/2/2020[2]	6/3/2020[2]
POND BCD						
BRGWA-2S	458.02	443.20	442.58	440.90	432.34	431.10
BRGWA-2I	457.85	443.14	442.16	440.85	432.34	431.19
BRGWA-5S	448.53	443.86	435.92	435.22	435.28	434.46
BRGWA-5I	448.44	443.79	435.93	435.25	435.20	434.38
BRGWA-6S	463.63	458.96	436.81	435.87	442.25	438.81
BRGWA-12S	439.69	434.64	DRY	386.99	DRY	382.88
BRGWA-12I	439.43	434.39	385.78	386.18	381.17	382.88
BRGWA-23S	428.42	428.24	392.17	391.48	393.19	395.96
BRGWC-25I	357.46	357.37	348.56	348.03	353.22	350.31
BRGWC-27I	367.99	366.86	364.59	364.04	365.51	364.19
BRGWC-29I	353.30	353.23	343.58	341.20	344.63	343.83
BRGWC-30I	352.33	352.61	348.24	348.28	349.36	348.81
BRGWC-32S	406.51	406.39	371.31	370.24	372.30	374.87
BRGWC-45	384.61	384.58	373.31	372.74	376.25	374.59
BRGWC-47	411.32	411.20	386.23	385.45	391.35	391.40
BRGWC-50	381.53	381.35	343.73	344.56	345.75	345.20
BRGWC-52I	383.83	383.87	344.81	344.40	348.47	346.95

TABLE 3
Summary of Groundwater Elevations
Georgia Power Company- Plant Branch
Milledgeville, Georgia

Well-ID	Top of Casing Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1,2]	GROUNDWATER ELEVATIONS (FEET NAVD88)			
			8/26/2019	10/14/2019	3/2/2020[2]	6/3/2020[2]
POND E						
BRGWA-2S	458.02	443.20	442.58	440.90	432.34	431.10
BRGWA-2I	457.85	443.14	442.16	440.85	432.34	431.19
BRGWA-5S	448.53	443.86	435.92	435.22	435.28	434.46
BRGWA-5I	448.44	443.79	435.93	435.25	435.20	434.38
BRGWA-6S	463.63	458.96	436.81	435.87	442.25	438.81
BRGWC-17S	370.25	365.32	364.44	363.87	359.34	358.90
BRGWC-33S	416.92	416.68	409.02	408.40	411.54	409.72
BRGWC-34S	392.06	391.96	389.51	389.27	389.85	389.44
BRGWC-35S	366.54	366.31	364.58	364.33	364.51	364.36
BRGWC-36S	386.00	389.84	383.57	383.12	387.81	387.75
BRGWC-37S	447.23	447.05	396.06	396.53	397.37	399.47
BRGWC-38S	432.33	432.24	410.92	410.43	415.85	414.11

TABLE 3
Summary of Groundwater Elevations
Georgia Power Company- Plant Branch
Milledgeville, Georgia

Well-ID	Top of Casing Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1,2]	GROUNDWATER ELEVATIONS (FEET NAVD88)			
			8/26/2019	10/14/2019	3/2/2020[2]	6/3/2020[2]
PIEZOMETERS						
PZ-1S	470.22	465.07	433.23	432.33	428.47	431.82
PZ-1I	469.85	464.71	432.30	431.50	427.48	430.90
PZ-1D	468.56	463.41	430.91	429.94	426.45	429.26
PZ-3S	494.63	490.53	DRY	451.08	DRY	DRY
PZ-3I	493.60	489.49	439.27	439.28	435.25	436.76
PZ-3D	491.59	487.50	440.09	440.06	436.07	436.68
PZ-4S	487.08	482.87	DRY	453.88	450.81	450.91
PZ-4I	487.22	482.98	452.67	452.29	450.33	450.69
PZ-7S	456.87	451.57	429.67	428.74	430.27	431.12
PZ-8S	457.37	453.08	429.68	428.68	429.80	429.58
PZ-9S	474.02	469.28	434.78	434.39	431.23	433.82
PZ-10S	438.95	433.85	411.79	410.70	409.70	409.13
PZ-11S	398.97	393.99	375.86	386.32	375.84	376.40
PZ-12D	439.17	434.09	359.96	356.83	350.39	354.92
PZ-13S	415.13	409.97	387.09	386.33	388.58	387.95
PZ-14S	435.51	423.31	416.35	415.73	410.07	406.41
PZ-14I	434.91	422.71	418.23	418.09	394.10	399.66
PZ-15S	415.77	402.90	405.99	405.65	394.02	393.30
PZ-15I	415.90	403.06	406.53	406.10	394.59	393.83
PZ-16S	386.97	382.52	374.61	373.78	372.34	371.36
PZ-16I	386.89	382.45	374.68	373.84	372.47	371.48
PZ-17I	370.07	365.33	366.96	366.12	363.05	362.46
PZ-18S	367.27	362.82	345.88	345.56	344.41	343.10
PZ-18I	366.75	362.55	345.52	344.94	344.23	342.96
PZ-19S	376.31	371.42	360.01	358.91	362.42	359.57
PZ-19I	376.73	371.74	359.73	358.66	361.93	359.23
PZ-20S	370.71	365.41	355.63	355.56	354.80	351.73
PZ-20I	370.64	365.34	355.78	355.24	354.96	351.91
PZ-21S	358.60	358.52	353.05[3]	348.00[3]	353.68	350.56

TABLE 3
Summary of Groundwater Elevations
Georgia Power Company- Plant Branch
Milledgeville, Georgia

Well-ID	Top of Casing Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1,2]	GROUNDWATER ELEVATIONS (FEET NAVD88)			
			8/26/2019	10/14/2019	3/2/2020[2]	6/3/2020[2]
PIEZOMETERS						
PZ-21I	359.20	358.92	353.94[3]	348.14[3]	353.47	350.44
PZ-23I	427.90	427.74	392.19	391.36	392.76	395.74
BRGWC-24S	354.00	354.10	339.39	339.02	341.50	340.10
PZ-26I	370.93	370.63	348.68	348.21	357.03	352.45
PZ-28I	364.88	364.81	350.48	350.02	354.85	351.86
PZ-31S	376.94	376.77	350.96	348.44	354.22	354.44
PZ-39	434.70	434.78	385.79	385.74	385.77	385.82
PZ-40S	356.06	355.96	339.77	339.44	341.56	340.46
PZ-41S	357.23	357.17	339.75	339.45	341.46	340.48
PZ-42S	361.69	361.66	340.45	340.21	342.11	342.04
PZ-43	383.75	383.71	354.35	354.30	354.91	356.35
PZ-44	383.12	383.04	358.97	358.60	369.64	363.91
PZ-46	384.70	384.64	375.80	374.77	376.64	375.94
PZ-48	421.05	420.90	390.89	389.90	394.19	395.29
PZ-49	385.06	384.99	371.96	370.58	377.34	375.46
PZ-51S	380.19	380.27	341.79	341.49	342.97	343.68
PZ-51I	380.60	380.52	342.39	342.10	343.92	343.55
PZ-52D	417.26	417.03	NI	NI	NI	DRY
PZ-53D	434.95	434.68	NI	NI	NI	416.27
PZ-54	444.01	443.86	NI	NI	NI	399.01
PZ-55	453.10	453.07	NI	NI	NI	404.45
PZ-56	419.01	418.84	NI	NI	NI	414.21

TABLE 3
Summary of Groundwater Elevations
Georgia Power Company- Plant Branch
Milledgeville, Georgia

Well-ID	Top of Casing Elevation (feet NAVD88)[1]	Top of Casing Elevation (feet NAVD88)[1,2]	GROUNDWATER ELEVATIONS (FEET NAVD88)			
			8/26/2019	10/14/2019	3/2/2020[2]	6/3/2020[2]
Temporary Landfill Piezometers						
PB-1S	403.06	403.16	NM	374.52	384.11	385.51
PB-2D	416.76	416.71	NM	375.36	376.48	377.61
PB-4S	411.06	411.15	NM	377.27	381.13	385.80
PB-4D	412.18	412.12	NM	377.90	383.22	386.24
PB-7S	402.86	402.88	NM	372.06	380.17	379.97
PB-8S	401.69	401.82	NM	374.87	378.80	381.90
PB-8D	401.77	401.74	NM	374.32	378.45	380.98
PB-10S	400.94	400.91	NM	385.90	390.44	389.52
PB-10D	400.33	400.31	NM	384.94	390.30	389.19
PB-13S	373.38	373.31	NM	361.16	364.99	364.58
PB-13D	373.83	373.77	NM	360.90	364.72	364.36

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. Survey data for PZ-21S and PZ-21I were updated in January 2020.

NI. Not Installed, PZ-52D, PZ-53D, PZ-54, PZ-55, and PZ-56 were installed in June 2020

TABLE 4A
GROUNDWATER VELOCITY CALCULATIONS (October 2019)
Georgia Power - Plant Branch Ash Pond AP-BCD
Milledgeville, GA

Flow Paths	Groundwater Elevation (feet NAVD88)	Δ h (feet)[1]	Δ l (feet)[2]	Hydraulic Gradient (Δ h/Δ l)	Average Hydraulic Conductivity, K (feet per day)[5]	Assumed Effective Porosity (n_e)[6]	Average Linear Groundwater Velocity	
							(feet per day)[4]	(feet per year)[4]
Pond BCD October 14, 2019								
BRGWA-23S / BRGWC-30I	391.48	43.20	1374.0	0.031	2.73 to 5.47	0.2	0.43 to 0.86	156.6 to 313.9
	348.28							
BRGWC-47 / BRGWC-50	385.45	40.89	3130.0	0.013	2.73 to 5.47	0.2	0.18 to 0.36	65.1 to 130.4
	344.56							

Notes:

1. Δ H = Change in groundwater elevation.
2. Δ L = Distance along flow path.
3. I = Δ H / Δ 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 (March 2020)
Georgia Power - Plant Branch Ash Pond AP-BCD
Milledgeville, GA

Flow Paths	Groundwater Elevation (feet NAVD88)	Δ h (feet)[1]	Δ l (feet)[2]	Hydraulic Gradient (Δ h/Δ l)	Average Hydraulic Conductivity, K (feet per day)[5]	Assumed Effective Porosity (n_e)[6]	Average Linear Groundwater Velocity	
							(feet per day)[4]	(feet per year)[4]
Pond BCD March 2, 2020								
BRGWA-23S / BRGWC-30I	393.19	43.83	1375.0	0.032	2.73 to 5.47	0.2	0.44 to 0.87	158.8 to 318.2
	349.36							
BRGWC-47 / BRGWC-50	391.35	45.60	3120.0	0.015	2.73 to 5.47	0.2	0.20 to 0.40	72.8 to 145.9
	345.75							

Notes:

1. Δ H = Change in groundwater elevation.
2. Δ L = Distance along flow path.
3. I = Δ H / Δ 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 - POND BCD (August 2019)
GPC PLANT BRANCH
MILLDEGEVILLE, GEORGIA

Analyte	Units	PQL/RL	MDL	GROUNDWATER MONITORING WELLS																
				BRGWA-6S	BRGWA-5S	BRGWA-5I	BRGWA-2S	BRGWA-2I	BRGWA-12S	BRGWA-12I	BRGWA-23S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
		Sample Date:		8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/27/2019	8/29/2019	8/27/2019	8/28/2019	8/28/2019	8/27/2019	8/27/2019	8/28/2019	8/28/2019	8/29/2019	8/29/2019
Appendix III																				
BORON, TOTAL	mg/L	0.05	0.021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CALCIUM, TOTAL	mg/L	0.25	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CHLORIDE, TOTAL	mg/L	1.0	0.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FLUORIDE, TOTAL	mg/L	0.3	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.084 J	0.15 J	0.074 J	0.055 J	0.12 J	< 0.05	< 0.05	< 0.05	0.41	0.087 J
pH	S.U.	N/R	N/R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SULFATE, TOTAL	mg/L	1.0	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL DISSOLVED SOLIDS	mg/L	5.0	3.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Appendix IV																				
ANTIMONY, TOTAL	mg/L	0.003	0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	0.0072	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	0.00046 J	< 0.00027	0.00052 J	< 0.00027
ARSENIC, TOTAL	mg/L	0.005	0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	< 0.00035	0.0014 J	0.00051 J	< 0.00035	< 0.00035	0.00058 J	0.0018 J	< 0.00035	0.00067 J
BARIUM, TOTAL	mg/L	0.01	0.00049	0.013	0.056	0.028	0.0095 J	0.012	0.057	0.058	0.076	0.027	0.019	0.02	0.027	0.032	0.11	0.035	0.018	0.017
BERYLLIUM, TOTAL	mg/L	0.003	0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	0.00012 J	0.0008 J	< 0.000074	< 0.000074	< 0.000074	< 0.000074	0.0029 J	< 0.000074
CADMIUM, TOTAL	mg/L	0.0025	0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.00017 J	0.0071	< 0.00011
CHROMIUM, TOTAL	mg/L	0.01	0.00039	0.015	0.0043 J	0.0055 J	0.0083 J	0.0004 J	0.0024 J	0.0023 J	0.0016 J	0.0016 J	< 0.00039	< 0.00039	0.0051 J	0.0019 J	< 0.00039	0.00092 J	< 0.00039	< 0.00039
COBALT, TOTAL	mg/L	0.005	0.0003	< 0.0003	0.00042 J	0.00068 J	0.0012 J	< 0.0003	< 0.0003	< 0.0003	0.0015 J	0.0042 J	0.01	0.0061 J	0.0014 J	< 0.0003	0.011	0.00037 J	1.3	0.00063 J
FLUORIDE, TOTAL	mg/L	0.3	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.084 J	0.15 J	0.074 J	0.055 J	0.12 J	< 0.05	< 0.05	< 0.05	0.41	0.087 J
LEAD, TOTAL	mg/L	0.005	0.000046	< 0.000046	0.00036 J	< 0.000046	0.000058 J	< 0.000046	< 0.000046	< 0.000046	0.00007 J	0.00011 J	< 0.000046	0.00027 J	< 0.000046	< 0.000046	< 0.000046	< 0.000046	0.000049 J	< 0.000046
LITHIUM, TOTAL	mg/L	0.03	0.00078	0.0028 J	< 0.00078	0.0019 J	< 0.00078	0.035	< 0.00078	0.0039 J	0.007 J	< 0.00078	0.0016 J	0.0033 J	0.016 J	0.0022 J	0.0034 J	0.044	0.039	0.0052 J
MERCURY, TOTAL	mg/L	0.0005	0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014	< 0.00014
MOLYBDENUM, TOTAL	mg/L	0.01	0.00095	< 0.00095	< 0.00095	0.0028 J	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095
RADIUM (226 + 228)	pCi/L	1	varies	0.650 U	1.44	1.19	1.47	1.11	1.32	1.31	1.45 U	0.910 U	0.643 U	1.76	1.35	0.860 U	0.528 U	0.804 U	1.33	1.44
SELENIUM, TOTAL	mg/L	0.01	0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	0.0023 J	< 0.0013	0.0017 J	< 0.0013	0.0038 J	0.057	< 0.0013	< 0.0013	< 0.0013	< 0.0013
THALLIUM, TOTAL	mg/L	0.001	0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	0.00017 J	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052

NOTES:

1. mg/L - Milligrams per Liter
2. S. U. - Standard Units
3. pCi/L - picocuries per Liter
4. N/R - indicated constituent does not have an established Maximum Contaminant Limit.
5. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.
6. Radium data is 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.
7. NA - Constituent was not analyzed pursuant to 257.95(d)(1)

TABLE 5B
ANALYTICAL DATA SUMMARY - POND BCD (October 2019)
GPC PLANT BRANCH
MILLDEGEVILLE, GEORGIA

Analyte	Units	PQL/RL	MDL	GROUNDWATER MONITORING WELLS																			
				BRGWA-6S	BRGWA-5S	BRGWA-5I	BRGWA-2S	BRGWA-2I	BRGWA-12S	BRGWA-12I	BRGWA-23S	BRGWC-25I	BRGWC-27I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-30I	BRGWC-32S	BRGWC-32S	BRGWC-45	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
		Sample Date:		10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/15/2019	10/17/2019	12/4/2019	10/16/2019	10/17/2019	12/4/2019	10/17/2019	12/4/2019	10/17/2019	12/3/2019	10/16/2019	10/16/2009	10/16/2019
Appendix III																							
BORON, TOTAL	mg/L	0.04	0.0049	0.01 J	0.006 J	< 0.0049	< 0.0049	0.0067 J	< 0.0049	0.006 J	0.022 J	1.2	0.97	0.89	1.2	1.7	1.60	1.5	1.60	0.064	0.027 J	0.36	0.31	1.3
CALCIUM, TOTAL	mg/L	0.1	0.011	3.5	20	14.4	3.7	15.1	6.2	15.9	8.6	48.3	NA	76.8	54	NA	92.6	NA	52.7	NA	43.7	338	241	48.4
CHLORIDE, TOTAL	mg/L	1.0	0.024	2.4	3.7	4.2	1.9	2.2	3.4	3.1	3.5	5	NA	5.6	6.9	NA	5	NA	6.6	NA	52.8	4.6	21.9	7
FLUORIDE, TOTAL	mg/L	0.3	0.029	< 0.029	0.045 J	< 0.029	< 0.029	< 0.029	< 0.029	0.047 J	< 0.029	0.16 J	NA	0.18 J	0.11 J	NA	0.26 J	NA	0.11 J	NA	0.19 J	0.076 J	0.39	0.22 J
pH	S.U.	N/R	N/R	6.36	7.01	6.77	6.06	6.57	6.61	6.80	5.70	6.00	NA	6.01	4.79	NA	6.43	NA	6.09	NA	5.93	5.90	5.36	7.00
SULFATE, TOTAL	mg/L	1.0	0.017	0.48 J	0.68 J	3.8	0.47 J	5.2	0.61 J	1.9	30	174	NA	241	266	NA	327	NA	293	NA	105	1560	1590	155
TOTAL DISSOLVED SOLIDS	mg/L	10	10	63	144	175	66	140	89	134	124	380	NA	422	2030	NA	612	NA	526	NA	362	2220	2280	346
Appendix IV																							
ANTIMONY, TOTAL	mg/L	0.003	0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	0.00047 J	< 0.00027	0.012	< 0.00027	< 0.00027	NA	< 0.00027	< 0.00027	NA	< 0.00027	NA	< 0.00027	NA	0.00088 J	< 0.00027	< 0.00027	< 0.00027
ARSENIC, TOTAL	mg/L	0.005	0.00035	< 0.00035	0.00039 J	0.00058 J	0.00063 J	0.0008 J	0.00046 J	0.00088 J	0.00075 J	0.00052 J	NA	0.0011 J	0.00065 J	NA	0.00056 J	NA	0.00053 J	NA	0.0007 J	< 0.00035	< 0.00035	0.0026 J
BARIUM, TOTAL	mg/L	0.01	0.00049	0.013	0.049	0.032	0.0091 J	0.013	0.053	0.06	0.069	0.027	NA	0.016	0.019	NA	0.021	NA	0.028	NA	0.099	0.032	0.017	0.015
BERYLLIUM, TOTAL	mg/L	0.003	0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	0.00012 J	0.00072 J	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	0.0027 J	< 0.000074
CADMIUM, TOTAL	mg/L	0.0025	0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.00011 J	0.00018 J	0.014	< 0.00011
CHROMIUM, TOTAL	mg/L	0.01	0.00039	0.014	0.0055 J	0.0047 J	0.0083 J	< 0.00039	0.0023 J	0.0021 J	0.0017 J	0.00098 J	NA	< 0.00039	< 0.00039	NA	< 0.00039	NA	0.0014 J	NA	< 0.00039	< 0.00039	0.0005 J	< 0.00039
COBALT, TOTAL	mg/L	0.005	0.0003	< 0.0003	< 0.0003	0.00083 J	0.00097 J	< 0.0003	< 0.0003	< 0.0003	0.0011 J	0.0043 J	0.009 J	0.0086	0.0058	< 0.0003	0.0012 J	< 0.0003	< 0.0003	0.0096 J	0.0076	0.00032 J	1.4	< 0.0003
FLUORIDE, TOTAL	mg/L	0.3	0.029	< 0.029	0.045 J	< 0.029	< 0.029	< 0.029	< 0.029	0.047 J	< 0.029	0.16 J	NA	0.18 J	0.11 J	NA	0.26 J	NA	0.11 J	NA	0.19 J	0.076 J	0.39	0.22 J
LEAD, TOTAL	mg/L	0.005	0.000046	< 0.000046	0.000079 J	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	NA	0.000063 J	0.00027 J	NA	< 0.000046	NA	< 0.000046	NA	< 0.000046	< 0.000046	0.000085 J	< 0.000046
LITHIUM, TOTAL	mg/L	0.03	0.00078	0.0024 J	< 0.00078	0.002 J	< 0.00078	0.028 J	< 0.00078	0.0037 J	0.0069 J	< 0.00078	NA	0.0014 J	0.0029 J	NA	0.013 J	NA	0.0022 J	NA	0.0033 J	0.038	0.034	0.0023 J
MERCURY, TOTAL	mg/L	0.0005	0.00014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MOLYBDENUM, TOTAL	mg/L	0.01	0.00095	< 0.00095	< 0.00095	0.0035 J	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	< 0.00095	NA	< 0.00095	< 0.00095	NA	< 0.00095	NA	< 0.00095	NA	< 0.00095	< 0.00095	< 0.00095	< 0.00095
RADIUM (226 + 228)	pCi/L	1	varies	0.402 U	0.467 U	0.714 U	0.807 U	1.02 U	1.05 U	1.13 U	1.69	1.06 U	1.07 U	NA	1.69 U	1.249 U	NA	1.198 U	NA	0.977 U	NA	1.28 U	2.51	2.13
SELENIUM, TOTAL	mg/L	0.01	0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	0.0022 J	< 0.0013	NA	0.0036 J	< 0.0013	NA	0.0018 J	NA	0.1	NA	0.0029 J	0.0017 J	0.002 J	< 0.0013
THALLIUM, TOTAL	mg/L	0.001	0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	NA	< 0.000052	0.00017 J	NA	< 0.000052	NA	< 0.000052	NA	< 0.000052	< 0.000052	< 0.000052	< 0.000052

NOTES:

1. mg/L - Milligrams per Liter
2. S. U. - Standard Units
3. pCi/L - picocuries per Liter
4. N/R - indicated constituent does not have an established Maximum Contaminant Limit.
5. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less that the PQL with a J.
6. Radium data is 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.
7. NA - Constituent was not analyzed pursuant to 257.95(d)(1).

TABLE 5C
ANALYTICAL DATA SUMMARY - POND BCD (March 2020)
GPC PLANT BRANCH
MILLDEGEVILLE, GEORGIA

Analyte	Units	PQL/RL	MDL	GROUNDWATER MONITORING WELLS																
				BRGWA-6S	BRGWA-5S	BRGWA-5I	BRGWA-2S	BRGWA-2I	BRGWA-12S	BRGWA-12I	BRGWA-23S	BRGWC-25I	BRGWC-27I	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
		Sample Date:		3/3/2020	3/3/2020	3/3/2020	3/3/2020	3/3/2020	3/3/2020	3/3/2020	3/4/2020	3/4/2020	3/4/2020	3/4/2020	3/5/2020	3/5/2020	5/12/2020	3/5/2020	3/4/2020	3/4/2020	3/4/2020
Appendix III																				
BORON, TOTAL	mg/L	0.10	0.0049	< 0.0049	< 0.0049	< 0.0049	< 0.0049	0.0082 J	0.0065 J	0.010 J	0.044 J	1.2	0.81	1.1	1.50	1.50	NA	0.044 J	0.49	0.32	1.4
CALCIUM, TOTAL	mg/L	0.50	0.14	5.0	23.2	14.9	4.0	20.0	6.8	19.4	11.5	52.0	72.3	59.3	119	52.1	NA	37.9	353	245	49.5
CHLORIDE, TOTAL	mg/L	1.0	0.60	2.9	3.6	3.9	1.9	1.9	3.2	2.6	3.3	5.0	5.1	5.8	4.3	6.0	NA	37.1	4.2	21.6	6.1
FLUORIDE, TOTAL	mg/L	0.30	0.050	0.090 J	0.057 J	< 0.050	0.050 J	0.066 J	< 0.050	0.056 J	< 0.050	0.070 J	< 0.050	< 0.050	0.051 J	< 0.050	NA	< 0.050	< 0.050	0.14 J	0.10 J
pH	S.U.	N/R	N/R	6.59	6.49	6.29	6.1	6.71	5.94	6.33	5.70	6.02	5.80	4.50	5.99	5.74	5.88	5.95	5.76	5.20	6.54
SULFATE, TOTAL	mg/L	1.0	0.50	2.5	0.71 J	2.8	0.93 J	7.1	0.51 J	1.8	38.6	165	205	238	369	269	NA	106	1380	1370	129
TOTAL DISSOLVED SOLIDS	mg/L	10.0	10.0	54.0	130	< 10.0	41.0	155	72.0	115	118	330	326	391	681	489	NA	297	2140	2270	351
Appendix IV																				
ANTIMONY, TOTAL	mg/L	0.003	0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	0.0063	< 0.00027	< 0.00027	< 0.00027	< 0.00027	< 0.00027	0.0014 J	NA	0.0016 J	< 0.00027	< 0.00027	0.00043 J
ARSENIC, TOTAL	mg/L	0.005	0.00035	0.0018 J	0.0027 J	0.0024 J	0.00098 J	0.0027 J	0.0015 J	0.0023 J	< 0.00035	< 0.00035	< 0.00035	0.00044 J	< 0.00035	< 0.00035	NA	< 0.00035	0.00049 J	0.00046 J	0.0047 J
BARIUM, TOTAL	mg/L	0.010	0.00049	0.019	0.051	0.028	0.011	0.017	0.060	0.076	0.087	0.026	0.015	0.018	0.025	0.026	NA	0.078	0.038	0.019	0.022
BERYLLIUM, TOTAL	mg/L	0.003	0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	< 0.000074	0.00012 J	0.00073 J	< 0.000074	< 0.000074	NA	< 0.000074	< 0.000074	0.0052	< 0.000074
CADMIUM, TOTAL	mg/L	0.0025	0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	NA	< 0.00011	0.00024 J	0.013	< 0.00011
CHROMIUM, TOTAL	mg/L	0.010	0.00039	0.011	0.0057 J	0.0069 J	0.0098 J	0.00047 J	0.0028 J	0.0026 J	0.0019 J	< 0.00039	< 0.00039	0.020	< 0.00039	0.0014 J	NA	0.00053 J	0.00078 J	0.00071 J	< 0.00039
COBALT, TOTAL	mg/L	0.0050	0.00030	0.0011 J	< 0.00030	0.00043 J	0.0015 J	< 0.00030	< 0.00030	< 0.00030	0.0012 J	0.0039 J	0.0080	0.0070	0.0011 J	< 0.00030	NA	0.0091	0.0011 J	1.5	< 0.00030
FLUORIDE, TOTAL	mg/L	0.30	0.050	0.090 J	0.057 J	< 0.050	0.050 J	0.066 J	< 0.050	0.056 J	< 0.050	0.070 J	< 0.050	< 0.050	0.051 J	< 0.050	NA	< 0.050	< 0.050	0.14 J	0.10 J
LEAD, TOTAL	mg/L	0.0050	0.000046	0.000073 J	0.000079 J	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	< 0.000046	0.00030 J	< 0.000046	< 0.000046	NA	0.00026 J	0.00012 J	0.00010 J	< 0.000046
LITHIUM, TOTAL	mg/L	0.030	0.00078	0.0026 J	< 0.00078	0.0013 J	< 0.00078	0.055	< 0.00078	0.0033 J	0.0074 J	< 0.00078	0.0014 J	0.0029 J	0.016 J	0.0022 J	NA	0.0030 J	0.042	0.042	0.0020 J
MERCURY, TOTAL	mg/L	0.0005	0.00014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MOLYBDENUM, TOTAL	mg/L	0.01	0.00095	< 0.00095	< 0.00095	0.0023 J	< 0.00095	< 0.00095	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RADIUM (226 + 228)	pCi/L	1	varies	0.397 U	1.50	0.996 U	0.818 U	1.18 U	1.68	1.29 U	1.45	1.34	1.18	1.23	1.35	0.483 U	NA	0.921 U	0.862 U	1.73	2.30
SELENIUM, TOTAL	mg/L	0.010	0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	< 0.0013	0.0019 J	< 0.0013	0.0022 J	0.0018 J	< 0.0013	0.10	0.0989	< 0.0013	< 0.0013	0.0026 J	< 0.0013
THALLIUM, TOTAL	mg/L	0.0010	0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	< 0.000052	0.00016 J	< 0.000052	< 0.000052	NA	< 0.000052	< 0.000052	< 0.000052	< 0.000052

NOTES:

1. mg/L - Milligrams per Liter
2. S. U. - Standard Units
3. pCi/L - picocuries per Liter
4. N/R - indicated constituent does not have an established Maximum Contaminant Limit.
5. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantitation Limit (PQL). Values are displayed as less than the PQL with a J.
6. Radium data is 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.
7. NA - Constituent was not analyzed pursuant to 257.95(d)(1).

GOLDER

APPENDIX A

ANALYTICAL RESULTS, FIELD DATA FORMS, CERTIFIED WELL SURVEY REPORT, WELL INSPECTION LOGS & DATA VALIDATION SUMMARIES

APPENDIX A

ANALYTICAL RESULTS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2622485

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2622485

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2622485

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622485001	**BRGWA-12I**	Water	08/27/19 14:02	08/28/19 11:00
2622485002	**BRGWA-12S**	Water	08/27/19 15:02	08/28/19 11:00
2622485004	**BRGWC-30I**	Water	08/27/19 15:23	08/28/19 11:00
2622485005	**BRGWC-25I**	Water	08/27/19 15:55	08/28/19 11:00
2622485006	**BRGWC-32S**	Water	08/27/19 16:28	08/28/19 11:00

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2622485

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2622485001	**BRGWA-12I**	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622485002	**BRGWA-12S**	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622485004	**BRGWC-30I**	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622485005	**BRGWC-25I**	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1
2622485006	**BRGWC-32S**	EPA 6020B	CSW	12
		EPA 7470A	DRB	1
		EPA 300.0	MWB	1

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2622485

Sample: BRGWA-12I **Lab ID: 2622485001** Collected: 08/27/19 14:02 Received: 08/28/19 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0072**	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 21:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 21:54	7440-38-2	
Barium	**0.058**	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 21:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 21:54	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 21:54	7440-43-9	
Chromium	**0.0023J**	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 21:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 21:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 21:54	7439-92-1	
Lithium	**0.0039J**	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 21:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 21:54	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 21:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 21:54	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/29/19 10:01	08/29/19 15:49	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 02:37	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2622485

Sample: BRGWA-12S **Lab ID: 2622485002** Collected: 08/27/19 15:02 Received: 08/28/19 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:00	7440-38-2	
Barium	**0.057**	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:00	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:00	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:00	7440-43-9	
Chromium	**0.0024J**	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:00	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:00	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:00	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:00	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:00	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:00	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:00	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/29/19 10:01	08/29/19 15:51	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 03:00	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2622485

Sample: BRGWC-30I **Lab ID: 2622485004** Collected: 08/27/19 15:23 Received: 08/28/19 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:11	7440-38-2	
Barium	**0.027**	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:11	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:11	7440-43-9	
Chromium	**0.0051J**	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:11	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:11	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:11	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:11	7439-98-7	
Selenium	**0.0038J**	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/29/19 10:01	08/29/19 15:56	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Fluoride	**0.12J**	mg/L	0.30	0.029	1		09/04/19 03:45	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2622485

Sample: BRGWC-25I **Lab ID: 2622485005** Collected: 08/27/19 15:55 Received: 08/28/19 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:28	7440-38-2	
Barium	**0.027**	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:28	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:28	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:28	7440-43-9	
Chromium	**0.0016J**	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:28	7440-47-3	
Cobalt	**0.0042J**	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:28	7440-48-4	
Lead	**0.00011J**	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:28	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:28	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:28	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:28	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:28	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/29/19 10:01	08/29/19 15:58	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Fluoride	**0.15J**	mg/L	0.30	0.029	1		09/04/19 04:08	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2622485

Sample: BRGWC-32S **Lab ID: 2622485006** Collected: 08/27/19 16:28 Received: 08/28/19 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/29/19 18:05	09/03/19 22:34	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	08/29/19 18:05	09/03/19 22:34	7440-38-2	
Barium	**0.032**	mg/L	0.010	0.00049	1	08/29/19 18:05	09/03/19 22:34	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/29/19 18:05	09/03/19 22:34	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/29/19 18:05	09/03/19 22:34	7440-43-9	
Chromium	**0.0019J**	mg/L	0.010	0.00039	1	08/29/19 18:05	09/03/19 22:34	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/29/19 18:05	09/03/19 22:34	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/29/19 18:05	09/03/19 22:34	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00078	1	08/29/19 18:05	09/03/19 22:34	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/29/19 18:05	09/03/19 22:34	7439-98-7	
Selenium	**0.057**	mg/L	0.010	0.0013	1	08/29/19 18:05	09/03/19 22:34	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/29/19 18:05	09/03/19 22:34	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	08/29/19 10:01	08/29/19 16:01	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Fluoride	ND	mg/L	0.30	0.029	1		09/04/19 04:31	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2622485

QC Batch: 34475 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

METHOD BLANK: 155051 Matrix: Water
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	08/29/19 15:18	

LABORATORY CONTROL SAMPLE: 155052

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155053 155054

Parameter	Units	2622483004 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	0.0024	99	96	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2622485

QC Batch: 34528 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

METHOD BLANK: 155360 Matrix: Water
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/03/19 20:11	
Arsenic	mg/L	ND	0.0050	0.00035	09/03/19 20:11	
Barium	mg/L	ND	0.010	0.00049	09/03/19 20:11	
Beryllium	mg/L	ND	0.0030	0.000074	09/03/19 20:11	
Cadmium	mg/L	ND	0.0025	0.00011	09/03/19 20:11	
Chromium	mg/L	ND	0.010	0.00039	09/03/19 20:11	
Cobalt	mg/L	ND	0.0050	0.00030	09/03/19 20:11	
Lead	mg/L	ND	0.0050	0.000046	09/03/19 20:11	
Lithium	mg/L	ND	0.030	0.00078	09/03/19 20:11	
Molybdenum	mg/L	ND	0.010	0.00095	09/03/19 20:11	
Selenium	mg/L	ND	0.010	0.0013	09/03/19 20:11	
Thallium	mg/L	ND	0.0010	0.000052	09/03/19 20:11	

LABORATORY CONTROL SAMPLE: 155361

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.12	118	80-120	
Arsenic	mg/L	0.1	0.10	105	80-120	
Barium	mg/L	0.1	0.11	105	80-120	
Beryllium	mg/L	0.1	0.11	109	80-120	
Cadmium	mg/L	0.1	0.11	108	80-120	
Chromium	mg/L	0.1	0.11	107	80-120	
Cobalt	mg/L	0.1	0.11	106	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	108	80-120	
Selenium	mg/L	0.1	0.11	107	80-120	
Thallium	mg/L	0.1	0.10	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155362 155363

Parameter	Units	2622481002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.12	114	117	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Barium	mg/L	0.027	0.1	0.1	0.13	0.13	101	107	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.11	103	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2622485

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155362 155363

Parameter	Units	2622481002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.0018J	0.1	0.1	0.11	0.11	104	107	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.11	103	107	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	3	20	
Lithium	mg/L	0.0014J	0.1	0.1	0.10	0.10	100	103	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	110	75-125	4	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.11	103	106	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	102	104	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2622485

QC Batch: 34680 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

METHOD BLANK: 156099 Matrix: Water
Associated Lab Samples: 2622485001, 2622485002, 2622485004, 2622485005, 2622485006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.30	0.029	09/03/19 20:58	

LABORATORY CONTROL SAMPLE: 156100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	10	9.4	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156101 156102

Parameter	Units	2622398001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.11J	10	10	9.4	9.2	92	91	90-110	1	15	

MATRIX SPIKE SAMPLE: 156103

Parameter	Units	2622402001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	ND	10	9.6	96	90-110	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2622485

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.

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.

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.

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2622485

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622485001	**BRGWA-12I**	EPA 3005A	34528	EPA 6020B	34560
2622485002	**BRGWA-12S**	EPA 3005A	34528	EPA 6020B	34560
2622485004	**BRGWC-30I**	EPA 3005A	34528	EPA 6020B	34560
2622485005	**BRGWC-25I**	EPA 3005A	34528	EPA 6020B	34560
2622485006	**BRGWC-32S**	EPA 3005A	34528	EPA 6020B	34560
2622485001	**BRGWA-12I**	EPA 7470A	34475	EPA 7470A	34513
2622485002	**BRGWA-12S**	EPA 7470A	34475	EPA 7470A	34513
2622485004	**BRGWC-30I**	EPA 7470A	34475	EPA 7470A	34513
2622485005	**BRGWC-25I**	EPA 7470A	34475	EPA 7470A	34513
2622485006	**BRGWC-32S**	EPA 7470A	34475	EPA 7470A	34513
2622485001	**BRGWA-12I**	EPA 300.0	34680		
2622485002	**BRGWA-12S**	EPA 300.0	34680		
2622485004	**BRGWC-30I**	EPA 300.0	34680		
2622485005	**BRGWC-25I**	EPA 300.0	34680		
2622485006	**BRGWC-32S**	EPA 300.0	34680		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road
	Atlanta, GA 30339
Email:	jabraham@southernco.com
Phone:	(404)506-7239 Fax:
Requested Due Date:	

Section B
Required Project Information:

Report To:	Joju Abraham
Copy To:	Golder, ~~Maria Padilla~~ M, kaburch@southernco.com
Purchase Order #:	SCS10382775
Project Name:	Plant Branch ABCD
Project #:	CCR

Section C
Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	betsy.mcdaniel@pacelabs.com,
Pace Profile #:	326.11.2

Regulatory Agency	
State / Location	GA

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N): Metals N; Fluoride N; Radium N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	Metals (App. IV) *	Fluoride by 300.0	Radium 226/228	Residual Chlorine (Y/N)
1	BRGWA-12I	WT	G			8-27-19	1402		4	1		3							1	1	2	
2	BRGWA-12S	WT	G			8-27-19	1502		4	1		3							1	1	2	
3	BRGWA-23S	WT	G			8-27-19	1346		4	1		3							1	1	2	
4	BRGWC-30I	WT	G			8-27-19	1523		4	1		3							1	1	2	
5	BRGWC-25I	WT	G			8-27-19	1555		4	1		3							1	1	2	
6	BRGWC-32S	WT	G			8-27-19	1628		4	1		3							1	1	2	
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
* Metals: Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl	[signature] / Golder	8-28-19	0800	[signature]	8/28/19	1100	1.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Travis Martinez

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-27-19

WO#: 2622485

2622485

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 2622485

PM: BM Due Date: 09/05/19

CLIENT: GAPower-CCR

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Ot

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 1.3°C Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/28/19 CDW

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: Travis Martinez Date/Time: 8/28/2019 8:34pm

Comments/ Resolution: Per consultant, cancel BRGWA-235 sampled 8/27/2019. Resampled.

Project Manager Review: BMD **Date:** 8/29/2019

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 26, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2622486

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kristen Jurinko, Golder Associates Inc.
Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta
Dominic Weatherhill, Georgia Power

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2622486

Pennsylvania Certification IDs

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, LLC
110 Technology Parkway
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(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2622486

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622486001	**BRGWA-12I**	Water	08/27/19 14:02	08/28/19 10:00
2622486002	**BRGWA-12S**	Water	08/27/19 15:02	08/28/19 10:00
2622486004	**BRGWC-30I**	Water	08/27/19 15:23	08/28/19 10:00
2622486005	**BRGWC-25I**	Water	08/27/19 15:55	08/28/19 10:00
2622486006	**BRGWC-32S**	Water	08/27/19 16:28	08/28/19 10:00

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2622486

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622486001	**BRGWA-12I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622486002	**BRGWA-12S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622486004	**BRGWC-30I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622486005	**BRGWC-25I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622486006	**BRGWC-32S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

Sample: BRGWA-12I **Lab ID: 2622486001** Collected: 08/27/19 14:02 Received: 08/28/19 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Comments: • Sample canceled by client.

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.367 ± 0.252 (0.357) C:82% T:NA**	pCi/L	09/20/19 07:20	13982-63-3	
Radium-228	EPA 9320	**0.938 ± 0.427 (0.713) C:80% T:80%**	pCi/L	09/23/19 10:55	15262-20-1	
Total Radium	Total Radium Calculation	**1.31 ± 0.679 (1.07)**	pCi/L	09/24/19 10:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

Sample: BRGWA-12S **Lab ID: 2622486002** Collected: 08/27/19 15:02 Received: 08/28/19 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.422 ± 0.268 (0.332) C:79% T:NA**	pCi/L	09/20/19 07:20	13982-63-3	
Radium-228	EPA 9320	**0.899 ± 0.456 (0.804) C:77% T:79%**	pCi/L	09/23/19 10:55	15262-20-1	
Total Radium	Total Radium Calculation	**1.32 ± 0.724 (1.14)**	pCi/L	09/24/19 10:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

Sample: BRGWC-30I **Lab ID: 2622486004** Collected: 08/27/19 15:23 Received: 08/28/19 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.572 ± 0.280 (0.261) C:94% T:NA**	pCi/L	09/20/19 07:27	13982-63-3	
Radium-228	EPA 9320	**0.777 ± 0.390 (0.684) C:80% T:87%**	pCi/L	09/23/19 10:55	15262-20-1	
Total Radium	Total Radium Calculation	**1.35 ± 0.670 (0.945)**	pCi/L	09/24/19 10:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

Sample: BRGWC-25I **Lab ID: 2622486005** Collected: 08/27/19 15:55 Received: 08/28/19 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.230 ± 0.274 (0.570) C:79% T:NA**	pCi/L	09/20/19 08:48	13982-63-3	
Radium-228	EPA 9320	**0.680 ± 0.359 (0.620) C:81% T:78%**	pCi/L	09/23/19 10:55	15262-20-1	
Total Radium	Total Radium Calculation	**0.910 ± 0.633 (1.19)**	pCi/L	09/24/19 10:31	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

Sample: BRGWC-32S **Lab ID: 2622486006** Collected: 08/27/19 16:28 Received: 08/28/19 10:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.307 ± 0.240 (0.409) C:87% T:NA**	pCi/L	09/20/19 08:49	13982-63-3	
Radium-228	EPA 9320	**0.553 ± 0.315 (0.561) C:83% T:86%**	pCi/L	09/23/19 10:56	15262-20-1	
Total Radium	Total Radium Calculation	**0.860 ± 0.555 (0.970)**	pCi/L	09/24/19 13:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

QC Batch: 359967 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2622486001, 2622486002, 2622486004, 2622486005, 2622486006

METHOD BLANK: 1747391 Matrix: Water
Associated Lab Samples: 2622486001, 2622486002, 2622486004, 2622486005, 2622486006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.763 ± 0.364 (0.510) C:93% T:NA	pCi/L	09/20/19 07:14	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2622486

QC Batch: 359968 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2622486001, 2622486002, 2622486004, 2622486005, 2622486006

METHOD BLANK: 1747392 Matrix: Water
Associated Lab Samples: 2622486001, 2622486002, 2622486004, 2622486005, 2622486006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.921 ± 0.439 (0.755) C:82% T:78%	pCi/L	09/23/19 10:55	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2622486

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2622486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622486001	**BRGWA-12I**	EPA 9315	359967		
2622486002	**BRGWA-12S**	EPA 9315	359967		
2622486004	**BRGWC-30I**	EPA 9315	359967		
2622486005	**BRGWC-25I**	EPA 9315	359967		
2622486006	**BRGWC-32S**	EPA 9315	359967		
2622486001	**BRGWA-12I**	EPA 9320	359968		
2622486002	**BRGWA-12S**	EPA 9320	359968		
2622486004	**BRGWC-30I**	EPA 9320	359968		
2622486005	**BRGWC-25I**	EPA 9320	359968		
2622486006	**BRGWC-32S**	EPA 9320	359968		
2622486001	**BRGWA-12I**	Total Radium Calculation	362817		
2622486002	**BRGWA-12S**	Total Radium Calculation	362817		
2622486004	**BRGWC-30I**	Total Radium Calculation	362817		
2622486005	**BRGWC-25I**	Total Radium Calculation	362817		
2622486006	**BRGWC-32S**	Total Radium Calculation	362867		

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A
Required Client Information:

Company:	Georgia Power - Coal Combustion Residuals
Address:	2480 Maner Road, Atlanta, GA 30339
Email:	jabraham@southernco.com
Phone:	(404)506-7239 Fax
Requested Due Date:	

Section B
Required Project Information:

Report To:	Joju Abraham
Copy To:	Golder, ~~Macia Rad-Ha~~ jaburch@southernco.com
Purchase Order #:	SCS10382775
Project Name:	Plant Branch ABCD
Project #:	CCR

Section C
Invoice Information:

Attention:	scsinvoices@southernco.com
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	betsy.mcdaniel@pacelabs.com,
Pace Profile #:	326 11.2

Regulatory Agency	
State / Location	GA

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Requested Analysis Filtered (Y/N): Metals N, Fluoride N, Radium N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Metals (App. IV) *	Fluoride by 300.0	Radium 226/228	Residual Chlorine (Y/N)
1	BRGWA-12I	WT	G			8-27-19	1402		4	1		3						1	1	2	
2	BRGWA-12S	WT	G			8-27-19	1502		4	1		3						1	1	2	
3	BRGWA-23S	WT	G			8-27-19	1346		4	1		3						1	1	2	
4	BRGWC-30I	WT	G			8-27-19	1523		4	1		3						1	1	2	
5	BRGWC-25I	WT	G			8-27-19	1555		4	1		3						1	1	2	
6	BRGWC-32S	WT	G			8-27-19	1628		4	1		3						1	1	2	
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Metals: Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl	[signature] / Golder	8-28-19	0800	[signature]	8/28/19	1100	1.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Travis Martinez

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-27-19

WO#: 2622486

2622486

Sample Condition Upon Receipt

WU#: 2622486

PM: BM Due Date: 09/26/19

CLIENT: GAPower-CCR

Pace Analytical

Client Name: GA Power

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other _____

Tracking #: _____

Optional
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 1.3°C

Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 8/28/19 DW

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: Travis Martinez Date/Time: 8/28/2019 8:34pm

Comments/ Resolution: Per consultant, cancel BRGWA-235 sampled 8/27/2019. Resampled.

Project Manager Review: BMD **Date:** 8/29/2019

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch BCD
Pace Project No.: 2622561

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch BCD
Pace Project No.: 2622561

Pace Analytical Services Atlanta
110 Technology Parkway 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

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, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch BCD
Pace Project No.: 2622561

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622561001	**BRGWC-27I**	Water	08/28/19 09:43	08/29/19 11:15
2622561002	**BRGWC-29I**	Water	08/28/19 10:57	08/29/19 11:15
2622561003	**BRGWC-45**	Water	08/28/19 15:28	08/29/19 11:15
2622561004	**BRGWC-47**	Water	08/28/19 10:48	08/29/19 11:15
2622561005	**FB-3**	Water	08/28/19 13:05	08/29/19 11:15
2622561006	**EB-3**	Water	08/28/19 13:15	08/29/19 11:15
2622561007	**Dup-3**	Water	08/28/19 00:00	08/29/19 11:15

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110 Technology Parkway
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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch BCD
Pace Project No.: 2622561

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622561001	**BRGWC-27I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561002	**BRGWC-29I**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561003	**BRGWC-45**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561004	**BRGWC-47**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561005	**FB-3**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561006	**EB-3**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A
2622561007	**Dup-3**	EPA 6020B	CSW	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	1	PASI-A

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: BRGWC-27I **Lab ID: 2622561001** Collected: 08/28/19 09:43 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:05	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:05	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:05	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:05	7440-47-3	
Cobalt	**0.010**	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:05	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:05	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:05	7439-98-7	
Selenium	**0.0017J**	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 16:51	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.074J**	mg/L	0.30	0.050	1		09/05/19 11:34	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: BRGWC-29I **Lab ID: 2622561002** Collected: 08/28/19 10:57 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:11	7440-36-0	
Arsenic	**0.00051J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:11	7440-38-2	
Barium	**0.020**	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:11	7440-39-3	
Beryllium	**0.00080J**	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:11	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:11	7440-47-3	
Cobalt	**0.0061**	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:11	7440-48-4	
Lead	**0.00027J**	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:11	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:11	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:11	7782-49-2	
Thallium	**0.00017J**	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:11	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.055J**	mg/L	0.30	0.050	1		09/05/19 12:32	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: BRGWC-45 **Lab ID: 2622561003** Collected: 08/28/19 15:28 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00046J**	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:17	7440-36-0	
Arsenic	**0.00058J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:17	7440-38-2	
Barium	**0.11**	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:17	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:17	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:17	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:17	7440-47-3	
Cobalt	**0.011**	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:17	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:17	7439-92-1	
Lithium	**0.0034J**	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:17	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:17	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:05	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		09/05/19 13:44	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: BRGWC-47 **Lab ID: 2622561004** Collected: 08/28/19 10:48 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:23	7440-36-0	
Arsenic	**0.0018J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:23	7440-38-2	
Barium	**0.035**	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:23	7440-41-7	
Cadmium	**0.00017J**	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:23	7440-43-9	
Chromium	**0.00092J**	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:23	7440-47-3	
Cobalt	**0.00037J**	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:23	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:23	7439-92-1	
Lithium	**0.044**	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:23	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:23	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:12	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		09/05/19 11:48	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: FB-3 **Lab ID: 2622561005** Collected: 08/28/19 13:05 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:40	7440-36-0	
Arsenic	**0.00077J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:40	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:40	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:40	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:40	7440-43-9	
Chromium	**0.00039J**	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:40	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:40	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:40	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:40	7439-93-2	
Molybdenum	**0.0020J**	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:40	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:40	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:40	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:14	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		09/05/19 13:15	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: EB-3 **Lab ID: 2622561006** Collected: 08/28/19 13:15 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:46	7440-36-0	
Arsenic	**0.00073J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:46	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:46	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:46	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:46	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:46	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:46	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:46	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:46	7439-93-2	
Molybdenum	**0.0021J**	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:46	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:46	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:46	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:17	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		09/05/19 13:30	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622561

Sample: Dup-3 **Lab ID: 2622561007** Collected: 08/28/19 00:00 Received: 08/29/19 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00074J**	mg/L	0.0030	0.00027	1	08/30/19 16:08	09/04/19 20:51	7440-36-0	
Arsenic	**0.00087J**	mg/L	0.0050	0.00035	1	08/30/19 16:08	09/04/19 20:51	7440-38-2	
Barium	**0.10**	mg/L	0.010	0.00049	1	08/30/19 16:08	09/04/19 20:51	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	08/30/19 16:08	09/04/19 20:51	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	08/30/19 16:08	09/04/19 20:51	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	08/30/19 16:08	09/04/19 20:51	7440-47-3	
Cobalt	**0.012**	mg/L	0.0050	0.00030	1	08/30/19 16:08	09/04/19 20:51	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	08/30/19 16:08	09/04/19 20:51	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00078	1	08/30/19 16:08	09/04/19 20:51	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	08/30/19 16:08	09/04/19 20:51	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	08/30/19 16:08	09/04/19 20:51	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	08/30/19 16:08	09/04/19 20:51	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/03/19 11:46	09/03/19 17:19	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	ND	mg/L	0.30	0.050	1		09/05/19 11:19	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622561

QC Batch: 34630 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

METHOD BLANK: 155919 Matrix: Water
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/03/19 16:46	

LABORATORY CONTROL SAMPLE: 155920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0027	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155921 155922

Parameter	Units	2622561001 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	105	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

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622561

QC Batch: 34569 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

METHOD BLANK: 155676 Matrix: Water
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/04/19 18:22	
Arsenic	mg/L	ND	0.0050	0.00035	09/04/19 18:22	
Barium	mg/L	ND	0.010	0.00049	09/04/19 18:22	
Beryllium	mg/L	ND	0.0030	0.000074	09/04/19 18:22	
Cadmium	mg/L	ND	0.0025	0.00011	09/04/19 18:22	
Chromium	mg/L	ND	0.010	0.00039	09/04/19 18:22	
Cobalt	mg/L	ND	0.0050	0.00030	09/04/19 18:22	
Lead	mg/L	ND	0.0050	0.000046	09/04/19 18:22	
Lithium	mg/L	ND	0.030	0.00078	09/04/19 18:22	
Molybdenum	mg/L	ND	0.010	0.00095	09/04/19 18:22	
Selenium	mg/L	ND	0.010	0.0013	09/04/19 18:22	
Thallium	mg/L	ND	0.0010	0.000052	09/04/19 18:22	

LABORATORY CONTROL SAMPLE: 155677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	112	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	105	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Cadmium	mg/L	0.1	0.10	104	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	104	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155678 155679

Parameter	Units	2622524009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	110	111	75-125	1	20	
Arsenic	mg/L	0.0011J	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Barium	mg/L	0.14	0.1	0.1	0.23	0.23	90	91	75-125	0	20	
Beryllium	mg/L	0.00090J	0.1	0.1	0.093	0.090	92	90	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622561

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 155678 155679

Parameter	Units	2622524009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.0056J	0.1	0.1	0.11	0.11	101	100	75-125	0	20	
Cobalt	mg/L	0.00070J	0.1	0.1	0.10	0.10	99	99	75-125	0	20	
Lead	mg/L	0.00022J	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Lithium	mg/L	0.012J	0.1	0.1	0.11	0.11	93	94	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	103	75-125	1	20	
Selenium	mg/L	0.0019J	0.1	0.1	0.10	0.099	100	97	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.094	96	94	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

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622561

QC Batch: 496024 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
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

METHOD BLANK: 2672026 Matrix: Water
Associated Lab Samples: 2622561001, 2622561002, 2622561003, 2622561004, 2622561005, 2622561006, 2622561007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	09/05/19 07:56	

LABORATORY CONTROL SAMPLE: 2672027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2672028 2672029

Parameter	Units	2622563004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	100	105	90-110	4	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2672030 2672031

Parameter	Units	2622561002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.055J	2.5	2.5	3.2	3.2	125	127	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch BCD
Pace Project No.: 2622561

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.

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.

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.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch BCD
Pace Project No.: 2622561

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622561001	**BRGWC-27I**	EPA 3005A	34569	EPA 6020B	34600
2622561002	**BRGWC-29I**	EPA 3005A	34569	EPA 6020B	34600
2622561003	**BRGWC-45**	EPA 3005A	34569	EPA 6020B	34600
2622561004	**BRGWC-47**	EPA 3005A	34569	EPA 6020B	34600
2622561005	**FB-3**	EPA 3005A	34569	EPA 6020B	34600
2622561006	**EB-3**	EPA 3005A	34569	EPA 6020B	34600
2622561007	**Dup-3**	EPA 3005A	34569	EPA 6020B	34600
2622561001	**BRGWC-27I**	EPA 7470A	34630	EPA 7470A	34665
2622561002	**BRGWC-29I**	EPA 7470A	34630	EPA 7470A	34665
2622561003	**BRGWC-45**	EPA 7470A	34630	EPA 7470A	34665
2622561004	**BRGWC-47**	EPA 7470A	34630	EPA 7470A	34665
2622561005	**FB-3**	EPA 7470A	34630	EPA 7470A	34665
2622561006	**EB-3**	EPA 7470A	34630	EPA 7470A	34665
2622561007	**Dup-3**	EPA 7470A	34630	EPA 7470A	34665
2622561001	**BRGWC-27I**	EPA 300.0 Rev 2.1 1993	496024		
2622561002	**BRGWC-29I**	EPA 300.0 Rev 2.1 1993	496024		
2622561003	**BRGWC-45**	EPA 300.0 Rev 2.1 1993	496024		
2622561004	**BRGWC-47**	EPA 300.0 Rev 2.1 1993	496024		
2622561005	**FB-3**	EPA 300.0 Rev 2.1 1993	496024		
2622561006	**EB-3**	EPA 300.0 Rev 2.1 1993	496024		
2622561007	**Dup-3**	EPA 300.0 Rev 2.1 1993	496024		

Pace Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

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

WO# : 2622561 WO# : 2622561

2622561

PM: BM Due Date: 09/06/19

CLIENT: GAPower-CCR

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD Project # CCR
Collected By (print): J.Quemeville	Purchase Order # : SCS10382775 Quote #:
Collected By (signature):	Turnaround Date Required:
	Rush: [ ]Same Day [ ]Next Day [ ]2 Day [ ]3 Day [ ]4 Day [ ]5 Day (Expedite Charges Apply)

Pace Profile# 326.11.2	
Pace Project Manager: betsy.mcdaniel@pacelabs.com	
Immediately Packed on Ice: [X] Yes [ ] No	
Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____	

* 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)

** 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 _____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses:	Fluoride by 300.0		Metals app IV		Radium 226.228				
BRGWC-27I	GW	G			8/28/2019	9:43		4		1		1		1				
BRGWC-29I	GW	G			8/28/2019	10:57		4		1		1		1				
BRGWC-45	GW	G			8/28/2019	15:28		4		1		1		1				
BRGWC-47	GW	G			8/28/2019	10:48		4		1		1		1				
FB-3	WT	G			8/28/2019	13:05		4		1		1		1				
EB-3	WT	G			8/28/2019	13:15		4		1		1		1				
DUP-3	GW	G			8/28/2019	--		4		1		1		1				

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
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
Cl Strips: _____
Sample pH Acceptable Y N NA
pH Strips: _____
Sulfide Present Y N NA
Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:
Metals : Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: 83
Cooler 1 Temp Upon Receipt: 0.3 oC
Cooler 1 Therm Corr. Factor: ___ oC
Cooler 1 Corrected Temp: ___ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8-29-19 0825	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY Table #:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) M Zalman	Date/Time: 8/29/19 1115	Acctnum: Template: Prelogin:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	PM: PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 24, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch BCD
Pace Project No.: 2622562

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 29, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kristen Jurinko, Golder Associates Inc.
Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch BCD
Pace Project No.: 2622562

Pennsylvania Certification IDs

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, LLC
110 Technology Parkway
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(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch BCD
Pace Project No.: 2622562

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622562001	**BRGWC-27I**	Water	08/28/19 09:43	08/29/19 11:15
2622562002	**BRGWC-29I**	Water	08/28/19 10:57	08/29/19 11:15
2622562003	**BRGWC-45**	Water	08/28/19 15:28	08/29/19 11:15
2622562004	**BRGWC-47**	Water	08/28/19 10:48	08/29/19 11:15
2622562005	**FB-3**	Water	08/28/19 13:05	08/29/19 11:15
2622562006	**EB-3**	Water	08/28/19 13:15	08/29/19 11:15
2622562007	**Dup-3**	Water	08/28/19 00:00	08/29/19 11:15

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch BCD
Pace Project No.: 2622562

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622562001	**BRGWC-27I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562002	**BRGWC-29I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562003	**BRGWC-45**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562004	**BRGWC-47**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562005	**FB-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562006	**EB-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622562007	**Dup-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: BRGWC-27I **Lab ID: 2622562001** Collected: 08/28/19 09:43 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.643 ± 0.280 (0.284) C:91% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**-0.0523 ± 0.444 (1.03) C:72% T:78%**	pCi/L	09/19/19 15:08	15262-20-1	
Total Radium	Total Radium Calculation	**0.643 ± 0.724 (1.31)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: BRGWC-29I **Lab ID: 2622562002** Collected: 08/28/19 10:57 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.652 ± 0.289 (0.284) C:90% T:NA**	pCi/L	09/12/19 08:11	13982-63-3	
Radium-228	EPA 9320	**1.11 ± 0.726 (1.38) C:63% T:84%**	pCi/L	09/19/19 18:37	15262-20-1	
Total Radium	Total Radium Calculation	**1.76 ± 1.02 (1.66)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: BRGWC-45 **Lab ID: 2622562003** Collected: 08/28/19 15:28 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.499 ± 0.302 (0.495) C:84% T:NA**	pCi/L	09/12/19 08:17	13982-63-3	
Radium-228	EPA 9320	**0.0294 ± 0.771 (1.80) C:49% T:76%**	pCi/L	09/19/19 18:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.528 ± 1.07 (2.30)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: BRGWC-47 **Lab ID: 2622562004** Collected: 08/28/19 10:48 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.804 ± 0.315 (0.324) C:96% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**-0.329 ± 0.442 (1.07) C:67% T:86%**	pCi/L	09/19/19 15:08	15262-20-1	
Total Radium	Total Radium Calculation	**0.804 ± 0.757 (1.39)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: FB-3 **Lab ID: 2622562005** Collected: 08/28/19 13:05 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.229 ± 0.199 (0.354) C:86% T:NA**	pCi/L	09/12/19 08:12	13982-63-3	
Radium-228	EPA 9320	**1.08 ± 0.767 (1.49) C:63% T:76%**	pCi/L	09/19/19 18:44	15262-20-1	
Total Radium	Total Radium Calculation	**1.31 ± 0.966 (1.84)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: EB-3 **Lab ID: 2622562006** Collected: 08/28/19 13:15 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.410 ± 0.245 (0.342) C:87% T:NA**	pCi/L	09/12/19 08:14	13982-63-3	
Radium-228	EPA 9320	**0.205 ± 0.616 (1.39) C:58% T:84%**	pCi/L	09/19/19 18:44	15262-20-1	
Total Radium	Total Radium Calculation	**0.615 ± 0.861 (1.73)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

Sample: Dup-3 **Lab ID: 2622562007** Collected: 08/28/19 00:00 Received: 08/29/19 11:15 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.129 ± 0.183 (0.394) C:84% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**-0.553 ± 0.459 (1.12) C:69% T:82%**	pCi/L	09/19/19 15:08	15262-20-1	
Total Radium	Total Radium Calculation	**0.129 ± 0.642 (1.51)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

QC Batch: 359954 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2622562001, 2622562002, 2622562003, 2622562004, 2622562005, 2622562006, 2622562007

METHOD BLANK: 1747365 Matrix: Water
Associated Lab Samples: 2622562001, 2622562002, 2622562003, 2622562004, 2622562005, 2622562006, 2622562007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0188 ± 0.324 (0.758) C:68% T:80%	pCi/L	09/19/19 15:18	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622562

QC Batch: 359953 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2622562001, 2622562002, 2622562003, 2622562004, 2622562005, 2622562006, 2622562007

METHOD BLANK: 1747363 Matrix: Water
Associated Lab Samples: 2622562001, 2622562002, 2622562003, 2622562004, 2622562005, 2622562006, 2622562007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.412 ± 0.223 (0.263) C:94% T:NA	pCi/L	09/12/19 08:42	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch BCD
Pace Project No.: 2622562

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch BCD
Pace Project No.: 2622562

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622562001	**BRGWC-27I**	EPA 9315	359953		
2622562002	**BRGWC-29I**	EPA 9315	359953		
2622562003	**BRGWC-45**	EPA 9315	359953		
2622562004	**BRGWC-47**	EPA 9315	359953		
2622562005	**FB-3**	EPA 9315	359953		
2622562006	**EB-3**	EPA 9315	359953		
2622562007	**Dup-3**	EPA 9315	359953		
2622562001	**BRGWC-27I**	EPA 9320	359954		
2622562002	**BRGWC-29I**	EPA 9320	359954		
2622562003	**BRGWC-45**	EPA 9320	359954		
2622562004	**BRGWC-47**	EPA 9320	359954		
2622562005	**FB-3**	EPA 9320	359954		
2622562006	**EB-3**	EPA 9320	359954		
2622562007	**Dup-3**	EPA 9320	359954		
2622562001	**BRGWC-27I**	Total Radium Calculation	362616		
2622562002	**BRGWC-29I**	Total Radium Calculation	362616		
2622562003	**BRGWC-45**	Total Radium Calculation	362616		
2622562004	**BRGWC-47**	Total Radium Calculation	362616		
2622562005	**FB-3**	Total Radium Calculation	362616		
2622562006	**EB-3**	Total Radium Calculation	362616		
2622562007	**Dup-3**	Total Radium Calculation	362616		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

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

WO#: 2622562

2622562

WO#: 2622562

PM: BM Due Date: 09/27/19

CLIENT: GAPower-CCR

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD Project # CCR
Collected By (print): J. Quenneville	Purchase Order # : SCS10382775 Quote #:
Collected By (signature):	Turnaround Date Required:
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Pace Profile# 326.11.2
Pace Project Manager: betsy.mcdaniel@pacelabs.com
Immediately Packed on Ice: [X] Yes [ ] No
Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

** 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: Fluoride by 300.0	Metals app IV	Radium 226.228
BRGWC-27I	GW	G			8/28/2019	9:43		4	1	1	1
BRGWC-29I	GW	G			8/28/2019	10:57		4	1	1	1
BRGWC-45	GW	G			8/28/2019	15:28		4	1	1	1
BRGWC-47	GW	G			8/28/2019	10:48		4	1	1	1
FB-3	WT	G			8/28/2019	13:05		4	1	1	1
EB-3	WT	G			8/28/2019	13:15		4	1	1	1
DUP-3	GW	G			8/28/2019	--		4	1	1	1

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
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
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	
LAB USE ONLY:	
Lab Sample # / Comments:	

Customer Remarks / Special Conditions / Possible Hazards:
Metals : Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: 8
Cooler 1 Temp Upon Receipt: 0.3 oC
Cooler 1 Therm Corr. Factor: __ oC
Cooler 1 Corrected Temp: __ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8-29-19 0825	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY Table #:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 8/29/19 1115	Acctnum: 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

Page: ____ of: ____

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch BCD
Pace Project No.: 2622596

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 10, 2019. This report was revised to correct the DUP sample ID per consultant request. No other changes have been made to this report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch BCD
Pace Project No.: 2622596

Pace Analytical Services Atlanta
110 Technology Parkway 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

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch BCD
Pace Project No.: 2622596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622596001	**BRGWA-23S**	Water	08/29/19 15:05	08/30/19 08:00
2622596002	**BRGWC-50**	Water	08/29/19 10:55	08/30/19 08:00
2622596003	**BRGWC-52I**	Water	08/29/19 12:40	08/30/19 08:00
2622596004	**Dup-2**	Water	08/29/19 00:00	08/30/19 08:00

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SAMPLE ANALYTE COUNT

Project: Plant Branch BCD
Pace Project No.: 2622596

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622596001	**BRGWA-23S**	EPA 6020B	KLH	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622596002	**BRGWC-50**	EPA 6020B	CSW, KLH	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622596003	**BRGWC-52I**	EPA 6020B	KLH	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A
2622596004	**Dup-2**	EPA 6020B	CSW, KLH	12	PASI-GA
		EPA 7470A	DRB	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	1	PASI-A

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ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622596

Sample: BRGWA-23S **Lab ID: 2622596001** Collected: 08/29/19 15:05 Received: 08/30/19 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/04/19 14:00	09/06/19 14:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/04/19 14:00	09/06/19 14:58	7440-38-2	
Barium	**0.076**	mg/L	0.010	0.00049	1	09/04/19 14:00	09/06/19 14:58	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/04/19 14:00	09/06/19 14:58	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/04/19 14:00	09/06/19 14:58	7440-43-9	
Chromium	**0.0016J**	mg/L	0.010	0.00039	1	09/04/19 14:00	09/06/19 14:58	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00030	1	09/04/19 14:00	09/06/19 14:58	7440-48-4	
Lead	**0.000070J**	mg/L	0.0050	0.000046	1	09/04/19 14:00	09/06/19 14:58	7439-92-1	
Lithium	**0.0070J**	mg/L	0.030	0.00078	1	09/04/19 14:00	09/06/19 14:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/04/19 14:00	09/06/19 14:58	7439-98-7	
Selenium	**0.0023J**	mg/L	0.010	0.0013	1	09/04/19 14:00	09/06/19 14:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/04/19 14:00	09/06/19 14:58	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/05/19 09:07	09/05/19 13:35	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.084J**	mg/L	0.10	0.050	1		09/07/19 13:52	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622596

Sample: BRGWC-50 **Lab ID: 2622596002** Collected: 08/29/19 10:55 Received: 08/30/19 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00052J**	mg/L	0.0030	0.00027	1	09/04/19 14:00	09/06/19 15:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/04/19 14:00	09/06/19 15:21	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00049	1	09/04/19 14:00	09/06/19 15:21	7440-39-3	
Beryllium	**0.0029J**	mg/L	0.0030	0.000074	1	09/04/19 14:00	09/06/19 15:21	7440-41-7	
Cadmium	**0.0071**	mg/L	0.0025	0.00011	1	09/04/19 14:00	09/06/19 15:21	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	09/04/19 14:00	09/06/19 15:21	7440-47-3	
Cobalt	**1.3**	mg/L	0.025	0.0015	5	09/04/19 14:00	09/09/19 13:11	7440-48-4	
Lead	**0.000049J**	mg/L	0.0050	0.000046	1	09/04/19 14:00	09/06/19 15:21	7439-92-1	
Lithium	**0.039**	mg/L	0.030	0.00078	1	09/04/19 14:00	09/06/19 15:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/04/19 14:00	09/06/19 15:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	09/04/19 14:00	09/06/19 15:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/04/19 14:00	09/06/19 15:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/05/19 09:07	09/05/19 13:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.41**	mg/L	0.10	0.050	1		09/07/19 14:07	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622596

Sample: BRGWC-52I **Lab ID: 2622596003** Collected: 08/29/19 12:40 Received: 08/30/19 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/04/19 14:00	09/06/19 15:27	7440-36-0	
Arsenic	**0.00067J**	mg/L	0.0050	0.00035	1	09/04/19 14:00	09/06/19 15:27	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00049	1	09/04/19 14:00	09/06/19 15:27	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	09/04/19 14:00	09/06/19 15:27	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00011	1	09/04/19 14:00	09/06/19 15:27	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	09/04/19 14:00	09/06/19 15:27	7440-47-3	
Cobalt	**0.00063J**	mg/L	0.0050	0.00030	1	09/04/19 14:00	09/06/19 15:27	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	09/04/19 14:00	09/06/19 15:27	7439-92-1	
Lithium	**0.0052J**	mg/L	0.030	0.00078	1	09/04/19 14:00	09/06/19 15:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/04/19 14:00	09/06/19 15:27	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	09/04/19 14:00	09/06/19 15:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/04/19 14:00	09/06/19 15:27	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/05/19 09:07	09/05/19 13:39	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.087J**	mg/L	0.10	0.050	1		09/07/19 14:23	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch BCD
Pace Project No.: 2622596

Sample: Dup-2 **Lab ID: 2622596004** Collected: 08/29/19 00:00 Received: 08/30/19 08:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	09/04/19 14:00	09/06/19 15:33	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	09/04/19 14:00	09/06/19 15:33	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00049	1	09/04/19 14:00	09/06/19 15:33	7440-39-3	
Beryllium	**0.0030J**	mg/L	0.0030	0.000074	1	09/04/19 14:00	09/06/19 15:33	7440-41-7	
Cadmium	**0.0073**	mg/L	0.0025	0.00011	1	09/04/19 14:00	09/06/19 15:33	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	09/04/19 14:00	09/06/19 15:33	7440-47-3	
Cobalt	**1.3**	mg/L	0.025	0.0015	5	09/04/19 14:00	09/09/19 13:17	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	09/04/19 14:00	09/06/19 15:33	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00078	1	09/04/19 14:00	09/06/19 15:33	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	09/04/19 14:00	09/06/19 15:33	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	09/04/19 14:00	09/06/19 15:33	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	09/04/19 14:00	09/06/19 15:33	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	ND	mg/L	0.00050	0.00014	1	09/05/19 09:07	09/05/19 13:42	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Fluoride	**0.37**	mg/L	0.10	0.050	1		09/07/19 14:38	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622596

QC Batch: 34720 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

METHOD BLANK: 156270 Matrix: Water
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.00014	09/05/19 12:57	

LABORATORY CONTROL SAMPLE: 156271

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156272 156273

Parameter	Units	2622587001 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	0.0023	0.0023	91	92	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

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622596

QC Batch: 34718 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

METHOD BLANK: 156264 Matrix: Water
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	09/06/19 14:47	
Arsenic	mg/L	ND	0.0050	0.00035	09/06/19 14:47	
Barium	mg/L	ND	0.010	0.00049	09/06/19 14:47	
Beryllium	mg/L	ND	0.0030	0.000074	09/06/19 14:47	
Cadmium	mg/L	ND	0.0025	0.00011	09/06/19 14:47	
Chromium	mg/L	ND	0.010	0.00039	09/06/19 14:47	
Cobalt	mg/L	ND	0.0050	0.00030	09/06/19 14:47	
Lead	mg/L	ND	0.0050	0.000046	09/06/19 14:47	
Lithium	mg/L	ND	0.030	0.00078	09/06/19 14:47	
Molybdenum	mg/L	ND	0.010	0.00095	09/06/19 14:47	
Selenium	mg/L	ND	0.010	0.0013	09/06/19 14:47	
Thallium	mg/L	ND	0.0010	0.000052	09/06/19 14:47	

LABORATORY CONTROL SAMPLE: 156265

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	101	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	101	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	0.097	97	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	102	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Thallium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156266 156267

Parameter	Units	2622596001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20	
Barium	mg/L	0.076	0.1	0.1	0.18	0.17	102	98	75-125	2	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.099	101	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

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622596

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 156266 156267

Parameter	Units	2622596001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/L	0.0016J	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Cobalt	mg/L	0.0015J	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Lead	mg/L	0.000070J	0.1	0.1	0.10	0.10	101	100	75-125	0	20	
Lithium	mg/L	0.0070J	0.1	0.1	0.11	0.10	98	97	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Selenium	mg/L	0.0023J	0.1	0.1	0.098	0.099	96	97	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: Plant Branch BCD
Pace Project No.: 2622596

QC Batch: 496582 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
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

METHOD BLANK: 2674477 Matrix: Water
Associated Lab Samples: 2622596001, 2622596002, 2622596003, 2622596004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	09/07/19 12:19	

LABORATORY CONTROL SAMPLE: 2674478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.7	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674479 2674480

Parameter	Units	2622657001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	ND	ND	0	0	90-110		10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2674481 2674482

Parameter	Units	2622587005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.7	2.8	108	108	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch BCD
Pace Project No.: 2622596

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.

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.

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.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch BCD
Pace Project No.: 2622596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622596001	**BRGWA-23S**	EPA 3005A	34718	EPA 6020B	34727
2622596002	**BRGWC-50**	EPA 3005A	34718	EPA 6020B	34727
2622596003	**BRGWC-52I**	EPA 3005A	34718	EPA 6020B	34727
2622596004	**Dup-2**	EPA 3005A	34718	EPA 6020B	34727
2622596001	**BRGWA-23S**	EPA 7470A	34720	EPA 7470A	34792
2622596002	**BRGWC-50**	EPA 7470A	34720	EPA 7470A	34792
2622596003	**BRGWC-52I**	EPA 7470A	34720	EPA 7470A	34792
2622596004	**Dup-2**	EPA 7470A	34720	EPA 7470A	34792
2622596001	**BRGWA-23S**	EPA 300.0 Rev 2.1 1993	496582		
2622596002	**BRGWC-50**	EPA 300.0 Rev 2.1 1993	496582		
2622596003	**BRGWC-52I**	EPA 300.0 Rev 2.1 1993	496582		
2622596004	**Dup-2**	EPA 300.0 Rev 2.1 1993	496582		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

WO# : 2622596

2622596

WO# : 2622596

PM: BM Due Date: 09/09/19

CLIENT: GAPower-CCR

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET

Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD Project # CCR	Pace Profile# 326.11.2
Collected By (print): Devin Thomas	Purchase Order # : SCS10382775 Quote #:	Pace Project Manager: betsy.mcdaniel@pacelabs.com
Collected By (signature):	Turnaround Date Required:	Immediately Packed on Ice: [X] Yes [ ] No
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Fluoride by 300.0	Metals app IV	Radium 226.228
BRGWA-23S	GW	G			8/29/2019	1505		4	1	1	2
BRGWC-50	GW	G			8/29/2019	1055		4	1	1	2
BRGWC-52I	GW	G			8/29/2019	1240		4	1	1	2
Dup-3	GW	G			8/29/2019	—		4	1	1	2

** 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

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
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
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	
LAB USE ONLY:	
Lab Sample # / Comments:	

Customer Remarks / Special Conditions / Possible Hazards:
Metals : Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: 85
Cooler 1 Temp Upon Receipt: 1.0
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8-30-19/0800	Received by/Company: (Signature)	Date/Time: 8/30/19 0800
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ___ of: ___

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 27, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch BCD
Pace Project No.: 2622597

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report replaces the report issued on September 10, 2019. This report was revised to correct the DUP sample ID per consultant request. No other changes have been made to this report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Kristen Jurinko, Golder Associates Inc.
Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta
Dominic Weatherhill, Georgia Power

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch BCD
Pace Project No.: 2622597

Pennsylvania Certification IDs

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, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch BCD
Pace Project No.: 2622597

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2622597001	**BRGWA-23S**	Water	08/29/19 15:05	08/30/19 08:00
2622597002	**BRGWC-50**	Water	08/29/19 10:55	08/30/19 08:00
2622597003	**BRGWC-52I**	Water	08/29/19 12:40	08/30/19 08:00
2622597004	**Dup-2**	Water	08/29/19 00:00	08/30/19 08:00

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch BCD
Pace Project No.: 2622597

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2622597001	**BRGWA-23S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622597002	**BRGWC-50**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622597003	**BRGWC-52I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2622597004	**Dup-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

Sample: BRGWA-23S **Lab ID: 2622597001** Collected: 08/29/19 15:05 Received: 08/30/19 08:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.582 ± 0.301 (0.438) C:87% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**0.866 ± 0.555 (1.07) C:62% T:88%**	pCi/L	09/19/19 15:08	15262-20-1	
Total Radium	Total Radium Calculation	**1.45 ± 0.856 (1.51)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

Sample: BRGWC-50 **Lab ID: 2622597002** Collected: 08/29/19 10:55 Received: 08/30/19 08:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.556 ± 0.261 (0.281) C:89% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**0.777 ± 0.416 (0.740) C:72% T:84%**	pCi/L	09/19/19 15:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.33 ± 0.677 (1.02)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

Sample: BRGWC-52I **Lab ID: 2622597003** Collected: 08/29/19 12:40 Received: 08/30/19 08:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.566 ± 0.269 (0.318) C:91% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**0.871 ± 0.440 (0.760) C:67% T:84%**	pCi/L	09/19/19 15:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.44 ± 0.709 (1.08)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

Sample: Dup-2 **Lab ID: 2622597004** Collected: 08/29/19 00:00 Received: 08/30/19 08:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.823 ± 0.323 (0.321) C:96% T:NA**	pCi/L	09/12/19 08:42	13982-63-3	
Radium-228	EPA 9320	**0.483 ± 0.340 (0.646) C:71% T:85%**	pCi/L	09/19/19 15:19	15262-20-1	
Total Radium	Total Radium Calculation	**1.31 ± 0.663 (0.967)**	pCi/L	09/23/19 11:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

QC Batch: 359954 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2622597001, 2622597002, 2622597003, 2622597004

METHOD BLANK: 1747365 Matrix: Water
Associated Lab Samples: 2622597001, 2622597002, 2622597003, 2622597004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0188 ± 0.324 (0.758) C:68% T:80%	pCi/L	09/19/19 15:18	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch BCD
Pace Project No.: 2622597

QC Batch: 359953 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2622597001, 2622597002, 2622597003, 2622597004

METHOD BLANK: 1747363 Matrix: Water
Associated Lab Samples: 2622597001, 2622597002, 2622597003, 2622597004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.412 ± 0.223 (0.263) C:94% T:NA	pCi/L	09/12/19 08:42	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch BCD
Pace Project No.: 2622597

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch BCD
Pace Project No.: 2622597

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2622597001	**BRGWA-23S**	EPA 9315	359953		
2622597002	**BRGWC-50**	EPA 9315	359953		
2622597003	**BRGWC-52I**	EPA 9315	359953		
2622597004	**Dup-2**	EPA 9315	359953		
2622597001	**BRGWA-23S**	EPA 9320	359954		
2622597002	**BRGWC-50**	EPA 9320	359954		
2622597003	**BRGWC-52I**	EPA 9320	359954		
2622597004	**Dup-2**	EPA 9320	359954		
2622597001	**BRGWA-23S**	Total Radium Calculation	362616		
2622597002	**BRGWC-50**	Total Radium Calculation	362616		
2622597003	**BRGWC-52I**	Total Radium Calculation	362616		
2622597004	**Dup-2**	Total Radium Calculation	362616		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

WO#: 2622597

2622597

WO#: 2622597

PM: BM Due Date: 09/30/19

CLIENT: GAPower-CCR

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD Project # CCR
Collected By (print): Devin Thomas	Purchase Order # : SCS10382775 Quote #:
Collected By (signature):	Turnaround Date Required:
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

	Pace Profile# 326.11.2
	Pace Project Manager: betsy.mcdaniel@pacelabs.com
	Immediately Packed on Ice: [X] Yes [ ] No
	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

** 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Fluoride by 300.0	Metals app IV	Radium 226.228
BRGWA-23S	GW	G			8/29/2019	1505		4	1	1	2
BRGWC-50	GW	G			8/29/2019	1055		4	1	1	2
BRGWC-52I	GW	G			8/29/2019	1240		4	1	1	2
Dup-3	GW	G			8/29/2019	—		4	1	1	2

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
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
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:
Metals: Hg, Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: 8
Cooler 1 Temp Upon Receipt: 1.0
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8-30-19 10800	Received by/Company: (Signature)	Date/Time: 8/30/19 0800
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCl MeOH TSP Other

Non Conformance(s): YES / NO

Page: ___ of: ___

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624392

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624392

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624392

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624392001	**BRGWA-12S**	Water	10/15/19 12:30	10/16/19 12:30
2624392002	**BRGWA-12I**	Water	10/15/19 15:45	10/16/19 12:30
2624392003	**BRGWA-23S**	Water	10/15/19 13:42	10/16/19 12:30
2624392004	**FB-1**	Water	10/15/19 14:10	10/16/19 12:30
2624392005	**BRGWC-25I**	Water	10/15/19 15:08	10/16/19 12:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624392

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624392001	**BRGWA-12S**	EPA 6020B	CSW	14
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624392002	**BRGWA-12I**	EPA 6020B	CSW	14
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624392003	**BRGWA-23S**	EPA 6020B	CSW	14
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624392004	**FB-1**	EPA 6020B	CSW	14
		SM 2540C	ALW	1
		EPA 300.0	MWB	3
2624392005	**BRGWC-25I**	EPA 6020B	CSW	14
		SM 2540C	ALW	1
		EPA 300.0	MWB	3

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ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624392

Sample: BRGWA-12S **Lab ID: 2624392001** Collected: 10/15/19 12:30 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/20/19 16:44	10/22/19 21:21	7440-36-0	
Arsenic	**0.00046J**	mg/L	0.0050	0.00035	1	10/20/19 16:44	10/22/19 21:21	7440-38-2	B
Barium	**0.053**	mg/L	0.010	0.00049	1	10/20/19 16:44	10/22/19 21:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/20/19 16:44	10/22/19 21:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/20/19 16:44	10/22/19 21:21	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/20/19 16:44	10/22/19 21:21	7440-43-9	
Calcium	**6.2**	mg/L	0.10	0.011	1	10/20/19 16:44	10/22/19 21:21	7440-70-2	
Chromium	**0.0023J**	mg/L	0.010	0.00039	1	10/20/19 16:44	10/22/19 21:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/20/19 16:44	10/22/19 21:21	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/20/19 16:44	10/22/19 21:21	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/20/19 16:44	10/22/19 21:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/20/19 16:44	10/22/19 21:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/20/19 16:44	10/22/19 21:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/20/19 16:44	10/22/19 21:21	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**89.0**	mg/L	10.0	10.0	1		10/18/19 10:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.4**	mg/L	1.0	0.024	1		10/21/19 22:48	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/21/19 22:48	16984-48-8	
Sulfate	**0.61J**	mg/L	1.0	0.017	1		10/21/19 22:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624392

Sample: BRGWA-12I **Lab ID: 2624392002** Collected: 10/15/19 15:45 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.012**	mg/L	0.0030	0.00027	1	10/20/19 16:44	10/22/19 21:44	7440-36-0	
Arsenic	**0.00088J**	mg/L	0.0050	0.00035	1	10/20/19 16:44	10/22/19 21:44	7440-38-2	B
Barium	**0.060**	mg/L	0.010	0.00049	1	10/20/19 16:44	10/22/19 21:44	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/20/19 16:44	10/22/19 21:44	7440-41-7	
Boron	**0.0060J**	mg/L	0.040	0.0049	1	10/20/19 16:44	10/22/19 21:44	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/20/19 16:44	10/22/19 21:44	7440-43-9	
Calcium	**15.9**	mg/L	5.0	0.55	50	10/20/19 16:44	10/22/19 21:49	7440-70-2	
Chromium	**0.0021J**	mg/L	0.010	0.00039	1	10/20/19 16:44	10/22/19 21:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/20/19 16:44	10/22/19 21:44	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/20/19 16:44	10/22/19 21:44	7439-92-1	
Lithium	**0.0037J**	mg/L	0.030	0.00078	1	10/20/19 16:44	10/22/19 21:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/20/19 16:44	10/22/19 21:44	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/20/19 16:44	10/22/19 21:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/20/19 16:44	10/22/19 21:44	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**134**	mg/L	10.0	10.0	1		10/18/19 10:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1**	mg/L	1.0	0.024	1		10/21/19 23:10	16887-00-6	
Fluoride	**0.047J**	mg/L	0.30	0.029	1		10/21/19 23:10	16984-48-8	
Sulfate	**1.9**	mg/L	1.0	0.017	1		10/21/19 23:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624392

Sample: BRGWA-23S **Lab ID: 2624392003** Collected: 10/15/19 13:42 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/20/19 16:44	10/22/19 21:55	7440-36-0	
Arsenic	**0.00075J**	mg/L	0.0050	0.00035	1	10/20/19 16:44	10/22/19 21:55	7440-38-2	B
Barium	**0.069**	mg/L	0.010	0.00049	1	10/20/19 16:44	10/22/19 21:55	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/20/19 16:44	10/22/19 21:55	7440-41-7	
Boron	**0.022J**	mg/L	0.040	0.0049	1	10/20/19 16:44	10/22/19 21:55	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/20/19 16:44	10/22/19 21:55	7440-43-9	
Calcium	**8.6**	mg/L	0.10	0.011	1	10/20/19 16:44	10/22/19 21:55	7440-70-2	
Chromium	**0.0017J**	mg/L	0.010	0.00039	1	10/20/19 16:44	10/22/19 21:55	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00030	1	10/20/19 16:44	10/22/19 21:55	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/20/19 16:44	10/22/19 21:55	7439-92-1	
Lithium	**0.0069J**	mg/L	0.030	0.00078	1	10/20/19 16:44	10/22/19 21:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/20/19 16:44	10/22/19 21:55	7439-98-7	
Selenium	**0.0022J**	mg/L	0.010	0.0013	1	10/20/19 16:44	10/22/19 21:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/20/19 16:44	10/22/19 21:55	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**124**	mg/L	10.0	10.0	1		10/18/19 10:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.5**	mg/L	1.0	0.024	1		10/21/19 23:33	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/21/19 23:33	16984-48-8	
Sulfate	**30.0**	mg/L	1.0	0.017	1		10/21/19 23:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624392

Sample: FB-1 **Lab ID: 2624392004** Collected: 10/15/19 14:10 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/20/19 16:44	10/22/19 22:06	7440-36-0	
Arsenic	**0.00060J**	mg/L	0.0050	0.00035	1	10/20/19 16:44	10/22/19 22:06	7440-38-2	B
Barium	ND	mg/L	0.010	0.00049	1	10/20/19 16:44	10/22/19 22:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/20/19 16:44	10/22/19 22:06	7440-41-7	
Boron	ND	mg/L	0.040	0.0049	1	10/20/19 16:44	10/22/19 22:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/20/19 16:44	10/22/19 22:06	7440-43-9	
Calcium	ND	mg/L	0.10	0.011	1	10/20/19 16:44	10/22/19 22:06	7440-70-2	
Chromium	**0.00039J**	mg/L	0.010	0.00039	1	10/20/19 16:44	10/22/19 22:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/20/19 16:44	10/22/19 22:06	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/20/19 16:44	10/22/19 22:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/20/19 16:44	10/22/19 22:06	7439-93-2	
Molybdenum	**0.0020J**	mg/L	0.010	0.00095	1	10/20/19 16:44	10/22/19 22:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/20/19 16:44	10/22/19 22:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/20/19 16:44	10/22/19 22:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**25.0**	mg/L	10.0	10.0	1		10/18/19 10:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**0.035J**	mg/L	1.0	0.024	1		10/21/19 23:55	16887-00-6	
Fluoride	ND	mg/L	0.30	0.029	1		10/21/19 23:55	16984-48-8	
Sulfate	**0.035J**	mg/L	1.0	0.017	1		10/21/19 23:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624392

Sample: BRGWC-25I **Lab ID: 2624392005** Collected: 10/15/19 15:08 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/20/19 16:44	10/22/19 22:52	7440-36-0	
Arsenic	**0.00052J**	mg/L	0.0050	0.00035	1	10/20/19 16:44	10/22/19 22:52	7440-38-2	B
Barium	**0.027**	mg/L	0.010	0.00049	1	10/20/19 16:44	10/22/19 22:52	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/20/19 16:44	10/22/19 22:52	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.0049	1	10/20/19 16:44	10/22/19 22:52	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/20/19 16:44	10/22/19 22:52	7440-43-9	
Calcium	**48.3**	mg/L	5.0	0.55	50	10/20/19 16:44	10/22/19 22:58	7440-70-2	
Chromium	**0.00098J**	mg/L	0.010	0.00039	1	10/20/19 16:44	10/22/19 22:52	7440-47-3	
Cobalt	**0.0043J**	mg/L	0.0050	0.00030	1	10/20/19 16:44	10/22/19 22:52	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/20/19 16:44	10/22/19 22:52	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	10/20/19 16:44	10/22/19 22:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/20/19 16:44	10/22/19 22:52	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/20/19 16:44	10/22/19 22:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/20/19 16:44	10/22/19 22:52	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**380**	mg/L	10.0	10.0	1		10/18/19 10:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.0**	mg/L	1.0	0.024	1		10/24/19 17:44	16887-00-6	
Fluoride	**0.16J**	mg/L	0.30	0.029	1		10/24/19 17:44	16984-48-8	
Sulfate	**174**	mg/L	10.0	0.17	10		10/28/19 22:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624392

QC Batch: 37136 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2624392001, 2624392002, 2624392003, 2624392004, 2624392005

METHOD BLANK: 167849 Matrix: Water
Associated Lab Samples: 2624392001, 2624392002, 2624392003, 2624392004, 2624392005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/22/19 18:23	
Arsenic	mg/L	0.00059J	0.0050	0.00035	10/22/19 18:23	
Barium	mg/L	ND	0.010	0.00049	10/22/19 18:23	
Beryllium	mg/L	ND	0.0030	0.000074	10/22/19 18:23	
Boron	mg/L	ND	0.040	0.0049	10/22/19 18:23	
Cadmium	mg/L	ND	0.0025	0.00011	10/22/19 18:23	
Calcium	mg/L	ND	0.10	0.011	10/22/19 18:23	
Chromium	mg/L	ND	0.010	0.00039	10/22/19 18:23	
Cobalt	mg/L	ND	0.0050	0.00030	10/22/19 18:23	
Lead	mg/L	ND	0.0050	0.000046	10/22/19 18:23	
Lithium	mg/L	ND	0.030	0.00078	10/22/19 18:23	
Molybdenum	mg/L	ND	0.010	0.00095	10/22/19 18:23	
Selenium	mg/L	ND	0.010	0.0013	10/22/19 18:23	
Thallium	mg/L	ND	0.0010	0.000052	10/22/19 18:23	

LABORATORY CONTROL SAMPLE: 167850

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.098	98	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.099	99	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Calcium	mg/L	1	0.96	96	80-120	
Chromium	mg/L	0.1	0.098	98	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.098	98	80-120	
Lithium	mg/L	0.1	0.095	95	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168476 168477

Parameter	Units	2624389004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.098	0.097	97	97	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

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QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624392

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168476 168477

Parameter	Units	2624389004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.00063J	0.1	0.1	0.095	0.098	95	97	75-125	3	20	
Barium	mg/L	0.0091J	0.1	0.1	0.11	0.11	100	103	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.092	0.094	92	94	75-125	2	20	
Boron	mg/L	ND	1	1	0.89	0.94	88	93	75-125	6	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	0	20	
Calcium	mg/L	3.7	1	1	4.5	4.5	88	82	75-125	1	20	
Chromium	mg/L	0.0083J	0.1	0.1	0.11	0.11	97	100	75-125	2	20	
Cobalt	mg/L	0.00097J	0.1	0.1	0.096	0.096	95	95	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20	
Lithium	mg/L	ND	0.1	0.1	0.092	0.094	91	93	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.093	0.10	93	100	75-125	7	20	
Thallium	mg/L	ND	0.1	0.1	0.095	0.098	95	98	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624392

QC Batch: 37181 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2624392001, 2624392002, 2624392003, 2624392004, 2624392005

LABORATORY CONTROL SAMPLE: 168196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	412	103	84-108	

SAMPLE DUPLICATE: 168197

Parameter	Units	2624388001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1520	1570	3	10	

SAMPLE DUPLICATE: 168198

Parameter	Units	2624392001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	89.0	86.0	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

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QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624392

QC Batch: 37138 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624392001, 2624392002, 2624392003, 2624392004

METHOD BLANK: 167857 Matrix: Water
Associated Lab Samples: 2624392001, 2624392002, 2624392003, 2624392004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.024	10/21/19 16:11	
Fluoride	mg/L	ND	0.30	0.029	10/21/19 16:11	
Sulfate	mg/L	ND	1.0	0.017	10/21/19 16:11	

LABORATORY CONTROL SAMPLE: 167858

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	9.9	99	90-110	
Fluoride	mg/L	10	10.2	102	90-110	
Sulfate	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 167859 167860

Parameter	Units	2624388001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	20.9	10	10	28.1	28.1	72	72	90-110	0	15	M1
Fluoride	mg/L	ND	10	10	10.0	10.1	100	101	90-110	1	15	

MATRIX SPIKE SAMPLE: 167861

Parameter	Units	2624389005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	2.2	10	12.2	100	90-110	
Fluoride	mg/L	ND	10	10.3	103	90-110	
Sulfate	mg/L	5.2	10	14.8	96	90-110	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624392

QC Batch: 37374
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624392005

METHOD BLANK: 169142 Matrix: Water
Associated Lab Samples: 2624392005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.024	10/24/19 14:46	
Fluoride	mg/L	ND	0.30	0.029	10/24/19 14:46	
Sulfate	mg/L	ND	1.0	0.017	10/24/19 14:46	

LABORATORY CONTROL SAMPLE: 169143

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.0	100	90-110	
Fluoride	mg/L	10	10.4	104	90-110	
Sulfate	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 169144 169145

Parameter	Units	2623721001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	25.1	10	10	31.5	31.5	63	63	90-110	0	15	H1,M1
Fluoride	mg/L	0.075J	10	10	10.6	10.7	106	106	90-110	0	15	H1

MATRIX SPIKE SAMPLE: 169146

Parameter	Units	2623721002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	23.6	10	30.3	67	90-110	H1,M1
Fluoride	mg/L	0.13J	10	10.4	103	90-110	H1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624392

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.

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.

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

B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624392

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624392001	**BRGWA-12S**	EPA 3005A	37136	EPA 6020B	37255
2624392002	**BRGWA-12I**	EPA 3005A	37136	EPA 6020B	37255
2624392003	**BRGWA-23S**	EPA 3005A	37136	EPA 6020B	37255
2624392004	**FB-1**	EPA 3005A	37136	EPA 6020B	37255
2624392005	**BRGWC-25I**	EPA 3005A	37136	EPA 6020B	37255
2624392001	**BRGWA-12S**	SM 2540C	37181		
2624392002	**BRGWA-12I**	SM 2540C	37181		
2624392003	**BRGWA-23S**	SM 2540C	37181		
2624392004	**FB-1**	SM 2540C	37181		
2624392005	**BRGWC-25I**	SM 2540C	37181		
2624392001	**BRGWA-12S**	EPA 300.0	37138		
2624392002	**BRGWA-12I**	EPA 300.0	37138		
2624392003	**BRGWA-23S**	EPA 300.0	37138		
2624392004	**FB-1**	EPA 300.0	37138		
2624392005	**BRGWC-25I**	EPA 300.0	37374		

WO# : 2624392

2624392

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

Workorder Number or

E ONLY

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD CCR Project #
Collected By (print): Travis Martinez	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)

Pace Profile#	
Pace Project Manager: betsy.mcdaniel@pacelabs.com	
Immediately Packed on Ice: [X] Yes [ ] No	
Field Filtered (if applicable): [ ] Yes [ ] No Analysis:	

Container Preservative Type **

	1		1									

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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Metals App III/IV - see comments	Radium 226.228	Chloride, Fluoride, Sulfate, TDS
BRGWA-12S	GW	G	10/15/2019	12:30				4	1	2	1
BRGWA-12I	GW	G	10/15/2019	15:45				4	1	2	1
BRGWA-23S	GW	G	10/15/2019	13:42				4	1	2	1
FB-1	W	G	10/15/2019	14:10				4	1	2	1

Analyses

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
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
Cl Strips: _____
Sample pH Acceptable Y N NA
pH Strips: _____
Sulfide Present Y N NA
Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:

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

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: _____
Cooler 1 Temp Upon Receipt: 1.0 oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Relinquished by/Company: (Signature) Golder	Date/Time: 10-16-19 / 0815	Received by/Company: (Signature) M Rahman
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)

Date/Time: 10/16/19 1230	MTJL LAB USE ONLY Table #: Acctnum: Template: Prelogin: PM: PB:
Date/Time:	
Date/Time:	

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Optional
Proj. Due Date:
Proj. Name:

Tracking #:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.0 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/16/19 MR

Temp should be above freezing to 6°C Comments:

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

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

Person Contacted: Date/Time:

Comments/ Resolution: BRGWC-25T Collected on 10/15/19 @ 1508 GTS Rad, Metals, Diss. Metals, IC-300 and TDS per Container labels was present but was not listed on the COC. That was added to the report ~~per W28~~ per client's request.

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 14, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624393

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
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CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624393

Pennsylvania Certification IDs

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

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SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624393

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624393001	**BRGWA-12S**	Water	10/15/19 12:30	10/16/19 12:30
2624393002	**BRGWA-12I**	Water	10/15/19 15:45	10/16/19 12:30
2624393003	**BRGWA-23S**	Water	10/15/19 13:42	10/16/19 12:30
2624393004	**FB-1**	Water	10/15/19 14:10	10/16/19 12:30
2624393005	**BRGWC-25I**	Water	10/15/19 15:08	10/16/19 12:30

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SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624393

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624393001	**BRGWA-12S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624393002	**BRGWA-12I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624393003	**BRGWA-23S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624393004	**FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624393005	**BRGWC-25I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

Sample: BRGWA-12S **Lab ID: 2624393001** Collected: 10/15/19 12:30 Received: 10/16/19 12:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.179 ± 0.196 (0.383) C:95% T:NA**	pCi/L	11/07/19 07:47	13982-63-3	
Radium-228	EPA 9320	**0.873 ± 0.519 (0.954) C:68% T:72%**	pCi/L	11/07/19 14:59	15262-20-1	
Total Radium	Total Radium Calculation	**1.05 ± 0.715 (1.34)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

Sample: BRGWA-12I **Lab ID: 2624393002** Collected: 10/15/19 15:45 Received: 10/16/19 12:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.475 ± 0.290 (0.431) C:89% T:NA**	pCi/L	11/07/19 07:47	13982-63-3	
Radium-228	EPA 9320	**0.656 ± 0.436 (0.823) C:66% T:82%**	pCi/L	11/07/19 15:00	15262-20-1	
Total Radium	Total Radium Calculation	**1.13 ± 0.726 (1.25)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

Sample: BRGWA-23S **Lab ID: 2624393003** Collected: 10/15/19 13:42 Received: 10/16/19 12:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.659 ± 0.328 (0.412) C:91% T:NA**	pCi/L	11/07/19 07:47	13982-63-3	
Radium-228	EPA 9320	**1.03 ± 0.432 (0.660) C:76% T:73%**	pCi/L	11/11/19 12:30	15262-20-1	
Total Radium	Total Radium Calculation	**1.69 ± 0.760 (1.07)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

Sample: FB-1 **Lab ID: 2624393004** Collected: 10/15/19 14:10 Received: 10/16/19 12:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.209 ± 0.203 (0.373) C:93% T:NA**	pCi/L	11/07/19 07:47	13982-63-3	
Radium-228	EPA 9320	**-0.742 ± 0.835 (2.10) C:63% T:69%**	pCi/L	11/07/19 20:08	15262-20-1	
Total Radium	Total Radium Calculation	**0.209 ± 1.04 (2.47)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

Sample: BRGWC-25I **Lab ID: 2624393005** Collected: 10/15/19 15:08 Received: 10/16/19 12:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.537 ± 0.311 (0.457) C:87% T:NA**	pCi/L	11/07/19 07:47	13982-63-3	
Radium-228	EPA 9320	**0.525 ± 0.864 (1.88) C:66% T:76%**	pCi/L	11/07/19 20:08	15262-20-1	
Total Radium	Total Radium Calculation	**1.06 ± 1.18 (2.34)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

QC Batch: 368367 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2624393001, 2624393002, 2624393003, 2624393004, 2624393005

METHOD BLANK: 1787254 Matrix: Water
Associated Lab Samples: 2624393001, 2624393002, 2624393003, 2624393004, 2624393005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.416 ± 0.262 (0.396) C:98% T:NA	pCi/L	11/07/19 07:47	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624393

QC Batch: 368368 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2624393001, 2624393002, 2624393003, 2624393004, 2624393005

METHOD BLANK: 1787255 Matrix: Water
Associated Lab Samples: 2624393001, 2624393002, 2624393003, 2624393004, 2624393005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.536 ± 0.405 (0.790) C:74% T:76%	pCi/L	11/07/19 14:59	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624393

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624393

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624393001	**BRGWA-12S**	EPA 9315	368367		
2624393002	**BRGWA-12I**	EPA 9315	368367		
2624393003	**BRGWA-23S**	EPA 9315	368367		
2624393004	**FB-1**	EPA 9315	368367		
2624393005	**BRGWC-25I**	EPA 9315	368367		
2624393001	**BRGWA-12S**	EPA 9320	368368		
2624393002	**BRGWA-12I**	EPA 9320	368368		
2624393003	**BRGWA-23S**	EPA 9320	368368		
2624393004	**FB-1**	EPA 9320	368368		
2624393005	**BRGWC-25I**	EPA 9320	368368		
2624393001	**BRGWA-12S**	Total Radium Calculation	370511		
2624393002	**BRGWA-12I**	Total Radium Calculation	370511		
2624393003	**BRGWA-23S**	Total Radium Calculation	370511		
2624393004	**FB-1**	Total Radium Calculation	370511		
2624393005	**BRGWC-25I**	Total Radium Calculation	370511		

WO# : 2624393

2624393

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical™

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

Workorder Number or

USE ONLY

Project Manager:

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD CCR Project #
Collected By (print): Travis Martinez	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)

Pace Profile#

Pace Project Manager:
betsy.mcdaniel@pacelabs.com

Immediately Packed on Ice:
[X] Yes [ ] No

Field Filtered (if applicable):
[ ] Yes [ ] No

Analysis: _____

* 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)

** 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 _____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: Metals App III/IV - see comments	Radium 226.228	Chloride, Fluoride, Sulfate, TDS	Lab Profile/Line:
BRGWA-12S	GW	G	10/15/2019	12:30				4	1	2	1	
BRGWA-12I	GW	G	10/15/2019	15:45				4	1	2	1	
BRGWA-23S	GW	G	10/15/2019	13:42				4	1	2	1	
FB-1	W	G	10/15/2019	14:10				4	1	2	1	

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
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
Cl Strips:
Sample pH Acceptable: Y N NA
pH Strips:
Sulfide Present: Y N NA
Lead Acetate Strips:

LAB USE ONLY:
Lab Sample # / Comments:

(App III Metals): B, Ca, (App IV Metals): Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl + Ra

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#:
Cooler 1 Temp Upon Receipt: 8.1.0 °C
Cooler 1 Therm Corr. Factor: ___°C
Cooler 1 Corrected Temp: ___°C
Comments:

Relinquished by/Company: (Signature) Golder	Date/Time: 10-16-19 0815	Received by/Company: (Signature)	Date/Time: 10/16/19 1230
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Lab #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ___ of: ___

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Tracking #:

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

Optional
Proj. Due Date:
Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.0 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10/16/19 MR

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

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

Person Contacted: Date/Time:

Comments/ Resolution: BRGWC-25T collected on 10/15/19 @ 1508 for Rad, Metals, Diss. Metals, IC-300 and TDS per Containers Labels was present but was not listed on the COC. That was added to the report ~~per WO#~~ per Client's request.

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624395

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624395

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624395

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624395001	**BRGWA-6S**	Water	10/15/19 08:45	10/16/19 12:30
2624395002	**BRGWA-5S**	Water	10/15/19 09:00	10/16/19 12:30
2624395003	**BRGWA-5I**	Water	10/15/19 10:20	10/16/19 12:30
2624395004	**BRGWA-2S**	Water	10/15/19 09:55	10/16/19 12:30
2624395005	**BRGWA-2I**	Water	10/15/19 11:17	10/16/19 12:30
2624395006	**BRGWA-12S**	Water	10/15/19 12:30	10/16/19 12:30
2624395007	**BRGWA-12I**	Water	10/15/19 15:45	10/16/19 12:30
2624395008	**BRGWA-23S**	Water	10/15/19 13:42	10/16/19 12:30
2624395009	**FB-1**	Water	10/15/19 14:10	10/16/19 12:30
2624395010	**BRGWC-25I**	Water	10/15/19 15:08	10/16/19 12:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624395

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624395001	**BRGWA-6S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395002	**BRGWA-5S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395003	**BRGWA-5I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395004	**BRGWA-2S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395005	**BRGWA-2I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395006	**BRGWA-12S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395007	**BRGWA-12I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395008	**BRGWA-23S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624395

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624395009	**FB-1**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		EPA 300.0	MWB	1
2624395010	**BRGWC-25I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	7
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-6S **Lab ID: 2624395001** Collected: 10/15/19 08:45 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	**0.052J**	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 01:25	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 01:25	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 01:25	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 01:25	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 01:25	7440-48-4	
Iron	**0.045**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 01:25	7439-89-6	
Magnesium	**3.6**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 01:25	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 01:25	7439-96-5	
Potassium	**0.67**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 01:25	7440-09-7	
Sodium	**2.2**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 01:25	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:06	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:06	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:06	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:06	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:06	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:06	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:06	7439-96-5	
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.13**	mg/L	0.020	0.020	1		10/24/19 16:44		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.62**	mg/L	0.050	0.0050	1		10/18/19 21:52	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-5S **Lab ID: 2624395002** Collected: 10/15/19 09:00 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 01:44	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 01:44	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 01:44	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 01:44	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 01:44	7440-48-4	
Iron	**0.016J**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 01:44	7439-89-6	
Magnesium	**9.6**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 01:44	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 01:44	7439-96-5	
Potassium	**1.3**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 01:44	7440-09-7	
Sodium	**4.6**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 01:44	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:25	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:25	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:25	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:25	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:25	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:25	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:25	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**92.0**	mg/L	20.0	20.0	1		10/21/19 18:34		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:34		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.13**	mg/L	0.020	0.020	1		10/24/19 16:45		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.18**	mg/L	0.050	0.0050	1		10/18/19 22:55	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-5I **Lab ID: 2624395003** Collected: 10/15/19 10:20 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 01:49	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 01:49	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 01:49	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 01:49	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 01:49	7440-48-4	
Iron	**0.024J**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 01:49	7439-89-6	
Magnesium	**9.8**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 01:49	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 01:49	7439-96-5	
Potassium	**1.4**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 01:49	7440-09-7	
Sodium	**4.7**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 01:49	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:30	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:30	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:30	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:30	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:30	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:30	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:30	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**74.0**	mg/L	20.0	20.0	1		10/21/19 18:38		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:38		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.062**	mg/L	0.020	0.020	1		10/24/19 16:46		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.22**	mg/L	0.050	0.0050	1		10/18/19 23:15	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-2S **Lab ID: 2624395004** Collected: 10/15/19 09:55 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:03	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:03	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:03	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:03	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:03	7440-48-4	
Iron	**0.055**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:03	7439-89-6	
Magnesium	**3.9**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:03	7439-95-4	
Manganese	**0.086**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:03	7439-96-5	
Potassium	**0.41**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:03	7440-09-7	
Sodium	**2.9**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:03	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:35	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:35	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:35	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:35	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:35	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:35	7439-89-6	
Manganese, Dissolved	**0.074**	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:35	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**26.0**	mg/L	20.0	20.0	1		10/21/19 18:42		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:42		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/24/19 16:47		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.23**	mg/L	0.050	0.0050	1		10/18/19 23:36	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-2I **Lab ID: 2624395005** Collected: 10/15/19 11:17 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:08	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:08	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:08	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:08	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:08	7440-48-4	
Iron	**0.65**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:08	7439-89-6	
Magnesium	**6.4**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:08	7439-95-4	
Manganese	**0.090**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:08	7439-96-5	
Potassium	**7.0**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:08	7440-09-7	
Sodium	**7.6**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:08	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:40	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:40	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:40	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:40	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:40	7440-48-4	
Iron, Dissolved	**0.028J**	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:40	7439-89-6	
Manganese, Dissolved	**0.073**	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:40	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	20.0	20.0	1		10/21/19 18:46		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:46		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/24/19 16:47		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.12**	mg/L	0.050	0.0050	1		10/18/19 23:57	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-12S **Lab ID: 2624395006** Collected: 10/15/19 12:30 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:13	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:13	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:13	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:13	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:13	7440-48-4	
Iron	**0.019J**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:13	7439-89-6	
Magnesium	**3.5**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:13	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:13	7439-96-5	
Potassium	**2.7**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:13	7440-09-7	
Sodium	**5.6**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:13	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 03:45	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 03:45	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 03:45	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 03:45	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 03:45	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 03:45	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 03:45	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**35.0**	mg/L	20.0	20.0	1		10/21/19 18:50		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:50		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/24/19 16:48		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.4**	mg/L	0.050	0.0050	1		10/19/19 00:17	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-12I **Lab ID: 2624395007** Collected: 10/15/19 15:45 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:18	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:18	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:18	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:18	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:18	7440-48-4	
Iron	**0.029J**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:18	7439-89-6	
Magnesium	**4.1**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:18	7439-95-4	
Manganese	**0.017J**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:18	7439-96-5	
Potassium	**3.2**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:18	7440-09-7	
Sodium	**10.3**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:18	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 21:45	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 21:45	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 21:45	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 21:45	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 21:45	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 21:45	7439-89-6	
Manganese, Dissolved	**0.016J**	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 21:45	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**84.0**	mg/L	20.0	20.0	1		10/22/19 15:53		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/22/19 15:53		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.078**	mg/L	0.020	0.020	1		10/24/19 16:49		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.47**	mg/L	0.050	0.0050	1		10/19/19 00:38	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWA-23S **Lab ID: 2624395008** Collected: 10/15/19 13:42 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:23	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:23	7440-41-7	
Boron	**0.023J**	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:23	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:23	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:23	7440-48-4	
Iron	**0.079**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:23	7439-89-6	
Magnesium	**4.9**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:23	7439-95-4	
Manganese	**0.068**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:23	7439-96-5	
Potassium	**3.6**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:23	7440-09-7	
Sodium	**7.7**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:23	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 21:50	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 21:50	7440-41-7	
Boron, Dissolved	**0.032J**	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 21:50	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 21:50	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 21:50	7440-48-4	
Iron, Dissolved	**0.030J**	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 21:50	7439-89-6	
Manganese, Dissolved	**0.31**	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 21:50	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**29.0**	mg/L	20.0	20.0	1		10/21/19 18:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 18:54		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/24/19 16:50		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.12**	mg/L	0.050	0.0050	1		10/19/19 00:59	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: FB-1 **Lab ID: 2624395009** Collected: 10/15/19 14:10 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	**0.057J**	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:27	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:27	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:27	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:27	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:27	7440-48-4	
Iron	**0.47**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:27	7439-89-6	
Magnesium	ND	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:27	7439-95-4	
Manganese	**0.018J**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:27	7439-96-5	
Potassium	ND	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:27	7440-09-7	
Sodium	ND	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:27	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 22:04	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 22:04	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	10/22/19 12:45	10/24/19 22:04	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 22:04	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 22:04	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 22:04	7439-89-6	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 22:04	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/22/19 16:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/22/19 16:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.011J**	mg/L	0.050	0.0050	1		10/19/19 02:22	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624395

Sample: BRGWC-25I **Lab ID: 2624395010** Collected: 10/15/19 15:08 Received: 10/16/19 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	**0.033J**	mg/L	0.10	0.032	1	10/21/19 13:13	10/24/19 02:32	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/21/19 13:13	10/24/19 02:32	7440-41-7	
Boron	**1.4**	mg/L	0.040	0.017	1	10/21/19 13:13	10/24/19 02:32	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/21/19 13:13	10/24/19 02:32	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/21/19 13:13	10/24/19 02:32	7440-48-4	
Iron	**0.43**	mg/L	0.040	0.015	1	10/21/19 13:13	10/24/19 02:32	7439-89-6	
Magnesium	**21.9**	mg/L	0.050	0.011	1	10/21/19 13:13	10/24/19 02:32	7439-95-4	
Manganese	**1.9**	mg/L	0.040	0.0061	1	10/21/19 13:13	10/24/19 02:32	7439-96-5	
Potassium	**5.2**	mg/L	0.20	0.026	1	10/21/19 13:13	10/24/19 02:32	7440-09-7	
Sodium	**20.7**	mg/L	1.0	0.19	1	10/21/19 13:13	10/24/19 02:32	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	10/22/19 12:45	10/24/19 22:09	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	10/22/19 12:45	10/24/19 22:09	7440-41-7	
Boron, Dissolved	**1.2**	mg/L	0.040	0.017	1	10/22/19 12:45	10/25/19 18:22	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	10/22/19 12:45	10/24/19 22:09	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	10/22/19 12:45	10/24/19 22:09	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	10/22/19 12:45	10/24/19 22:09	7439-89-6	
Manganese, Dissolved	**1.9**	mg/L	0.040	0.0061	1	10/22/19 12:45	10/24/19 22:09	7439-96-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**52.0**	mg/L	20.0	20.0	1		10/21/19 19:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/21/19 19:02		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/24/19 16:51		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.016J**	mg/L	0.050	0.0050	1		10/30/19 02:12	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

QC Batch: 37228 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009, 2624395010

METHOD BLANK: 168486 Matrix: Water
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009, 2624395010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	ND	0.10	0.032	10/24/19 01:15	
Beryllium	mg/L	ND	0.010	0.0026	10/24/19 01:15	
Boron	mg/L	ND	0.040	0.017	10/24/19 01:15	
Cadmium	mg/L	ND	0.010	0.00090	10/24/19 01:15	
Cobalt	mg/L	ND	0.040	0.0052	10/24/19 01:15	
Iron	mg/L	ND	0.040	0.015	10/24/19 01:15	
Magnesium	mg/L	ND	0.050	0.011	10/24/19 01:15	
Manganese	mg/L	ND	0.040	0.0061	10/24/19 01:15	
Potassium	mg/L	ND	0.20	0.026	10/24/19 01:15	
Sodium	mg/L	ND	1.0	0.19	10/24/19 01:15	

LABORATORY CONTROL SAMPLE: 168487

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1	1.0	104	80-120	
Beryllium	mg/L	1	1.0	104	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	1	1.0	104	80-120	
Cobalt	mg/L	1	1.0	103	80-120	
Iron	mg/L	1	1.1	105	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Manganese	mg/L	1	1.0	104	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168488 168489

Parameter	Units	2624395001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	mg/L	ND	1	1	1.1	1.1	107	106	75-125	1	20	
Beryllium	mg/L	ND	1	1	1.1	1.1	106	106	75-125	0	20	
Boron	mg/L	ND	1	1	1.1	1.1	105	107	75-125	1	20	
Cadmium	mg/L	ND	1	1	1.0	1.1	105	105	75-125	1	20	
Cobalt	mg/L	ND	1	1	1.0	1.1	105	105	75-125	0	20	
Iron	mg/L	ND	1	1	1.1	1.1	106	106	75-125	0	20	
Magnesium	mg/L	3.6	1	1	4.6	4.7	101	108	75-125	1	20	
Manganese	mg/L	ND	1	1	1.1	1.1	106	105	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168488 168489

Parameter	Units	2624395001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	mg/L	0.67	1	1	1.7	1.7	101	102	75-125	1	20	
Sodium	mg/L	2.2	1	1	3.2	3.2	98	102	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

QC Batch: 37281 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009, 2624395010

METHOD BLANK: 168657 Matrix: Water
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009, 2624395010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	mg/L	ND	0.10	0.032	10/24/19 02:47	
Beryllium, Dissolved	mg/L	ND	0.010	0.0026	10/24/19 02:47	
Boron, Dissolved	mg/L	ND	0.040	0.017	10/24/19 02:47	
Cadmium, Dissolved	mg/L	ND	0.010	0.00090	10/24/19 02:47	
Cobalt, Dissolved	mg/L	ND	0.040	0.0052	10/24/19 02:47	
Iron, Dissolved	mg/L	ND	0.040	0.015	10/24/19 02:47	
Manganese, Dissolved	mg/L	ND	0.040	0.0061	10/24/19 02:47	

LABORATORY CONTROL SAMPLE: 168658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	mg/L	1	0.98	98	80-120	
Beryllium, Dissolved	mg/L	1	0.99	99	80-120	
Boron, Dissolved	mg/L	1	0.98	98	80-120	
Cadmium, Dissolved	mg/L	1	0.98	98	80-120	
Cobalt, Dissolved	mg/L	1	0.98	98	80-120	
Iron, Dissolved	mg/L	1	0.99	99	80-120	
Manganese, Dissolved	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168659 168660

Parameter	Units	2624395001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	mg/L	ND	1	1	1.0	0.97	101	97	75-125	4	20	
Beryllium, Dissolved	mg/L	ND	1	1	1.0	0.99	102	99	75-125	3	20	
Boron, Dissolved	mg/L	ND	1	1	1.0	1.0	102	99	75-125	3	20	
Cadmium, Dissolved	mg/L	ND	1	1	1.0	0.97	101	97	75-125	4	20	
Cobalt, Dissolved	mg/L	ND	1	1	1.0	0.97	101	97	75-125	3	20	
Iron, Dissolved	mg/L	ND	1	1	1.0	0.98	100	97	75-125	3	20	
Manganese, Dissolved	mg/L	ND	1	1	1.0	0.99	102	99	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

QC Batch: 37498 Analysis Method: SM 4500-P
QC Batch Method: SM 4500-P Analysis Description: 4500PE Ortho Phosphorus
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395010

METHOD BLANK: 169830 Matrix: Water
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Orthophosphate as P	mg/L	ND	0.020	0.020	10/24/19 16:43	

LABORATORY CONTROL SAMPLE: 169831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Orthophosphate as P	mg/L	0.5	0.56	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 169832 169833

Parameter	Units	2624576006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Orthophosphate as P	mg/L	ND	0.5	0.5	0.57	0.56	113	112	80-120	1	10	H1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

QC Batch: 37219 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009

METHOD BLANK: 168456 Matrix: Water
Associated Lab Samples: 2624395001, 2624395002, 2624395003, 2624395004, 2624395005, 2624395006, 2624395007, 2624395008, 2624395009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.050	0.0050	10/18/19 21:11	

LABORATORY CONTROL SAMPLE: 168457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	10	10.5	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168458 168459

Parameter	Units	2624395001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.62	10	10	10.9	11.0	103	104	90-110	1	15	H1

MATRIX SPIKE SAMPLE: 168460

Parameter	Units	2624395002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	0.18	10	10.7	105	90-110	H1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624395

QC Batch: 37579 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624395010

METHOD BLANK: 170492 Matrix: Water
Associated Lab Samples: 2624395010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.050	0.0050	10/30/19 01:30	

LABORATORY CONTROL SAMPLE: 170493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	10	10.2	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 170494 170495

Parameter	Units	2624395010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.016J	10	10	9.9	9.7	98	97	90-110	2	15	H1

MATRIX SPIKE SAMPLE: 170496

Parameter	Units	2624492001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	ND	10	9.9	99	90-110	H1

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624395

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.

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.

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

H1 Analysis conducted outside the EPA method holding time.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624395

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624395001	BRGWA-6S	EPA 3010A	37228	EPA 6010D	37288
2624395002	BRGWA-5S	EPA 3010A	37228	EPA 6010D	37288
2624395003	BRGWA-5I	EPA 3010A	37228	EPA 6010D	37288
2624395004	BRGWA-2S	EPA 3010A	37228	EPA 6010D	37288
2624395005	BRGWA-2I	EPA 3010A	37228	EPA 6010D	37288
2624395006	BRGWA-12S	EPA 3010A	37228	EPA 6010D	37288
2624395007	BRGWA-12I	EPA 3010A	37228	EPA 6010D	37288
2624395008	BRGWA-23S	EPA 3010A	37228	EPA 6010D	37288
2624395009	FB-1	EPA 3010A	37228	EPA 6010D	37288
2624395010	BRGWC-25I	EPA 3010A	37228	EPA 6010D	37288
2624395001	BRGWA-6S	EPA 3010A	37281	EPA 6010D	37384
2624395002	BRGWA-5S	EPA 3010A	37281	EPA 6010D	37384
2624395003	BRGWA-5I	EPA 3010A	37281	EPA 6010D	37384
2624395004	BRGWA-2S	EPA 3010A	37281	EPA 6010D	37384
2624395005	BRGWA-2I	EPA 3010A	37281	EPA 6010D	37384
2624395006	BRGWA-12S	EPA 3010A	37281	EPA 6010D	37384
2624395007	BRGWA-12I	EPA 3010A	37281	EPA 6010D	37384
2624395008	BRGWA-23S	EPA 3010A	37281	EPA 6010D	37384
2624395009	FB-1	EPA 3010A	37281	EPA 6010D	37384
2624395010	BRGWC-25I	EPA 3010A	37281	EPA 6010D	37384
2624395002	BRGWA-5S	SM 2320B	37276		
2624395003	BRGWA-5I	SM 2320B	37276		
2624395004	BRGWA-2S	SM 2320B	37276		
2624395005	BRGWA-2I	SM 2320B	37276		
2624395006	BRGWA-12S	SM 2320B	37276		
2624395007	BRGWA-12I	SM 2320B	37343		
2624395008	BRGWA-23S	SM 2320B	37276		
2624395009	FB-1	SM 2320B	37343		
2624395010	BRGWC-25I	SM 2320B	37276		
2624395001	BRGWA-6S	SM 4500-P	37498		
2624395002	BRGWA-5S	SM 4500-P	37498		
2624395003	BRGWA-5I	SM 4500-P	37498		
2624395004	BRGWA-2S	SM 4500-P	37498		
2624395005	BRGWA-2I	SM 4500-P	37498		
2624395006	BRGWA-12S	SM 4500-P	37498		
2624395007	BRGWA-12I	SM 4500-P	37498		
2624395008	BRGWA-23S	SM 4500-P	37498		
2624395010	BRGWC-25I	SM 4500-P	37498		
2624395001	BRGWA-6S	EPA 300.0	37219		
2624395002	BRGWA-5S	EPA 300.0	37219		
2624395003	BRGWA-5I	EPA 300.0	37219		
2624395004	BRGWA-2S	EPA 300.0	37219		
2624395005	BRGWA-2I	EPA 300.0	37219		
2624395006	BRGWA-12S	EPA 300.0	37219		
2624395007	BRGWA-12I	EPA 300.0	37219		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624395

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624395008	**BRGWA-23S**	EPA 300.0	37219		
2624395009	**FB-1**	EPA 300.0	37219		
2624395010	**BRGWC-25I**	EPA 300.0	37579		

WO# : 2624395

2624395

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical™

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

Number or

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch Project #: 166625418.022A Pace Profile#:
Collected By (print): Travis Martinez	Purchase Order # : Quote #: Pace Project Manager: betsy.mcdaniel@pacelabs.com
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [X] Yes [ ] No
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Metals - see comments	Dissolved Metals by 200.7 (Lab Filter)	Cations / Anions (phosphate lab filtered)
BRGWA-6S	GW	G	10/15/2019	8:45				3	1	1	1
BRGWA-5S	GW	G	10/15/2019	9:00				3	1	1	1
BRGWA-5I	GW	G	10/15/2019	10:20				3	1	1	1
BRGWA-2S	GW	G	10/15/2019	9:55				3	1	1	1
BRGWA-2I	GW	G	10/15/2019	11:17				3	1	1	1
BRGWA-12S	GW	G	10/15/2019	12:30				3	1	1	1
BRGWA-12I	GW	G	10/15/2019	15:45				3	1	1	1
BRGWA-23S	GW	G	10/15/2019	13:42				3	1	1	1
FB-1	W	G	10/15/2019	14:10				3	1	1	1
									1		

** 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 ____

Analyses

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
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
Cl Strips: ____
Sample pH Acceptable: Y N NA
pH Strips: ____
Sulfide Present: Y N NA
Lead Acetate Strips: ____

LAB USE ONLY:
Lab Sample # / Comments:

{Total / Dissolved Metals}: Al, B, Be, Cd, Co, Fe, Mn
{Cations/Anions}: Bicarbonate/Carbonate Alkalinity, Nitrate, Phosphate, Sodium, Magnesium, Potassium

Type of Ice Used: Wet Blue Dry None

Packing Material Used: N/A

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#: B3
Cooler 1 Temp Upon Receipt: 1.0 °C
Cooler 1 Therm Corr. Factor: ____ °C
Cooler 1 Corrected Temp: ____ °C
Comments:

Relinquished by/Company: (Signature) Travis Golder	Date/Time: 10-16-19 0815	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) M Lalman	Date/Time: 10/16/19 1230
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Tracking #:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.0 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/16/19 MR

Temp should be above freezing to 6°C

Comments:

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

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

Person Contacted: Date/Time:

Comments/ Resolution: BRGWC-25T Collected on 10/15/19 @ 1508 hrs Rad, Metals, Diss. Metals, IC-300 and TDS per Containers Labels was present but was not listed on the COC. That was added to the report ~~per W28~~ per Client's request.

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624487

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624487

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624487

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624487001	**BRGWC-29I**	Water	10/16/19 09:50	10/17/19 11:35
2624487002	**BRGWC-47**	Water	10/16/19 11:35	10/17/19 11:35
2624487003	**BRGWC-50**	Water	10/16/19 13:25	10/17/19 11:35
2624487004	**BRGWC-52I**	Water	10/16/19 14:55	10/17/19 11:35
2624487005	**Dup-2**	Water	10/16/19 00:00	10/17/19 11:35

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SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624487

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624487001	**BRGWC-29I**	EPA 6020B	CSW	14
		SM 2540C	MZP	1
		EPA 300.0	MWB	3
2624487002	**BRGWC-47**	EPA 6020B	CSW	14
		SM 2540C	MZP	1
		EPA 300.0	MWB	3
2624487003	**BRGWC-50**	EPA 6020B	CSW	14
		SM 2540C	MZP	1
		EPA 300.0	MWB	3
2624487004	**BRGWC-52I**	EPA 6020B	CSW	14
		SM 2540C	MZP	1
		EPA 300.0	MWB	3
2624487005	**Dup-2**	EPA 6020B	CSW	14
		SM 2540C	MZP	1
		EPA 300.0	MWB	3

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(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624487

Sample: BRGWC-29I **Lab ID: 2624487001** Collected: 10/16/19 09:50 Received: 10/17/19 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/21/19 16:03	10/23/19 20:20	7440-36-0	
Arsenic	**0.00065J**	mg/L	0.0050	0.00035	1	10/21/19 16:03	10/23/19 20:20	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00049	1	10/21/19 16:03	10/23/19 20:20	7440-39-3	
Beryllium	**0.00072J**	mg/L	0.0030	0.000074	1	10/21/19 16:03	10/23/19 20:20	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.0049	1	10/21/19 16:03	10/23/19 20:20	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/21/19 16:03	10/23/19 20:20	7440-43-9	
Calcium	**54.0**	mg/L	5.0	0.55	50	10/21/19 16:03	10/23/19 20:26	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/21/19 16:03	10/23/19 20:20	7440-47-3	
Cobalt	**0.0058**	mg/L	0.0050	0.00030	1	10/21/19 16:03	10/23/19 20:20	7440-48-4	
Lead	**0.00027J**	mg/L	0.0050	0.000046	1	10/21/19 16:03	10/23/19 20:20	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00078	1	10/21/19 16:03	10/23/19 20:20	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/21/19 16:03	10/23/19 20:20	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/21/19 16:03	10/23/19 20:20	7782-49-2	
Thallium	**0.00017J**	mg/L	0.0010	0.000052	1	10/21/19 16:03	10/23/19 20:20	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**2030**	mg/L	10.0	10.0	1		10/23/19 15:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.9**	mg/L	1.0	0.024	1		10/24/19 21:42	16887-00-6	
Fluoride	**0.11J**	mg/L	0.30	0.029	1		10/24/19 21:42	16984-48-8	
Sulfate	**266**	mg/L	20.0	0.34	20		10/25/19 05:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624487

Sample: BRGWC-47 **Lab ID: 2624487002** Collected: 10/16/19 11:35 Received: 10/17/19 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/21/19 16:03	10/23/19 20:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/21/19 16:03	10/23/19 20:43	7440-38-2	
Barium	**0.032**	mg/L	0.010	0.00049	1	10/21/19 16:03	10/23/19 20:43	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/21/19 16:03	10/23/19 20:43	7440-41-7	
Boron	**0.36**	mg/L	0.040	0.0049	1	10/21/19 16:03	10/23/19 20:43	7440-42-8	
Cadmium	**0.00018J**	mg/L	0.0025	0.00011	1	10/21/19 16:03	10/23/19 20:43	7440-43-9	
Calcium	**338**	mg/L	5.0	0.55	50	10/21/19 16:03	10/23/19 20:49	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/21/19 16:03	10/23/19 20:43	7440-47-3	
Cobalt	**0.00032J**	mg/L	0.0050	0.00030	1	10/21/19 16:03	10/23/19 20:43	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/21/19 16:03	10/23/19 20:43	7439-92-1	
Lithium	**0.038**	mg/L	0.030	0.00078	1	10/21/19 16:03	10/25/19 09:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/21/19 16:03	10/23/19 20:43	7439-98-7	
Selenium	**0.0017J**	mg/L	0.010	0.0013	1	10/21/19 16:03	10/23/19 20:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/21/19 16:03	10/23/19 20:43	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**2220**	mg/L	10.0	10.0	1		10/23/19 15:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.6**	mg/L	1.0	0.024	1		10/24/19 22:04	16887-00-6	
Fluoride	**0.076J**	mg/L	0.30	0.029	1		10/24/19 22:04	16984-48-8	
Sulfate	**1560**	mg/L	50.0	0.85	50		10/25/19 06:45	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624487

Sample: BRGWC-50 **Lab ID: 2624487003** Collected: 10/16/19 13:25 Received: 10/17/19 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/21/19 16:03	10/23/19 20:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/21/19 16:03	10/23/19 20:55	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00049	1	10/21/19 16:03	10/23/19 20:55	7440-39-3	
Beryllium	**0.0027J**	mg/L	0.0030	0.000074	1	10/21/19 16:03	10/23/19 20:55	7440-41-7	
Boron	**0.31**	mg/L	0.040	0.0049	1	10/21/19 16:03	10/23/19 20:55	7440-42-8	
Cadmium	**0.014**	mg/L	0.0025	0.00011	1	10/21/19 16:03	10/23/19 20:55	7440-43-9	
Calcium	**241**	mg/L	5.0	0.55	50	10/21/19 16:03	10/23/19 21:00	7440-70-2	
Chromium	**0.00050J**	mg/L	0.010	0.00039	1	10/21/19 16:03	10/23/19 20:55	7440-47-3	
Cobalt	**1.4**	mg/L	0.0050	0.00030	1	10/21/19 16:03	10/23/19 20:55	7440-48-4	
Lead	**0.000085J**	mg/L	0.0050	0.000046	1	10/21/19 16:03	10/23/19 20:55	7439-92-1	
Lithium	**0.034**	mg/L	0.030	0.00078	1	10/21/19 16:03	10/25/19 09:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/21/19 16:03	10/23/19 20:55	7439-98-7	
Selenium	**0.0020J**	mg/L	0.010	0.0013	1	10/21/19 16:03	10/23/19 20:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/21/19 16:03	10/23/19 20:55	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**2280**	mg/L	10.0	10.0	1		10/23/19 15:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**21.9**	mg/L	1.0	0.024	1		10/24/19 22:47	16887-00-6	
Fluoride	**0.39**	mg/L	0.30	0.029	1		10/24/19 22:47	16984-48-8	
Sulfate	**1590**	mg/L	50.0	0.85	50		10/25/19 07:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624487

Sample: BRGWC-52I **Lab ID: 2624487004** Collected: 10/16/19 14:55 Received: 10/17/19 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/21/19 16:03	10/23/19 21:06	7440-36-0	
Arsenic	**0.0026J**	mg/L	0.0050	0.00035	1	10/21/19 16:03	10/23/19 21:06	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00049	1	10/21/19 16:03	10/23/19 21:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	10/21/19 16:03	10/23/19 21:06	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.0049	1	10/21/19 16:03	10/23/19 21:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/21/19 16:03	10/23/19 21:06	7440-43-9	
Calcium	**48.4**	mg/L	5.0	0.55	50	10/21/19 16:03	10/23/19 21:12	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/21/19 16:03	10/23/19 21:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	10/21/19 16:03	10/23/19 21:06	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	10/21/19 16:03	10/23/19 21:06	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00078	1	10/21/19 16:03	10/25/19 10:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/21/19 16:03	10/23/19 21:06	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/21/19 16:03	10/23/19 21:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	10/21/19 16:03	10/23/19 21:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**346**	mg/L	10.0	10.0	1		10/23/19 15:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**7.0**	mg/L	1.0	0.024	1		10/24/19 23:09	16887-00-6	
Fluoride	**0.22J**	mg/L	0.30	0.029	1		10/24/19 23:09	16984-48-8	
Sulfate	**155**	mg/L	10.0	0.17	10		10/25/19 07:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624487

Sample: Dup-2 **Lab ID: 2624487005** Collected: 10/16/19 00:00 Received: 10/17/19 11:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	10/21/19 16:03	10/23/19 21:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	10/21/19 16:03	10/23/19 21:17	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00049	1	10/21/19 16:03	10/23/19 21:17	7440-39-3	
Beryllium	**0.00061J**	mg/L	0.0030	0.000074	1	10/21/19 16:03	10/23/19 21:17	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.0049	1	10/21/19 16:03	10/23/19 21:17	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	10/21/19 16:03	10/23/19 21:17	7440-43-9	
Calcium	**53.5**	mg/L	5.0	0.55	50	10/21/19 16:03	10/23/19 21:23	7440-70-2	
Chromium	ND	mg/L	0.010	0.00039	1	10/21/19 16:03	10/23/19 21:17	7440-47-3	
Cobalt	**0.0056**	mg/L	0.0050	0.00030	1	10/21/19 16:03	10/23/19 21:17	7440-48-4	
Lead	**0.00027J**	mg/L	0.0050	0.000046	1	10/21/19 16:03	10/23/19 21:17	7439-92-1	
Lithium	**0.0027J**	mg/L	0.030	0.00078	1	10/21/19 16:03	10/25/19 10:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00095	1	10/21/19 16:03	10/23/19 21:17	7439-98-7	
Selenium	ND	mg/L	0.010	0.0013	1	10/21/19 16:03	10/23/19 21:17	7782-49-2	
Thallium	**0.00016J**	mg/L	0.0010	0.000052	1	10/21/19 16:03	10/23/19 21:17	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**393**	mg/L	10.0	10.0	1		10/23/19 15:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.9**	mg/L	1.0	0.024	1		10/24/19 23:31	16887-00-6	
Fluoride	**0.12J**	mg/L	0.30	0.029	1		10/24/19 23:31	16984-48-8	
Sulfate	**275**	mg/L	20.0	0.34	20		10/25/19 07:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624487

QC Batch: 37286 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2624487001, 2624487002, 2624487003, 2624487004, 2624487005

METHOD BLANK: 168679 Matrix: Water
Associated Lab Samples: 2624487001, 2624487002, 2624487003, 2624487004, 2624487005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	10/23/19 18:31	
Arsenic	mg/L	ND	0.0050	0.00035	10/23/19 18:31	
Barium	mg/L	ND	0.010	0.00049	10/23/19 18:31	
Beryllium	mg/L	ND	0.0030	0.000074	10/23/19 18:31	
Boron	mg/L	ND	0.040	0.0049	10/23/19 18:31	
Cadmium	mg/L	ND	0.0025	0.00011	10/23/19 18:31	
Calcium	mg/L	ND	0.10	0.011	10/23/19 18:31	
Chromium	mg/L	ND	0.010	0.00039	10/23/19 18:31	
Cobalt	mg/L	ND	0.0050	0.00030	10/23/19 18:31	
Lead	mg/L	ND	0.0050	0.000046	10/23/19 18:31	
Lithium	mg/L	ND	0.030	0.00078	10/23/19 18:31	
Molybdenum	mg/L	ND	0.010	0.00095	10/23/19 18:31	
Selenium	mg/L	ND	0.010	0.0013	10/23/19 18:31	
Thallium	mg/L	ND	0.0010	0.000052	10/23/19 18:31	

LABORATORY CONTROL SAMPLE: 168680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	102	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	103	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Calcium	mg/L	1	1.0	101	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	101	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.10	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168681 168682

Parameter	Units	2624484003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	100	100	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624487

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 168681 168682

Parameter	Units	2624484003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	0.00040J	0.1	0.1	0.10	0.10	100	100	75-125	0	20	
Barium	mg/L	0.037	0.1	0.1	0.15	0.14	109	107	75-125	1	20	
Beryllium	mg/L	0.00015J	0.1	0.1	0.095	0.094	95	94	75-125	0	20	
Boron	mg/L	2.2	1	1	3.1	3.1	90	90	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	100	75-125	1	20	
Calcium	mg/L	61.2	1	1	62.7	66.1	145	485	75-125	5	20	M6
Chromium	mg/L	0.0064J	0.1	0.1	0.11	0.10	100	98	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Lithium	mg/L	0.0022J	0.1	0.1	0.096	0.095	94	93	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	101	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.096	96	95	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624487

QC Batch: 37419 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2624487001, 2624487002, 2624487003, 2624487004, 2624487005

LABORATORY CONTROL SAMPLE: 169291

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	84-108	

SAMPLE DUPLICATE: 169292

Parameter	Units	2624484007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		10	

SAMPLE DUPLICATE: 169293

Parameter	Units	2624491004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	500	501	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624487

QC Batch: 37461 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624487001, 2624487002, 2624487003, 2624487004, 2624487005

METHOD BLANK: 169631 Matrix: Water
Associated Lab Samples: 2624487001, 2624487002, 2624487003, 2624487004, 2624487005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.043J	1.0	0.024	10/24/19 16:21	
Fluoride	mg/L	ND	0.30	0.029	10/24/19 16:21	
Sulfate	mg/L	ND	1.0	0.017	10/24/19 16:21	

LABORATORY CONTROL SAMPLE: 169632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	10	10.6	106	90-110	
Fluoride	mg/L	10	10.9	109	90-110	
Sulfate	mg/L	10	10.4	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 169633 169634

Parameter	Units	2624484001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.4	10	10	15.3	15.3	99	100	90-110	0	15	
Fluoride	mg/L	0.17J	10	10	11.1	11.1	110	110	90-110	0	15	

MATRIX SPIKE SAMPLE: 169635

Parameter	Units	2624487002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	4.6	10	14.7	101	90-110	
Fluoride	mg/L	0.076J	10	10.6	106	90-110	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624487

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.

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.

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

M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624487

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624487001	**BRGWC-29I**	EPA 3005A	37286	EPA 6020B	37308
2624487002	**BRGWC-47**	EPA 3005A	37286	EPA 6020B	37308
2624487003	**BRGWC-50**	EPA 3005A	37286	EPA 6020B	37308
2624487004	**BRGWC-52I**	EPA 3005A	37286	EPA 6020B	37308
2624487005	**Dup-2**	EPA 3005A	37286	EPA 6020B	37308
2624487001	**BRGWC-29I**	SM 2540C	37419		
2624487002	**BRGWC-47**	SM 2540C	37419		
2624487003	**BRGWC-50**	SM 2540C	37419		
2624487004	**BRGWC-52I**	SM 2540C	37419		
2624487005	**Dup-2**	SM 2540C	37419		
2624487001	**BRGWC-29I**	EPA 300.0	37461		
2624487002	**BRGWC-47**	EPA 300.0	37461		
2624487003	**BRGWC-50**	EPA 300.0	37461		
2624487004	**BRGWC-52I**	EPA 300.0	37461		
2624487005	**Dup-2**	EPA 300.0	37461		

WO#: 2624487
2624487

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

Workorder Number or ...E ONLY

Company: Georgia Power - Coal Combustion Residuals
Billing Information:
Address: 2480 Maner Road, Atlanta, GA 30339
Report To: Joju Abraham
Email To: scsinvoices@southernco.com
Copy To: Golder
Site Collection Info/Address: Plant Branch
phone: (404) 506-7239
Email: jabraham@southernco.com
State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239
Email: jabraham@southernco.com
Project Name: Plant Branch BCD CCR
Project #
Pace Profile#
Collected By (print): Travil Martinez
Purchase Order #:
Quote #:
Pace Project Manager: betsy.mcdaniel@pacelabs.com
Collected By (signature):
Turnaround Date Required:
Immediately Packed on Ice: [X] Yes [ ] No
Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: ____

* 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)

Lab Project Manager:

Container Preservative Type **: 1, 1

** 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 ____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Composite End Date	Time	Res Cl	# of Ctns	Metals App III/IV - see comments	Radium 226.228	Chloride, Fluoride, Sulfate, TDS	Lab Sample # / Comments
BRGWC-29I	GW	G	10/16/2019	9:50				4	1	2	1	
BRGWC-47	GW	G	10/16/2019	11:35				6	1	4	1	Rad-1
BRGWC-50	GW	G	10/16/2019	13:25				4	1	2	1	
BRGWC-52I	GW	G	10/16/2019	14:55				4	1	2	1	
DUP-2	GW	G	10/16/2019	--				4	1	2	1	

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
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
Cl Strips: ____
Sample pH Acceptable Y N NA
pH Strips: ____
Sulfide Present Y N NA
Lead Acetate Strips: ____
LAB USE ONLY:
Lab Sample # / Comments:

(App III Metals): B, Ca, (App IV Metals): Sb, As, Ba, Be, Cd, Cr, Co, 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#:
Cooler 1 Temp Upon Receipt: 8 oC
Cooler 1 Therm Corr. Factor: ___ oC
Cooler 1 Corrected Temp: ___ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY
/ Golder	10-17-19 / 0815	[signature]	10/17/19 11	Table #:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Acctnum: Template: Prelogin:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	PM: PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO
Page: 1 of: 1

Sample Condition Upon Receipt

Pace Analytical

Client Name: GRAPower Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other _____

Tracking #: _____

Optional
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 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.8 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/17/19 MP

Temp should be above freezing to 6°C

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

3000 W28

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 15, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624488

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624488

Pennsylvania Certification IDs

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, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624488

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624488001	**BRGWC-29I**	Water	10/16/19 09:50	10/17/19 11:35
2624488002	**BRGWC-47**	Water	10/16/19 11:35	10/17/19 11:35
2624488003	**BRGWC-50**	Water	10/16/19 13:25	10/17/19 11:35
2624488004	**BRGWC-52I**	Water	10/16/19 14:55	10/17/19 11:35
2624488005	**Dup-2**	Water	10/16/19 00:00	10/17/19 11:35

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624488

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624488001	**BRGWC-29I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624488002	**BRGWC-47**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624488003	**BRGWC-50**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624488004	**BRGWC-52I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624488005	**Dup-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

Sample: BRGWC-29I **Lab ID: 2624488001** Collected: 10/16/19 09:50 Received: 10/17/19 11:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.549 ± 0.312 (0.454) C:87% T:NA**	pCi/L	11/07/19 08:56	13982-63-3	
Radium-228	EPA 9320	**1.14 ± 0.846 (1.66) C:67% T:84%**	pCi/L	11/07/19 20:14	15262-20-1	
Total Radium	Total Radium Calculation	**1.69 ± 1.16 (2.11)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

Sample: BRGWC-47 **Lab ID: 2624488002** Collected: 10/16/19 11:35 Received: 10/17/19 11:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.572 ± 0.304 (0.422) C:94% T:NA**	pCi/L	11/07/19 08:56	13982-63-3	
Radium-228	EPA 9320	**0.703 ± 0.701 (1.44) C:74% T:79%**	pCi/L	11/07/19 20:14	15262-20-1	
Total Radium	Total Radium Calculation	**1.28 ± 1.01 (1.86)**	pCi/L	11/12/19 10:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

Sample: BRGWC-50 **Lab ID: 2624488003** Collected: 10/16/19 13:25 Received: 10/17/19 11:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.880 ± 0.359 (0.359) C:90% T:NA**	pCi/L	11/07/19 07:21	13982-63-3	
Radium-228	EPA 9320	**1.63 ± 0.552 (0.762) C:83% T:75%**	pCi/L	11/14/19 11:03	15262-20-1	
Total Radium	Total Radium Calculation	**2.51 ± 0.911 (1.12)**	pCi/L	11/14/19 15:46	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

Sample: BRGWC-52I **Lab ID: 2624488004** Collected: 10/16/19 14:55 Received: 10/17/19 11:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.513 ± 0.296 (0.417) C:90% T:NA**	pCi/L	11/07/19 07:22	13982-63-3	
Radium-228	EPA 9320	**1.62 ± 0.568 (0.813) C:85% T:70%**	pCi/L	11/14/19 11:03	15262-20-1	
Total Radium	Total Radium Calculation	**2.13 ± 0.864 (1.23)**	pCi/L	11/14/19 15:46	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

Sample: Dup-2 **Lab ID: 2624488005** Collected: 10/16/19 00:00 Received: 10/17/19 11:35 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.536 ± 0.304 (0.443) C:92% T:NA**	pCi/L	11/07/19 07:22	13982-63-3	
Radium-228	EPA 9320	**1.02 ± 0.429 (0.690) C:84% T:80%**	pCi/L	11/14/19 11:03	15262-20-1	
Total Radium	Total Radium Calculation	**1.56 ± 0.733 (1.13)**	pCi/L	11/14/19 15:46	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

QC Batch: 368367 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2624488001, 2624488002

METHOD BLANK: 1787254 Matrix: Water
Associated Lab Samples: 2624488001, 2624488002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.416 ± 0.262 (0.396) C:98% T:NA	pCi/L	11/07/19 07:47	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

QC Batch: 368370 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2624488003, 2624488004, 2624488005

METHOD BLANK: 1787257 Matrix: Water
Associated Lab Samples: 2624488003, 2624488004, 2624488005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0477 ± 0.582 (1.37) C:76% T:75%	pCi/L	11/08/19 19:28	

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

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

QC Batch: 368369 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2624488003, 2624488004, 2624488005

METHOD BLANK: 1787256 Matrix: Water
Associated Lab Samples: 2624488003, 2624488004, 2624488005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.352 ± 0.285 (0.530) C:94% T:NA	pCi/L	11/07/19 07:21	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: Plant Branch
Pace Project No.: 2624488

QC Batch: 368368 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2624488001, 2624488002

METHOD BLANK: 1787255 Matrix: Water
Associated Lab Samples: 2624488001, 2624488002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.536 ± 0.405 (0.790) C:74% T:76%	pCi/L	11/07/19 14:59	

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

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Peachtree Corners, GA 30092
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QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624488

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624488

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624488001	**BRGWC-29I**	EPA 9315	368367		
2624488002	**BRGWC-47**	EPA 9315	368367		
2624488003	**BRGWC-50**	EPA 9315	368369		
2624488004	**BRGWC-52I**	EPA 9315	368369		
2624488005	**Dup-2**	EPA 9315	368369		
2624488001	**BRGWC-29I**	EPA 9320	368368		
2624488002	**BRGWC-47**	EPA 9320	368368		
2624488003	**BRGWC-50**	EPA 9320	368370		
2624488004	**BRGWC-52I**	EPA 9320	368370		
2624488005	**Dup-2**	EPA 9320	368370		
2624488001	**BRGWC-29I**	Total Radium Calculation	370512		
2624488002	**BRGWC-47**	Total Radium Calculation	370512		
2624488003	**BRGWC-50**	Total Radium Calculation	371088		
2624488004	**BRGWC-52I**	Total Radium Calculation	371088		
2624488005	**Dup-2**	Total Radium Calculation	371088		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

WO# : 2624488

2624488

Workorder Number or

SE ONLY

oject Manager:

Company: Georgia Power - Coal Combustion Residuals	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD CCR Project #
Collected By (print): Travis Martinez	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)

Pace Profile#
Pace Project Manager: betsy.mcdaniel@pacelabs.com
Immediately Packed on Ice: [X] Yes [ ] No
Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

** 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: Metals App III/IV - see comments	Radium 226.228	Chloride, Fluoride, Sulfate, TDS
BRGWC-29I	GW	G	10/16/2019	9:50				4	1	2	1
BRGWC-47	GW	G	10/16/2019	11:35				6	1	4	1
BRGWC-50	GW	G	10/16/2019	13:25				4	1	2	1
BRGWC-52I	GW	G	10/16/2019	14:55				4	1	2	1
DUP-2	GW	G	10/16/2019	--				4	1	2	1

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
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
Cl Strips: _____
Sample pH Acceptable: Y N NA
pH Strips: _____
Sulfide Present: Y N NA
Lead Acetate Strips: _____

LAB USE ONLY:
Lab Sample # / Comments:

Rad-1

(App III Metals): B, Ca, (App IV Metals): Sb, As, Ba, Be, Cd, Cr, Co, 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#: _____
Cooler 1 Temp Upon Receipt: 0.8 oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: ___oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Golder	10-17-19 0815		10/17/19 11:15
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

Sample Condition Upon Receipt

Pace Analytical

Client Name: GrAPower Project #

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Commercial ☐ Pace Other

Tracking #:

Optional
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 83 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.8 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 10/17/19 MP

Temp should be above freezing to 6°C

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

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

Person Contacted: Date/Time:

Comments/ Resolution:

3000 W28

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 17, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: Plant Branch
Pace Project No.: 2624678

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Kevin Herring for
Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: Plant Branch
Pace Project No.: 2624678

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: Plant Branch
Pace Project No.: 2624678

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624678001	**BRGWC-17S**	Water	10/17/19 10:45	10/18/19 15:00
2624678002	**BRGWC-36S**	Water	10/17/19 12:38	10/18/19 15:00
2624678003	**BRGWC-27I**	Water	10/17/19 09:50	10/18/19 15:00
2624678004	**BRGWC-30I**	Water	10/17/19 12:00	10/18/19 15:00
2624678005	**BRGWC-32S**	Water	10/17/19 10:50	10/18/19 15:00
2624678006	**BRGWC-45**	Water	10/17/19 14:08	10/18/19 15:00
2624678007	**EB-2**	Water	10/17/19 13:00	10/18/19 15:00
2624678008	**EB-3**	Water	10/17/19 14:41	10/18/19 15:00
2624678009	**FB-3**	Water	10/17/19 14:13	10/18/19 15:00
2624678010	**DUP-3**	Water	10/17/19 00:00	10/18/19 15:00

Pace Analytical Services, LLC
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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624678

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2624678001	**BRGWC-17S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678002	**BRGWC-36S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678003	**BRGWC-27I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678004	**BRGWC-30I**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678005	**BRGWC-32S**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678006	**BRGWC-45**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678007	**EB-2**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678008	**EB-3**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10

Pace Analytical Services, LLC
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(770)734-4200

SAMPLE ANALYTE COUNT

Project: Plant Branch
Pace Project No.: 2624678

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678009	**FB-3**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1
2624678010	**DUP-3**	EPA 6010D	KLH	10
		EPA 6010D	KLH	10
		SM 2320B	S1A	2
		SM 4500-P	JAD	1
		EPA 300.0	MWB	1

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-17S **Lab ID: 2624678001** Collected: 10/17/19 10:45 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:06	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:06	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:06	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:06	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:06	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:06	7439-89-6	
Magnesium	**21.1**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:06	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:06	7439-96-5	
Potassium	**1.1**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:06	7440-09-7	
Sodium	**22.1**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:06	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 09:54	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 09:54	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 09:54	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 09:54	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 09:54	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 09:54	7439-89-6	
Magnesium, Dissolved	**21.5**	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 09:54	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 09:54	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 09:54	7440-09-7	
Sodium, Dissolved	**22.0**	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 09:54	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**75.0**	mg/L	20.0	20.0	1		10/25/19 14:56		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/25/19 14:56		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.15**	mg/L	0.020	0.020	1		10/25/19 19:58		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.065**	mg/L	0.050	0.0050	1		10/24/19 02:59	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-36S **Lab ID: 2624678002** Collected: 10/17/19 12:38 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:11	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:11	7440-41-7	
Boron	**1.1**	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:11	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:11	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:11	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:11	7439-89-6	
Magnesium	**22.1**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:11	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:11	7439-96-5	
Potassium	**4.1**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:11	7440-09-7	
Sodium	**38.9**	mg/L	10.0	1.9	10	10/25/19 16:05	10/31/19 21:46	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 09:59	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 09:59	7440-41-7	
Boron, Dissolved	**1.1**	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 09:59	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 09:59	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 09:59	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 09:59	7439-89-6	
Magnesium, Dissolved	**23.0**	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 09:59	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 09:59	7439-96-5	
Potassium, Dissolved	**4.0**	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 09:59	7440-09-7	
Sodium, Dissolved	**36.6**	mg/L	10.0	1.9	10	11/01/19 17:23	11/05/19 17:18	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**16.0**	mg/L	1.0	1.0	1		10/28/19 11:44		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:44		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.19**	mg/L	0.020	0.020	1		10/25/19 19:59		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.035J**	mg/L	0.050	0.0050	1		10/30/19 07:30	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-27I **Lab ID: 2624678003** Collected: 10/17/19 09:50 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:16	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:16	7440-41-7	
Boron	**0.97**	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:16	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:16	7440-43-9	
Cobalt	**0.0090J**	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:16	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:16	7439-89-6	
Magnesium	**6.6**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:16	7439-95-4	
Manganese	**0.85**	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:16	7439-96-5	
Potassium	**5.9**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:16	7440-09-7	
Sodium	**17.4**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:16	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:04	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:04	7440-41-7	
Boron, Dissolved	**0.98**	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:04	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:04	7440-43-9	
Cobalt, Dissolved	**0.011J**	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:04	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:04	7439-89-6	
Magnesium, Dissolved	**7.1**	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:04	7439-95-4	
Manganese, Dissolved	**0.91**	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:04	7439-96-5	
Potassium, Dissolved	**6.2**	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:04	7440-09-7	
Sodium, Dissolved	**18.0**	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 10:04	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**16.5**	mg/L	1.0	1.0	1		10/28/19 11:49		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:49		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/25/19 20:00		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.050	0.0050	1		10/24/19 02:37	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-30I **Lab ID: 2624678004** Collected: 10/17/19 12:00 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:24	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:24	7440-41-7	
Boron	**1.7**	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:24	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:24	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:24	7440-48-4	
Iron	**0.68**	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:24	7439-89-6	
Magnesium	**29.8**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:24	7439-95-4	
Manganese	**0.43**	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:24	7439-96-5	
Potassium	**4.4**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:24	7440-09-7	
Sodium	**26.7**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:24	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:08	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:08	7440-41-7	
Boron, Dissolved	**1.7**	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:08	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:08	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:08	7440-48-4	
Iron, Dissolved	**0.036J**	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:08	7439-89-6	
Magnesium, Dissolved	**32.5**	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:08	7439-95-4	
Manganese, Dissolved	**0.46**	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:08	7439-96-5	
Potassium, Dissolved	**4.5**	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:08	7440-09-7	
Sodium, Dissolved	**26.7**	mg/L	10.0	1.9	10	11/01/19 17:23	11/05/19 17:23	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**72.0**	mg/L	20.0	20.0	1		10/25/19 15:16		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/25/19 15:16		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.035**	mg/L	0.020	0.020	1		10/25/19 20:01		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.034J**	mg/L	0.050	0.0050	1		10/24/19 03:43	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-32S **Lab ID: 2624678005** Collected: 10/17/19 10:50 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:29	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:29	7440-41-7	
Boron	**1.5**	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:29	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:29	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:29	7440-48-4	
Iron	**0.067**	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:29	7439-89-6	
Magnesium	**37.9**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:29	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:29	7439-96-5	
Potassium	**1.8**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:29	7440-09-7	
Sodium	**28.9**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:29	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 18:00	11/03/19 11:07	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 18:00	11/03/19 11:07	7440-41-7	
Boron, Dissolved	**1.4**	mg/L	0.040	0.017	1	11/01/19 18:00	11/03/19 11:07	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 18:00	11/03/19 11:07	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 18:00	11/03/19 11:07	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 18:00	11/03/19 11:07	7439-89-6	
Magnesium, Dissolved	**38.6**	mg/L	0.050	0.011	1	11/01/19 18:00	11/03/19 11:07	7439-95-4	M1
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 18:00	11/03/19 11:07	7439-96-5	
Potassium, Dissolved	**1.7**	mg/L	0.20	0.026	1	11/01/19 18:00	11/03/19 11:07	7440-09-7	
Sodium, Dissolved	**28.1**	mg/L	1.0	0.19	1	11/01/19 18:00	11/03/19 11:07	7440-23-5	M1
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**21.0**	mg/L	20.0	20.0	1		10/25/19 15:20		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/25/19 15:20		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.063**	mg/L	0.020	0.020	1		10/25/19 20:03		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.13**	mg/L	0.050	0.0050	1		10/24/19 03:21	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: BRGWC-45 **Lab ID: 2624678006** Collected: 10/17/19 14:08 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:33	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:33	7440-41-7	
Boron	**0.064**	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:33	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:33	7440-43-9	
Cobalt	**0.0096J**	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:33	7440-48-4	
Iron	**0.34**	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:33	7439-89-6	
Magnesium	**19.0**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:33	7439-95-4	
Manganese	**0.37**	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:33	7439-96-5	
Potassium	**4.9**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:33	7440-09-7	
Sodium	**18.7**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:33	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:13	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:13	7440-41-7	
Boron, Dissolved	**0.065**	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:13	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:13	7440-43-9	
Cobalt, Dissolved	**0.0098J**	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:13	7440-48-4	
Iron, Dissolved	**0.25**	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:13	7439-89-6	
Magnesium, Dissolved	**19.6**	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:13	7439-95-4	
Manganese, Dissolved	**0.39**	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:13	7439-96-5	
Potassium, Dissolved	**4.9**	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:13	7440-09-7	
Sodium, Dissolved	**18.9**	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 10:13	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**42.0**	mg/L	20.0	20.0	1		10/25/19 15:24		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/25/19 15:24		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/25/19 20:03		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.056**	mg/L	0.050	0.0050	1		10/24/19 04:05	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: EB-2 **Lab ID: 2624678007** Collected: 10/17/19 13:00 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 16:38	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 16:38	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 16:38	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 16:38	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 16:38	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 16:38	7439-89-6	
Magnesium	ND	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 16:38	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 16:38	7439-96-5	
Potassium	ND	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 16:38	7440-09-7	
Sodium	ND	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 16:38	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:33	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:33	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:33	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:33	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:33	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:33	7439-89-6	
Magnesium, Dissolved	ND	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:33	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:33	7439-96-5	
Potassium, Dissolved	ND	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:33	7440-09-7	
Sodium, Dissolved	ND	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 10:33	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:54		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:54		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/25/19 20:04		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.50	0.050	10		10/30/19 16:45	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: EB-3 **Lab ID: 2624678008** Collected: 10/17/19 14:41 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 20:32	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 20:32	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 20:32	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 20:32	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 20:32	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 20:32	7439-89-6	
Magnesium	ND	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 20:32	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 20:32	7439-96-5	
Potassium	ND	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 20:32	7440-09-7	
Sodium	ND	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 20:32	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:38	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:38	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:38	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:38	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:38	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:38	7439-89-6	
Magnesium, Dissolved	ND	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:38	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:38	7439-96-5	
Potassium, Dissolved	ND	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:38	7440-09-7	
Sodium, Dissolved	ND	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 10:38	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:58		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 11:58		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/25/19 20:05		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.050	0.0050	1		10/30/19 08:14	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: FB-3 **Lab ID: 2624678009** Collected: 10/17/19 14:13 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 20:37	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 20:37	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 20:37	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 20:37	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 20:37	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 20:37	7439-89-6	
Magnesium	ND	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 20:37	7439-95-4	
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 20:37	7439-96-5	
Potassium	ND	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 20:37	7440-09-7	
Sodium	ND	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 20:37	7440-23-5	
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 17:23	11/03/19 10:52	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 17:23	11/03/19 10:52	7440-41-7	
Boron, Dissolved	ND	mg/L	0.040	0.017	1	11/01/19 17:23	11/03/19 10:52	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 17:23	11/03/19 10:52	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 17:23	11/03/19 10:52	7440-48-4	
Iron, Dissolved	**0.052**	mg/L	0.040	0.015	1	11/01/19 17:23	11/03/19 10:52	7439-89-6	
Magnesium, Dissolved	ND	mg/L	0.050	0.011	1	11/01/19 17:23	11/03/19 10:52	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 17:23	11/03/19 10:52	7439-96-5	
Potassium, Dissolved	ND	mg/L	0.20	0.026	1	11/01/19 17:23	11/03/19 10:52	7440-09-7	
Sodium, Dissolved	ND	mg/L	1.0	0.19	1	11/01/19 17:23	11/03/19 10:52	7440-23-5	
2320B Alkalinity Low Level	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 12:00		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	1.0	1.0	1		10/28/19 12:00		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	ND	mg/L	0.020	0.020	1		10/25/19 20:08		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.050	0.0050	1		10/30/19 07:52	14797-55-8	H1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: Plant Branch
Pace Project No.: 2624678

Sample: DUP-3 **Lab ID: 2624678010** Collected: 10/17/19 00:00 Received: 10/18/19 15:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum	ND	mg/L	0.10	0.032	1	10/25/19 16:05	10/28/19 20:42	7429-90-5	
Beryllium	ND	mg/L	0.010	0.0026	1	10/25/19 16:05	10/28/19 20:42	7440-41-7	
Boron	ND	mg/L	0.040	0.017	1	10/25/19 16:05	10/28/19 20:42	7440-42-8	
Cadmium	ND	mg/L	0.010	0.00090	1	10/25/19 16:05	10/28/19 20:42	7440-43-9	
Cobalt	ND	mg/L	0.040	0.0052	1	10/25/19 16:05	10/28/19 20:42	7440-48-4	
Iron	ND	mg/L	0.040	0.015	1	10/25/19 16:05	10/28/19 20:42	7439-89-6	
Magnesium	**20.2**	mg/L	0.050	0.011	1	10/25/19 16:05	10/28/19 20:42	7439-95-4	M1
Manganese	ND	mg/L	0.040	0.0061	1	10/25/19 16:05	10/28/19 20:42	7439-96-5	
Potassium	**1.1**	mg/L	0.20	0.026	1	10/25/19 16:05	10/28/19 20:42	7440-09-7	
Sodium	**21.2**	mg/L	1.0	0.19	1	10/25/19 16:05	10/28/19 20:42	7440-23-5	M1
6010D MET ICP, Lab Filtered	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Aluminum, Dissolved	ND	mg/L	0.10	0.032	1	11/01/19 18:00	11/03/19 11:36	7429-90-5	
Beryllium, Dissolved	ND	mg/L	0.010	0.0026	1	11/01/19 18:00	11/03/19 11:36	7440-41-7	
Boron, Dissolved	**0.057**	mg/L	0.040	0.017	1	11/01/19 18:00	11/03/19 11:36	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.010	0.00090	1	11/01/19 18:00	11/03/19 11:36	7440-43-9	
Cobalt, Dissolved	ND	mg/L	0.040	0.0052	1	11/01/19 18:00	11/03/19 11:36	7440-48-4	
Iron, Dissolved	ND	mg/L	0.040	0.015	1	11/01/19 18:00	11/03/19 11:36	7439-89-6	
Magnesium, Dissolved	**21.1**	mg/L	0.050	0.011	1	11/01/19 18:00	11/03/19 11:36	7439-95-4	
Manganese, Dissolved	ND	mg/L	0.040	0.0061	1	11/01/19 18:00	11/03/19 11:36	7439-96-5	
Potassium, Dissolved	**1.1**	mg/L	0.20	0.026	1	11/01/19 18:00	11/03/19 11:36	7440-09-7	
Sodium, Dissolved	**21.7**	mg/L	1.0	0.19	1	11/01/19 18:00	11/03/19 11:36	7440-23-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**73.0**	mg/L	20.0	20.0	1		10/25/19 15:27		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	20.0	1		10/25/19 15:27		
4500PE Ortho Phosphorus	Analytical Method: SM 4500-P								
Orthophosphate as P	**0.15**	mg/L	0.020	0.020	1		10/25/19 20:09		H1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.064**	mg/L	0.050	0.0050	1		10/30/19 06:23	14797-55-8	H1,M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 37568 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678005, 2624678006, 2624678007, 2624678008, 2624678009, 2624678010

METHOD BLANK: 170388 Matrix: Water
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678005, 2624678006, 2624678007, 2624678008, 2624678009, 2624678010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum	mg/L	ND	0.10	0.032	10/28/19 15:13	
Beryllium	mg/L	ND	0.010	0.0026	10/28/19 15:13	
Boron	mg/L	ND	0.040	0.017	10/28/19 15:13	
Cadmium	mg/L	ND	0.010	0.00090	10/28/19 15:13	
Cobalt	mg/L	ND	0.040	0.0052	10/28/19 15:13	
Iron	mg/L	ND	0.040	0.015	10/28/19 15:13	
Magnesium	mg/L	ND	0.050	0.011	10/28/19 15:13	
Manganese	mg/L	ND	0.040	0.0061	10/28/19 15:13	
Potassium	mg/L	ND	0.20	0.026	10/28/19 15:13	
Sodium	mg/L	ND	1.0	0.19	10/28/19 15:13	

LABORATORY CONTROL SAMPLE: 170389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/L	1	0.96	96	80-120	
Beryllium	mg/L	1	0.97	97	80-120	
Boron	mg/L	1	0.97	97	80-120	
Cadmium	mg/L	1	0.99	99	80-120	
Cobalt	mg/L	1	0.96	96	80-120	
Iron	mg/L	1	0.96	96	80-120	
Magnesium	mg/L	1	0.97	97	80-120	
Manganese	mg/L	1	0.98	98	80-120	
Potassium	mg/L	1	0.96	96	80-120	
Sodium	mg/L	1	0.97J	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 170390 170391

Parameter	Units	2624678010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	mg/L	ND	1	1	0.98	0.98	98	98	75-125	0	20	
Beryllium	mg/L	ND	1	1	1.0	1.0	101	100	75-125	1	20	
Boron	mg/L	0.057	1	1	1.0	1.0	99	100	75-125	1	20	
Cadmium	mg/L	ND	1	1	1.0	1.0	101	100	75-125	1	20	
Cobalt	mg/L	ND	1	1	0.99	0.98	99	98	75-125	1	20	
Iron	mg/L	ND	1	1	1.0	1.0	100	104	75-125	4	20	
Magnesium	mg/L	21.1	1	1	21.3	20.8	115	62	75-125	3	20	M1
Manganese	mg/L	ND	1	1	1.0	1.0	102	100	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 170390 170391

Parameter	Units	2624678010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Potassium	mg/L	1.1	1	1	2.2	2.1	107	102	75-125	2	20	
Sodium	mg/L	21.7	1	1	22.2	21.8	99	59	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 38007 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET Dissolved
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678006, 2624678007, 2624678008, 2624678009

METHOD BLANK: 172830 Matrix: Water
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678006, 2624678007, 2624678008, 2624678009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	mg/L	ND	0.10	0.032	11/04/19 15:30	
Beryllium, Dissolved	mg/L	ND	0.010	0.0026	11/04/19 15:30	
Boron, Dissolved	mg/L	ND	0.040	0.017	11/04/19 15:30	
Cadmium, Dissolved	mg/L	ND	0.010	0.00090	11/04/19 15:30	
Cobalt, Dissolved	mg/L	ND	0.040	0.0052	11/04/19 15:30	
Iron, Dissolved	mg/L	ND	0.040	0.015	11/04/19 15:30	
Magnesium, Dissolved	mg/L	ND	0.050	0.011	11/04/19 15:30	
Manganese, Dissolved	mg/L	ND	0.040	0.0061	11/04/19 15:30	
Potassium, Dissolved	mg/L	ND	0.20	0.026	11/04/19 15:30	
Sodium, Dissolved	mg/L	ND	1.0	0.19	11/04/19 15:30	

LABORATORY CONTROL SAMPLE: 172831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	mg/L	1	1.1	106	80-120	
Beryllium, Dissolved	mg/L	1	1.0	104	80-120	
Boron, Dissolved	mg/L	1	1.0	101	80-120	
Cadmium, Dissolved	mg/L	1	1.1	107	80-120	
Cobalt, Dissolved	mg/L	1	1.1	107	80-120	
Iron, Dissolved	mg/L	1	1.1	108	80-120	
Magnesium, Dissolved	mg/L	1	1.1	107	80-120	
Manganese, Dissolved	mg/L	1	1.1	106	80-120	
Potassium, Dissolved	mg/L	1	1.0	102	80-120	
Sodium, Dissolved	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 172834 172835

Parameter	Units	2624490001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	mg/L	0.16	1	1	1.2	1.2	102	104	75-125	2	20	
Beryllium, Dissolved	mg/L	ND	1	1	1.0	1.0	103	103	75-125	0	20	
Boron, Dissolved	mg/L	1.2	1	1	2.1	2.2	99	100	75-125	1	20	
Cadmium, Dissolved	mg/L	ND	1	1	1.0	1.0	102	104	75-125	1	20	
Cobalt, Dissolved	mg/L	0.048	1	1	1.1	1.1	104	105	75-125	1	20	
Iron, Dissolved	mg/L	ND	1	1	1.1	1.1	106	106	75-125	0	20	
Magnesium, Dissolved	mg/L	5.7	1	1	6.4	6.4	68	70	75-125	0	20	M1
Manganese, Dissolved	mg/L	1.5	1	1	2.5	2.4	98	96	75-125	1	20	
Potassium, Dissolved	mg/L	12.5	1	1	12.9	12.9	42	48	75-125	0	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 172834 172835

Parameter	Units	2624490001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sodium, Dissolved	mg/L	16.4	1	1	16.5	16.6	9	26	75-125	1	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 38053
QC Batch Method: EPA 3010A
Associated Lab Samples: 2624678005, 2624678010

Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved

METHOD BLANK: 172832 Matrix: Water
Associated Lab Samples: 2624678005, 2624678010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Aluminum, Dissolved	mg/L	ND	0.10	0.032	11/03/19 10:57	
Beryllium, Dissolved	mg/L	ND	0.010	0.0026	11/03/19 10:57	
Boron, Dissolved	mg/L	ND	0.040	0.017	11/03/19 10:57	
Cadmium, Dissolved	mg/L	ND	0.010	0.00090	11/03/19 10:57	
Cobalt, Dissolved	mg/L	ND	0.040	0.0052	11/03/19 10:57	
Iron, Dissolved	mg/L	ND	0.040	0.015	11/03/19 10:57	
Magnesium, Dissolved	mg/L	ND	0.050	0.011	11/03/19 10:57	
Manganese, Dissolved	mg/L	ND	0.040	0.0061	11/03/19 10:57	
Potassium, Dissolved	mg/L	ND	0.20	0.026	11/03/19 10:57	
Sodium, Dissolved	mg/L	ND	1.0	0.19	11/03/19 10:57	

LABORATORY CONTROL SAMPLE: 172833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	mg/L	1	1.0	102	80-120	
Beryllium, Dissolved	mg/L	1	1.0	101	80-120	
Boron, Dissolved	mg/L	1	0.97	97	80-120	
Cadmium, Dissolved	mg/L	1	1.0	104	80-120	
Cobalt, Dissolved	mg/L	1	1.1	106	80-120	
Iron, Dissolved	mg/L	1	1.1	106	80-120	
Magnesium, Dissolved	mg/L	1	1.0	103	80-120	
Manganese, Dissolved	mg/L	1	1.1	105	80-120	
Potassium, Dissolved	mg/L	1	0.97	97	80-120	
Sodium, Dissolved	mg/L	1	0.96J	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 173035 173036

Parameter	Units	2624678005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	mg/L	ND	1	1	1.1	1.0	106	100	75-125	6	20	
Beryllium, Dissolved	mg/L	ND	1	1	1.1	1.0	106	100	75-125	5	20	
Boron, Dissolved	mg/L	1.4	1	1	2.6	2.5	117	103	75-125	5	20	
Cadmium, Dissolved	mg/L	ND	1	1	1.1	1.0	107	101	75-125	6	20	
Cobalt, Dissolved	mg/L	ND	1	1	1.1	1.0	108	102	75-125	6	20	
Iron, Dissolved	mg/L	ND	1	1	1.1	1.0	110	104	75-125	6	20	
Magnesium, Dissolved	mg/L	38.6	1	1	42.6	40.0	402	138	75-125	6	20	M1
Manganese, Dissolved	mg/L	ND	1	1	1.1	1.0	108	104	75-125	4	20	
Potassium, Dissolved	mg/L	1.7	1	1	3.0	2.7	125	100	75-125	9	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 173035 173036

Parameter	Units	2624678005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sodium, Dissolved	mg/L	28.1	1	1	30.8	28.7	270	57	75-125	7	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 37596 Analysis Method: SM 4500-P
QC Batch Method: SM 4500-P Analysis Description: 4500PE Ortho Phosphorus
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678005, 2624678006, 2624678007, 2624678008, 2624678009, 2624678010

METHOD BLANK: 170601 Matrix: Water
Associated Lab Samples: 2624678001, 2624678002, 2624678003, 2624678004, 2624678005, 2624678006, 2624678007, 2624678008, 2624678009, 2624678010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Orthophosphate as P	mg/L	ND	0.020	0.020	10/25/19 19:56	

LABORATORY CONTROL SAMPLE: 170602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Orthophosphate as P	mg/L	0.5	0.56	112	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 170603 170604

Parameter	Units	2624780001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Orthophosphate as P	mg/L	0.37	0.5	0.5	0.96	0.94	117	114	80-120	2	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 37451 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624678001, 2624678003, 2624678004, 2624678005, 2624678006

METHOD BLANK: 169595 Matrix: Water
Associated Lab Samples: 2624678001, 2624678003, 2624678004, 2624678005, 2624678006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.050	0.0050	10/24/19 01:53	

LABORATORY CONTROL SAMPLE: 169596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	5	5.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 169821 169822

Parameter	Units	2624678003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	ND	10	10	9.8	9.8	98	98	90-110	0	15	H1

MATRIX SPIKE SAMPLE: 169823

Parameter	Units	2624663002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	2.3	10	11.1	88	90-110	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: Plant Branch
Pace Project No.: 2624678

QC Batch: 37499 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2624678002, 2624678007, 2624678008, 2624678009, 2624678010

METHOD BLANK: 169844 Matrix: Water
Associated Lab Samples: 2624678002, 2624678007, 2624678008, 2624678009, 2624678010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.050	0.0050	10/30/19 05:16	

LABORATORY CONTROL SAMPLE: 169845

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 169846 169847

Parameter	Units	2624678010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.064	5	5	10.2	10.2	202	202	90-110	0	15	H1,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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: Plant Branch
Pace Project No.: 2624678

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.

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.

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

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624678

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624678001	BRGWC-17S	EPA 3010A	37568	EPA 6010D	37588
2624678002	BRGWC-36S	EPA 3010A	37568	EPA 6010D	37588
2624678003	BRGWC-27I	EPA 3010A	37568	EPA 6010D	37588
2624678004	BRGWC-30I	EPA 3010A	37568	EPA 6010D	37588
2624678005	BRGWC-32S	EPA 3010A	37568	EPA 6010D	37588
2624678006	BRGWC-45	EPA 3010A	37568	EPA 6010D	37588
2624678007	EB-2	EPA 3010A	37568	EPA 6010D	37588
2624678008	EB-3	EPA 3010A	37568	EPA 6010D	37588
2624678009	FB-3	EPA 3010A	37568	EPA 6010D	37588
2624678010	DUP-3	EPA 3010A	37568	EPA 6010D	37588
2624678001	BRGWC-17S	EPA 3010A	38007	EPA 6010D	38048
2624678002	BRGWC-36S	EPA 3010A	38007	EPA 6010D	38048
2624678003	BRGWC-27I	EPA 3010A	38007	EPA 6010D	38048
2624678004	BRGWC-30I	EPA 3010A	38007	EPA 6010D	38048
2624678005	BRGWC-32S	EPA 3010A	38053	EPA 6010D	38066
2624678006	BRGWC-45	EPA 3010A	38007	EPA 6010D	38048
2624678007	EB-2	EPA 3010A	38007	EPA 6010D	38048
2624678008	EB-3	EPA 3010A	38007	EPA 6010D	38048
2624678009	FB-3	EPA 3010A	38007	EPA 6010D	38048
2624678010	DUP-3	EPA 3010A	38053	EPA 6010D	38066
2624678001	BRGWC-17S	SM 2320B	37559		
2624678004	BRGWC-30I	SM 2320B	37559		
2624678005	BRGWC-32S	SM 2320B	37559		
2624678006	BRGWC-45	SM 2320B	37559		
2624678010	DUP-3	SM 2320B	37559		
2624678002	BRGWC-36S	SM 2320B	37629		
2624678003	BRGWC-27I	SM 2320B	37629		
2624678007	EB-2	SM 2320B	37629		
2624678008	EB-3	SM 2320B	37629		
2624678009	FB-3	SM 2320B	37629		
2624678001	BRGWC-17S	SM 4500-P	37596		
2624678002	BRGWC-36S	SM 4500-P	37596		
2624678003	BRGWC-27I	SM 4500-P	37596		
2624678004	BRGWC-30I	SM 4500-P	37596		
2624678005	BRGWC-32S	SM 4500-P	37596		
2624678006	BRGWC-45	SM 4500-P	37596		
2624678007	EB-2	SM 4500-P	37596		
2624678008	EB-3	SM 4500-P	37596		
2624678009	FB-3	SM 4500-P	37596		
2624678010	DUP-3	SM 4500-P	37596		
2624678001	BRGWC-17S	EPA 300.0	37451		
2624678002	BRGWC-36S	EPA 300.0	37499		
2624678003	BRGWC-27I	EPA 300.0	37451		
2624678004	BRGWC-30I	EPA 300.0	37451		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Plant Branch
Pace Project No.: 2624678

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624678005	**BRGWC-32S**	EPA 300.0	37451		
2624678006	**BRGWC-45**	EPA 300.0	37451		
2624678007	**EB-2**	EPA 300.0	37499		
2624678008	**EB-3**	EPA 300.0	37499		
2624678009	**FB-3**	EPA 300.0	37499		
2624678010	**DUP-3**	EPA 300.0	37499		

WO# : 2624678

2624678

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

LAB USE ONLY- Affix Workorder/Login Label He:
MTJL Log-in Numb

ALL SHADED AREAS are for LAB USE ONLY

Company: Georgia Power - Coal Combustion Residuals	Billing Information:	
Address: 2480 Maner Road Atlanta, GA 30339		
Report To: Joju Abraham	Email To: scsinvoices@southernco.com	
Copy To: Golder	Site Collection Info/Address: Plant Branch	
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET	
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch Project # 166625418.022A	Pace Profile#
Collected By (print): Travis Martinez Devin Thomas	Purchase Order # : Quote #:	Pace Project Manager: betsy.mcdaniel@pacelabs.com
Collected By (signature):	Turnaround Date Required:	Immediately Packed on Ice: [X] Yes [ ] No
	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

Container Preservative Type **: 1

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)

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Metals - see comments	Dissolved Metals by 200.7 (Lab Filter)	Cations / Anions (phosphate lab filtered)
BRGWC-17S	GW	G	10/17/2019	10:45				3	1	1	1
BRGWC-36S	GW	G	10/17/2019	12:38				3	1	1	1
BRGWC-27I	GW	G	10/17/2019	9:50				3	1	1	1
BRGWC-30I	GW	G	10/17/2019	12:00				3	1	1	1
BRGWC-32S	GW	G	10/17/2019	10:50				3	1	1	1
BRGWC-45	GW	G	10/17/2019	14:08				3	1	1	1
EB-2	W	G	10/17/2019	13:00				3	1	1	1
EB-3	W	G	10/17/2019	14:41				3	1	1	1
FB-3	W	G	10/17/2019	14:13				3	1	1	1
DUP-3	GW	G	10/17/2019	--				3	1	1	1

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
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
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

(Total / Dissolved Metals): Al, B, Be, Cd, Co, Fe, Mn
(Cations/Anions): Bicarbonate/Carbonate Alkalinity, Nitrate, Phosphate, Sodium, Magnesium, Potassium

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#: _____
Cooler 1 Temp Upon Receipt: 1.9 oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature] / Golder	10-18-19/1458	[signature] / PACE	10/18 1500
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 2

Sample Condition Upon Receipt

Pace Analytical

Client Name: _____ Project # _____

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Optional
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 1.4 **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: _____

Temp should be above freezing to 6°C **Comments:**

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

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

3000 W28

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)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 21, 2019

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Betsy McDaniel
betsy.mcdaniel@pacelabs.com
(770)734-4200
Project Manager

Enclosures

cc: Julie Lehrman, Golder Associates Inc.
Dawn Prell, Golder Associates Inc.
Eric Rolle, Georgia Power - Coal Combustion Residuals
Rebecca Thornton, Pace Analytical Atlanta

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

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, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2624861001	**BRGWC-27I**	Water	10/17/19 09:50	10/18/19 15:00
2624861002	**BRGWC-30I**	Water	10/17/19 12:00	10/18/19 15:00
2624861003	**BRGWC-32S**	Water	10/17/19 10:50	10/18/19 15:00
2624861004	**BRGWC-45**	Water	10/17/19 14:08	10/18/19 15:00
2624861005	**EB-3**	Water	10/17/19 14:41	10/18/19 15:00
2624861006	**FB-3**	Water	10/17/19 14:13	10/18/19 15:00

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SAMPLE ANALYTE COUNT

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2624861001	**BRGWC-27I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624861002	**BRGWC-30I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624861003	**BRGWC-32S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624861004	**BRGWC-45**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624861005	**EB-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2624861006	**FB-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: BRGWC-27I **Lab ID: 2624861001** Collected: 10/17/19 09:50 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.725 ± 0.342 (0.411) C:88% T:NA**	pCi/L	11/15/19 08:46	13982-63-3	
Radium-228	EPA 9320	**0.347 ± 0.487 (1.04) C:79% T:86%**	pCi/L	11/12/19 17:52	15262-20-1	
Total Radium	Total Radium Calculation	**1.07 ± 0.829 (1.45)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: BRGWC-30I **Lab ID: 2624861002** Collected: 10/17/19 12:00 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.720 ± 0.324 (0.322) C:94% T:NA**	pCi/L	11/15/19 07:57	13982-63-3	
Radium-228	EPA 9320	**0.529 ± 0.475 (0.965) C:81% T:83%**	pCi/L	11/12/19 17:53	15262-20-1	
Total Radium	Total Radium Calculation	**1.25 ± 0.799 (1.29)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: BRGWC-32S **Lab ID: 2624861003** Collected: 10/17/19 10:50 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.306 ± 0.229 (0.366) C:92% T:NA**	pCi/L	11/15/19 07:57	13982-63-3	
Radium-228	EPA 9320	**0.892 ± 0.527 (0.974) C:81% T:82%**	pCi/L	11/12/19 17:54	15262-20-1	
Total Radium	Total Radium Calculation	**1.20 ± 0.756 (1.34)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: BRGWC-45 **Lab ID: 2624861004** Collected: 10/17/19 14:08 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.487 ± 0.337 (0.581) C:89% T:NA**	pCi/L	11/15/19 07:57	13982-63-3	
Radium-228	EPA 9320	**0.490 ± 0.487 (1.00) C:80% T:79%**	pCi/L	11/12/19 17:54	15262-20-1	
Total Radium	Total Radium Calculation	**0.977 ± 0.824 (1.58)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: EB-3 **Lab ID: 2624861005** Collected: 10/17/19 14:41 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.887 ± 0.405 (0.569) C:92% T:NA**	pCi/L	11/14/19 08:07	13982-63-3	
Radium-228	EPA 9320	**0.464 ± 0.389 (0.780) C:79% T:88%**	pCi/L	11/11/19 17:23	15262-20-1	
Total Radium	Total Radium Calculation	**1.35 ± 0.794 (1.35)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Sample: FB-3 **Lab ID: 2624861006** Collected: 10/17/19 14:13 Received: 10/18/19 15:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
Radium-226	EPA 9315	**0.503 ± 0.280 (0.382) C:96% T:NA**	pCi/L	11/14/19 09:20	13982-63-3	
Radium-228	EPA 9320	**0.461 ± 0.418 (0.849) C:77% T:85%**	pCi/L	11/11/19 17:23	15262-20-1	
Total Radium	Total Radium Calculation	**0.964 ± 0.698 (1.23)**	pCi/L	11/20/19 14:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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QUALITY CONTROL - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

QC Batch: 369310 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2624861001, 2624861002, 2624861003, 2624861004

METHOD BLANK: 1791698 Matrix: Water
Associated Lab Samples: 2624861001, 2624861002, 2624861003, 2624861004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.590 ± 0.307 (0.405) C:93% T:NA	pCi/L	11/15/19 07:34	

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

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

QC Batch: 369692 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Associated Lab Samples: 2624861005, 2624861006

METHOD BLANK: 1793514 Matrix: Water
Associated Lab Samples: 2624861005, 2624861006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.566 ± 0.293 (0.358) C:93% T:NA	pCi/L	11/14/19 08:25	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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QUALITY CONTROL - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

QC Batch: 369311 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2624861001, 2624861002, 2624861003, 2624861004

METHOD BLANK: 1791699 Matrix: Water
Associated Lab Samples: 2624861001, 2624861002, 2624861003, 2624861004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.174 ± 0.362 (0.799) C:80% T:87%	pCi/L	11/12/19 15:54	

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

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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

QC Batch: 369693 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Associated Lab Samples: 2624861005, 2624861006

METHOD BLANK: 1793517 Matrix: Water
Associated Lab Samples: 2624861005, 2624861006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.182 ± 0.310 (0.675) C:83% T:83%	pCi/L	11/11/19 16:33	

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

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.

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.

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.

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT BRANCH RADS
Pace Project No.: 2624861

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2624861001	**BRGWC-27I**	EPA 9315	369310		
2624861002	**BRGWC-30I**	EPA 9315	369310		
2624861003	**BRGWC-32S**	EPA 9315	369310		
2624861004	**BRGWC-45**	EPA 9315	369310		
2624861005	**EB-3**	EPA 9315	369692		
2624861006	**FB-3**	EPA 9315	369692		
2624861001	**BRGWC-27I**	EPA 9320	369311		
2624861002	**BRGWC-30I**	EPA 9320	369311		
2624861003	**BRGWC-32S**	EPA 9320	369311		
2624861004	**BRGWC-45**	EPA 9320	369311		
2624861005	**EB-3**	EPA 9320	369693		
2624861006	**FB-3**	EPA 9320	369693		
2624861001	**BRGWC-27I**	Total Radium Calculation	371954		
2624861002	**BRGWC-30I**	Total Radium Calculation	371954		
2624861003	**BRGWC-32S**	Total Radium Calculation	371954		
2624861004	**BRGWC-45**	Total Radium Calculation	371954		
2624861005	**EB-3**	Total Radium Calculation	371954		
2624861006	**FB-3**	Total Radium Calculation	371954		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent 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	Billing Information:
Address: 2480 Maner Road Atlanta, GA 30339	
Report To: Joju Abraham	Email To: scsinvoices@southernco.com
Copy To: Golder	Site Collection Info/Address: Plant Branch
phone: (404) 506-7239 Email: jabraham@southernco.com	State: Georgia City: Milledgeville Time Zone Collected: [ ]PT [ ]MT [ ]CT [X]ET
Phone: (404) 506-7239 Email: jabraham@southernco.com	Project Name: Plant Branch BCD CCR Project #
Collected By (print): Travis Martinez Devin Thomas	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)

Pace Profile#	Lab Project Manager:
Pace Project Manager: betsy.mcdaniel@pacelabs.com	Lab Profile/Line:
Immediately Packed on Ice: [X] Yes [ ] No	
Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____	

** 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Preservative Type **	Analyses: Metals App III/IV - see comments	Container Preservative Type **	Analyses: Radium 226.228	Container Preservative Type **	Analyses: Chloride, Fluoride, Sulfate, TDS	LAB USE ONLY: Lab Sample # / Comments
									1		1				
BRGWC-27I	GW	G	10/17/2019	9:50				4		1		2		1	
BRGWC-30I	GW	G	10/17/2019	12:00				4		1		2		1	
BRGWC-32S	GW	G	10/17/2019	10:50				4		1		2		1	
BRGWC-45	GW	G	10/17/2019	14:08				6		1		4		1	RAD-3
EB-3	W	G	10/17/2019	14:41				4		1		2		1	
FB-3	W	G	10/17/2019	14:13				4		1		2		1	

(App III Metals): B, Ca, **(App IV Metals)**: Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl

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
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
Cl Strips: _____
Sample pH Acceptable Y N NA
pH Strips: _____
Sulfide Present Y N NA
Lead Acetate Strips: _____

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#: _____
Cooler 1 Temp Upon Receipt: 2.1 oC
Cooler 1 Therm Corr. Factor: ___oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Golder	10-18-19/1450	PACE	10/18 15:00
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

WO# : 2624861

2624861

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 26, 2020

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Dear Joju Abraham:
Enclosed are the analytical results for sample(s) received by the laboratory between March 04, 2020 and March 06, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Tyler Forney for
Kevin Herring
kevin.herring@pacelabs.com
(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.
Lauren Petty, Southern Company Services, Inc.
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Pace Analytical Services Atlanta
110 Technology Parkway 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

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, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2629733001	**BRGWA-12S**	Water	03/03/20 15:22	03/04/20 10:45
2629733002	**BRGWA-12I**	Water	03/03/20 17:15	03/04/20 10:45
2629733003	**BRGWA-23S**	Water	03/04/20 11:20	03/05/20 15:30
2629733004	**BRGWC-47**	Water	03/04/20 11:28	03/05/20 15:30
2629733005	**FB-1**	Water	03/04/20 10:55	03/05/20 15:30
2629733006	**EB-1**	Water	03/04/20 11:11	03/05/20 15:30
2629733007	**BRGWC-27I**	Water	03/04/20 12:46	03/05/20 15:30
2629733008	**BRGWC-50**	Water	03/04/20 13:33	03/05/20 15:30
2629733009	**BRGWC-25I**	Water	03/04/20 14:25	03/05/20 15:30
2629733010	**BRGWC-52I**	Water	03/04/20 15:10	03/05/20 15:30
2629733011	**DUP-1**	Water	03/04/20 00:00	03/05/20 15:30
2629733012	**DUP-2**	Water	03/04/20 00:00	03/05/20 15:30
2629733013	**EB-2**	Water	03/04/20 16:03	03/05/20 15:30
2629733014	**BRGWC-29I**	Water	03/04/20 16:05	03/05/20 15:30
2629733015	**BRGWC-30I**	Water	03/05/20 09:10	03/06/20 09:45
2629733016	**BRGWC-32S**	Water	03/05/20 10:25	03/06/20 09:45
2629733017	**BRGWC-45**	Water	03/05/20 16:05	03/06/20 09:45
2629733018	**EB-3**	Water	03/05/20 15:30	03/06/20 09:45
2629733019	**FB-3**	Water	03/05/20 13:00	03/06/20 09:45

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SAMPLE ANALYTE COUNT

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2629733001	**BRGWA-12S**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2629733002	**BRGWA-12I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	BRJ	3	PASI-A
2629733003	**BRGWA-23S**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733004	**BRGWC-47**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733005	**FB-1**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733006	**EB-1**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733007	**BRGWC-27I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733008	**BRGWC-50**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733009	**BRGWC-25I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733010	**BRGWC-52I**	EPA 6010D	DRB	1	PASI-GA

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SAMPLE ANALYTE COUNT

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733011	**DUP-1**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733012	**DUP-2**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733013	**EB-2**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733014	**BRGWC-29I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733015	**BRGWC-30I**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733016	**BRGWC-32S**	EPA 6010D	DRB	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733017	**BRGWC-45**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733018	**EB-3**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A
2629733019	**FB-3**	EPA 6010D	KLH	1	PASI-GA
		EPA 6020B	CSW	12	PASI-GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540C	NJ1	1	PASI-GA
		EPA 300.0 Rev 2.1 1993	CDC	3	PASI-A

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SUMMARY OF DETECTION

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2629733001	**BRGWA-12S**					
	Field pH	5.94	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	6.8	mg/L	0.50	03/11/20 18:31	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	03/10/20 20:27	
EPA 6020B	Barium	0.060	mg/L	0.010	03/10/20 20:27	
EPA 6020B	Boron	0.0065J	mg/L	0.10	03/10/20 20:27	
EPA 6020B	Chromium	0.0028J	mg/L	0.010	03/10/20 20:27	
SM 2540C	Total Dissolved Solids	72.0	mg/L	10.0	03/06/20 12:46	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	03/07/20 16:02	
EPA 300.0 Rev 2.1 1993	Sulfate	0.51J	mg/L	1.0	03/07/20 16:02	
2629733002	**BRGWA-12I**					
	Field pH	6.33	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	19.4	mg/L	0.50	03/11/20 18:34	
EPA 6020B	Antimony	0.0063	mg/L	0.0030	03/10/20 20:50	
EPA 6020B	Arsenic	0.0023J	mg/L	0.0050	03/10/20 20:50	
EPA 6020B	Barium	0.076	mg/L	0.010	03/10/20 20:50	
EPA 6020B	Boron	0.010J	mg/L	0.10	03/10/20 20:50	
EPA 6020B	Chromium	0.0026J	mg/L	0.010	03/10/20 20:50	
EPA 6020B	Lithium	0.0033J	mg/L	0.030	03/10/20 20:50	
SM 2540C	Total Dissolved Solids	115	mg/L	10.0	03/06/20 12:46	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	03/07/20 16:46	
EPA 300.0 Rev 2.1 1993	Fluoride	0.056J	mg/L	0.30	03/07/20 16:46	
EPA 300.0 Rev 2.1 1993	Sulfate	1.8	mg/L	1.0	03/07/20 16:46	
2629733003	**BRGWA-23S**					
	Field pH	5.7	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	11.5	mg/L	0.50	03/11/20 22:00	
EPA 6020B	Barium	0.087	mg/L	0.010	03/12/20 21:20	
EPA 6020B	Boron	0.044J	mg/L	0.10	03/12/20 21:20	
EPA 6020B	Chromium	0.0019J	mg/L	0.010	03/12/20 21:20	
EPA 6020B	Cobalt	0.0012J	mg/L	0.0050	03/12/20 21:20	
EPA 6020B	Lithium	0.0074J	mg/L	0.030	03/12/20 21:20	
EPA 6020B	Selenium	0.0019J	mg/L	0.010	03/12/20 21:20	
SM 2540C	Total Dissolved Solids	118	mg/L	10.0	03/11/20 11:14	
EPA 300.0 Rev 2.1 1993	Chloride	3.3	mg/L	1.0	03/12/20 22:41	
EPA 300.0 Rev 2.1 1993	Sulfate	38.6	mg/L	1.0	03/12/20 22:41	
2629733004	**BRGWC-47**					
	Field pH	5.76	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	353	mg/L	5.0	03/13/20 19:08	
EPA 6020B	Arsenic	0.00049J	mg/L	0.0050	03/12/20 21:26	
EPA 6020B	Barium	0.038	mg/L	0.010	03/12/20 21:26	
EPA 6020B	Boron	0.49	mg/L	0.10	03/12/20 21:26	
EPA 6020B	Cadmium	0.00024J	mg/L	0.0025	03/12/20 21:26	
EPA 6020B	Chromium	0.00078J	mg/L	0.010	03/12/20 21:26	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	03/12/20 21:26	
EPA 6020B	Lead	0.00012J	mg/L	0.0050	03/12/20 21:26	
EPA 6020B	Lithium	0.042	mg/L	0.030	03/12/20 21:26	
SM 2540C	Total Dissolved Solids	2140	mg/L	10.0	03/11/20 11:14	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2629733004	**BRGWC-47**					
EPA 300.0 Rev 2.1 1993	Chloride	4.2	mg/L	1.0	03/12/20 22:56	
EPA 300.0 Rev 2.1 1993	Sulfate	1380	mg/L	25.0	03/13/20 13:57	
2629733007	**BRGWC-27I**					
	Field pH	5.8	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	72.3	mg/L	0.50	03/11/20 22:14	
EPA 6020B	Barium	0.015	mg/L	0.010	03/12/20 21:43	
EPA 6020B	Beryllium	0.00012J	mg/L	0.0030	03/12/20 21:43	
EPA 6020B	Boron	0.81	mg/L	0.10	03/12/20 21:43	
EPA 6020B	Cobalt	0.0080	mg/L	0.0050	03/12/20 21:43	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	03/12/20 21:43	
EPA 6020B	Selenium	0.0022J	mg/L	0.010	03/12/20 21:43	
SM 2540C	Total Dissolved Solids	326	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	5.1	mg/L	1.0	03/12/20 23:41	
EPA 300.0 Rev 2.1 1993	Sulfate	205	mg/L	4.0	03/13/20 14:17	
2629733008	**BRGWC-50**					
	Field pH	5.2	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	245	mg/L	0.50	03/11/20 22:18	
EPA 6020B	Arsenic	0.00046J	mg/L	0.0050	03/12/20 21:49	
EPA 6020B	Barium	0.019	mg/L	0.010	03/12/20 21:49	
EPA 6020B	Beryllium	0.0052	mg/L	0.0030	03/12/20 21:49	
EPA 6020B	Boron	0.32	mg/L	0.10	03/12/20 21:49	
EPA 6020B	Cadmium	0.013	mg/L	0.0025	03/12/20 21:49	
EPA 6020B	Chromium	0.00071J	mg/L	0.010	03/12/20 21:49	
EPA 6020B	Cobalt	1.5	mg/L	0.050	03/13/20 13:39	
EPA 6020B	Lead	0.00010J	mg/L	0.0050	03/12/20 21:49	
EPA 6020B	Lithium	0.042	mg/L	0.030	03/12/20 21:49	
EPA 6020B	Selenium	0.0026J	mg/L	0.010	03/12/20 21:49	
SM 2540C	Total Dissolved Solids	2270	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	21.6	mg/L	1.0	03/12/20 23:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14J	mg/L	0.30	03/12/20 23:55	
EPA 300.0 Rev 2.1 1993	Sulfate	1370	mg/L	25.0	03/13/20 14:38	
2629733009	**BRGWC-25I**					
	Field pH	6.02	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	52.0	mg/L	0.50	03/11/20 22:21	
EPA 6020B	Barium	0.026	mg/L	0.010	03/12/20 21:54	
EPA 6020B	Boron	1.2	mg/L	0.10	03/12/20 21:54	
EPA 6020B	Cobalt	0.0039J	mg/L	0.0050	03/12/20 21:54	
SM 2540C	Total Dissolved Solids	330	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	03/13/20 00:10	
EPA 300.0 Rev 2.1 1993	Fluoride	0.070J	mg/L	0.30	03/13/20 00:10	
EPA 300.0 Rev 2.1 1993	Sulfate	165	mg/L	3.0	03/13/20 14:58	
2629733010	**BRGWC-52I**					
	Field pH	6.54	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	49.5	mg/L	0.50	03/11/20 22:24	
EPA 6020B	Antimony	0.00043J	mg/L	0.0030	03/12/20 22:11	B

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2629733010	**BRGWC-52I**					
EPA 6020B	Arsenic	0.0047J	mg/L	0.0050	03/12/20 22:11	
EPA 6020B	Barium	0.022	mg/L	0.010	03/12/20 22:11	
EPA 6020B	Boron	1.4	mg/L	0.10	03/12/20 22:11	
EPA 6020B	Lithium	0.0020J	mg/L	0.030	03/12/20 22:11	
SM 2540C	Total Dissolved Solids	351	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	03/13/20 00:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10J	mg/L	0.30	03/13/20 00:25	
EPA 300.0 Rev 2.1 1993	Sulfate	129	mg/L	3.0	03/13/20 15:20	
2629733011	**DUP-1**					
EPA 6010D	Calcium	71.4	mg/L	0.50	03/11/20 22:28	
EPA 6020B	Barium	0.016	mg/L	0.010	03/12/20 22:17	
EPA 6020B	Beryllium	0.00011J	mg/L	0.0030	03/12/20 22:17	
EPA 6020B	Boron	0.82	mg/L	0.10	03/12/20 22:17	
EPA 6020B	Chromium	0.00058J	mg/L	0.010	03/12/20 22:17	
EPA 6020B	Cobalt	0.0079	mg/L	0.0050	03/12/20 22:17	
EPA 6020B	Lithium	0.0014J	mg/L	0.030	03/12/20 22:17	
EPA 6020B	Selenium	0.0022J	mg/L	0.010	03/12/20 22:17	
SM 2540C	Total Dissolved Solids	283	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	5.1	mg/L	1.0	03/13/20 01:24	
EPA 300.0 Rev 2.1 1993	Sulfate	199	mg/L	4.0	03/13/20 15:42	
2629733012	**DUP-2**					
EPA 6010D	Calcium	49.2	mg/L	0.50	03/11/20 22:32	
EPA 6020B	Antimony	0.00029J	mg/L	0.0030	03/12/20 22:23	B
EPA 6020B	Arsenic	0.0044J	mg/L	0.0050	03/12/20 22:23	
EPA 6020B	Barium	0.022	mg/L	0.010	03/12/20 22:23	
EPA 6020B	Boron	1.4	mg/L	0.10	03/12/20 22:23	
EPA 6020B	Chromium	0.0014J	mg/L	0.010	03/12/20 22:23	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	03/12/20 22:23	
SM 2540C	Total Dissolved Solids	126	mg/L	10.0	03/11/20 11:15	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	03/13/20 02:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.16J	mg/L	0.30	03/13/20 02:08	
EPA 300.0 Rev 2.1 1993	Sulfate	131	mg/L	3.0	03/13/20 17:14	
2629733013	**EB-2**					
EPA 6020B	Boron	0.0063J	mg/L	0.10	03/12/20 22:29	
EPA 6020B	Chromium	0.0049J	mg/L	0.010	03/12/20 22:29	
EPA 6020B	Lead	0.000053J	mg/L	0.0050	03/12/20 22:29	
SM 2540C	Total Dissolved Solids	11.0	mg/L	10.0	03/11/20 16:02	
2629733014	**BRGWC-29I**					
	Field pH	4.5	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	59.3	mg/L	0.50	03/11/20 22:45	
EPA 6020B	Arsenic	0.00044J	mg/L	0.0050	03/12/20 22:34	
EPA 6020B	Barium	0.018	mg/L	0.010	03/12/20 22:34	
EPA 6020B	Beryllium	0.00073J	mg/L	0.0030	03/12/20 22:34	
EPA 6020B	Boron	1.1	mg/L	0.10	03/12/20 22:34	
EPA 6020B	Chromium	0.020	mg/L	0.010	03/12/20 22:34	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2629733014	**BRGWC-29I**					
EPA 6020B	Cobalt	0.0070	mg/L	0.0050	03/12/20 22:34	
EPA 6020B	Lead	0.00030J	mg/L	0.0050	03/12/20 22:34	
EPA 6020B	Lithium	0.0029J	mg/L	0.030	03/12/20 22:34	
EPA 6020B	Selenium	0.0018J	mg/L	0.010	03/12/20 22:34	
EPA 6020B	Thallium	0.00016J	mg/L	0.0010	03/12/20 22:34	
SM 2540C	Total Dissolved Solids	391	mg/L	10.0	03/11/20 16:03	
EPA 300.0 Rev 2.1 1993	Chloride	5.8	mg/L	1.0	03/13/20 02:38	
EPA 300.0 Rev 2.1 1993	Sulfate	238	mg/L	5.0	03/13/20 17:36	
2629733015	**BRGWC-30I**					
	Field pH	5.99	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	119	mg/L	0.50	03/11/20 22:49	
EPA 6020B	Barium	0.025	mg/L	0.010	03/16/20 14:38	
EPA 6020B	Boron	1.5	mg/L	0.10	03/16/20 14:38	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	03/16/20 14:38	
EPA 6020B	Lithium	0.016J	mg/L	0.030	03/16/20 14:38	
SM 2540C	Total Dissolved Solids	681	mg/L	10.0	03/11/20 16:03	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	03/13/20 02:53	
EPA 300.0 Rev 2.1 1993	Fluoride	0.051J	mg/L	0.30	03/13/20 02:53	
EPA 300.0 Rev 2.1 1993	Sulfate	369	mg/L	7.0	03/13/20 17:57	
2629733016	**BRGWC-32S**					
	Field pH	5.74	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	52.1	mg/L	0.50	03/11/20 22:52	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	03/16/20 15:01	
EPA 6020B	Barium	0.026	mg/L	0.010	03/16/20 15:01	
EPA 6020B	Boron	1.5	mg/L	0.10	03/16/20 15:01	
EPA 6020B	Chromium	0.0014J	mg/L	0.010	03/16/20 15:01	
EPA 6020B	Lithium	0.0022J	mg/L	0.030	03/16/20 15:01	
EPA 6020B	Selenium	0.10	mg/L	0.010	03/16/20 15:01	
SM 2540C	Total Dissolved Solids	489	mg/L	10.0	03/11/20 16:04	
EPA 300.0 Rev 2.1 1993	Chloride	6.0	mg/L	1.0	03/13/20 03:07	
EPA 300.0 Rev 2.1 1993	Sulfate	269	mg/L	5.0	03/13/20 18:18	
2629733017	**BRGWC-45**					
	Field pH	5.95	Std. Units		03/26/20 14:34	
EPA 6010D	Calcium	37.9	mg/L	0.50	03/18/20 18:40	
EPA 6020B	Antimony	0.0016J	mg/L	0.0030	03/16/20 15:06	
EPA 6020B	Barium	0.078	mg/L	0.010	03/16/20 15:06	
EPA 6020B	Boron	0.044J	mg/L	0.10	03/16/20 15:06	
EPA 6020B	Chromium	0.00053J	mg/L	0.010	03/16/20 15:06	
EPA 6020B	Cobalt	0.0091	mg/L	0.0050	03/16/20 15:06	
EPA 6020B	Lead	0.00026J	mg/L	0.0050	03/16/20 15:06	
EPA 6020B	Lithium	0.0030J	mg/L	0.030	03/16/20 15:06	
SM 2540C	Total Dissolved Solids	297	mg/L	10.0	03/12/20 12:57	
EPA 300.0 Rev 2.1 1993	Chloride	37.1	mg/L	1.0	03/13/20 03:22	
EPA 300.0 Rev 2.1 1993	Sulfate	106	mg/L	2.0	03/13/20 18:39	

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SUMMARY OF DETECTION

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2629733018	**EB-3**					
EPA 6020B	Boron	0.0051J	mg/L	0.10	03/16/20 15:12	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWA-12S **Lab ID: 2629733001** Collected: 03/03/20 15:22 Received: 03/04/20 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.94**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**6.8**	mg/L	0.50	0.14	1	03/10/20 18:00	03/11/20 18:31	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/05/20 22:25	03/10/20 20:27	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0050	0.00035	1	03/05/20 22:25	03/10/20 20:27	7440-38-2	
Barium	**0.060**	mg/L	0.010	0.00049	1	03/05/20 22:25	03/10/20 20:27	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/05/20 22:25	03/10/20 20:27	7440-41-7	
Boron	**0.0065J**	mg/L	0.10	0.0049	1	03/05/20 22:25	03/10/20 20:27	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/05/20 22:25	03/10/20 20:27	7440-43-9	
Chromium	**0.0028J**	mg/L	0.010	0.00039	1	03/05/20 22:25	03/10/20 20:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/05/20 22:25	03/10/20 20:27	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/05/20 22:25	03/10/20 20:27	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/05/20 22:25	03/10/20 20:27	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/05/20 22:25	03/10/20 20:27	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/05/20 22:25	03/10/20 20:27	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**72.0**	mg/L	10.0	10.0	1		03/06/20 12:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**3.2**	mg/L	1.0	0.60	1		03/07/20 16:02	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/07/20 16:02	16984-48-8	M1
Sulfate	**0.51J**	mg/L	1.0	0.50	1		03/07/20 16:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWA-12I **Lab ID: 2629733002** Collected: 03/03/20 17:15 Received: 03/04/20 10:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.33**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**19.4**	mg/L	0.50	0.14	1	03/10/20 18:00	03/11/20 18:34	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0063**	mg/L	0.0030	0.00027	1	03/05/20 22:25	03/10/20 20:50	7440-36-0	
Arsenic	**0.0023J**	mg/L	0.0050	0.00035	1	03/05/20 22:25	03/10/20 20:50	7440-38-2	
Barium	**0.076**	mg/L	0.010	0.00049	1	03/05/20 22:25	03/10/20 20:50	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/05/20 22:25	03/10/20 20:50	7440-41-7	
Boron	**0.010J**	mg/L	0.10	0.0049	1	03/05/20 22:25	03/10/20 20:50	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/05/20 22:25	03/10/20 20:50	7440-43-9	
Chromium	**0.0026J**	mg/L	0.010	0.00039	1	03/05/20 22:25	03/10/20 20:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/05/20 22:25	03/10/20 20:50	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/05/20 22:25	03/10/20 20:50	7439-92-1	
Lithium	**0.0033J**	mg/L	0.030	0.00078	1	03/05/20 22:25	03/10/20 20:50	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/05/20 22:25	03/10/20 20:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/05/20 22:25	03/10/20 20:50	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**115**	mg/L	10.0	10.0	1		03/06/20 12:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**2.6**	mg/L	1.0	0.60	1		03/07/20 16:46	16887-00-6	
Fluoride	**0.056J**	mg/L	0.30	0.050	1		03/07/20 16:46	16984-48-8	
Sulfate	**1.8**	mg/L	1.0	0.50	1		03/07/20 16:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWA-23S **Lab ID: 2629733003** Collected: 03/04/20 11:20 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.7**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**11.5**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:00	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:20	7440-38-2	
Barium	**0.087**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:20	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:20	7440-41-7	
Boron	**0.044J**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:20	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:20	7440-43-9	
Chromium	**0.0019J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:20	7440-47-3	
Cobalt	**0.0012J**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:20	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:20	7439-92-1	
Lithium	**0.0074J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:20	7439-93-2	
Selenium	**0.0019J**	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:20	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:20	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**118**	mg/L	10.0	10.0	1		03/11/20 11:14		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**3.3**	mg/L	1.0	0.60	1		03/12/20 22:41	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/12/20 22:41	16984-48-8	
Sulfate	**38.6**	mg/L	1.0	0.50	1		03/12/20 22:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-47 **Lab ID: 2629733004** Collected: 03/04/20 11:28 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.76**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**353**	mg/L	5.0	1.4	10	03/10/20 18:30	03/13/20 19:08	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:26	7440-36-0	
Arsenic	**0.00049J**	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:26	7440-38-2	
Barium	**0.038**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:26	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:26	7440-41-7	
Boron	**0.49**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:26	7440-42-8	
Cadmium	**0.00024J**	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:26	7440-43-9	
Chromium	**0.00078J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:26	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:26	7440-48-4	
Lead	**0.00012J**	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:26	7439-92-1	
Lithium	**0.042**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:26	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:26	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:26	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**2140**	mg/L	10.0	10.0	1		03/11/20 11:14		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**4.2**	mg/L	1.0	0.60	1		03/12/20 22:56	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/12/20 22:56	16984-48-8	
Sulfate	**1380**	mg/L	25.0	12.5	25		03/13/20 13:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: FB-1 **Lab ID: 2629733005** Collected: 03/04/20 10:55 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	ND	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:07	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:31	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:31	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:31	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:31	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:31	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:31	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:31	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:31	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:31	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:31	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:31	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:31	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/11/20 11:14		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		03/12/20 23:11	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/12/20 23:11	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/12/20 23:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: EB-1 **Lab ID: 2629733006** Collected: 03/04/20 11:11 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	ND	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:10	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:37	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:37	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:37	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:37	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:37	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:37	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:37	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:37	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:37	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:37	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:37	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:37	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		03/12/20 23:26	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/12/20 23:26	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/12/20 23:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-27I **Lab ID: 2629733007** Collected: 03/04/20 12:46 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.8**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**72.3**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:14	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:43	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:43	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:43	7440-41-7	
Boron	**0.81**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:43	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:43	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:43	7440-47-3	
Cobalt	**0.0080**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:43	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:43	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:43	7439-93-2	
Selenium	**0.0022J**	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:43	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:43	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**326**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**5.1**	mg/L	1.0	0.60	1		03/12/20 23:41	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/12/20 23:41	16984-48-8	
Sulfate	**205**	mg/L	4.0	2.0	4		03/13/20 14:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-50 **Lab ID: 2629733008** Collected: 03/04/20 13:33 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.2**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**245**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:18	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:49	7440-36-0	
Arsenic	**0.00046J**	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:49	7440-38-2	
Barium	**0.019**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:49	7440-39-3	
Beryllium	**0.0052**	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:49	7440-41-7	
Boron	**0.32**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:49	7440-42-8	
Cadmium	**0.013**	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:49	7440-43-9	
Chromium	**0.00071J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:49	7440-47-3	
Cobalt	**1.5**	mg/L	0.050	0.0030	10	03/11/20 19:35	03/13/20 13:39	7440-48-4	
Lead	**0.00010J**	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:49	7439-92-1	
Lithium	**0.042**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:49	7439-93-2	
Selenium	**0.0026J**	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:49	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**2270**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**21.6**	mg/L	1.0	0.60	1		03/12/20 23:55	16887-00-6	
Fluoride	**0.14J**	mg/L	0.30	0.050	1		03/12/20 23:55	16984-48-8	
Sulfate	**1370**	mg/L	25.0	12.5	25		03/13/20 14:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-25I **Lab ID: 2629733009** Collected: 03/04/20 14:25 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.02**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**52.0**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:21	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 21:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 21:54	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 21:54	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 21:54	7440-41-7	
Boron	**1.2**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 21:54	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 21:54	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 21:54	7440-47-3	
Cobalt	**0.0039J**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 21:54	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 21:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 21:54	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 21:54	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 21:54	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**330**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**5.0**	mg/L	1.0	0.60	1		03/13/20 00:10	16887-00-6	
Fluoride	**0.070J**	mg/L	0.30	0.050	1		03/13/20 00:10	16984-48-8	
Sulfate	**165**	mg/L	3.0	1.5	3		03/13/20 14:58	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-52I **Lab ID: 2629733010** Collected: 03/04/20 15:10 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**6.54**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**49.5**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:24	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00043J**	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 22:11	7440-36-0	B
Arsenic	**0.0047J**	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 22:11	7440-38-2	
Barium	**0.022**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 22:11	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 22:11	7440-41-7	
Boron	**1.4**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 22:11	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 22:11	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 22:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 22:11	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 22:11	7439-92-1	
Lithium	**0.0020J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 22:11	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 22:11	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 22:11	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**351**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**6.1**	mg/L	1.0	0.60	1		03/13/20 00:25	16887-00-6	
Fluoride	**0.10J**	mg/L	0.30	0.050	1		03/13/20 00:25	16984-48-8	
Sulfate	**129**	mg/L	3.0	1.5	3		03/13/20 15:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: DUP-1 **Lab ID: 2629733011** Collected: 03/04/20 00:00 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**71.4**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:28	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 22:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 22:17	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 22:17	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 22:17	7440-41-7	
Boron	**0.82**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 22:17	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 22:17	7440-43-9	
Chromium	**0.00058J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 22:17	7440-47-3	
Cobalt	**0.0079**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 22:17	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 22:17	7439-92-1	
Lithium	**0.0014J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 22:17	7439-93-2	
Selenium	**0.0022J**	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 22:17	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 22:17	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**283**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**5.1**	mg/L	1.0	0.60	1		03/13/20 01:24	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 01:24	16984-48-8	M1
Sulfate	**199**	mg/L	4.0	2.0	4		03/13/20 15:42	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: DUP-2 **Lab ID: 2629733012** Collected: 03/04/20 00:00 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**49.2**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:32	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.00029J**	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 22:23	7440-36-0	B
Arsenic	**0.0044J**	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 22:23	7440-38-2	
Barium	**0.022**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 22:23	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 22:23	7440-41-7	
Boron	**1.4**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 22:23	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 22:23	7440-43-9	
Chromium	**0.0014J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 22:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 22:23	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 22:23	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 22:23	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 22:23	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 22:23	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**126**	mg/L	10.0	10.0	1		03/11/20 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**6.1**	mg/L	1.0	0.60	1		03/13/20 02:08	16887-00-6	
Fluoride	**0.16J**	mg/L	0.30	0.050	1		03/13/20 02:08	16984-48-8	
Sulfate	**131**	mg/L	3.0	1.5	3		03/13/20 17:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: EB-2 **Lab ID: 2629733013** Collected: 03/04/20 16:03 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	ND	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:42	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 22:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 22:29	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 22:29	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 22:29	7440-41-7	
Boron	**0.0063J**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 22:29	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 22:29	7440-43-9	
Chromium	**0.0049J**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 22:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 22:29	7440-48-4	
Lead	**0.000053J**	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 22:29	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 22:29	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 22:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 22:29	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**11.0**	mg/L	10.0	10.0	1		03/11/20 16:02		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		03/13/20 02:23	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 02:23	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/20 02:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-29I **Lab ID: 2629733014** Collected: 03/04/20 16:05 Received: 03/05/20 15:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**4.5**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**59.3**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:45	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:35	03/12/20 22:34	7440-36-0	
Arsenic	**0.00044J**	mg/L	0.0050	0.00035	1	03/11/20 19:35	03/12/20 22:34	7440-38-2	
Barium	**0.018**	mg/L	0.010	0.00049	1	03/11/20 19:35	03/12/20 22:34	7440-39-3	
Beryllium	**0.00073J**	mg/L	0.0030	0.000074	1	03/11/20 19:35	03/12/20 22:34	7440-41-7	
Boron	**1.1**	mg/L	0.10	0.0049	1	03/11/20 19:35	03/12/20 22:34	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:35	03/12/20 22:34	7440-43-9	
Chromium	**0.020**	mg/L	0.010	0.00039	1	03/11/20 19:35	03/12/20 22:34	7440-47-3	
Cobalt	**0.0070**	mg/L	0.0050	0.00030	1	03/11/20 19:35	03/12/20 22:34	7440-48-4	
Lead	**0.00030J**	mg/L	0.0050	0.000046	1	03/11/20 19:35	03/12/20 22:34	7439-92-1	
Lithium	**0.0029J**	mg/L	0.030	0.00078	1	03/11/20 19:35	03/12/20 22:34	7439-93-2	
Selenium	**0.0018J**	mg/L	0.010	0.0013	1	03/11/20 19:35	03/12/20 22:34	7782-49-2	
Thallium	**0.00016J**	mg/L	0.0010	0.000052	1	03/11/20 19:35	03/12/20 22:34	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**391**	mg/L	10.0	10.0	1		03/11/20 16:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**5.8**	mg/L	1.0	0.60	1		03/13/20 02:38	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 02:38	16984-48-8	
Sulfate	**238**	mg/L	5.0	2.5	5		03/13/20 17:36	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-30I **Lab ID: 2629733015** Collected: 03/05/20 09:10 Received: 03/06/20 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.99**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**119**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:49	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:30	03/16/20 14:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:30	03/16/20 14:38	7440-38-2	
Barium	**0.025**	mg/L	0.010	0.00049	1	03/11/20 19:30	03/16/20 14:38	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:30	03/16/20 14:38	7440-41-7	
Boron	**1.5**	mg/L	0.10	0.0049	1	03/11/20 19:30	03/16/20 14:38	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:30	03/16/20 14:38	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:30	03/16/20 14:38	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00030	1	03/11/20 19:30	03/16/20 14:38	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:30	03/16/20 14:38	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00078	1	03/11/20 19:30	03/16/20 14:38	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:30	03/16/20 14:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:30	03/16/20 14:38	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**681**	mg/L	10.0	10.0	1		03/11/20 16:03		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**4.3**	mg/L	1.0	0.60	1		03/13/20 02:53	16887-00-6	
Fluoride	**0.051J**	mg/L	0.30	0.050	1		03/13/20 02:53	16984-48-8	
Sulfate	**369**	mg/L	7.0	3.5	7		03/13/20 17:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-32S **Lab ID: 2629733016** Collected: 03/05/20 10:25 Received: 03/06/20 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.74**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**52.1**	mg/L	0.50	0.14	1	03/10/20 18:30	03/11/20 22:52	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0014J**	mg/L	0.0030	0.00027	1	03/11/20 19:30	03/16/20 15:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:30	03/16/20 15:01	7440-38-2	
Barium	**0.026**	mg/L	0.010	0.00049	1	03/11/20 19:30	03/16/20 15:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:30	03/16/20 15:01	7440-41-7	
Boron	**1.5**	mg/L	0.10	0.0049	1	03/11/20 19:30	03/16/20 15:01	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:30	03/16/20 15:01	7440-43-9	
Chromium	**0.0014J**	mg/L	0.010	0.00039	1	03/11/20 19:30	03/16/20 15:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:30	03/16/20 15:01	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:30	03/16/20 15:01	7439-92-1	
Lithium	**0.0022J**	mg/L	0.030	0.00078	1	03/11/20 19:30	03/16/20 15:01	7439-93-2	
Selenium	**0.10**	mg/L	0.010	0.0013	1	03/11/20 19:30	03/16/20 15:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:30	03/16/20 15:01	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**489**	mg/L	10.0	10.0	1		03/11/20 16:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**6.0**	mg/L	1.0	0.60	1		03/13/20 03:07	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 03:07	16984-48-8	
Sulfate	**269**	mg/L	5.0	2.5	5		03/13/20 18:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: BRGWC-45 **Lab ID: 2629733017** Collected: 03/05/20 16:05 Received: 03/06/20 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method:								
Field pH	**5.95**	Std. Units			1		03/26/20 14:34		
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	**37.9**	mg/L	0.50	0.14	1	03/11/20 18:00	03/18/20 18:40	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	**0.0016J**	mg/L	0.0030	0.00027	1	03/11/20 19:30	03/16/20 15:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:30	03/16/20 15:06	7440-38-2	
Barium	**0.078**	mg/L	0.010	0.00049	1	03/11/20 19:30	03/16/20 15:06	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:30	03/16/20 15:06	7440-41-7	
Boron	**0.044J**	mg/L	0.10	0.0049	1	03/11/20 19:30	03/16/20 15:06	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:30	03/16/20 15:06	7440-43-9	
Chromium	**0.00053J**	mg/L	0.010	0.00039	1	03/11/20 19:30	03/16/20 15:06	7440-47-3	
Cobalt	**0.0091**	mg/L	0.0050	0.00030	1	03/11/20 19:30	03/16/20 15:06	7440-48-4	
Lead	**0.00026J**	mg/L	0.0050	0.000046	1	03/11/20 19:30	03/16/20 15:06	7439-92-1	
Lithium	**0.0030J**	mg/L	0.030	0.00078	1	03/11/20 19:30	03/16/20 15:06	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:30	03/16/20 15:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:30	03/16/20 15:06	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	**297**	mg/L	10.0	10.0	1		03/12/20 12:57		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	**37.1**	mg/L	1.0	0.60	1		03/13/20 03:22	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 03:22	16984-48-8	
Sulfate	**106**	mg/L	2.0	1.0	2		03/13/20 18:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: EB-3 **Lab ID: 2629733018** Collected: 03/05/20 15:30 Received: 03/06/20 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	ND	mg/L	0.50	0.14	1	03/11/20 18:00	03/18/20 19:01	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:30	03/16/20 15:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:30	03/16/20 15:12	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/11/20 19:30	03/16/20 15:12	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:30	03/16/20 15:12	7440-41-7	
Boron	**0.0051J**	mg/L	0.10	0.0049	1	03/11/20 19:30	03/16/20 15:12	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:30	03/16/20 15:12	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:30	03/16/20 15:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:30	03/16/20 15:12	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:30	03/16/20 15:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:30	03/16/20 15:12	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:30	03/16/20 15:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:30	03/16/20 15:12	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/12/20 12:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		03/13/20 03:37	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 03:37	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/20 03:37	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Sample: FB-3 **Lab ID: 2629733019** Collected: 03/05/20 13:00 Received: 03/06/20 09:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Calcium	ND	mg/L	0.50	0.14	1	03/11/20 18:00	03/18/20 19:04	7440-70-2	
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A								
Antimony	ND	mg/L	0.0030	0.00027	1	03/11/20 19:30	03/16/20 15:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00035	1	03/11/20 19:30	03/16/20 15:18	7440-38-2	
Barium	ND	mg/L	0.010	0.00049	1	03/11/20 19:30	03/16/20 15:18	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000074	1	03/11/20 19:30	03/16/20 15:18	7440-41-7	
Boron	ND	mg/L	0.10	0.0049	1	03/11/20 19:30	03/16/20 15:18	7440-42-8	
Cadmium	ND	mg/L	0.0025	0.00011	1	03/11/20 19:30	03/16/20 15:18	7440-43-9	
Chromium	ND	mg/L	0.010	0.00039	1	03/11/20 19:30	03/16/20 15:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00030	1	03/11/20 19:30	03/16/20 15:18	7440-48-4	
Lead	ND	mg/L	0.0050	0.000046	1	03/11/20 19:30	03/16/20 15:18	7439-92-1	
Lithium	ND	mg/L	0.030	0.00078	1	03/11/20 19:30	03/16/20 15:18	7439-93-2	
Selenium	ND	mg/L	0.010	0.0013	1	03/11/20 19:30	03/16/20 15:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.000052	1	03/11/20 19:30	03/16/20 15:18	7440-28-0	
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/12/20 12:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993								
Chloride	ND	mg/L	1.0	0.60	1		03/13/20 04:21	16887-00-6	
Fluoride	ND	mg/L	0.30	0.050	1		03/13/20 04:21	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/20 04:21	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44425 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Associated Lab Samples: 2629733001, 2629733002

METHOD BLANK: 203825 Matrix: Water
Associated Lab Samples: 2629733001, 2629733002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	0.50	0.14	03/11/20 17:22	

LABORATORY CONTROL SAMPLE: 203826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 203827 203828

Parameter	Units	2629679001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	5.3	1	1	6.6	6.3	129	101	75-125	4	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44427 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014, 2629733015, 2629733016

METHOD BLANK: 203834 Matrix: Water
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014, 2629733015, 2629733016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	0.50	0.14	03/11/20 21:07	

LABORATORY CONTROL SAMPLE: 203835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 203836 203837

Parameter	Units	2629765017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	69.8	1	1	70.2	71.5	34	170	75-125	2	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44482 Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A Analysis Description: 6010D MET
Associated Lab Samples: 2629733017, 2629733018, 2629733019

METHOD BLANK: 204090 Matrix: Water
Associated Lab Samples: 2629733017, 2629733018, 2629733019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	0.50	0.14	03/18/20 18:33	

LABORATORY CONTROL SAMPLE: 204091

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.99	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204092 204093

Parameter	Units	2629733017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	37.9	1	1	38.6	39.1	76	118	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44282 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2629733001, 2629733002

METHOD BLANK: 202999 Matrix: Water
Associated Lab Samples: 2629733001, 2629733002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	03/10/20 20:16	
Arsenic	mg/L	ND	0.0050	0.00035	03/10/20 20:16	
Barium	mg/L	ND	0.010	0.00049	03/10/20 20:16	
Beryllium	mg/L	ND	0.0030	0.000074	03/10/20 20:16	
Boron	mg/L	ND	0.10	0.0049	03/10/20 20:16	
Cadmium	mg/L	ND	0.0025	0.00011	03/10/20 20:16	
Chromium	mg/L	ND	0.010	0.00039	03/10/20 20:16	
Cobalt	mg/L	ND	0.0050	0.00030	03/10/20 20:16	
Lead	mg/L	ND	0.0050	0.000046	03/10/20 20:16	
Lithium	mg/L	ND	0.030	0.00078	03/10/20 20:16	
Selenium	mg/L	ND	0.010	0.0013	03/10/20 20:16	
Thallium	mg/L	ND	0.0010	0.000052	03/10/20 20:16	

LABORATORY CONTROL SAMPLE: 203000

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.10	100	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	103	80-120	
Lithium	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	
Thallium	mg/L	0.1	0.10	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 203001 203002

Parameter	Units	2629733001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	111	110	75-125	1	20	
Arsenic	mg/L	0.0015J	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Barium	mg/L	0.060	0.1	0.1	0.17	0.18	115	116	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	0	20	
Boron	mg/L	0.0065J	1	1	1.0	1.0	102	103	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 203001 203002

Parameter	Units	2629733001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	0	20	
Chromium	mg/L	0.0028J	0.1	0.1	0.11	0.11	112	107	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	107	108	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.11	0.10	108	105	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.11	0.10	107	105	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44486 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

METHOD BLANK: 204134 Matrix: Water
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00041J	0.0030	0.00027	03/12/20 19:54	
Arsenic	mg/L	ND	0.0050	0.00035	03/12/20 19:54	
Barium	mg/L	ND	0.010	0.00049	03/12/20 19:54	
Beryllium	mg/L	ND	0.0030	0.000074	03/12/20 19:54	
Boron	mg/L	ND	0.10	0.0049	03/12/20 19:54	
Cadmium	mg/L	ND	0.0025	0.00011	03/12/20 19:54	
Chromium	mg/L	ND	0.010	0.00039	03/12/20 19:54	
Cobalt	mg/L	ND	0.0050	0.00030	03/12/20 19:54	
Lead	mg/L	ND	0.0050	0.000046	03/12/20 19:54	
Lithium	mg/L	ND	0.030	0.00078	03/12/20 19:54	
Selenium	mg/L	ND	0.010	0.0013	03/12/20 19:54	
Thallium	mg/L	ND	0.0010	0.000052	03/12/20 19:54	

LABORATORY CONTROL SAMPLE: 204135

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204136 204137

Parameter	Units	2629703017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	109	110	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	1	20	
Barium	mg/L	0.77	0.1	0.1	0.88	0.91	104	136	75-125	4	20	M1
Beryllium	mg/L	0.00014J	0.1	0.1	0.094	0.095	94	95	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204136 204137

Parameter	Units	2629703017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	0.14	1	1	1.1	1.1	94	95	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.11	107	105	75-125	1	20	
Chromium	mg/L	0.0027J	0.1	0.1	0.11	0.11	106	103	75-125	3	20	
Cobalt	mg/L	0.00093J	0.1	0.1	0.10	0.10	102	104	75-125	2	20	
Lead	mg/L	0.0010J	0.1	0.1	0.099	0.10	98	99	75-125	1	20	
Lithium	mg/L	0.015J	0.1	0.1	0.11	0.11	94	96	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.079	0.078	79	77	75-125	2	20	
Thallium	mg/L	0.000092J	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44487 Analysis Method: EPA 6020B
QC Batch Method: EPA 3005A Analysis Description: 6020B MET
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

METHOD BLANK: 204143 Matrix: Water
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00027	03/16/20 14:26	
Arsenic	mg/L	0.00036J	0.0050	0.00035	03/16/20 14:26	
Barium	mg/L	ND	0.010	0.00049	03/16/20 14:26	
Beryllium	mg/L	ND	0.0030	0.000074	03/16/20 14:26	
Boron	mg/L	ND	0.10	0.0049	03/16/20 14:26	
Cadmium	mg/L	ND	0.0025	0.00011	03/16/20 14:26	
Chromium	mg/L	ND	0.010	0.00039	03/16/20 14:26	
Cobalt	mg/L	ND	0.0050	0.00030	03/16/20 14:26	
Lead	mg/L	ND	0.0050	0.000046	03/16/20 14:26	
Lithium	mg/L	ND	0.030	0.00078	03/16/20 14:26	
Selenium	mg/L	ND	0.010	0.0013	03/16/20 14:26	
Thallium	mg/L	ND	0.0010	0.000052	03/16/20 14:26	

LABORATORY CONTROL SAMPLE: 204144

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	0.098	98	80-120	
Barium	mg/L	0.1	0.098	98	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.10	100	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.096	96	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204145 204146

Parameter	Units	2629733015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.10	106	102	75-125	3	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	105	101	75-125	4	20	
Barium	mg/L	0.025	0.1	0.1	0.13	0.12	102	98	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.092	95	92	75-125	4	20	
Boron	mg/L	1.5	1	1	2.6	2.4	112	94	75-125	7	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 204145 204146

Parameter	Units	2629733015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.096	97	95	75-125	2	20	
Cobalt	mg/L	0.0011J	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Lithium	mg/L	0.016J	0.1	0.1	0.12	0.11	99	93	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44309
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2629733001, 2629733002

LABORATORY CONTROL SAMPLE: 203157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	84-108	

SAMPLE DUPLICATE: 203158

Parameter	Units	2629679001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	52.0	49.0	6	10	

SAMPLE DUPLICATE: 203159

Parameter	Units	2629766004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	63.0	67.0	6	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44453 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012

LABORATORY CONTROL SAMPLE: 203948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	84-108	

SAMPLE DUPLICATE: 203949

Parameter	Units	2629751001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	337	344	2	10	

SAMPLE DUPLICATE: 203950

Parameter	Units	2629733003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	118	119	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44470 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2629733013, 2629733014, 2629733015, 2629733016

LABORATORY CONTROL SAMPLE: 204029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	413	103	84-108	

SAMPLE DUPLICATE: 204030

Parameter	Units	2629733013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	11.0	10.0	10	10	

SAMPLE DUPLICATE: 204031

Parameter	Units	2629884001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	152	167	9	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 44505 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 2629733017, 2629733018, 2629733019

LABORATORY CONTROL SAMPLE: 204334

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	84-108	

SAMPLE DUPLICATE: 204335

Parameter	Units	2629733017 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	297	314	6	10	

SAMPLE DUPLICATE: 204336

Parameter	Units	2629734014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	457	455	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 529130
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Associated Lab Samples: 2629733001, 2629733002

METHOD BLANK: 2826277 Matrix: Water
Associated Lab Samples: 2629733001, 2629733002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/07/20 11:50	
Fluoride	mg/L	ND	0.10	0.050	03/07/20 11:50	
Sulfate	mg/L	ND	1.0	0.50	03/07/20 11:50	

LABORATORY CONTROL SAMPLE: 2826278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.6	103	90-110	
Fluoride	mg/L	2.5	2.3	91	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2826279 2826280

Parameter	Units	92468399001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.3	50	50	54.6	51.8	102	97	90-110	5	10	
Fluoride	mg/L	ND	2.5	2.5	2.1	2.0	81	76	90-110	6	10	M1
Sulfate	mg/L	10	50	50	60.0	57.2	100	94	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2826281 2826282

Parameter	Units	2629733001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.2	50	50	52.6	53.3	99	100	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.1	2.1	82	85	90-110	3	10	M1
Sulfate	mg/L	0.51J	50	50	48.9	49.4	97	98	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

QC Batch: 529972 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
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014, 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

METHOD BLANK: 2830385 Matrix: Water
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014, 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/20 08:37	
Fluoride	mg/L	ND	0.10	0.050	03/13/20 08:37	
Sulfate	mg/L	ND	1.0	0.50	03/13/20 08:37	

LABORATORY CONTROL SAMPLE: 2830386

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	52.5	105	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	54.5	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2830387 2830388

Parameter	Units	92468702015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	45.5	50	50	95.4	95.2	100	99	90-110	0	10	
Fluoride	mg/L	1.5	2.5	2.5	3.5	3.6	82	87	90-110	4	10	M1
Sulfate	mg/L	1690	50	50	1760	1780	126	179	90-110	2	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2830389 2830390

Parameter	Units	2629733011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.1	50	50	56.2	55.3	102	100	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	1.5	1.6	60	62	90-110	4	10	M1
Sulfate	mg/L	199	50	50	246	244	94	90	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

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.

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.

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.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-GA	Pace Analytical Services - Atlanta, GA

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
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.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2629733001	BRGWA-12S				
2629733002	BRGWA-12I				
2629733003	BRGWA-23S				
2629733004	BRGWC-47				
2629733007	BRGWC-27I				
2629733008	BRGWC-50				
2629733009	BRGWC-25I				
2629733010	BRGWC-52I				
2629733014	BRGWC-29I				
2629733015	BRGWC-30I				
2629733016	BRGWC-32S				
2629733017	BRGWC-45				
2629733001	BRGWA-12S	EPA 3010A	44425	EPA 6010D	44437
2629733002	BRGWA-12I	EPA 3010A	44425	EPA 6010D	44437
2629733003	BRGWA-23S	EPA 3010A	44427	EPA 6010D	44443
2629733004	BRGWC-47	EPA 3010A	44427	EPA 6010D	44443
2629733005	FB-1	EPA 3010A	44427	EPA 6010D	44443
2629733006	EB-1	EPA 3010A	44427	EPA 6010D	44443
2629733007	BRGWC-27I	EPA 3010A	44427	EPA 6010D	44443
2629733008	BRGWC-50	EPA 3010A	44427	EPA 6010D	44443
2629733009	BRGWC-25I	EPA 3010A	44427	EPA 6010D	44443
2629733010	BRGWC-52I	EPA 3010A	44427	EPA 6010D	44443
2629733011	DUP-1	EPA 3010A	44427	EPA 6010D	44443
2629733012	DUP-2	EPA 3010A	44427	EPA 6010D	44443
2629733013	EB-2	EPA 3010A	44427	EPA 6010D	44443
2629733014	BRGWC-29I	EPA 3010A	44427	EPA 6010D	44443
2629733015	BRGWC-30I	EPA 3010A	44427	EPA 6010D	44443
2629733016	BRGWC-32S	EPA 3010A	44427	EPA 6010D	44443
2629733017	BRGWC-45	EPA 3010A	44482	EPA 6010D	44490
2629733018	EB-3	EPA 3010A	44482	EPA 6010D	44490
2629733019	FB-3	EPA 3010A	44482	EPA 6010D	44490
2629733001	BRGWA-12S	EPA 3005A	44282	EPA 6020B	44315
2629733002	BRGWA-12I	EPA 3005A	44282	EPA 6020B	44315
2629733003	BRGWA-23S	EPA 3005A	44486	EPA 6020B	44510
2629733004	BRGWC-47	EPA 3005A	44486	EPA 6020B	44510
2629733005	FB-1	EPA 3005A	44486	EPA 6020B	44510
2629733006	EB-1	EPA 3005A	44486	EPA 6020B	44510
2629733007	BRGWC-27I	EPA 3005A	44486	EPA 6020B	44510
2629733008	BRGWC-50	EPA 3005A	44486	EPA 6020B	44510
2629733009	BRGWC-25I	EPA 3005A	44486	EPA 6020B	44510
2629733010	BRGWC-52I	EPA 3005A	44486	EPA 6020B	44510
2629733011	DUP-1	EPA 3005A	44486	EPA 6020B	44510
2629733012	DUP-2	EPA 3005A	44486	EPA 6020B	44510
2629733013	EB-2	EPA 3005A	44486	EPA 6020B	44510
2629733014	BRGWC-29I	EPA 3005A	44486	EPA 6020B	44510
2629733015	BRGWC-30I	EPA 3005A	44487	EPA 6020B	44511

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT BRANCH AP-BCD 2ND SA
Pace Project No.: 2629733

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2629733016	BRGWC-32S	EPA 3005A	44487	EPA 6020B	44511
2629733017	BRGWC-45	EPA 3005A	44487	EPA 6020B	44511
2629733018	EB-3	EPA 3005A	44487	EPA 6020B	44511
2629733019	FB-3	EPA 3005A	44487	EPA 6020B	44511
2629733001	BRGWA-12S	SM 2540C	44309		
2629733002	BRGWA-12I	SM 2540C	44309		
2629733003	BRGWA-23S	SM 2540C	44453		
2629733004	BRGWC-47	SM 2540C	44453		
2629733005	FB-1	SM 2540C	44453		
2629733006	EB-1	SM 2540C	44453		
2629733007	BRGWC-27I	SM 2540C	44453		
2629733008	BRGWC-50	SM 2540C	44453		
2629733009	BRGWC-25I	SM 2540C	44453		
2629733010	BRGWC-52I	SM 2540C	44453		
2629733011	DUP-1	SM 2540C	44453		
2629733012	DUP-2	SM 2540C	44453		
2629733013	EB-2	SM 2540C	44470		
2629733014	BRGWC-29I	SM 2540C	44470		
2629733015	BRGWC-30I	SM 2540C	44470		
2629733016	BRGWC-32S	SM 2540C	44470		
2629733017	BRGWC-45	SM 2540C	44505		
2629733018	EB-3	SM 2540C	44505		
2629733019	FB-3	SM 2540C	44505		
2629733001	BRGWA-12S	EPA 300.0 Rev 2.1 1993	529130		
2629733002	BRGWA-12I	EPA 300.0 Rev 2.1 1993	529130		
2629733003	BRGWA-23S	EPA 300.0 Rev 2.1 1993	529972		
2629733004	BRGWC-47	EPA 300.0 Rev 2.1 1993	529972		
2629733005	FB-1	EPA 300.0 Rev 2.1 1993	529972		
2629733006	EB-1	EPA 300.0 Rev 2.1 1993	529972		
2629733007	BRGWC-27I	EPA 300.0 Rev 2.1 1993	529972		
2629733008	BRGWC-50	EPA 300.0 Rev 2.1 1993	529972		
2629733009	BRGWC-25I	EPA 300.0 Rev 2.1 1993	529972		
2629733010	BRGWC-52I	EPA 300.0 Rev 2.1 1993	529972		
2629733011	DUP-1	EPA 300.0 Rev 2.1 1993	529972		
2629733012	DUP-2	EPA 300.0 Rev 2.1 1993	529972		
2629733013	EB-2	EPA 300.0 Rev 2.1 1993	529972		
2629733014	BRGWC-29I	EPA 300.0 Rev 2.1 1993	529972		
2629733015	BRGWC-30I	EPA 300.0 Rev 2.1 1993	529972		
2629733016	BRGWC-32S	EPA 300.0 Rev 2.1 1993	529972		
2629733017	BRGWC-45	EPA 300.0 Rev 2.1 1993	529972		
2629733018	EB-3	EPA 300.0 Rev 2.1 1993	529972		
2629733019	FB-3	EPA 300.0 Rev 2.1 1993	529972		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Docu

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accu

WO#: 2629733

2629733

Page:

Section A Required Client Information:

Company:	GA Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date/TAT:	10 Day

Section B Required Project Information:

Report To:	SCS Contacts
Copy To:	Golder Contacts
Purchase Order No.:	
Project Name:	Plant Branch AP-BCD 2nd Semi-Annual
Project Number:	166625418

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	2905-5

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER CCR

Site Location STATE: GA

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE DATE	COLLECTED COMPOSITE TIME	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Chloride/Fluoride/Sulfate	Metals 6010/6020/7470*	TDS	RAD 226/228	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BRGWC-30I	WT	G			3-5-20	0910		5	2		3						X	X	X	X			
2	BRGWC-32S	WT	G			3-5-20	1025		5	2		3						X	X	X	X			
3	BRGWC-45	WT	G			3-5-20	1605		7	2		5						X	X	X	X			extra radiums
4	EB-3	WT	G			3-5-20	1530		5	2		3						X	X	X	X			
5	FB-3	WT	G			3-5-20	~~1530~~ 1300		5	2		3						X	X	X	X			
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Please note dry wells, strike thorugh any wells not sampled, and note when the last sample for the event has been taken.	DARREN COX / GOLDER	3-6-2020	945		3/6/20	0945	0.2	Y	N	Y
*Metals=As,B,Ba,Be,Ca,Cd,Co,Cr,Mo, Pb,Sb,Se,Li,Tl,Hg										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: DARREN COX

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 3-6-2020

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power

WO#: 2629733

PM: KH Due Date: 03/18/20

CLIENT: 26-GA Power

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 230 **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 0.2°C **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: 3/6/20 dy

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	3/6/20
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☑No	Initial when completed: MW Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐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)

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 06, 2020

Mr. Joju Abraham
Georgia Power
2480 Maner Road
Atlanta, GA 30339

RE: Project: 2629733
Pace Project No.: 30353316

Dear Mr. Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory between March 05, 2020 and March 10, 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,

Jacquelyn Collins
jacquelyn.collins@pacelabs.com
(724)850-5612
Project Manager

Enclosures

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: 2629733
Pace Project No.: 30353316

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, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: 2629733
Pace Project No.: 30353316

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2629733001	**BRGWA-12S**	Water	03/03/20 15:22	03/05/20 09:15
2629733002	**BRGWA-12I**	Water	03/03/20 17:15	03/05/20 09:15
2629733003	**BRGWA-23S**	Water	03/04/20 11:20	03/07/20 10:30
2629733004	**BRGWC-47**	Water	03/04/20 11:28	03/07/20 10:30
2629733005	**FB-1**	Water	03/04/20 10:55	03/07/20 10:30
2629733006	**EB-1**	Water	03/04/20 11:11	03/07/20 10:30
2629733007	**BRGWC-27I**	Water	03/04/20 12:46	03/07/20 10:30
2629733008	**BRGWC-50**	Water	03/04/20 13:33	03/07/20 10:30
2629733009	**BRGWC-25I**	Water	03/04/20 14:25	03/07/20 10:30
2629733010	**BRGWC-52I**	Water	03/04/20 15:10	03/07/20 10:30
2629733011	**DUP-1**	Water	03/04/20 00:00	03/07/20 10:30
2629733012	**DUP-2**	Water	03/04/20 00:00	03/07/20 10:30
2629733013	**EB-2**	Water	03/04/20 16:03	03/07/20 10:30
2629733014	**BRGWC-29I**	Water	03/04/20 16:05	03/07/20 10:30
2629733015	**BRGWC-30I**	Water	03/05/20 09:10	03/10/20 09:20
2629733016	**BRGWC-32S**	Water	03/05/20 10:25	03/10/20 09:20
2629733017	**BRGWC-45**	Water	03/05/20 16:05	03/10/20 09:20
2629733018	**EB-3**	Water	03/05/20 15:30	03/10/20 09:20
2629733019	**FB-3**	Water	03/05/20 13:00	03/10/20 09:20

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2629733
Pace Project No.: 30353316

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2629733001	BRGWA-12S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733002	BRGWA-12I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733003	BRGWA-23S	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733004	BRGWC-47	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733005	FB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733006	EB-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733007	BRGWC-27I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733008	BRGWC-50	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733009	BRGWC-25I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733010	BRGWC-52I	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733011	DUP-1	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733012	DUP-2	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733013	EB-2	EPA 9315	LAL	1	PASI-PA

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: 2629733
Pace Project No.: 30353316

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733014	**BRGWC-29I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733015	**BRGWC-30I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733016	**BRGWC-32S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733017	**BRGWC-45**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733018	**EB-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
2629733019	**FB-3**	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

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: BRGWA-12S **Lab ID: 2629733001** Collected: 03/03/20 15:22 Received: 03/05/20 09:15 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	**1.04 ± 0.434 (0.434) C:80% T:NA**	pCi/L	03/12/20 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.640 ± 0.416 (0.788) C:72% T:90%**	pCi/L	03/24/20 19:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.68 ± 0.850 (1.22)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: BRGWA-12I **Lab ID: 2629733002** Collected: 03/03/20 17:15 Received: 03/05/20 09:15 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	**0.380 ± 0.321 (0.587) C:73% T:NA**	pCi/L	03/12/20 08:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.914 ± 0.459 (0.801) C:70% T:87%**	pCi/L	03/24/20 19:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.780 (1.39)**	pCi/L	04/03/20 15:09	7440-14-4	

Sample: BRGWA-23S **Lab ID: 2629733003** Collected: 03/04/20 11:20 Received: 03/07/20 10:30 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	**0.918 ± 0.349 (0.392) C:87% T:NA**	pCi/L	03/23/20 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.536 ± 0.367 (0.711) C:87% T:87%**	pCi/L	04/02/20 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.45 ± 0.716 (1.10)**	pCi/L	04/03/20 14:54	7440-14-4	

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: BRGWC-47 **Lab ID: 2629733004** Collected: 03/04/20 11:28 Received: 03/07/20 10:30 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	**0.778 ± 0.327 (0.419) C:94% T:NA**	pCi/L	03/23/20 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0844 ± 0.310 (0.701) C:83% T:88%**	pCi/L	04/02/20 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.862 ± 0.637 (1.12)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: FB-1 **Lab ID: 2629733005** Collected: 03/04/20 10:55 Received: 03/07/20 10:30 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	**0.375 ± 0.231 (0.357) C:88% T:NA**	pCi/L	03/23/20 10:04	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.000611 ± 0.300 (0.696) C:83% T:90%**	pCi/L	04/02/20 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.376 ± 0.531 (1.05)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: EB-1 **Lab ID: 2629733006** Collected: 03/04/20 11:11 Received: 03/07/20 10:30 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	**0.536 ± 0.254 (0.280) C:92% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.171 ± 0.339 (0.745) C:85% T:92%**	pCi/L	04/02/20 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.707 ± 0.593 (1.03)**	pCi/L	04/03/20 14:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: BRGWC-27I **Lab ID: 2629733007** Collected: 03/04/20 12:46 Received: 03/07/20 10:30 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	**0.608 ± 0.284 (0.372) C:92% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.569 ± 0.367 (0.700) C:87% T:85%**	pCi/L	04/02/20 11:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.18 ± 0.651 (1.07)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: BRGWC-50 **Lab ID: 2629733008** Collected: 03/04/20 13:33 Received: 03/07/20 10:30 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	**0.963 ± 0.353 (0.283) C:79% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.764 ± 0.402 (0.722) C:83% T:88%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.73 ± 0.755 (1.01)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: BRGWC-25I **Lab ID: 2629733009** Collected: 03/04/20 14:25 Received: 03/07/20 10:30 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	**0.964 ± 0.327 (0.287) C:96% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.379 ± 0.361 (0.743) C:78% T:91%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.34 ± 0.688 (1.03)**	pCi/L	04/03/20 14:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: BRGWC-52I **Lab ID: 2629733010** Collected: 03/04/20 15:10 Received: 03/07/20 10:30 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	**0.880 ± 0.310 (0.289) C:93% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.42 ± 0.494 (0.719) C:83% T:89%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.30 ± 0.804 (1.01)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: DUP-1 **Lab ID: 2629733011** Collected: 03/04/20 00:00 Received: 03/07/20 10:30 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	**0.697 ± 0.306 (0.402) C:88% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.516 ± 0.354 (0.679) C:83% T:86%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.660 (1.08)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: DUP-2 **Lab ID: 2629733012** Collected: 03/04/20 00:00 Received: 03/07/20 10:30 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	**1.05 ± 0.353 (0.313) C:92% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.15 ± 0.473 (0.758) C:83% T:83%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.20 ± 0.826 (1.07)**	pCi/L	04/03/20 14:54	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: EB-2 **Lab ID: 2629733013** Collected: 03/04/20 16:03 Received: 03/07/20 10:30 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	**0.439 ± 0.231 (0.321) C:95% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0294 ± 0.282 (0.664) C:82% T:94%**	pCi/L	04/02/20 11:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.439 ± 0.513 (0.985)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: BRGWC-29I **Lab ID: 2629733014** Collected: 03/04/20 16:05 Received: 03/07/20 10:30 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	**0.895 ± 0.325 (0.319) C:88% T:NA**	pCi/L	03/23/20 10:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.335 ± 0.312 (0.634) C:86% T:83%**	pCi/L	04/02/20 11:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.637 (0.953)**	pCi/L	04/03/20 14:54	7440-14-4	

Sample: BRGWC-30I **Lab ID: 2629733015** Collected: 03/05/20 09:10 Received: 03/10/20 09:20 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	**0.601 ± 0.243 (0.229) C:95% T:NA**	pCi/L	03/23/20 10:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.745 ± 0.392 (0.698) C:83% T:86%**	pCi/L	04/02/20 14:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.35 ± 0.635 (0.927)**	pCi/L	04/06/20 12:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: BRGWC-32S **Lab ID: 2629733016** Collected: 03/05/20 10:25 Received: 03/10/20 09:20 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	**0.397 ± 0.211 (0.283) C:88% T:NA**	pCi/L	03/23/20 10:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0858 ± 0.297 (0.672) C:82% T:81%**	pCi/L	04/02/20 14:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.483 ± 0.508 (0.955)**	pCi/L	04/06/20 12:59	7440-14-4	

Sample: BRGWC-45 **Lab ID: 2629733017** Collected: 03/05/20 16:05 Received: 03/10/20 09:20 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	**0.309 ± 0.212 (0.362) C:86% T:NA**	pCi/L	03/23/20 10:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.612 ± 0.370 (0.683) C:83% T:84%**	pCi/L	04/02/20 14:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.921 ± 0.582 (1.05)**	pCi/L	04/06/20 12:59	7440-14-4	

Sample: EB-3 **Lab ID: 2629733018** Collected: 03/05/20 15:30 Received: 03/10/20 09:20 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	**0.280 ± 0.171 (0.241) C:98% T:NA**	pCi/L	03/23/20 10:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.139 ± 0.254 (0.556) C:85% T:95%**	pCi/L	04/02/20 14:56	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.419 ± 0.425 (0.797)**	pCi/L	04/06/20 12:59	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

Sample: FB-3 **Lab ID: 2629733019** Collected: 03/05/20 13:00 Received: 03/10/20 09:20 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	**0.384 ± 0.202 (0.255) C:91% T:NA**	pCi/L	03/23/20 10:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0570 ± 0.261 (0.628) C:78% T:93%**	pCi/L	04/02/20 14:57	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.384 ± 0.463 (0.883)**	pCi/L	04/06/20 12:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 387070
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733001, 2629733002

METHOD BLANK: 1875172
Matrix: Water
Associated Lab Samples: 2629733001, 2629733002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.386 ± 0.179 (0.259) C:94% T:NA	pCi/L	03/11/20 19:21	

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

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 387086
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733001, 2629733002

METHOD BLANK: 1875203 Matrix: Water
Associated Lab Samples: 2629733001, 2629733002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.371 ± 0.288 (0.559) C:81% T:88%	pCi/L	03/24/20 19:46	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 388318
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

METHOD BLANK: 1880999
Matrix: Water
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.364 ± 0.221 (0.350) C:92% T:NA	pCi/L	03/23/20 10:04	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 388323
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

METHOD BLANK: 1881006 Matrix: Water
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0681 ± 0.261 (0.594) C:84% T:89%	pCi/L	04/02/20 14:56	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 388320 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

METHOD BLANK: 1881003 Matrix: Water
Associated Lab Samples: 2629733015, 2629733016, 2629733017, 2629733018, 2629733019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.387 ± 0.205 (0.273) C:94% T:NA	pCi/L	03/23/20 10:25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: 2629733
Pace Project No.: 30353316

QC Batch: 388321 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

METHOD BLANK: 1881004 Matrix: Water
Associated Lab Samples: 2629733003, 2629733004, 2629733005, 2629733006, 2629733007, 2629733008, 2629733009, 2629733010, 2629733011, 2629733012, 2629733013, 2629733014

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.474 ± 0.338 (0.655) C:83% T:89%	pCi/L	04/02/20 11:45	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: 2629733
Pace Project No.: 30353316

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.

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: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(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.

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 3/4/2020
Results Requested By: ~~3/18/2020~~ 21 days

Pace Analytical
www.pacelabs.com

Workorder: 2629733 **Workorder Name:** PLANT BRANCH AP-BCD 2ND SA

Report To	Subcontract To
Kevin Herring Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092	Pace Analytical Pittsburgh 1638 Roseytown Road Suites 2,3, & 4 Greensburg, PA 15601 Phone (724)850-5600

Item	Sample ID	Sample Type	Collected Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						Requested Analysis: RAD 9315	RAD 9320										LAB USE ONLY
1	BRGWA-12S	PS	3/3/2020 15:22	2629733001	Water	1	2					X	X										001
2	BRGWA-12I	PS	3/3/2020 17:15	2629733002	Water	1	2					X	X										002
3																							
4																							
5																							

Transfers	Released By	Date/Time	Received By	Date/Time
1	Pace	3/4/20 1700		3-6-2020
2				5 RM
3				

Comments: 0915 3-6-2020

Cooler Temperature on Receipt N/A °C | Custody Seal Y or (N) | Received on Ice Y or (N) | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 30353316

30353316

Chain of Custody

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: GA
Cert. Needed: ☐ Yes ☐ No
Owner Received Date: 3/4/2020 Results Requested By: ~~3/18/2020~~ 2 days

Pace Analytical® www.pacelabs.com

Workorder: 2629733 **Workorder Name:** PLANT BRANCH AP-BCD 2ND SA

Report To

Kevin Herring
Pace Analytical Charlotte
9800 Kincey Ave.
Suite 100
Huntersville, NC 28078
Phone (704)875-9092

Subcontract To

Pace Analytical Pittsburgh
1638 Roseytown Road
Suites 2,3, & 4
Greensburg, PA 15601
Phone (724)850-5600

Requested Analysis

WO# : 30353316

PM: JAC Due Date: 03/26/20
CLIENT: PACE_26_ATGA

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HNO3						RAD 9315	RAD 9320										LAB USE ONLY
1	BRGWA-12S	PS	3/3/2020 15:22	[illegible]	Water	1						X	X										
2	BRGWA-12I	PS	3/3/2020 17:15	2629733002	Water	1						X	X										
3	BRGWA-23S	PS	3/4/2020 11:20	2629733003	Water	1	2					X	X										CC3
4	BRGWC-47	PS	3/4/2020 11:28	2629733004	Water	1	2					X	X										CC4
5	FB-1	PS	3/4/2020 10:55	2629733005	Water	1	2					X	X										CC5
6	EB-1	PS	3/4/2020 11:11	2629733006	Water	1	2					X	X										CC6
7	BRGWC-27I	PS	3/4/2020 12:46	2629733007	Water	1	2					X	X										CC7
8	BRGWC-50	PS	3/4/2020 13:33	2629733008	Water	1	4					X	X										CC8
9	BRGWC-25I	PS	3/4/2020 14:25	2629733009	Water	1	2					X	X										CC9
10	BRGWC-52I	PS	3/4/2020 15:10	2629733010	Water	1	2					X	X										C10
11	DUP-1	PS	3/4/2020 00:00	2629733011	Water	1	2					X	X										C11
12	DUP-2	PS	3/4/2020 00:00	2629733012	Water	1	2					X	X										C12
13	EB-2	PS	3/4/2020 16:03	2629733013	Water	1	2					X	X										C13
14	BRGWC-29I	PS	3/4/2020 16:05	2629733014	Water	1	2					X	X										C14

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1				3-7-20 10:30	Add on
2					
3					

Cooler Temperature on Receipt N/A °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/20/2020
Worklist:	52921
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1880999
MB concentration:	0.364
M/B Counting Uncertainty:	0.215
MB MDC:	0.350
MB Numerical Performance Indicator:	3.32
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52921	LCSD52921
Count Date:	3/23/2020	3/23/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	0.502
Target Conc. (pCi/L, g, F):	4.762	4.789
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	4.919	4.732
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.637	0.633
Numerical Performance Indicator:	0.48	-0.17
Percent Recovery:	103.28%	98.82%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	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 Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS52921	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52921	
Sample Result (pCi/L, g, F):	4.919	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.637	
Sample Duplicate Result (pCi/L, g, F):	4.732	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.633	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.407	2629980002
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.41%	2629980002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% 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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

AM 3/23/20

CH 3/23/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/20/2020
Worklist:	52921
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1880999
MB concentration:	0.364
M/B Counting Uncertainty:	0.215
MB MDC:	0.350
MB Numerical Performance Indicator:	3.32
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52921	LCSD52921
Count Date:	3/23/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.049	
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.505	
Target Conc. (pCi/L, g, F):	4.762	
Uncertainty (Calculated):	0.057	
Result (pCi/L, g, F):	4.919	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.637	
Numerical Performance Indicator:	0.48	
Percent Recovery:	103.28%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	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 Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	2629980002	Enter Duplicate
Duplicate Sample I.D.	2629980002DUP	sample IDs if
Sample Result (pCi/L, g, F):	1.046	other than
Sample Result Counting Uncertainty (pCi/L, g, F):	0.339	LCS/LCSD in
Sample Duplicate Result (pCi/L, g, F):	0.829	the space below.
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.268	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.985	2629980002
Duplicate RPD:	23.16%	2629980002DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% 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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

LAM 3/23/20

Qlc 3/23/20

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/11/2020
Worklist:	52777
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1875172
MB concentration:	0.386
M/B Counting Uncertainty:	0.170
MB MDC:	0.259
MB Numerical Performance Indicator:	4.44
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52777	LCSD52777
Count Date:	3/12/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.050	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.502	
Target Conc. (pCi/L, g, F):	4.792	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	4.985	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.821	
Numerical Performance Indicator:	0.46	
Percent Recovery:	104.02%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	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 Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	2629734005	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2629734005DUP	
Sample Result (pCi/L, g, F):	0.559	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.428	
Sample Duplicate Result (pCi/L, g, F):	0.655	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.322	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	-0.351	2629734005
Duplicate RPD:	15.81%	2629734005DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% 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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

CW 3/12/2020

LAM 3/12/20

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/20/2020
Worklist:	52923
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1881003
MB concentration:	0.387
M/B Counting Uncertainty:	0.197
MB MDC:	0.273
MB Numerical Performance Indicator:	3.85
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52923	LCSD52923
Count Date:	3/23/2020	3/23/2020
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.049	24.049
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.501	0.506
Target Conc. (pCi/L, g, F):	4.801	4.755
Uncertainty (Calculated):	0.058	0.057
Result (pCi/L, g, F):	5.204	4.652
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.615	0.586
Numerical Performance Indicator:	1.28	-0.34
Percent Recovery:	108.39%	97.83%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	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 Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	LCS52923	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52923	
Sample Result (pCi/L, g, F):	5.204	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.615	
Sample Duplicate Result (pCi/L, g, F):	4.652	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.586	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.275	2629733017
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.24%	2629733017DUP
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% 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:
*The method blank result is below the reporting limit for this analysis and is acceptable.

LAM 3/23/20

LCC 3/23/20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	3/20/2020
Worklist:	52923
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1881003
MB concentration:	0.387
M/B Counting Uncertainty:	0.197
MB MDC:	0.273
MB Numerical Performance Indicator:	3.85
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52923	LCSD52923
Count Date:	3/23/2020	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.049	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.501	
Target Conc. (pCi/L, g, F):	4.801	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	5.204	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.615	
Numerical Performance Indicator:	1.28	
Percent Recovery:	108.39%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	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 Limits:		
MS/MSD Lower % Recovery Limits:		

Duplicate Sample Assessment		
Sample I.D.:	2629733017	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2629733017DUP	
Sample Result (pCi/L, g, F):	0.309	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.207	
Sample Duplicate Result (pCi/L, g, F):	0.232	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.155	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.588	2629733017
Duplicate RPD:	28.68%	2629733017DUP
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:

*The method blank result is below the reporting limit for this analysis and is acceptable.

***Batch must be re-prepped due to unacceptable precision.

LAM 3/23/20

3/23/20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/24/2020
Worklist:	52924
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1881004
MB concentration:	0.474
M/B 2 Sigma CSU:	0.338
MB MDC:	0.655
MB Numerical Performance Indicator:	2.75
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS52924	LCSD52924
Count Date:	4/2/2020	
Spike I.D.:	19-057	
Decay Corrected Spike Concentration (pCi/mL):	34.630	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.802	
Target Conc. (pCi/L, g, F):	4.318	
Uncertainty (Calculated):	0.311	
Result (pCi/L, g, F):	3.525	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.833	
Numerical Performance Indicator:	-1.75	
Percent Recovery:	81.62%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

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 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:		

Duplicate Sample Assessment		
Sample I.D.:	2629980001	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	2629980001DUP	
Sample Result (pCi/L, g, F):	0.271	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.325	
Sample Duplicate Result (pCi/L, g, F):	0.242	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.351	
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:	0.119	2629980001
Duplicate RPD:	11.32%	2629980001DUP
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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/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:

JJ 4-3-20

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/13/2020
Worklist:	52786
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1875203
MB concentration:	0.371
M/B 2 Sigma CSU:	0.288
MB MDC:	0.559
MB Numerical Performance Indicator:	2.53
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52786	LCSD52786
Count Date:	3/24/2020	3/24/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.729	34.729
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.813	0.805
Target Conc. (pCi/L, g, F):	4.272	4.314
Uncertainty (Calculated):	0.308	0.311
Result (pCi/L, g, F):	3.467	4.011
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.841	0.955
Numerical Performance Indicator:	-1.76	-0.59
Percent Recovery:	81.16%	92.97%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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 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:		

Duplicate Sample Assessment		
Sample I.D.:	LCS52786	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52786	
Sample Result (pCi/L, g, F):	3.467	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.841	
Sample Duplicate Result (pCi/L, g, F):	4.011	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.955	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.838	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	13.56%	
Duplicate Status vs Numerical Indicator:	Pass	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

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/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:

DT 3-25-20

KLB 3-25-2020

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	3/25/2020
Worklist:	52926
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	1881006
MB concentration:	0.068
M/B 2 Sigma CSU:	0.261
MB MDC:	0.594
MB Numerical Performance Indicator:	0.51
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS52926	LCSD52926
Count Date:	4/2/2020	4/2/2020
Spike I.D.:	19-057	19-057
Decay Corrected Spike Concentration (pCi/mL):	34.629	34.629
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.813	0.806
Target Conc. (pCi/L, g, F):	4.262	4.297
Uncertainty (Calculated):	0.307	0.309
Result (pCi/L, g, F):	4.498	2.740
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.984	0.683
Numerical Performance Indicator:	0.45	-4.07
Percent Recovery:	105.54%	63.76%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	135%	135%
Lower % Recovery Limits:	60%	60%

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 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:		

Duplicate Sample Assessment		
Sample I.D.:	LCS52926	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD52926	
Sample Result (pCi/L, g, F):	4.498	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.984	
Sample Duplicate Result (pCi/L, g, F):	2.740	
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):	0.683	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.878	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	49.36%	
Duplicate Status vs Numerical Indicator:	Warning	
Duplicate Status vs RPD:	Fail***	
% RPD Limit:	36%	

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/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:

4/3/20

4/3/20

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

May 28, 2020

Joju Abraham
Georgia Power - Coal Combustion Residuals
2480 Maner Road
Atlanta, GA 30339

RE: Project: PLANT BRANCH
Pace Project No.: 2631812

Dear Joju Abraham:

Enclosed are the analytical results for sample(s) received by the laboratory on May 12, 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 - Atlanta, GA

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

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
(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.
Lauren Petty, Southern Company Services, Inc.
Carolyn Powrozek, Golder
Dawn Prell, Golder Associates Inc.
Tim Richards, Golder Associates - Atlanta

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: PLANT BRANCH
Pace Project No.: 2631812

Pace Analytical Services Atlanta
110 Technology Parkway 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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: PLANT BRANCH
Pace Project No.: 2631812

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2631812001	**BRGWC-32S**	Water	05/12/20 14:59	05/12/20 17:15
2631812002	**FD**	Water	05/12/20 00:00	05/12/20 17:15
2631812003	**FB**	Water	05/12/20 14:10	05/12/20 17:15
2631812004	**EB**	Water	05/12/20 14:15	05/12/20 17:15

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SAMPLE ANALYTE COUNT

Project: PLANT BRANCH
Pace Project No.: 2631812

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2631812001	**BRGWC-32S**	EPA 6020B	CSW	1
2631812002	**FD**	EPA 6020B	CSW	1
2631812003	**FB**	EPA 6020B	CSW	1
2631812004	**EB**	EPA 6020B	CSW	1

PASI-GA = Pace Analytical Services - Atlanta, GA

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SUMMARY OF DETECTION

Project: PLANT BRANCH
Pace Project No.: 2631812

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
2631812001	**BRGWC-32S**					
	Field pH	5.88	Std. Units		05/12/20 17:42	
EPA 6020B	Selenium	98.9	ug/L	10.0	05/22/20 17:44	
2631812002	**FD**					
EPA 6020B	Selenium	100	ug/L	10.0	05/22/20 18:07	

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ANALYTICAL RESULTS

Project: PLANT BRANCH
Pace Project No.: 2631812

Sample: BRGWC-32S **Lab ID: 2631812001** Collected: 05/12/20 14:59 Received: 05/12/20 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Atlanta, GA								
Field pH	**5.88**	Std. Units			1		05/12/20 17:42		
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Selenium	**98.9**	ug/L	10.0	1.3	1	05/21/20 15:30	05/22/20 17:44	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH
Pace Project No.: 2631812

Sample: FD **Lab ID: 2631812002** Collected: 05/12/20 00:00 Received: 05/12/20 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Selenium	**100**	ug/L	10.0	1.3	1	05/21/20 15:30	05/22/20 18:07	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH
Pace Project No.: 2631812

Sample: FB **Lab ID: 2631812003** Collected: 05/12/20 14:10 Received: 05/12/20 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Selenium	ND	ug/L	10.0	1.3	1	05/21/20 15:30	05/22/20 18:13	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: PLANT BRANCH
Pace Project No.: 2631812

Sample: EB **Lab ID: 2631812004** Collected: 05/12/20 14:15 Received: 05/12/20 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Atlanta, GA								
Selenium	ND	ug/L	10.0	1.3	1	05/21/20 15:30	05/22/20 18:19	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: PLANT BRANCH
Pace Project No.: 2631812

QC Batch: 46587
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Atlanta, GA
Associated Lab Samples: 2631812001, 2631812002, 2631812003, 2631812004

METHOD BLANK: 216786 Matrix: Water
Associated Lab Samples: 2631812001, 2631812002, 2631812003, 2631812004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Selenium	ug/L	ND	10.0	1.3	05/22/20 17:33	

LABORATORY CONTROL SAMPLE: 216787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Selenium	ug/L	100	101	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 216788 216789

Parameter	Units	2631812001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Selenium	ug/L	98.9	100	100	200	203	101	104	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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: PLANT BRANCH
Pace Project No.: 2631812

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.

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.

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT BRANCH
Pace Project No.: 2631812

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2631812001	**BRGWC-32S**				
2631812001	**BRGWC-32S**	EPA 3005A	46587	EPA 6020B	46594
2631812002	**FD**	EPA 3005A	46587	EPA 6020B	46594
2631812003	**FB**	EPA 3005A	46587	EPA 6020B	46594
2631812004	**EB**	EPA 3005A	46587	EPA 6020B	46594

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Georgia Power Company	Report To: Jolu Abraham	Attention: scsinvoices@southernco.com
Address: Atlanta, GA	Copy To: Golder	Company Name:
	brian_steele@golder.com	Address:
Email: jabraham@southernco.com	Purchase Order #:	Pace Quote:
Phone: (404) 506-7239 Fax:	Project Name: Plant Branch	Pace Project Manager: Kevin Herring
Requested Due Date:	Project #: 16662541E	Pace Profile #:

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved - Ice	H2SO4	HNO3	HCl	NaOH + Zn Acetate	Na2S2O3	Methanol	Other	Analyses Test Y/N	Selenium	Residual Chlorine (Y/N)	2631812
1	BRGWC-32S	WT	G	5/12/2020	1459		1			1						N	X		pH: 5.88
2	FD			5/12/2020	—		1			1							X		
3	FB			5/12/2020	1460		1			1							X		
4	EB			5/12/2020	1415		1			1							X		
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Golder	5/12/20	1715		5/14/20	1715	21	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Karim McKee

SIGNATURE of SAMPLER: [signature] DATE Signed: 5-12-20

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Sample Condition Upon Receipt

Pace Analytical

Client Name: GA Power   Project # ____

Optional
Proj. Due Date:
Proj. Name:

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ ~~Client~~ ☐ Commercial ☐ Pace Other ____

Tracking #: ____

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

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 2.1°C   **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 5/10/20 COY

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

F-ALLC003rev.3, 11September2006

Pace Analytical	Document Name: Bottle Identification Form (BIF)	Document Issued: March 14, 2019 Page 1 of 1
	Document No.: F-CAR-CS-043-Rev.00	Issuing Authority: Pace Carolinas Quality Office

Project #

*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) (Cl-)	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) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	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)	AG0U-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 Offi

Out of hold, incorrect preservative, out of temp, incorrect containers.

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: **December 10, 2019**
Expiration Date: **June 14, 2020**
Certificate # 10657

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.: 10657

Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville, NC 28804

Virginia Laboratory ID: 460222
Effective Date: December 10, 2019
Expiration Date: June 14, 2020

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 CACO3	VA
SM 9223 COLISURE®	TOTAL COLIFORMS	VA
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 SIO2	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
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.: 10657

Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville, NC 28804

Virginia Laboratory ID: 460222
Effective Date: December 10, 2019
Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
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	ORTHOPHOSPHATE 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

METHOD	ANALYTE	PRIMARY
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 SIO2	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

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 10657

Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville, NC 28804

Virginia Laboratory ID: 460222
Effective Date: December 10, 2019
Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
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	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-SETTLEABLE	VA
SM 4500-CL^- 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

METHOD	ANALYTE	PRIMARY
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 9040 C	PH	VA
EPA 9056 A	CHLORIDE	VA
EPA 9056 A	NITRATE AS N	VA
EPA 9056 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^- E-2011	CYANIDE	VA
SM 4500-$S2^-$ 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 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

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
EPA 6010 D	COPPER	VA
EPA 6010 D	LEAD	VA

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 10657

Pace Analytical Services, LLC - Asheville NC
2225 Riverside Drive
Asheville, NC 28804

Virginia Laboratory ID: 460222
Effective Date: December 10, 2019
Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
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
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, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S

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: May 01, 2020 Expiration Date: June 30, 2020

Patty A. Lewandowski, MBA, MT(ASCP)
Chief Bureau of Public Health Laboratories
DH Form 1697, 7/04
NON-TRANSFERABLE E87315-45-05/01/2020
Supersedes all previously issued certificates

Ron DeSantis
Governor

Florida HEALTH

Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-45, expiration date June 30, 2020. 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 300.0	Primary Inorganic Contaminants	NELAP	4/10/2002
Nitrate	EPA 353.2	Primary Inorganic Contaminants	NELAP	4/17/2020
Nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	4/10/2002
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 300.0	Primary Inorganic Contaminants	NELAP	4/10/2002
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 #: E87315-45, expiration date June 30, 2020. 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
Ferrous iron	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	7/28/2009
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
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

Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-45, expiration date June 30, 2020. 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

Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-45, expiration date June 30, 2020. 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	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrate as N	EPA 300.0	General Chemistry	NELAP	4/10/2002
Nitrate as N	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	4/10/2002
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	4/17/2020
Nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrite as N	EPA 300.0	General Chemistry	NELAP	4/10/2002
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

Laboratory Scope of Accreditation

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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
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
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

Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-45, expiration date June 30, 2020. 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
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 nitrate-nitrite	EPA 9056	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
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 #: E87315-45, expiration date June 30, 2020. 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
Amenable cyanide	EPA 9010/9014	General Chemistry	NELAP	4/10/2002
Antimony	EPA 6010	Metals	NELAP	4/10/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	4/10/2002
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	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
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
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

Laboratory Scope of Accreditation

Attachment to Certificate #: E87315-45, expiration date June 30, 2020. 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
Tin	EPA 6010	Metals	NELAP	4/10/2002
Titanium	EPA 6010	Metals	NELAP	9/27/2002
Total cyanide	EPA 9010/9014	General Chemistry	NELAP	4/10/2002
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	4/10/2002
Vanadium	EPA 6010	Metals	NELAP	4/10/2002
Zinc	EPA 6010	Metals	NELAP	4/10/2002

APPENDIX A

FIELD DATA FORMS, CERTIFIED WELL SURVEY REPORT, WELL INSPECTION LOGS

Product Name: Low-Flow System

Date: 2019-08-28 09:44:36

Project Information:		Pump Information:	
Operator Name	J. Quenneville	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	5 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646777		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.31 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-27I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3073171 L
Well Total Depth	33.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.05 in
Depth to Water	3.43 ft	Total Volume Pumped	7.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	09:22:46	300.11	22.47	5.51	592.71	0.16	3.50	1.38	113.61
Last 5	09:27:46	600.03	22.48	5.49	599.42	0.37	3.50	1.24	113.46
Last 5	09:32:46	900.03	22.44	5.50	603.01	0.26	3.51	0.98	112.68
Last 5	09:37:46	1200.03	22.38	5.51	602.81	0.17	3.49	0.84	111.74
Last 5	09:42:46	1500.03	22.39	5.51	608.28	0.16	3.48	0.81	110.93
Variance 0			-0.03	0.01	3.58			-0.26	-0.77
Variance 1			-0.06	0.01	-0.20			-0.14	-0.95
Variance 2			0.01	0.00	5.47			-0.03	-0.80

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-29 10:58:24

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	63.7 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	LaMotte 2020 we	Pump placement from TOC	63.7 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-50	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.4993201 L
Well Total Depth	68.76 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.8 in
Depth to Water	37.75 ft	Total Volume Pumped	4.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:35:15	600.01	23.56	5.22	2281.84	0.84	37.90	1.17	79.44
Last 5	10:40:15	900.00	23.52	5.21	2275.53	0.73	37.90	0.95	81.12
Last 5	10:45:15	1199.99	23.53	5.21	2273.41	0.50	37.90	0.78	81.63
Last 5	10:50:15	1499.99	23.50	5.20	2274.59	0.57	37.90	0.69	81.97
Last 5	10:55:15	1799.98	23.49	5.20	2273.48	0.45	37.90	0.61	82.20
Variance 0			0.00	-0.01	-2.13			-0.17	0.51
Variance 1			-0.03	-0.01	1.18			-0.09	0.35
Variance 2			-0.02	-0.00	-1.11			-0.08	0.22

Notes

Started purging at 1025

Stopped purging and began sampling at 1055

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 10:50:22

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder	Tubing Type	Poly
Project Name	166625418	Tubing Diameter	.17 in
Site Name	Plant Branch	Tubing Length	92.08 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020 we	Pump placement from TOC	92.08 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-47	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.6259921 L
Well Total Depth	97.08 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6 in
Depth to Water	25.10 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 20		+/- 0.3	+/- 10
Last 5	10:28:38	300.06	22.98	5.83	2196.64	1.39	25.57	0.69	25.79
Last 5	10:33:38	600.02	22.66	5.78	2216.03	0.41	25.60	0.57	25.94
Last 5	10:38:38	900.02	22.46	5.76	2226.54	0.25	25.60	0.51	26.99
Last 5	10:43:38	1200.02	22.30	5.75	2234.88	0.13	25.60	0.46	26.74
Last 5	10:48:38	1500.02	22.27	5.74	2233.47	0.12	25.60	0.44	25.69
Variance 0			-0.20	-0.02	10.52			-0.07	1.04
Variance 1			-0.16	-0.01	8.33			-0.04	-0.24
Variance 2			-0.04	-0.01	-1.40			-0.03	-1.05

Notes

Started purging at 1023

Stopped purging and began sampling at 1048

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-29 15:07:48

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED well wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	38.8 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	LaMotte 2020 we	Pump placement from TOC	38.9 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-23S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.5531808 L
Well Total Depth	43.8 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	31.68 in
Depth to Water	36.28 ft	Total Volume Pumped	15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:45:02	3299.95	22.22	5.65	148.46	0.67	38.80	3.62	54.37
Last 5	14:50:02	3599.94	22.07	5.65	151.08	0.87	38.83	3.66	55.22
Last 5	14:55:02	3899.93	22.00	5.64	153.63	0.77	38.87	3.69	56.04
Last 5	15:00:02	4199.92	22.10	5.64	155.59	0.69	38.90	3.71	56.21
Last 5	15:05:02	4499.92	22.11	5.64	157.68	0.64	38.90	3.73	56.79
Variance 0			-0.07	-0.00	2.55			0.03	0.81
Variance 1			0.10	-0.00	1.96			0.02	0.17
Variance 2			0.01	0.00	2.09			0.02	0.58

Notes

Started purging at 1350

Stopped purging and began sampling at 1505

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-29 12:43:26

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	71.6 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	LaMotte 2020 we	Pump placement from TOC	71.6 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-52I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5345811 L
Well Total Depth	76.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.28 in
Depth to Water	39.00 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:20:45	300.05	22.56	6.24	478.82	1.45	39.44	0.84	34.92
Last 5	12:25:45	600.01	22.05	6.24	484.54	0.93	39.44	0.50	33.81
Last 5	12:30:45	900.00	21.73	6.24	486.64	0.66	39.44	0.33	33.07
Last 5	12:35:45	1200.00	21.57	6.26	487.67	0.54	39.44	0.28	31.81
Last 5	12:40:45	1499.99	22.42	6.27	484.94	0.53	39.44	0.32	30.18
Variance 0			-0.31	0.00	2.10			-0.17	-0.74
Variance 1			-0.16	0.01	1.03			-0.05	-1.26
Variance 2			0.85	0.02	-2.73			0.04	-1.63

Notes

Started purging at 1215

Stopped purging and began sampling at 1240

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 15:30:33

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	Alexis
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	60.45 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	642531		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	50.45 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-45	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.3598139 L
Well Total Depth	60.45 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.28 in
Depth to Water	11.12 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	15:13:47	300.06	25.76	5.86	500.62	1.28	11.40	0.12	41.98
Last 5	15:18:47	600.04	26.00	5.86	491.81	2.73	11.40	0.11	41.15
Last 5	15:23:47	900.02	26.25	5.86	485.40	2.31	11.40	0.10	40.27
Last 5	15:28:47	1200.01	26.01	5.86	473.39	1.80	11.40	0.10	40.32
Last 5									
Variance 0			0.24	-0.00	-8.81			-0.01	-0.83
Variance 1			0.26	0.00	-6.41			-0.01	-0.88
Variance 2			-0.25	0.00	-12.01			-0.01	0.04

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 15:03:16

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	61.01 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	642531		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	56.01 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12S	Final Pumping Rate	108 mL/min
Well diameter	2 in	Total System Volume	0.5573135 L
Well Total Depth	61.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	52.78 ft	Total Volume Pumped	15.23 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	14:42:18	7199.96	22.40	6.01	91.91	0.42	52.78	7.74	61.01
Last 5	14:47:18	7499.96	22.49	6.00	91.83	0.54	52.78	7.69	61.54
Last 5	14:52:18	7799.96	22.04	5.97	91.69	0.86	52.78	7.70	62.91
Last 5	14:57:18	8099.96	21.89	6.01	91.71	0.68	52.78	7.71	62.00
Last 5	15:02:18	8399.95	22.04	6.00	91.84	0.35	52.78	7.76	62.17
Variance 0			-0.44	-0.03	-0.14			0.01	1.36
Variance 1			-0.15	0.03	0.02			0.01	-0.91
Variance 2			0.15	-0.00	0.13			0.05	0.17

Notes

Purge three well volumes

Purged three well volumes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 14:05:09

Project Information:		Pump Information:	
Operator Name	J. Quenneville	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	5 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646777		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	75.54 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12I	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3073171 L
Well Total Depth	80.54 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	6.63 in
Depth to Water	53.5 ft	Total Volume Pumped	7.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	13:42:23	3300.04	22.19	6.32	147.36	0.25	59.37	4.41	54.18
Last 5	13:47:24	3601.04	22.47	6.32	144.58	0.28	59.65	4.72	55.59
Last 5	13:52:24	3901.04	22.32	6.33	143.21	0.33	59.83	5.05	56.77
Last 5	13:57:24	4201.04	22.18	6.34	143.98	0.28	60.06	5.25	58.20
Last 5	14:02:24	4501.04	22.00	6.35	146.95	0.14	60.13	5.38	59.40
Variance 0			-0.15	0.01	-1.38			0.32	1.18
Variance 1			-0.14	0.01	0.77			0.20	1.43
Variance 2			-0.18	0.02	2.97			0.14	1.21

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 15:24:15

Project Information:		Pump Information:	
Operator Name	J. Quenneville	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	5 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646777		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	17.35 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-30I	Final Pumping Rate	0 mL/min
Well diameter	2 in	Total System Volume	0.3073171 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	4.00 ft	Total Volume Pumped	0 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	15:03:08	300.04	23.25	6.18	969.19	13.40	4.16	0.17	64.31
Last 5	15:08:08	600.03	22.89	6.18	965.86	8.88	4.10	0.15	64.44
Last 5	15:13:08	900.03	22.76	6.18	959.37	4.68	4.15	0.13	64.21
Last 5	15:18:08	1200.03	22.71	6.18	954.75	4.32	4.16	0.11	64.06
Last 5	15:23:08	1500.03	22.67	6.17	948.42	2.68	4.16	0.11	63.92
Variance 0			-0.14	-0.00	-6.49			-0.02	-0.23
Variance 1			-0.04	-0.00	-4.62			-0.01	-0.15
Variance 2			-0.05	-0.00	-6.33			-0.00	-0.14

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 15:58:17

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED
Company Name	Golder	Tubing Type	Poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	19.41 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463072		
Turbidity Make/Model	LaMotte 2020 we	Pump placement from TOC	19.41 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-25I	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.371635 L
Well Total Depth	24.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	2.76 in
Depth to Water	8.87 ft	Total Volume Pumped	6.75 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	15:35:30	1500.02	19.52	6.01	471.51	11.50	9.10	1.04	31.98
Last 5	15:40:30	1800.02	19.48	6.00	473.38	9.69	9.10	0.92	85.10
Last 5	15:45:30	2100.02	19.34	6.00	475.20	7.53	9.10	0.82	85.92
Last 5	15:50:30	2400.01	19.09	6.00	478.06	4.34	9.10	0.69	85.30
Last 5	15:55:30	2700.02	19.03	6.01	477.35	4.20	9.10	0.65	45.75
Variance 0			-0.14	0.00	1.82			-0.10	0.82
Variance 1			-0.24	0.00	2.86			-0.13	-0.62
Variance 2			-0.06	0.01	-0.70			-0.04	-39.56

Notes

Started purging at 1510

Stopped purging and began sampling at 1555

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-27 16:29:49

Project Information:		Pump Information:	
Operator Name	J. Quenneville	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	5 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646777		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	43 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-32S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.3073171 L
Well Total Depth	48 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.49 in
Depth to Water	35.22 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	16:07:26	600.03	22.21	5.92	733.53	0.79	35.65	5.77	68.15
Last 5	16:12:41	915.04	21.68	5.85	727.38	1.31	35.70	5.44	74.96
Last 5	16:17:41	1215.03	21.64	5.84	725.32	1.14	35.70	5.08	79.51
Last 5	16:22:41	1515.03	21.55	5.85	726.28	1.01	35.70	4.85	82.81
Last 5	16:27:41	1815.04	21.49	5.85	730.10	0.47	35.71	4.72	85.04
Variance 0			-0.04	-0.01	-2.06			-0.36	4.55
Variance 1			-0.09	0.00	0.96			-0.23	3.30
Variance 2			-0.06	0.00	3.82			-0.13	2.23

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-08-28 10:58:37

Project Information:		Pump Information:	
Operator Name	J. Quenneville	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	5 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	646777		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	ft

Well Information:		Pumping Information:	
Well ID	BRGWC-29I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3073171 L
Well Total Depth	ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	9.75 in
Depth to Water	9.75 ft	Total Volume Pumped	7.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	10:31:51	600.03	21.84	4.22	537.17	0.56	9.82	0.87	190.05
Last 5	10:36:51	900.03	21.78	4.32	537.95	0.41	9.83	0.40	178.12
Last 5	10:41:51	1200.03	21.76	4.36	545.21	0.31	9.81	0.21	171.42
Last 5	10:51:54	1803.04	21.78	4.38	548.07	0.18	9.84	0.12	162.93
Last 5	10:56:54	2103.04	21.78	4.39	548.79	0.23	9.85	0.10	159.80
Variance 0			-0.02	0.03	7.25			-0.19	-6.70
Variance 1			0.02	0.02	2.86			-0.08	-8.50
Variance 2			-0.00	0.00	0.72			-0.02	-3.12

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-17 09:50:23

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	28 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-21I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6099758 L
Well Total Depth	33.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.72 in
Depth to Water	3.94 ft	Total Volume Pumped	8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	09:28:09	1200.00	20.03	6.19	609.37	0.48	4.00	0.28	66.36
Last 5	09:33:09	1499.99	19.91	6.15	605.85	0.45	4.00	0.25	59.03
Last 5	09:38:09	1799.99	20.00	6.09	607.17	0.34	4.00	0.24	54.27
Last 5	09:43:09	2099.98	19.97	6.05	604.04	0.42	4.00	0.24	50.27
Last 5	09:48:09	2399.97	19.96	6.01	601.16	0.45	4.00	0.21	47.95
Variance 0			0.09	-0.06	1.32			-0.01	-4.76
Variance 1			-0.03	-0.04	-3.14			0.01	-4.00
Variance 2			-0.01	-0.04	-2.88			-0.03	-2.32

Notes

Started purging at 0908

Stopped purging and began sampling at 0950

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-17 11:59:49

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	17 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	17 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-30I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.5608782 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	4.05 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	11:37:27	300.03	20.50	6.40	859.38	3.76	4.15	0.49	34.47
Last 5	11:42:27	600.01	20.47	6.42	856.04	2.74	4.15	0.41	35.66
Last 5	11:47:27	900.00	20.46	6.42	855.14	1.97	4.15	0.36	35.77
Last 5	11:52:27	1200.00	20.44	6.42	853.29	1.31	4.15	0.33	35.91
Last 5	11:57:27	1499.99	20.45	6.43	851.87	1.02	4.15	0.33	36.13
Variance 0			-0.01	0.00	-0.90			-0.06	0.11
Variance 1			-0.02	0.01	-1.85			-0.03	0.14
Variance 2			0.02	0.01	-1.42			0.00	0.22

Notes

Started purging at 1132

Stopped purging and began sampling at 1200

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-16 14:54:26

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	71 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	71 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-52I	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.5319031 L
Well Total Depth	76.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.84 in
Depth to Water	39.28 ft	Total Volume Pumped	4.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	14:32:39	1200.00	24.02	6.72	495.42	0.84	39.60	0.42	-167.99
Last 5	14:37:39	1500.03	23.40	6.90	496.51	0.65	39.60	0.39	-161.72
Last 5	14:42:39	1800.02	23.09	6.98	500.27	0.57	39.60	0.37	-158.62
Last 5	14:47:39	2099.98	22.91	7.02	502.54	0.48	39.60	0.35	-155.51
Last 5	14:52:39	2399.97	23.07	7.00	504.49	0.35	39.60	0.33	-151.75
Variance 0			-0.31	0.08	3.76			-0.02	3.10
Variance 1			-0.18	0.04	2.27			-0.02	3.11
Variance 2			0.16	-0.02	1.95			-0.02	3.76

Notes

Started purging at 1412

Stopped purging and began sampling at 1455

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-16 13:25:11

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	63 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	63 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-50	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.4961957 L
Well Total Depth	68.76 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	38.05 ft	Total Volume Pumped	4.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	12:57:56	600.01	23.46	5.41	2319.88	1.46	38.15	0.57	-1.77
Last 5	13:02:56	900.01	23.52	5.40	2315.46	1.25	38.15	0.44	17.53
Last 5	13:07:56	1200.00	23.68	5.37	2325.21	1.18	38.15	0.40	27.74
Last 5	13:12:56	1500.00	23.94	5.37	2320.62	1.05	38.15	0.37	34.78
Last 5	13:22:56	2099.98	24.17	5.36	2317.34	0.94	38.15	0.32	38.62
Variance 0			0.16	-0.02	9.76			-0.04	10.21
Variance 1			0.27	-0.00	-4.59			-0.03	7.04
Variance 2			0.23	-0.01	-3.28			-0.05	3.84

Notes

Started purging at 1247

Stopped purging and began sampling at 1325

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-15 13:43:53

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Default Site	Tubing Length	43.80 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	647057		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	38.80 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-23S	Final Pumping Rate	135 mL/min
Well diameter	2 in	Total System Volume	0.4794979 L
Well Total Depth	43.80 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	23.88 in
Depth to Water	37.09 ft	Total Volume Pumped	12.42 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	13:22:35	4803.55	20.24	5.70	135.14	0.41	39.02	3.82	70.53
Last 5	13:27:35	5103.55	20.26	5.71	136.11	0.27	39.04	3.76	70.86
Last 5	13:32:35	5403.55	20.19	5.70	137.14	0.36	39.06	3.74	71.56
Last 5	13:37:35	5703.55	20.15	5.69	138.35	0.29	39.08	3.75	72.26
Last 5	13:42:35	6003.55	20.13	5.70	139.59	0.46	39.10	3.72	72.47
Variance 0			-0.07	-0.01	1.03			-0.02	0.70
Variance 1			-0.04	-0.01	1.21			0.00	0.70
Variance 2			-0.02	0.01	1.24			-0.03	0.21

Notes

Purge three well volumes

3X well volumes

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-15 15:09:32

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Default Site	Tubing Length	24.41 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	647057		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	19.41 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-25I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3929521 L
Well Total Depth	24.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	9.47 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	14:47:43	600.89	19.97	5.97	546.50	6.05	9.56	0.62	89.25
Last 5	14:52:43	900.89	19.99	5.99	550.25	3.24	9.62	0.53	89.48
Last 5	14:57:43	1200.89	20.02	6.00	552.65	2.18	9.61	0.31	88.88
Last 5	15:02:44	1501.89	20.01	6.00	554.00	1.43	9.57	0.17	88.81
Last 5	15:07:44	1801.89	20.00	6.00	554.85	1.20	9.57	0.15	89.00
Variance 0			0.03	0.01	2.40			-0.22	-0.60
Variance 1			-0.00	-0.00	1.35			-0.14	-0.07
Variance 2			-0.02	-0.00	0.85			-0.02	0.19

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-17 14:11:31

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	Alexis
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Default Site	Tubing Length	57.00 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	647057		
Turbidity Make/Model	Lamotte 2020we	Pump placement from TOC	52.00 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-45	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3444151 L
Well Total Depth	57.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3.96 in
Depth to Water	11.89 ft	Total Volume Pumped	6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	13:48:51	600.02	22.96	5.94	571.84	4.21	12.22	0.23	91.98
Last 5	13:53:51	900.02	22.98	5.93	543.12	9.22	12.22	0.18	91.59
Last 5	13:58:51	1200.45	22.87	5.93	529.13	4.29	12.22	0.16	90.27
Last 5	14:03:51	1500.45	22.91	5.93	519.03	1.78	12.22	0.15	88.47
Last 5	14:08:51	1800.45	22.99	5.93	515.31	4.08	12.22	0.13	87.00
Variance 0			-0.11	-0.00	-13.99			-0.02	-1.32
Variance 1			0.04	0.00	-10.09			-0.01	-1.80
Variance 2			0.08	-0.01	-3.72			-0.01	-1.47

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-15 12:28:38

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	56 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	56 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12S	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.7349517 L
Well Total Depth	61.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	52.70 ft	Total Volume Pumped	15 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	12:02:13	2999.96	19.92	6.62	91.74	0.80	52.70	7.58	60.72
Last 5	12:07:14	3300.95	19.91	6.62	91.71	0.75	52.70	7.58	64.35
Last 5	12:12:14	3600.94	19.92	6.61	91.79	0.45	52.70	7.59	63.03
Last 5	12:22:14	4200.93	19.88	6.61	91.70	0.32	52.70	7.59	60.89
Last 5	12:27:14	4500.92	19.88	6.61	91.80	0.28	52.70	7.58	60.04
Variance 0			0.01	-0.00	0.09			0.00	-1.31
Variance 1			-0.04	-0.00	-0.09			-0.00	-2.14
Variance 2			-0.00	-0.00	0.09			-0.01	-0.84

Notes

Started purging at 1112

Stopped purging and began sampling at 1230

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-15 15:47:18

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	75 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	75 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12I	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.8197567 L
Well Total Depth	80.54 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	117.6 in
Depth to Water	53.30 ft	Total Volume Pumped	9.6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	15:25:02	3599.94	19.86	6.74	145.46	0.12	61.55	3.21	29.21
Last 5	15:30:02	3899.93	19.79	6.75	148.70	0.13	61.95	3.32	29.51
Last 5	15:35:02	4199.93	19.70	6.77	153.31	0.11	62.14	3.59	29.50
Last 5	15:40:02	4499.92	19.65	6.78	158.20	0.17	62.76	3.55	28.50
Last 5	15:45:02	4799.91	19.62	6.80	160.62	0.13	63.10	3.71	28.88
Variance 0			-0.09	0.02	4.61			0.27	-0.01
Variance 1			-0.05	0.01	4.89			-0.04	-0.99
Variance 2			-0.04	0.02	2.43			0.16	0.38

Notes

Started purging and began sampling at 1425

Stopped purging and began sampling at 1545

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-16 09:52:34

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	17 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	17 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-29I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.5608782 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	7.2 in
Depth to Water	9.40 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	09:35:01	300.05	21.66	4.69	538.38	0.55	10.00	0.40	80.71
Last 5	09:40:01	600.00	21.64	4.73	542.56	0.36	10.00	0.32	64.56
Last 5	09:45:01	900.01	21.62	4.77	544.13	0.25	10.00	0.28	56.92
Last 5	09:50:01	1200.00	21.63	4.79	546.11	0.20	10.00	0.24	53.44
Last 5									
Variance 0			-0.02	0.04	4.18			-0.07	-16.15
Variance 1			-0.02	0.04	1.57			-0.04	-7.63
Variance 2			0.02	0.02	1.98			-0.04	-3.49

Notes

Started purging at 0930

Stopped purging and began sampling at 0950

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-16 11:36:25

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	92 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	92 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-47	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.6256349 L
Well Total Depth	97.08 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.16 in
Depth to Water	25.93 ft	Total Volume Pumped	3.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	11:13:57	900.01	22.06	6.04	2233.32	0.40	26.35	0.78	-71.60
Last 5	11:18:57	1200.00	22.86	5.97	2227.44	0.38	26.35	0.73	-63.82
Last 5	11:23:57	1500.00	23.36	5.93	2225.29	0.35	26.35	0.61	-48.95
Last 5	11:28:57	1799.99	23.48	5.91	2218.67	0.33	26.35	0.59	-43.55
Last 5	11:33:57	2099.98	23.23	5.90	2222.39	0.49	26.36	0.55	-36.48
Variance 0			0.50	-0.04	-2.16			-0.12	14.87
Variance 1			0.12	-0.02	-6.62			-0.02	5.40
Variance 2			-0.25	-0.01	3.72			-0.04	7.07

Notes

Started purging at 1058

Stopped purging and began sampling at 1135

Grab Samples

Product Name: Low-Flow System

Date: 2019-10-17 10:50:50

Project Information:		Pump Information:	
Operator Name	D.Thomas	Pump Model/Type	QED Well Wizard
Company Name	Golder Associates	Tubing Type	poly
Project Name	166625418	Tubing Diameter	.170 in
Site Name	Plant Branch	Tubing Length	43 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	541714		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	43 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-32S	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.6769272 L
Well Total Depth	48 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	5.28 in
Depth to Water	36.30 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	10:28:12	600.01	17.60	5.96	686.60	0.65	36.74	6.16	78.47
Last 5	10:33:12	900.00	17.70	6.01	683.66	0.56	36.74	5.84	75.87
Last 5	10:38:12	1200.00	17.65	6.03	684.63	0.58	36.74	5.64	74.52
Last 5	10:43:12	1499.99	17.70	6.07	685.48	0.58	36.74	5.46	72.95
Last 5	10:48:12	1799.99	17.70	6.09	687.70	0.43	36.74	5.32	71.64
Variance 0			-0.04	0.02	0.97			-0.20	-1.34
Variance 1			0.04	0.04	0.85			-0.18	-1.57
Variance 2			0.00	0.02	2.21			-0.14	-1.31

Notes

Started purging at 1018

Stopped purging and began sampling at 1050

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-04 08:29:28

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Branch	Tubing Length	22.35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463068		
Turbidity Make/Model	LaMotte	Pump placement from TOC	17.35 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-30I	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	0.3837575 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.1 in
Depth to Water	3.94 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	08:08:08	300.10	17.10	6.19	807.86	8.50	4.10	0.44	88.00
Last 5	08:13:08	600.01	17.46	6.18	808.34	6.91	4.10	0.24	84.22
Last 5	08:18:08	900.00	16.64	6.18	801.34	4.55	4.05	0.19	82.84
Last 5	08:23:08	1200.00	16.47	6.19	803.73	4.53	4.02	0.17	81.92
Last 5	08:28:08	1499.98	16.60	6.18	803.44	4.44	4.05	0.14	80.21
Variance 0			-0.82	0.00	-7.00			-0.05	-1.38
Variance 1			-0.17	0.00	2.40			-0.02	-0.92
Variance 2			0.13	-0.01	-0.29			-0.03	-1.71

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-03 16:17:53

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	Peristaltic Pump
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Branch	Tubing Length	57.00 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463068		
Turbidity Make/Model	LaMotte	Pump placement from TOC	52.00 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-45	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3444151 L
Well Total Depth	57.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.29 in
Depth to Water	10.92 ft	Total Volume Pumped	5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	15:55:06	300.03	19.52	5.95	565.34	4.69	11.07	0.21	62.49
Last 5	16:00:06	600.01	19.72	5.94	541.72	3.72	11.17	0.16	63.79
Last 5	16:05:06	900.00	19.95	5.93	537.28	4.35	11.19	0.15	61.06
Last 5	16:10:06	1200.00	19.88	5.92	527.62	4.32	11.21	0.14	58.02
Last 5	16:15:06	1499.99	19.78	5.94	513.66	4.61	11.21	0.12	56.67
Variance 0			0.22	-0.01	-4.44			-0.01	-2.72
Variance 1			-0.06	-0.01	-9.66			-0.01	-3.04
Variance 2			-0.10	0.01	-13.96			-0.02	-1.35

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-04 10:18:39

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Branch	Tubing Length	33.41 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463068		
Turbidity Make/Model	LaMotte	Pump placement from TOC	28.42 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-27I	Final Pumping Rate	160 mL/min
Well diameter	2 in	Total System Volume	0.433123 L
Well Total Depth	33.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.03 in
Depth to Water	4.02 ft	Total Volume Pumped	4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	09:56:37	300.02	16.51	5.47	583.45	1.52	4.04	1.33	113.69
Last 5	10:01:37	600.01	16.82	5.58	575.32	1.34	4.07	0.61	112.61
Last 5	10:06:37	900.00	17.45	5.66	571.64	1.30	4.05	0.37	110.54
Last 5	10:11:37	1199.99	17.36	5.70	566.75	1.73	4.05	0.24	109.41
Last 5	10:16:37	1499.99	17.24	5.71	567.33	1.45	4.05	0.18	108.54
Variance 0			0.63	0.08	-3.69			-0.24	-2.07
Variance 1			-0.09	0.04	-4.89			-0.13	-1.13
Variance 2			-0.12	0.01	0.58			-0.06	-0.87

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2019-12-04 09:23:39

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	QED
Company Name	Golder	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Branch	Tubing Length	48.00 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	463068		
Turbidity Make/Model	LaMotte	Pump placement from TOC	43.00 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-32S	Final Pumping Rate	120 mL/min
Well diameter	2 in	Total System Volume	0.4982443 L
Well Total Depth	48.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.45 in
Depth to Water	37.10 ft	Total Volume Pumped	3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 0.2	+/- 0
Last 5	08:59:36	300.04	15.07	5.50	687.57	1.26	37.58	6.77	89.89
Last 5	09:04:36	600.01	14.99	5.65	666.12	2.07	37.57	6.59	91.15
Last 5	09:09:36	900.00	15.05	5.76	670.51	1.98	37.56	6.25	91.92
Last 5	09:14:36	1199.99	15.03	5.79	671.63	2.07	37.56	6.19	93.02
Last 5	09:19:36	1499.99	15.17	5.83	674.72	1.41	37.55	5.89	93.49
Variance 0			0.05	0.11	4.40			-0.34	0.77
Variance 1			-0.01	0.03	1.12			-0.06	1.10
Variance 2			0.13	0.04	3.09			-0.30	0.48

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 11:29:26

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	97.18 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	92.18 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-47	Final Pumping Rate	100 mL/min
Well diameter	2 in	Total System Volume	0.7177555 L
Well Total Depth	97.08 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.53 ft
Depth to Water	19.80 ft	Total Volume Pumped	7.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	11:08:16	3304.97	17.41	5.78	2257.64	6.03	20.33	0.57	77.61
Last 5	11:13:16	3604.97	17.58	5.77	2265.43	5.56	20.33	0.52	76.59
Last 5	11:18:16	3904.89	17.72	5.76	2277.88	4.89	20.30	0.48	75.67
Last 5	11:23:16	4204.89	17.50	5.76	2270.86	4.75	20.28	0.46	75.03
Last 5	11:28:17	4505.90	17.63	5.76	2279.52	4.24	20.33	0.43	74.19
Variance 0			0.14	-0.01	12.45			-0.04	-0.92
Variance 1			-0.22	0.00	-7.02			-0.02	-0.64
Variance 2			0.13	-0.00	8.66			-0.03	-0.84

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-05 10:27:51

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	48.00 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	43.00 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-32S	Final Pumping Rate	110 mL/min
Well diameter	2 in	Total System Volume	0.4982443 L
Well Total Depth	48.00 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	12 in
Depth to Water	33.91 ft	Total Volume Pumped	3.3 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	10:05:03	300.04	17.19	5.64	650.57	1.42	34.87	5.32	22.52
Last 5	10:10:03	600.03	17.14	5.72	655.33	0.89	34.90	5.51	20.14
Last 5	10:20:03	1200.03	16.92	5.74	664.55	0.47	34.90	5.02	20.21
Last 5	10:25:03	1500.03	17.01	5.74	670.76	0.49	34.92	5.02	20.76
Last 5									
Variance 0			-0.04	0.08	4.75			0.19	-2.38
Variance 1			-0.23	0.02	9.22			-0.50	0.07
Variance 2			0.09	0.00	6.21			0.00	0.54

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 15:14:25

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	76.60 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	71.60 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-52I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.6258982 L
Well Total Depth	76.60 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.46 ft
Depth to Water	34.93 ft	Total Volume Pumped	4.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	14:55:05	300.02	18.75	6.39	525.80	1.42	35.31	0.54	-61.82
Last 5	15:00:05	600.02	18.72	6.47	526.63	1.31	35.35	0.37	-69.50
Last 5	15:05:06	901.54	18.66	6.52	526.01	1.43	35.35	0.32	-79.69
Last 5	15:10:06	1201.54	18.58	6.54	527.34	0.72	35.39	0.28	-88.09
Last 5									
Variance 0			-0.03	0.08	0.83			-0.16	-7.68
Variance 1			-0.07	0.06	-0.62			-0.05	-10.19
Variance 2			-0.07	0.02	1.33			-0.04	-8.40

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-05 16:06:37

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	60.53 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	55.53 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-45	Final Pumping Rate	185 mL/min
Well diameter	2 in	Total System Volume	0.554171 L
Well Total Depth	60.53 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.35 ft
Depth to Water	8.30 ft	Total Volume Pumped	13.65 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	15:45:22	3603.40	18.39	5.96	448.16	6.12	8.65	0.19	1.96
Last 5	15:50:23	3904.40	18.41	5.95	447.05	5.32	8.65	0.19	0.75
Last 5	15:55:23	4204.40	18.44	5.94	449.11	4.56	8.65	0.18	0.17
Last 5	16:00:23	4504.40	18.52	5.95	452.26	4.50	8.65	0.18	-0.18
Last 5	16:05:23	4804.40	18.39	5.95	450.70	4.77	8.65	0.17	-0.69
Variance 0			0.02	-0.01	2.06			-0.01	-0.59
Variance 1			0.09	0.00	3.15			0.00	-0.35
Variance 2			-0.13	0.00	-1.56			-0.01	-0.51

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 13:36:01

Project Information:		Pump Information:	
Operator Name	Travis Martinez	Pump Model/Type	SamplePro
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	68.76 ft
Latitude	0º 0' 0"		
Longitude	0º 0' 0"		
Sonde SN	646773		
Turbidity Make/Model	Lamotte2020we	Pump placement from TOC	63.76 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-50	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5909049 L
Well Total Depth	68.76 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.16 ft
Depth to Water	35.19 ft	Total Volume Pumped	3.8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	13:17:35	300.02	18.71	5.24	2390.03	1.59	35.27	0.87	49.40
Last 5	13:22:35	600.02	18.97	5.22	2388.41	1.61	35.28	0.60	54.84
Last 5	13:27:35	900.02	19.01	5.21	2387.54	1.11	35.35	0.50	58.00
Last 5	13:32:35	1200.02	19.00	5.20	2392.77	1.39	35.35	0.42	60.72
Last 5									
Variance 0			0.26	-0.02	-1.63			-0.27	5.44
Variance 1			0.04	-0.01	-0.87			-0.10	3.16
Variance 2			-0.01	-0.01	5.23			-0.09	2.72

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-03 15:30:01

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	61.01 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	56.01 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.5563135 L
Well Total Depth	61.01 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0 in
Depth to Water	52.70 ft	Total Volume Pumped	15.37 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	15:02:15	4502.04	18.79	5.92	81.50	0.31	52.70	7.48	91.06
Last 5	15:07:15	4802.04	18.77	5.93	81.41	0.28	52.70	7.49	90.42
Last 5	15:12:15	5102.04	18.75	5.93	81.44	0.28	52.70	7.47	91.13
Last 5	15:17:15	5402.04	18.72	5.90	81.40	0.29	52.70	7.46	92.80
Last 5	15:22:15	5702.04	18.70	5.94	81.36	0.28	52.70	7.47	91.41
Variance 0			-0.02	-0.00	0.03			-0.02	0.70
Variance 1			-0.03	-0.02	-0.04			-0.01	1.67
Variance 2			-0.02	0.03	-0.05			0.00	-1.39

Notes

3 well volumes of 4.06 Gal

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 11:24:09

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	43.80 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	38.80 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-23S	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.4794979 L
Well Total Depth	43.80 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	43.68 in
Depth to Water	35.0 ft	Total Volume Pumped	25.05 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	11:00:04	8402.06	18.34	5.69	175.65	0.66	38.39	6.51	103.52
Last 5	11:05:04	8702.05	18.43	5.69	127.55	0.40	38.52	6.27	102.19
Last 5	11:10:04	9002.04	18.44	5.70	179.65	1.14	38.55	6.33	101.34
Last 5	11:15:04	9302.06	18.40	5.71	179.49	0.62	38.59	6.08	101.17
Last 5	11:20:04	9602.10	18.38	5.70	179.34	0.56	38.64	6.21	101.89
Variance 0			0.00	0.02	52.10			0.05	-0.85
Variance 1			-0.04	0.01	-0.16			-0.25	-0.17
Variance 2			-0.02	-0.01	-0.14			0.14	0.72

Notes

Purged 3x well volume. Lightning stand down 945-1050, lack of dtw and NTU. CO2 tank ran out 1052

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-03 17:18:12

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	80.54 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	75.54 ft

Well Information:		Pumping Information:	
Well ID	BRGWA-12I	Final Pumping Rate	150 mL/min
Well diameter	2 in	Total System Volume	0.6434841 L
Well Total Depth	80.54 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	128.76 in
Depth to Water	53.35 ft	Total Volume Pumped	12.9 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	16:55:35	3603.05	18.44	6.22	132.48	0.49	63.81	4.22	95.42
Last 5	17:00:35	3903.05	18.42	6.24	137.44	0.49	63.93	4.32	96.20
Last 5	17:05:35	4203.05	18.42	6.29	140.58	0.56	64.02	4.41	94.82
Last 5	17:10:35	4503.05	18.45	6.32	143.04	0.47	64.06	4.51	94.56
Last 5	17:15:35	4803.05	18.44	6.33	144.82	0.57	64.08	4.62	96.16
Variance 0			-0.00	0.06	3.14			0.09	-1.38
Variance 1			0.02	0.02	2.47			0.10	-0.26
Variance 2			-0.01	0.01	1.77			0.12	1.60

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 12:50:21

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	33.41 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	28.41 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-27I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.433123 L
Well Total Depth	33.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	1.2 in
Depth to Water	1.12 ft	Total Volume Pumped	9.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	12:26:45	1200.03	16.71	5.78	525.58	0.24	1.28	1.96	110.66
Last 5	12:31:45	1500.03	16.79	5.79	526.05	0.30	1.24	2.10	110.16
Last 5	12:36:45	1800.03	16.83	5.80	525.63	0.62	1.21	2.25	109.94
Last 5	12:41:45	2100.04	16.88	5.79	526.29	0.64	1.21	2.24	109.77
Last 5	12:46:45	2400.04	16.90	5.80	525.97	0.53	1.22	2.31	109.56
Variance 0			0.04	0.01	-0.42			0.15	-0.22
Variance 1			0.05	-0.01	0.66			-0.01	-0.18
Variance 2			0.03	0.01	-0.32			0.07	-0.20

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 14:27:18

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	24.41 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	19.41 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-25I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3929521 L
Well Total Depth	24.41 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	3.97 ft	Total Volume Pumped	10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	14:05:03	1500.01	16.26	6.01	515.80	2.17	4.21	0.14	110.49
Last 5	14:10:03	1800.02	16.29	6.01	530.78	2.12	4.23	0.31	110.60
Last 5	14:15:03	2100.00	16.29	6.02	530.38	1.23	4.20	0.11	109.56
Last 5	14:20:03	2399.99	16.33	6.02	530.28	1.56	4.21	0.11	109.42
Last 5	14:25:03	2700.00	16.33	6.02	530.03	1.78	4.20	0.11	108.98
Variance 0			0.00	0.01	-0.40			-0.20	-1.04
Variance 1			0.04	-0.00	-0.10			-0.00	-0.14
Variance 2			0.00	0.01	-0.24			-0.00	-0.44

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-04 16:07:29

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	22.35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	17.35 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-29I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3837575 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	0.01 in
Depth to Water	8.00 ft	Total Volume Pumped	5.2 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	15:50:04	300.05	18.35	4.45	587.69	0.81	8.00	0.28	127.40
Last 5	15:55:04	600.04	18.40	4.48	592.80	0.59	8.01	0.21	127.50
Last 5	16:00:04	900.05	18.45	4.50	594.34	0.55	8.01	0.17	127.71
Last 5	16:05:04	1200.01	18.52	4.50	592.36	0.47	8.01	0.14	128.07
Last 5									
Variance 0			0.05	0.04	5.11			-0.07	0.10
Variance 1			0.05	0.01	1.55			-0.04	0.20
Variance 2			0.07	0.01	-1.99			-0.03	0.36

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-03-05 09:14:59

Project Information:		Pump Information:	
Operator Name	Darren Cox	Pump Model/Type	QED
Company Name	Golder Associates	Tubing Type	poly
Project Name	Plant Branch	Tubing Diameter	0.17 in
Site Name	Plant Branch	Tubing Length	22.35 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	643819		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	17.35 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-30I	Final Pumping Rate	200 mL/min
Well diameter	2 in	Total System Volume	0.3837575 L
Well Total Depth	22.35 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	3 in
Depth to Water	3.00 ft	Total Volume Pumped	7 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0	+/- 0.1	+/- 5%	+/- 5		+/- 10%	+/- 0
Last 5	08:50:05	600.04	16.38	6.01	902.97	13.50	3.30	0.38	47.74
Last 5	08:55:05	900.03	16.14	6.00	900.92	6.88	3.28	0.68	47.30
Last 5	09:00:05	1200.04	16.17	5.99	895.76	4.25	3.27	0.68	39.89
Last 5	09:05:05	1500.04	16.25	5.99	897.56	4.93	3.29	0.66	36.84
Last 5	09:10:05	1800.04	16.24	5.99	901.14	4.45	3.28	0.64	34.23
Variance 0			0.03	-0.01	-5.16			-0.00	-7.41
Variance 1			0.08	-0.00	1.79			-0.02	-3.05
Variance 2			-0.01	0.01	3.58			-0.02	-2.61

Notes

Grab Samples

Product Name: Low-Flow System

Date: 2020-05-12 15:01:35

Project Information:		Pump Information:	
Operator Name	K. Minkara	Pump Model/Type	QED Well Wizard
Company Name	Golder	Tubing Type	polyethylene
Project Name	166625418	Tubing Diameter	0.170 in
Site Name	Plant Branch	Tubing Length	43 ft
Latitude	0° 0' 0"		
Longitude	0° 0' 0"		
Sonde SN	513028		
Turbidity Make/Model	LaMotte 2020we	Pump placement from TOC	43 ft

Well Information:		Pumping Information:	
Well ID	BRGWC-32S	Final Pumping Rate	500 mL/min
Well diameter	2 in	Total System Volume	0.6769272 L
Well Total Depth	48 ft	Calculated Sample Rate	300 sec
Screen Length	10 ft	Stabilization Drawdown	31.8 in
Depth to Water	31.55 ft	Total Volume Pumped	32.5 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.5	+/- 0.1	+/- 5%	+/- 10		+/- 10%	+/- 10
Last 5	14:40:12	2701.00	19.07	5.88	622.98	0.98	34.20	3.04	102.26
Last 5	14:45:12	3001.00	18.99	5.88	624.14	1.03	34.20	3.01	103.79
Last 5	14:50:12	3301.00	18.88	5.88	624.77	1.21	34.20	3.01	105.24
Last 5	14:55:12	3601.00	18.96	5.88	624.49	1.02	34.20	3.01	106.71
Last 5	15:00:14	3902.99	18.90	5.88	626.18	0.98	34.20	2.97	108.33
Variance 0			-0.11	0.00	0.63			0.00	1.46
Variance 1			0.09	-0.00	-0.28			0.00	1.46
Variance 2			-0.06	-0.00	1.69			-0.04	1.62

Notes

Resampled for Se. FD, FB, and EB taken

Grab Samples

METRO ENGINEERING & SURVEYING CO., INC.
SURVEYORS - ENGINEERS - PHOTOGRAMMETRISTS
PROVIDING PROFESSIONAL SERVICE SINCE 1967

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SURVEYOR'S REPORT

SCOPE OF WORK:

Field survey of existing monitoring wells at Georgia Power Company, Plant Branch in Milledgeville, GA.

Horizontal and vertical datum was derived from RTK GPS observations with corrections from the eGPS network and conventional surveying equipment. Horizontal datum is Georgia State Plane, West Zone, NAD83(2011) and vertical datum is NAVD88.

EQUIPMENT USED TO ESTABLISH THE MONITORING WELL LOCATIONS:

Trimble R8 Dual Frequency GPS Receiver
Leica TS16 Total Station
Leica DNA10 Digital Level

CERTIFICATION:

I hereby certify that the center of well casing (PVC) has a horizontal accuracy of 0.5+/- feet or better using a Trimble R8 Dual Frequency RTK (survey-grade) global positioning system receiver referencing the Georgia State Plane, west zone, NAD83(2011) coordinate system in US survey feet. The top of well casing (PVC) elevation data was determined in feet above mean sea level based on the NAVD88 vertical datum. Vertical data was confirmed to be accurate within 0.01 foot through establishment of a closed level check loop with a Leica DNA10 digital level having a published accuracy of 0.9mm per dual-traverse kilometer.

James R. Green R.L.S. No. 2543

Date: 7/23/20

Plant Branch
Monitoring Well Locations
Ash Pond B, C & D
July 22, 2020

Well ID	LATITUDE	LONGITUDE	NAIL NORTHING	NAIL EASTING	NAIL ELEVATION	PVC NORTHING	PVC EASTING	TOP PVC ELEVATION	ELEV AT BASE CONC/GRD
BRGWA-12I	N33.197981	W83.314877	1164300.90	2557137.50	431.48	1164301.2	2557138.9	434.39	431.5
BRGWA-12S	N33.197941	W83.314864	1164286.30	2557141.70	431.64	1164286.6	2557142.9	434.64	431.6
BRGWA-23S	N33.194311	W83.312528	1162970.70	2557868.20	425.43	1162971.7	2557868.1	428.24	425.5
BRGWC-25I	N33.187670	W83.301326	1160584.70	2561315.10	354.96	1160583.7	2561315.1	357.37	355.0
BRGWC-27I	N33.185265	W83.306589	1159696.00	2559712.80	363.97	1159695.3	2559712.2	366.86	364.0
BRGWC-29I	N33.186890	W83.302200	1160298.70	2561049.90	350.61	1160297.6	2561050.2	353.23	350.6
BRGWC-30I	N33.190566	W83.313141	1161608.20	2557692.60	349.97	1161607.6	2557691.8	352.61	350.0
BRGWC-32S	N33.187992	W83.310531	1160678.60	2558497.60	403.62	1160677.7	2558497.9	406.39	403.6
BRGWC-45	N33.192199	W83.302065	1162229.10	2561074.90	381.65	1162229.8	2561075.5	384.58	381.6
BRGWC-47	N33.193530	W83.307343	1162701.00	2559456.40	408.75	1162700.7	2559456.7	411.20	408.8
BRGWC-50	N33.190421	W83.297841	1161593.70	2562372.00	378.71	1161593.3	2562372.9	381.35	378.8
BRGWC-52I	N33.189551	W83.298594	1161275.50	2562144.70	381.12	1161275.0	2562145.3	383.87	381.2
PZ-11S	N33.192944	W83.315371	1162466.00	2557002.70	390.95	1162467.3	2557002.5	393.99	390.9
PZ-12D	N33.198010	W83.314885	1164311.90	2557135.00	431.40	1164311.9	2557136.4	434.09	431.4
PZ-18I	N33.188252	W83.312988	1160766.20	2557747.10	359.65	1160766.2	2557745.5	362.55	359.6
PZ-18S	N33.188228	W83.312982	1160757.30	2557748.70	359.77	1160757.3	2557747.4	362.82	359.7
PZ-19I	N33.185563	W83.309241	1159797.90	2558900.70	368.85	1159797.1	2558900.0	371.74	368.9
PZ-19S	N33.185586	W83.309258	1159806.00	2558895.60	368.50	1159805.4	2558894.5	371.42	368.4
PZ-20I	N33.184705	W83.305130	1159494.60	2560159.30	362.16	1159495.4	2560160.2	365.34	362.2
PZ-20S	N33.184691	W83.305140	1159489.40	2560156.20	362.19	1159490.3	2560157.0	365.41	362.2
PZ-21I	N33.187691	W83.301283	1160592.70	2561327.70	355.85	1160591.6	2561328.2	358.92	355.8
PZ-21S	N33.187694	W83.301305	1160593.70	2561321.20	355.43	1160592.4	2561321.3	358.52	355.5
PZ-23I	N33.194321	W83.312497	1162974.30	2557877.90	425.00	1162975.4	2557877.7	427.74	425.1
PZ-26I	N33.187898	W83.300306	1160670.00	2561625.80	368.01	1160669.0	2561626.4	370.63	368.0
PZ-28I	N33.184732	W83.305158	1159504.90	2560150.40	362.45	1159505.1	2560151.7	364.81	362.5
PZ-31S	N33.188716	W83.312244	1160937.10	2557972.70	374.35	1160936.9	2557971.8	376.77	374.3
PZ-39	N33.196254	W83.313842	1163674.90	2557459.80	431.92	1163675.4	2557460.5	434.78	432.0
PZ-43	N33.191985	W83.298942	N.A.	N.A.	N.A.	1162159.8	2562031.3	383.71	381.0
PZ-44	N33.190799	W83.300405	1161723.80	2561586.80	380.49	1161724.6	2561587.5	383.04	380.5
PZ-46	N33.193658	W83.303739	1162755.50	2560558.40	382.09	1162756.2	2560559.0	384.64	382.1
PZ-48	N33.194504	W83.310642	1163047.70	2558445.00	418.20	1163046.7	2558444.6	420.90	418.3
PZ-49	N33.195198	W83.301871	1163321.90	2561124.90	382.22	1163321.2	2561125.7	384.99	382.2
PZ-51I	N33.190523	W83.297623	1161631.40	2562438.30	377.88	1161631.1	2562439.3	380.52	378.0
PZ-51S	N33.190474	W83.297644	1161613.90	2562432.10	377.79	1161613.4	2562433.1	380.27	377.9

Plant Branch
Monitoring Well Locations
Ash Pond E
Jul;y 22, 2020

Well ID	LATITUDE	LONGITUDE	NAIL NORTHING	NAIL EASTING	NAIL ELEVATION	PVC NORTHING	PVC EASTING	TOP PVC ELEVATION	ELEV AT BASE CONC/ GRD
BRD-1	N33.206557	W83.303323	N.A.	N.A.	N.A.	1167450.6	2560647.5	375.17	372.4
BRD-2	N33.192972	W83.336911	N.A.	N.A.	N.A.	1162424.7	2550413.1	444.48	441.2
BRGWA-2I	N33.205913	W83.338279	1167129.7	2549958.4	440.47	1167130.0	2549957.3	443.14	440.5
BRGWA-2S	N33.205940	W83.338294	1167139.2	2549953.9	440.43	1167139.7	2549952.6	443.20	440.4
BRGWA-5I	N33.214317	W83.339996	1170184.6	2549409.0	441.17	1170183.7	2549408.0	443.79	441.1
BRGWA-5S	N33.214300	W83.339971	1170178.5	2549416.5	440.87	1170177.5	2549415.5	443.86	440.8
BRGWA-6S	N33.215780	W83.333008	1170733.3	2551542.2	455.77	1170732.9	2551540.8	458.96	455.8
BRGWC-17S	N33.203532	W83.322836	1166300.8	2554686.9	362.12	1166301.5	2554687.7	365.32	362.2
BRGWC-24S	N33.192629	W83.296220	1162401.9	2562862.9	351.35	1162400.9	2562862.2	354.10	351.4
BRGWC-33S	N33.208371	W83.324826	1168056.7	2554064.0	414.10	1168057.0	2554064.8	416.68	414.2
BRGWC-34S	N33.206518	W83.324300	1167384.0	2554230.3	389.16	1167384.0	2554231.2	391.96	389.2
BRGWC-35S	N33.204484	W83.323519	1166645.7	2554475.2	363.66	1166646.0	2554476.3	366.31	363.7
BRGWC-36S	N33.201997	W83.322833	1165743.2	2554694.1	383.04	1165742.7	2554693.3	389.84	383.1
BRGWC-37S	N33.200205	W83.321914	1165092.1	2554978.9	444.35	1165093.0	2554979.5	447.05	444.4
BRGWC-38S	N33.198277	W83.321812	1164391.5	2555015.6	429.68	1164391.9	2555016.5	432.24	429.8
PB-10D	N33.196004	W83.310294	N.A.	N.A.	N.A.	1163593.4	2558546.7	400.31	397.5
PB-10S	N33.195992	W83.310279	N.A.	N.A.	N.A.	1163588.9	2558551.2	400.91	397.6
PB-13D	N33.191900	W83.316570	N.A.	N.A.	N.A.	1162084.5	2556638.8	373.77	371.1
PB-13S	N33.191900	W83.316612	N.A.	N.A.	N.A.	1162084.4	2556626.1	373.31	370.8
PB-1S	N33.199673	W83.317420	N.A.	N.A.	N.A.	1164910.5	2556355.9	403.16	400.4
PB-2D	N33.199504	W83.315596	N.A.	N.A.	N.A.	1164853.6	2556914.2	416.71	414.9
PB-4D	N33.198110	W83.318400	N.A.	N.A.	N.A.	1164339.6	2556060.7	412.12	409.0
PB-4S	N33.198098	W83.318372	N.A.	N.A.	N.A.	1164335.1	2556069.2	411.15	409.3
PB-7S	N33.196710	W83.318003	N.A.	N.A.	N.A.	1163831.3	2556186.2	402.88	399.7
PB-8D	N33.194480	W83.316062	N.A.	N.A.	N.A.	1163024.4	2556786.7	401.74	398.2
PB-8S	N33.194463	W83.316044	N.A.	N.A.	N.A.	1163018.2	2556792.3	401.82	398.6
PZ-10S	N33.197260	W83.321907	1164022.6	2554990.2	430.92	1164021.5	2554990.5	433.85	431.0
PZ-13S	N33.208218	W83.320866	1168012.6	2555276.6	406.45	1168011.4	2555276.7	409.97	406.5
PZ-14I	N33.209302	W83.323834	1168397.1	2554365.3	419.85	1168398.2	2554365.6	422.71	419.9
PZ-14S	N33.209303	W83.323855	1168397.4	2554358.8	420.17	1168398.7	2554359.2	423.31	420.2

Plant Branch
Monitoring Well Locations
Ash Pond E
Jul;y 22, 2020

PZ-15I	N33.207440	W83.323742	1167720.8	2554397.9	400.10	1167720.9	2554399.2	403.06	400.2
PZ-15S	N33.207438	W83.323759	1167720.3	2554392.6	400.04	1167720.3	2554394.0	402.90	400.1
PZ-16I	N33.205401	W83.323146	1166979.9	2554586.7	379.41	1166980.7	2554587.5	382.45	379.5
PZ-16S	N33.205393	W83.323166	1166977.2	2554580.3	379.32	1166977.8	2554581.4	382.52	379.3
PZ-17I	N33.203566	W83.322788	1166312.8	2554701.6	362.22	1166313.8	2554702.5	365.33	362.3
PZ-1D	N33.219259	W83.332788	1171997.7	2551598.1	462.82	1171999.0	2551598.1	463.41	462.9
PZ-1I	N33.219250	W83.332855	1171994.6	2551577.9	461.71	1171995.8	2551577.8	464.71	461.9
PZ-1S	N33.219251	W83.332821	1171995.0	2551588.0	462.22	1171996.4	2551588.0	465.07	462.4
PZ-3D	N33.201356	W83.337283	1165474.3	2550274.1	486.67	1165474.4	2550275.1	487.50	486.7
PZ-3I	N33.201412	W83.337289	1165494.5	2550271.8	486.48	1165494.5	2550273.2	489.49	486.5
PZ-3S	N33.201384	W83.337284	1165484.4	2550273.2	487.07	1165484.5	2550274.6	490.53	487.0
PZ-40S	N33.192669	W83.296398	1162416.0	2562807.9	353.17	1162414.9	2562807.7	355.96	353.2
PZ-41S	N33.192716	W83.296555	1162432.8	2562760.0	354.23	1162431.8	2562759.4	357.17	354.3
PZ-42S	N33.193854	W83.296624	1162844.5	2562734.8	358.92	1162845.7	2562735.0	361.66	359.0
PZ-4I	N33.195212	W83.334049	1163248.0	2551282.2	479.96	1163246.8	2551282.0	482.98	479.9
PZ-4S	N33.195216	W83.334088	1163249.1	2551270.2	479.90	1163247.8	2551270.1	482.87	479.9
PZ-52D	N33.208362	W83.324870	1168053.7	2554050.6	414.15	1168053.9	2554051.7	417.03	414.3
PZ-53D	N33.198283	W83.321917	1164392.7	2554984.3	431.59	1164393.8	2554984.3	434.68	431.6
PZ-54	N33.199468	W83.320356	1164829.5	2555458.7	440.71	1164828.7	2555458.3	443.86	440.8
PZ-55	N33.195029	W83.322604	1163208.8	2554783.0	450.11	1163208.0	2554783.6	453.07	450.2
PZ-56	N33.194377	W83.324890	1162965.6	2554085.6	416.17	1162965.1	2554086.3	418.84	416.2
PZ-7S	N33.212137	W83.328090	1169418.5	2553054.5	448.98	1169419.2	2553055.6	451.57	449.0
PZ-8S	N33.207731	W83.334235	1167800.4	2551188.1	450.42	1167801.1	2551188.9	453.08	450.5
PZ-9S	N33.193487	W83.328157	1162634.1	2553088.8	466.08	1162633.3	2553089.6	469.28	466.1

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-15
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-11
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-ID
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-2I
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✗	✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-25
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-3I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: PZ-3D
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?			✓
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?			✓
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-35
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: PZ-4I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

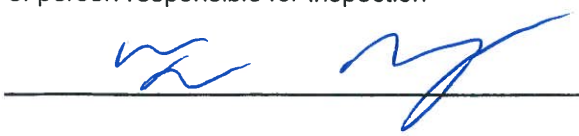
Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-45
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-5I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓	✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-55
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: ~~BGWA-6S~~ BRGWA-6S
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-7S
Date: 8-26-14

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-85
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-95
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-10S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-11S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

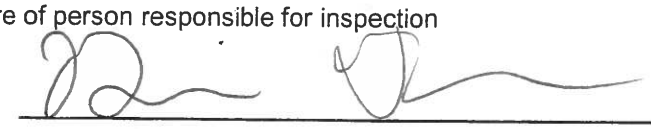
Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: PZ-12D
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓	✓	
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?		✓	
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓	✓	
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-125
Date: 8-26-19

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓	✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?			✓
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-121
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?		✓	
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
a	Does well recharge adequately when purged?	✓		N/A
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-13S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-145
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-14I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?		✓	
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-15S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-151
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-16S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓	✓	
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)		✓ Im	
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:
Correct well pad - wobbles. Recommend breaking the pad apart & re pouring the pad.

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-16I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

same comments as PZ-16S (wobbly pad) discovered during October event

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-171
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGwl - 17S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-18S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-181
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-19I
Date: 8-26-19

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-19S
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	N/A	✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?	N/A		✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-21I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓	✓	
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

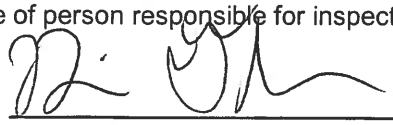
Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-215
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	N/A	✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	N/A	✓	
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-225
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWA-23S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-231
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWL - 24S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-25I
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	NA	✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?		✓	
e	Is the depth of the well consistent with the original well log?	✓		
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)			
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

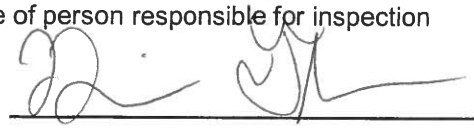
Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-26I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-27I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-29I
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWL-301
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-31S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWL-32S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWL-33S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGMW-34S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGwl-35s
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGwl-36s
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-37S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWL-38S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?		✓	
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-40S
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: P2-41S
Date: 8-26-14

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-42s
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: PZ-43
Date: 8-26-19

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?			✓
c	Does the casing have a functioning weep hole?			✓
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?			✓
e	Is the well locked and is the lock in good condition?			✓
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?			✓
b	Is the well pad sloped away from the protective casing?			✓
c	Is the well pad in complete contact with the protective casing?			✓
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)			✓
e	Is the pad surface clean (not covered with sediment or debris)?			✓
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)		✓	
5	Sampling: Groundwater Wells Only:			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-44
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	~~✓~~	✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-45
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-46
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓	✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-9T
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?		✓	
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-48
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: PZ-49
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓	✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

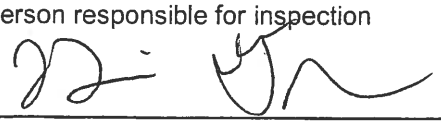
Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-50
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

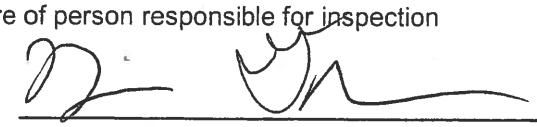


Site Name: Plant Branch
Permit Number:
Well ID: PZ-51S
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Site Name Plant Branch
Permit Number
Well ID PZ-5I
Date 8-26-19

		yes	no	n/a
1	Location/Identification			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	Protective Casing			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	Surface pad			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	Internal casing			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	Sampling: Groundwater Wells Only:			
a	Does well recharge adequately when purged?	N/A		✓
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

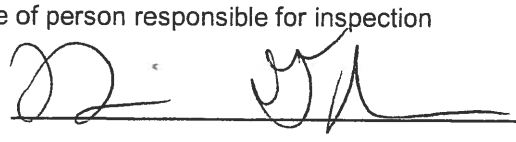
Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: BRGWC-52I
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?	✓		
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?		✓	
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?	✓		

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: IW-B-1
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: Iw-C-1
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: IW-C-2
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: Iw-D-1
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection

Groundwater Monitoring Well Integrity Form

Site Name: Plant Branch
Permit Number:
Well ID: MW-D-2
Date: 8-26-19

		yes	no	n/a
1	**Location/Identification**			
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2	**Protective Casing**			
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3	**Surface pad**			
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4	**Internal casing**			
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			✓
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5	**Sampling: Groundwater Wells Only:**			
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

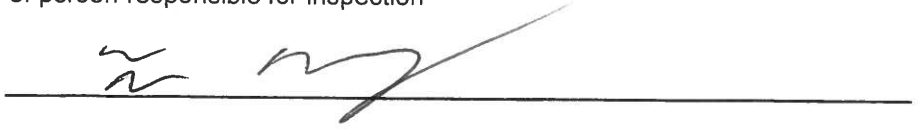
Signature of person responsible for inspection

Site Name: Plant Branch
Permit Number:
Well ID: IW-E1
Date: 8-26-19

		yes	no	n/a
1 Location/Identification				
a	Is the well visible and accessible?	✓		
b	Is the well properly identified with the correct well ID?	✓		
c	Is the well in a high traffic area and does the well require protection from traffic?		✓	
d	Is the drainage around the well acceptable? (no standing water, nor is well located in obvious drainage flow path)	✓		
2 Protective Casing				
a	Is the protective casing free from apparent damage and able to be secured?	✓		
b	Is the casing free of degradation or deterioration?	✓		
c	Does the casing have a functioning weep hole?	✓		
d	Is the annular space between casings clear of debris and water, or filled with pea gravel/sand?	✓		
e	Is the well locked and is the lock in good condition?	✓		
3 Surface pad				
a	Is the well pad in good condition (not cracked or broken)?	✓		
b	Is the well pad sloped away from the protective casing?	✓		
c	Is the well pad in complete contact with the protective casing?	✓		
d	Is the well pad in complete contact with the ground surface and stable? (not undermined by erosion, animal burrows, and does not move when stepped on)	✓		
e	Is the pad surface clean (not covered with sediment or debris)?	✓		
4 Internal casing				
a	Does the cap prevent entry of foreign material into the well?	✓		
b	Is the casing free of kinks or bends, or any obstructions from foreign objects (such as bailers)?	✓		
c	Is the well properly vented for equilibration of air pressure?	✓		
d	Is the survey point clearly marked on the inner casing?	✓		
e	Is the depth of the well consistent with the original well log?			
f	Is the casing stable? (or does the pvc move easily when touched or can it be taken apart by hand due to lack of grout or use of slip couplings in construction)	✓		
5 Sampling: Groundwater Wells Only:				
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 (low flow, turbid)?			✓
6	Based on your professional judgement, is the well construction / location appropriate to 1) achieve the objectives of the Groundwater Monitoring Program and 2) comply with the applicable regulatory requirements?			✓

7 Corrective actions as needed, by date:

Signature of person responsible for inspection



PLANT BRANCH GROUNDWATER SAMPLING
WELL CONDITION SPREADSHEET ON 03-02-2020

Well-ID	Old Well-ID	Location - visibility, accessibility, identified with ID and well drainage	Protective Casing - damaged, weep hole, annular space, lock	Surface Pad - pad condition	Internal casing - sealed cap, ventilated, stability	Pond ↑ or ↓	Sampling - recharge, turbidity, pump status	Comments
BRGWA-2S	PZ-2S	ok	ok	ok	ok	↑E	ok	
BRGWA-2I	PZ-2I	ok	ok	ok	ok	↑E	ok	
BRGWA-5S	PZ-5S	ok	ok	ok	ok	↑E	ok	
BRGWA-5I	PZ-5I	ok	ok	ok	ok	↑E	ok	
BRGWA-6S	PZ-6S	ok	ok	ok	ok	↑E	ok	
BRGWA-12S	PZ-12S	ok	ok	ok	ok	↑BCD	ok	
BRGWA-12I	PZ-12I	ok	ok	ok	ok	↑BCD	ok	
BRGWA-23S	PZ-23S	ok	ok	ok	ok	↑BCD	ok	
BRGWC-25I	PZ-25I	ok	ok	ok	ok	↓BCD	ok	
BRGWC-27I	PZ-27S	ok	ok	ok	ok	↓BCD	ok	
BRGWC-29I	PZ-29I	ok	ok	ok	ok	↓BCD	ok	
BRGWC-30I	PZ-30I	ok	ok	ok	ok	↓BCD	ok	
BRGWC-32S	PZ-32S	ok	ok	ok	ok	↓BCD	ok	
BRGWC-33S	PZ-33S	ok	ok	ok	ok	↓E	ok	
BRGWC-34S	PZ-34S	ok	ok	ok	ok	↓E	ok	
BRGWC-35S	PZ-35S	ok	ok	ok	ok	↓E	ok	
BRGWC-17S	PZ-17S	ok	ok	ok	ok	↓E	ok	
BRGWC-36S	PZ-36S	ok	ok	ok	ok	↓E	ok	
BRGWC-37S	PZ-37S	ok	ok	ok	ok	↓E	ok	
BRGWC-38S	PZ-38S	ok	ok	ok	ok	↓E	ok	
BRGWC-45	PZ-45	ok	ok	ok	ok	↓BCD	ok	Had to fish out a transducer prior to sampling
BRGWC-47	PZ-47	ok	ok	ok	ok	↓BCD	ok	
BRGWC-50	PZ-50	ok	ok	ok	ok	↓BCD	ok	
BRGWC-52I	PZ-52	ok	ok	ok	ok	↓BCD	ok	
PZ-1S	NA	ok	ok	ok	ok		N/A	
PZ -1I	NA	ok	ok	ok	ok		N/A	
PZ-1D	NA	ok	ok	ok	ok		N/A	
PZ -3S	NA	ok	ok	ok	ok		N/A	
PZ - 3I	NA	ok	ok	ok	ok		N/A	
PZ- 3D	NA	ok	ok	ok	ok		N/A	
PZ- 4S	NA	ok	ok	ok	ok		N/A	
PZ - 4I	NA	ok	ok	ok	ok		N/A	
PZ-7S	NA	ok	ok	ok	ok		N/A	
PZ- 8S	NA	ok	ok	ok	ok		N/A	
PZ-9S	NA	ok	ok	ok	ok		N/A	
PZ-10S	NA	ok	ok	ok	ok		N/A	
PZ-11S	NA	ok	ok	ok	ok		N/A	
PZ-12D	NA	ok	ok	ok	ok		N/A	
PZ-13S	NA	ok	ok	ok	ok		N/A	

PLANT BRANCH GROUNDWATER SAMPLING
WELL CONDITION SPREADSHEET ON 03-02-2020

Well-ID	Old Well-ID	Location - visibility, accessibility, identified with ID and well drainage	Protective Casing - damaged, weep hole, annular space, lock	Surface Pad - pad condition	Internal casing - sealed cap, ventilated, stability	Pond ↑ or ↓	Sampling - recharge, turbidity, pump status	Comments
PZ-14S	NA	ok	ok	ok	ok		N/A	
PZ -14I	NA	ok	ok	ok	ok		N/A	
PZ-15S	NA	ok	ok	ok	ok		N/A	
PZ -15I	NA	ok	ok	ok	ok		N/A	
PZ-16S	NA	ok	ok	ok	ok		N/A	
PZ -16I	NA	ok	ok	ok	ok		N/A	
PZ -17I	NA	ok	ok	ok	ok		N/A	
PZ-18S	NA	ok	ok	ok	ok		N/A	
PZ -18I	NA	ok	ok	ok	ok		N/A	
PZ-19S	NA	ok	ok	ok	ok		N/A	
PZ -19I	NA	ok	ok	ok	ok		N/A	
PZ-20S	NA	ok	ok	ok	ok		N/A	
PZ -20I	NA	ok	ok	ok	ok		N/A	
PZ-21S	NA	ok	ok	ok	ok		N/A	
PZ -21I	NA	ok	ok	ok	ok		N/A	
PZ-22S	PZ-39S	ok	ok	ok	ok		N/A	
BRGWC-24S	PZ-24S	ok	ok	ok	ok		N/A	
PZ-26I	NA	ok	ok	ok	ok		N/A	
PZ-28I	NA	ok	ok	ok	ok		N/A	
PZ-31S	NA	ok	ok	ok	ok		N/A	
PZ-23I	NA	ok	ok	ok	ok		N/A	
PZ-40S	NA	ok	ok	ok	ok		N/A	
PZ-41S	NA	ok	ok	ok	ok		N/A	
PZ-42S	NA	ok	ok	ok	ok		N/A	
PZ-43	NA	ok	ok	ok	ok		N/A	
PZ-44	NA	ok	ok	ok	ok		N/A	
PZ-46	NA	ok	ok	ok	ok		N/A	
PZ-48	NA	ok	ok	ok	ok		N/A	
PZ-49	NA	ok	ok	ok	ok		N/A	
PZ-51S	NA	ok	ok	ok	ok		N/A	
PZ-51I	N/A	ok	ok	ok	ok		N/A	
IW-C-1	N/A	--	--	--	--		N/A	Unable to access well due to ponded water
IW-B-1	N/A	ok	ok	ok	ok		N/A	
IW-D-1	N/A	ok	ok	ok	ok		N/A	
IW-E-1	N/A	ok	ok	ok	ok		N/A	
IW-B-2	N/A	ok	ok	ok	ok		N/A	
IW-C-2	N/A	ok	ok	ok	ok		N/A	
IW-D-2	N/A	ok	ok	ok	ok		N/A	
DW-01	DBW-01	ok	ok	ok	ok		N/A	
DW-02	DBW-02	ok	ok	ok	ok		N/A	

PLANT BRANCH GROUNDWATER SAMPLING
WELL CONDITION SPREADSHEET ON 03-02-2020

Well-ID	Old Well-ID	Location - visibility, accessibility, identified with ID and well drainage	Protective Casing - damaged, weep hole, annular space, lock	Surface Pad - pad condition	Internal casing - sealed cap, ventilated, stability	Pond ↑ or ↓	Sampling - recharge, turbidity, pump status	Comments
PB-1S	N/A	ok	ok	ok	ok		N/A	
PB-2D	N/A	ok	ok	ok	ok		N/A	
PB-4S	N/A	ok	ok	ok	ok		N/A	
PB-4D	N/A	ok	ok	ok	ok		N/A	
PB-7S	N/A	ok	ok	ok	ok		N/A	
PB-8D	N/A	ok	ok	ok	ok		N/A	
PB-8S	N/A	ok	ok	ok	ok		N/A	
PB-10D	N/A	ok	ok	ok	ok		N/A	
PB-10S	N/A	ok	ok	ok	ok		N/A	
PB-13D	N/A	ok	ok	ok	ok		N/A	
PB-13S	N/A	ok	ok	ok	ok		N/A	

APPENDIX A

DATA VALIDATION SUMMARIES

Quality Control Review of Analytical Data- Ash Pond BCD
Submitted by Pace Analytical Services
August - December 2019

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 Plant Branch CCR Ash Pond BCD (Site) between August 27, 2019 and December 4, 2019. 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 assessment monitoring constituents listed in 40 CFR, Part 257, Appendix IV. Test methods included Inductively Coupled Plasma- Mass Spectrometry (USEPA Method 6020B), Mercury in Liquid Wastes (USEPA Method 7470A), Determination of Inorganic Anions 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, equipment 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

Laboratory Precision: Laboratory goals for precision were met.

Field Precision: Field goals for precision were met with the exception of total dissolved solids (TDS) for BRGWC-29I as described in the qualifications section below.

Accuracy: Laboratory goals for accuracy were met with the exception of fluoride for BRGWC-29I as described in the qualifications section below.

Detection Limits: Project goals for detection limits were met. Certain samples were diluted due to elevated concentrations 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.

Completeness: There were no rejected analytical results for this event, resulting in a completion of 100%.

Holding Times: All holding time requirements were met in accordance with specific analytical methods.

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 associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was reported above the method detection limit; however, the concentration reported is an estimated value that may be biased high.
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 the SDGs, qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- Certain arsenic, chromium, selenium, total dissolved solid (TDS), radium-226, radium-228 and total radium results were qualified as non-detect (U) when the analyte was detected at a similar level in an associated blank sample. As shown in Table 2, if the original sample results were below the reporting limit (RL) or the minimum detectable concentration (MDC), the results were qualified as non-detect (U) and the results were raised to the RL or MDC. If results were above the RL or MDC, the results were qualified U and the RL or MDC was raised to the sample result.

- Total radium was qualified as biased high (J+) in certain samples when one radium isotope was detected above the MDC and the other isotope was U qualified.

- Fluoride for DGWC-29I was qualified as estimated biased high (J+) as the associated matrix spike/matrix spike duplicate (MS/MSD) recoveries were above the QC criteria.

- TDS for BRGWC-29I was qualified as estimated (J) as the field duplicate relative percent difference was outside QC criteria.

Golder reviewed the data from samples collected at Plant Branch CCR Ash Pond BCD between August 27, 2019 and December 4, 2019 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. & Porterfield, D.R. *Evaluation of Radiochemical Data Usability.* United States Department of Energy, Office of Environmental Restoration and Waste Management, Oak Ridge National Laboratory, April 1997.

USEPA, January 2017, National, Office of Superfund Remediation and Technology Innovation, *National Functional Guidelines for Inorganic Superfund Methods Data Review,* Revision 0.0.

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, September 2011, Region 4, Science and Ecosystem Support Division, Quality Assurance Section, MTSB, *Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data By Cold Vapor Atomic Absorption,* Revision 2.0.

TABLE 1

Sample Summary Table
SCS Plant Branch - Pond BCD

						Analyses			
SDGs	*Field Identification*	*Collection Date*	*Lab Identification*	*Matrix*	*QC Samples*	Total Metals (6020)	Anions (300.0)	TDS (SM 2540C)	Radium 226, Radium 228 (9315, 9320)
2622485/2622486	BRGWA-12I	8/27/2019	2622485001/2622486001	GW	-	X	X	-	X
2622485/2622486	BRGWA-12S	8/27/2019	2622485002/2622486002	GW	-	X	X	-	X
2622485/2622486	BRGWC-25I	8/27/2019	2622485005/2622486005	GW	-	X	X	-	X
2622485/2622486	BRGWC-30I	8/27/2019	2622485004/2622486004	GW	-	X	X	-	X
2622485/2622486	BRGWC-32S	8/27/2019	2622485006/2622486006	GW	-	X	X	-	X
2622563/2622564	BRGWC-27I	8/28/2019	2622561001/2622562001	GW	-	X	X	-	X
2622561/2622562	BRGWC-29I	8/28/2019	2622561002/2622562002	GW	-	X	X	-	X
2622561/2622562	BRGWC-45	8/28/2019	2622561003/2622562003	GW	-	X	X	-	X
2622561/2622562	BRGWC-47	8/28/2019	2622561004/2622562004	GW	-	X	X	-	X
2622561/2622562	Dup-3	8/28/2019	2622561007/2622562007	GW	DUP (BRGWC-45)	X	X	-	X
2622596/2622597	BRGWA-23S	8/29/2019	2622596001/2622597001	GW	-	X	X	-	X
2622596/2622597	BRGWC-50	8/29/2019	2622596002/2622597002	GW	-	X	X	-	X
2622596/2622597	BRGWC-52I	8/29/2019	2622596003/2622597003	GW	-	X	X	-	X
2622596/2622597	Dup-2	8/29/2019	2622596004/2622597004	GW	DUP (BRGWC-50)	X	X	-	X
2624392/2624393	BRGWA-12I	10/15/2019	2624392002/2624393002	GW	-	X	X	X	X
2624392/2624393	BRGWA-12S	10/15/2019	2624392001/2624393001	GW	-	X	X	X	X
2624392/2624393	BRGWA-23S	10/15/2019	2624392003/2624393003	GW	-	X	X	X	X
2624392/2624393	BRGWC-25I	10/15/2019	2624392005/2624393005	GW	-	X	X	X	X
2624487/2624488	BRGWC-29I	10/16/2019	2624487001/2624488001	GW	-	X	X	X	X
2624487/2624488	BRGWC-47	10/16/2019	2624487002/2624488002	GW	-	X	X	X	X
2624487/2624488	BRGWC-50	10/16/2019	2624487003/2624488003	GW	-	X	X	X	X
2624487/2624488	BRGWC-52I	10/16/2019	2624487004/2624488004	GW	-	X	X	X	X
2624487/2624488	Dup-2	10/16/2019	2624487005/2624488005	GW	DUP (BRGWC-29I)	X	X	X	X
2624861	BRGWC-27I	10/17/2019	2624861001	GW	-	-	-	-	X
2624861	BRGWC-30I	10/17/2019	2624861002	GW	-	-	-	-	X
2624861	BRGWC-32S	10/17/2019	2624861003	GW	-	-	-	-	X
2624861	BRGWC-45	10/17/2019	2624861004	GW	-	-	-	-	X
2626395	BRGWC-45	12/3/2019	2626395004	GW	-	X	X	-	X
2626395	BRGWC-27I	12/4/2019	2626395001	GW	-	X	X	-	X
2626395	BRGWC-30I	12/4/2019	2626395002	GW	-	X	X	-	X
2626395	BRGWC-32S	12/4/2019	2626395003	GW	-	X	X	-	X

Abbreviations:

DUP - Field duplicate
GW - Groundwater
TDS - Total Dissolved Solids
SDG - Sample Delivery Group
QC - Quality Control

TABLE 2
Qualifier Summary Table
Plant Branch - Pond BCD

SDG	Sample Name	Constituent	New Result	New RL or MDC	Qualifier	Reason
2622486	BRGWA-12I	Radium-226	-	0.367	U	Blank contamination
2622486	BRGWA-12S	Radium-226	-	0.422	U	Blank contamination
2622486	BRGWC-30I	Radium-226	-	0.572	U	Blank contamination
2622486	BRGWA-12I	Radium-228	-	0.938	U	Blank contamination
2622486	BRGWA-12S	Radium-228	-	0.899	U	Blank contamination
2622486	BRGWC-25I	Radium-228	-	0.680	U	Blank contamination
2622486	BRGWC-30I	Radium-228	-	0.777	U	Blank contamination
2622486	BRGWA-12I	Total Radium	-	1.31	U	Blank contamination
2622486	BRGWA-12S	Total Radium	-	1.32	U	Blank contamination
2622486	BRGWC-30I	Total Radium	-	1.35	U	Blank contamination
2622561	BRGWC-27I	Arsenic	0.005	-	U	Blank contamination
2622561	BRGWC-29I	Arsenic	0.005	-	U	Blank contamination
2622561	BRGWC-45	Arsenic	0.005	-	U	Blank contamination
2622561	BRGWC-47	Arsenic	0.005	-	U	Blank contamination
2622561	BRGWC-47	Chromium	0.01	-	U	Blank contamination
2622562	BRGWC-27I	Radium-226	-	0.643	U	Blank contamination
2622562	BRGWC-29I	Radium-226	-	0.652	U	Blank contamination
2622562	BRGWC-45	Radium-226	-	0.499	U	Blank contamination
2622562	BRGWC-47	Radium-226	-	0.804	U	Blank contamination
2622562	BRGWC-29I	Total Radium	-	1.76	U	Blank contamination
2622597	BRGWA-23S	Radium-226	-	0.582	U	Blank contamination
2622597	BRGWC-50	Radium-226	-	0.556	U	Blank contamination
2622597	BRGWC-52I	Radium-226	-	0.566	U	Blank contamination
2622597	BRGWC-50	Total Radium	-	-	J+	Blank contamination
2622597	BRGWC-52I	Total Radium	-	-	J+	Blank contamination
2624488	BRGWC-29I	Radium-226	-	0.549	U	Blank contamination
2624488	BRGWC-47	Radium-226	-	0.572	U	Blank contamination
2624488	BRGWC-50	Radium-226	-	0.88	U	Blank contamination
2624488	BRGWC-52I	Radium-226	-	0.513	U	Blank contamination
2624488	BRGWC-50	Radium-228	-	1.63	U	Blank contamination
2624488	BRGWC-52I	Radium-228	-	1.62	U	Blank contamination
2624488	BRGWC-50	Total Radium	-	2.51	U	Blank contamination
2624488	BRGWC-52I	Total Radium	-	2.13	U	Blank contamination
2624861	BRGWC-27I	Radium-226	-	0.725	U	Blank contamination
2624861	BRGWC-30I	Radium-226	-	0.72	U	Blank contamination
2624861	BRGWC-32S	Radium-226	-	0.306	U	Blank contamination
2624861	BRGWC-45	Radium-226	-	0.487	U	Blank contamination
2626395	BRGWC-27I	Arsenic	0.005	-	U	Blank contamination
2626395	BRGWC-30I	Arsenic	0.005	-	U	Blank contamination
2626395	BRGWC-32S	Arsenic	0.005	-	U	Blank contamination
2626395	BRGWC-27I	Selenium	0.01	-	U	Blank contamination
2626395	BRGWC-30I	Selenium	0.01	-	U	Blank contamination
2622597	Dup-2	Radium-226	-	0.823	U	Blank contamination
2622597	Dup-2	Total Radium	-	1.310	U	Blank contamination
2624488	Dup-2	Radium-226	-	0.536	U	Blank contamination
2624488	Dup-2	Radium-228	-	1.02	U	Blank contamination
2624488	Dup-2	Total Radium	-	1.56	U	Blank contamination
2622561	Dup-3	Arsenic	0.005	-	U	Blank contamination
2624392	BRGWA-12I	Chromium	0.01	-	U	Blank contamination
2624392	BRGWA-12S	Chromium	0.01	-	U	Blank contamination
2624392	BRGWA-23S	Chromium	0.01	-	U	Blank contamination
2624392	BRGWC-25I	Chromium	0.01	-	U	Blank contamination
2624392	BRGWA-12I	TDS	-	134	U	Blank contamination
2624392	BRGWA-12S	TDS	-	89	U	Blank contamination
2624392	BRGWA-23S	TDS	-	124	U	Blank contamination
2624487	BRGWC-29I	Arsenic	0.005	-	U	Blank contamination
2624487	BRGWC-52I	Arsenic	0.005	-	U	Blank contamination
2624392	BRGWA-12I	Arsenic	0.005	-	U	Blank contamination
2624392	BRGWA-12S	Arsenic	0.005	-	U	Blank contamination

TABLE 2
Qualifier Summary Table
Plant Branch - Pond BCD

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
2624392	BRGWA-23S	Arsenic	0.005	-	U	Blank contamination
2624392	BRGWC-25I	Arsenic	0.005	-	U	Blank contamination
2624393	BRGWA-12I	Radium-226	-	0.475	U	Blank contamination
2624393	BRGWA-23S	Radium-226	-	0.659	U	Blank contamination
2624393	BRGWC-25I	Radium-226	-	0.537	U	Blank contamination
2624393	BRGWA-23S	Total Radium	-	-	J+	Blank contamination
2622561	BRGWC-29I	Fluoride	-	-	J+	MS and/or MSD recovered above upper limit
2624484	BRGWC-29I	TDS	-	-	J	RPD exceedance between field duplicate and parent sample
2624484	Dup-2	TDS	-	-	J	RPD exceedance between field duplicate and parent sample

Abbreviations:
MDC: Minimum detectable concentration
MDL: Method detection limit
RL : Reporting limit
SDG : Sample delivery group

Qualifiers:
J+ : Estimated result, biased high
J : Estimated result
U : Non-detect result

Attachment A
Quality Control Review of Analytical Data submitted by Pace Analytical
Plant Branch CCR Ash Pond BCD

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-BCD between March 3, 2020 and May 12, 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. Test methods included Inductively Coupled Plasma- Mass Spectrometry (USEPA Method 6020B), Inductively Coupled Plasma (USEPA Method 6010D), Determination of Inorganic Anions (USEPA Method 300.0), Solids in Water (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 Inorganic Data by Inductively Coupled Plasma – Atomic Emission Spectroscopy and Inductively Coupled Plasma – Mass Spectroscopy (September 2011, Rev. 2.0) and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017). In addition, Southern Company Services, Inc. provided data validation guidance. The review included an assessment of the results for completeness, precision (laboratory duplicates, matrix spike/matrix spike duplicates), accuracy (laboratory control samples, matrix spike/matrix spike duplicates), and blank contamination (including 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

Laboratory Precision:	Laboratory goals for precision were met
Field Precision:	Field goals for precision were met with the exception of total dissolved solids (TDS) in SDG 2829733 as described in the qualifications sections below.
Accuracy:	Laboratory goals for accuracy were met with the exception fluoride in SDG 2829733 as described in the qualifications sections below.
Detection Limits:	Project goals for detection limits were met. Certain samples were diluted due to the concentration of the 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.
Completeness:	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 associated numerical value is the approximate concentration of the analyte in the sample.
J-	The analyte was positively identified above the method detection limit; however, the concentration reported is an estimated value that may be biased low.
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 of the samples collected at the site, the qualifications may not have been required or applied to all samples collected. A summary of sample qualifications can be found in Table 2.

- A certain TDS result in SDG 2829733 were qualified as estimated (J) as the parent sample and field duplicate exceeded field precision criteria.
- A certain fluoride result in SDG 2829733 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.
- Certain antimony, boron, chromium, and lead results in SDGs 2829733 and 2829734 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 RL, the results were qualified as non-detect (U) and the results were raised to the reporting limit.
- Certain radium-226 and total radium results were qualified as non-detect (U) when radium-226 was detected at a similar concentration in an associated blank sample. As shown in Table 2, the minimum detectable concentration (MDC) was raised to the sample result as part of the qualification process.

Golder reviewed the data from samples collected at the Plant Branch CCR Ash Ponds between March 3, 2020 and May 12, 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

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
SCS Plant Branch

						Analysis				
SDGs	***Field Identification***	***Collection Date***	***Lab Identification***	***Matrix***	***QC Samples***	**Total Metals (EPA 6020B)**	**Calcium (EPA 6010D)**	**Anions (EPA 300.0)**	**TDS (SM 2540C)**	**Radium-226 & 228 (EPA 9315 & 9320)**
2629733	BRGWA-12S	3/3/2020	2629733001	GW	-	X	X	X	X	-
2629733	BRGWA-12I	3/3/2020	2629733002	GW	-	X	X	X	X	-
2629733	BRGWA-23S	3/4/2020	2629733003	GW	-	X	X	X	X	-
2629733	BRGWC-47	3/4/2020	2629733004	GW	-	X	X	X	X	-
2629733	FB-1	3/4/2020	2629733005	WQ	FB	X	X	X	X	-
2629733	EB-1	3/4/2020	2629733006	WQ	EB	X	X	X	X	-
2629733	BRGWC-27I	3/4/2020	2629733007	GW	-	X	X	X	X	-
2629733	BRGWC-50	3/4/2020	2629733008	GW	-	X	X	X	X	-
2629733	BRGWC-25I	3/4/2020	2629733009	GW	-	X	X	X	X	-
2629733	BRGWC-52I	3/4/2020	2629733010	GW	-	X	X	X	X	-
2629733	DUP-1	3/4/2020	2629733011	GW	FD (BRGWC-27I)	X	X	X	X	-
2629733	DUP-2	3/4/2020	2629733012	GW	FD (BRGWC-52I)	X	X	X	X	-
2629733	EB-2	3/4/2020	2629733013	WQ	EB	X	X	X	X	-
2629733	BRGWC-29I	3/4/2020	2629733014	GW	-	X	X	X	X	-
2629733	BRGWC-30I	3/5/2020	2629733015	GW	-	X	X	X	X	-
2629733	BRGWC-32S	3/5/2020	2629733016	GW	-	X	X	X	X	-
2629733	BRGWC-45	3/5/2020	2629733017	GW	-	X	X	X	X	-
2629733	EB-3	3/5/2020	2629733018	WQ	EB	X	X	X	X	-
2629733	FB-3	3/5/2020	2629733019	WQ	FB	X	X	X	X	-
30353316	BRGWA-12S	3/3/2020	2629733001	GW	-	-	-	-	-	X
30353316	BRGWA-12I	3/3/2020	2629733002	GW	-	-	-	-	-	X
30353316	BRGWA-23S	3/4/2020	2629733003	GW	-	-	-	-	-	X
30353316	BRGWC-47	3/4/2020	2629733004	GW	-	-	-	-	-	X
30353316	FB-1	3/4/2020	2629733005	WQ	FB	-	-	-	-	X
30353316	EB-1	3/4/2020	2629733006	WQ	EB	-	-	-	-	X
30353316	BRGWC-27I	3/4/2020	2629733007	GW	-	-	-	-	-	X
30353316	BRGWC-50	3/4/2020	2629733008	GW	-	-	-	-	-	X
30353316	BRGWC-25I	3/4/2020	2629733009	GW	-	-	-	-	-	X
30353316	BRGWC-52I	3/4/2020	2629733010	GW	-	-	-	-	-	X
30353316	DUP-1	3/4/2020	2629733011	GW	FD (BRGWC-27I)	-	-	-	-	X
30353316	DUP-2	3/4/2020	2629733012	GW	FD (BRGWC-52I)	-	-	-	-	X
30353316	EB-2	3/4/2020	2629733013	WQ	EB	-	-	-	-	X
30353315	BRGWC-29I	3/4/2020	2629733014	GW	-	-	-	-	-	X
30353315	BRGWC-30I	3/5/2020	2629733015	GW	-	-	-	-	-	X
30353315	BRGWC-32S	3/5/2020	2629733016	GW	-	-	-	-	-	X
30353315	BRGWC-45	3/5/2020	2629733017	GW	-	-	-	-	-	X
30353315	EB-3	3/5/2020	2629733018	WQ	EB	-	-	-	-	X
30353315	FB-3	3/5/2020	2629733019	WQ	FB	-	-	-	-	X
2631812	BRGWC-32S	5/12/2020	2631812001	GW	-	X	-	-	-	-
2631812	FD	5/12/2020	2631812002	GW	FD (BRGWC-32S)	X	-	-	-	-
2631812	FB	5/12/2020	2631812003	WQ	FB	X	-	-	-	-
2631812	EB	5/12/2020	2631812004	WQ	EB	X	-	-	-	-

Abbreviations:
FB - Field blank
EB - Equipment 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
Plant Branch

SDG	*Sample Name*	*Constituent*	*New Result*	*New RL or MDC*	*Qualifier*	*Reason*
2829733	BRGWC-52I	Antimony	0.003	-	U	Blank contamination
2829733	Dup-2	Antimony	0.003	-	U	Blank contamination
2829733	BRGWA-23S	Boron	0.1	-	U	Blank contamination
2829733	BRGWA-23S	Chromium	0.01	-	U	Blank contamination
2829733	BRGWC-47	Chromium	0.01	-	U	Blank contamination
2829733	BRGWC-50	Chromium	0.01	-	U	Blank contamination
2829733	Dup-1	Chromium	0.01	-	U	Blank contamination
2829733	Dup-2	Chromium	0.01	-	U	Blank contamination
2829733	BRGWC-29I	Lead	0.005	-	U	Blank contamination
2829733	BRGWC-47	Lead	0.005	-	U	Blank contamination
2829733	BRGWC-50	Lead	0.005	-	U	Blank contamination
2829733	BRGWC-30I	Boron	0.1	-	U	Blank contamination
2829733	BRGWC-45	Boron	0.1	-	U	Blank contamination
2829733	BRGWA-12S	Fluoride	-	-	J-	MS/MSD outside of acceptance criteria
2829733	BRGWC-52I	TDS	-	-	J	RPD exceedance between field duplicate and parent sample
30353316	BRGWA-23S	Radium-226	-	0.918	U	Blank contamination
30353316	BRGWC-25I	Radium-226	-	0.964	U	Blank contamination
30353316	BRGWC-27I	Radium-226	-	0.608	U	Blank contamination
30353316	BRGWC-29I	Radium-226	-	0.895	U	Blank contamination
30353316	BRGWC-47	Radium-226	-	0.778	U	Blank contamination
30353316	BRGWC-50	Radium-226	-	0.963	U	Blank contamination
30353316	BRGWC-52I	Radium-226	-	0.88	U	Blank contamination
30353316	BRGWC-50	Total Radium	-	1.73	U	Blank contamination
30353316	BRGWC-52I	Total Radium	-	2.3	U	Blank contamination
30353316	DUP-1	Radium-226	-	0.697	U	Blank contamination
30353316	DUP-2	Radium-226	-	1.05	U	Blank contamination
30353316	DUP-2	Total Radium	-	2.2	U	Blank contamination
30353316	BRGWC-30I	Radium-226	-	0.601	U	Blank contamination
30353316	BRGWC-30I	Total Radium	-	1.35	U	Blank contamination
30353316	BRGWC-32S	Radium-226	-	0.397	U	Blank contamination
30353316	BRGWA-12S	Radium-226	-	1.04	U	Blank contamination
30353316	BRGWA-12S	Total Radium		1.68	U	Blank contamination

Abbreviations:
RL : Reporting limit
SDG : Sample delivery group
TDS : Total dissolved solids
RPD: Relative percent difference
MS/MSD: Matrix spike/matrix spike duplicate
MDC : Minimum Detectable Concentration

Qualifiers:
U : Non-detect result
J : Estimated value
J- : Estimated value, bias low

APPENDIX B

STATISTICAL ANALYSES

Table 4.2.1: AP-BCD October 2019 Inter-Well Prediction Limit Statistically Significant Increase Summary	
Appendix III Parameter	**AP-BCD Monitoring Wells**
Boron	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I
Calcium	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I
Chloride	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-50, BRGWC-52I
Fluoride	No exceedances
pH	BRGWC-29I, BRGWC-50
Sulfate	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I
Total Dissolved Solids	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I

Table 4.2.3: AP-BCD March 2020 Inter-Well Prediction Limit Statistically Significant Increase Summary	
Appendix III Parameter	**AP-BCD Monitoring Wells**
Boron	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I
Calcium	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I
Chloride	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-32S, BRGWC-45, BRGWC-50, BRGWC-52I
Fluoride	No exceedances
pH	BRGWC-29I, BRGWC-50
Sulfate	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I
Total Dissolved Solids	BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-50, BRGWC-52I

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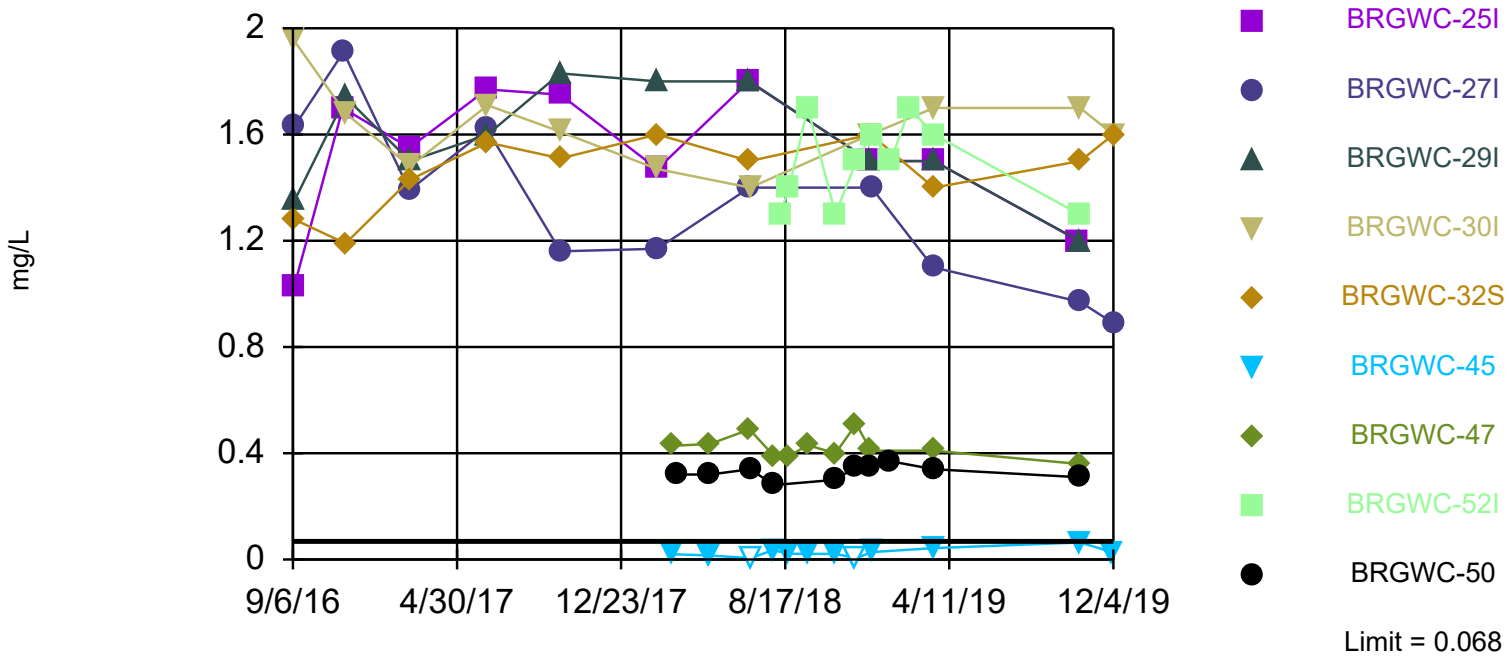
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-52I, BRGWC-50

Prediction Limit

Interwell Non-parametric



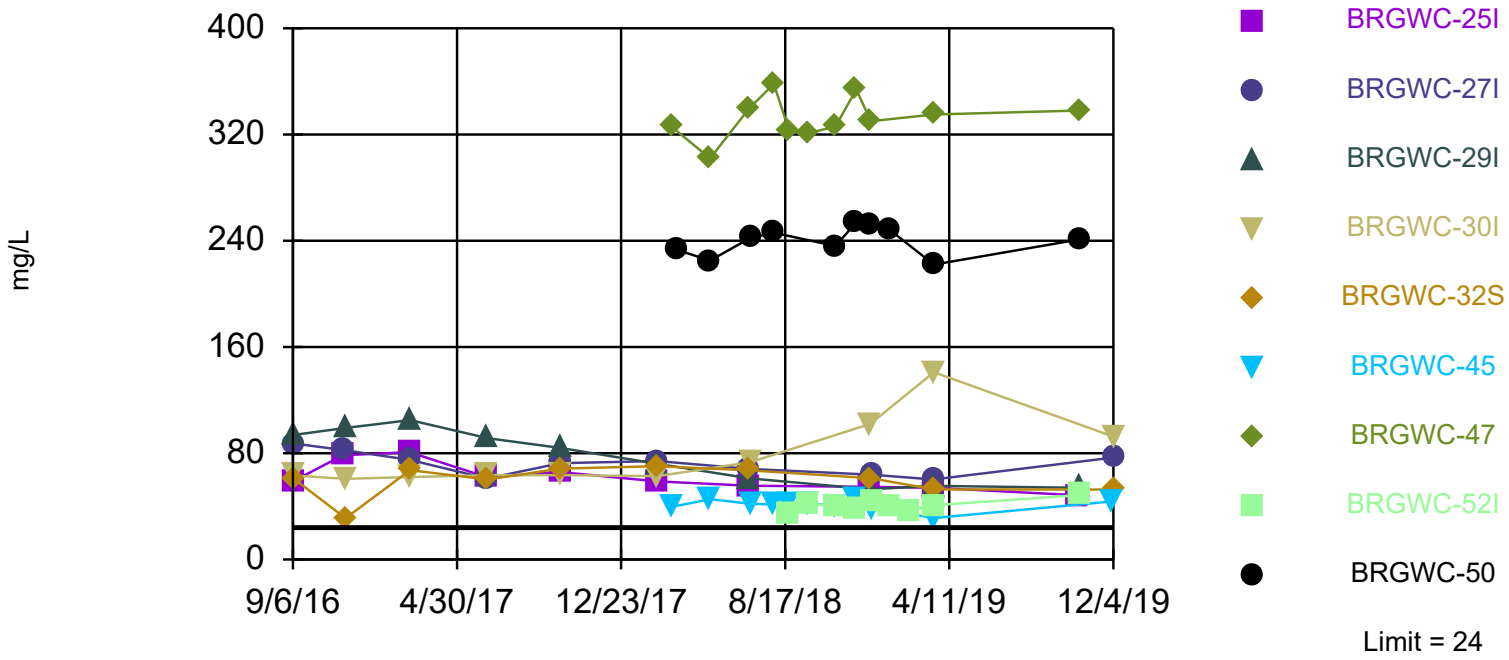
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 80 background values. 56.25% NDs. Annual per-constituent alpha = 0.005341. Individual comparison alpha = 0.0002975 (1 of 2). Comparing 9 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Boron Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I,..

Prediction Limit

Interwell Non-parametric



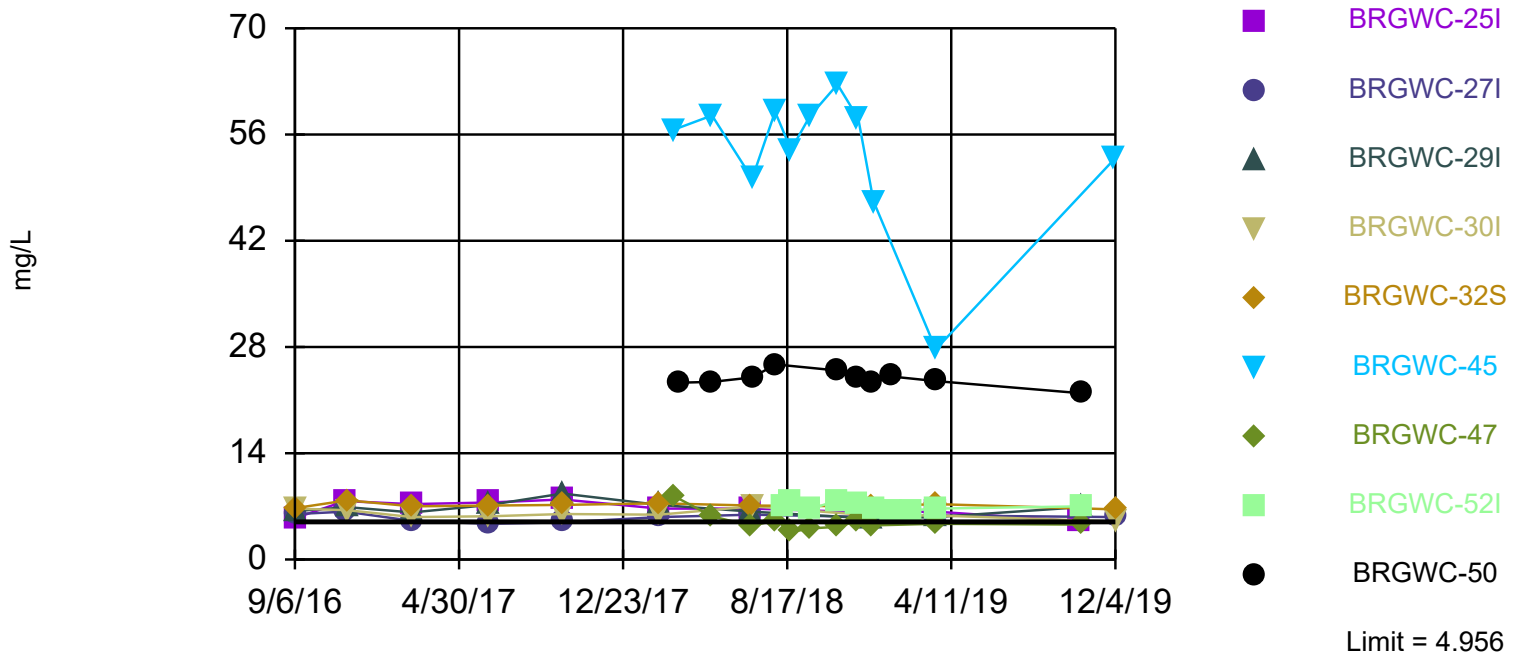
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 82 background values. 7.317% NDs. Annual per-constituent alpha = 0.005123. Individual comparison alpha = 0.0002853 (1 of 2). Comparing 9 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Calcium Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-52I, BRGWC-50

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.149, Std. Dev.=0.9233, n=82. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.964, critical = 0.959. Kappa = 1.957 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0008358. Comparing 9 points to limit.

Constituent: Chloride Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

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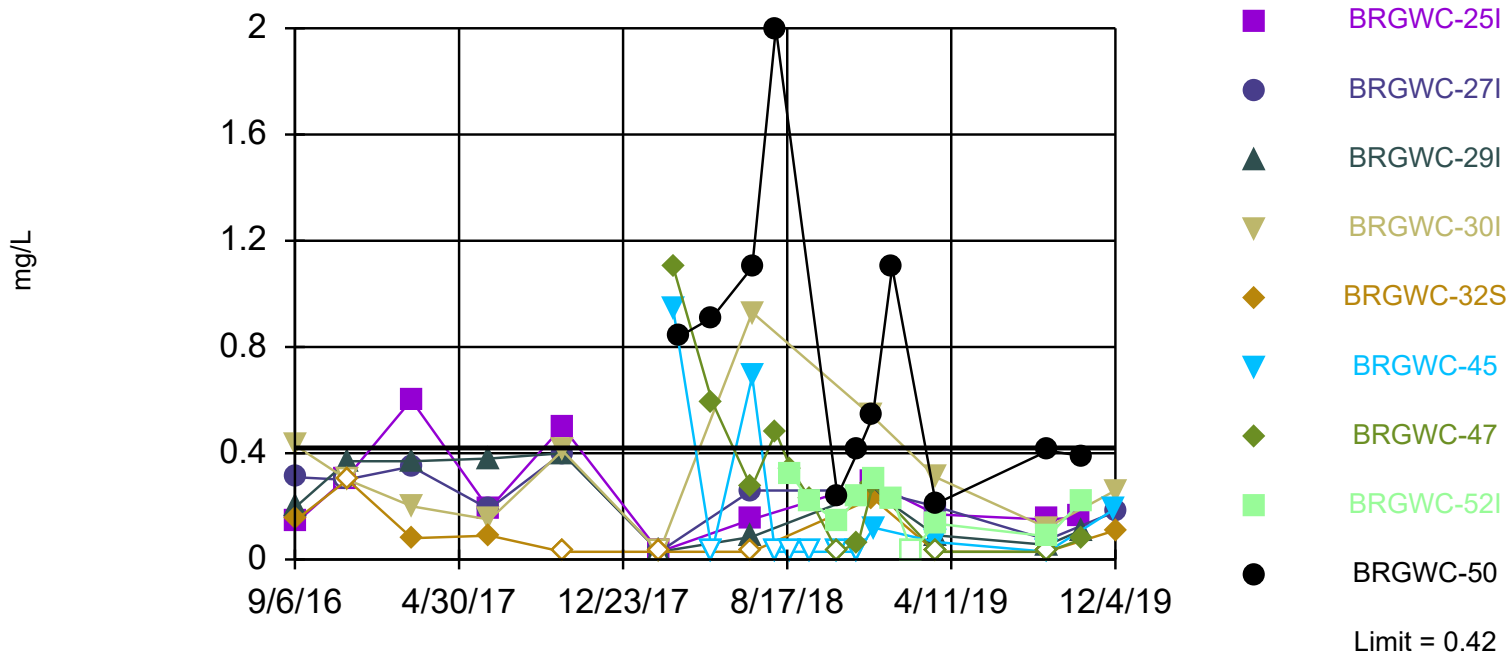
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



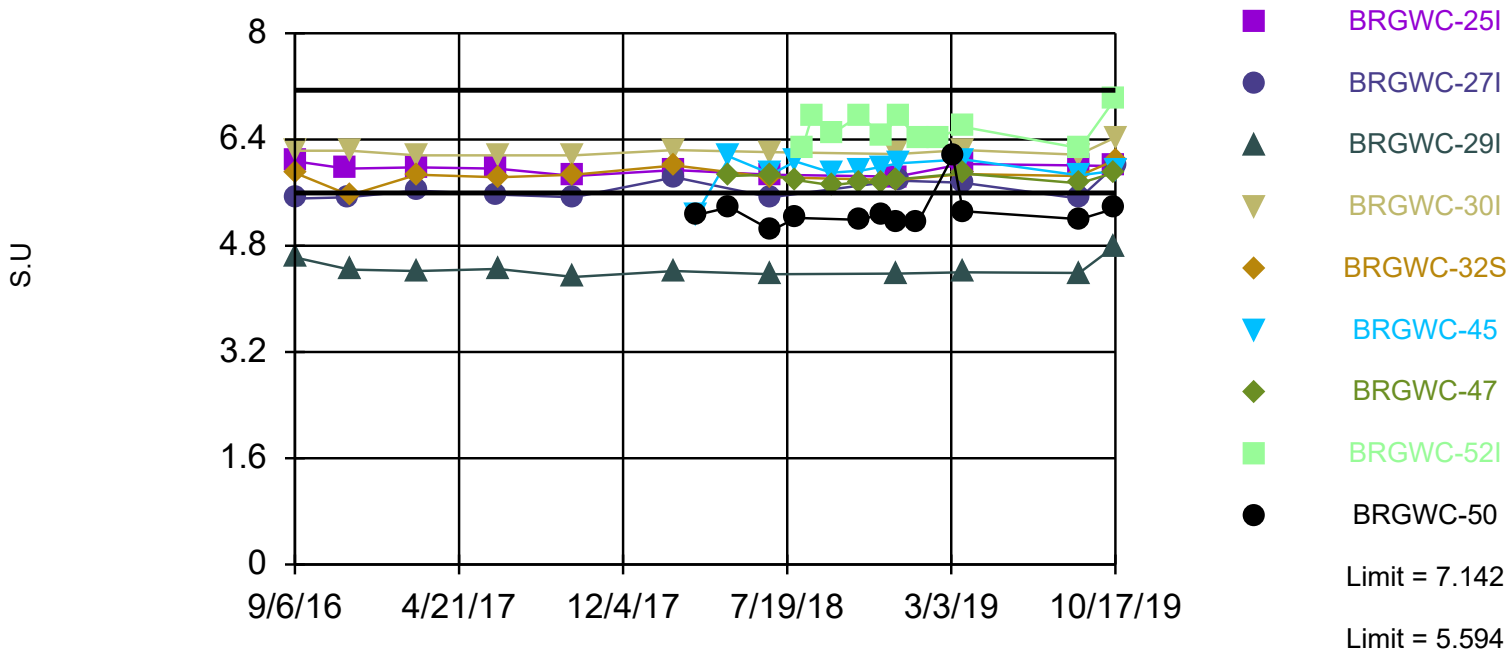
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 88 background values. 51.14% NDs. Annual per-constituent alpha = 0.004468. Individual comparison alpha = 0.0002487 (1 of 2). Comparing 9 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Fluoride Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Exceeds Limits: BRGWC-29I, BRGWC-50

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=6.368, Std. Dev.=0.3972, n=90. Seasonality was not detected with 95% confidence. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.99, critical = 0.961. Kappa = 1.949 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004179. Comparing 9 points to limit.

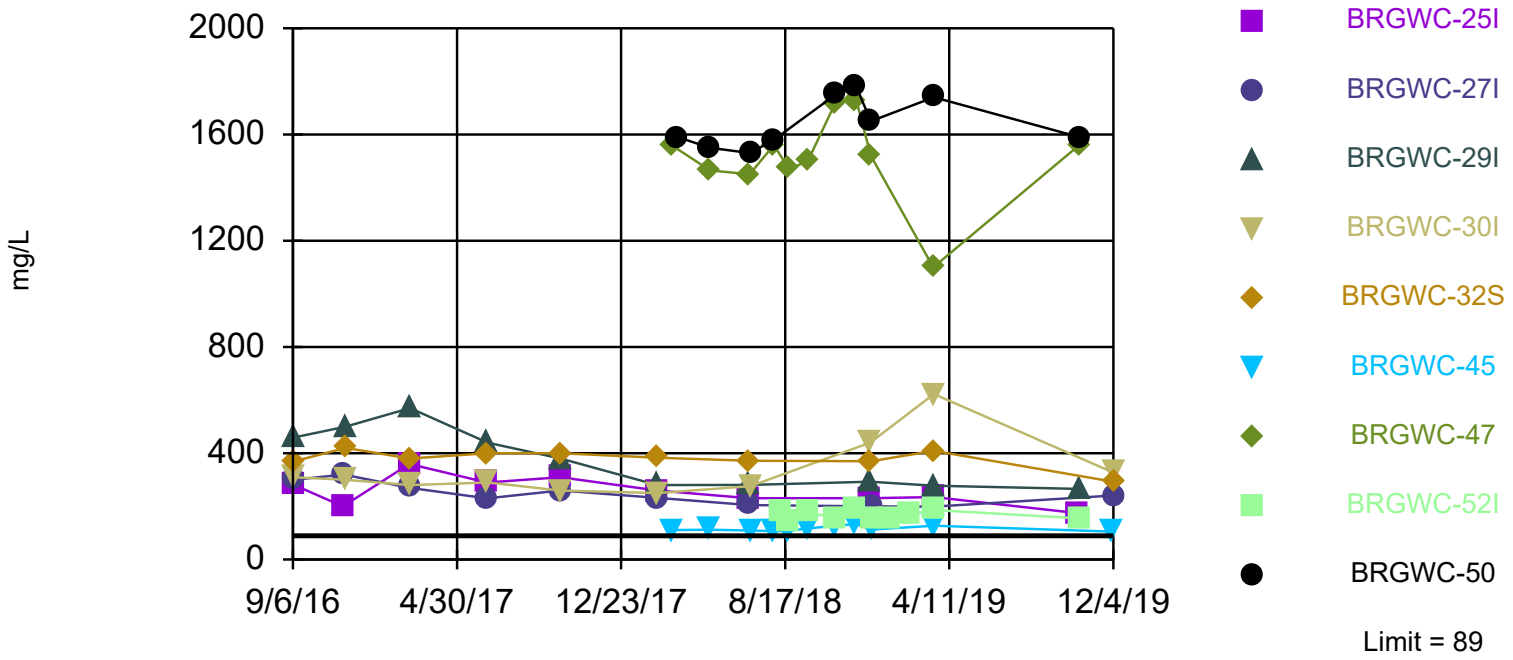
Constituent: pH Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I,..

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 82 background values. 8.537% NDs. Annual per-constituent alpha = 0.005123. Individual comparison alpha = 0.0002853 (1 of 2). Comparing 9 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Sulfate Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

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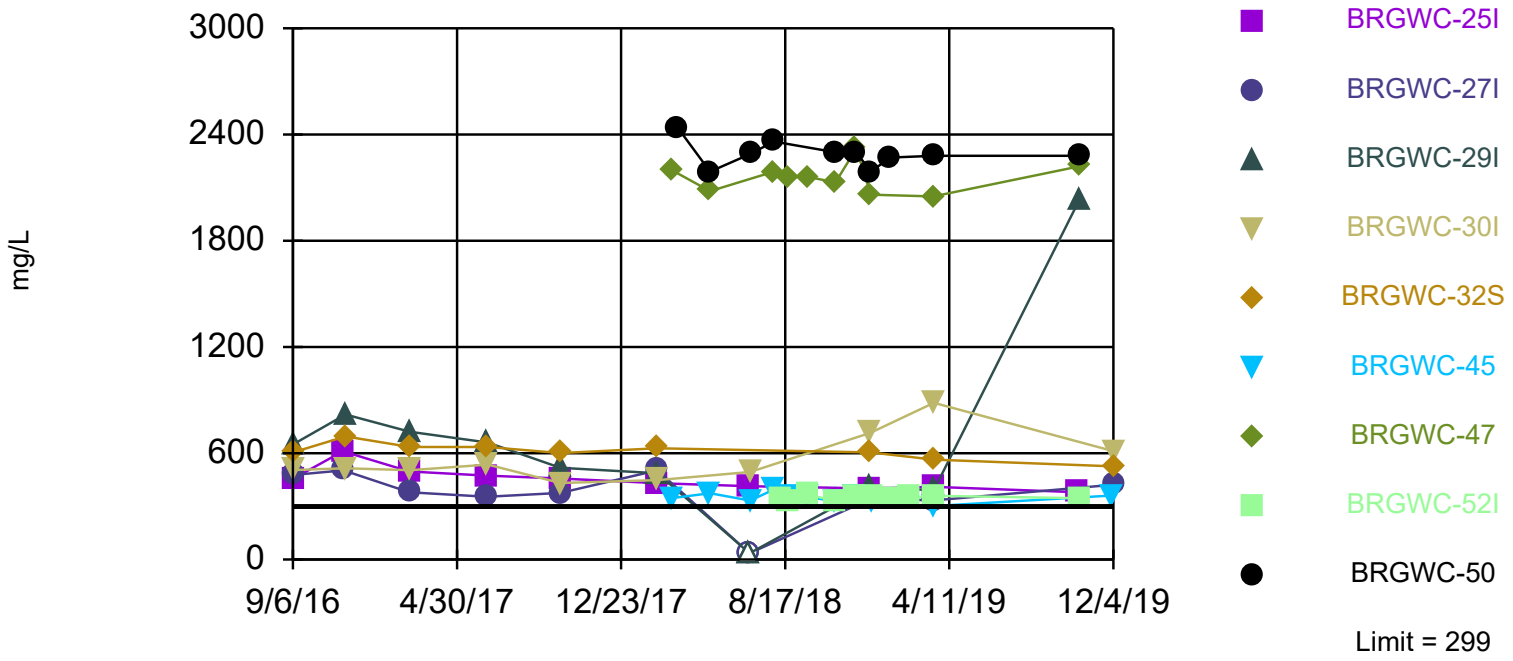
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I,..

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 82 background values. 6.098% NDs. Annual per-constituent alpha = 0.005123. Individual comparison alpha = 0.0002853 (1 of 2). Comparing 9 points to limit. Seasonality was not detected with 95% confidence.

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 10:40 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Interwell Prediction Limit

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:35 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**10/15/2019**	**1.2**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**12/4/2019**	**0.89**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**10/16/2019**	**1.2**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**12/4/2019**	**1.6**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**12/4/2019**	**1.6**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**10/16/2019**	**0.36**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**10/16/2019**	**1.3**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**10/16/2019**	**0.31**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**10/15/2019**	**48.3**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**12/4/2019**	**76.8**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**10/16/2019**	**54**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**12/4/2019**	**92.6**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**12/4/2019**	**52.7**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**12/3/2019**	**43.7**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**10/16/2019**	**338**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**10/16/2019**	**48.4**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**10/16/2019**	**241**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Chloride (mg/L)	**BRGWC-25I**	**4.956**	**n/a**	**10/15/2019**	**5**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-27I**	**4.956**	**n/a**	**12/4/2019**	**5.6**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-29I**	**4.956**	**n/a**	**10/16/2019**	**6.9**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-30I**	**4.956**	**n/a**	**12/4/2019**	**5**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-32S**	**4.956**	**n/a**	**12/4/2019**	**6.6**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-45**	**4.956**	**n/a**	**12/3/2019**	**52.8**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-52I**	**4.956**	**n/a**	**10/16/2019**	**7**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-50**	**4.956**	**n/a**	**10/16/2019**	**21.9**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
pH (S.U)	**BRGWC-29I**	**7.142**	**5.594**	**10/16/2019**	**4.79**	**Yes**	**90**	**0**	**No**	**0.000...**	Param 1 of 2
pH (S.U)	**BRGWC-50**	**7.142**	**5.594**	**10/16/2019**	**5.36**	**Yes**	**90**	**0**	**No**	**0.000...**	Param 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**10/15/2019**	**174**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**12/4/2019**	**241**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**10/16/2019**	**266**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**12/4/2019**	**327**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**12/4/2019**	**293**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**12/3/2019**	**105**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**10/16/2019**	**1560**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**10/16/2019**	**155**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**10/16/2019**	**1590**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-25I**	**299**	**n/a**	**10/15/2019**	**380**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**299**	**n/a**	**12/4/2019**	**422**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**10/16/2019**	**2030**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**12/4/2019**	**612**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**12/4/2019**	**526**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-45**	**299**	**n/a**	**12/3/2019**	**362**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**10/16/2019**	**2220**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-52I**	**299**	**n/a**	**10/16/2019**	**346**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**10/16/2019**	**2280**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2

Interwell Prediction Limit

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:35 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**10/15/2019**	**1.2**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**12/4/2019**	**0.89**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**10/16/2019**	**1.2**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**12/4/2019**	**1.6**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**12/4/2019**	**1.6**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	BRGWC-45	0.068	n/a	12/3/2019	0.027	No	80	56.25	n/a	0.000...	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**10/16/2019**	**0.36**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**10/16/2019**	**1.3**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**10/16/2019**	**0.31**	**Yes**	**80**	**56.25**	**n/a**	**0.000...**	NP (NDs) 1 of 2
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**10/15/2019**	**48.3**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**12/4/2019**	**76.8**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**10/16/2019**	**54**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**12/4/2019**	**92.6**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**12/4/2019**	**52.7**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**12/3/2019**	**43.7**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**10/16/2019**	**338**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**10/16/2019**	**48.4**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**10/16/2019**	**241**	**Yes**	**82**	**7.317**	**n/a**	**0.000...**	NP (normality) 1 of 2
Chloride (mg/L)	**BRGWC-25I**	**4.956**	**n/a**	**10/15/2019**	**5**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-27I**	**4.956**	**n/a**	**12/4/2019**	**5.6**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-29I**	**4.956**	**n/a**	**10/16/2019**	**6.9**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-30I**	**4.956**	**n/a**	**12/4/2019**	**5**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-32S**	**4.956**	**n/a**	**12/4/2019**	**6.6**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-45**	**4.956**	**n/a**	**12/3/2019**	**52.8**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	BRGWC-47	4.956	n/a	10/16/2019	4.6	No	82	0	No	0.000...	Param 1 of 2
Chloride (mg/L)	**BRGWC-52I**	**4.956**	**n/a**	**10/16/2019**	**7**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Chloride (mg/L)	**BRGWC-50**	**4.956**	**n/a**	**10/16/2019**	**21.9**	**Yes**	**82**	**0**	**No**	**0.000...**	Param 1 of 2
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	10/15/2019	0.16	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	12/4/2019	0.18	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	10/16/2019	0.11	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	12/4/2019	0.26	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	12/4/2019	0.11	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	12/3/2019	0.19	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	10/16/2019	0.076	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	10/16/2019	0.22	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	10/16/2019	0.39	No	88	51.14	n/a	0.000...	NP (NDs) 1 of 2
pH (S.U)	BRGWC-25I	7.142	5.594	10/15/2019	6	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	BRGWC-27I	7.142	5.594	10/17/2019	6.01	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	**BRGWC-29I**	**7.142**	**5.594**	**10/16/2019**	**4.79**	**Yes**	**90**	**0**	**No**	**0.000...**	Param 1 of 2
pH (S.U)	BRGWC-30I	7.142	5.594	10/17/2019	6.43	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	BRGWC-32S	7.142	5.594	10/17/2019	6.09	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	BRGWC-45	7.142	5.594	10/17/2019	5.93	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	BRGWC-47	7.142	5.594	10/16/2019	5.9	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	BRGWC-52I	7.142	5.594	10/16/2019	7	No	90	0	No	0.000...	Param 1 of 2
pH (S.U)	**BRGWC-50**	**7.142**	**5.594**	**10/16/2019**	**5.36**	**Yes**	**90**	**0**	**No**	**0.000...**	Param 1 of 2
Sulfate (mg/L)	**BRGWC-25I**	**89**	**n/a**	**10/15/2019**	**174**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-27I**	**89**	**n/a**	**12/4/2019**	**241**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-29I**	**89**	**n/a**	**10/16/2019**	**266**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-30I**	**89**	**n/a**	**12/4/2019**	**327**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-32S**	**89**	**n/a**	**12/4/2019**	**293**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2

Interwell Prediction Limit

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:35 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Sulfate (mg/L)	**BRGWC-45**	**89**	**n/a**	**12/3/2019**	**105**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-47**	**89**	**n/a**	**10/16/2019**	**1560**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-52I**	**89**	**n/a**	**10/16/2019**	**155**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Sulfate (mg/L)	**BRGWC-50**	**89**	**n/a**	**10/16/2019**	**1590**	**Yes**	**82**	**8.537**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-25I**	**299**	**n/a**	**10/15/2019**	**380**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-27I**	**299**	**n/a**	**12/4/2019**	**422**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-29I**	**299**	**n/a**	**10/16/2019**	**2030**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-30I**	**299**	**n/a**	**12/4/2019**	**612**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-32S**	**299**	**n/a**	**12/4/2019**	**526**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-45**	**299**	**n/a**	**12/3/2019**	**362**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-47**	**299**	**n/a**	**10/16/2019**	**2220**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-52I**	**299**	**n/a**	**10/16/2019**	**346**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2
Total Dissolved Solids (mg/L)	**BRGWC-50**	**299**	**n/a**	**10/16/2019**	**2280**	**Yes**	**82**	**6.098**	**n/a**	**0.000...**	NP (normality) 1 of 2

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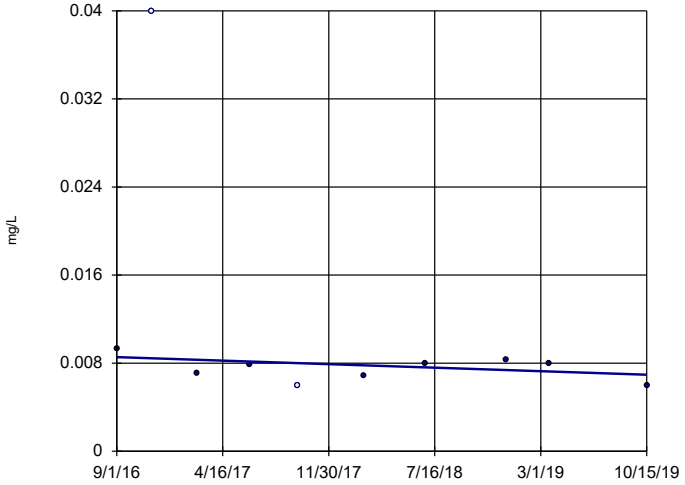
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 10

Slope = -0.0005108 units per year.

Mann-Kendall statistic = -11
critical = -27

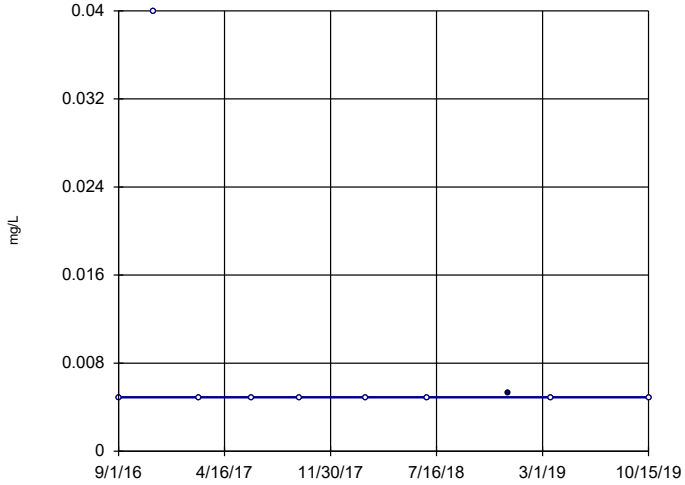
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -3
critical = -27

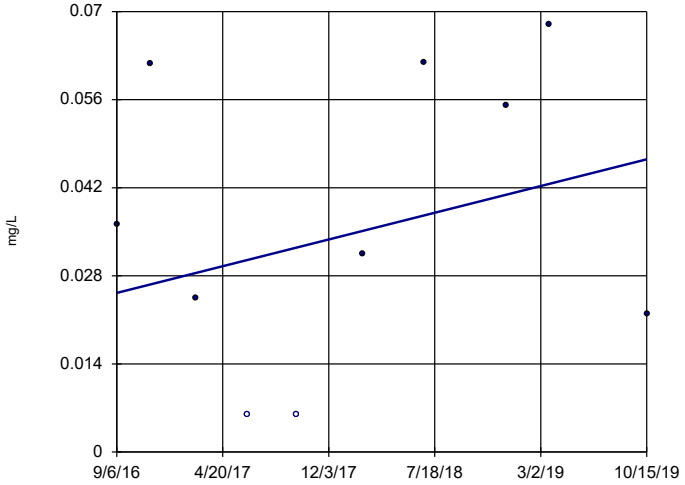
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 10

Slope = 0.006838 units per year.

Mann-Kendall statistic = 6
critical = 27

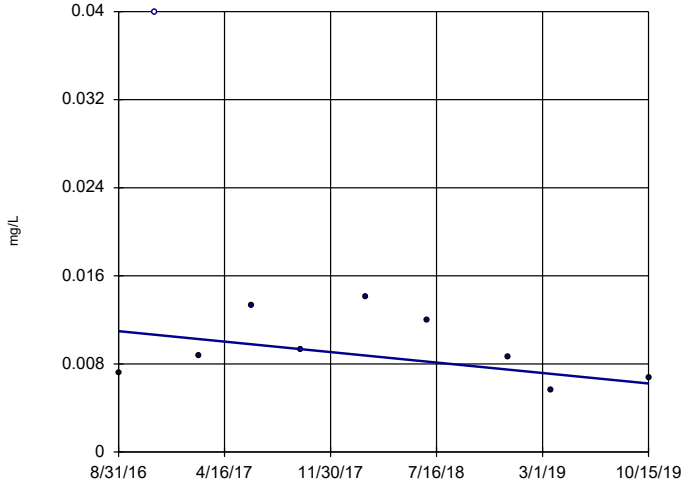
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 10

Slope = -0.001521 units per year.

Mann-Kendall statistic = -15
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)

n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -7
critical = -27

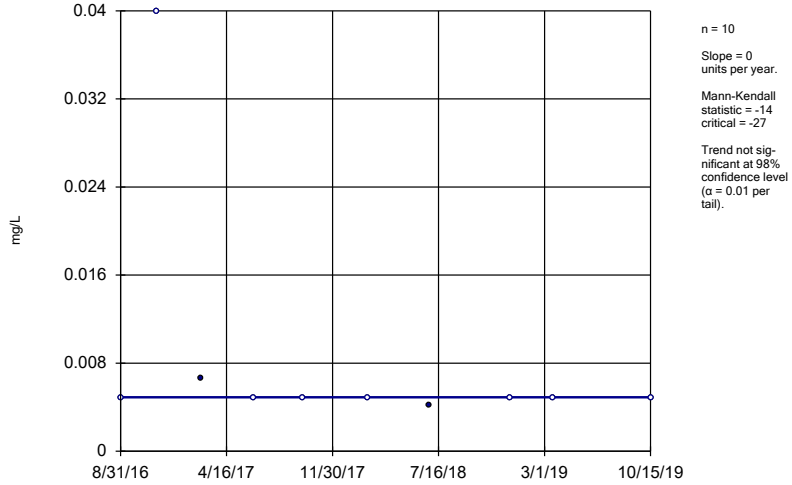
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -27

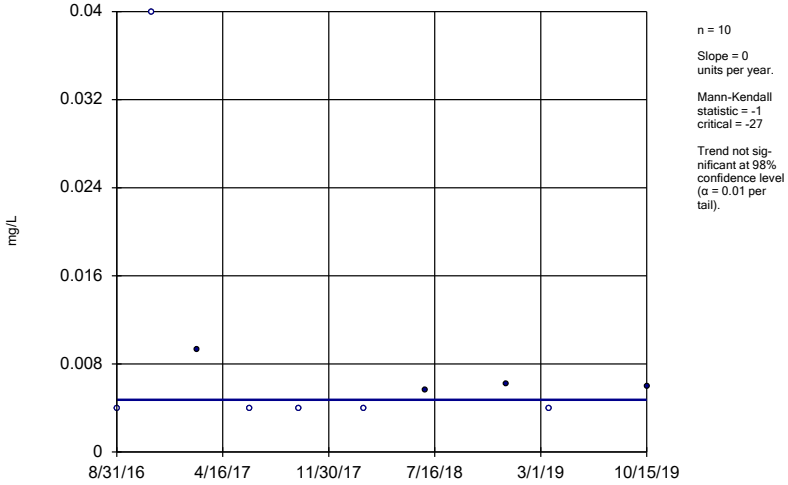
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -27

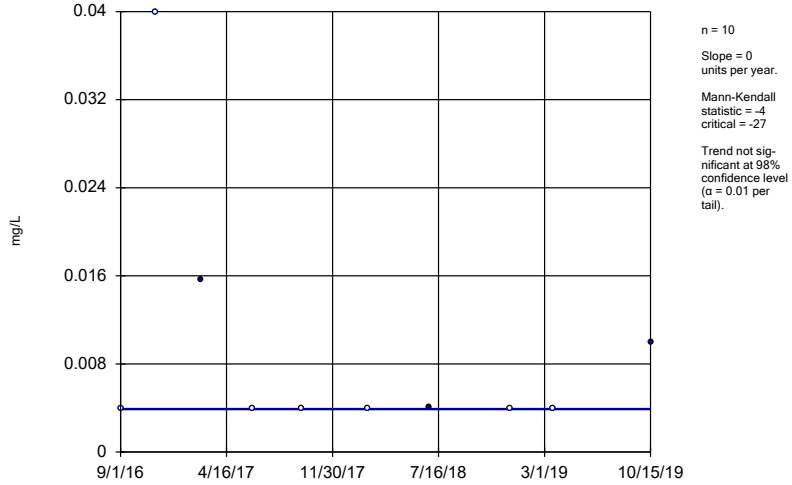
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = 0 units per year.

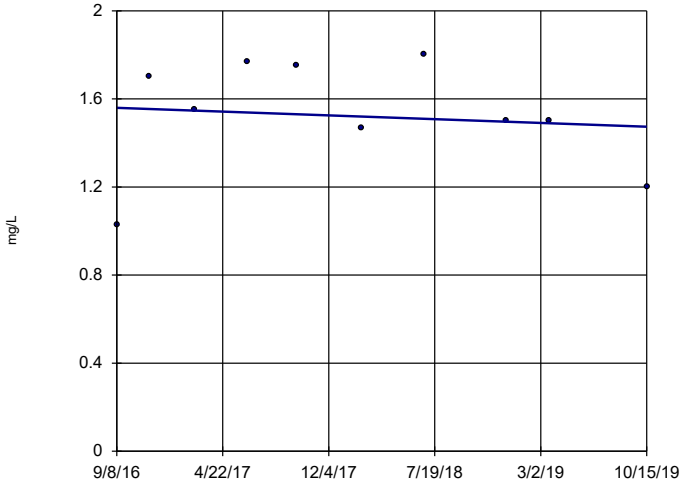
Mann-Kendall statistic = -4
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-25I



n = 10

Slope = -0.02744 units per year.

Mann-Kendall statistic = -4
critical = -27

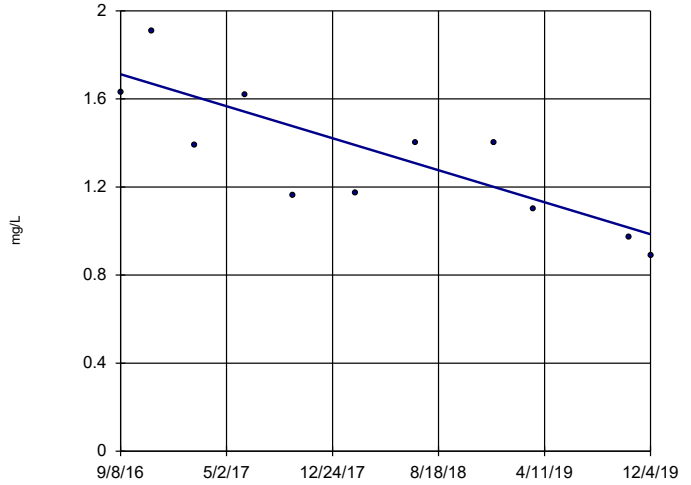
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -0.2243 units per year.

Mann-Kendall statistic = -36
critical = -31

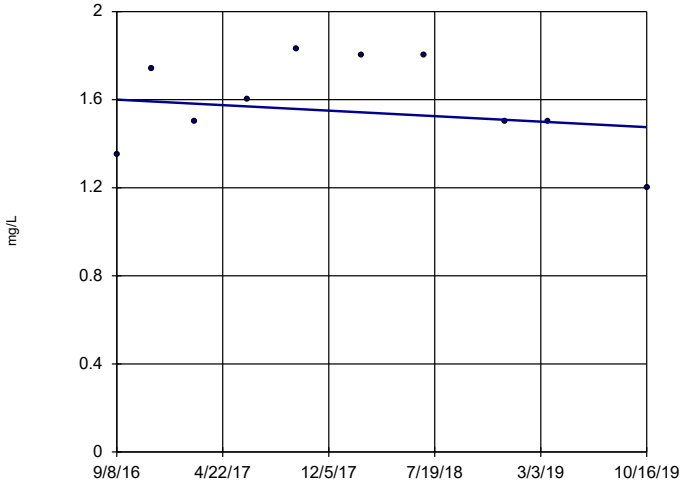
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-29I



n = 10

Slope = -0.04011 units per year.

Mann-Kendall statistic = -5
critical = -27

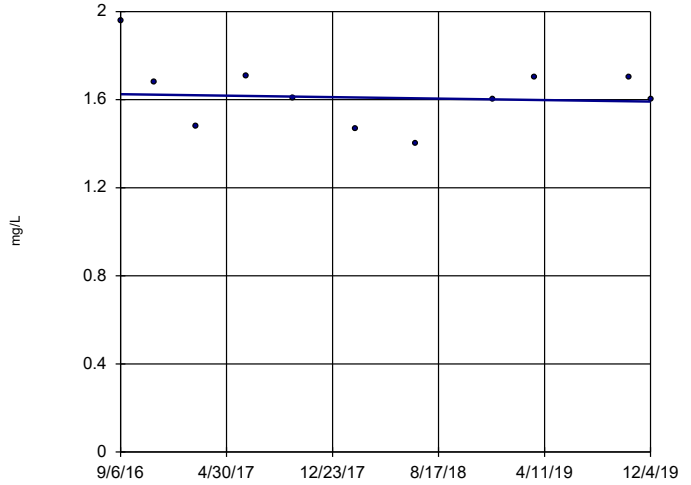
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = -0.01022 units per year.

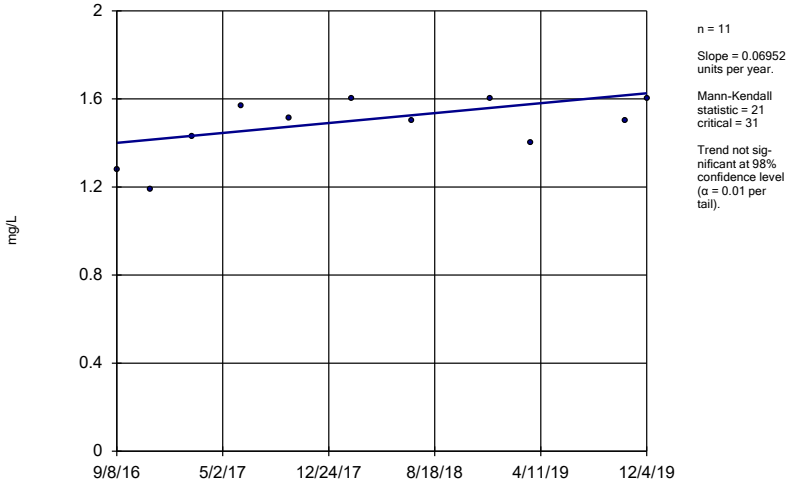
Mann-Kendall statistic = -11
critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = 0.06952 units per year.

Mann-Kendall statistic = 21 critical = 31

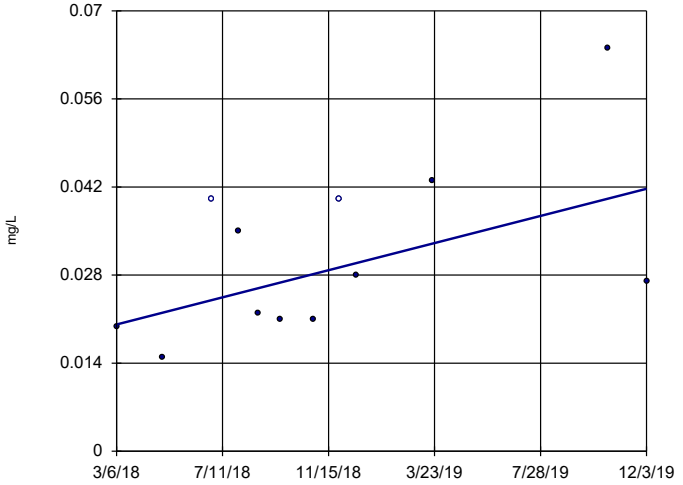
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-45



n = 12

Slope = 0.01234 units per year.

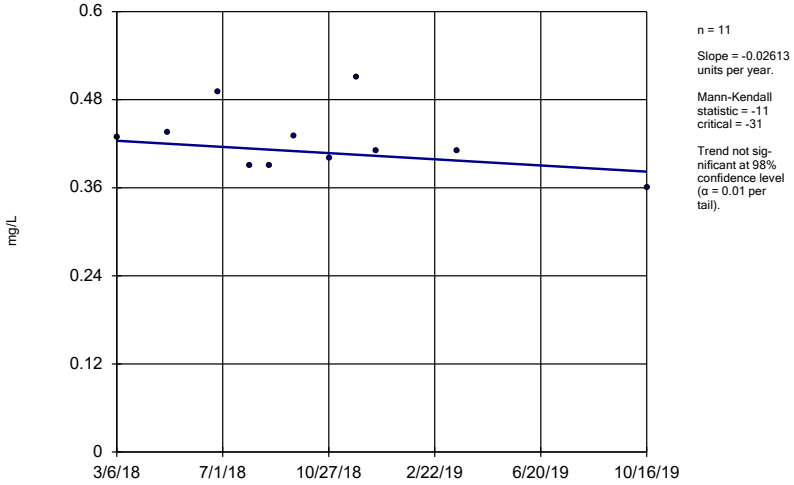
Mann-Kendall statistic = 26 critical = 35

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-47



n = 11

Slope = -0.02613 units per year.

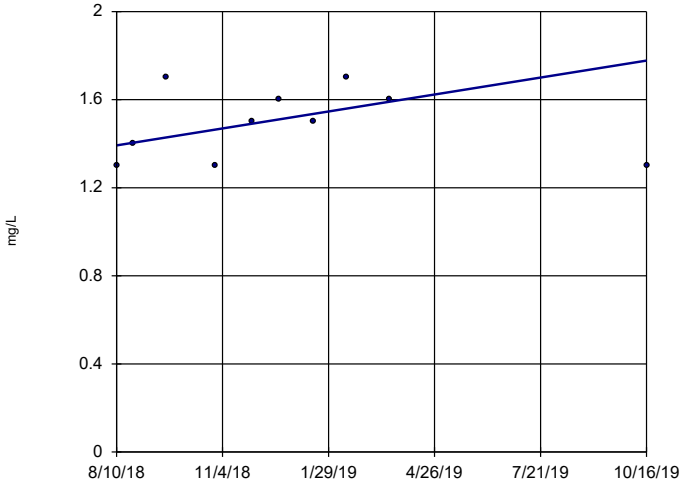
Mann-Kendall statistic = -11 critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = 0.3259 units per year.

Mann-Kendall statistic = 9 critical = 27

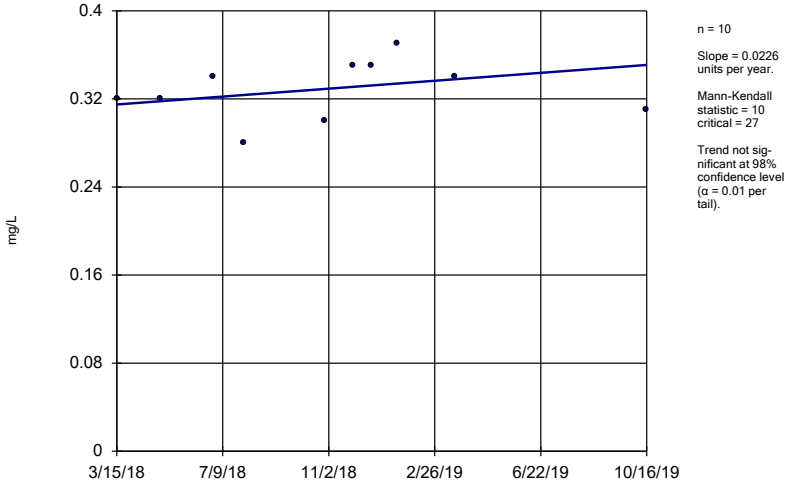
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-50



n = 10

Slope = 0.0226 units per year.

Mann-Kendall statistic = 10 critical = 27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Boron Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

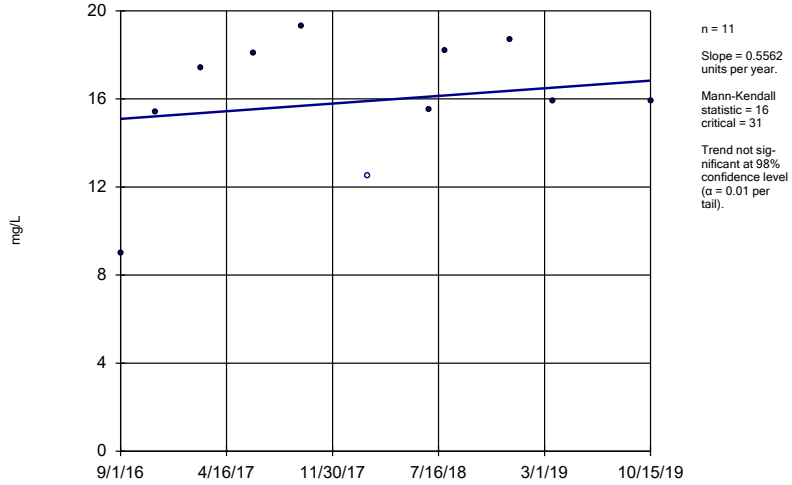
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = 0.5562 units per year.

Mann-Kendall statistic = 16 critical = 31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

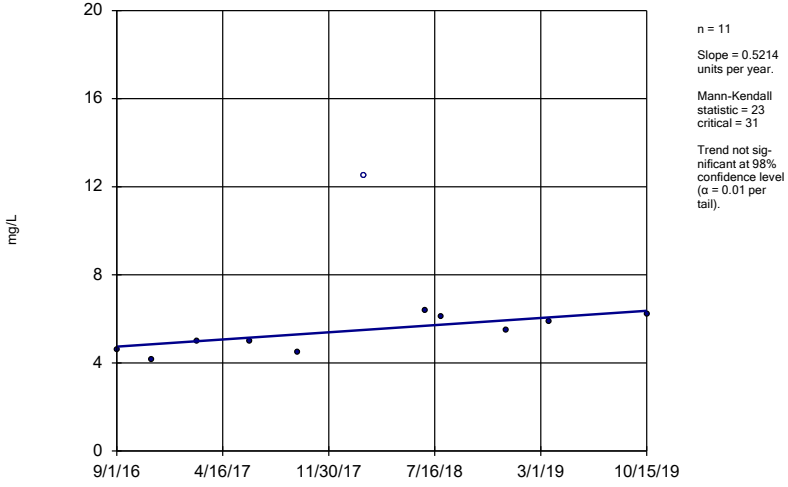
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = 0.5214 units per year.

Mann-Kendall statistic = 23 critical = 31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

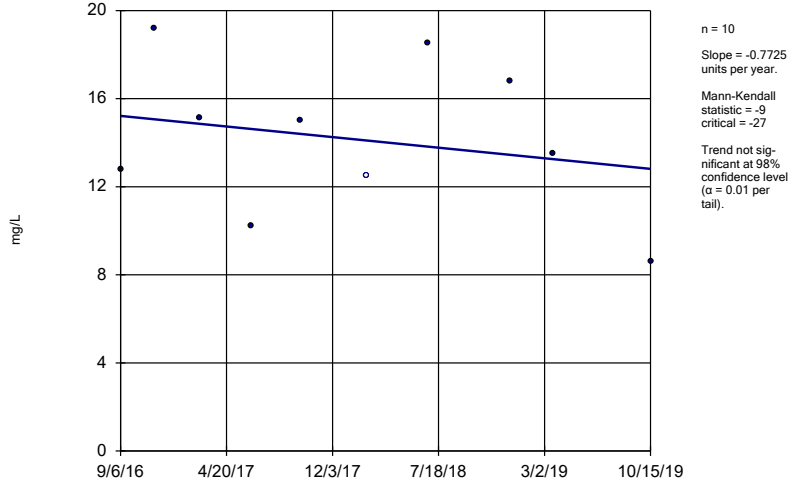
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 10

Slope = -0.7725 units per year.

Mann-Kendall statistic = -9 critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

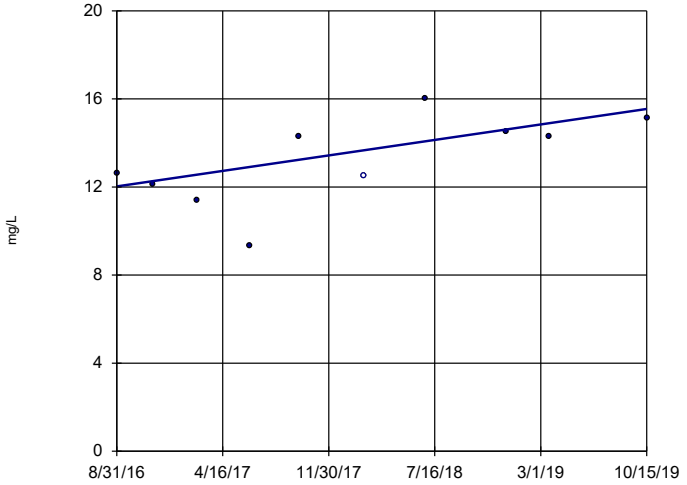
Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 10

Slope = 1.125 units per year.

Mann-Kendall statistic = 20
critical = 27

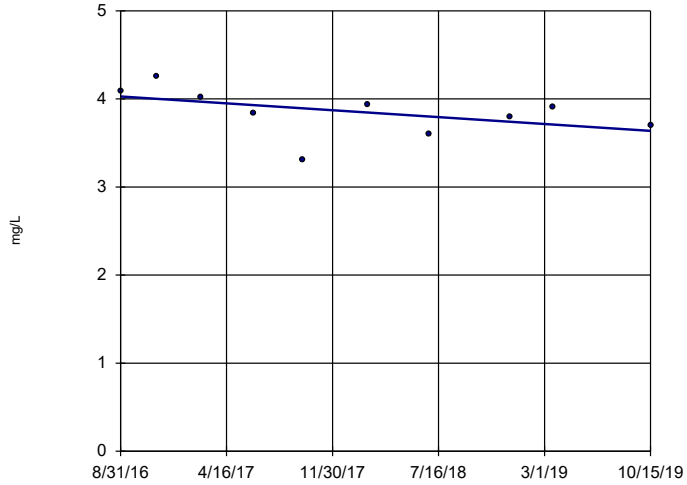
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 10

Slope = -0.1249 units per year.

Mann-Kendall statistic = -21
critical = -27

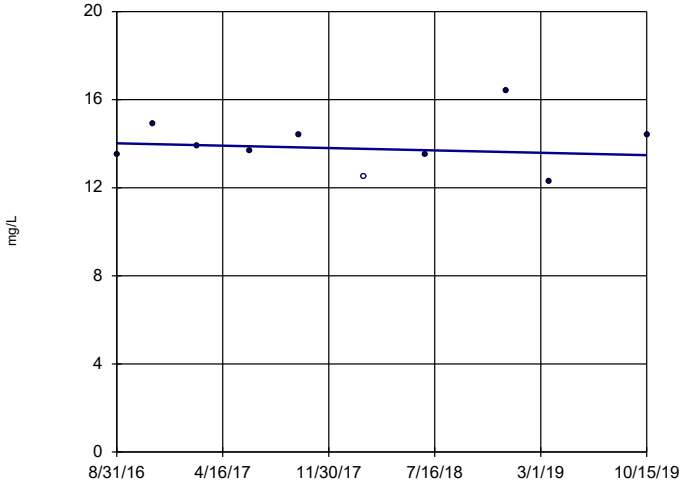
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 10

Slope = -0.1717 units per year.

Mann-Kendall statistic = -3
critical = -27

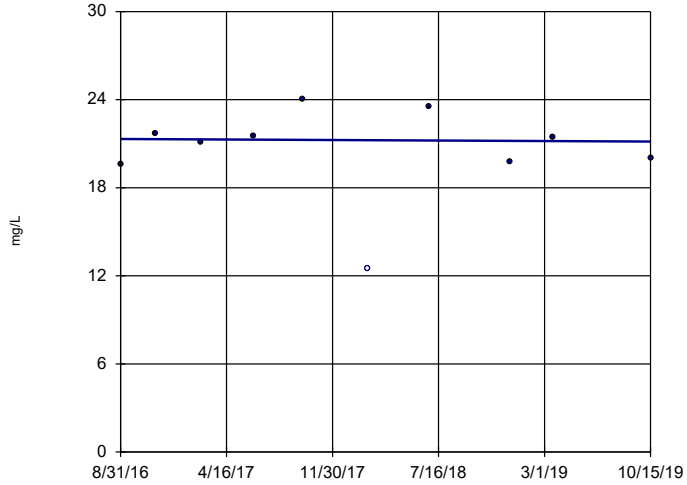
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 10

Slope = -0.05659 units per year.

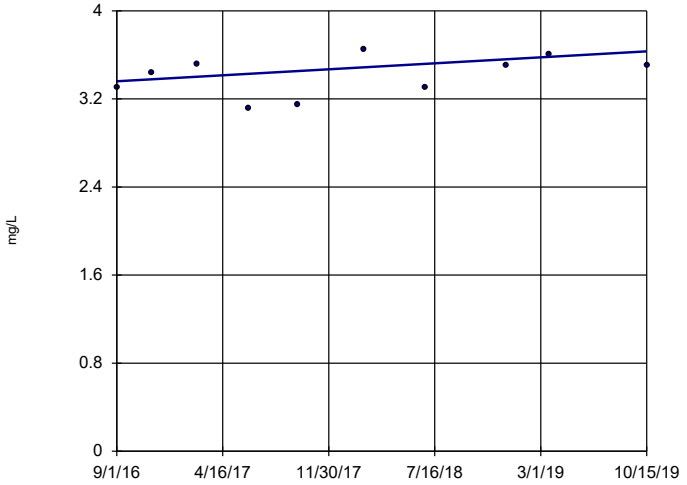
Mann-Kendall statistic = -1
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = 0.08711 units per year.

Mann-Kendall statistic = 13
critical = 27

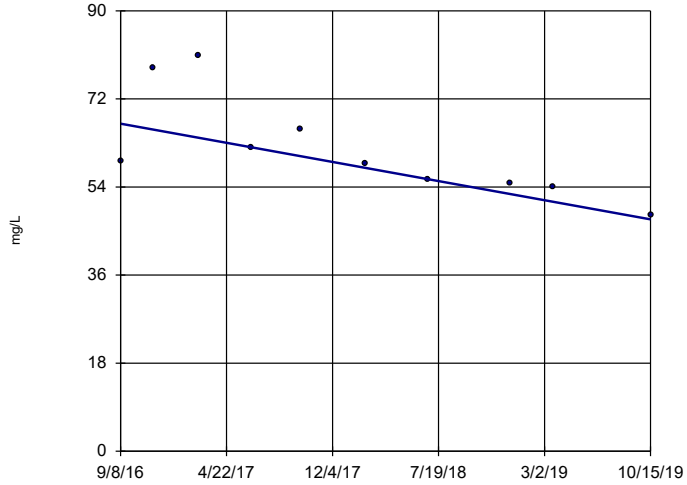
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-25I



n = 10

Slope = -6.303 units per year.

Mann-Kendall statistic = -33
critical = -27

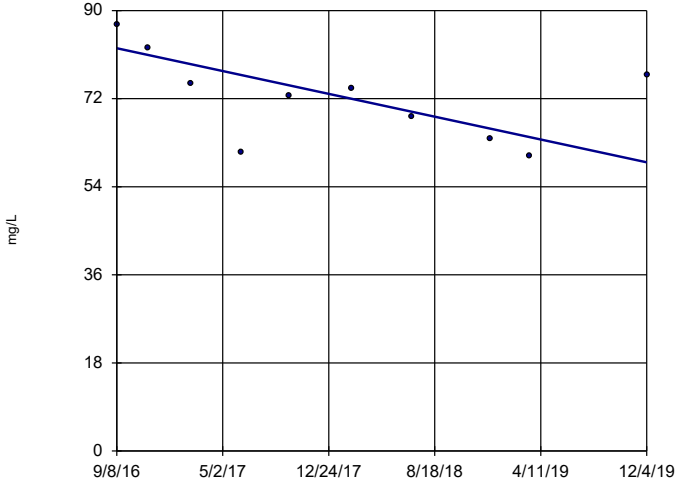
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-27I



n = 10

Slope = -7.194 units per year.

Mann-Kendall statistic = -21
critical = -27

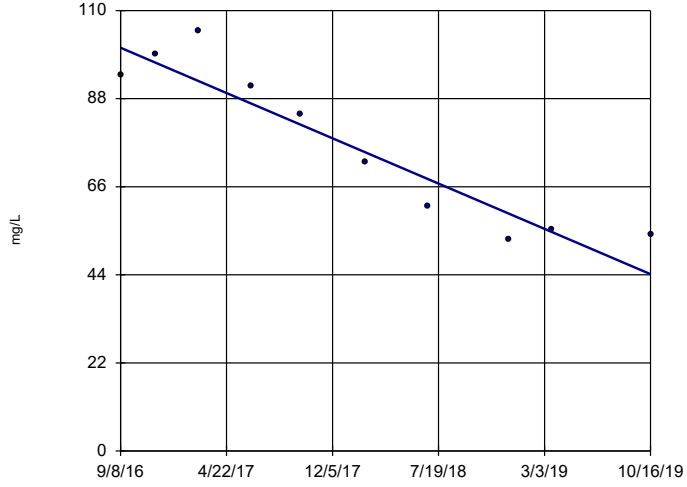
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-29I



n = 10

Slope = -18.22 units per year.

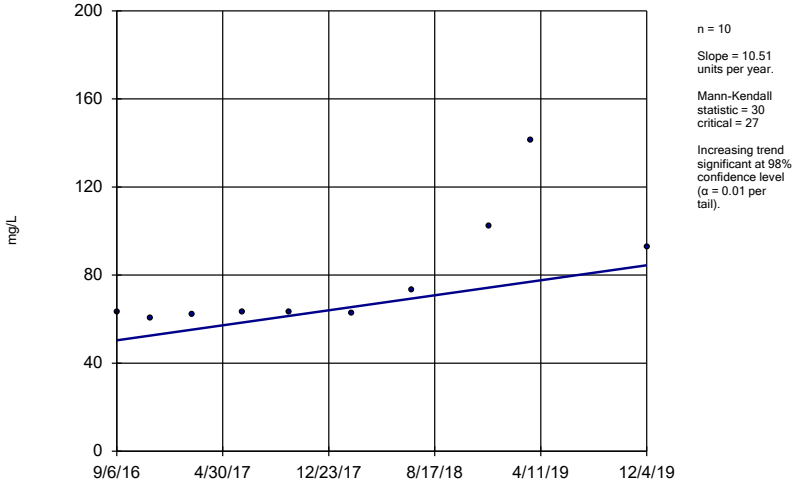
Mann-Kendall statistic = -35
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-30I



n = 10

Slope = 10.51 units per year.

Mann-Kendall statistic = 30 critical = 27

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

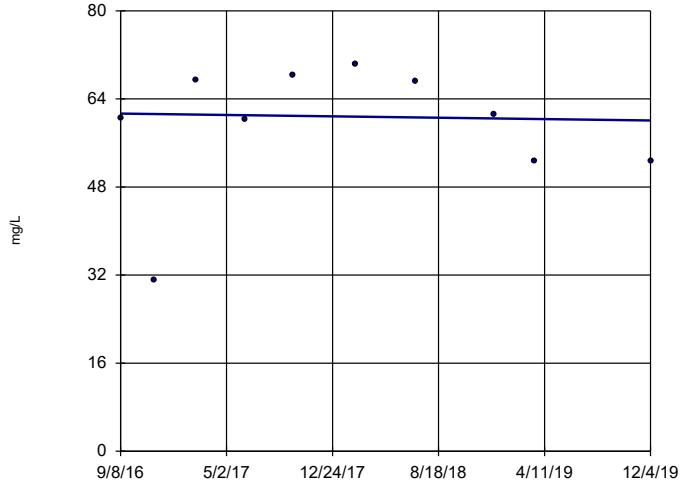
Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-32S



n = 10

Slope = -0.3925 units per year.

Mann-Kendall statistic = -5 critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

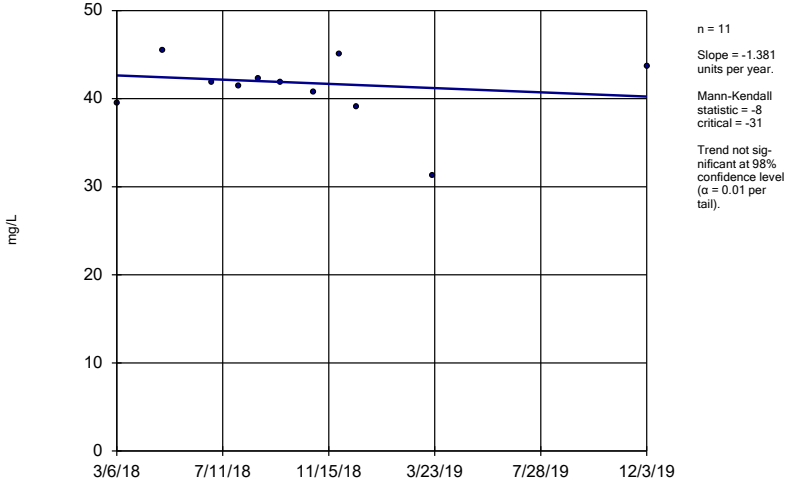
Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-45



n = 11

Slope = -1.381 units per year.

Mann-Kendall statistic = -8 critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

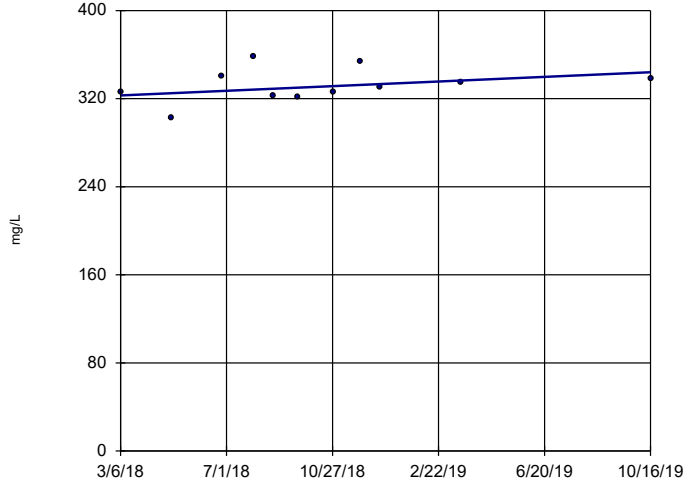
Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-47



n = 11

Slope = 13.07 units per year.

Mann-Kendall statistic = 14 critical = 31

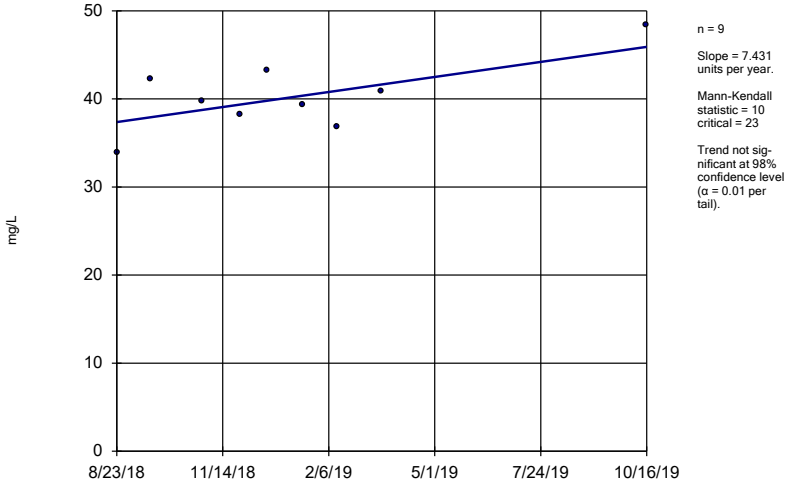
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-52I



n = 9

Slope = 7.431 units per year.

Mann-Kendall statistic = 10 critical = 23

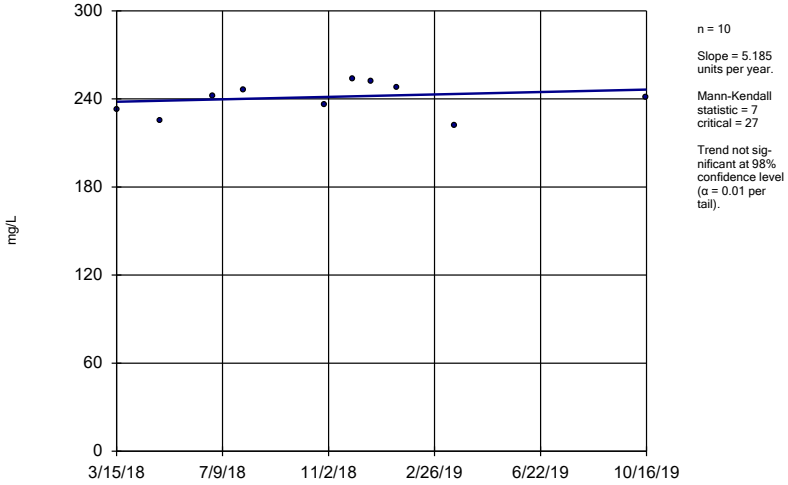
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-50



n = 10

Slope = 5.185 units per year.

Mann-Kendall statistic = 7 critical = 27

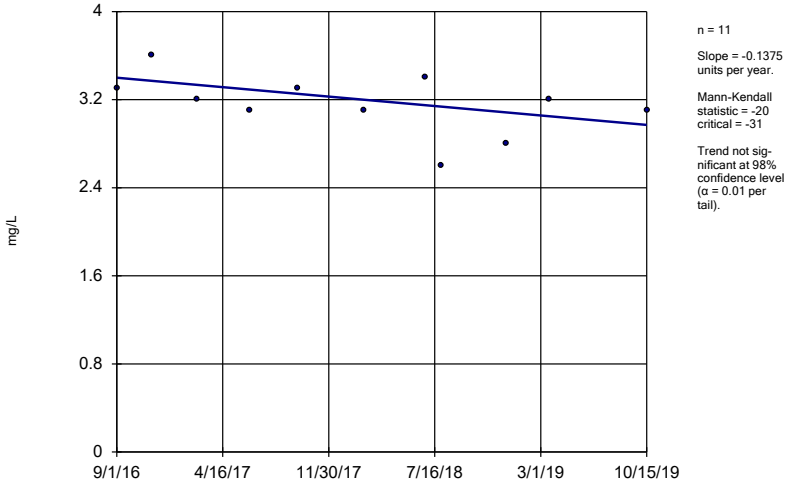
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Calcium Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = -0.1375 units per year.

Mann-Kendall statistic = -20 critical = -31

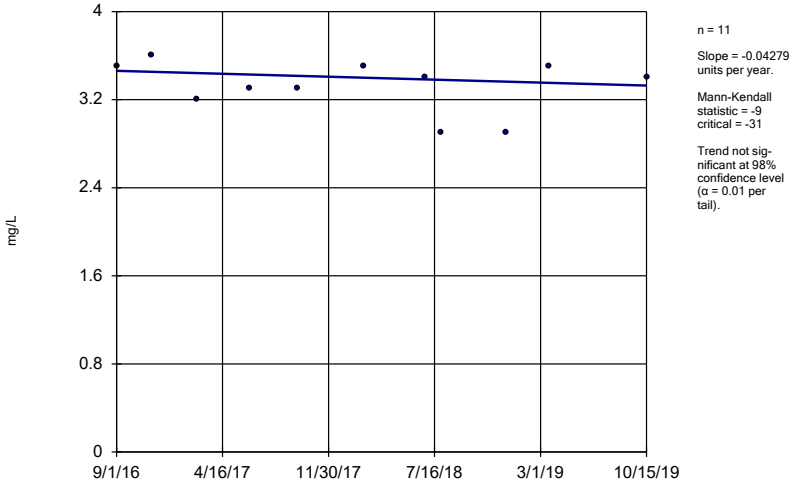
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = -0.04279 units per year.

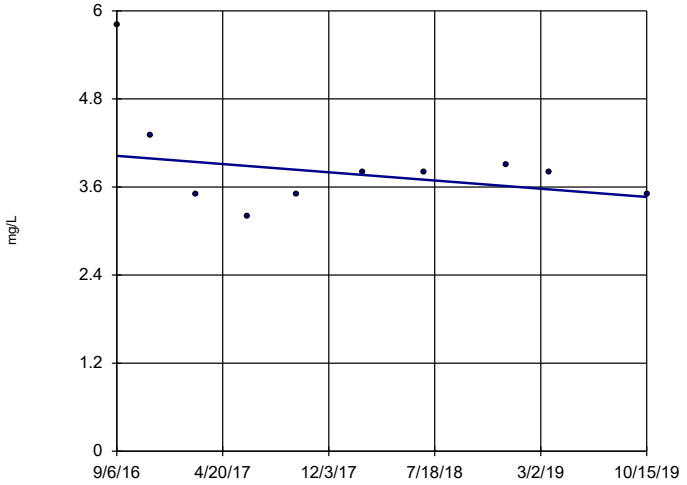
Mann-Kendall statistic = -9 critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-23S (bg)



n = 10

Slope = -0.1801 units per year.

Mann-Kendall statistic = -7
critical = -27

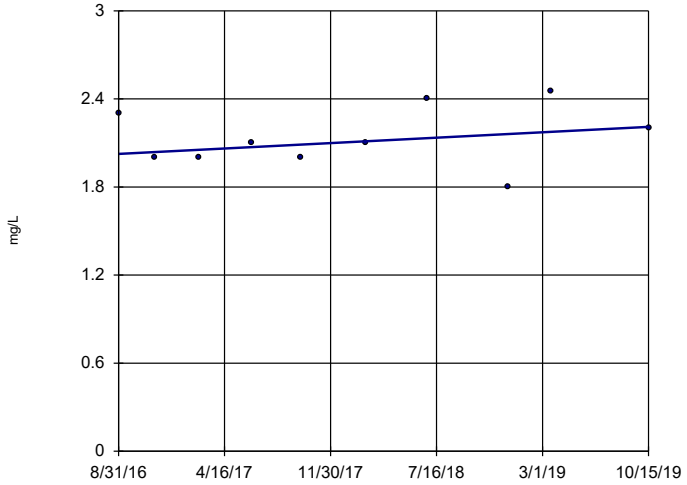
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 10

Slope = 0.05887 units per year.

Mann-Kendall statistic = 9
critical = 27

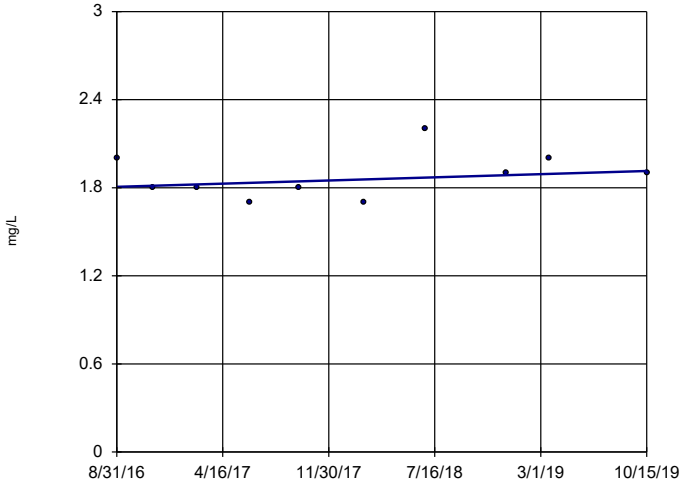
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:44 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 10

Slope = 0.03434 units per year.

Mann-Kendall statistic = 7
critical = 27

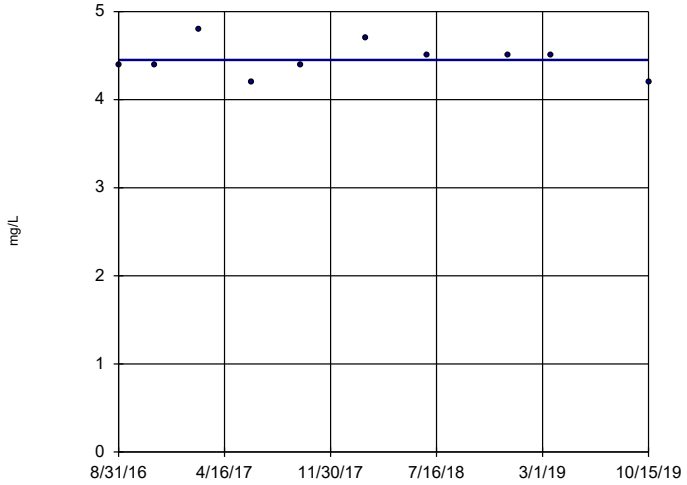
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 10

Slope = 0 units per year.

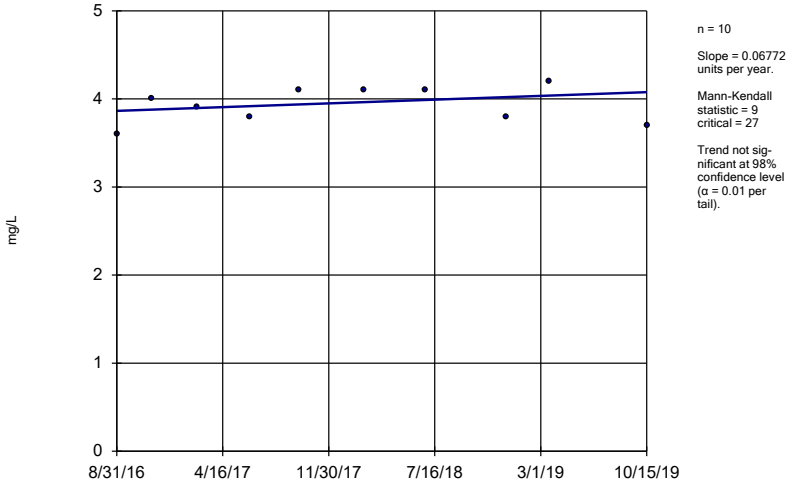
Mann-Kendall statistic = 0
critical = 27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-5S (bg)



n = 10

Slope = 0.06772 units per year.

Mann-Kendall statistic = 9
critical = 27

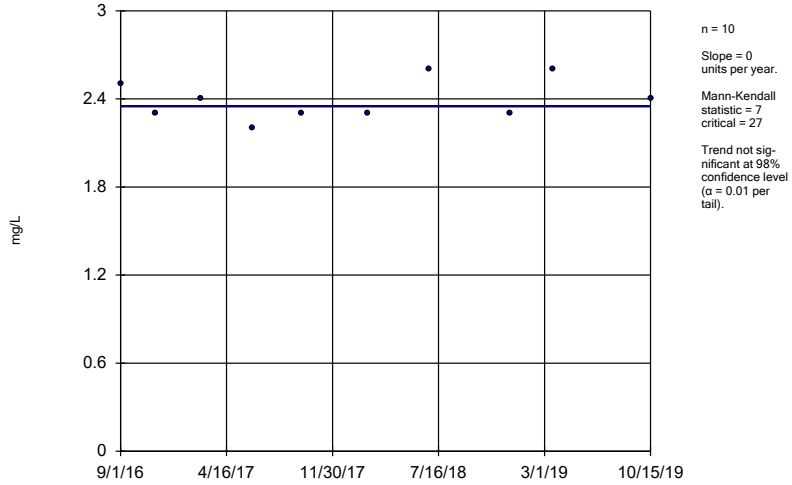
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = 7
critical = 27

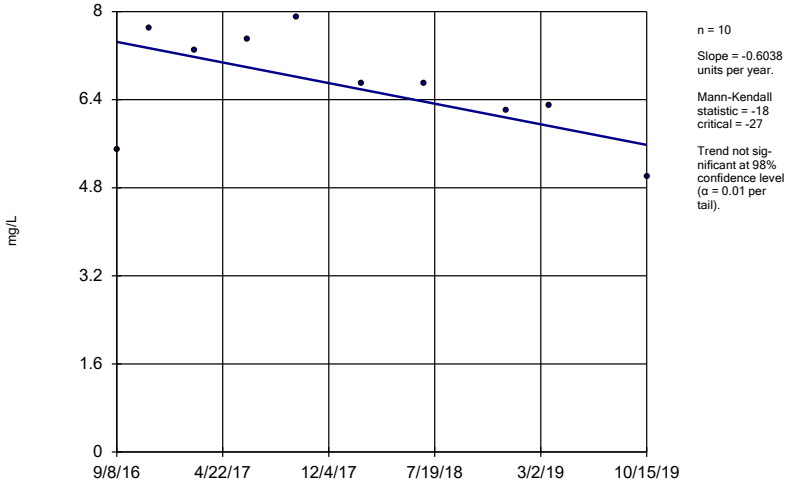
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-25I



n = 10

Slope = -0.6038 units per year.

Mann-Kendall statistic = -18
critical = -27

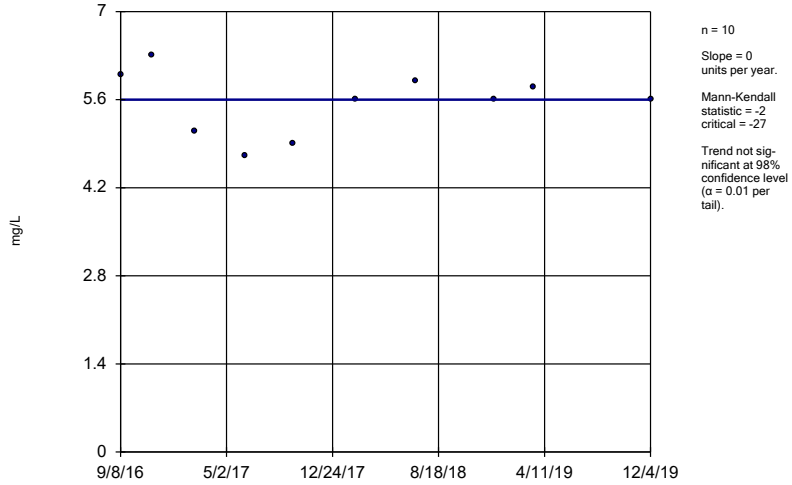
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-27I



n = 10

Slope = 0 units per year.

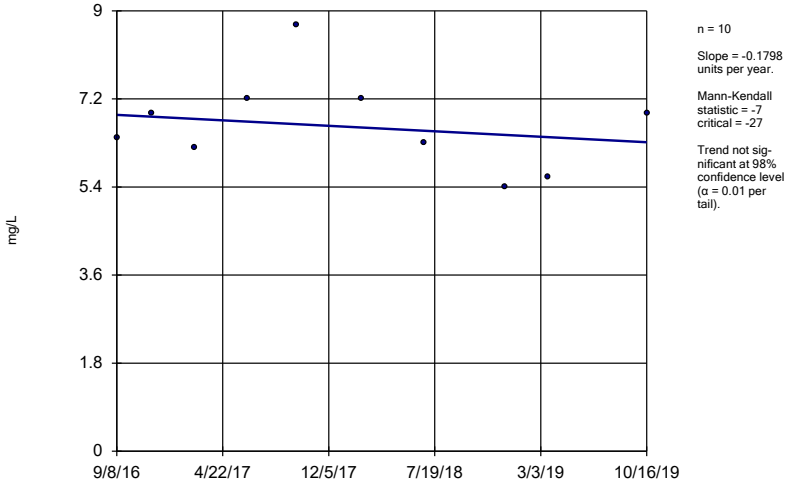
Mann-Kendall statistic = -2
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-29I



n = 10

Slope = -0.1798 units per year.

Mann-Kendall statistic = -7
critical = -27

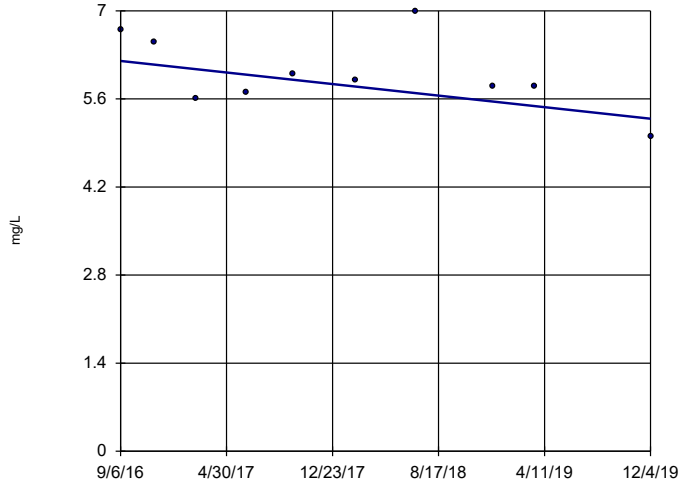
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-30I



n = 10

Slope = -0.2829 units per year.

Mann-Kendall statistic = -14
critical = -27

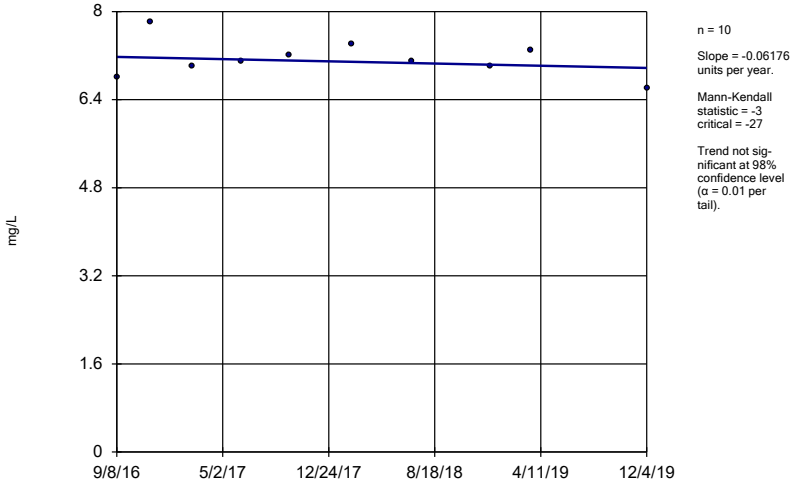
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-32S



n = 10

Slope = -0.06176 units per year.

Mann-Kendall statistic = -3
critical = -27

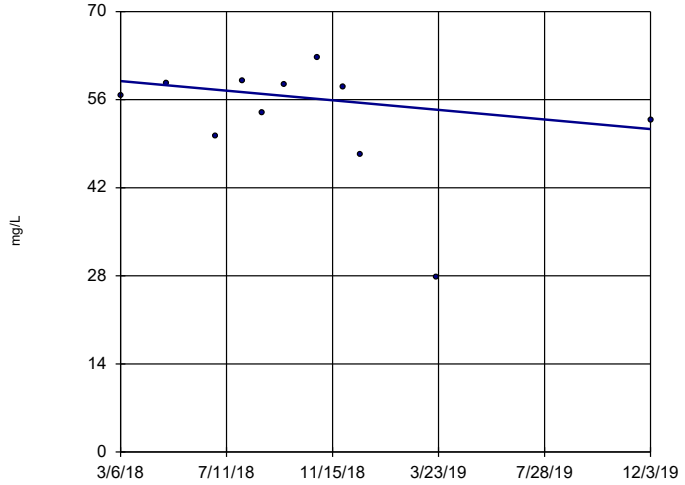
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-45



n = 11

Slope = -4.38 units per year.

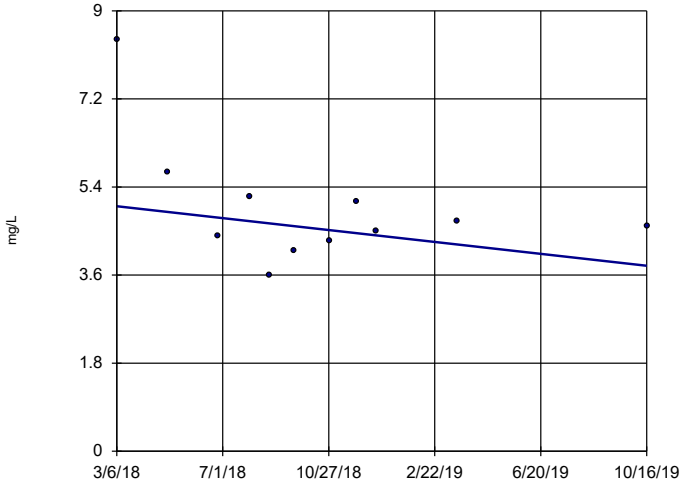
Mann-Kendall statistic = -15
critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-47



n = 11

Slope = -0.7533 units per year.

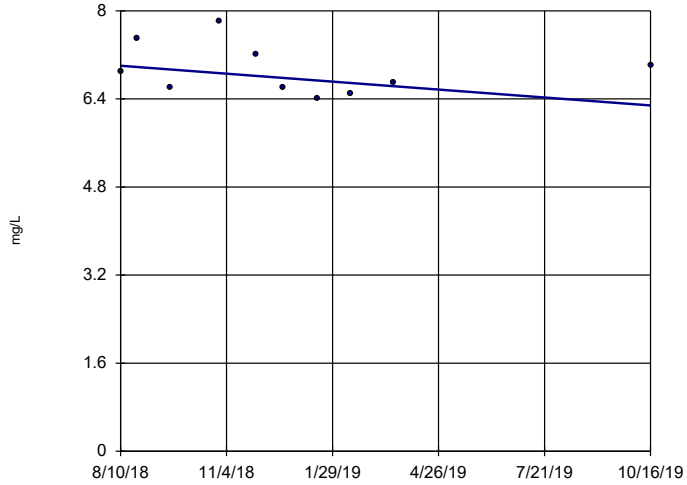
Mann-Kendall statistic = -11
critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = -0.6083 units per year.

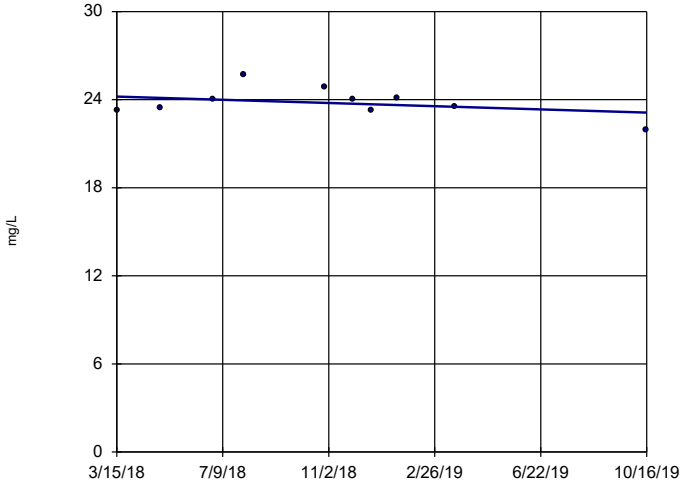
Mann-Kendall statistic = -10
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-50



n = 10

Slope = -0.6887 units per year.

Mann-Kendall statistic = -5
critical = -27

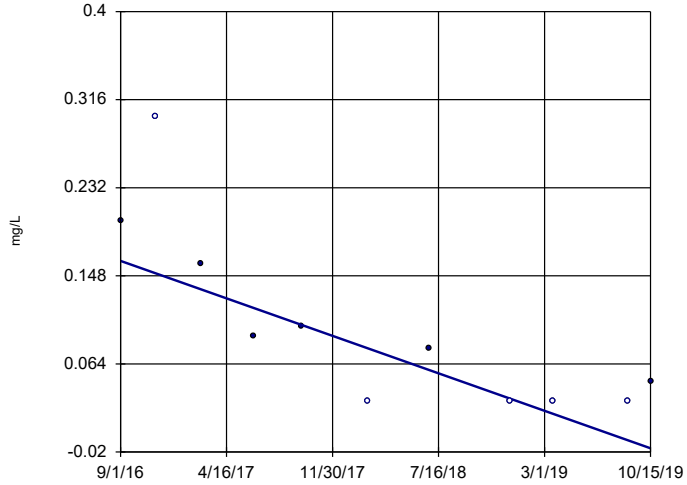
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = -0.05726 units per year.

Mann-Kendall statistic = -35
critical = -31

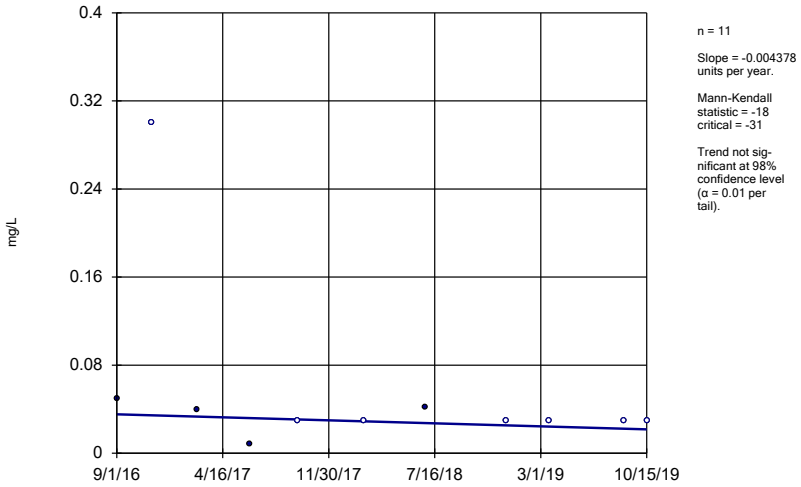
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = -0.004378 units per year.

Mann-Kendall statistic = -18
critical = -31

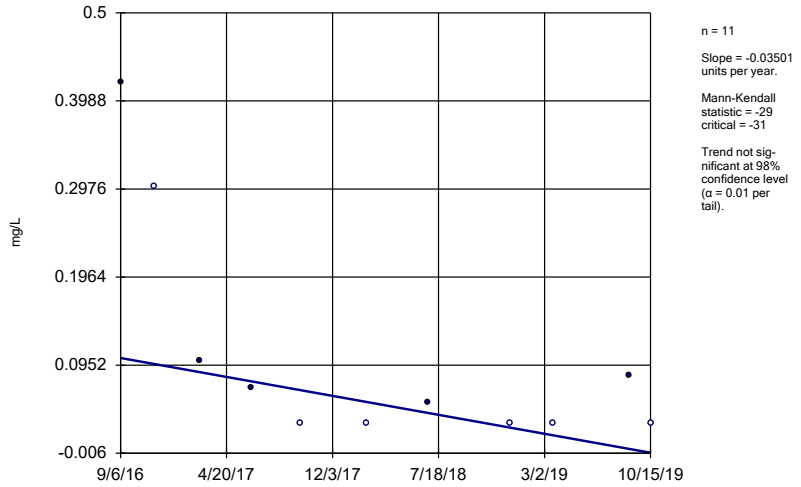
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -0.03501 units per year.

Mann-Kendall statistic = -29
critical = -31

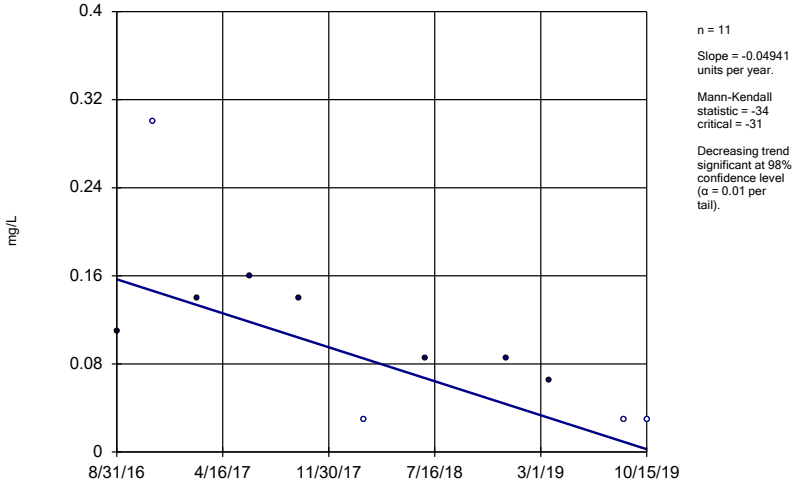
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = -0.04941 units per year.

Mann-Kendall statistic = -34
critical = -31

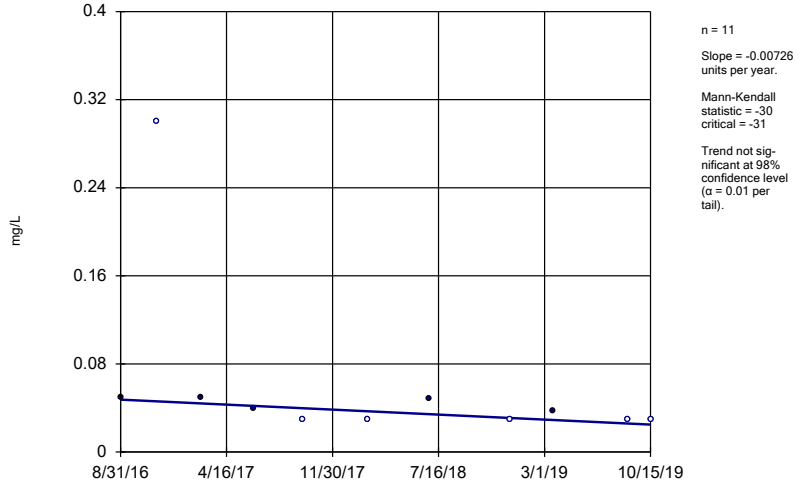
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = -0.00726 units per year.

Mann-Kendall statistic = -30
critical = -31

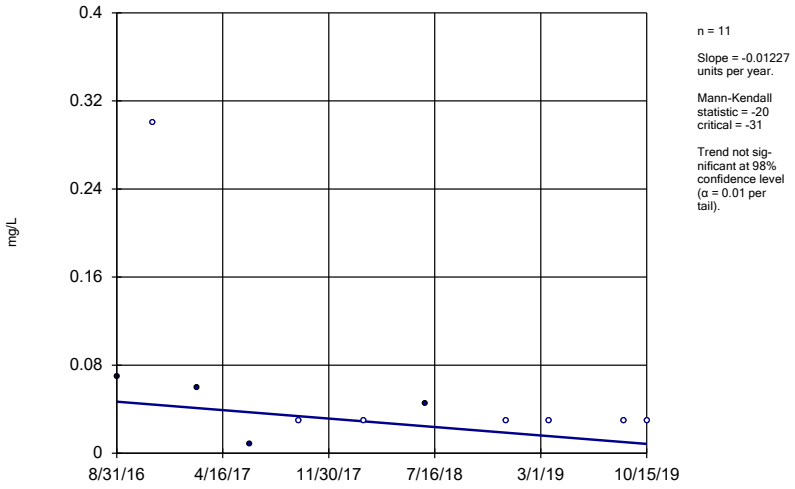
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = -0.01227 units per year.

Mann-Kendall statistic = -20
critical = -31

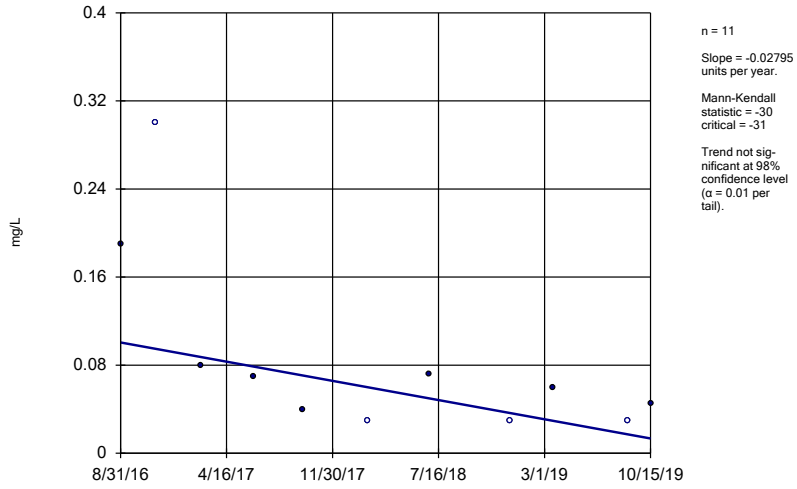
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = -0.02795 units per year.

Mann-Kendall statistic = -30
critical = -31

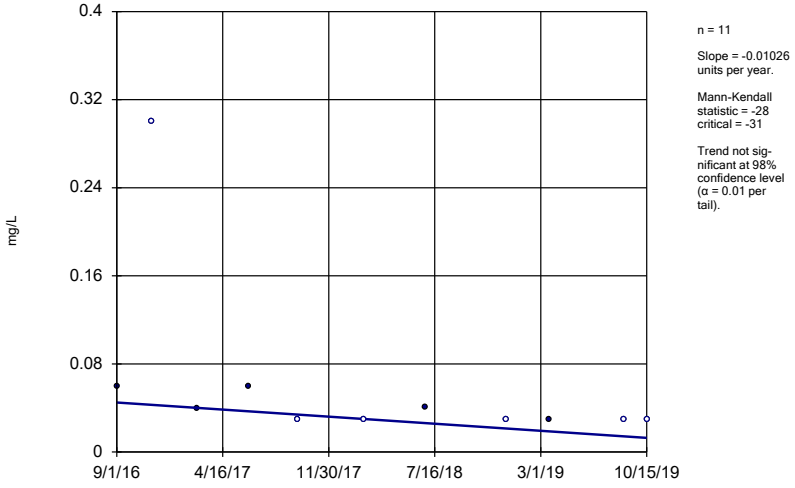
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = -0.01026 units per year.

Mann-Kendall statistic = -28
critical = -31

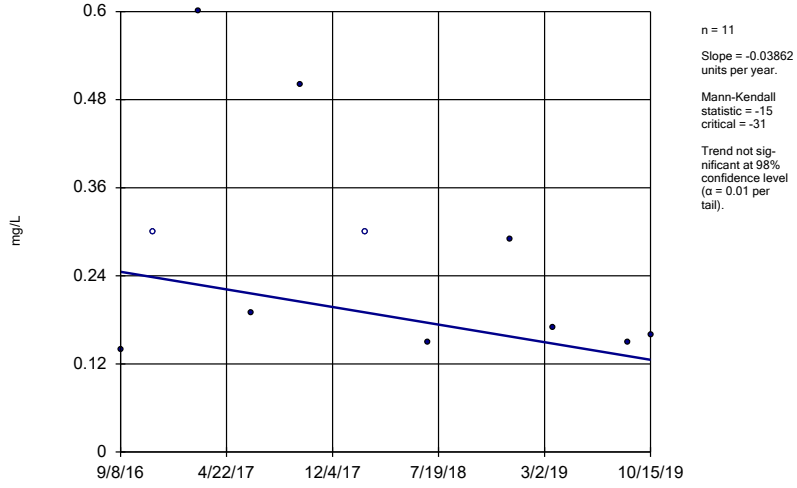
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -0.03862 units per year.

Mann-Kendall statistic = -15
critical = -31

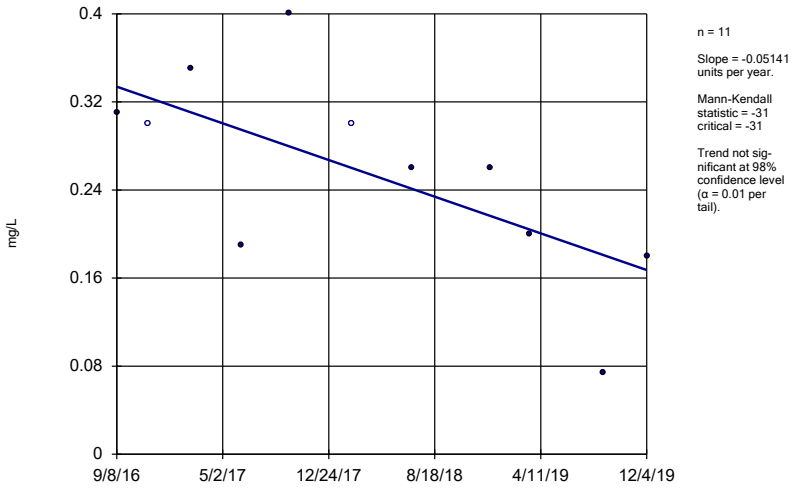
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -0.05141 units per year.

Mann-Kendall statistic = -31
critical = -31

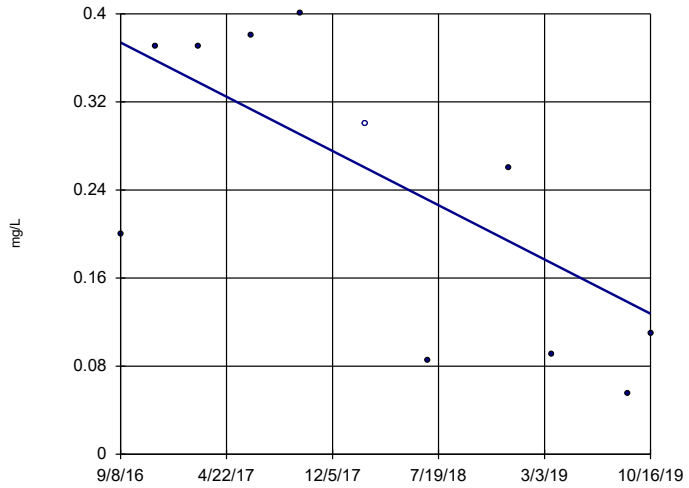
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -0.07935 units per year.

Mann-Kendall statistic = -22
critical = -31

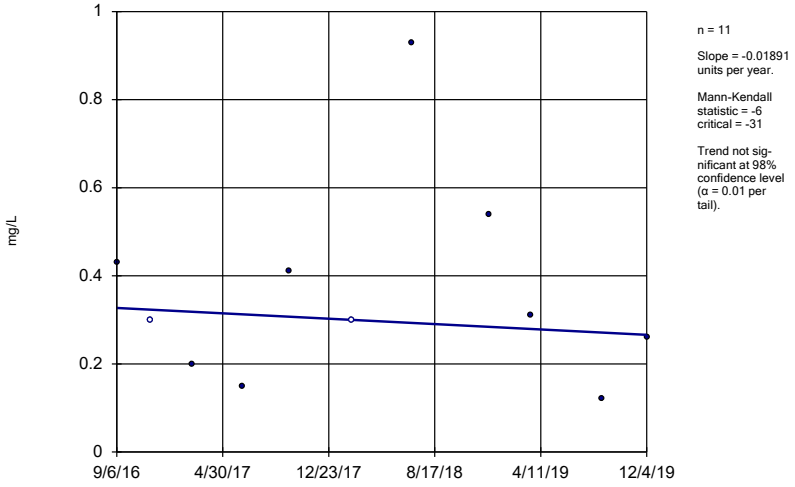
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = -0.01891 units per year.

Mann-Kendall statistic = -6
critical = -31

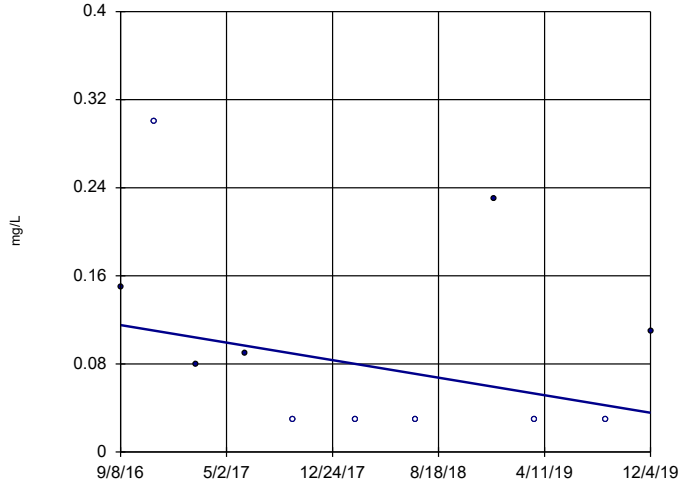
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = -0.02462 units per year.

Mann-Kendall statistic = -15
critical = -31

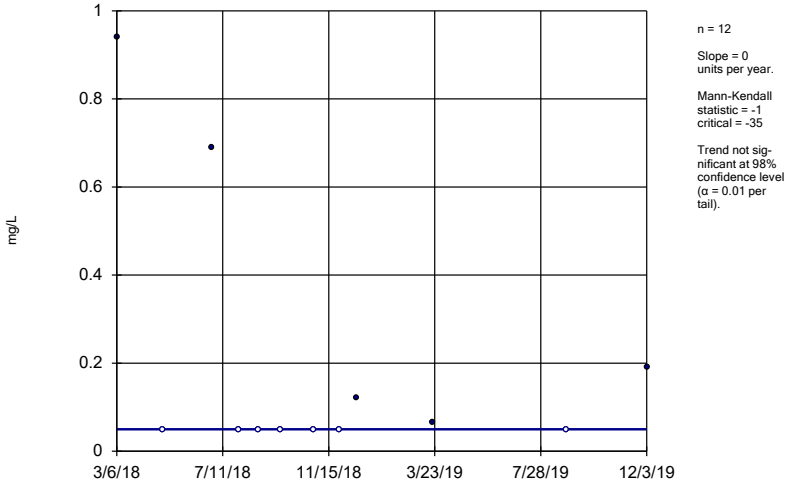
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-45



n = 12

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -35

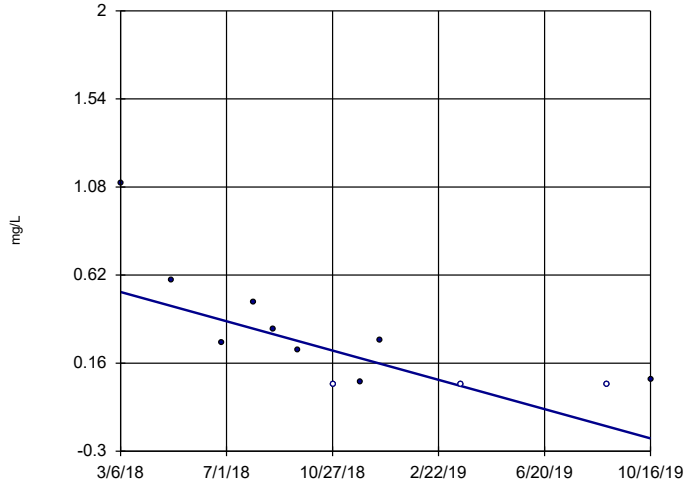
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-47



n = 12

Slope = -0.4734 units per year.

Mann-Kendall statistic = -41
critical = -35

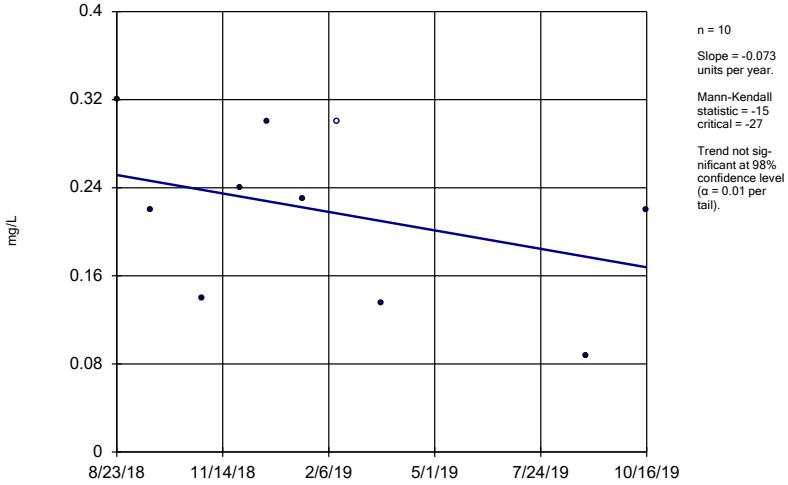
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = -0.073 units per year.

Mann-Kendall statistic = -15
critical = -27

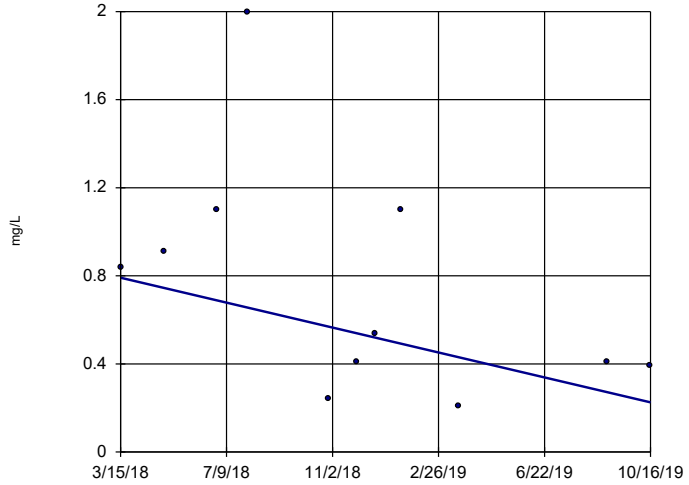
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-50



n = 11

Slope = -0.3561 units per year.

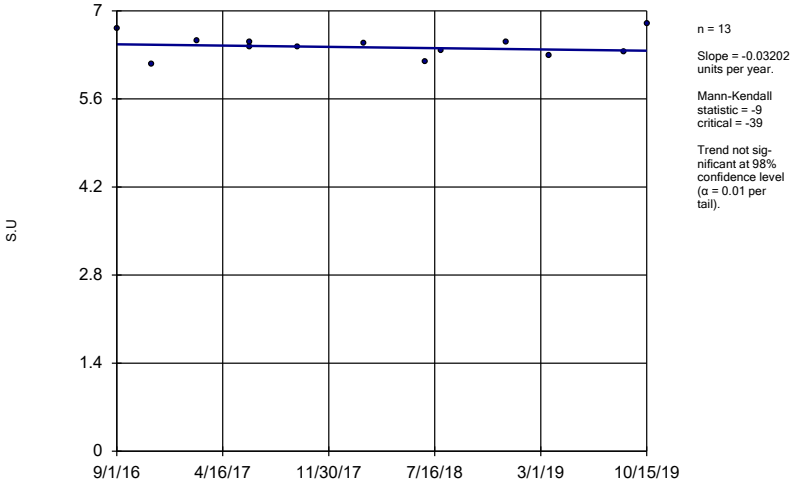
Mann-Kendall statistic = -17
critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Fluoride Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-12I (bg)



n = 13

Slope = -0.03202 units per year.

Mann-Kendall statistic = -9
critical = -39

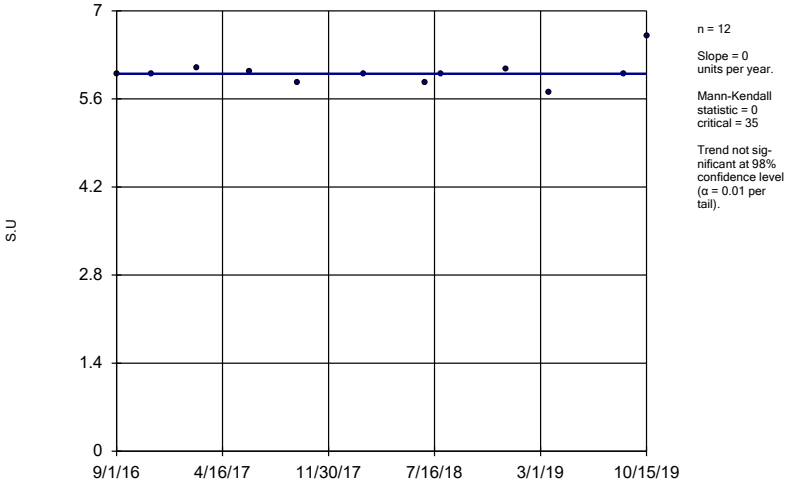
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 12

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 35

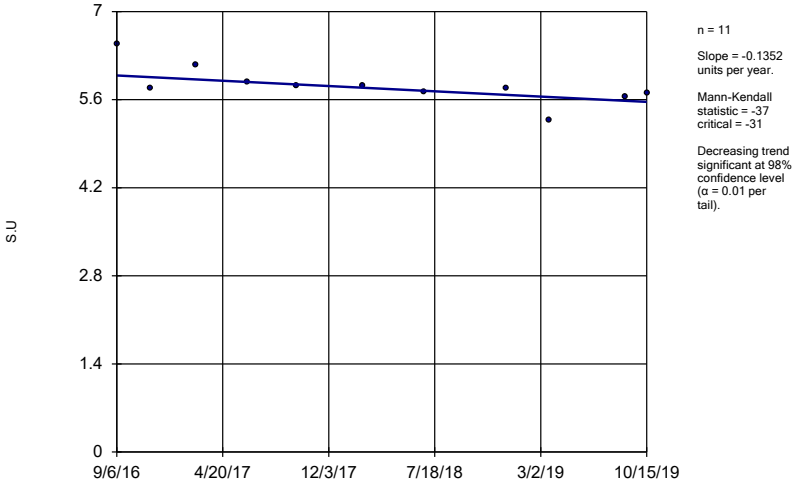
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -0.1352 units per year.

Mann-Kendall statistic = -37
critical = -31

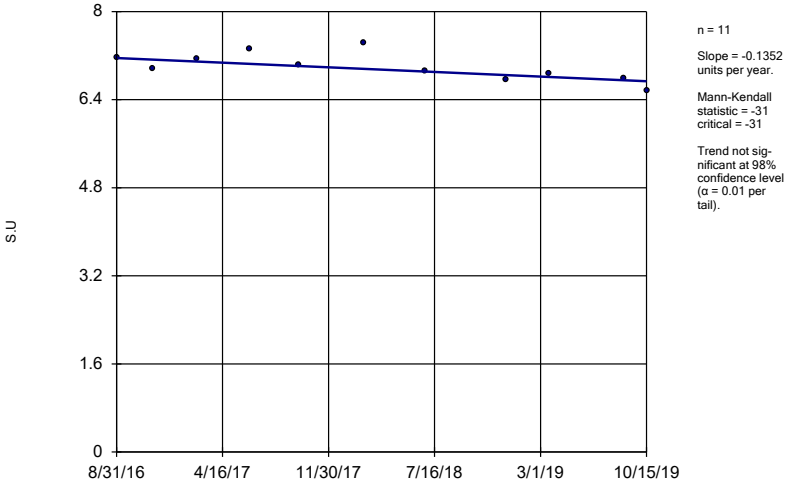
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = -0.1352 units per year.

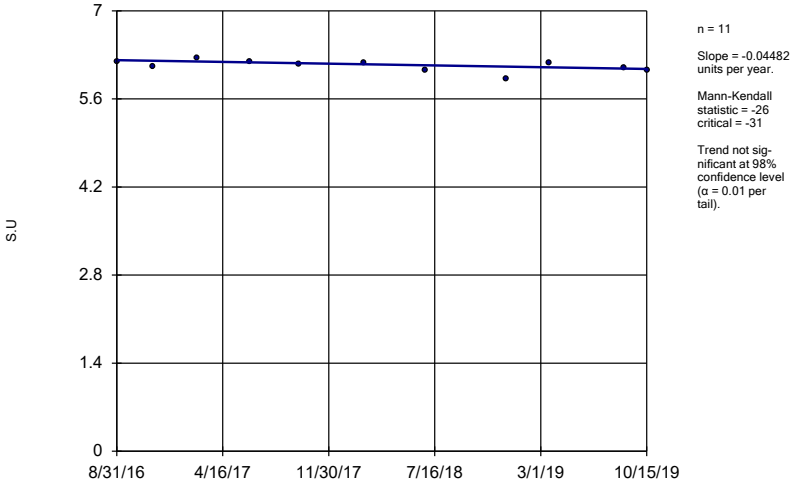
Mann-Kendall statistic = -31
critical = -31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = -0.04482 units per year.

Mann-Kendall statistic = -26
critical = -31

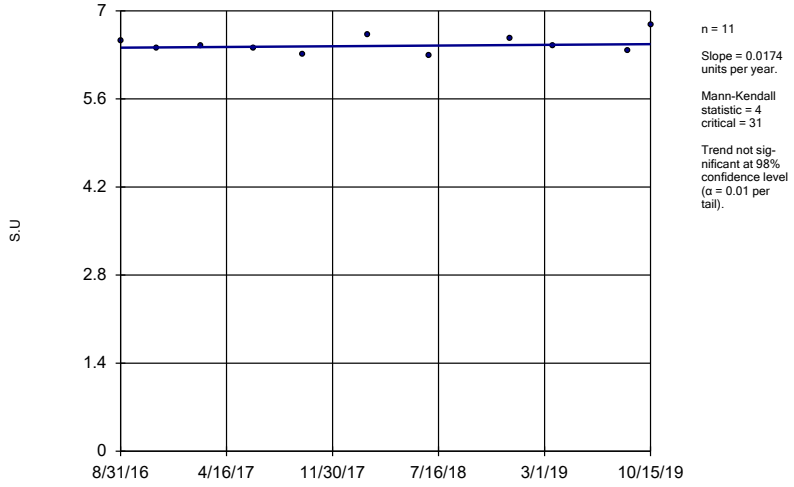
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = 0.0174 units per year.

Mann-Kendall statistic = 4
critical = 31

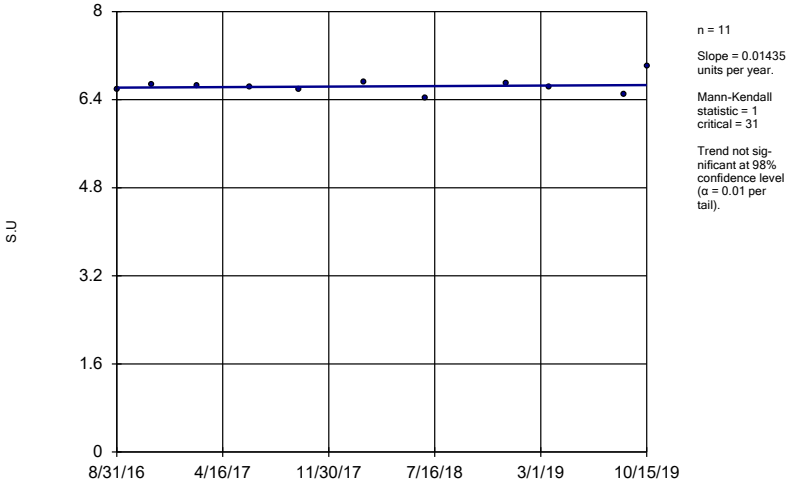
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = 0.01435 units per year.

Mann-Kendall statistic = 1
critical = 31

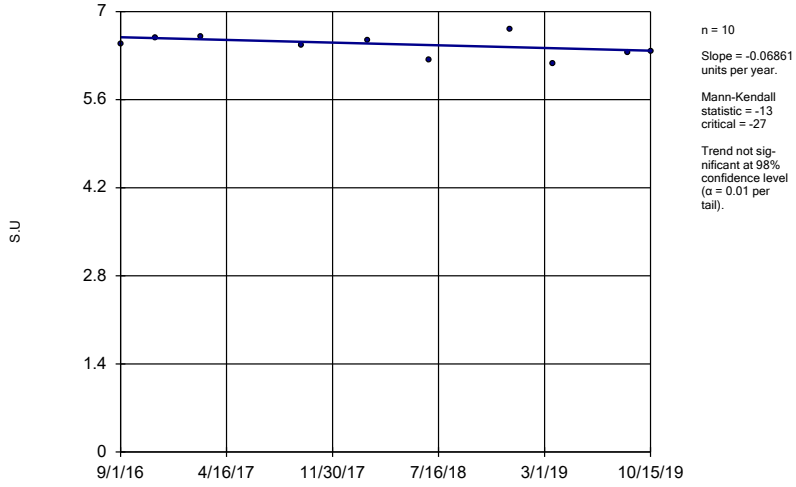
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = -0.06861 units per year.

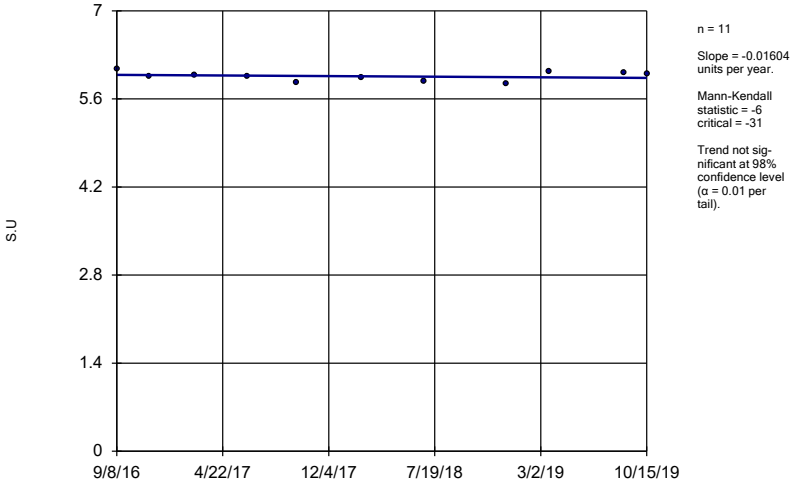
Mann-Kendall statistic = -13
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -0.01604 units per year.

Mann-Kendall statistic = -6
critical = -31

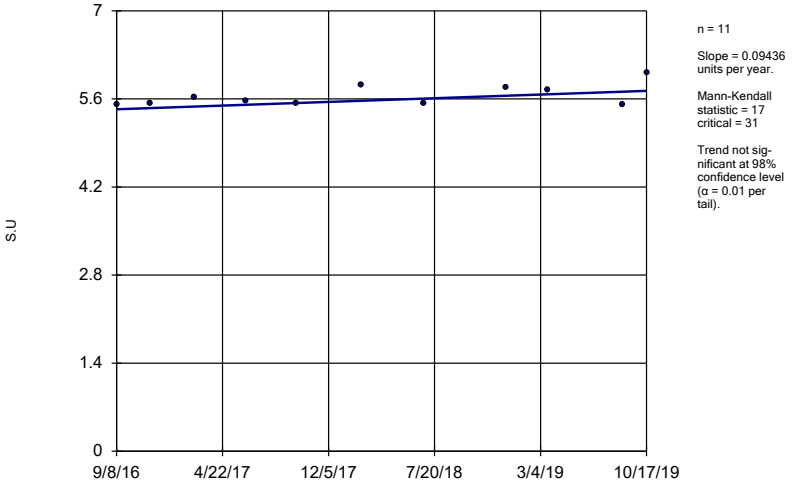
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = 0.09436 units per year.

Mann-Kendall statistic = 17
critical = 31

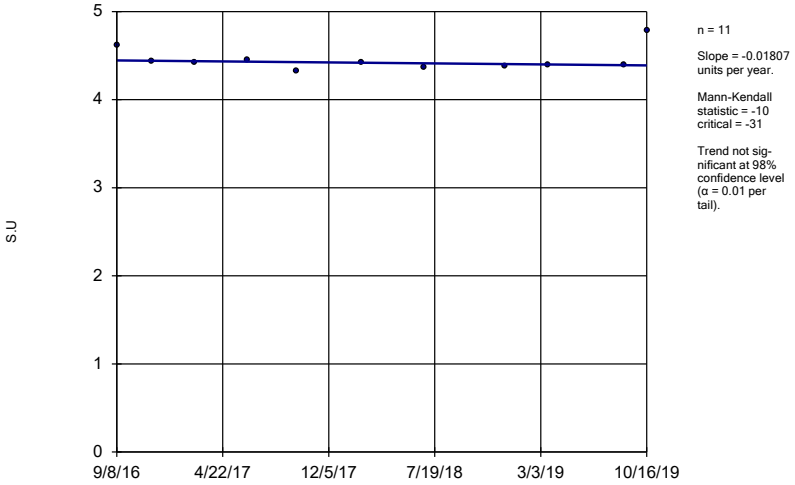
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -0.01807 units per year.

Mann-Kendall statistic = -10
critical = -31

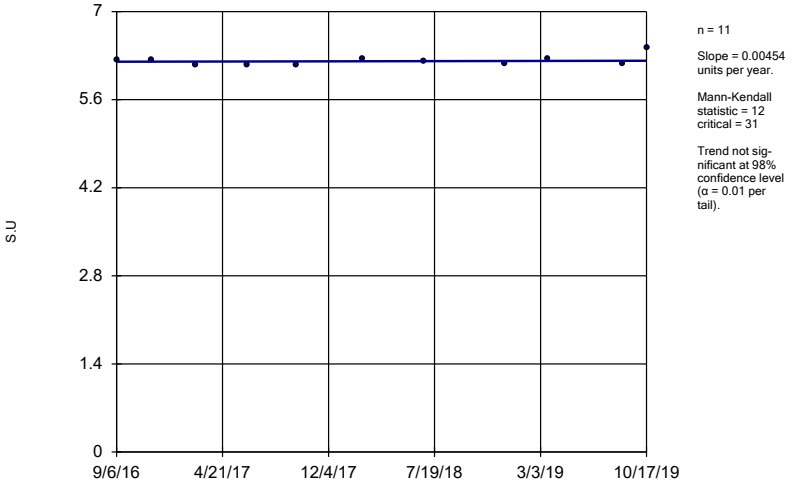
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = 0.00454 units per year.

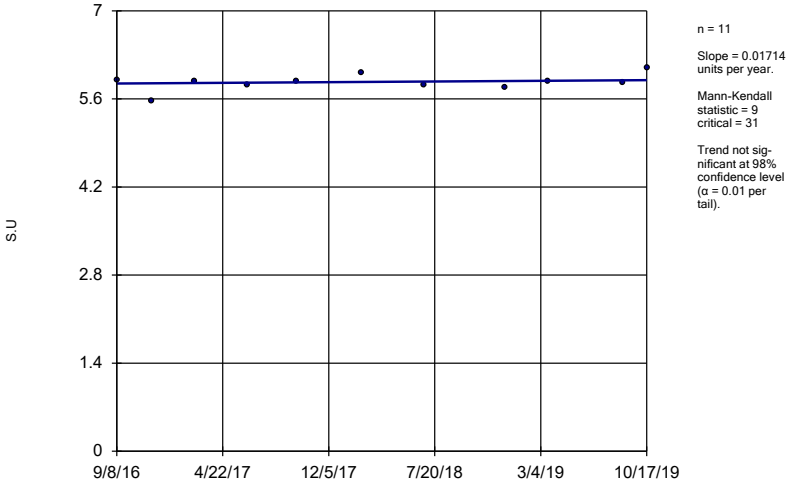
Mann-Kendall statistic = 12
critical = 31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = 0.01714 units per year.

Mann-Kendall statistic = 9 critical = 31

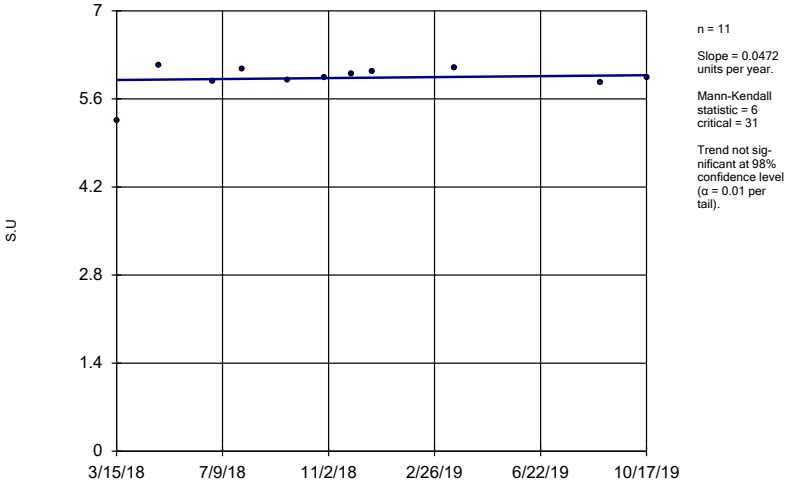
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-45



n = 11

Slope = 0.0472 units per year.

Mann-Kendall statistic = 6 critical = 31

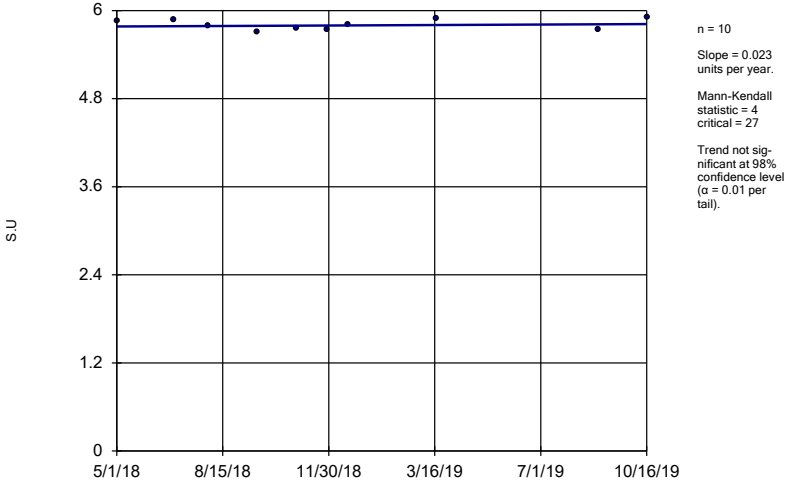
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-47



n = 10

Slope = 0.023 units per year.

Mann-Kendall statistic = 4 critical = 27

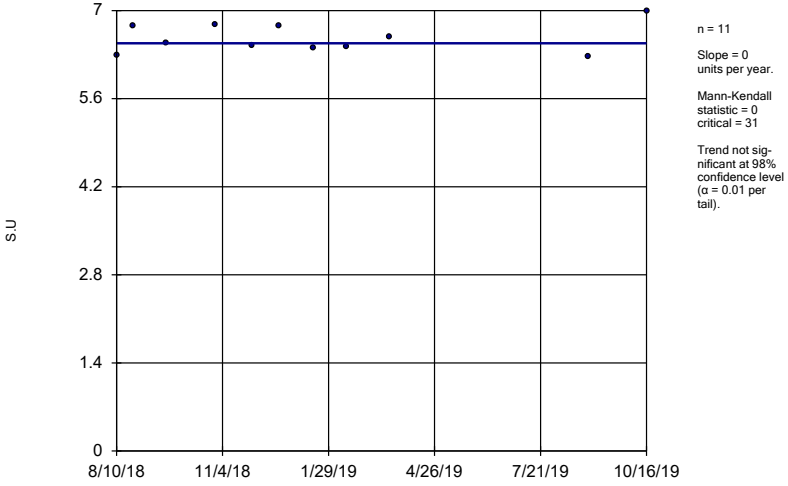
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-52I



n = 11

Slope = 0 units per year.

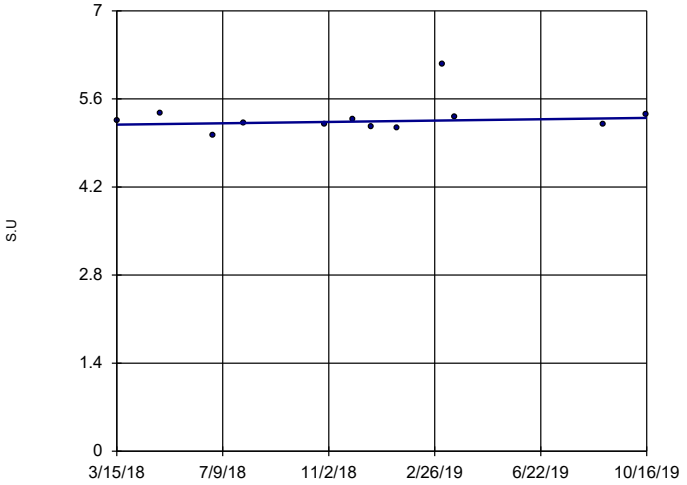
Mann-Kendall statistic = 0 critical = 31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-50



n = 12

Slope = 0.06623 units per year.

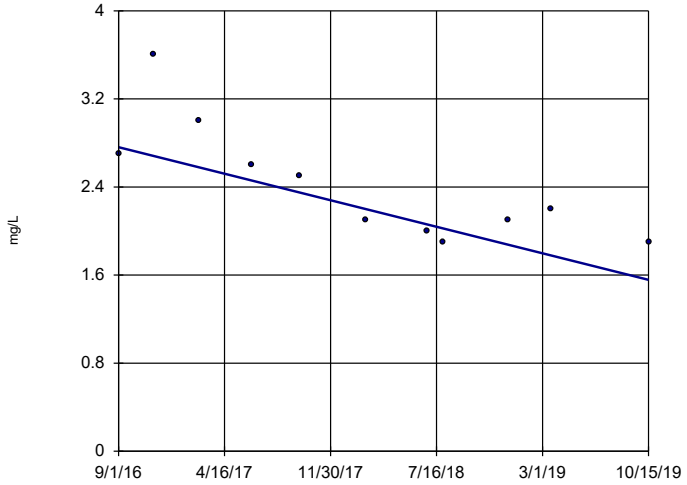
Mann-Kendall statistic = 8
critical = 35

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: pH Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = -0.3862 units per year.

Mann-Kendall statistic = -37
critical = -31

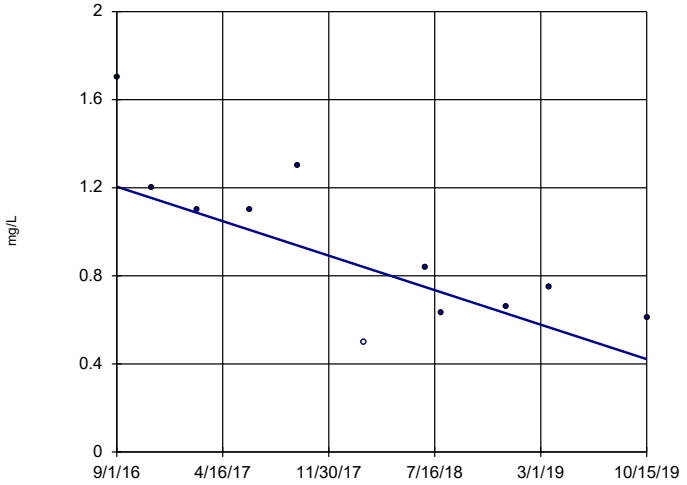
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = -0.2511 units per year.

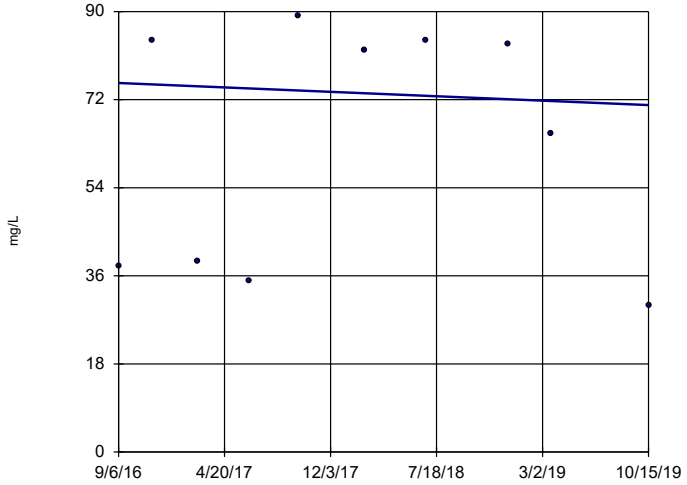
Mann-Kendall statistic = -32
critical = -31

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-23S (bg)



n = 10

Slope = -1.447 units per year.

Mann-Kendall statistic = -3
critical = -27

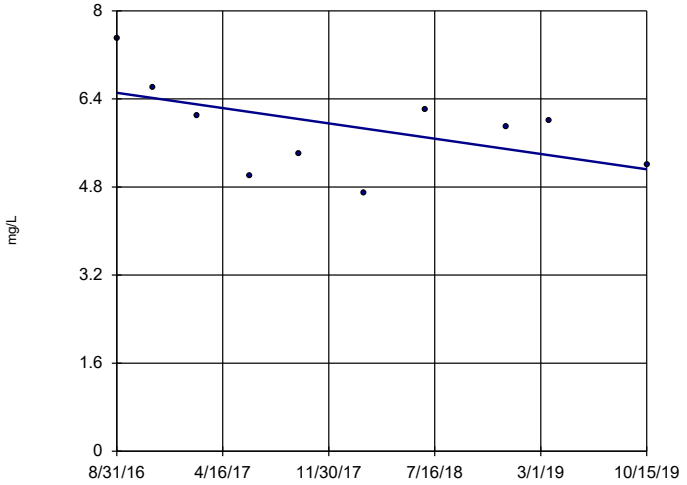
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 10

Slope = -0.4451 units per year.

Mann-Kendall statistic = -17
critical = -27

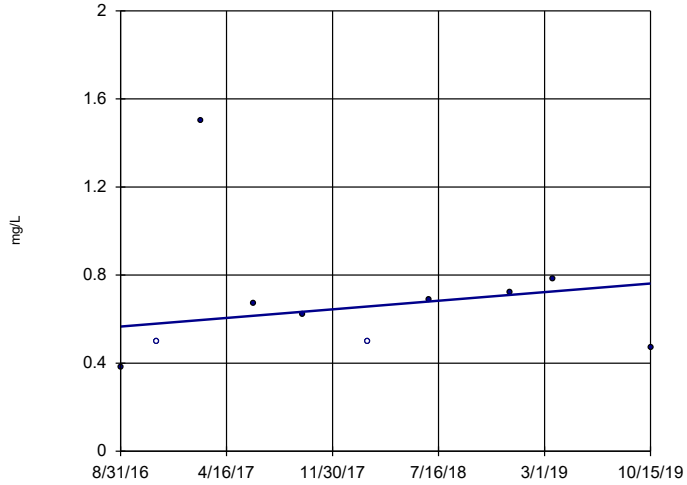
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 10

Slope = 0.06257 units per year.

Mann-Kendall statistic = 10
critical = 27

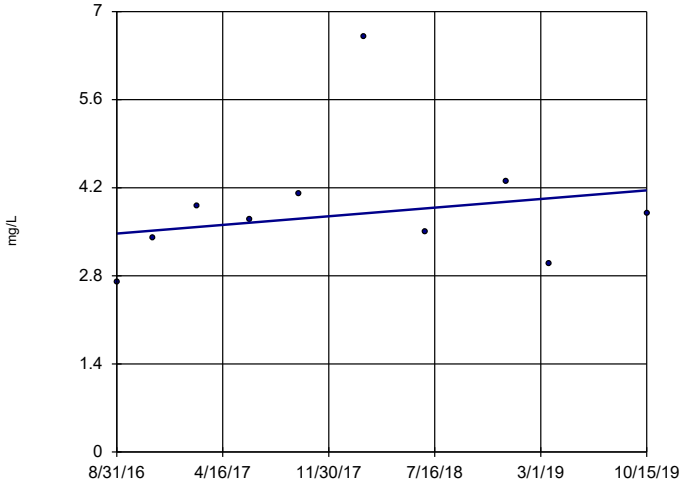
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 10

Slope = 0.2192 units per year.

Mann-Kendall statistic = 11
critical = 27

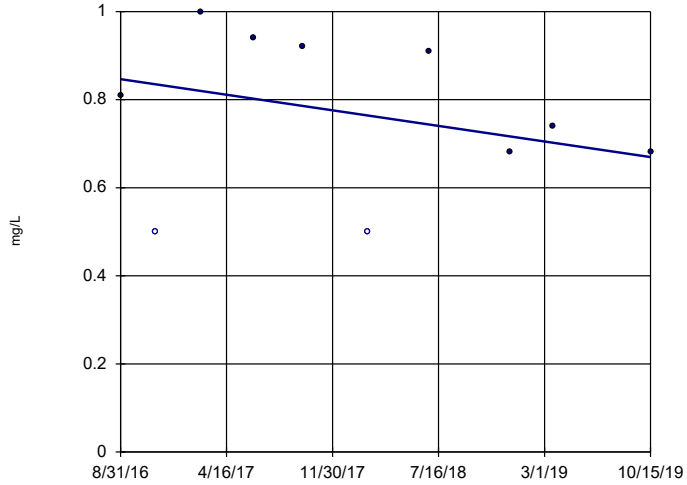
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:45 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 10

Slope = -0.05656 units per year.

Mann-Kendall statistic = -11
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

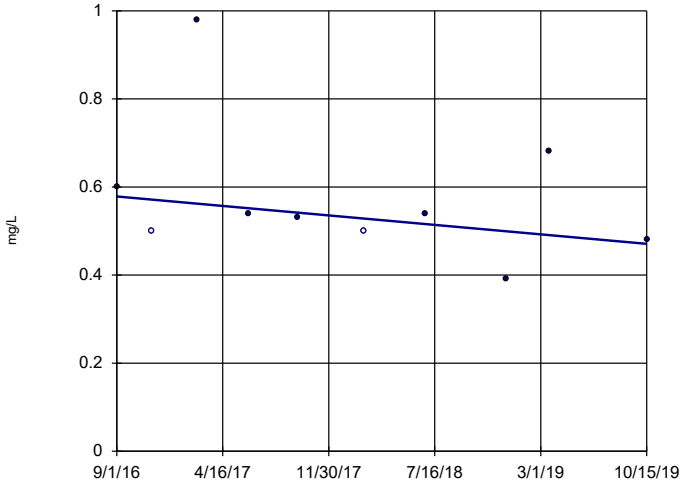
Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = -0.03443 units per year.

Mann-Kendall statistic = -13
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

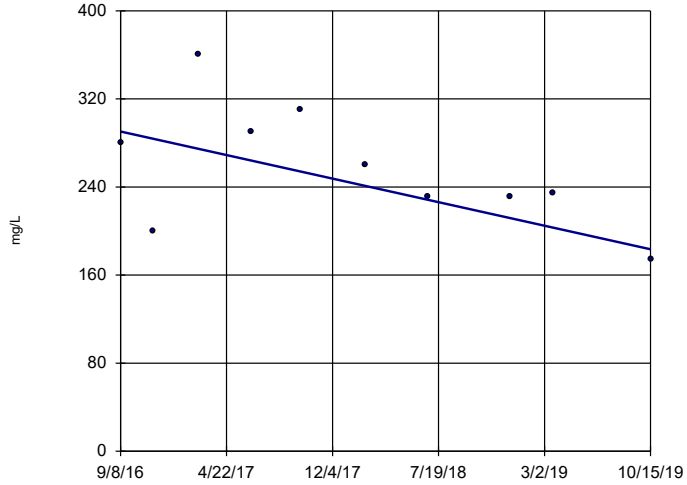
Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-25I



n = 10

Slope = -34.48 units per year.

Mann-Kendall statistic = -18
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

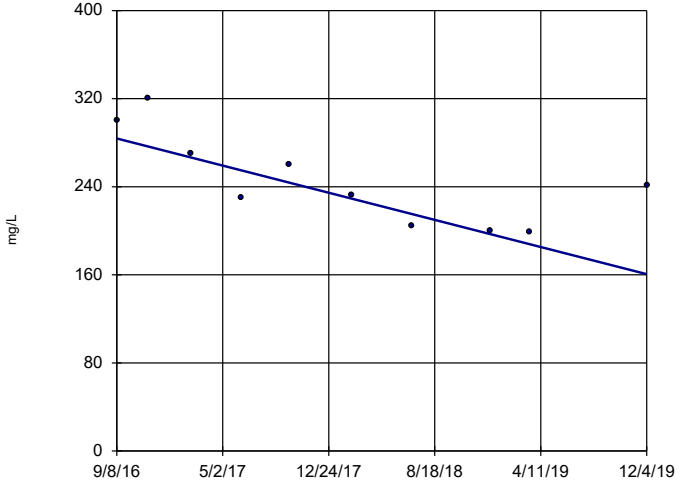
Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-27I



n = 10

Slope = -38.02 units per year.

Mann-Kendall statistic = -29
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

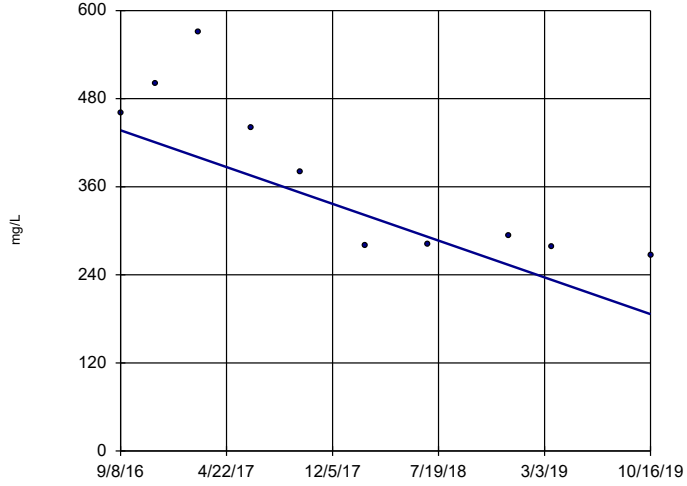
Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-29I



n = 10

Slope = -80.65 units per year.

Mann-Kendall statistic = -33
critical = -27

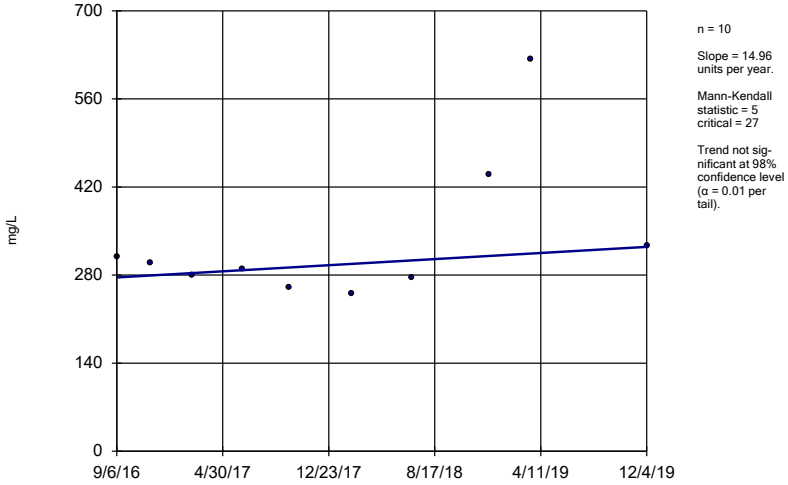
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-30I



n = 10

Slope = 14.96 units per year.

Mann-Kendall statistic = 5
critical = 27

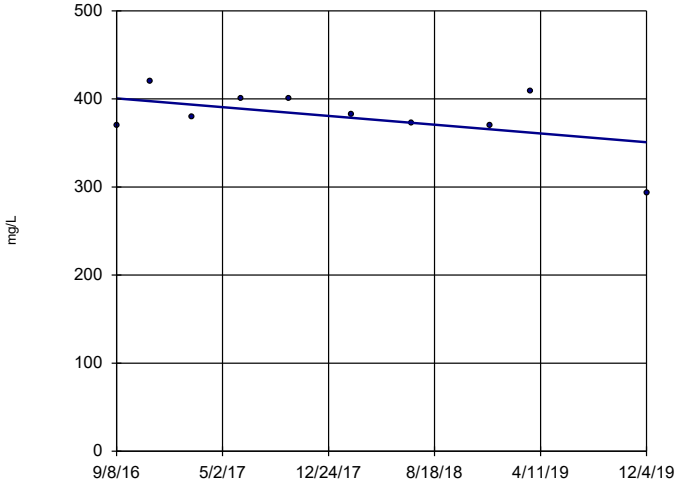
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-32S



n = 10

Slope = -15.41 units per year.

Mann-Kendall statistic = -11
critical = -27

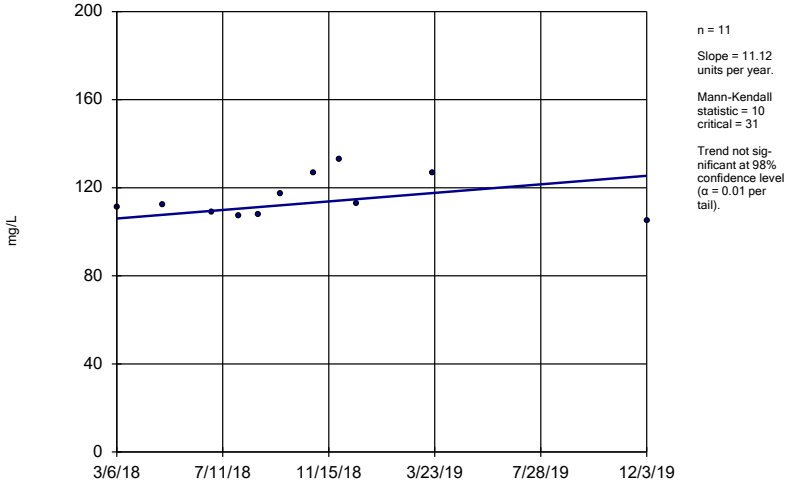
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-45



n = 11

Slope = 11.12 units per year.

Mann-Kendall statistic = 10
critical = 31

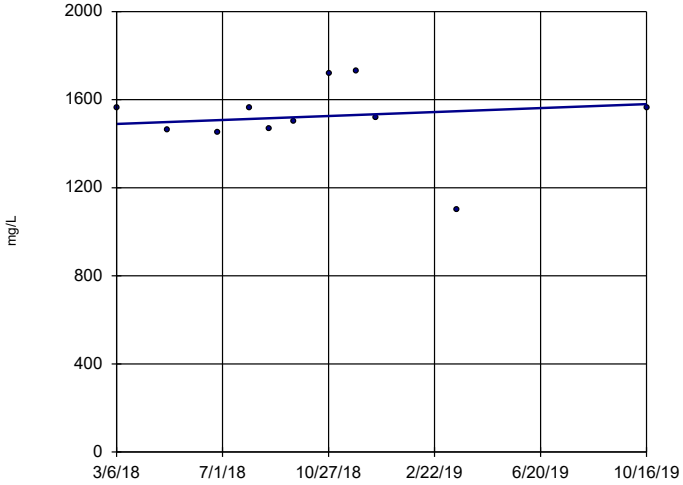
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-47



n = 11

Slope = 55.87 units per year.

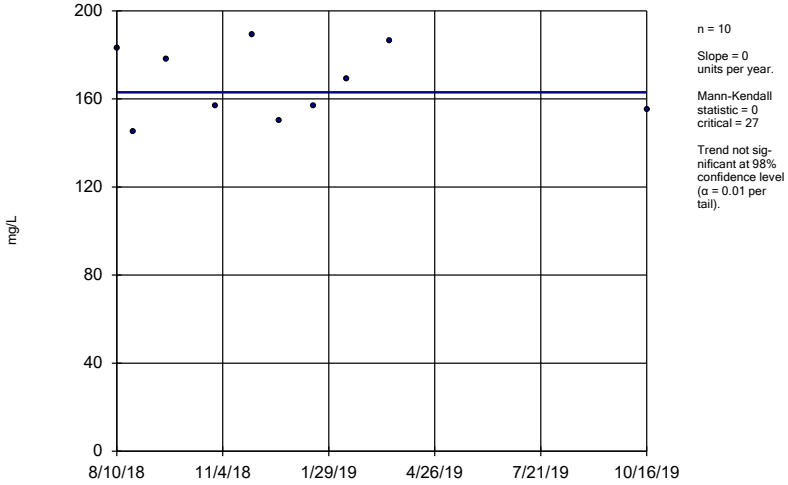
Mann-Kendall statistic = 8
critical = 31

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 27

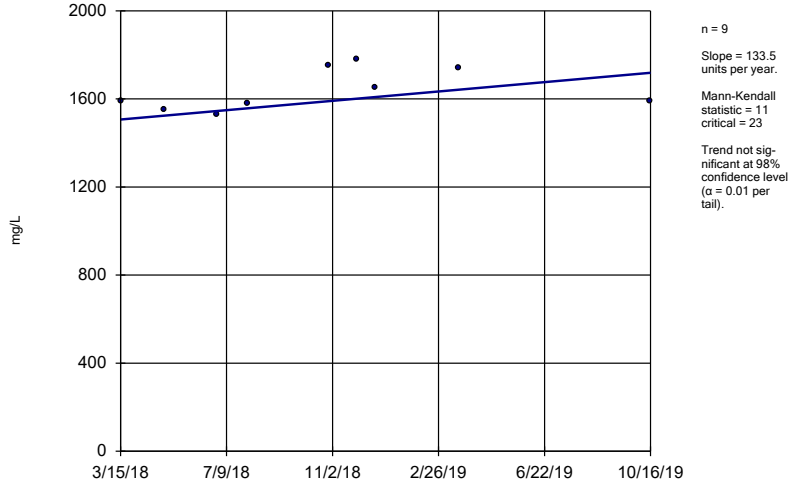
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-50



n = 9

Slope = 133.5 units per year.

Mann-Kendall statistic = 11 critical = 23

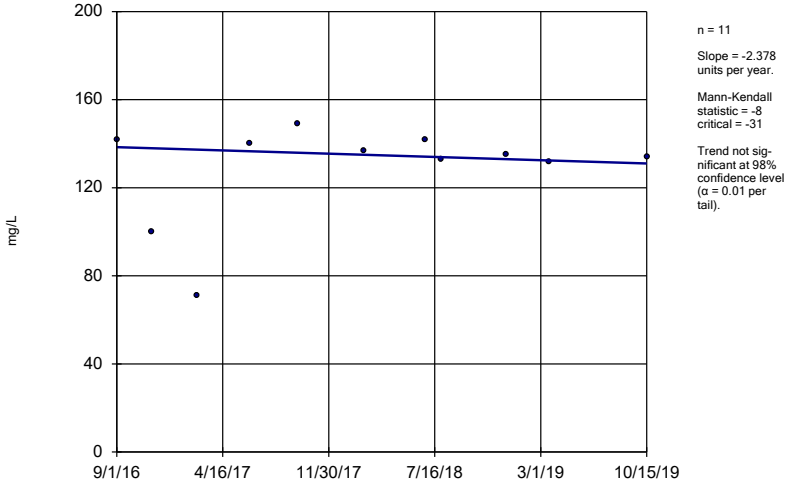
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = -2.378 units per year.

Mann-Kendall statistic = -8 critical = -31

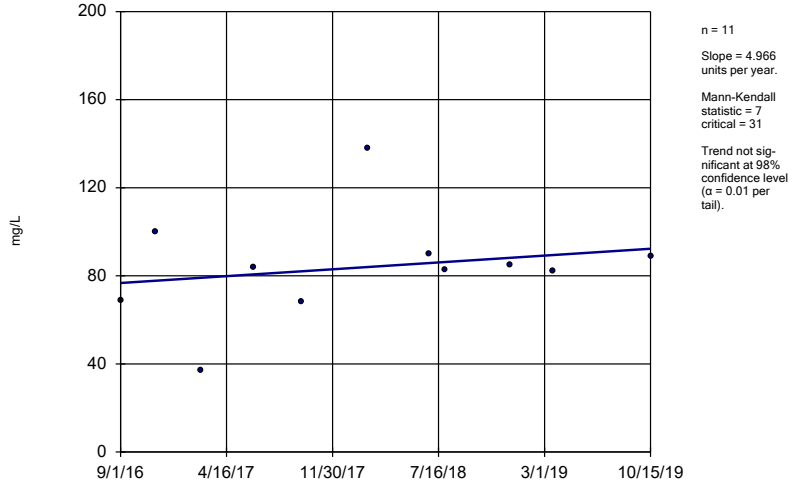
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = 4.966 units per year.

Mann-Kendall statistic = 7 critical = 31

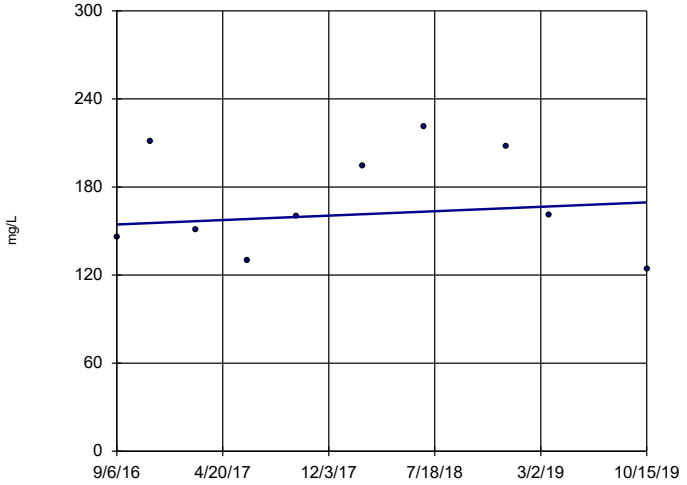
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 10

Slope = 4.828 units per year.

Mann-Kendall statistic = 3
critical = 27

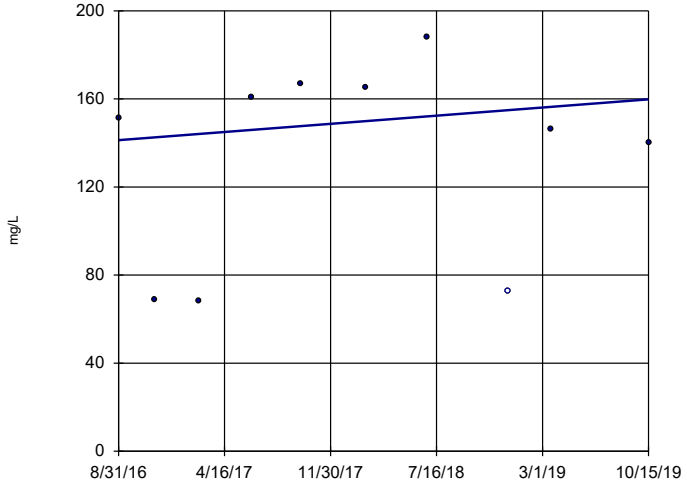
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 10

Slope = 5.935 units per year.

Mann-Kendall statistic = 5
critical = 27

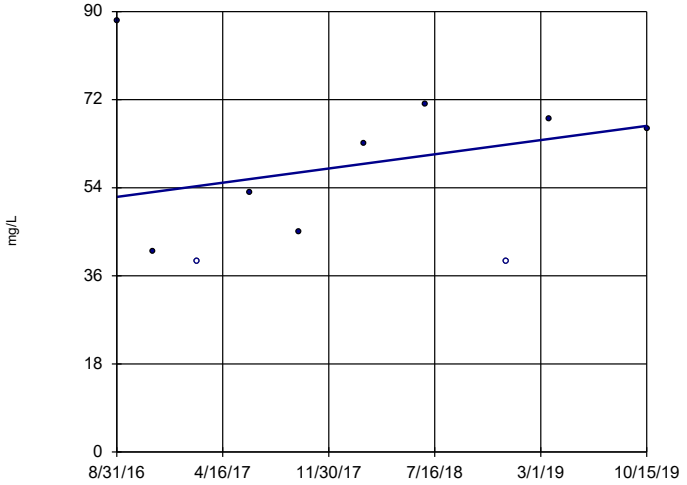
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 10

Slope = 4.65 units per year.

Mann-Kendall statistic = 6
critical = 27

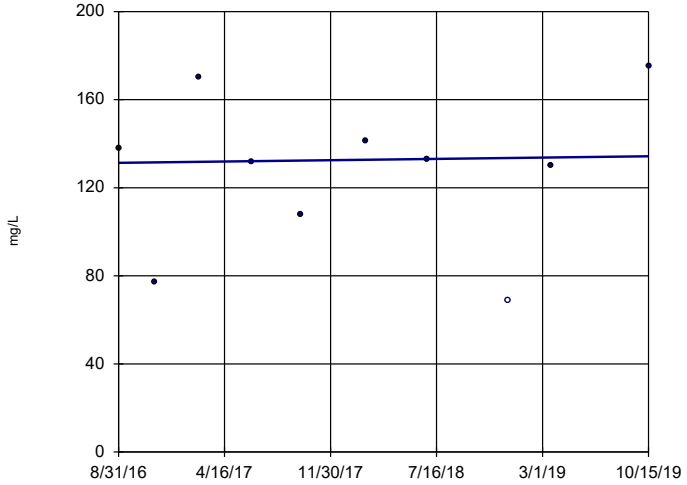
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 10

Slope = 0.9631 units per year.

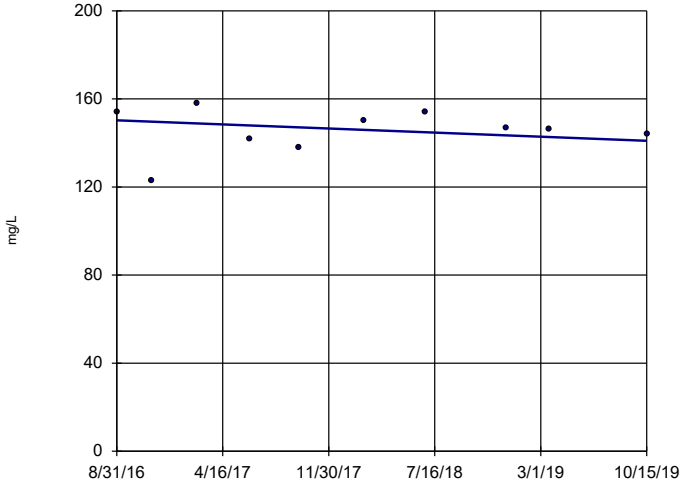
Mann-Kendall statistic = 1
critical = 27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-5S (bg)



n = 10

Slope = -2.974 units per year.

Mann-Kendall statistic = -4
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

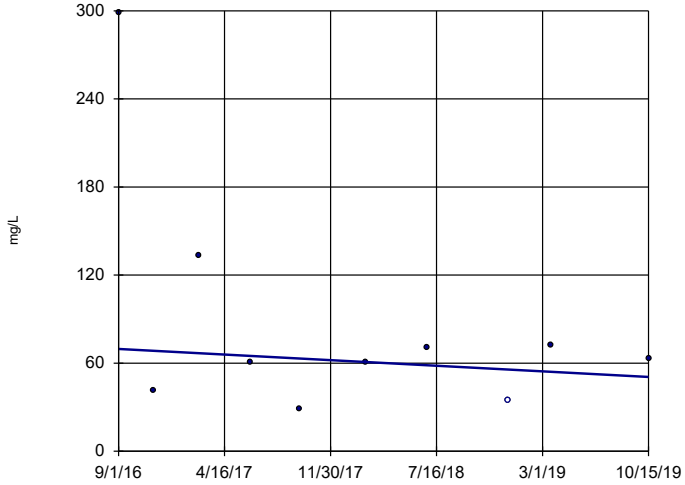
Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 10

Slope = -6.134 units per year.

Mann-Kendall statistic = -4
critical = -27

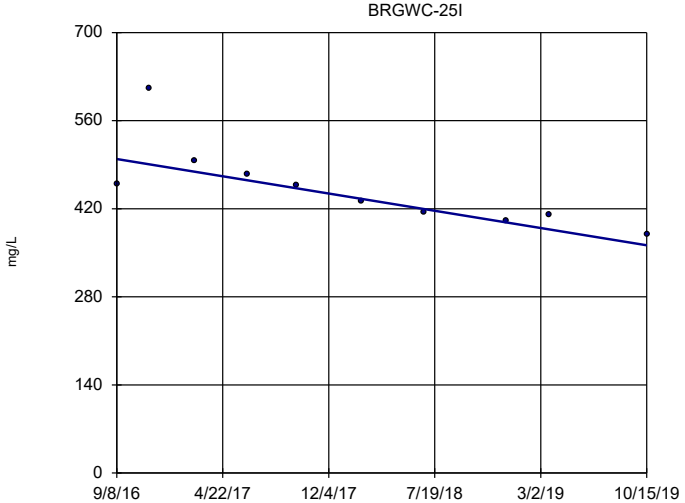
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-25I



n = 10

Slope = -44.21 units per year.

Mann-Kendall statistic = -37
critical = -27

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

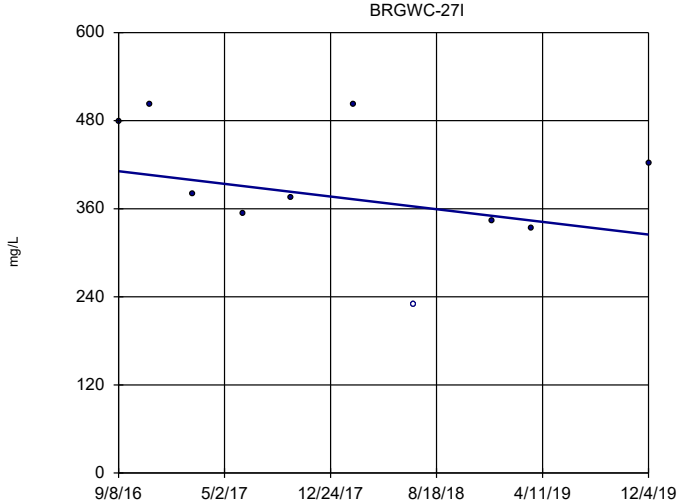
Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-27I



n = 10

Slope = -26.61 units per year.

Mann-Kendall statistic = -16
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

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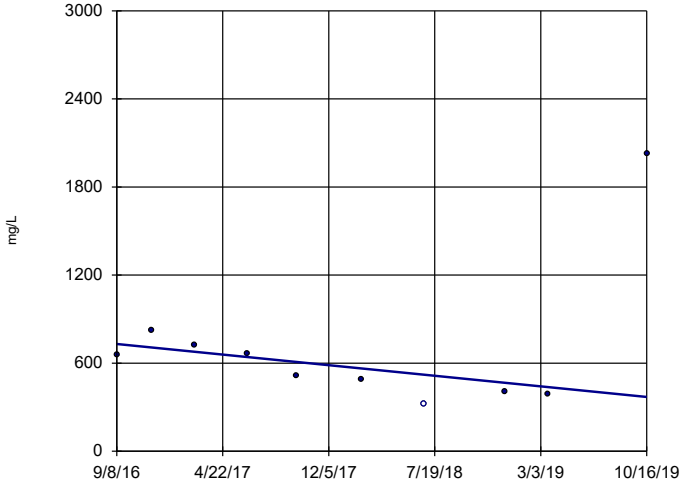
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWC-29I



n = 10

Slope = -116.3 units per year.

Mann-Kendall statistic = -17
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

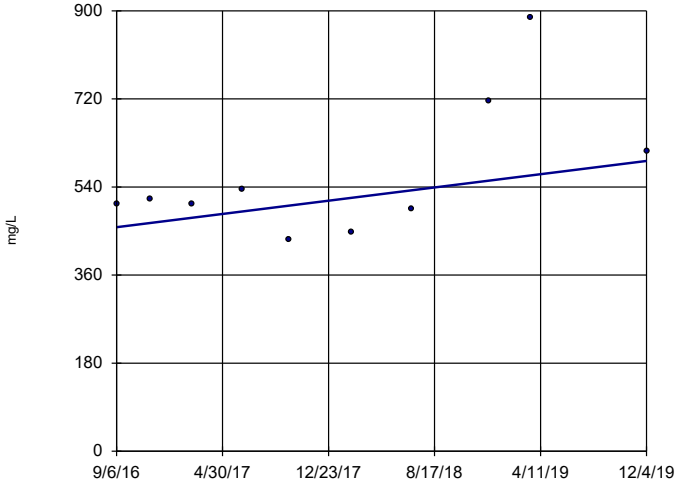
Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-30I



n = 10

Slope = 41.71 units per year.

Mann-Kendall statistic = 13
critical = 27

Trend not significant at 98% confidence level (α = 0.01 per tail).

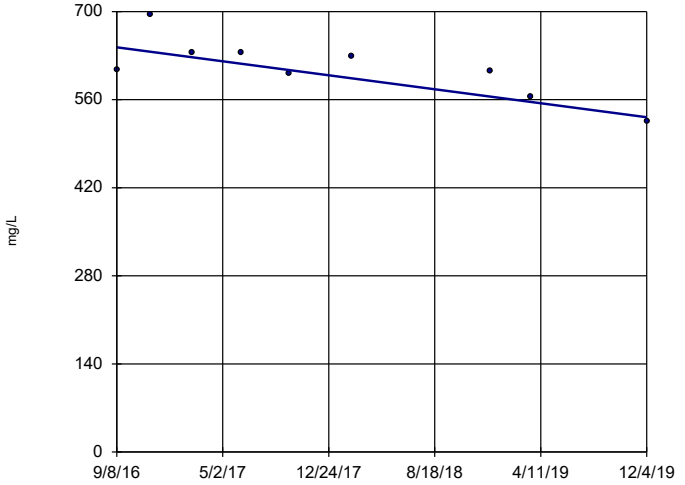
Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-32S



n = 9

Slope = -34.29 units per year.

Mann-Kendall statistic = -23
critical = -23

Trend not significant at 98% confidence level (α = 0.01 per tail).

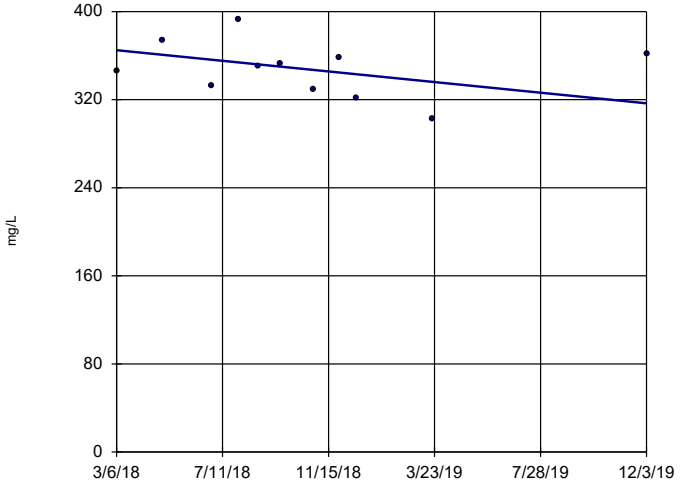
Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-45



n = 11

Slope = -27.68 units per year.

Mann-Kendall statistic = -11
critical = -31

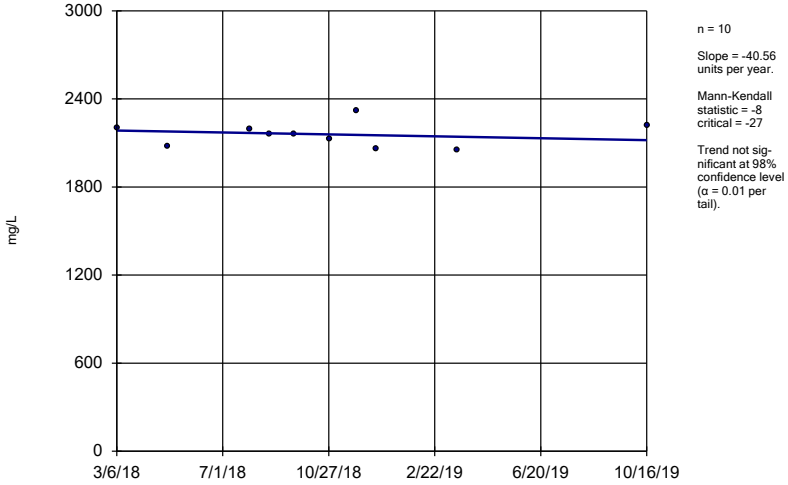
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-47



n = 10

Slope = -40.56 units per year.

Mann-Kendall statistic = -8
critical = -27

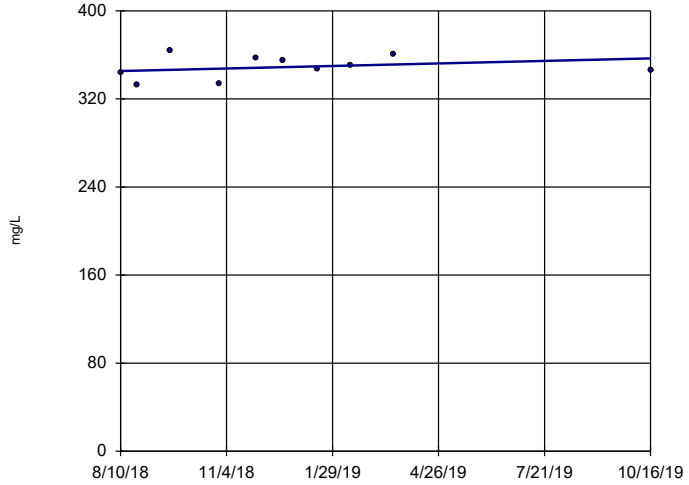
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = 9.777 units per year.

Mann-Kendall statistic = 7
critical = 27

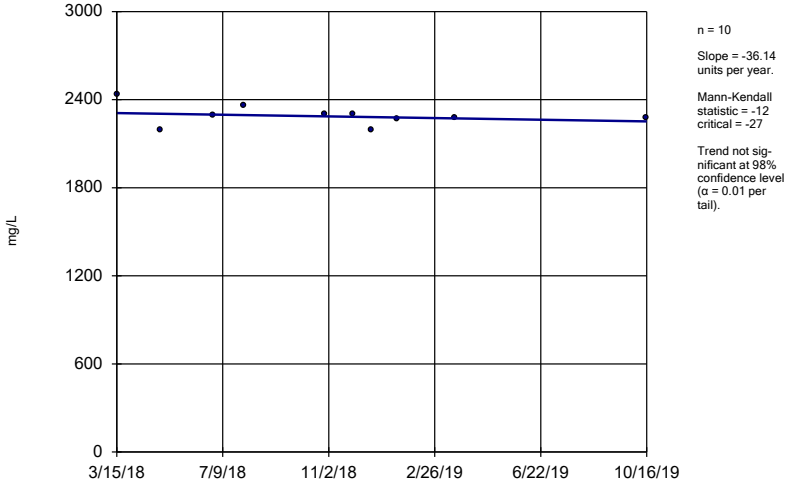
Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG

Sen's Slope Estimator

BRGWC-50



n = 10

Slope = -36.14 units per year.

Mann-Kendall statistic = -12
critical = -27

Trend not significant at 98% confidence level (α = 0.01 per tail).

Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:46 AM View: Pond BCD Appendix III
Branch Client: Golder Associates Data: Plant Branch Ash Pond

Trend Test

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:48 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.2243**	**-36**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-6.303**	**-33**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	**BRGWC-29I**	**-18.22**	**-35**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**10.51**	**30**	**27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**BRGWA-12I...**	**-0.05726**	**-35**	**-31**	**Yes**	**11**	**45.45**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**BRGWA-2I ...**	**-0.04941**	**-34**	**-31**	**Yes**	**11**	**36.36**	**n/a**	**n/a**	**0.02**	**NP**
Fluoride (mg/L)	**BRGWC-47**	**-0.4734**	**-41**	**-35**	**Yes**	**12**	**25**	**n/a**	**n/a**	**0.02**	**NP**
pH (S.U)	**BRGWA-23S...**	**-0.1352**	**-37**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**BRGWA-12I...**	**-0.3862**	**-37**	**-31**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**BRGWA-12S...**	**-0.2511**	**-32**	**-31**	**Yes**	**11**	**9.091**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**BRGWC-27I**	**-38.02**	**-29**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**BRGWC-29I**	**-80.65**	**-33**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Total Dissolved Solids (mg/L)	**BRGWC-25I**	**-44.21**	**-37**	**-27**	**Yes**	**10**	**0**	**n/a**	**n/a**	**0.02**	**NP**

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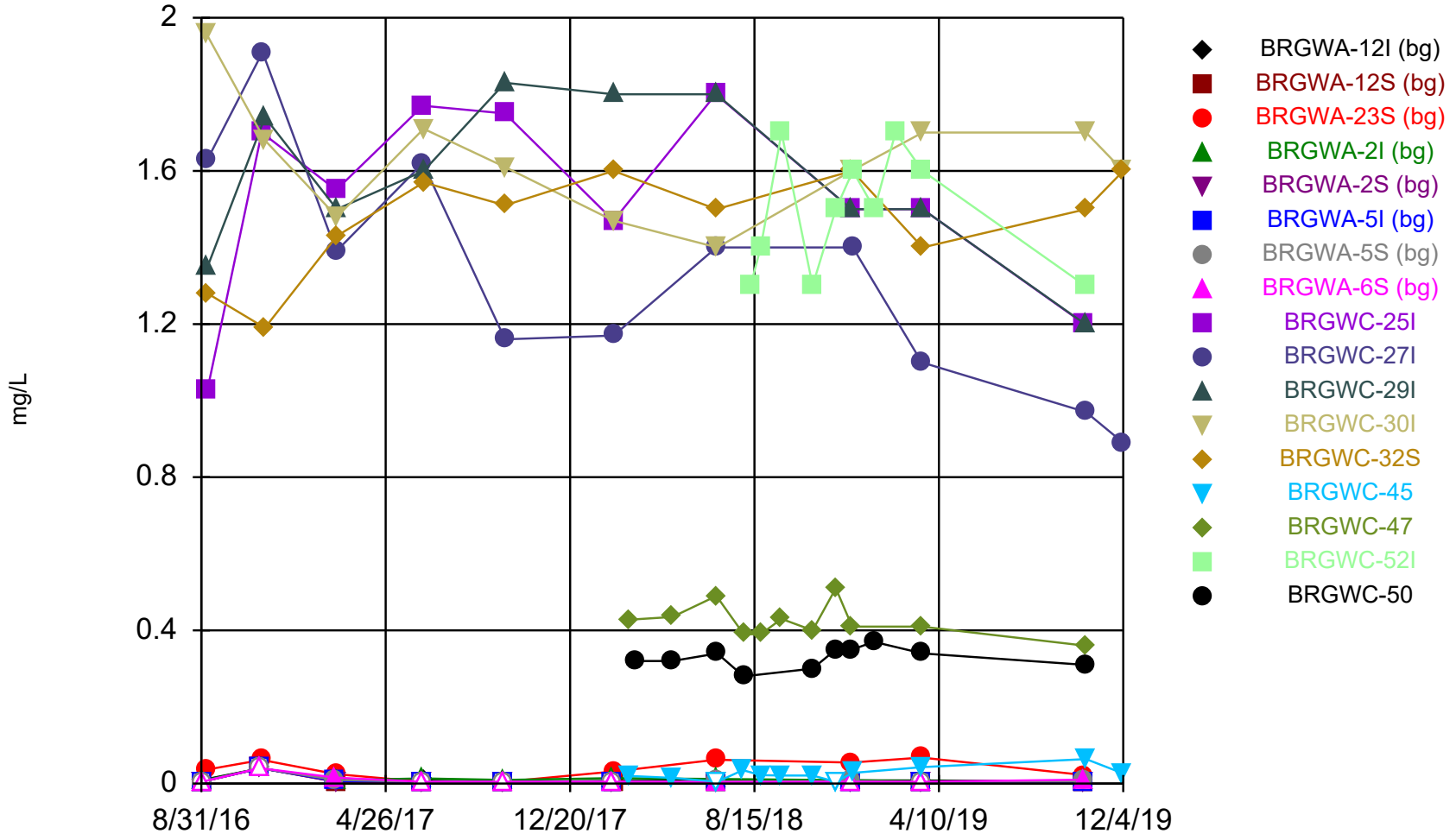
Hollow symbols indicate censored values.

Time Series

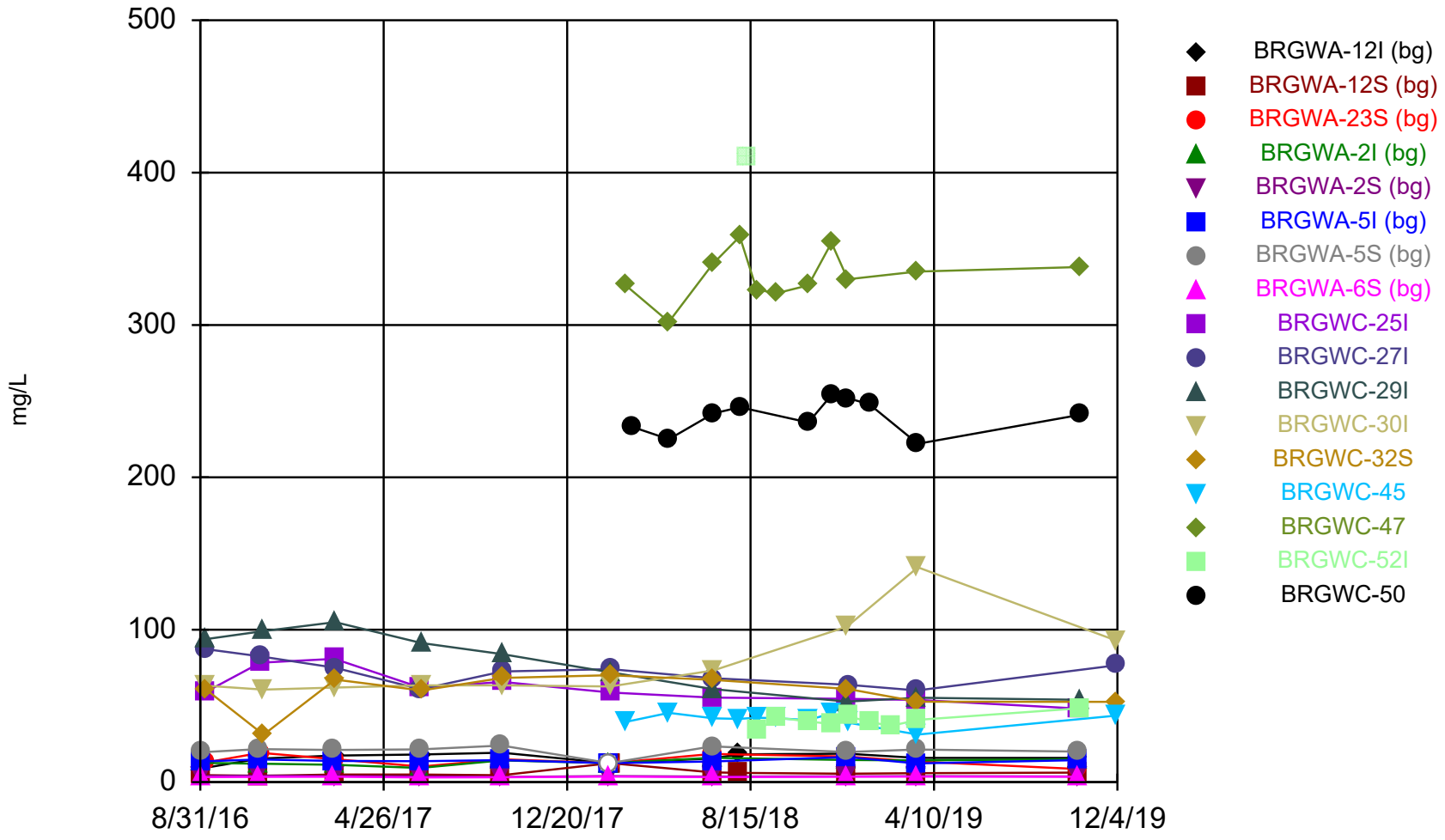


Constituent: Boron Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

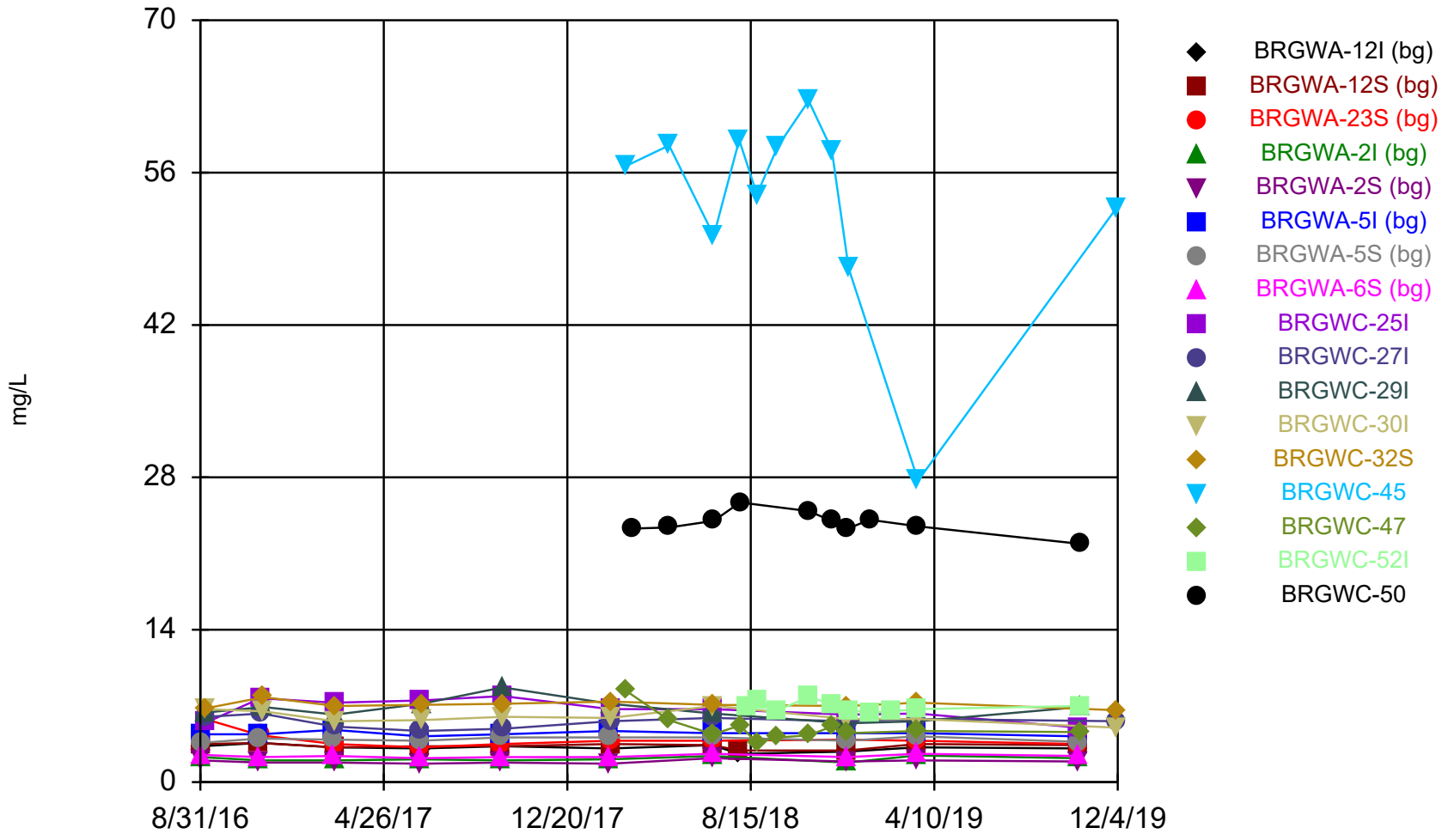
Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Calcium Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

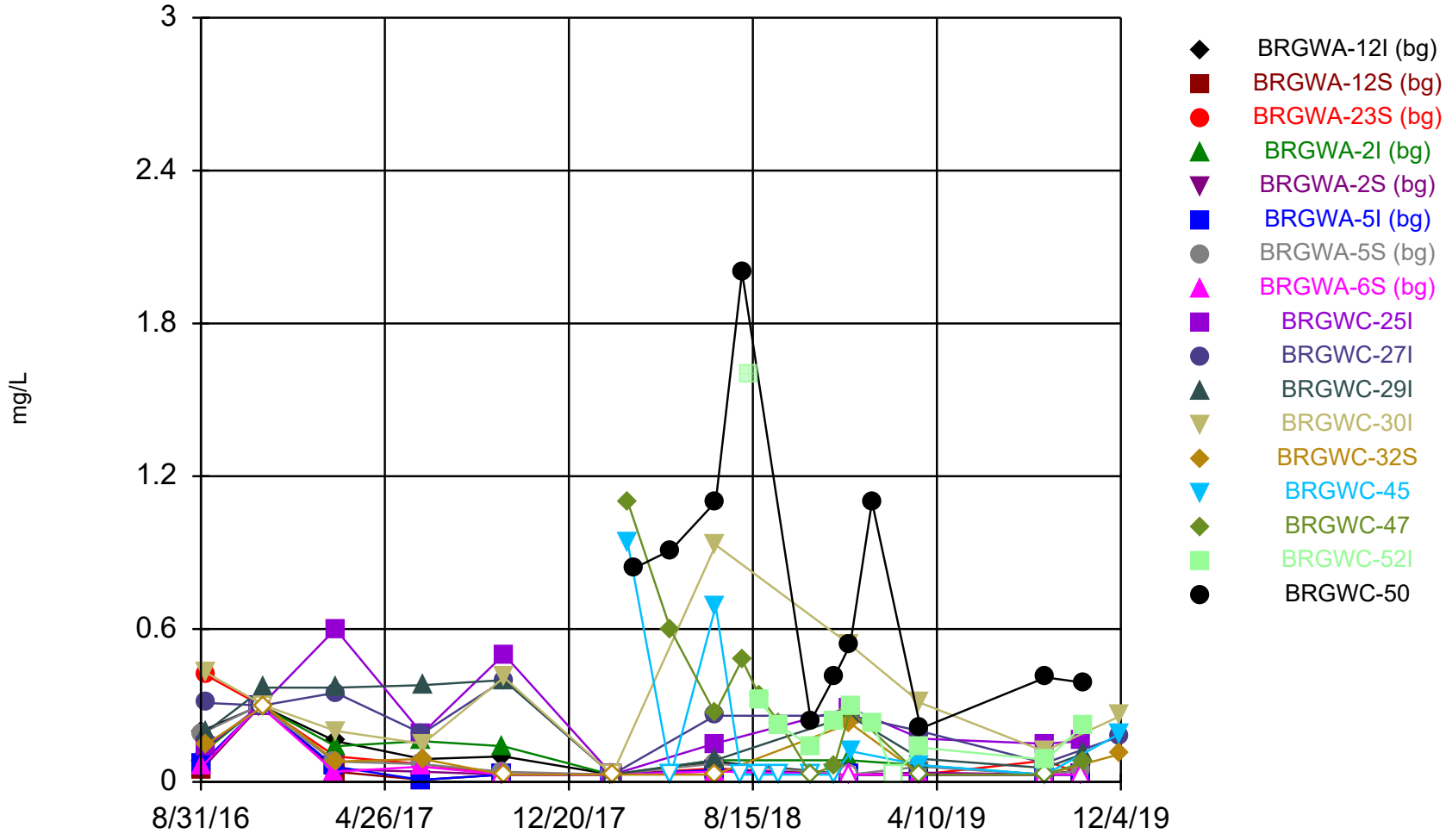
Time Series



Constituent: Chloride Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

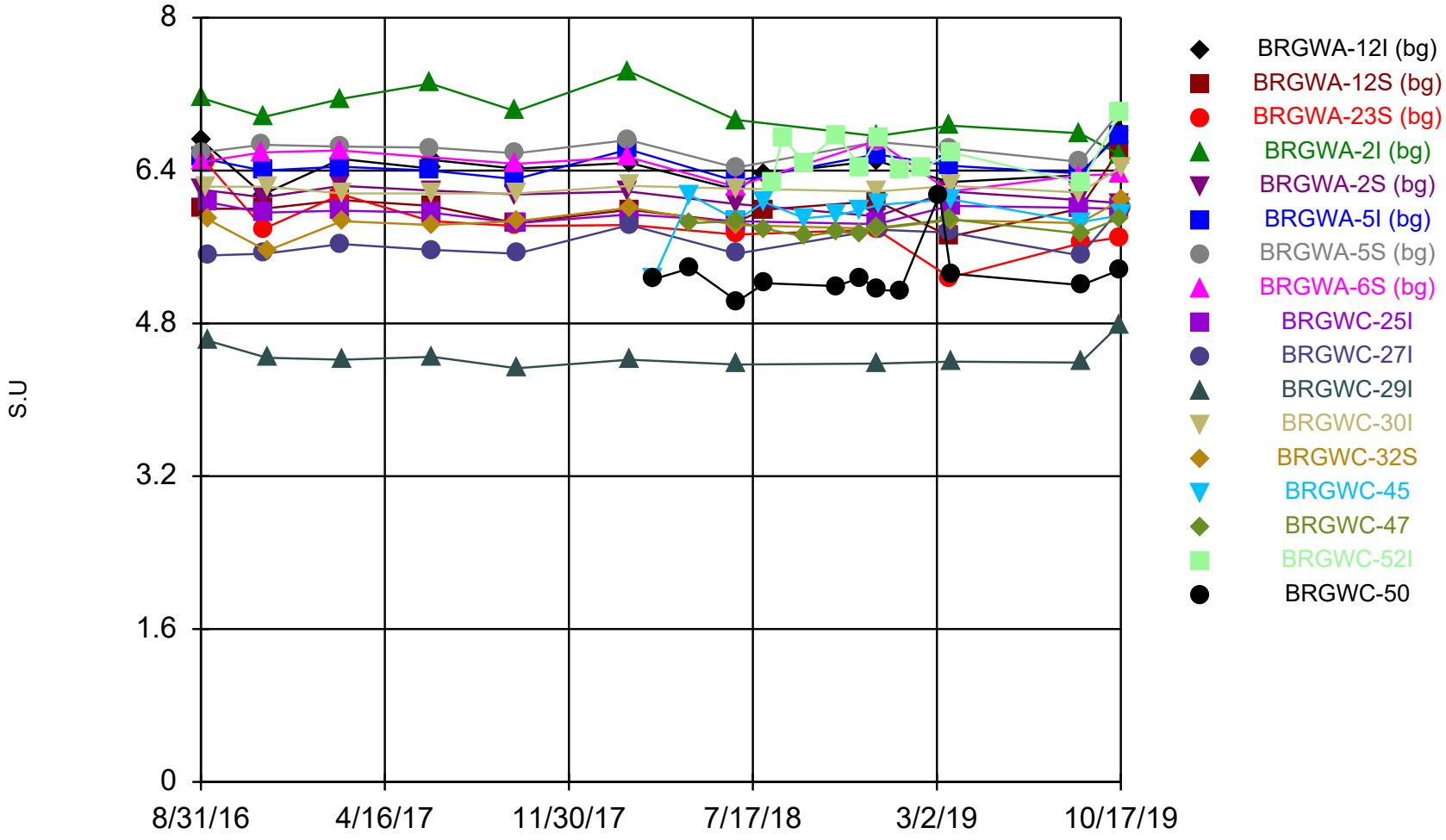
Time Series



Constituent: Fluoride Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Time Series

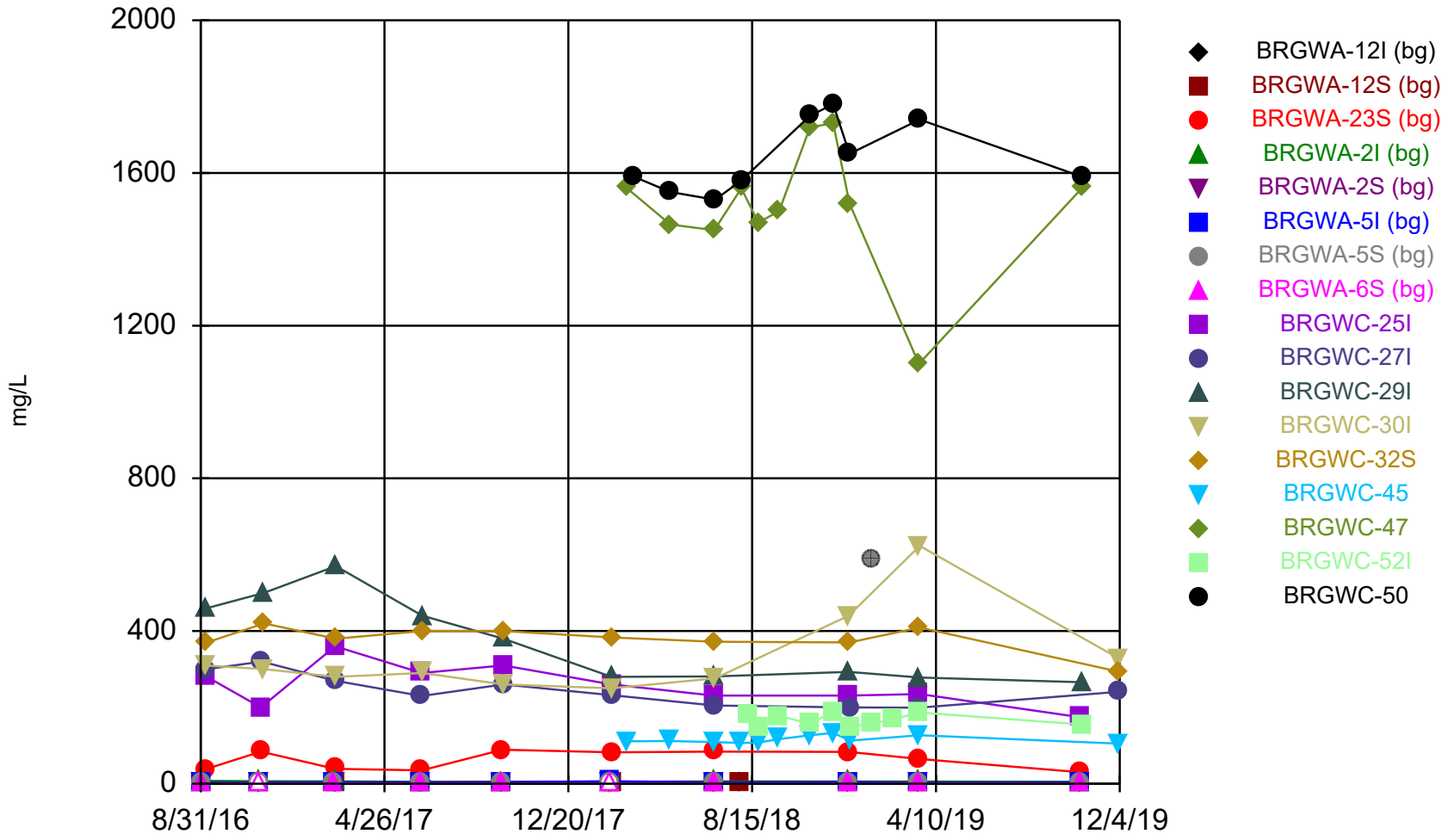


Constituent: pH Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Time Series

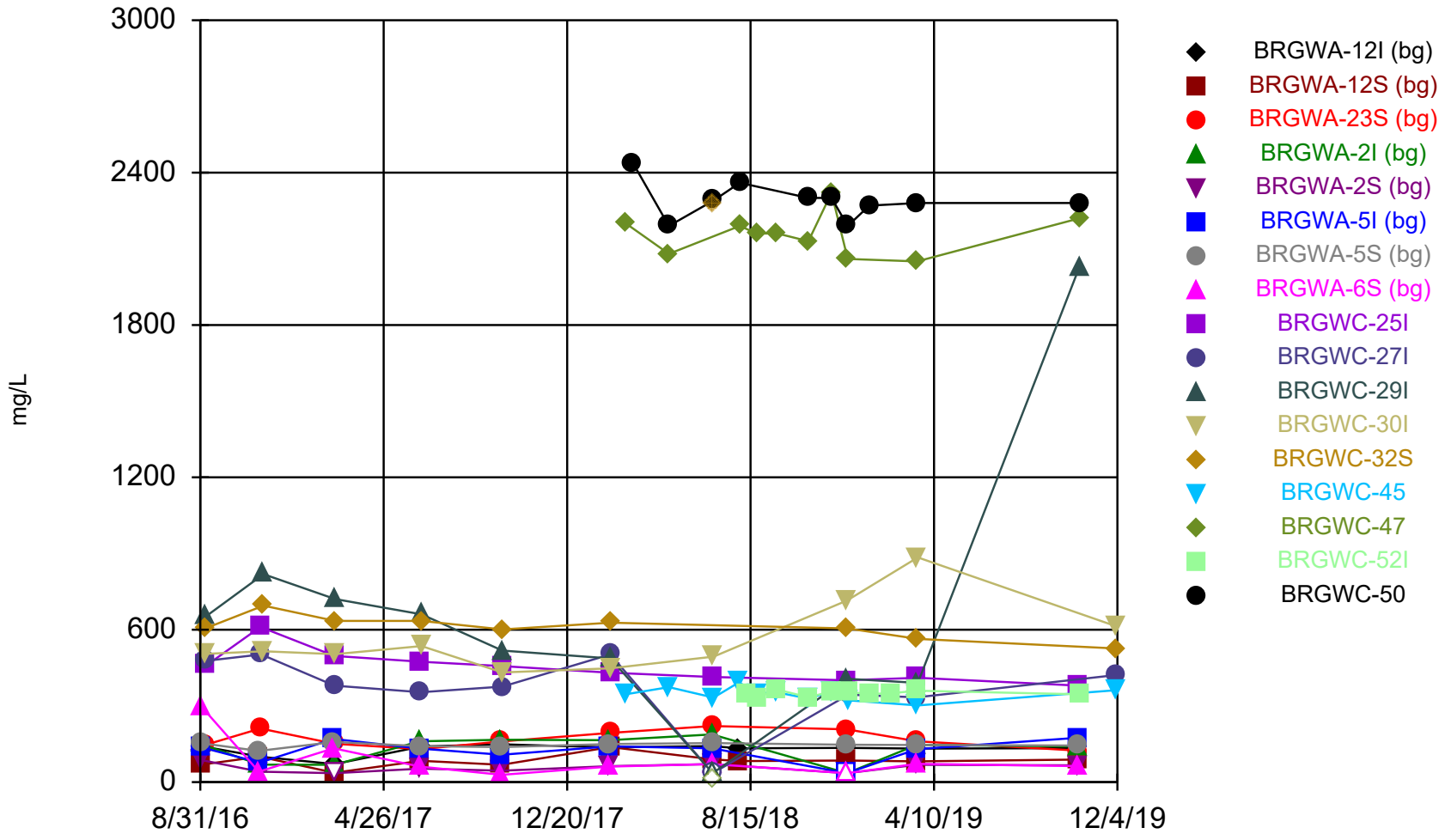


Constituent: Sulfate Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 For the statistical analyses of ground water by Golder Associates only. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Total Dissolved Solids Analysis Run 4/9/2020 11:36 AM View: Pond BCD Appendix III Branch Client: Golder Associates Data: Plant Branch Ash Pond

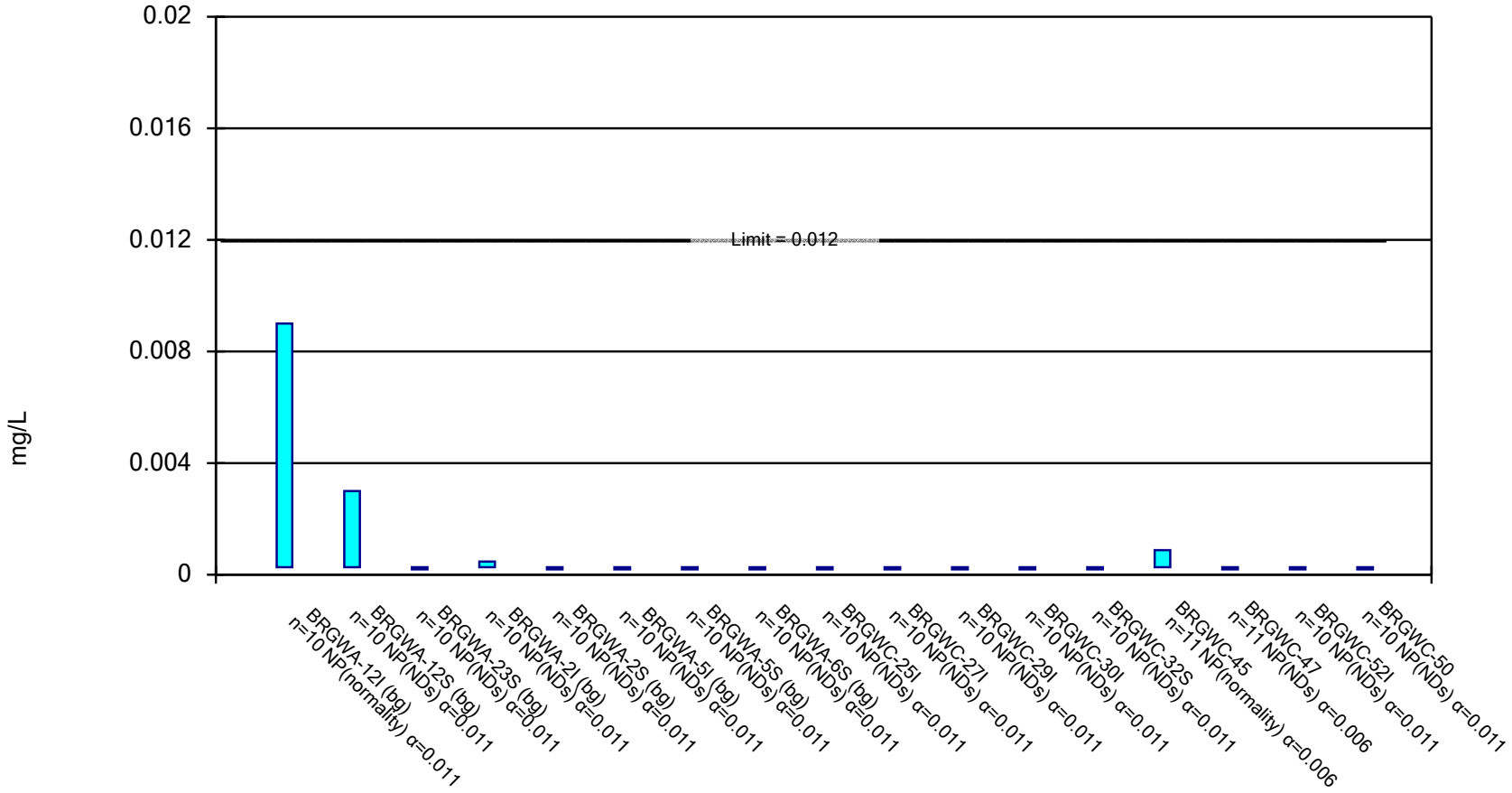
Tolerance Limit

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 10:31 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.012	n/a	n/a	n/a	80	85	n/a	0.01652	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.0012	n/a	n/a	n/a	80	72.5	n/a	0.01652	NP Inter(normal...
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	80	0	n/a	0.01652	NP Inter(normal...
Beryllium (mg/L)	n/a	0.000074	n/a	n/a	n/a	80	100	n/a	0.01652	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.00015	n/a	n/a	n/a	82	97.56	n/a	0.01491	NP Inter(NDs)
Chromium (mg/L)	n/a	0.016	n/a	n/a	n/a	80	31.25	n/a	0.01652	NP Inter(normal...
Cobalt (mg/L)	n/a	0.0135	n/a	n/a	n/a	82	59.76	n/a	0.01491	NP Inter(normal...
Combined Radium 226 + 228 (pCi/L)	n/a	1.856	n/a	n/a	n/a	80	0	sqrt(x)	0.05	Inter
Fluoride (mg/L)	n/a	0.42	n/a	n/a	n/a	88	51.14	n/a	0.01096	NP Inter(normal...
Lead (mg/L)	n/a	0.00036	n/a	n/a	n/a	80	85	n/a	0.01652	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	n/a	n/a	n/a	80	46.25	n/a	0.01652	NP Inter(normal...
Mercury (mg/L)	n/a	0.00021	n/a	n/a	n/a	72	90.28	n/a	0.02489	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	80	80	n/a	0.01652	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	n/a	n/a	80	93.75	n/a	0.01652	NP Inter(NDs)
Thallium (mg/L)	n/a	0.000052	n/a	n/a	n/a	80	100	n/a	0.01652	NP Inter(NDs)

Non-Parametric Confidence Interval

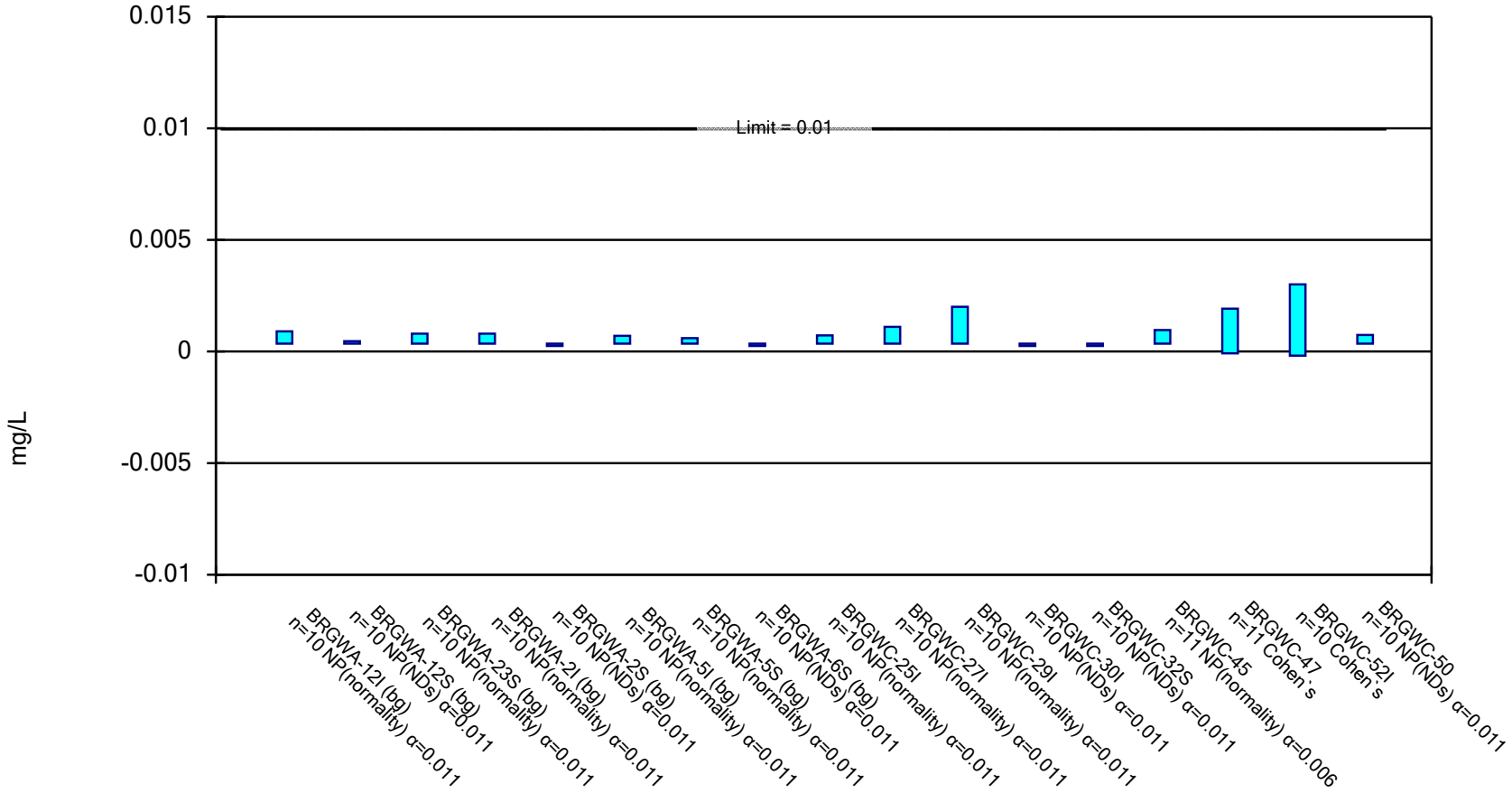
Compliance Limit is not exceeded.



Constituent: Antimony Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

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.

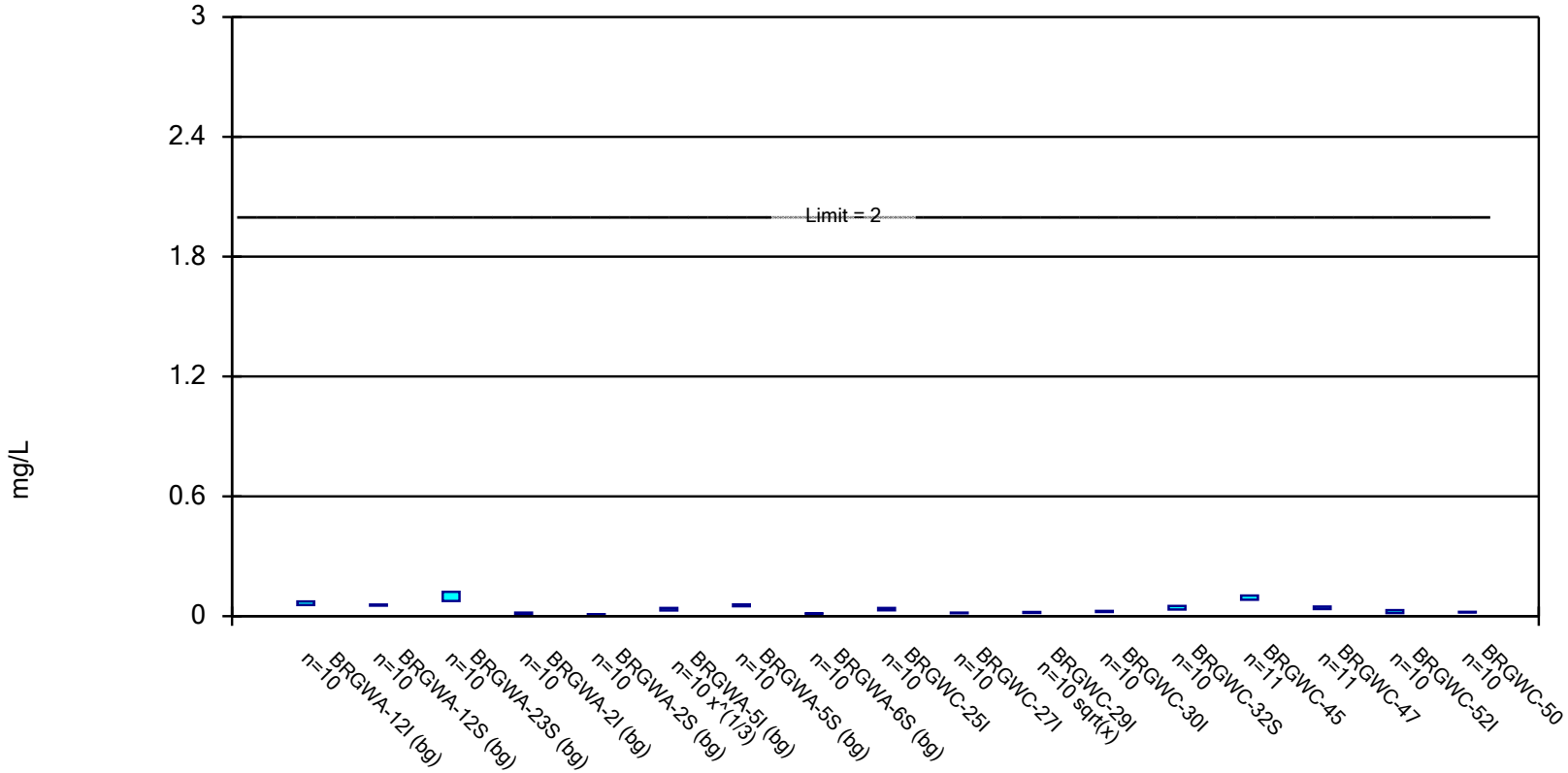


Constituent: Arsenic Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

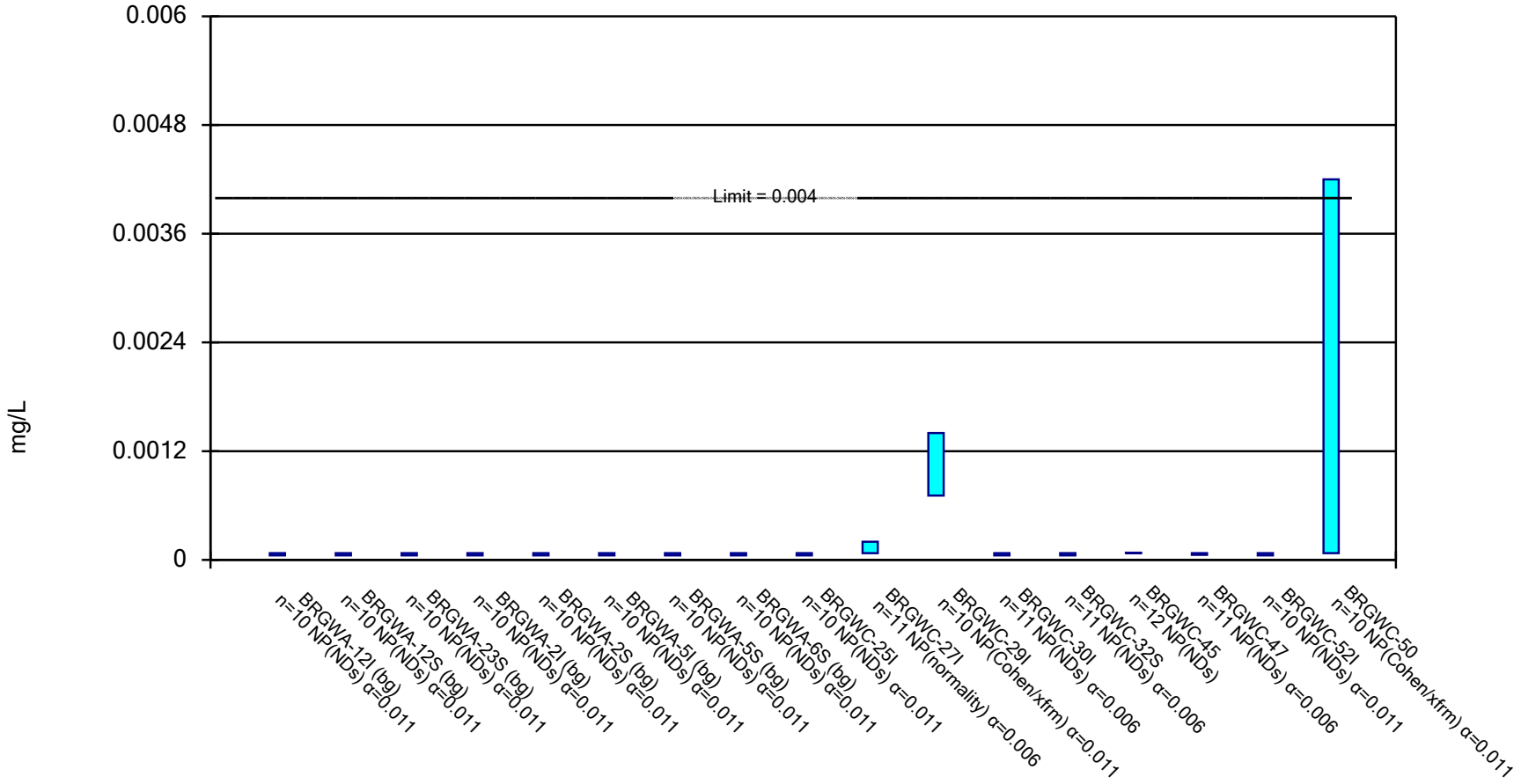


Constituent: Barium Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

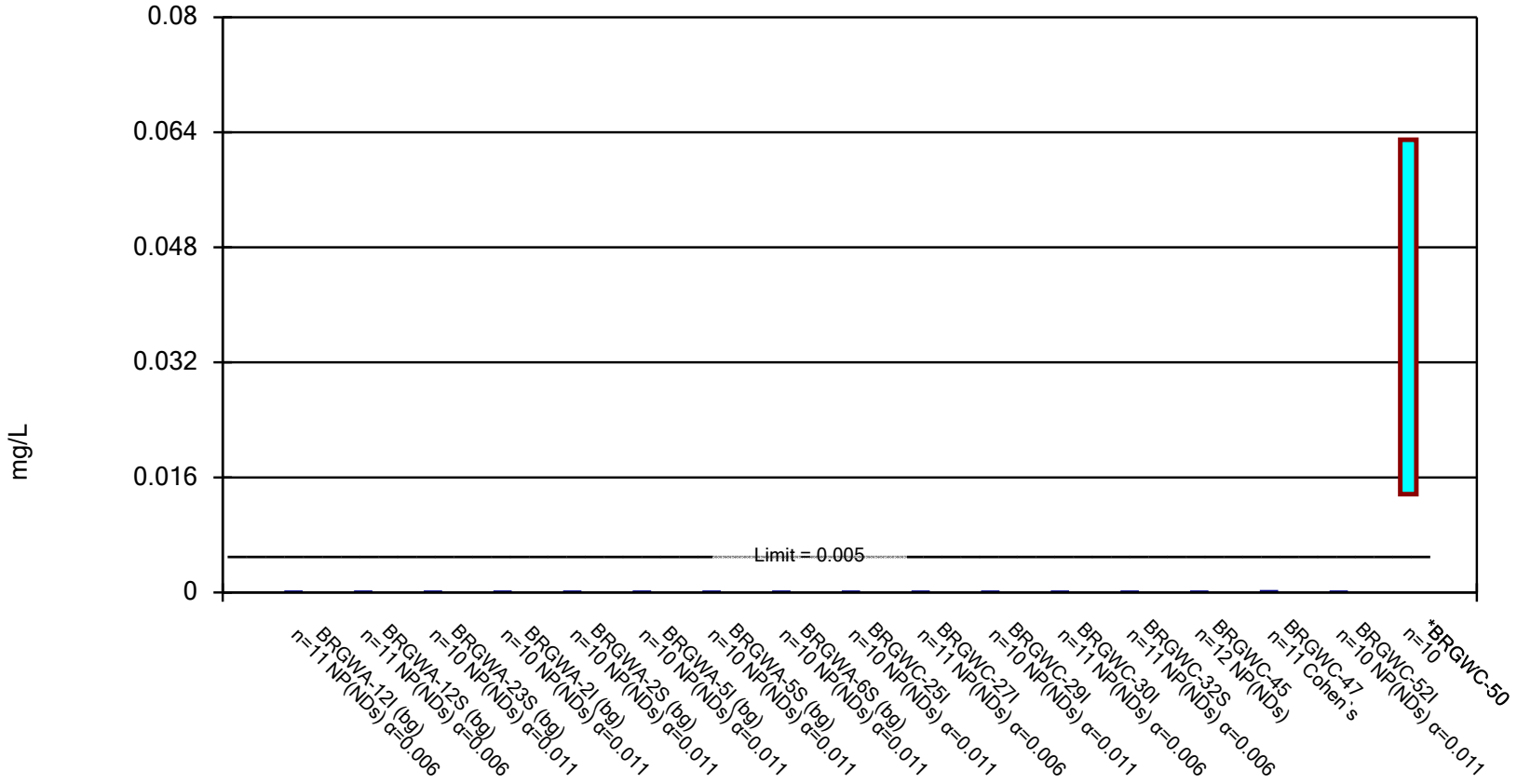
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Beryllium Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

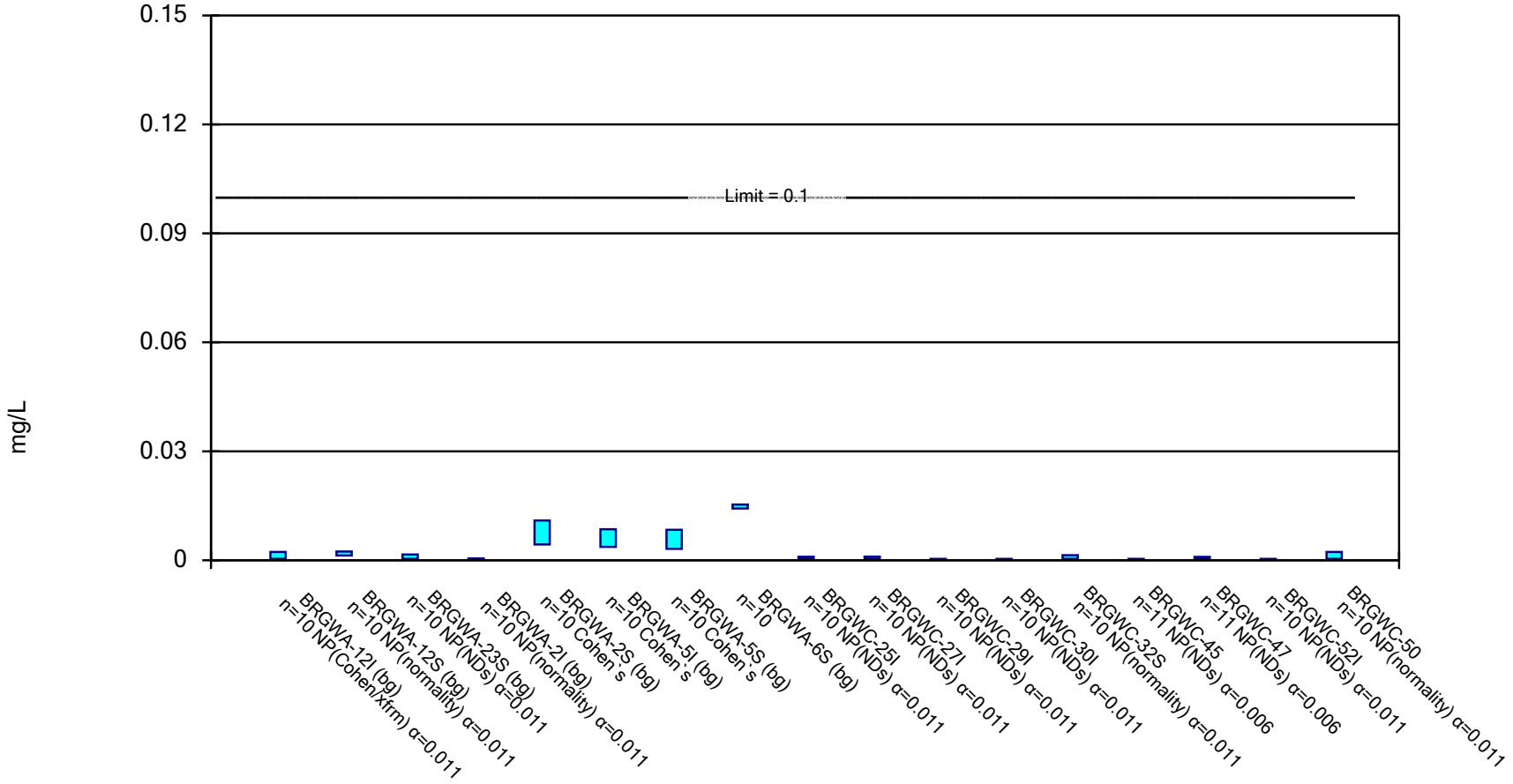


Constituent: Cadmium Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

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.

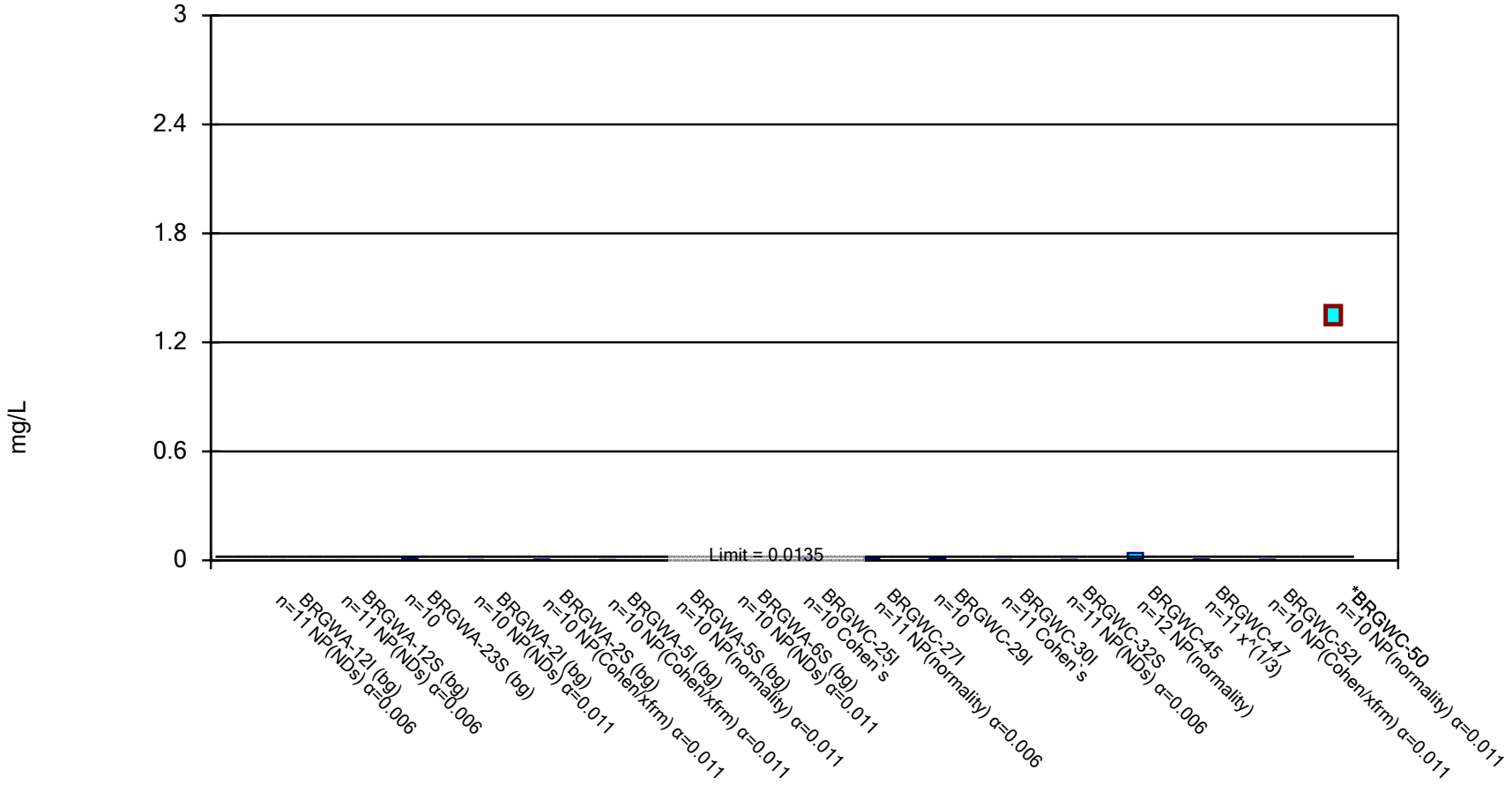


Constituent: Chromium Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

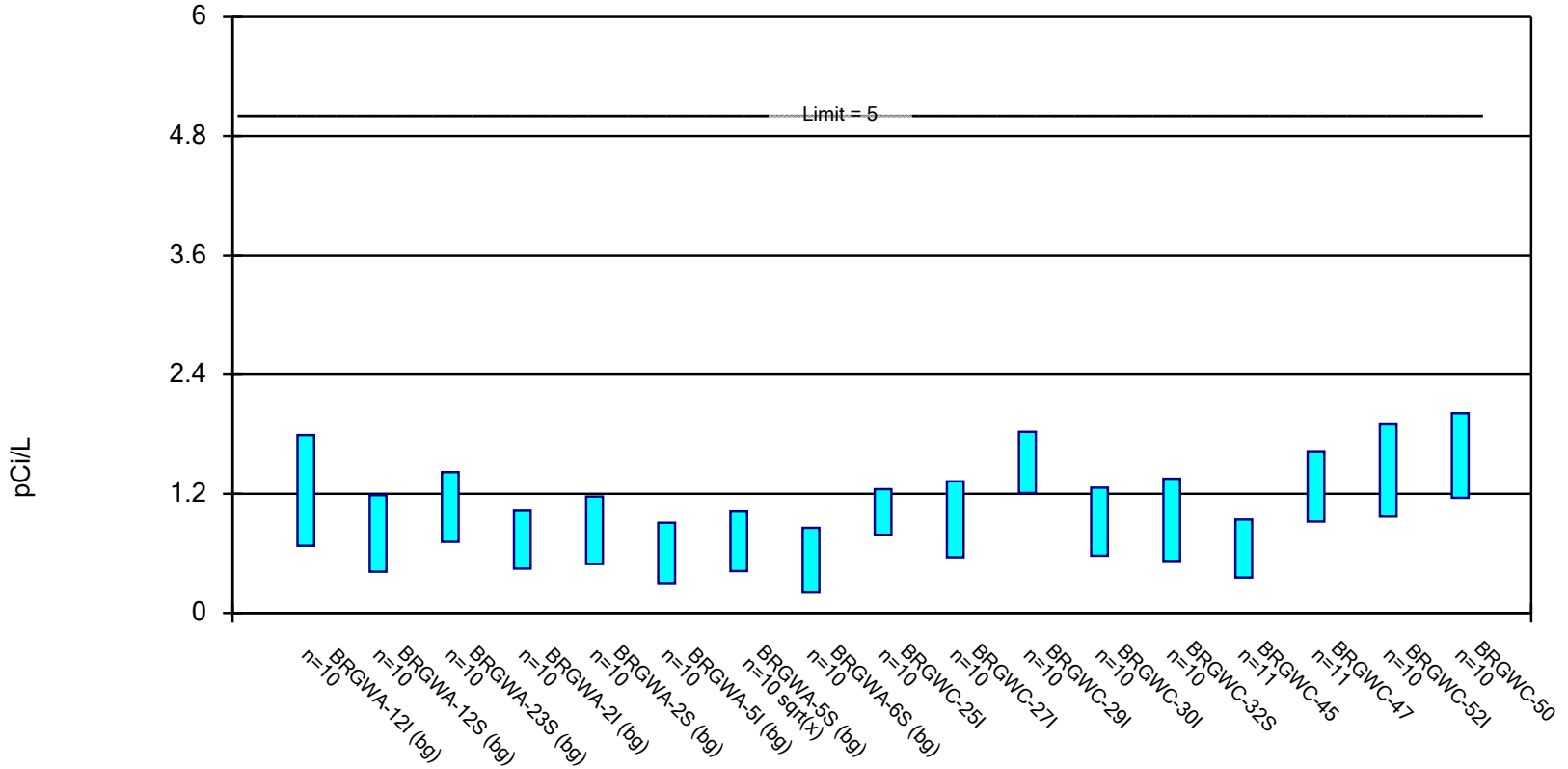


Constituent: Cobalt Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Parametric Confidence Interval

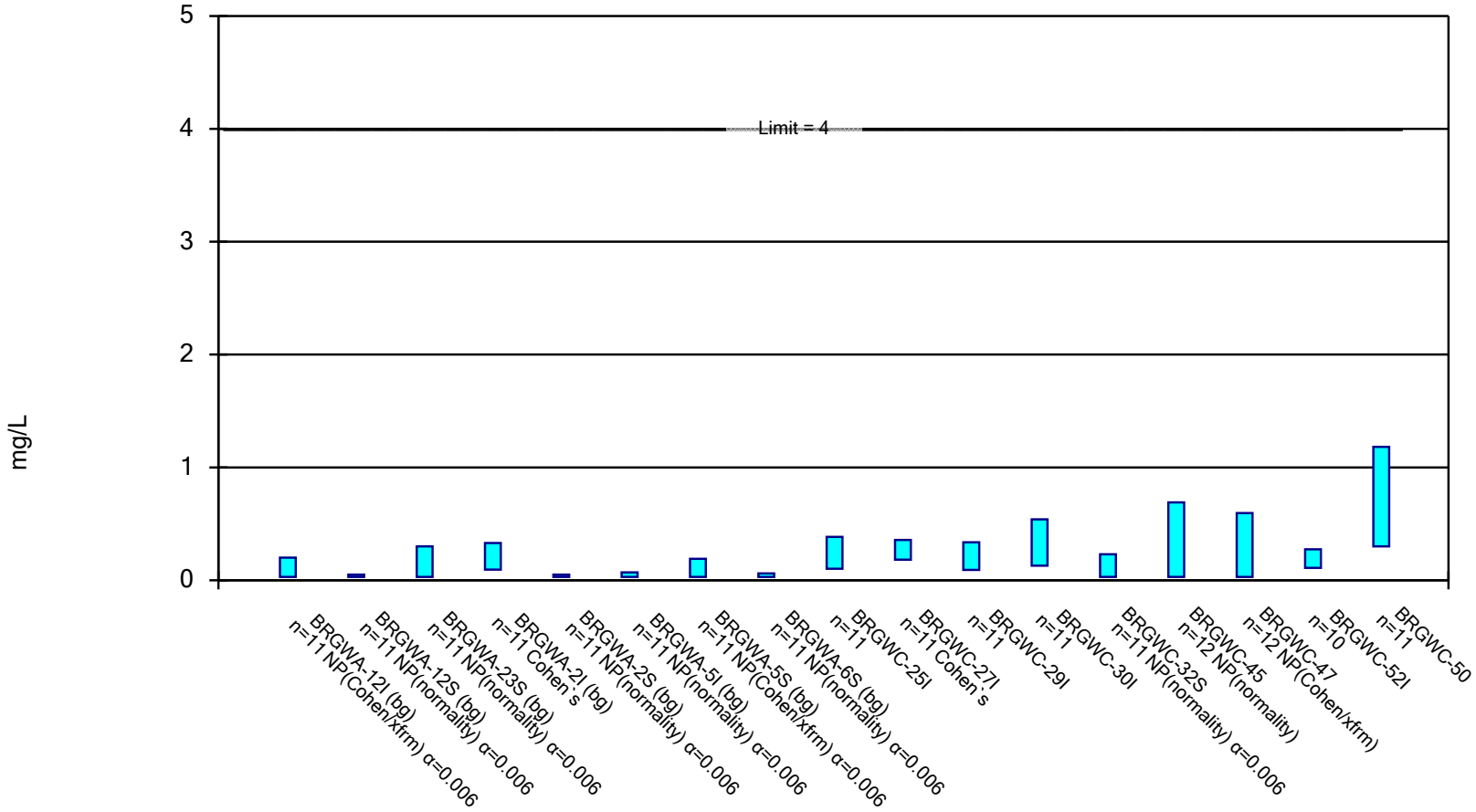
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

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.

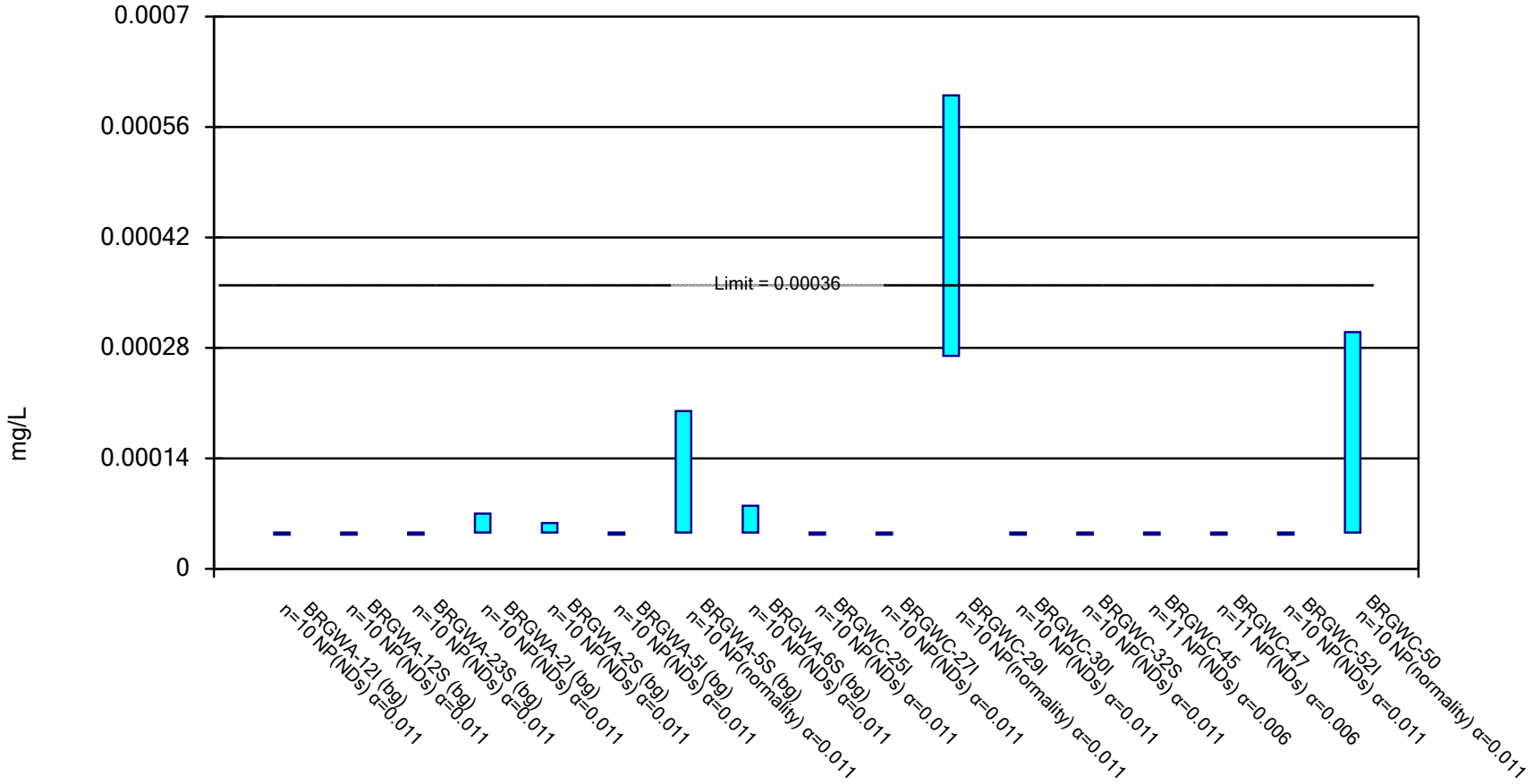


Constituent: Fluoride Analysis Run 4/9/2020 11:50 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

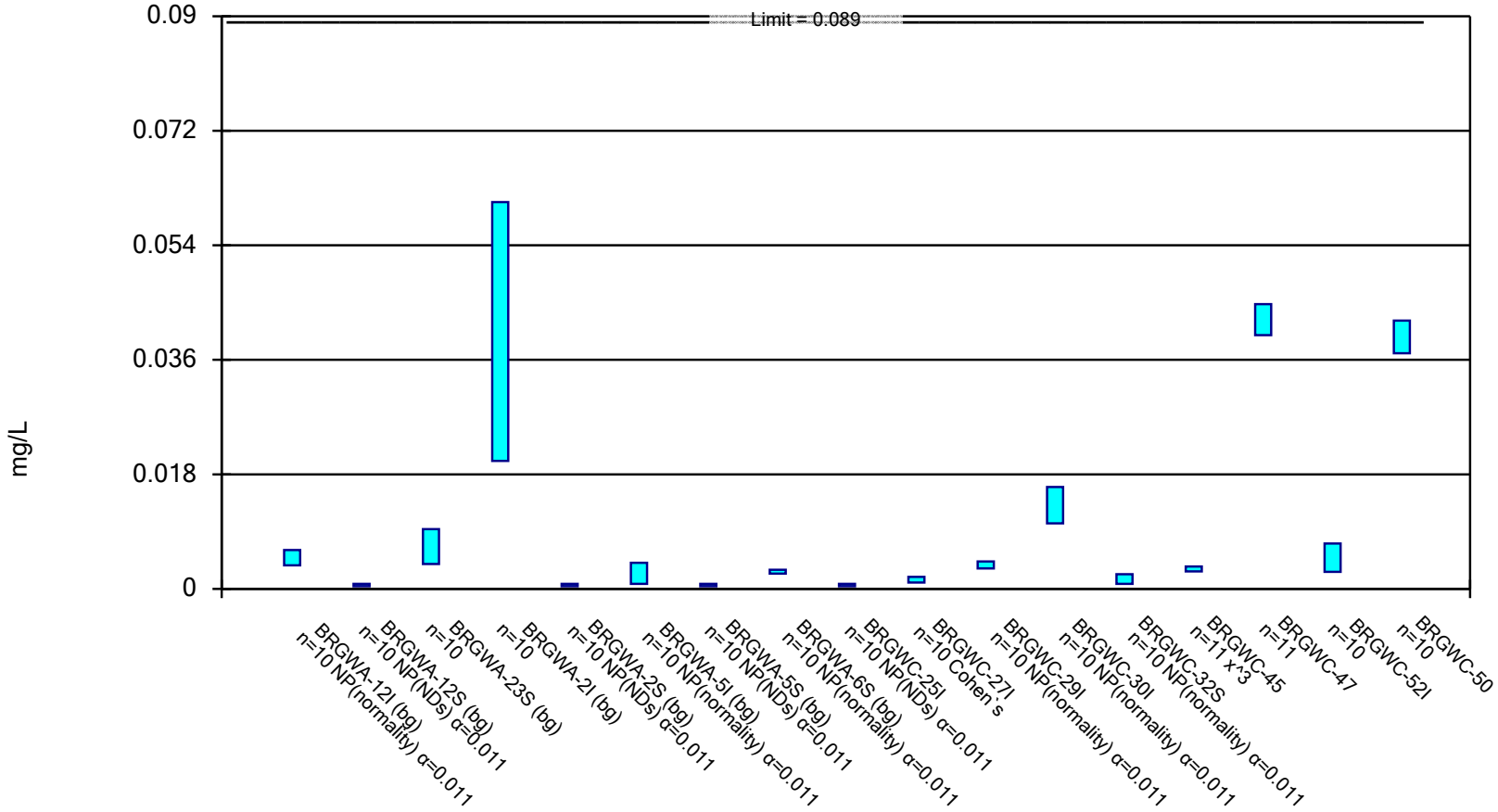
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

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.

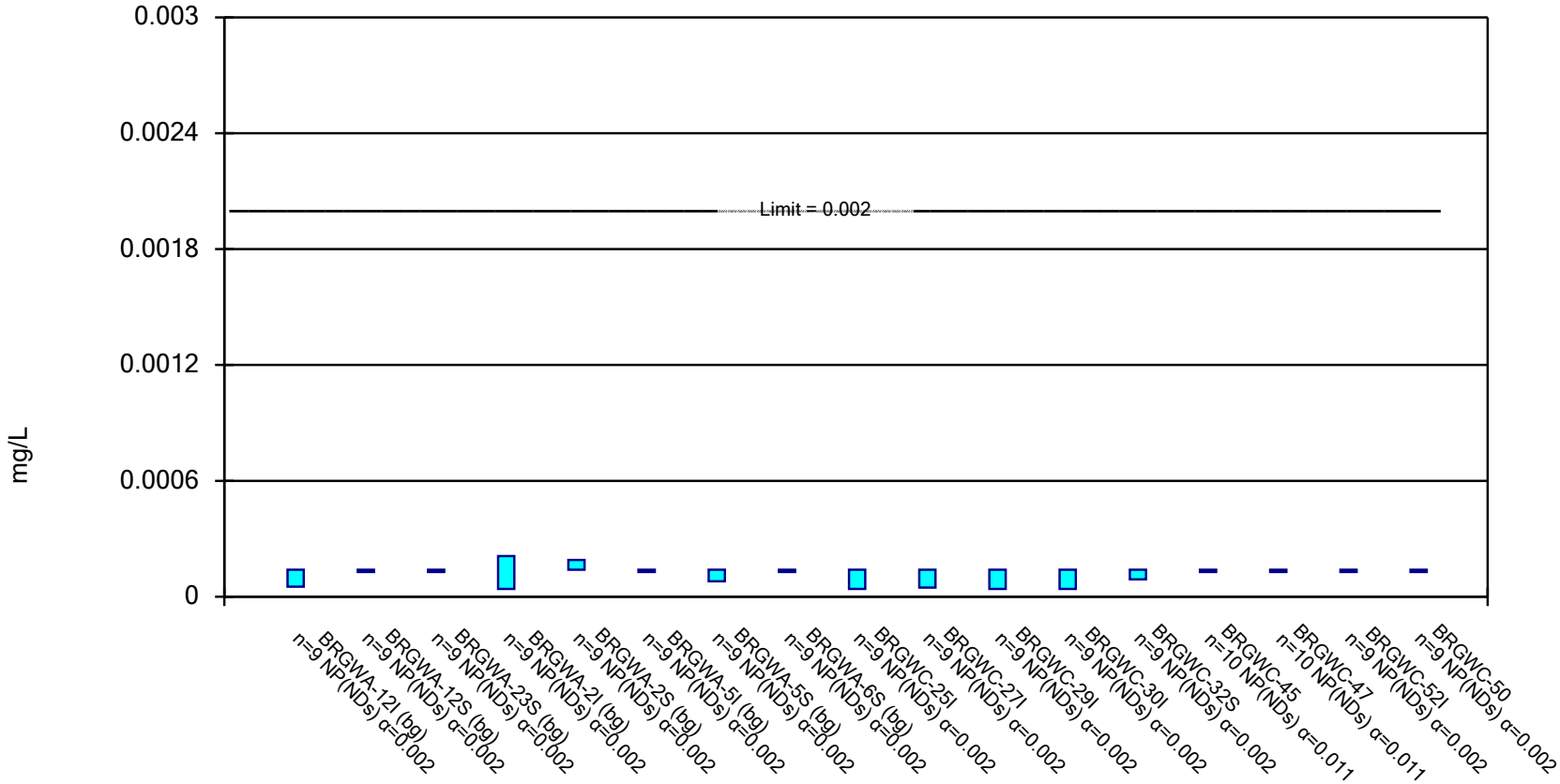


Constituent: Lithium Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV

Branch Client: Golder Associates Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

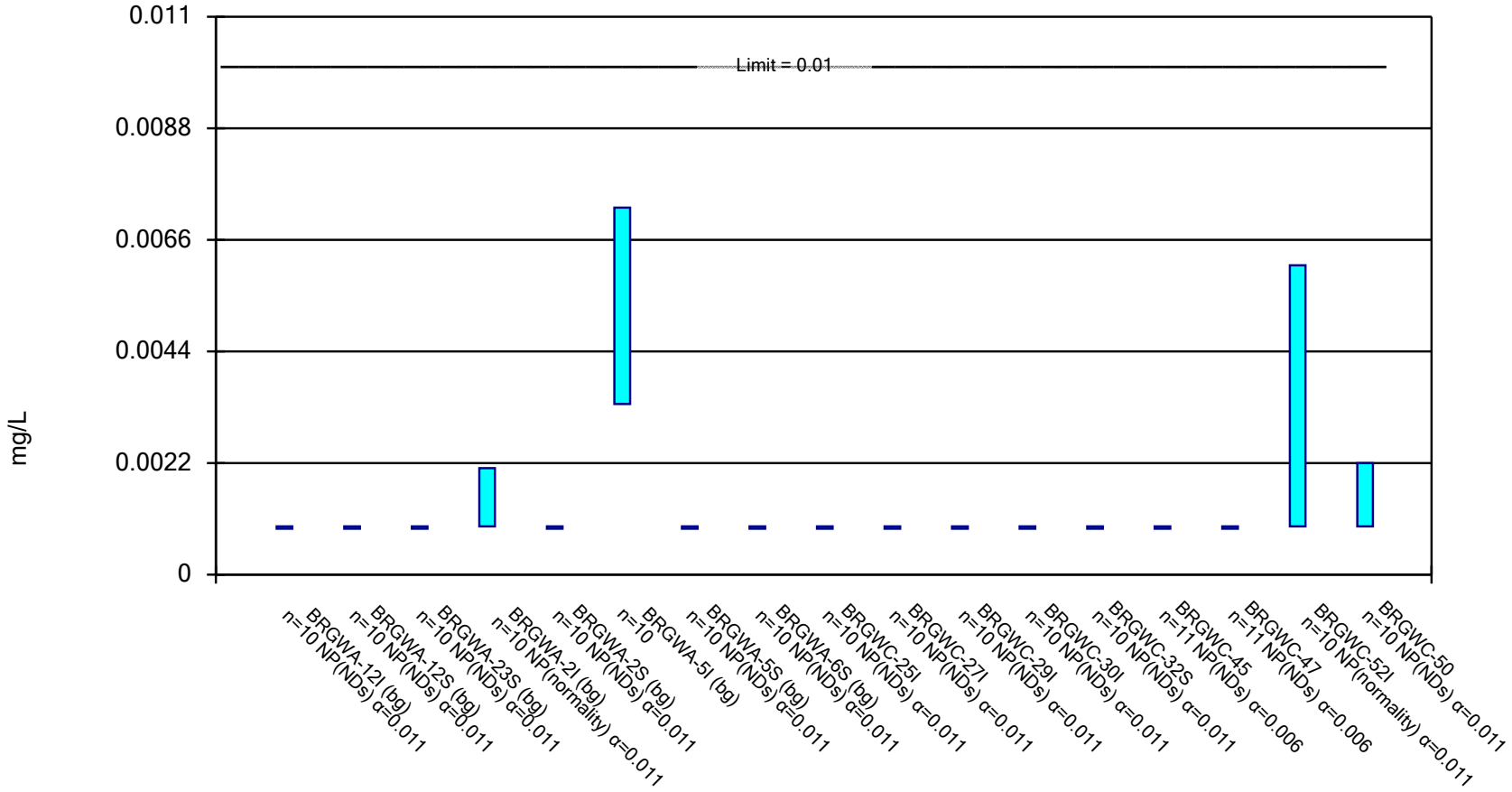
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

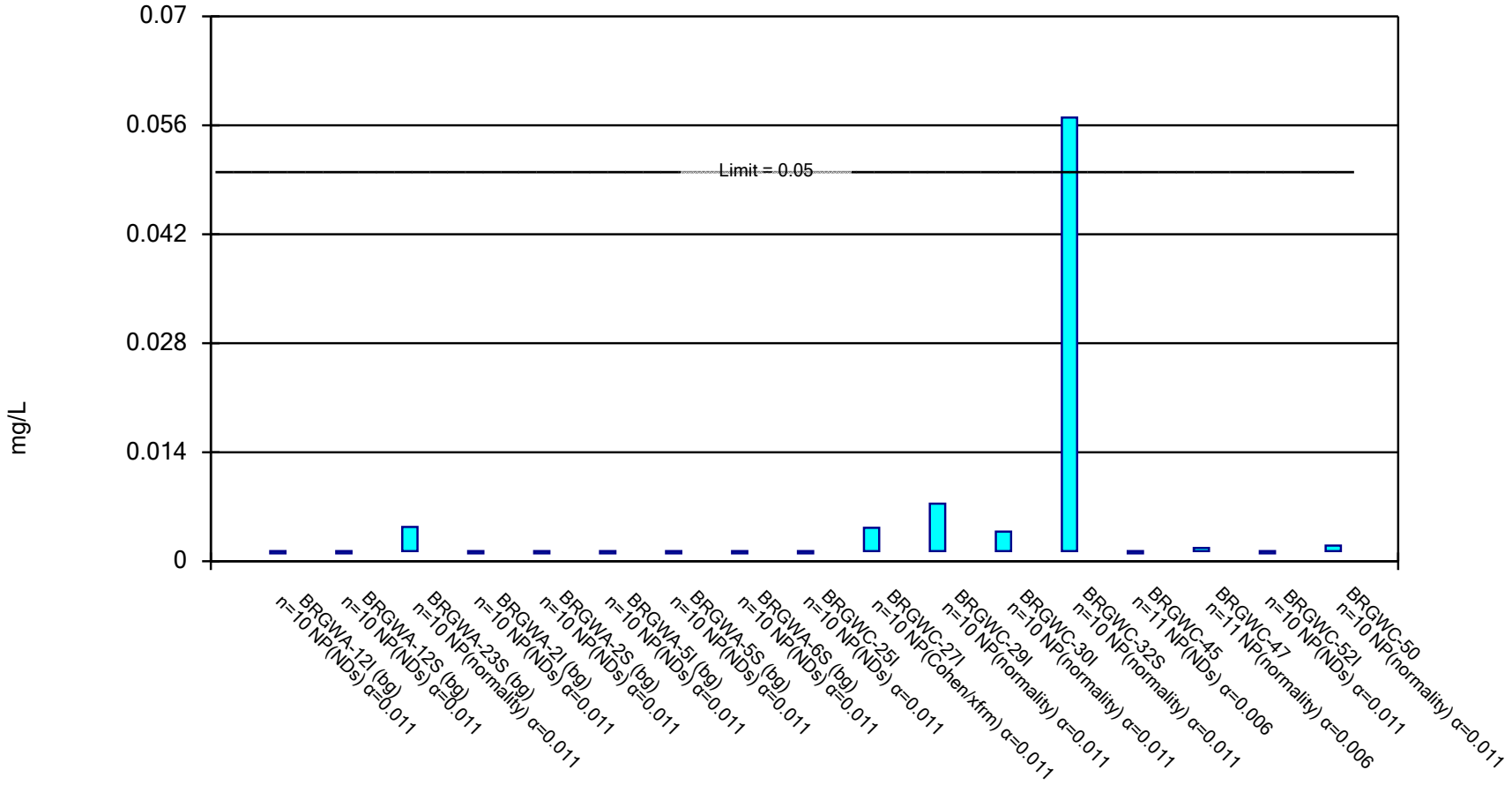
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

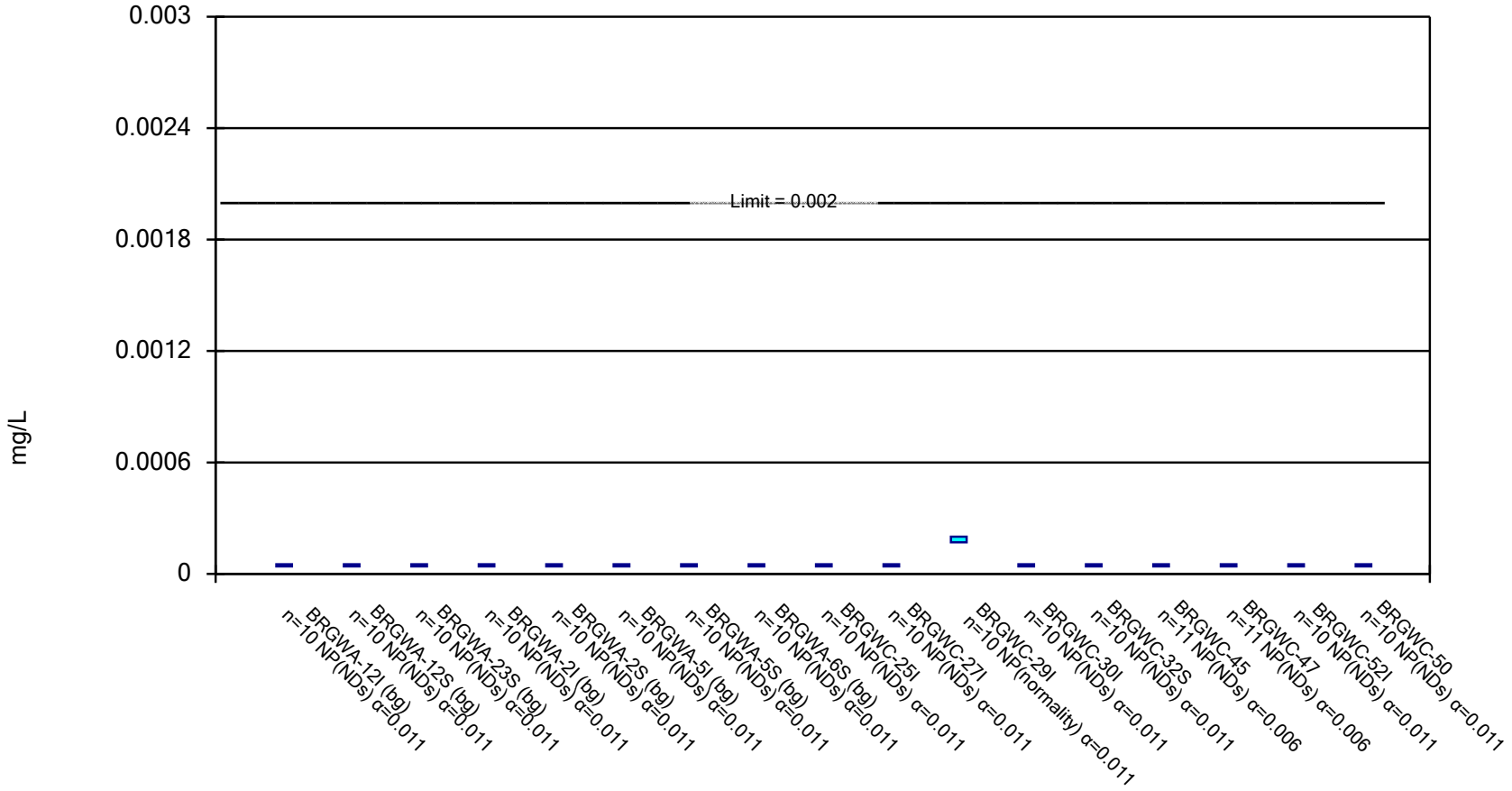
Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 4/9/2020 11:51 AM View: Pond BCD Appendix IV Branch Client: Golder Associates Data: Plant Branch Ash Pond

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	BRGWA-12I...	0.009	0.00027	0.012	No	10	50	No	0.011	NP (normality)
Antimony (mg/L)	BRGWA-12S...	0.003	0.00027	0.012	No	10	80	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-23S...	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-2I ...	0.00047	0.00027	0.012	No	10	80	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-2S ...	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-5I ...	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-5S ...	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWA-6S ...	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-25I	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-27I	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-29I	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-30I	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.00027	0.00027	0.012	No	10	100	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.00088	0.00027	0.012	No	11	72.73	No	0.006	NP (normality)
Antimony (mg/L)	BRGWC-47	0.00027	0.00027	0.012	No	11	100	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.00027	0.00027	0.012	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWA-12I...	0.0009	0.00035	0.01	No	10	70	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWA-12S...	0.00046	0.00035	0.01	No	10	80	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWA-23S...	0.0008	0.00035	0.01	No	10	50	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWA-2I ...	0.0008	0.00035	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWA-2S ...	0.00035	0.00035	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWA-5I ...	0.0007	0.00035	0.01	No	10	70	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWA-5S ...	0.0006	0.00035	0.01	No	10	70	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWA-6S ...	0.00035	0.00035	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWC-25I	0.00072	0.00035	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWC-27I	0.0011	0.00035	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWC-29I	0.002	0.00035	0.01	No	10	60	No	0.011	NP (normality)
Arsenic (mg/L)	BRGWC-30I	0.00035	0.00035	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.00035	0.00035	0.01	No	10	90	No	0.011	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.00096	0.00035	0.01	No	11	54.55	No	0.006	NP (normality)
Arsenic (mg/L)	BRGWC-47	0.001921	-0.00008013	0.01	No	11	36.36	No	0.01	Param.
Arsenic (mg/L)	BRGWC-52I	0.003006	-0.0001827	0.01	No	10	30	No	0.01	Param.
Arsenic (mg/L)	BRGWC-50	0.00074	0.00035	0.01	No	10	80	No	0.011	NP (NDs)
Barium (mg/L)	BRGWA-12I...	0.07344	0.05612	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-12S...	0.05775	0.05247	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-23S...	0.1219	0.07621	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-2I ...	0.01739	0.009514	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-2S ...	0.01001	0.009313	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-5I ...	0.04109	0.02879	2	No	10	0	x^(1/3)	0.01	Param.
Barium (mg/L)	BRGWA-5S ...	0.05903	0.04929	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWA-6S ...	0.0141	0.01294	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWC-25I	0.04066	0.02902	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.01777	0.01495	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.02077	0.01607	2	No	10	10	sqrt(x)	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02588	0.02054	2	No	10	10	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.05071	0.03353	2	No	10	0	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.1031	0.08198	2	No	11	0	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04792	0.03552	2	No	11	0	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.03	0.0154	2	No	10	0	No	0.01	Param.

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Barium (mg/L)	BRGWC-50	0.02168	0.01832	2	No	10	0	No	0.01	Param.
Beryllium (mg/L)	BRGWA-12I...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-12S...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-23S...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-2I ...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-2S ...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-5I ...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-5S ...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWA-6S ...	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWC-25I	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWC-27I	0.0002	0.000074	0.004	No	11	36.36	No	0.006	NP (normality)
Beryllium (mg/L)	BRGWC-29I	0.0014	0.00071	0.004	No	10	20	No	0.011	NP (Cohens/xfrm)
Beryllium (mg/L)	BRGWC-30I	0.000074	0.000074	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	BRGWC-32S	0.000074	0.000074	0.004	No	11	100	No	0.006	NP (NDs)
Beryllium (mg/L)	BRGWC-45	0.000079	0.000074	0.004	No	12	91.67	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.000074	0.000056	0.004	No	11	81.82	No	0.006	NP (NDs)
Beryllium (mg/L)	BRGWC-52I	0.000074	0.000074	0.004	No	10	100	No	0.011	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.0042	0.000074	0.004	No	10	20	No	0.011	NP (Cohens/xfrm)
Cadmium (mg/L)	BRGWA-12I...	0.00011	0.00011	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	BRGWA-12S...	0.00011	0.00011	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	BRGWA-23S...	0.00011	0.00011	0.005	No	10	80	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWA-2I ...	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWA-2S ...	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWA-5I ...	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWA-5S ...	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWA-6S ...	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWC-25I	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWC-27I	0.00011	0.00011	0.005	No	11	90.91	No	0.006	NP (NDs)
Cadmium (mg/L)	BRGWC-29I	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	BRGWC-30I	0.00011	0.00011	0.005	No	11	100	No	0.006	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.00011	0.00011	0.005	No	11	81.82	No	0.006	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.00011	0.00011	0.005	No	12	83.33	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0001854	0.0001019	0.005	No	11	27.27	No	0.01	Param.
Cadmium (mg/L)	BRGWC-52I	0.00011	0.00011	0.005	No	10	100	No	0.011	NP (NDs)
Cadmium (mg/L)	**BRGWC-50**	**0.06295**	**0.01367**	**0.005**	**Yes**	**10**	**0**	**No**	**0.01**	**Param.**
Chromium (mg/L)	BRGWA-12I...	0.0023	0.00039	0.1	No	10	30	No	0.011	NP (Cohens/xfrm)
Chromium (mg/L)	BRGWA-12S...	0.0024	0.0013	0.1	No	10	20	No	0.011	NP (normality)
Chromium (mg/L)	BRGWA-23S...	0.0016	0.00039	0.1	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWA-2I ...	0.0005	0.00039	0.1	No	10	60	No	0.011	NP (normality)
Chromium (mg/L)	BRGWA-2S ...	0.01096	0.004325	0.1	No	10	20	No	0.01	Param.
Chromium (mg/L)	BRGWA-5I ...	0.008528	0.003667	0.1	No	10	20	No	0.01	Param.
Chromium (mg/L)	BRGWA-5S ...	0.008374	0.00312	0.1	No	10	20	No	0.01	Param.
Chromium (mg/L)	BRGWA-6S ...	0.01535	0.01423	0.1	No	10	0	No	0.01	Param.
Chromium (mg/L)	BRGWC-25I	0.00098	0.00039	0.1	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.001	0.00039	0.1	No	10	80	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.00039	0.00039	0.1	No	10	100	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.00039	0.00039	0.1	No	10	90	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.0014	0.00039	0.1	No	10	50	No	0.011	NP (normality)
Chromium (mg/L)	BRGWC-45	0.00039	0.00039	0.1	No	11	100	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.00092	0.00039	0.1	No	11	81.82	No	0.006	NP (NDs)

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Chromium (mg/L)	BRGWC-52I	0.00039	0.00039	0.1	No	10	90	No	0.011	NP (NDs)
Chromium (mg/L)	BRGWC-50	0.0023	0.00039	0.1	No	10	70	No	0.011	NP (normality)
Cobalt (mg/L)	BRGWA-12I...	0.0003	0.0003	0.0135	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	BRGWA-12S...	0.0003	0.0003	0.0135	No	11	100	No	0.006	NP (NDs)
Cobalt (mg/L)	BRGWA-23S...	0.0093	0.00194	0.0135	No	10	10	No	0.01	Param.
Cobalt (mg/L)	BRGWA-2I ...	0.0016	0.0003	0.0135	No	10	90	No	0.011	NP (NDs)
Cobalt (mg/L)	BRGWA-2S ...	0.0034	0.00097	0.0135	No	10	20	No	0.011	NP (Cohens/xfrm)
Cobalt (mg/L)	BRGWA-5I ...	0.0016	0.00062	0.0135	No	10	20	No	0.011	NP (Cohens/xfrm)
Cobalt (mg/L)	BRGWA-5S ...	0.0006	0.0003	0.0135	No	10	50	No	0.011	NP (normality)
Cobalt (mg/L)	BRGWA-6S ...	0.0003	0.0003	0.0135	No	10	80	No	0.011	NP (NDs)
Cobalt (mg/L)	BRGWC-25I	0.009764	0.005214	0.0135	No	10	20	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.0149	0.0086	0.0135	No	11	9.091	No	0.006	NP (normality)
Cobalt (mg/L)	BRGWC-29I	0.01207	0.004831	0.0135	No	10	10	No	0.01	Param.
Cobalt (mg/L)	BRGWC-30I	0.00132	0.0002573	0.0135	No	11	27.27	No	0.01	Param.
Cobalt (mg/L)	BRGWC-32S	0.0025	0.0003	0.0135	No	11	90.91	No	0.006	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.04	0.0071	0.0135	No	12	8.333	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-47	0.004801	0.0005334	0.0135	No	11	9.091	x^(1/3)	0.01	Param.
Cobalt (mg/L)	BRGWC-52I	0.0028	0.0003	0.0135	No	10	40	No	0.011	NP (Cohens/xfrm)
Cobalt (mg/L)	**BRGWC-50**	**1.4**	**1.3**	**0.0135**	**Yes**	**10**	**0**	**No**	**0.011**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	BRGWA-12I...	1.789	0.676	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-12S...	1.185	0.4146	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-23S...	1.418	0.716	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-2I ...	1.029	0.4459	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-2S ...	1.171	0.4928	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-5I ...	0.9092	0.3001	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-5S ...	1.021	0.4212	5	No	10	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWA-6S ...	0.8575	0.2043	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-25I	1.246	0.7882	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.325	0.5608	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.821	1.207	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.262	0.5767	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.352	0.5236	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.9418	0.3549	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.629	0.9205	5	No	11	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	1.907	0.9716	5	No	10	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	2.01	1.158	5	No	10	0	No	0.01	Param.
Fluoride (mg/L)	BRGWA-12I...	0.2	0.029	4	No	11	45.45	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	BRGWA-12S...	0.05	0.029	4	No	11	63.64	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWA-23S...	0.3	0.029	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWA-2I ...	0.3299	0.09423	4	No	11	36.36	No	0.01	Param.
Fluoride (mg/L)	BRGWA-2S ...	0.05	0.029	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWA-5I ...	0.07	0.029	4	No	11	63.64	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWA-5S ...	0.19	0.029	4	No	11	36.36	No	0.006	NP (Cohens/xfrm)
Fluoride (mg/L)	BRGWA-6S ...	0.06	0.029	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWC-25I	0.3849	0.1022	4	No	11	18.18	No	0.01	Param.
Fluoride (mg/L)	BRGWC-27I	0.3575	0.1828	4	No	11	18.18	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.3359	0.09138	4	No	11	9.091	No	0.01	Param.
Fluoride (mg/L)	BRGWC-30I	0.5403	0.1286	4	No	11	18.18	No	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.23	0.029	4	No	11	54.55	No	0.006	NP (normality)
Fluoride (mg/L)	BRGWC-45	0.69	0.029	4	No	12	58.33	No	0.01	NP (normality)

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Fluoride (mg/L)	BRGWC-47	0.595	0.029	4	No	12	25	No	0.01	NP (Cohens/xfrm)
Fluoride (mg/L)	BRGWC-52I	0.2746	0.1096	4	No	10	10	No	0.01	Param.
Fluoride (mg/L)	BRGWC-50	1.182	0.3002	4	No	11	0	No	0.01	Param.
Lead (mg/L)	BRGWA-12I...	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-12S...	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-23S...	0.000046	0.000046	0.00036	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-2I ...	0.00007	0.000046	0.00036	No	10	80	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-2S ...	0.000058	0.000046	0.00036	No	10	80	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-5I ...	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWA-5S ...	0.0002	0.000046	0.00036	No	10	50	No	0.011	NP (normality)
Lead (mg/L)	BRGWA-6S ...	0.00008	0.000046	0.00036	No	10	80	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-25I	0.000046	0.000046	0.00036	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.000046	0.000046	0.00036	No	10	90	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0006	0.00027	0.00036	No	10	20	No	0.011	NP (normality)
Lead (mg/L)	BRGWC-30I	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-32S	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-45	0.000046	0.000046	0.00036	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-47	0.000046	0.000046	0.00036	No	11	100	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-52I	0.000046	0.000046	0.00036	No	10	100	No	0.011	NP (NDs)
Lead (mg/L)	BRGWC-50	0.0003	0.000046	0.00036	No	10	60	No	0.011	NP (normality)
Lithium (mg/L)	BRGWA-12I...	0.0061	0.0037	0.089	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	BRGWA-12S...	0.00078	0.00078	0.089	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	BRGWA-23S...	0.009378	0.003918	0.089	No	10	10	No	0.01	Param.
Lithium (mg/L)	BRGWA-2I ...	0.0608	0.0201	0.089	No	10	10	No	0.01	Param.
Lithium (mg/L)	BRGWA-2S ...	0.00078	0.00078	0.089	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	BRGWA-5I ...	0.0041	0.00078	0.089	No	10	30	No	0.011	NP (normality)
Lithium (mg/L)	BRGWA-5S ...	0.00078	0.00078	0.089	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	BRGWA-6S ...	0.003	0.0024	0.089	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	BRGWC-25I	0.00078	0.00078	0.089	No	10	100	No	0.011	NP (NDs)
Lithium (mg/L)	BRGWC-27I	0.001879	0.001002	0.089	No	10	20	No	0.01	Param.
Lithium (mg/L)	BRGWC-29I	0.0043	0.0032	0.089	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	BRGWC-30I	0.016	0.0103	0.089	No	10	10	No	0.011	NP (normality)
Lithium (mg/L)	BRGWC-32S	0.0023	0.00078	0.089	No	10	20	No	0.011	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003514	0.002735	0.089	No	11	9.091	x^3	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04475	0.03987	0.089	No	11	0	No	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.007121	0.002675	0.089	No	10	10	No	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04217	0.03703	0.089	No	10	0	No	0.01	Param.
Mercury (mg/L)	BRGWA-12I...	0.00014	0.000052	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-12S...	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-23S...	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-2I ...	0.00021	0.00004	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-2S ...	0.00019	0.00014	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-5I ...	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-5S ...	0.00014	0.00008	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWA-6S ...	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-25I	0.00014	0.00004	0.002	No	9	88.89	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.00014	0.000047	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.00014	0.00004	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.00014	0.00004	0.002	No	9	77.78	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.00014	0.00009	0.002	No	9	77.78	No	0.002	NP (NDs)

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Mercury (mg/L)	BRGWC-45	0.00014	0.00014	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	BRGWC-47	0.00014	0.00014	0.002	No	10	100	No	0.011	NP (NDs)
Mercury (mg/L)	BRGWC-52I	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-50	0.00014	0.00014	0.002	No	9	100	No	0.002	NP (NDs)
Molybdenum (mg/L)	BRGWA-12I...	0.00095	0.00095	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWA-12S...	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWA-23S...	0.00095	0.00095	0.01	No	10	90	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWA-2I ...	0.0021	0.00095	0.01	No	10	50	No	0.011	NP (normality)
Molybdenum (mg/L)	BRGWA-2S ...	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWA-5I ...	0.007236	0.003364	0.01	No	10	10	No	0.01	Param.
Molybdenum (mg/L)	BRGWA-5S ...	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWA-6S ...	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-25I	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-27I	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-29I	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-30I	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-32S	0.00095	0.00095	0.01	No	10	100	No	0.011	NP (NDs)
Molybdenum (mg/L)	BRGWC-45	0.00095	0.00095	0.01	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	BRGWC-47	0.00095	0.00095	0.01	No	11	100	No	0.006	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.0061	0.00095	0.01	No	10	50	No	0.011	NP (normality)
Molybdenum (mg/L)	BRGWC-50	0.0022	0.00095	0.01	No	10	80	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-12I...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-12S...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-23S...	0.0044	0.0013	0.05	No	10	50	No	0.011	NP (normality)
Selenium (mg/L)	BRGWA-2I ...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-2S ...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-5I ...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-5S ...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWA-6S ...	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWC-25I	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.0043	0.0013	0.05	No	10	30	No	0.011	NP (Cohens/xfrm)
Selenium (mg/L)	BRGWC-29I	0.0074	0.0013	0.05	No	10	60	No	0.011	NP (normality)
Selenium (mg/L)	BRGWC-30I	0.0038	0.0013	0.05	No	10	60	No	0.011	NP (normality)
Selenium (mg/L)	BRGWC-32S	0.057	0.0013	0.05	No	10	40	No	0.011	NP (normality)
Selenium (mg/L)	BRGWC-45	0.0013	0.0013	0.05	No	11	90.91	No	0.006	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.0017	0.0013	0.05	No	11	72.73	No	0.006	NP (normality)
Selenium (mg/L)	BRGWC-52I	0.0013	0.0013	0.05	No	10	100	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWC-50	0.002	0.0013	0.05	No	10	60	No	0.011	NP (normality)
Thallium (mg/L)	BRGWA-12I...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-12S...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-23S...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-2I ...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-2S ...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-5I ...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-5S ...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWA-6S ...	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWC-25I	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWC-27I	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWC-29I	0.0002	0.00017	0.002	No	10	20	No	0.011	NP (normality)
Thallium (mg/L)	BRGWC-30I	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)

Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:51 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Thallium (mg/L)	BRGWC-32S	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWC-45	0.000052	0.000052	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	BRGWC-47	0.000052	0.000052	0.002	No	11	100	No	0.006	NP (NDs)
Thallium (mg/L)	BRGWC-52I	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)
Thallium (mg/L)	BRGWC-50	0.000052	0.000052	0.002	No	10	100	No	0.011	NP (NDs)

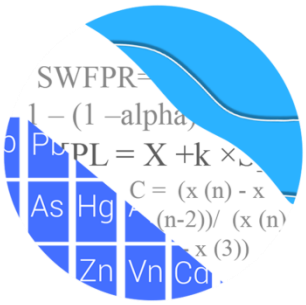
Confidence Interval

Branch Client: Golder Associates Data: Plant Branch Ash Pond Printed 4/9/2020, 11:52 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	%NDs	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.06295**	**0.01367**	**0.005**	**Yes**	**10**	**0**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.4**	**1.3**	**0.0135**	**Yes**	**10**	**0**	**No**	**0.011**	**NP (normality)**

GROUNDWATER STATS CONSULTING

July 27, 2020



Southern Company Services
Attn: Mr. Joju Abraham
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, Georgia 30308-3374

Re: Plant Branch Ponds B,C,D – March 2020 Statistical Analysis

Dear Mr. Abraham,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2020 Semi-Annual Groundwater Monitoring and Corrective Action Statistical summary of groundwater data for Georgia Power Company's Plant Branch Ponds B, C, and D. The analysis complies with the Georgia Environmental Protection Division (EPD) Rules for Solid Waste Management Chapter 391-3-4-.10 as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009). The site is in Assessment Monitoring.

Sampling began for Appendix III and IV parameters in 2016 for most wells. However, sampling for wells BRGWC-45, BRGWC-47, BRGWC-50 and BRGWC-52I began in 2018, and at least 8 background samples have been collected at each of the groundwater monitoring wells. Semi-annual sampling of the majority of constituents has been performed for several years in accordance with the Georgia Department of Natural Resources, Environmental Protection Division groundwater monitoring regulations.

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, BRGWA-12I, BRGWA-12S, and BRGWA-23S
- **Downgradient wells:** BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-50, BRGWC-52I

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Dr. Jim Loftis, Civil & Environmental Engineering professor emeritus at Colorado State University and Senior Advisor to Groundwater Stats Consulting.

The CCR program consists of the following constituents:

- **Appendix III** (Detection Monitoring) **-** boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- **Appendix IV** (Assessment Monitoring) **–** antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

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 method was selected:

- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are nondetects, a nonparametric test is utilized. While the false positive rate

associated with the parametric limits is based on an annual 10% (5% per semi-annual event) as recommended by the EPA Unified Guidance (2009), the false positive rate associated with the nonparametric limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

After testing for normality and performing any adjustments as discussed below (US EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

- No statistical analyses are required on wells and analytes containing 100% nondetects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in background, simple substitution of one-half the 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 the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new data points are available to determine whether earlier concentrations are representative of present-day groundwater quality. 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.

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. Although outliers are screened for all wells, only outliers in upgradient wells will affect the interwell prediction limits. The current list of outliers includes a few that were not included in the previous background screening list for Appendix III parameters.

When suspected outliers were evaluated using the Tukey box plot method during the previous screening, several 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 are 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 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, included with the background screening report, showed a handful of statistically significant decreasing trends for the Appendix III parameters. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were made to the data sets.

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 2020

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through March 2020 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well 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; therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. Prediction limit exceedances were noted for Appendix III parameters. A summary table of the background prediction limits and exceedances follows this letter.

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses to identify whether similar patterns exist upgradient of the site which is an indication of natural variability in groundwater unrelated to practices at the site. A statistically significant increasing trend was noted for calcium in downgradient well BRGWC-30I. Statistically significant decreasing trends were noted for boron in downgradient well BRGWC-27I; calcium in downgradient wells BRGWC-25I and BRGWC-29I; pH in upgradient wells BRGWA-2I and BRGWA-23S; sulfate in upgradient wells BRGWA-12I and BRGWA-12S, and downgradient well BRGWC-29I; and TDS in downgradient well BRGWC-25I. A summary of the trend test results follows this letter.

Evaluation of Appendix IV Parameters – March 2020

Interwell tolerance limits were used to calculate the site-specific background limits from pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution such as for barium and radium. When data contained greater than 50% nondetects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. The background limits were then used when determining the groundwater protection standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a) (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 March 2020 sample event.

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the Appendix IV constituents in each downgradient well (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 cadmium and cobalt in well BRGWC-50. 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 Ponds B, C, D. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Groundwater Analyst

Kristina L. Rayner
Groundwater Statistician

100% Nondetect Well-Constituent Pairs

Date: 5/4/2020 10:37 AM

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Antimony (mg/L)

BRGWA-5I, BRGWA-6S, BRGWC-25I, BRGWC-27I, BRGWC-30I, BRGWC-47

Beryllium (mg/L)

BRGWA-12I, BRGWA-12S, BRGWA-23S, BRGWA-2I, BRGWA-2S, BRGWA-5I, BRGWA-5S, BRGWA-6S, BRGWC-25I, BRGWC-30I, BRGWC-32S, BRGWC-52I

Chromium (mg/L)

BRGWC-24S

Cobalt (mg/L)

BRGWA-12I, BRGWA-12S

Lithium (mg/L)

BRGWA-12S, BRGWA-2S, BRGWA-5S, BRGWC-25I

Mercury (mg/L)

BRGWA-12S, BRGWA-23S, BRGWA-5I, BRGWA-6S, BRGWC-45, BRGWC-47, BRGWC-52I, BRGWC-50

Molybdenum (mg/L)

BRGWA-12S, BRGWA-2S, BRGWA-5S, BRGWA-6S, BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47

Thallium (mg/L)

BRGWA-12I, BRGWA-12S, BRGWA-23S, BRGWA-2I, BRGWA-2S, BRGWA-5I, BRGWA-5S, BRGWA-6S, BRGWC-24S, BRGWC-25I, BRGWC-27I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I, BRGWC-50

Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:51 AM

	BRGWC-52I Calcium (mg/L)	BRGWA-12S Chromium (mg/L)	BRGWA-5I Cobalt (mg/L)	BRGWC-52I Fluoride (mg/L)	BRGWC-45 Lithium (mg/L)	BRGWC-50 Sulfate as SO4 (mg/L)	BRGWC-29I Thallium (mg/L)	BRGWC-47 Total Dissolved Solids [TDS] (mg/L)
9/8/2016						<0.001 (o)		
11/16/2016			<0.01 (o)					
2/13/2018			<0.01 (o)					
2/14/2018		<0.01 (o)						
6/27/2018							31 (OX)	
7/31/2018				<0.25 (o)				
8/10/2018	410 (O)			1.6 (O)				
1/16/2019					589 (O)			

Interwell Prediction Limits Summary Table - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	3/4/2020	1.2	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	3/4/2020	0.81	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	3/4/2020	1.1	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	3/5/2020	1.5	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	3/5/2020	1.5	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	3/4/2020	0.49	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	3/4/2020	1.4	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	3/4/2020	0.32	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	3/4/2020	52	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	3/4/2020	72.3	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	3/4/2020	59.3	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	3/5/2020	119	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	3/5/2020	52.1	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	3/5/2020	37.9	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	3/4/2020	353	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	3/4/2020	49.5	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	3/4/2020	245	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-25I	4.897	n/a	3/4/2020	5	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-27I	4.897	n/a	3/4/2020	5.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-29I	4.897	n/a	3/4/2020	5.8	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-32S	4.897	n/a	3/5/2020	6	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-45	4.897	n/a	3/5/2020	37.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-52I	4.897	n/a	3/4/2020	6.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-50	4.897	n/a	3/4/2020	21.6	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-29I	7.122	5.598	3/4/2020	4.5	Yes	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-50	7.122	5.598	3/4/2020	5.2	Yes	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-25I	89	n/a	3/4/2020	165	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-27I	89	n/a	3/4/2020	205	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-29I	89	n/a	3/4/2020	238	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-30I	89	n/a	3/5/2020	369	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-32S	89	n/a	3/5/2020	269	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-45	89	n/a	3/5/2020	106	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-47	89	n/a	3/4/2020	1380	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-52I	89	n/a	3/4/2020	129	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-50	89	n/a	3/4/2020	1370	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-25I	299	n/a	3/4/2020	330	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-27I	299	n/a	3/4/2020	326	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-29I	299	n/a	3/4/2020	391	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-30I	299	n/a	3/5/2020	681	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-32S	299	n/a	3/5/2020	489	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-47	299	n/a	3/4/2020	2140	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-52I	299	n/a	3/4/2020	351	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-50	299	n/a	3/4/2020	2270	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2

Interwell Prediction Limits Summary Table - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**3/4/2020**	**1.2**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**3/4/2020**	**0.81**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**3/4/2020**	**1.1**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**3/5/2020**	**1.5**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**3/5/2020**	**1.5**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	3/5/2020	0.044	No	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**3/4/2020**	**0.49**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**3/4/2020**	**1.4**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**3/4/2020**	**0.32**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**3/4/2020**	**52**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**3/4/2020**	**72.3**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**3/4/2020**	**59.3**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**3/5/2020**	**119**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**3/5/2020**	**52.1**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**3/5/2020**	**37.9**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**3/4/2020**	**353**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**3/4/2020**	**49.5**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**3/4/2020**	**245**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**BRGWC-25I**	**4.897**	**n/a**	**3/4/2020**	**5**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-27I**	**4.897**	**n/a**	**3/4/2020**	**5.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-29I**	**4.897**	**n/a**	**3/4/2020**	**5.8**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	BRGWC-30I	4.897	n/a	3/5/2020	4.3	No	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	**BRGWC-32S**	**4.897**	**n/a**	**3/5/2020**	**6**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-45**	**4.897**	**n/a**	**3/5/2020**	**37.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	BRGWC-47	4.897	n/a	3/4/2020	4.2	No	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	**BRGWC-52I**	**4.897**	**n/a**	**3/4/2020**	**6.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-50**	**4.897**	**n/a**	**3/4/2020**	**21.6**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	3/4/2020	0.07	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	3/5/2020	0.051	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	3/5/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	3/5/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	3/4/2020	0.1	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	3/4/2020	0.14	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-25I	7.122	5.598	3/4/2020	6.02	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-27I	7.122	5.598	3/4/2020	5.8	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	**BRGWC-29I**	**7.122**	**5.598**	**3/4/2020**	**4.5**	**Yes**	**98**	**6.36**	**0.3923**	**0**	**None**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U)	BRGWC-30I	7.122	5.598	3/5/2020	5.99	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-32S	7.122	5.598	3/5/2020	5.74	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-45	7.122	5.598	3/5/2020	5.95	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-47	7.122	5.598	3/4/2020	5.76	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-52I	7.122	5.598	3/4/2020	6.54	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	**BRGWC-50**	**7.122**	**5.598**	**3/4/2020**	**5.2**	**Yes**	**98**	**6.36**	**0.3923**	**0**	**None**	**0.0004179**	**Param Inter 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-25I**	**89**	**n/a**	**3/4/2020**	**165**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-27I**	**89**	**n/a**	**3/4/2020**	**205**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**89**	**n/a**	**3/4/2020**	**238**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-30I**	**89**	**n/a**	**3/5/2020**	**369**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-32S**	**89**	**n/a**	**3/5/2020**	**269**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-45**	**89**	**n/a**	**3/5/2020**	**106**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-47**	**89**	**n/a**	**3/4/2020**	**1380**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-52I**	**89**	**n/a**	**3/4/2020**	**129**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-50**	**89**	**n/a**	**3/4/2020**	**1370**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**299**	**n/a**	**3/4/2020**	**330**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits Summary Table - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-27I**	**299**	**n/a**	**3/4/2020**	**326**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-29I**	**299**	**n/a**	**3/4/2020**	**391**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-30I**	**299**	**n/a**	**3/5/2020**	**681**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-32S**	**299**	**n/a**	**3/5/2020**	**489**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	BRGWC-45	299	n/a	3/5/2020	297	No	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-47**	**299**	**n/a**	**3/4/2020**	**2140**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-52I**	**299**	**n/a**	**3/4/2020**	**351**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-50**	**299**	**n/a**	**3/4/2020**	**2270**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**

Trend Tests Summary Table - PL Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.2397**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.666**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-29I**	**-15.54**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**13.31**	**38**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-23S (bg)**	**-0.1005**	**-43**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-2I (bg)**	**-0.1345**	**-40**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12I (bg)**	**-0.3408**	**-48**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12S (bg)**	**-0.2424**	**-41**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**-74.18**	**-43**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**-49.22**	**-47**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests Summary Table - PL Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	-0.0004356	-7	-34	No	11	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	-13	-34	No	11	81.82	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.002233	8	34	No	11	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	-0.001267	-19	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	3	34	No	11	81.82	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-10	-34	No	11	63.64	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	-5	-34	No	11	72.73	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.08558	-11	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.2397**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-29I	-0.07821	-15	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-30I	-0.04152	-16	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	0.0498	20	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	-0.006472	-3	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	6	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0.01484	8	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.7337	27	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.6095	32	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-1.016	-15	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	1.558	30	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.08179	-17	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	0.1887	4	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	0.1446	5	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1665	23	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-25I**	**-5.666**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-27I	-5.883	-23	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-29I**	**-15.54**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**13.31**	**38**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-2.407	-13	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.312	-17	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	16.09	21	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	8.536	19	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	5.185	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-12I (bg)	-0.1788	-30	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-12S (bg)	-0.04892	-15	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-23S (bg)	-0.2142	-15	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2I (bg)	0	1	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0.03034	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.06867	-10	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	0	0	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0.05993	17	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-25I	-0.6791	-27	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-27I	-0.07918	-7	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-29I	-0.2897	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-32S	-0.1629	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-45	-5.92	-24	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-52I	-0.6083	-20	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-50	-1.027	-15	-34	No	11	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-12I (bg)	-0.0365	-16	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-12S (bg)	-0.005359	-6	-43	No	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	**BRGWA-23S (bg)**	**-0.1005**	**-43**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-2I (bg)**	**-0.1345**	**-40**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	BRGWA-2S (bg)	-0.03789	-29	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.01219	-6	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.01337	-7	-38	No	12	0	n/a	n/a	0.01	NP

Trend Tests Summary Table - PL Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH, Field (S.U)	BRGWA-6S (bg)	-0.04166	-8	-34	No	11	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-29I	-0.0108	-3	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-50	0.02015	5	43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**BRGWA-12I (bg)**	**-0.3408**	**-48**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12S (bg)**	**-0.2424**	**-41**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	BRGWA-23S (bg)	-1.669	-7	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2I (bg)	-0.2487	-9	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.09547	18	34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	0.04269	3	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.04162	-13	-34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.006861	-3	-34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-25I	-39.04	-28	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-27I	-30.26	-34	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**-74.18**	**-43**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	BRGWC-30I	20.99	11	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-32S	-24.44	-21	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-45	0.7833	1	38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-47	0	-1	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-52I	-17.42	-10	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-50	8.277	2	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-12I (bg)	-2.808	-15	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-12S (bg)	0.7581	2	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-23S (bg)	-7.081	-7	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	6.016	5	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	4.65	6	34	No	11	9.091	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-1.132	-2	-34	No	11	9.091	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-3.285	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	-3.411	-6	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**-49.22**	**-47**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	BRGWC-27I	-25.03	-26	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-29I	-95.11	-26	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-30I	50.49	19	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-32S	-40.24	-30	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-47	-31.41	-10	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-52I	5.448	9	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-50	-22.67	-17	-34	No	11	0	n/a	n/a	0.01	NP

Tolerance Limit Summary Table

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.012	n/a	n/a	n/a	n/a	88	n/a	n/a	85.23	n/a	n/a	0.01096	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	88	n/a	n/a	67.05	n/a	n/a	0.01096	NP Inter(NDs)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	88	n/a	n/a	0	n/a	n/a	0.01096	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a	88	n/a	n/a	100	n/a	n/a	0.01096	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	90	n/a	n/a	97.78	n/a	n/a	0.009888	NP Inter(NDs)
Chromium (mg/L)	n/a	0.016	n/a	n/a	n/a	n/a	87	n/a	n/a	27.59	n/a	n/a	0.01153	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0135	n/a	n/a	n/a	n/a	88	n/a	n/a	57.95	n/a	n/a	0.01096	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.903	n/a	n/a	n/a	n/a	88	0.8855	0.2537	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	n/a	0.42	n/a	n/a	n/a	n/a	96	n/a	n/a	50	n/a	n/a	0.007269	NP Inter(normality)
Lead (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	88	n/a	n/a	84.09	n/a	n/a	0.01096	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	n/a	n/a	n/a	n/a	88	n/a	n/a	45.45	n/a	n/a	0.01096	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	72	n/a	n/a	90.28	n/a	n/a	0.02489	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	85	n/a	n/a	80	n/a	n/a	0.01278	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	88	n/a	n/a	93.18	n/a	n/a	0.01096	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	88	n/a	n/a	100	n/a	n/a	0.01096	NP Inter(NDs)

PLANT BRANCH PONDS B,C,D GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.012	0.012
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.13	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	0.016	0.1
Cobalt, Total (mg/L)		0.0135	0.0135
Combined Radium, Total (pCi/L)	5	1.903	5
Fluoride, Total (mg/L)	4	0.42	4
Lead, Total (mg/L)		0.005	0.005
Lithium, Total (mg/L)		0.089	0.089
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)		0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Highlighted cells indicated Background is higher than MCLs*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.05875**	**0.01327**	**0.005**	**Yes**	**11**	**0.03601**	**0.02729**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.0135**	**Yes**	**11**	**1.391**	**0.07006**	**0**	**None**	**No**	**0.006**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-29I	0.003	0.003	0.012	No	11	0.002791	0.0006935	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.003	0.012	No	11	0.002855	0.0004824	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.003	0.00088	0.012	No	12	0.002445	0.0009327	66.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00085	0.012	No	11	0.002571	0.0009593	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.003	0.012	No	11	0.002775	0.0007477	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-25I	0.005	0.0006	0.01	No	11	0.003432	0.002178	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0009	0.01	No	11	0.003555	0.002012	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00051	0.01	No	11	0.0032	0.002117	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-30I	0.005	0.005	0.01	No	11	0.004596	0.001339	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.005	0.01	No	11	0.004594	0.001348	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.0007	0.01	No	12	0.003341	0.002084	58.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-47	0.001962	0.0008551	0.01	No	12	0.002695	0.001798	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	BRGWC-52I	0.003528	0.001325	0.01	No	11	0.003279	0.001587	27.27	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	BRGWC-50	0.005	0.00074	0.01	No	11	0.003873	0.001943	72.73	Kaplan-Meier	No	0.006	NP (NDs)
Barium (mg/L)	BRGWC-25I	0.03965	0.02842	2	No	11	0.03404	0.006738	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.01753	0.01494	2	No	11	0.01624	0.001552	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.02046	0.01629	2	No	11	0.01839	0.002615	9.091	None	sqrt(x)	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02578	0.02096	2	No	11	0.02337	0.002891	9.091	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04928	0.03203	2	No	11	0.04065	0.01035	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.1014	0.08129	2	No	12	0.09133	0.0128	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04704	0.03578	2	No	12	0.04141	0.007178	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.0291	0.01617	2	No	11	0.02264	0.007762	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02142	0.0184	2	No	11	0.01991	0.001814	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.003	0.0001	0.004	No	12	0.0011	0.001404	33.33	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-29I	0.003	0.00072	0.004	No	11	0.001315	0.0008624	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	BRGWC-45	0.003	0.000079	0.004	No	13	0.002775	0.0008101	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.003	0.000056	0.004	No	12	0.002509	0.001146	83.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.00405	0.002619	0.004	No	11	0.003409	0.0008443	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	BRGWC-27I	0.0025	0.001	0.005	No	12	0.002172	0.0007902	91.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0025	0.00011	0.005	No	12	0.001976	0.0009735	83.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0025	0.00011	0.005	No	13	0.002131	0.0008998	84.62	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0025	0.00014	0.005	No	12	0.0007567	0.001052	25	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.05875**	**0.01327**	**0.005**	**Yes**	**11**	**0.03601**	**0.02729**	**0**	**None**	**No**	**0.01**	**Param.**
Chromium (mg/L)	BRGWC-25I	0.01	0.0016	0.1	No	11	0.008416	0.003526	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.01	0.003	0.1	No	11	0.008545	0.003267	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.01	0.01	0.1	No	11	0.01091	0.003015	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.01	0.01	0.1	No	11	0.009555	0.001477	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.01	0.0011	0.1	No	11	0.005264	0.004541	45.45	None	No	0.006	NP (normality)
Chromium (mg/L)	BRGWC-45	0.01	0.00053	0.1	No	12	0.009211	0.002734	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.01	0.00092	0.1	No	12	0.007792	0.004002	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-52I	0.01	0.01	0.1	No	11	0.009245	0.002503	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-50	0.01	0.00071	0.1	No	11	0.007101	0.004154	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	BRGWC-25I	0.007708	0.004759	0.0135	No	11	0.006464	0.002081	18.18	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.0149	0.0081	0.0135	No	12	0.01267	0.008844	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-29I	0.01131	0.006181	0.0135	No	11	0.008745	0.003078	9.091	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-30I	0.005	0.0007	0.0135	No	12	0.002082	0.001786	25	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.01	0.0025	0.0135	No	12	0.005208	0.001671	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.04	0.0071	0.0135	No	13	0.01684	0.01795	7.692	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-47	0.005189	0.0007867	0.0135	No	12	0.003224	0.003618	8.333	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.0135	No	11	0.003457	0.001752	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.0135**	**Yes**	**11**	**1.391**	**0.07006**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	BRGWC-25I	1.265	0.828	5	No	11	1.046	0.2622	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.308	0.6207	5	No	11	0.9643	0.4124	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.769	1.207	5	No	11	1.488	0.3375	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.281	0.6362	5	No	11	0.9584	0.3866	0	None	No	0.01	Param.

Confidence Intervals - All Results

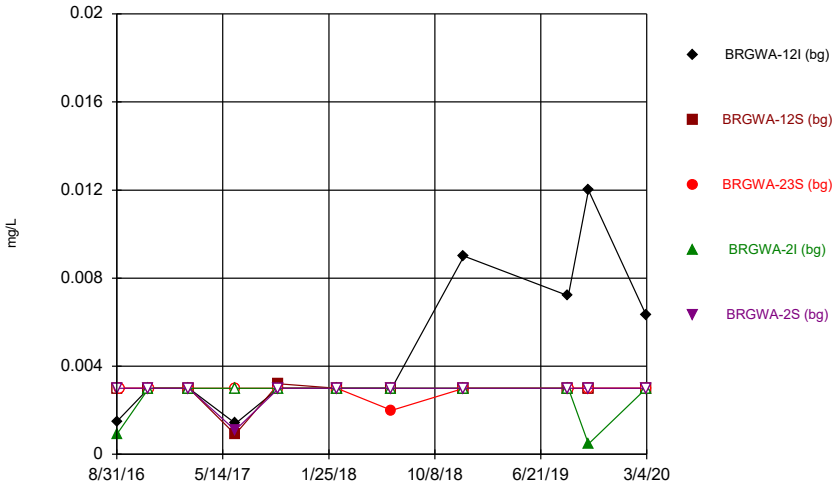
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.281	0.5121	5	No	11	0.8965	0.4614	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.9417	0.4005	5	No	12	0.6711	0.3449	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.572	0.9088	5	No	12	1.24	0.4223	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	1.958	1.203	5	No	11	1.58	0.4532	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	1.977	1.218	5	No	11	1.597	0.455	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.3211	0.1107	4	No	12	0.2517	0.1579	16.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-27I	0.2949	0.148	4	No	12	0.2603	0.08764	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.2941	0.09779	4	No	12	0.2434	0.1298	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-30I	0.4938	0.1251	4	No	12	0.3334	0.2333	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.3	0.09	4	No	12	0.23	0.094	58.33	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-45	0.69	0.12	4	No	13	0.3389	0.2312	61.54	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-47	0.4689	0.1301	4	No	13	0.3565	0.2633	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2768	0.1399	4	No	11	0.2084	0.08217	9.091	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-50	1.109	0.2724	4	No	12	0.6908	0.5332	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.005	0.005	0.005	No	11	0.004555	0.001474	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.005	0.005	0.005	No	11	0.004551	0.001489	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0006	0.00027	0.005	No	10	0.000844	0.001464	10	None	No	0.011	NP (normality)
Lead (mg/L)	BRGWC-45	0.005	0.00026	0.005	No	12	0.004605	0.001368	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.005	0.00012	0.005	No	12	0.004593	0.001409	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.005	0.000085	0.005	No	11	0.002825	0.002502	54.55	None	No	0.006	NP (NDs)
Lithium (mg/L)	BRGWC-27I	0.025	0.0014	0.089	No	11	0.005882	0.009454	18.18	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.0043	0.0029	0.089	No	11	0.005436	0.006503	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-30I	0.01659	0.01079	0.089	No	11	0.01384	0.004206	9.091	None	ln(x)	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.025	0.0021	0.089	No	11	0.006327	0.009233	18.18	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003463	0.002991	0.089	No	11	0.003227	0.0002832	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04447	0.04009	0.089	No	12	0.04228	0.002791	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.009418	0.002994	0.089	No	11	0.006836	0.006404	9.091	None	ln(x)	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04217	0.03747	0.089	No	11	0.03982	0.002822	0	None	No	0.01	Param.
Mercury (mg/L)	BRGWC-25I	0.0005	0.00004	0.002	No	9	0.0004489	0.0001533	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0005	0.000047	0.002	No	9	0.0003997	0.0001991	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0005	0.00004	0.002	No	9	0.0004011	0.0001964	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0005	0.00004	0.002	No	9	0.0004011	0.0001964	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0005	0.00009	0.002	No	9	0.00041	0.0001786	77.78	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.01	0.0032	0.01	No	10	0.00735	0.003014	50	None	No	0.011	NP (normality)
Molybdenum (mg/L)	BRGWC-50	0.01	0.0033	0.01	No	10	0.00855	0.003068	80	None	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.003534	0.001816	0.05	No	11	0.004845	0.003436	27.27	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-29I	0.01	0.0039	0.05	No	11	0.007718	0.002986	54.55	Kaplan-Meier	No	0.006	NP (NDs)
Selenium (mg/L)	BRGWC-30I	0.01	0.0034	0.05	No	11	0.007591	0.003401	63.64	Kaplan-Meier	No	0.006	NP (NDs)
Selenium (mg/L)	BRGWC-32S	0.01532	0.001391	0.05	No	11	0.02802	0.0388	36.36	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	BRGWC-45	0.01	0.0029	0.05	No	12	0.009408	0.00205	91.67	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.01	0.0017	0.05	No	12	0.007933	0.00374	75	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-50	0.01	0.002	0.05	No	11	0.006491	0.004047	54.55	Kaplan-Meier	No	0.006	NP (NDs)
Thallium (mg/L)	BRGWC-29I	0.0002	0.00017	0.002	No	10	0.000212	0.0001023	10	None	No	0.011	NP (normality)

FIGURE A.

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

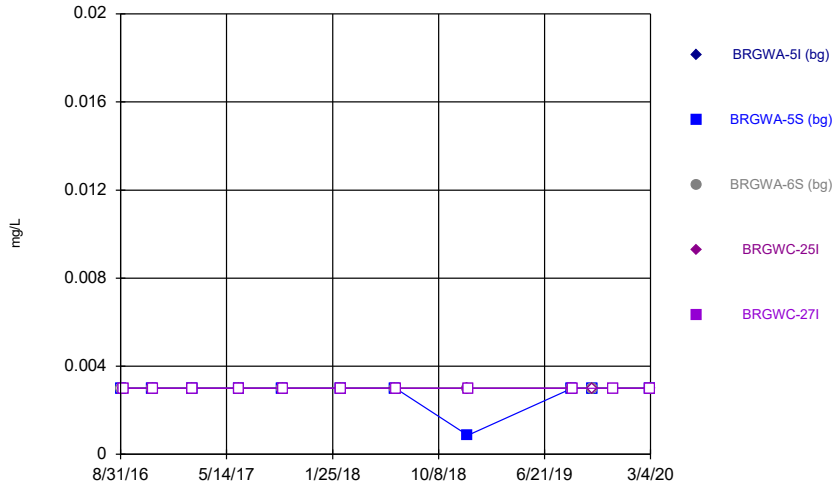
Time Series



Constituent: Antimony Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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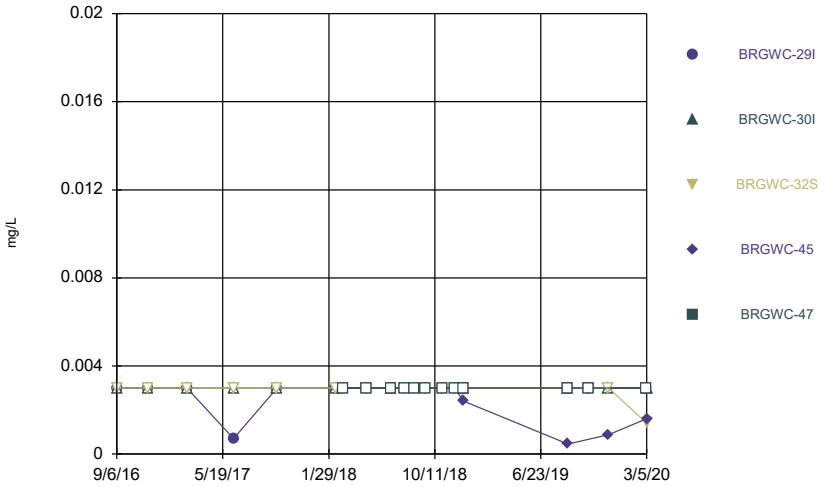

Constituent: Antimony Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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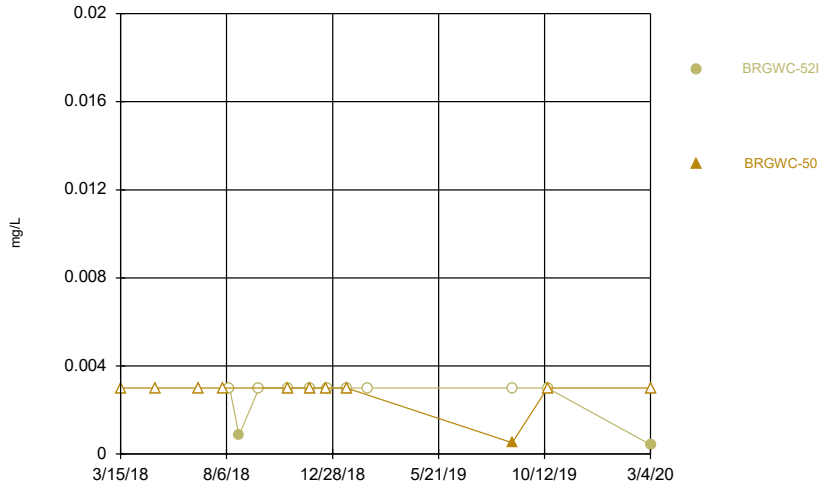
Time Series



Constituent: Antimony Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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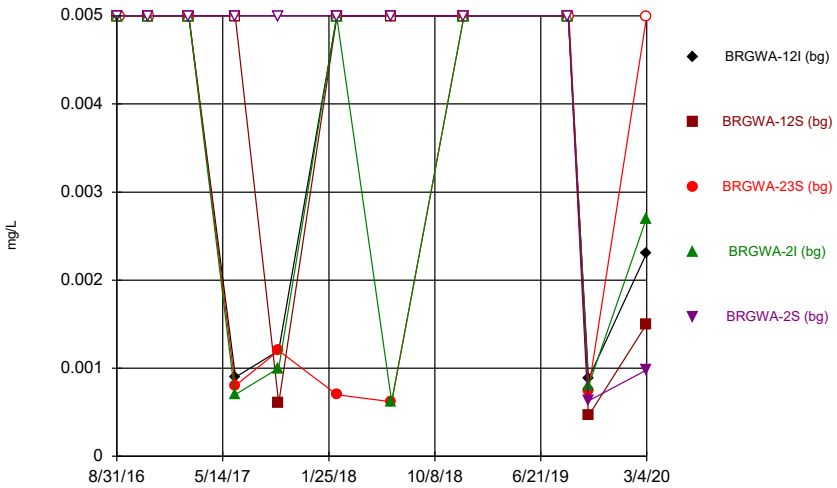
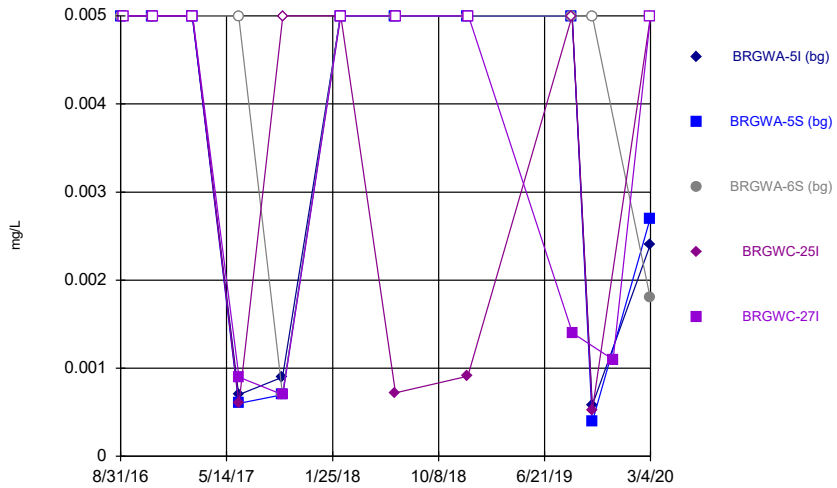


Constituent: Arsenic Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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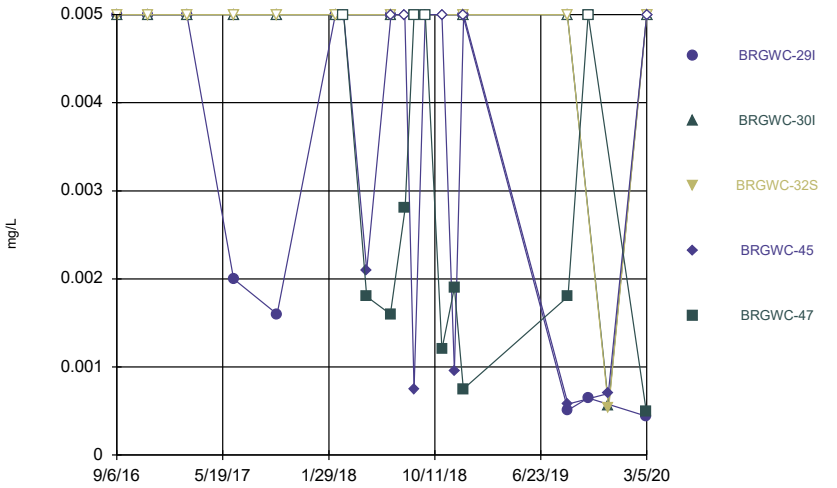
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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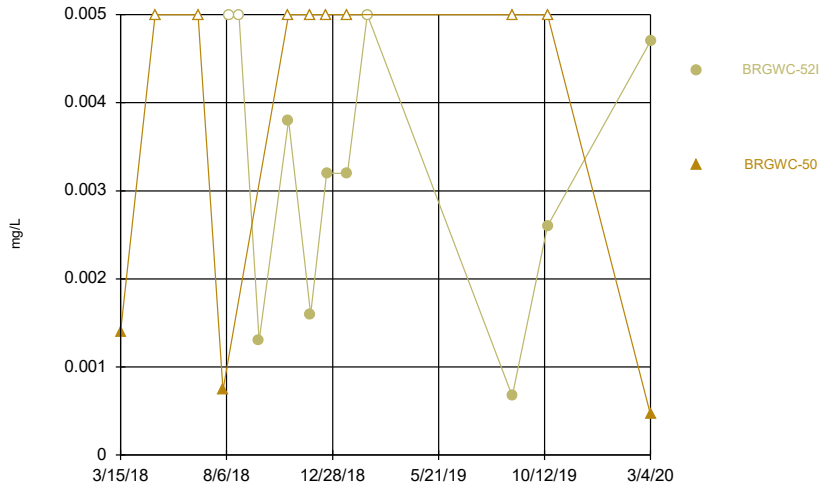
Time Series



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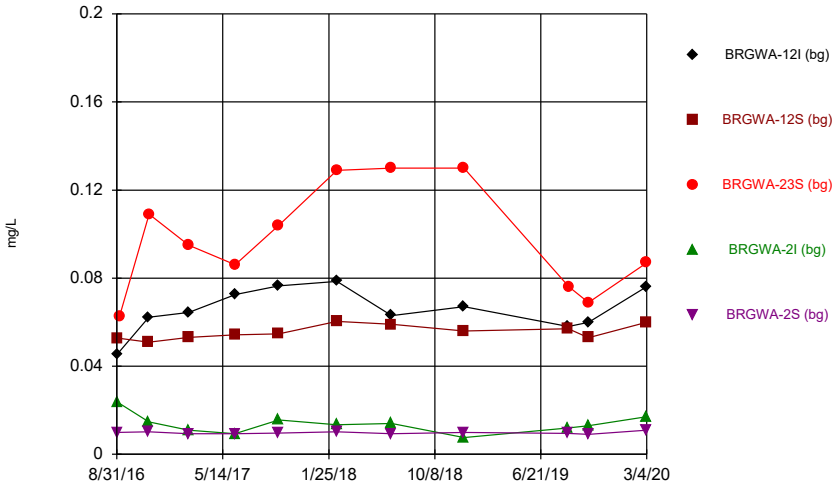
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

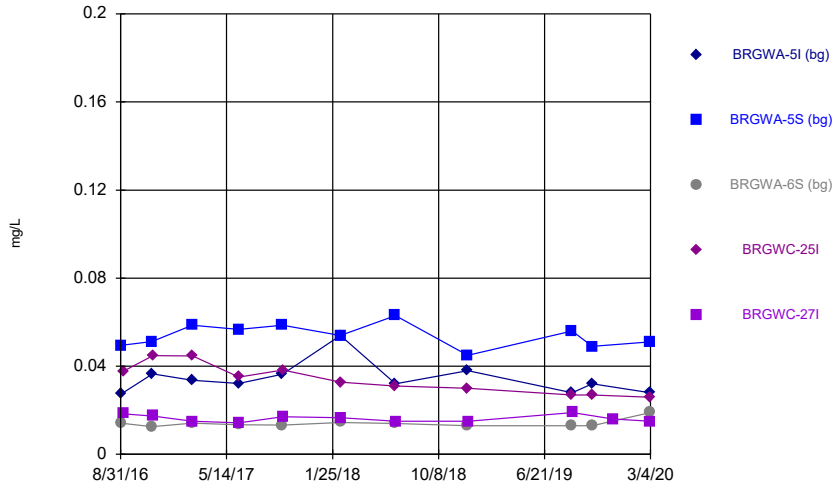
Time Series



Constituent: Barium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Time Series



Constituent: Barium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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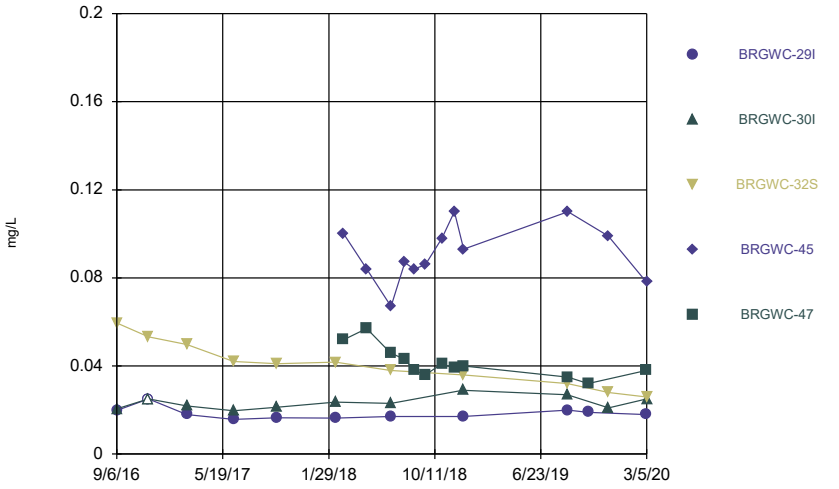
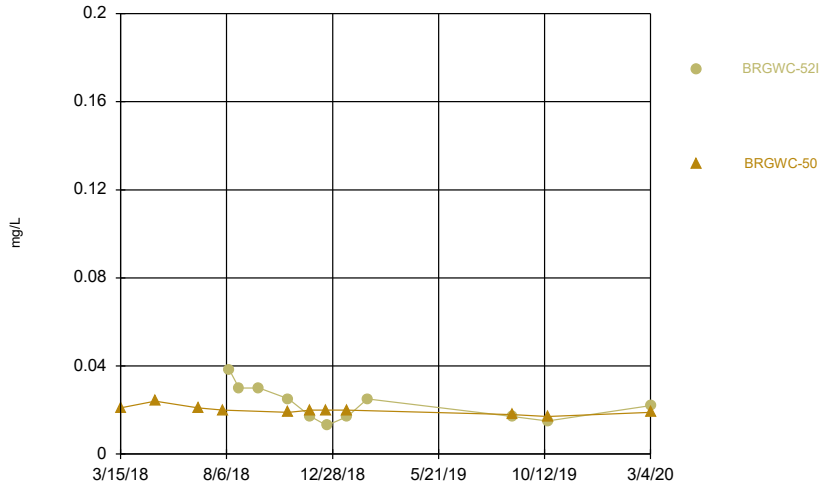
Time Series



Constituent: Barium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Time Series



Constituent: Barium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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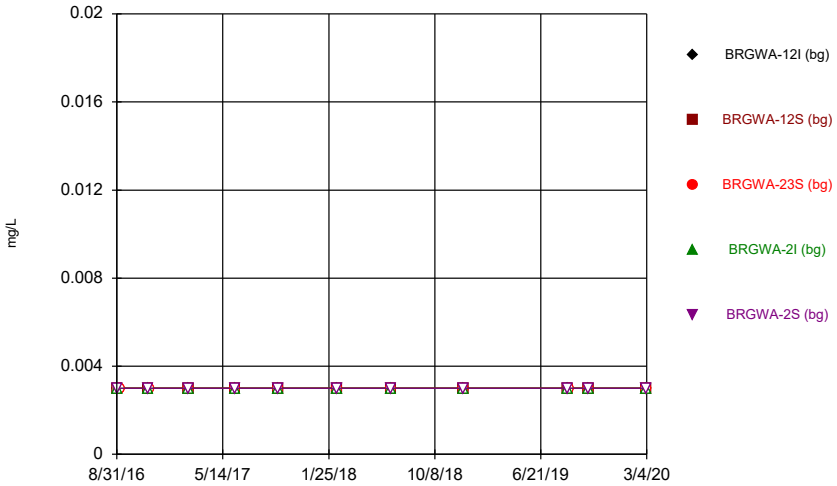
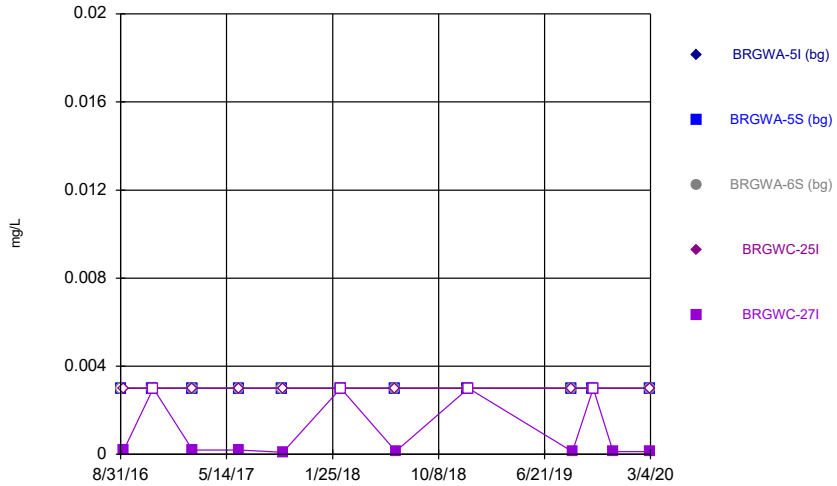
Time Series



Constituent: Beryllium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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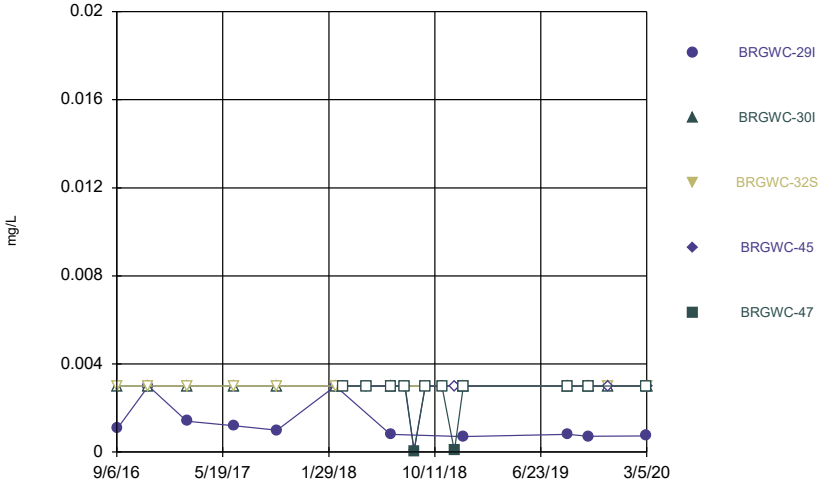
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

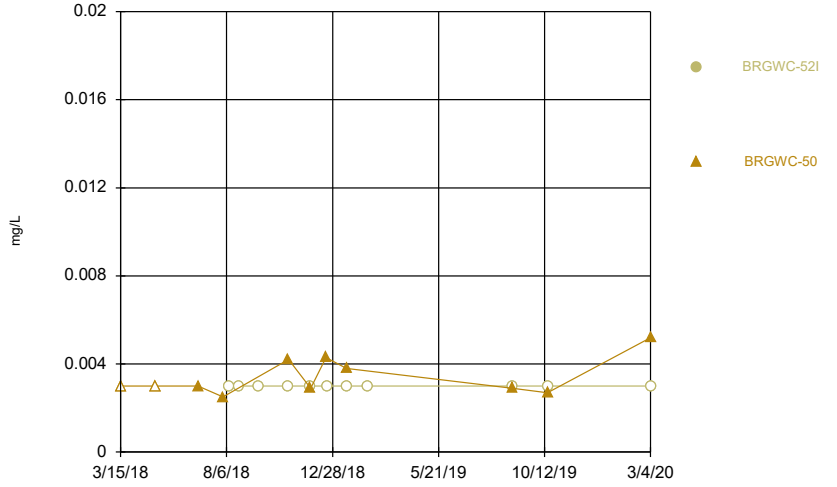
Time Series



Constituent: Beryllium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

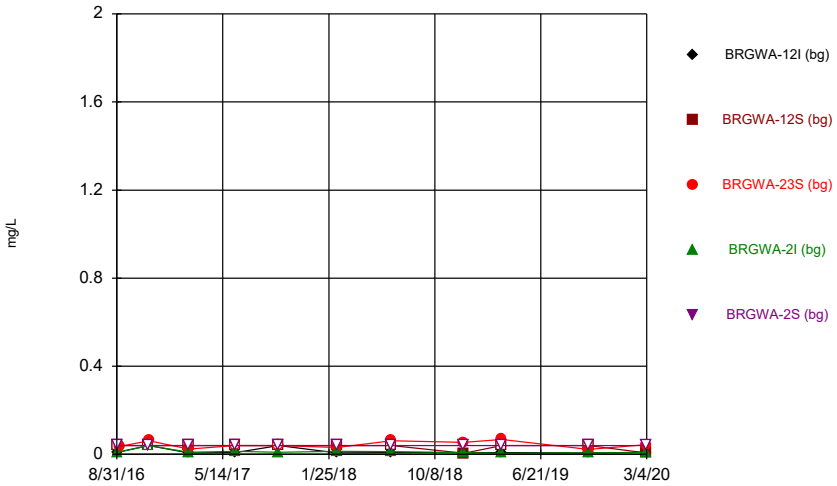
Time Series



Constituent: Beryllium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

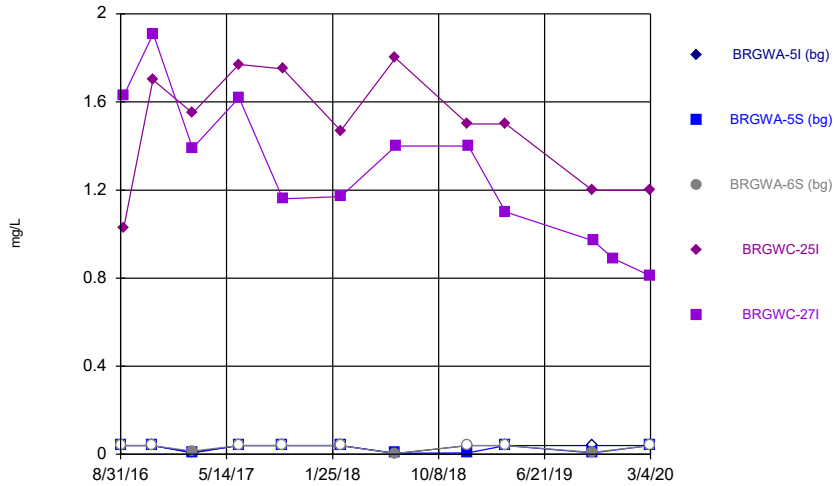
Time Series



Constituent: Boron Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

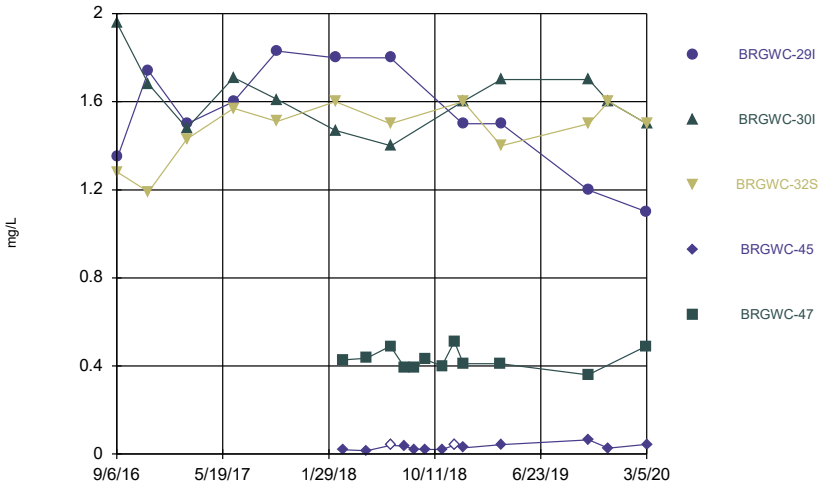
Time Series



Constituent: Boron Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

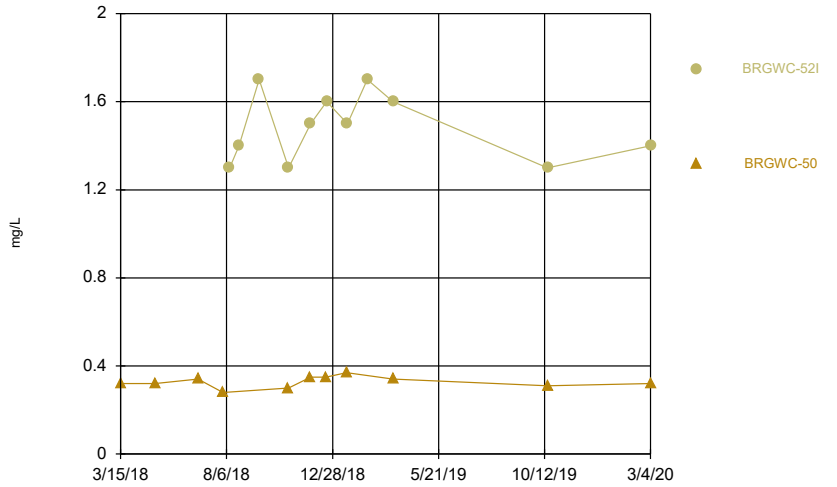
Time Series



Constituent: Boron Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

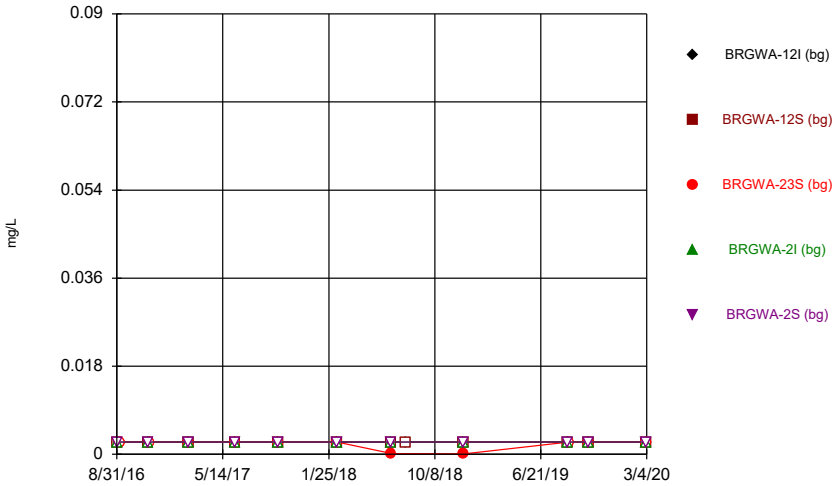
Time Series



Constituent: Boron Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

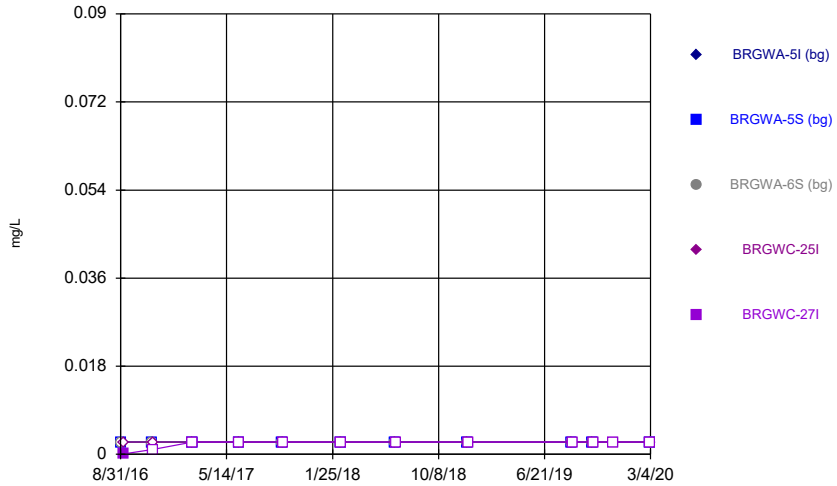
Time Series



Constituent: Cadmium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

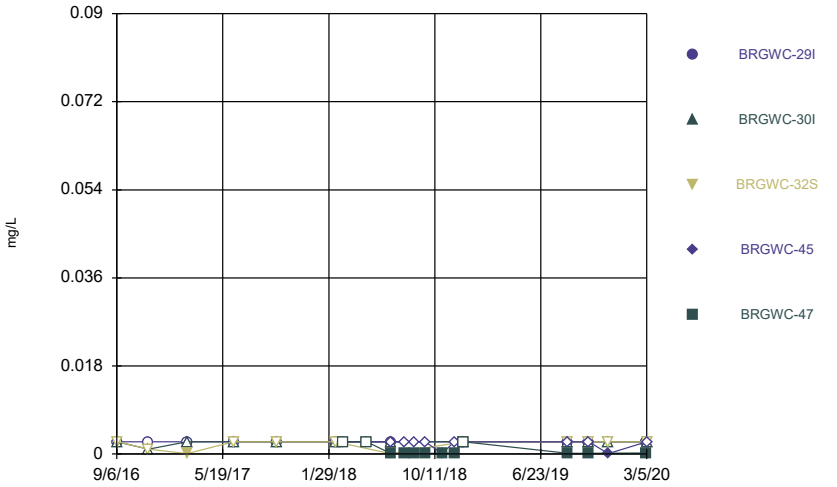
Time Series



Constituent: Cadmium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

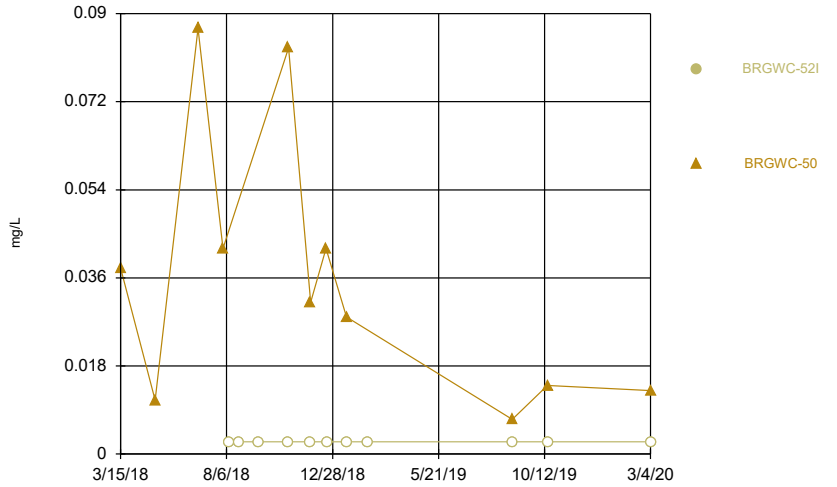
Time Series



Constituent: Cadmium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

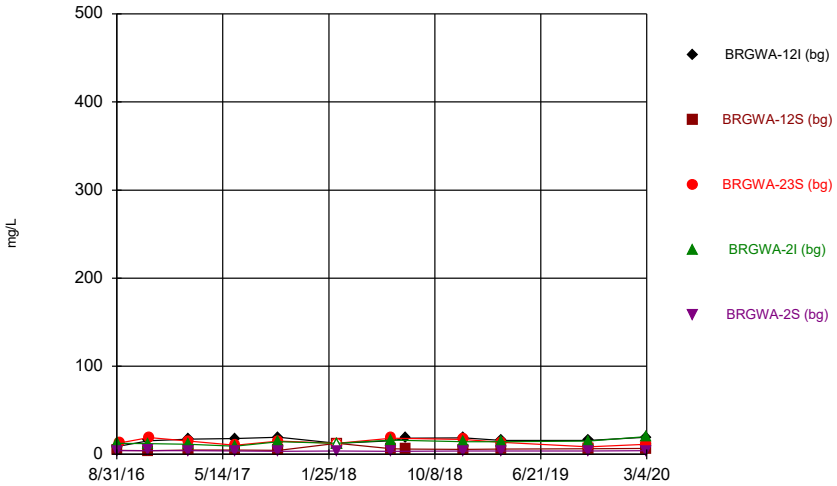
Time Series



Constituent: Cadmium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

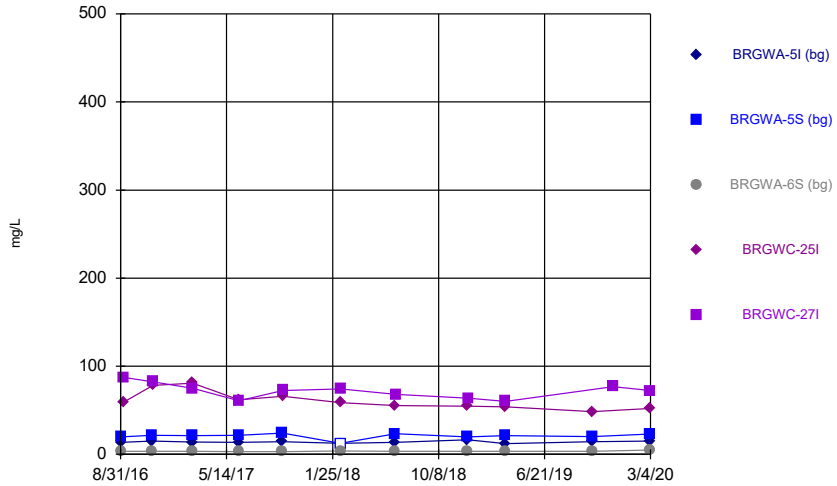
Time Series



Constituent: Calcium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

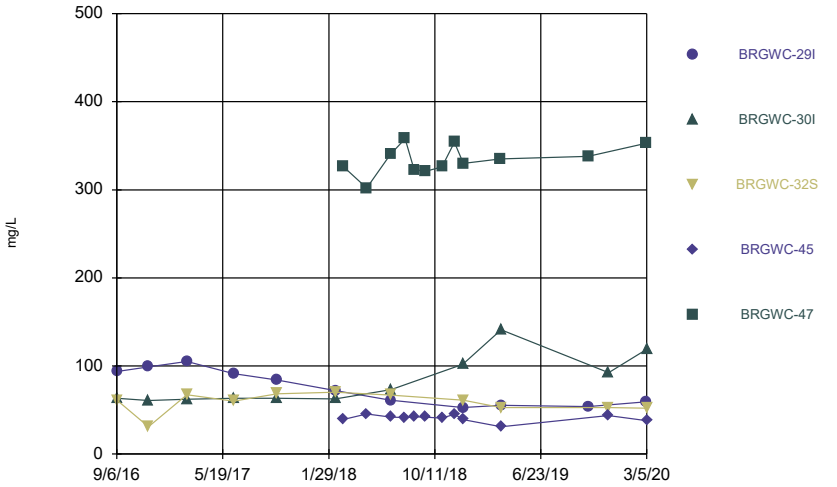
Time Series



Constituent: Calcium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

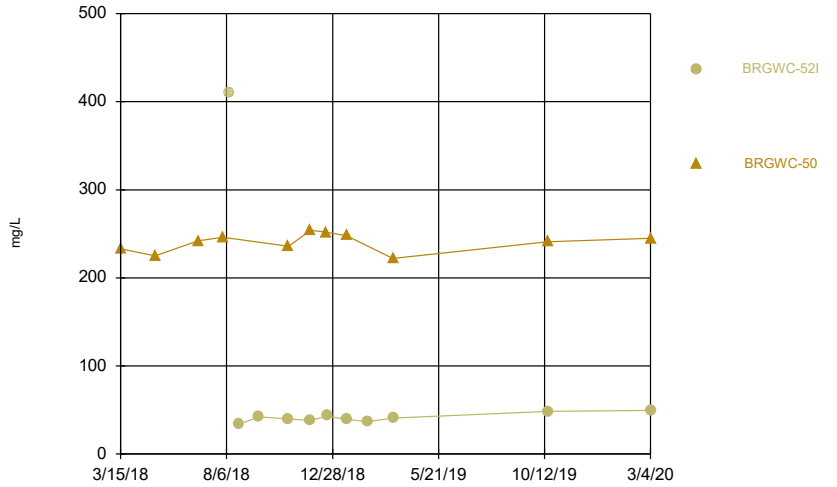
Time Series



Constituent: Calcium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

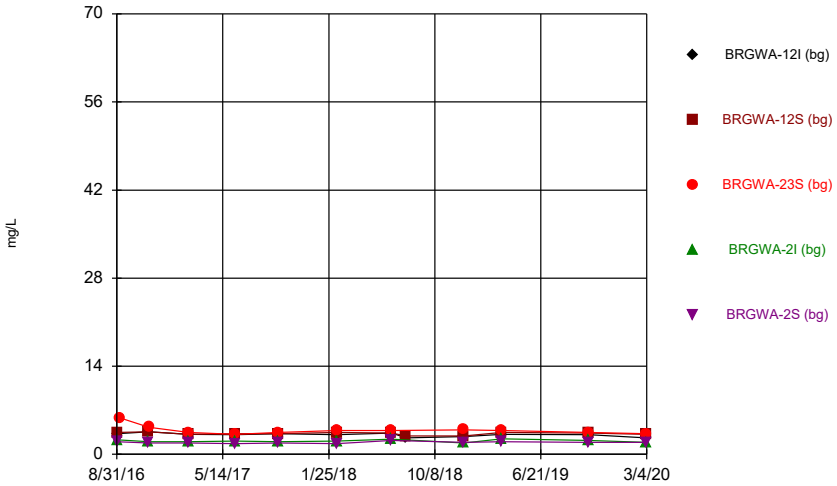
Time Series



Constituent: Calcium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

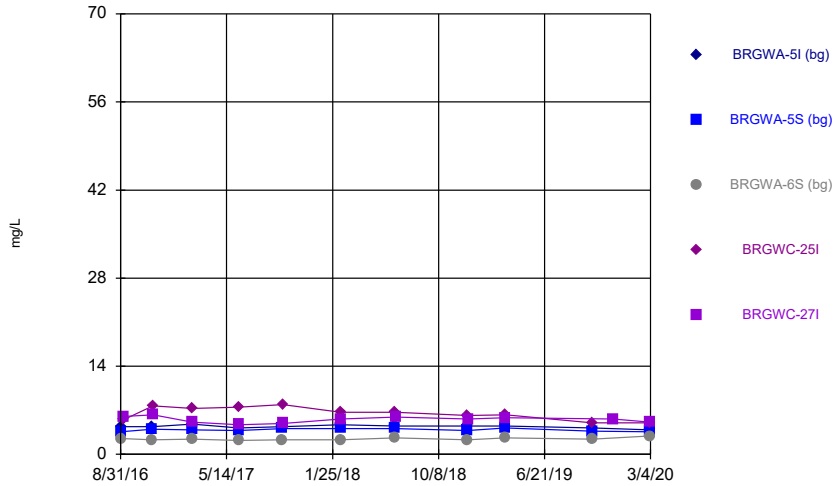
Time Series



Constituent: Chloride, Total Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

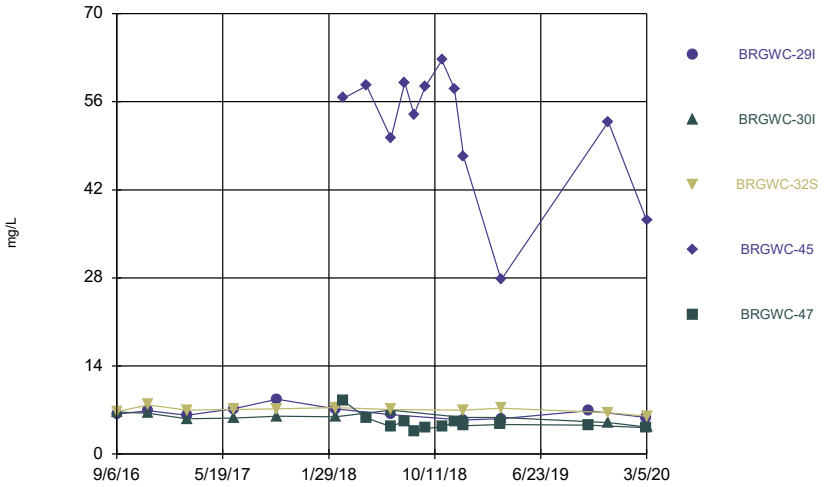
Time Series



Constituent: Chloride, Total Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

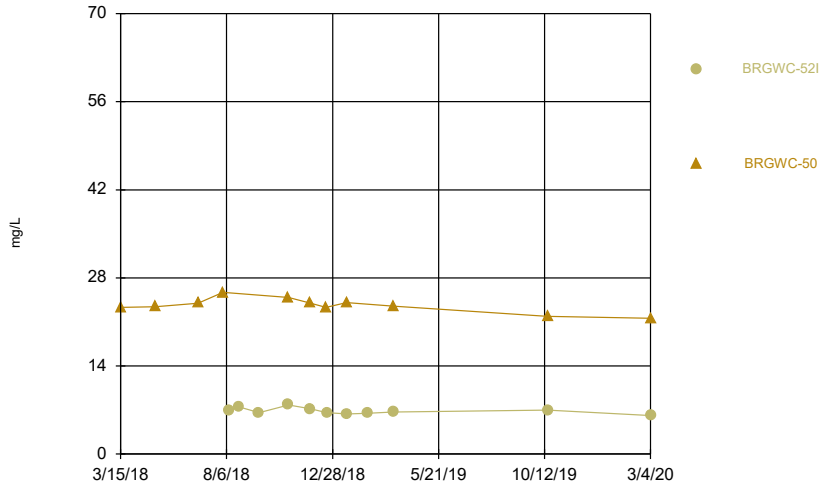
Time Series



Constituent: Chloride, Total Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

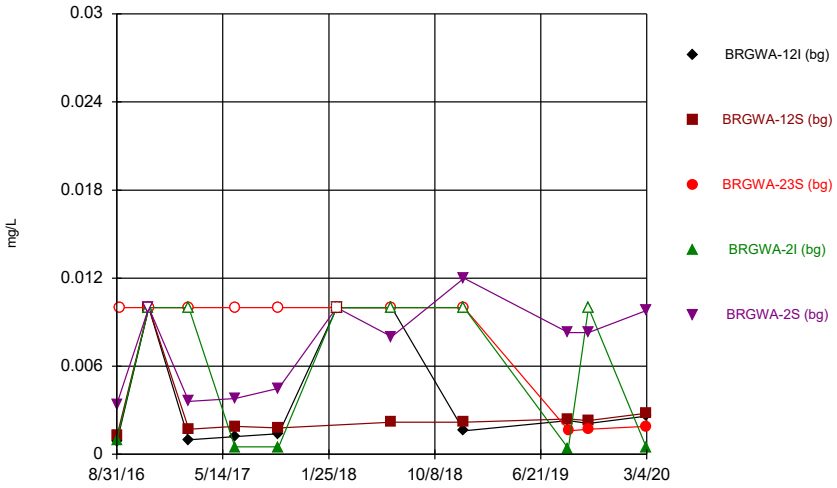
Time Series



Constituent: Chloride, Total Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

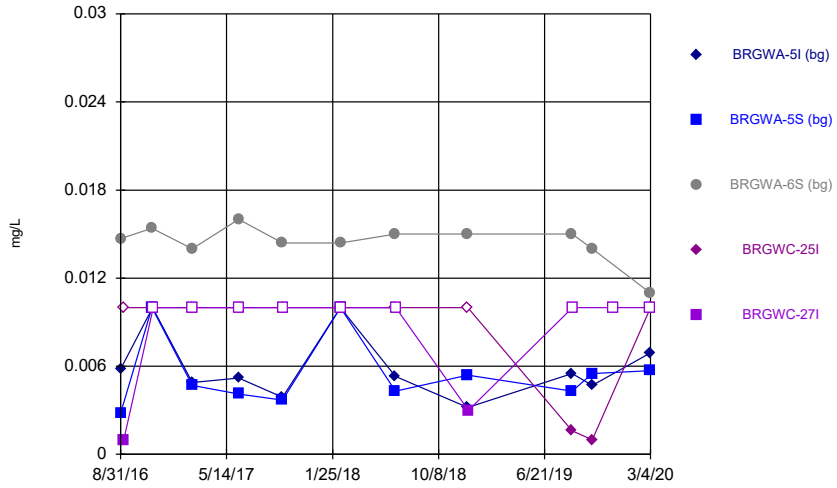
Time Series



Constituent: Chromium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

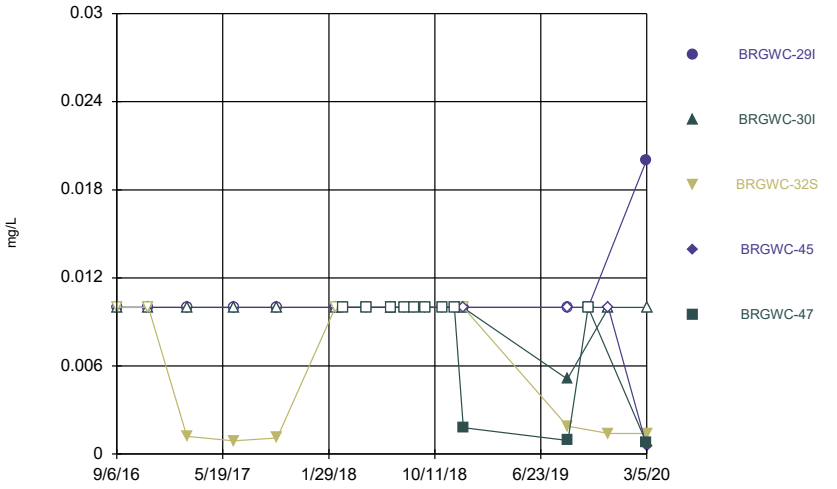
Time Series



Constituent: Chromium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

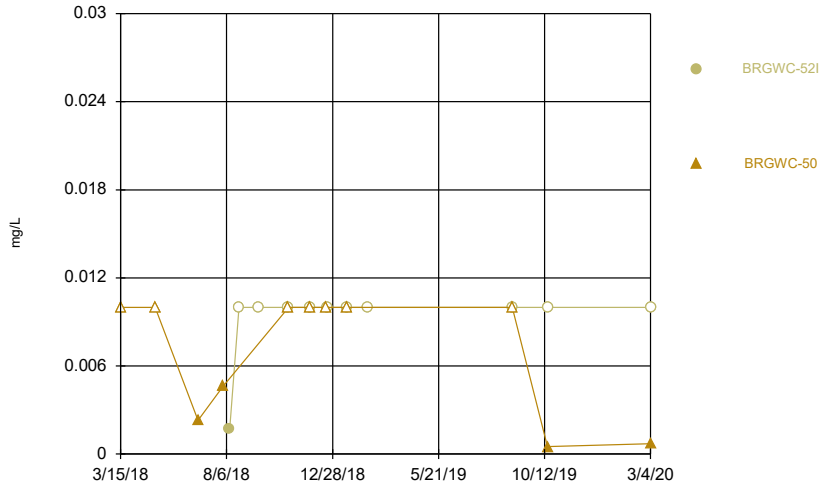
Time Series



Constituent: Chromium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

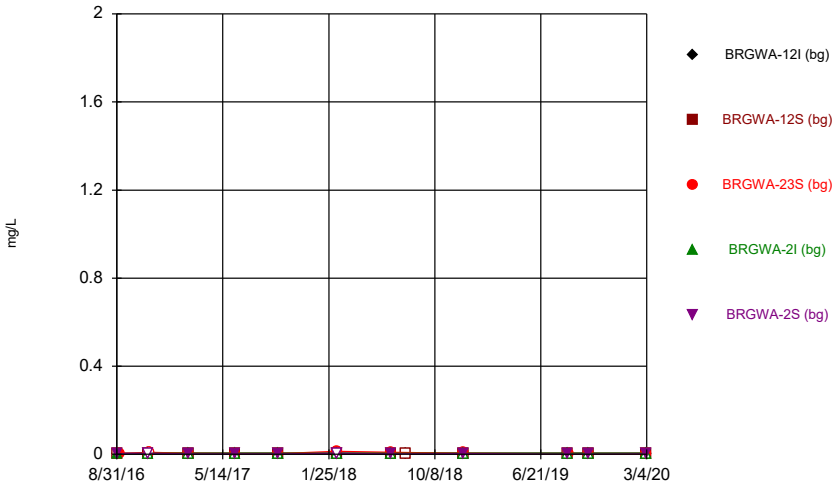
Time Series



Constituent: Chromium Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

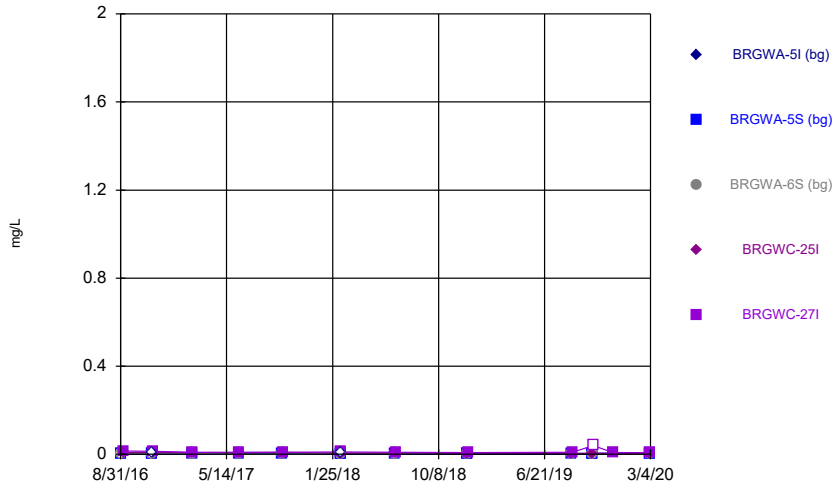
Time Series



Constituent: Cobalt Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

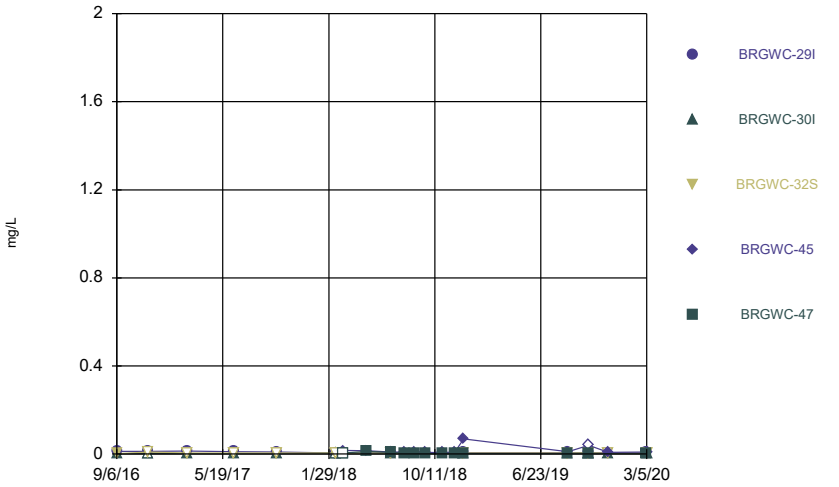
Time Series



Constituent: Cobalt Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

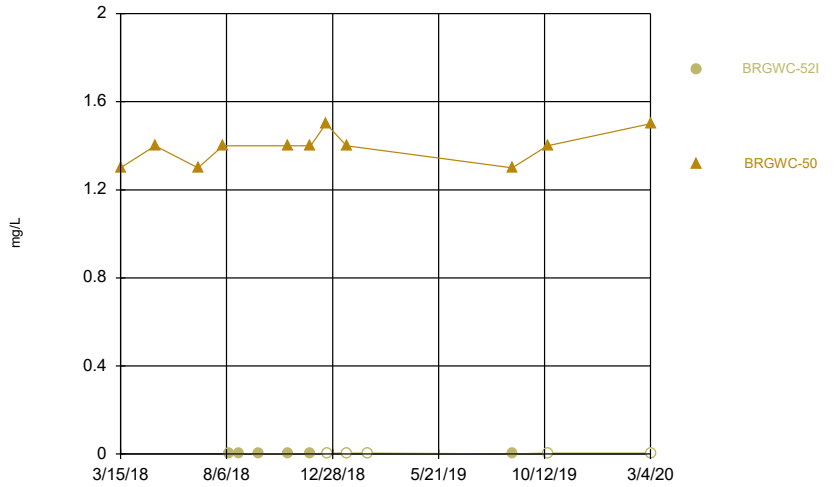
Time Series



Constituent: Cobalt Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

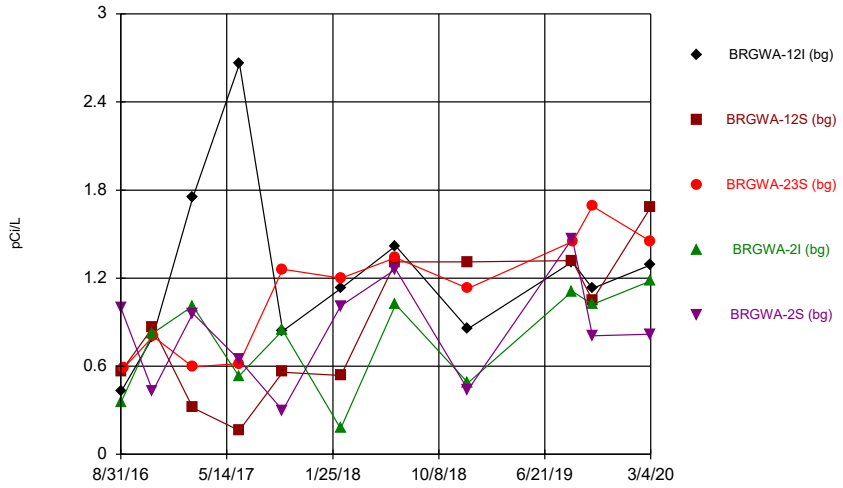
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

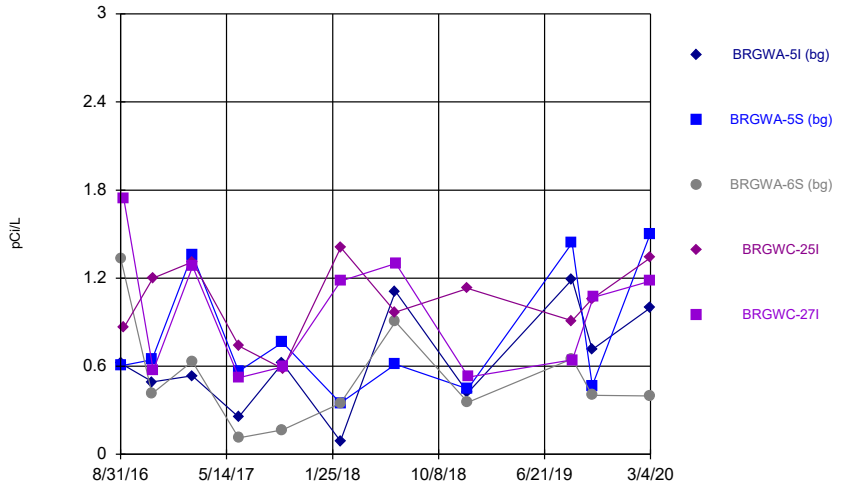
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

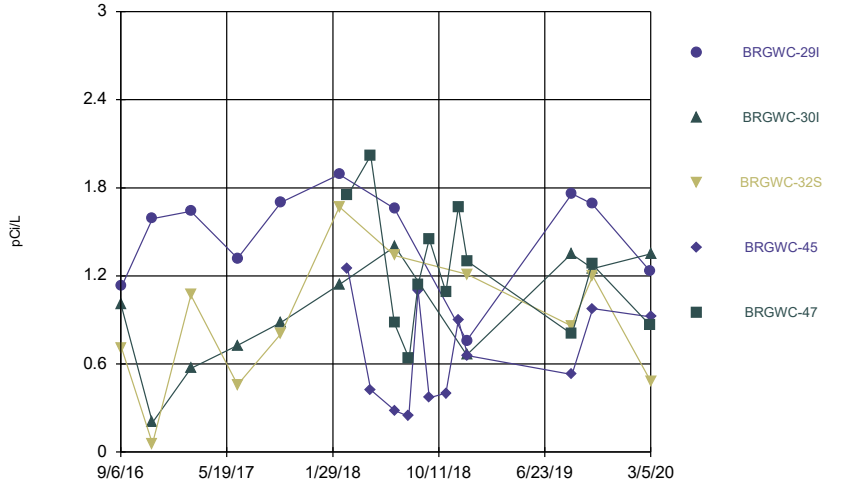
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

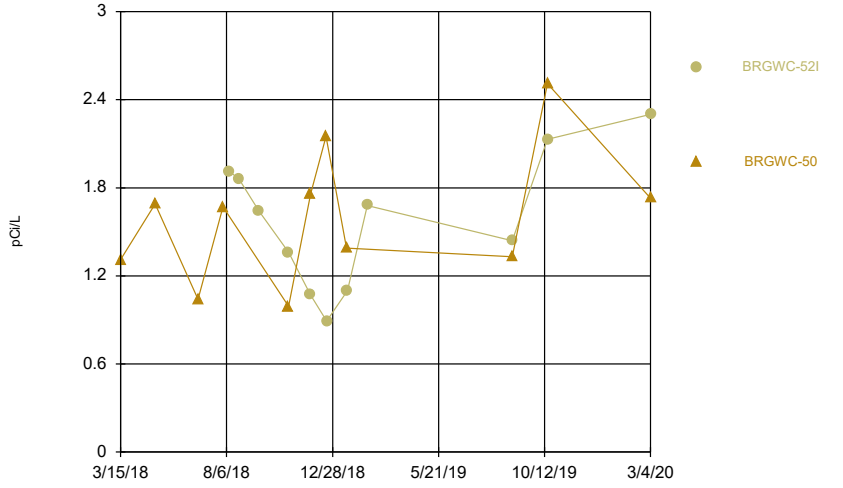
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

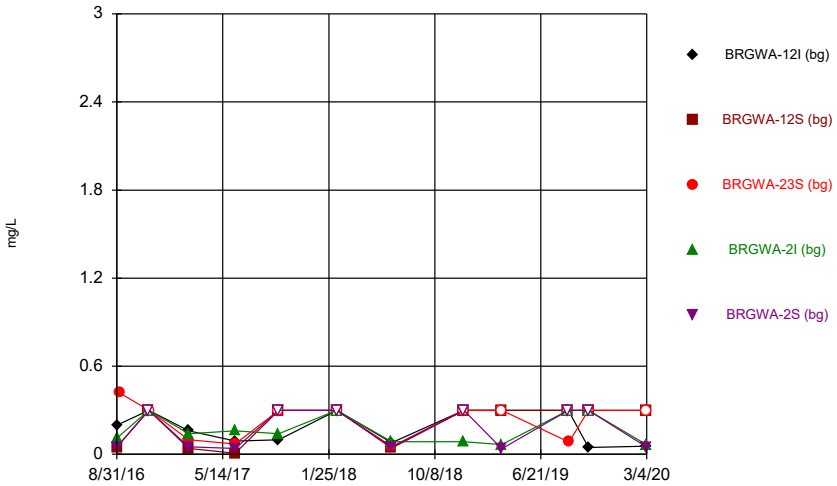
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

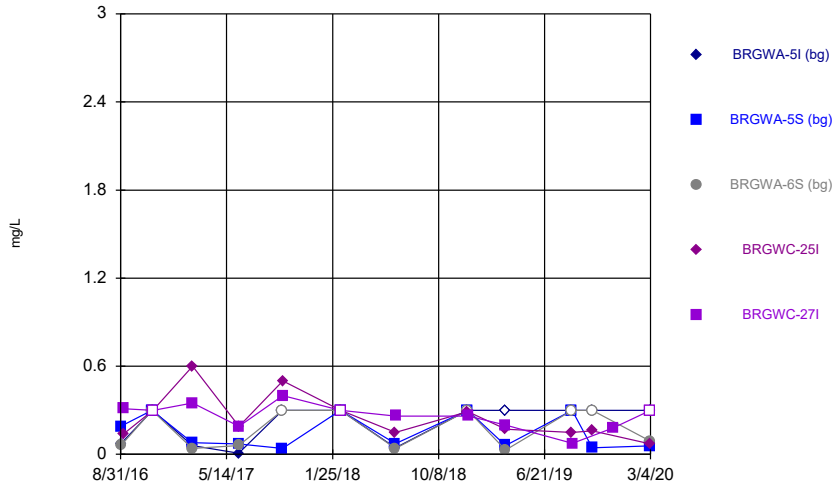
Time Series



Constituent: Fluoride Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

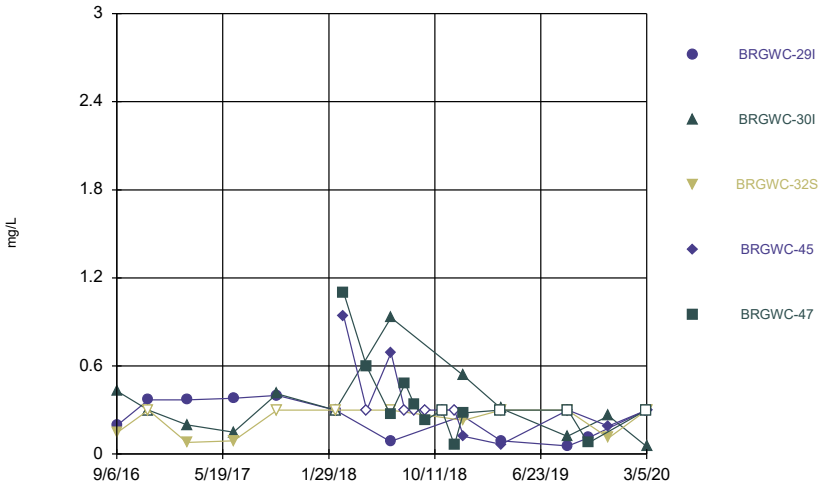
Time Series



Constituent: Fluoride Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

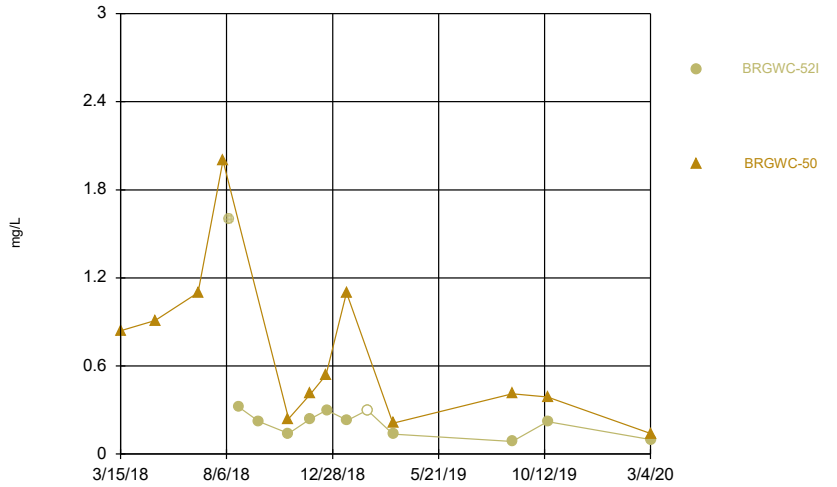
Time Series



Constituent: Fluoride Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

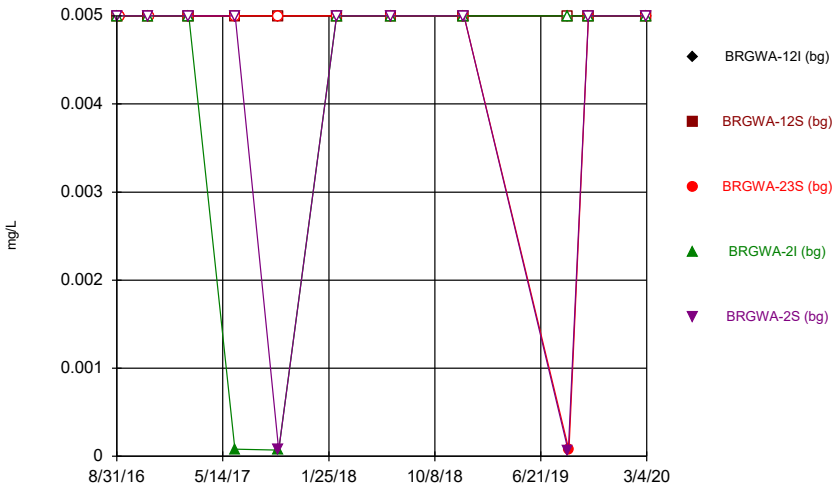
Time Series



Constituent: Fluoride Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

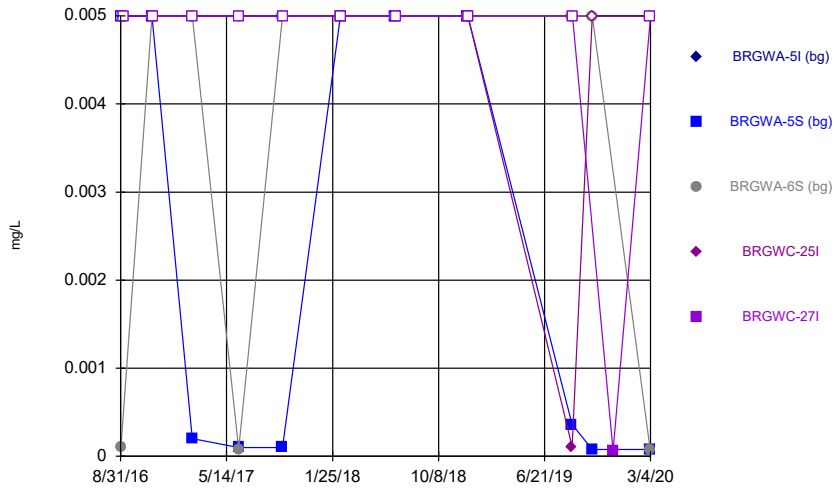
Time Series



Constituent: Lead Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

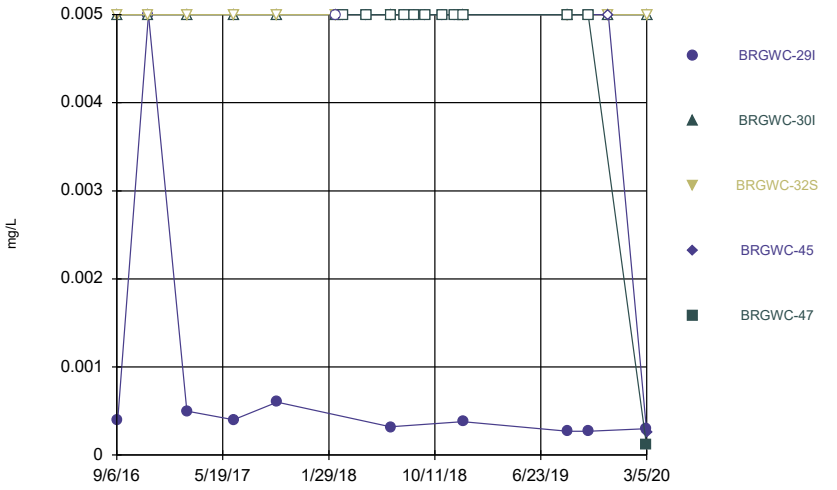
Time Series



Constituent: Lead Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
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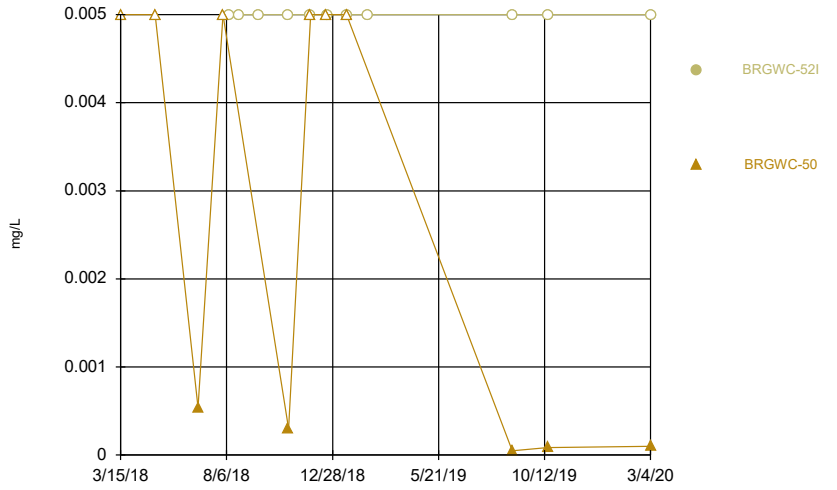
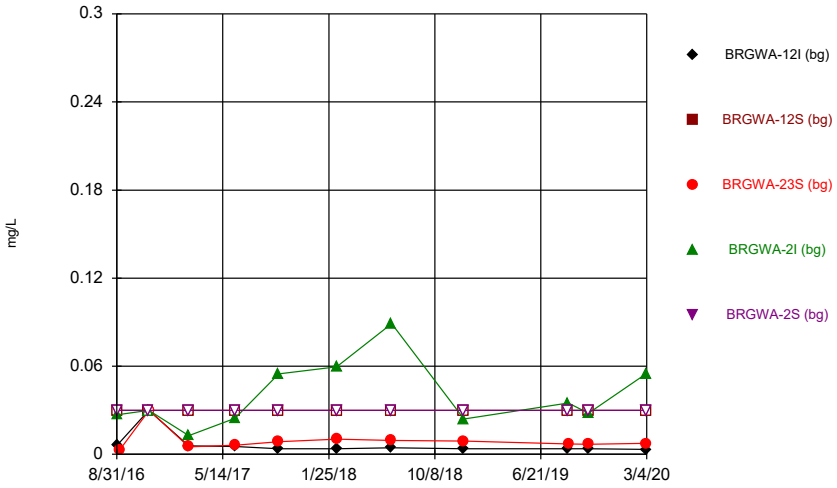
Time Series



Constituent: Lead Analysis Run 5/4/2020 9:51 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

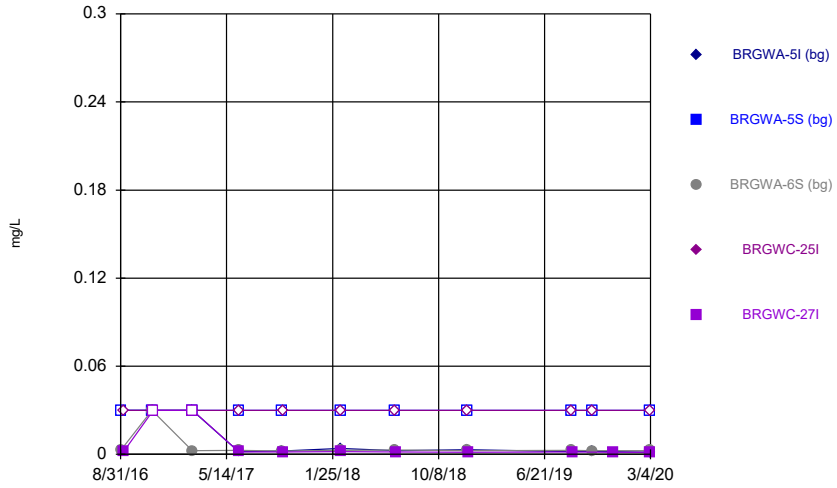
Time Series



Constituent: Lithium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

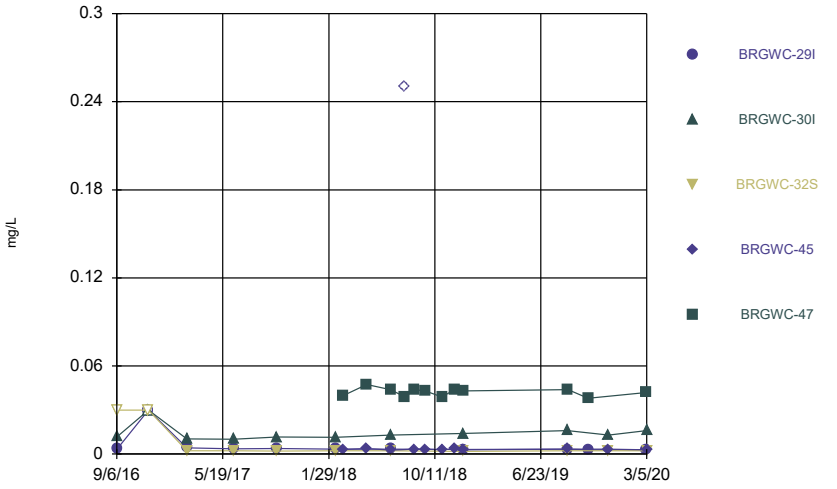
Time Series



Constituent: Lithium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

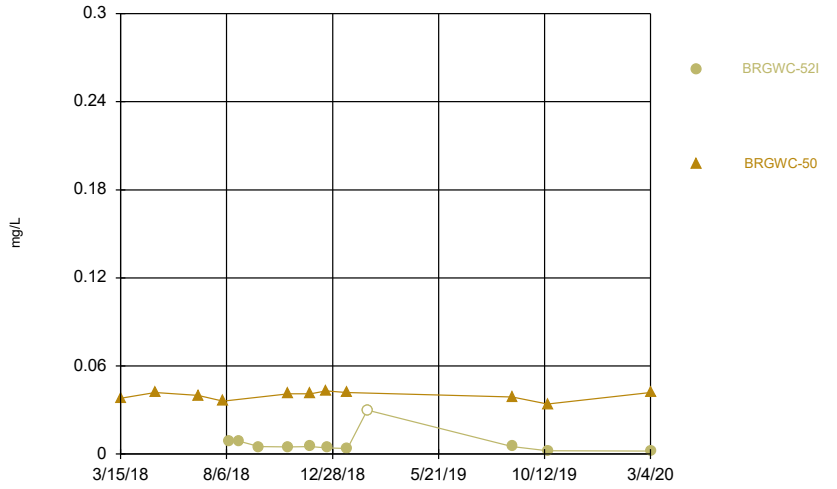
Time Series



Constituent: Lithium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

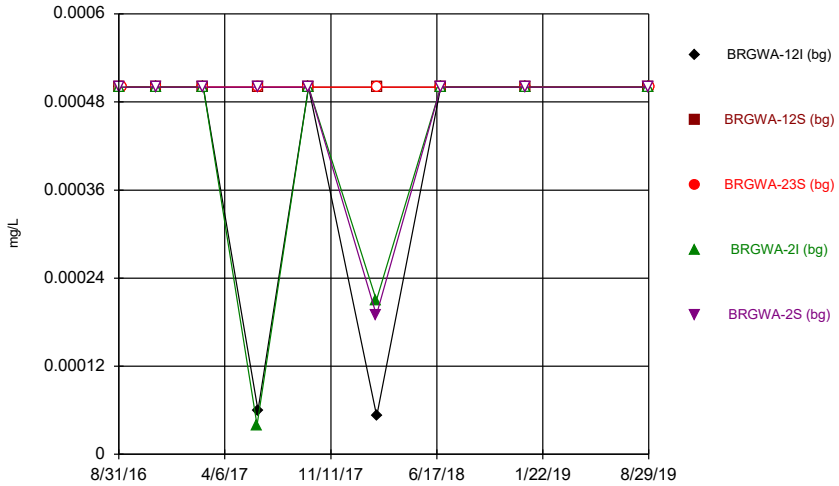
Time Series



Constituent: Lithium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

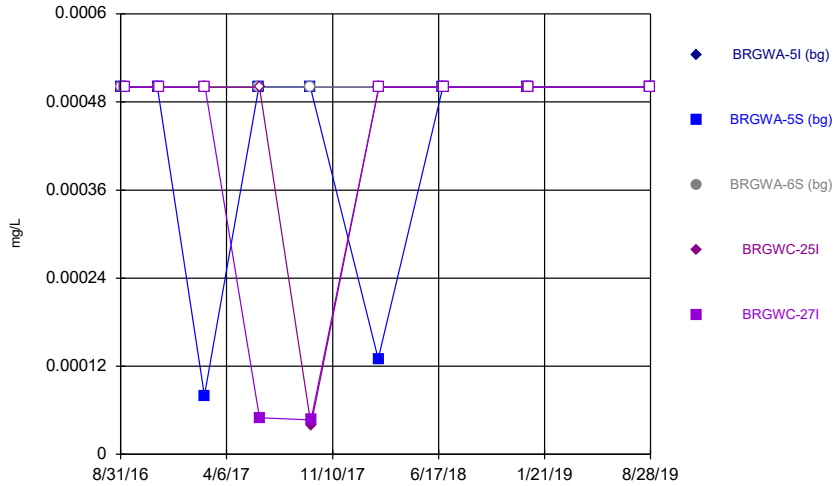
Time Series



Constituent: Mercury Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

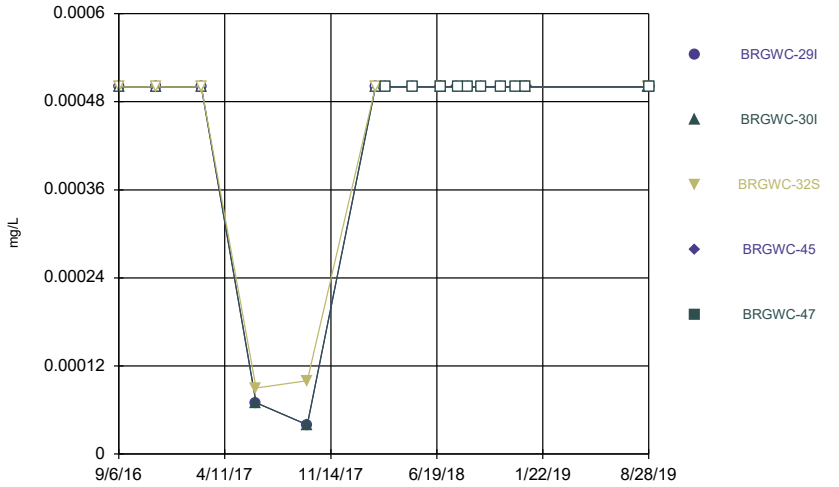
Time Series



Constituent: Mercury Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

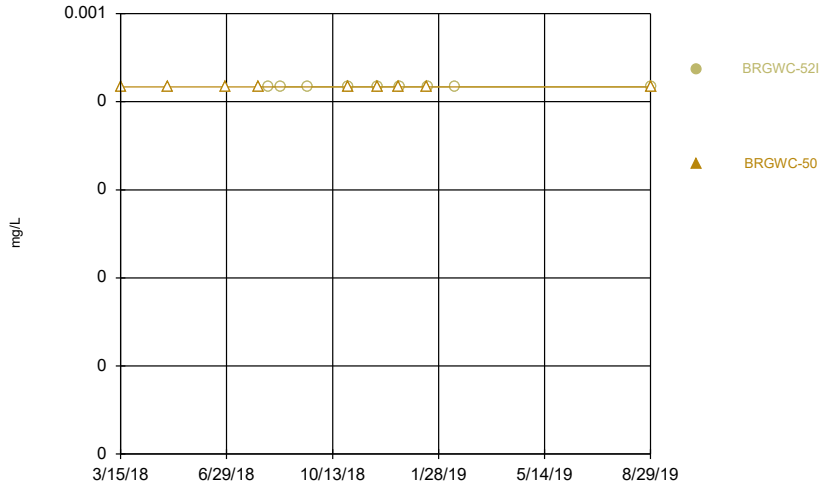
Time Series



Constituent: Mercury Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

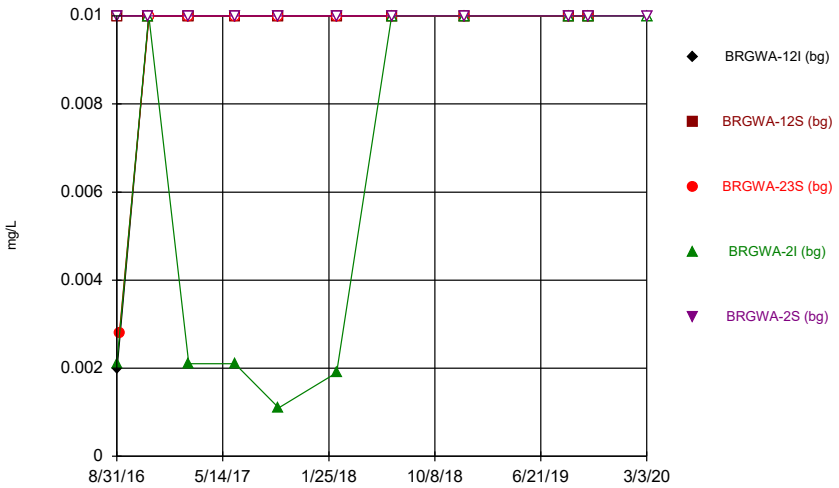
Time Series



Constituent: Mercury Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

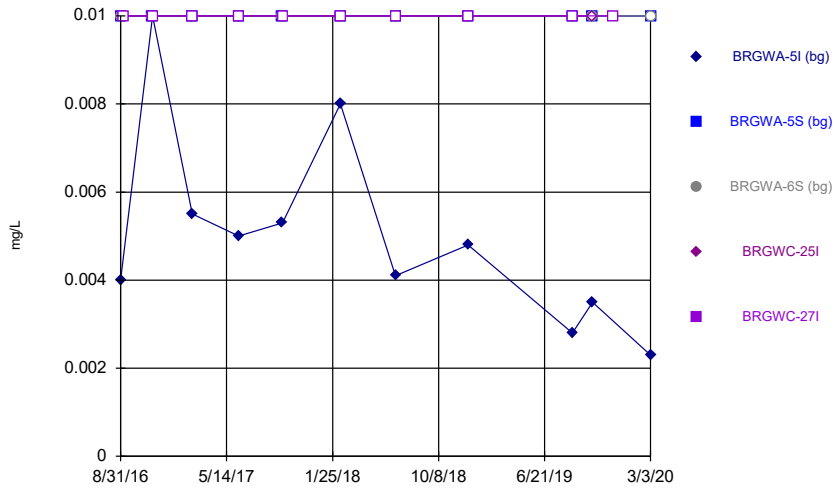
Time Series



Constituent: Molybdenum Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

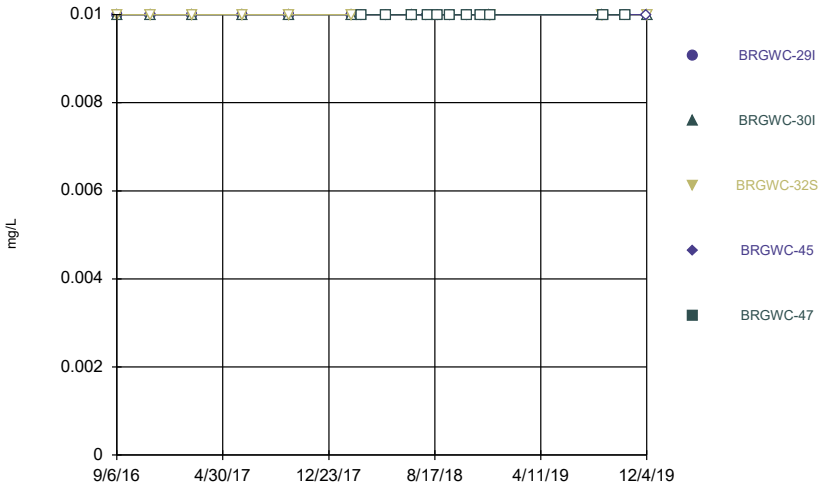
Time Series



Constituent: Molybdenum Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

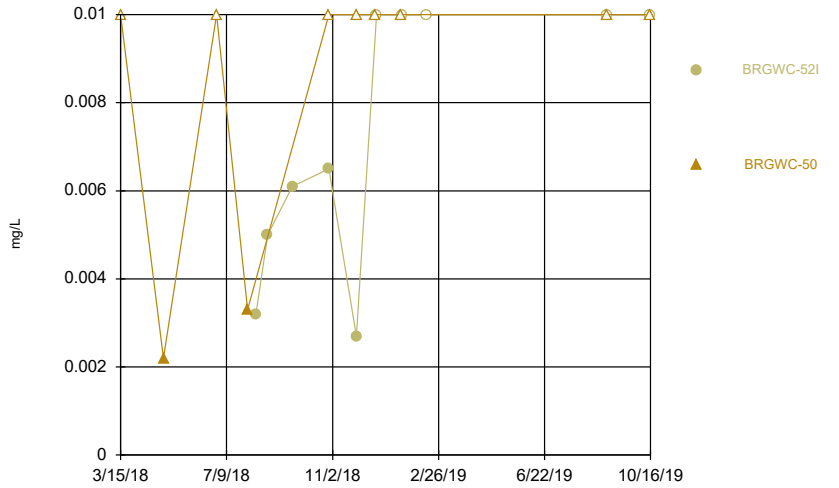
Time Series



Constituent: Molybdenum Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

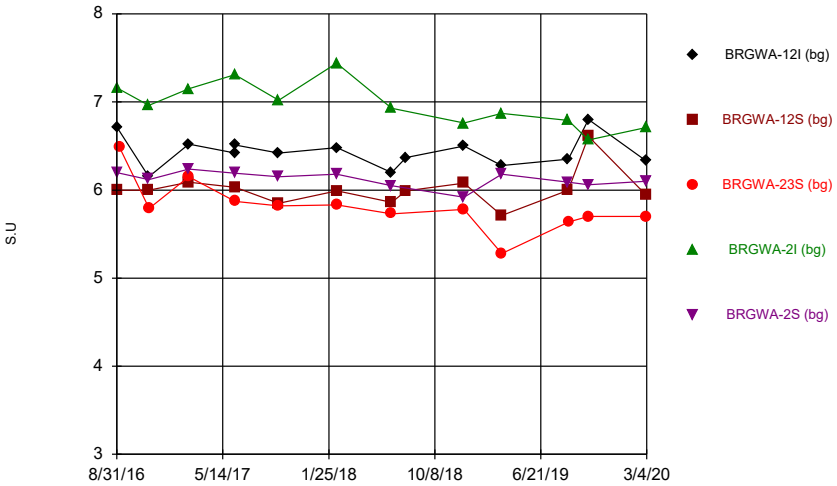
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

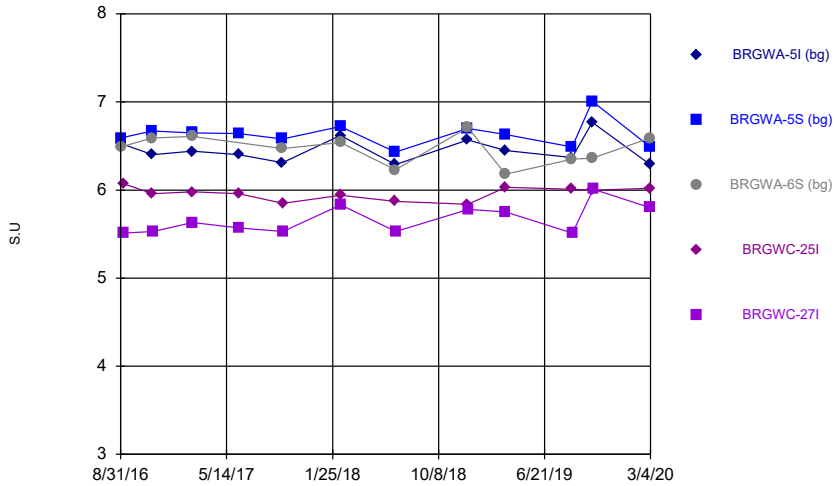
Time Series



Constituent: pH, Field Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

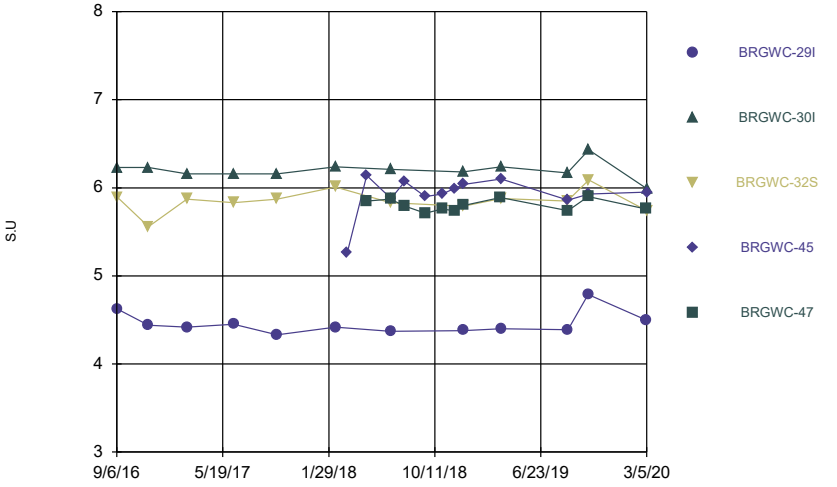
Time Series



Constituent: pH, Field Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

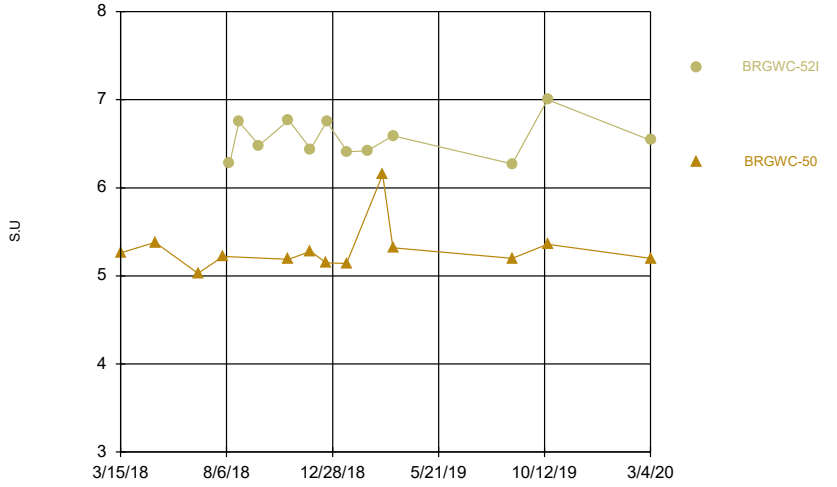
Time Series



Constituent: pH, Field Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

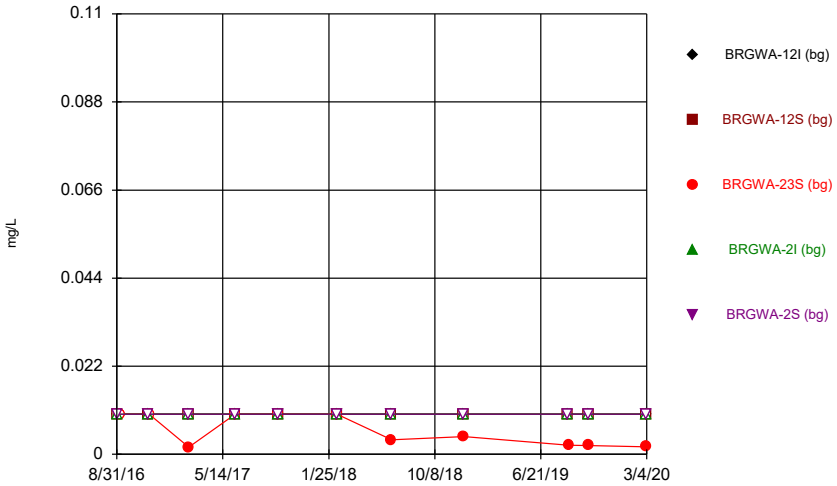
Time Series



Constituent: pH, Field Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

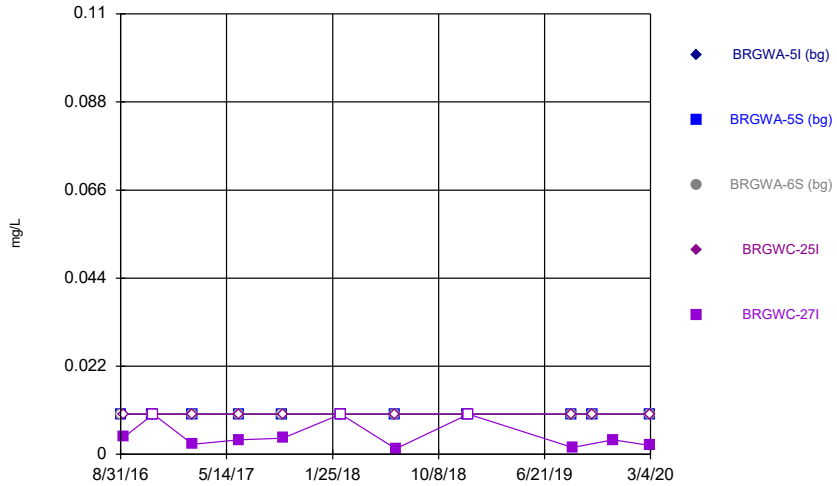
Time Series



Constituent: Selenium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

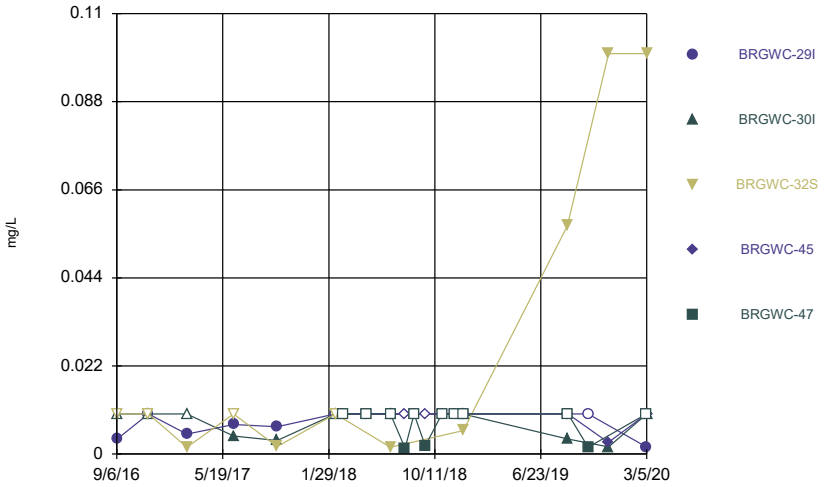
Time Series



Constituent: Selenium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

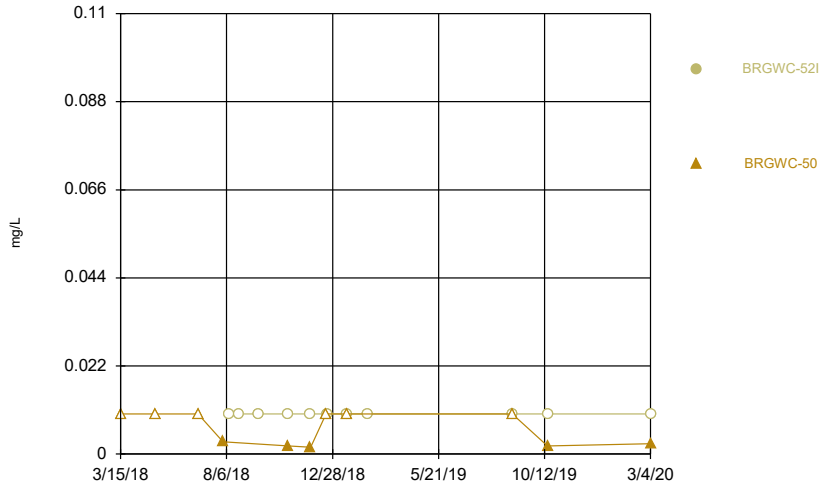
Time Series



Constituent: Selenium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

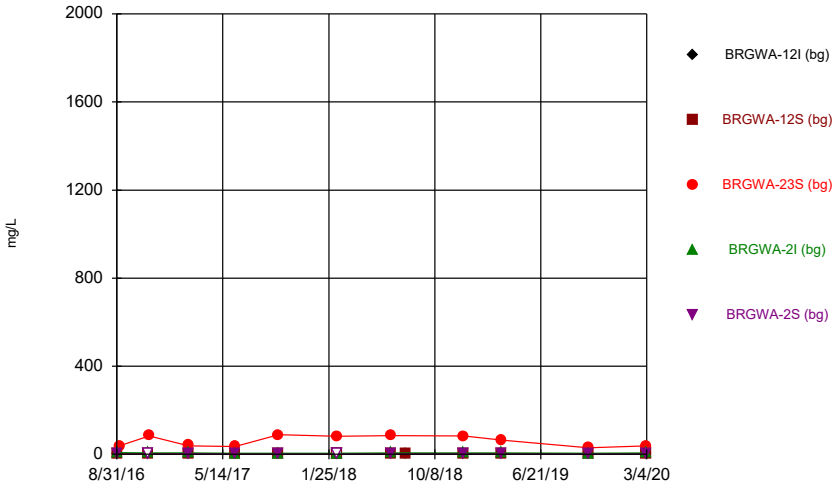
Time Series



Constituent: Selenium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

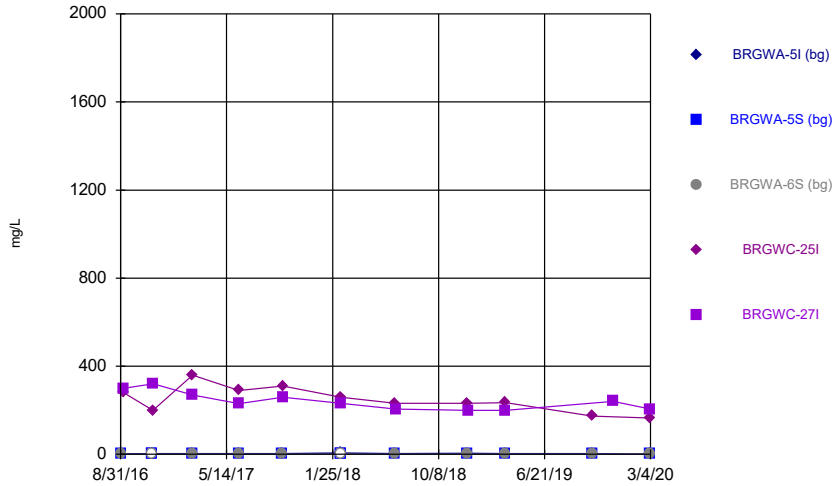
Time Series



Constituent: Sulfate as SO4 Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

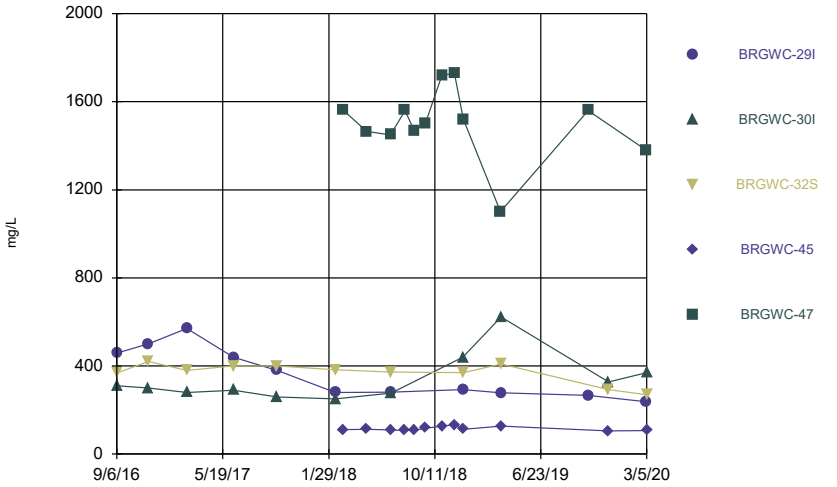
Time Series



Constituent: Sulfate as SO4 Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

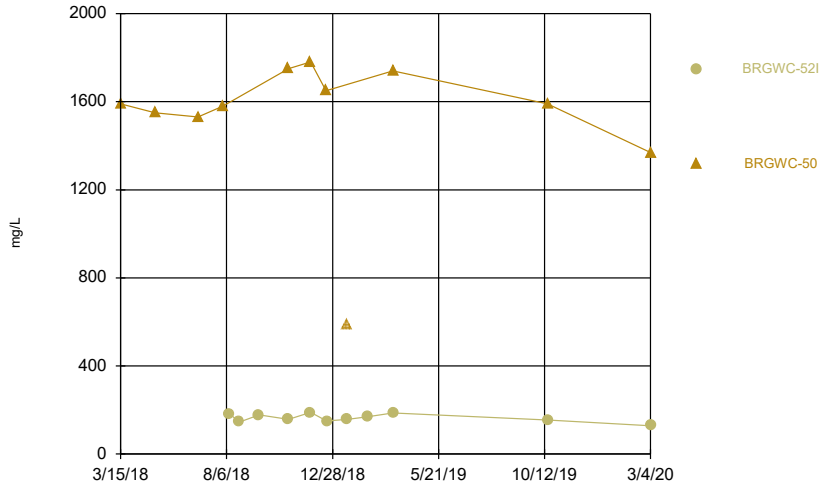
Time Series



Constituent: Sulfate as SO4 Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

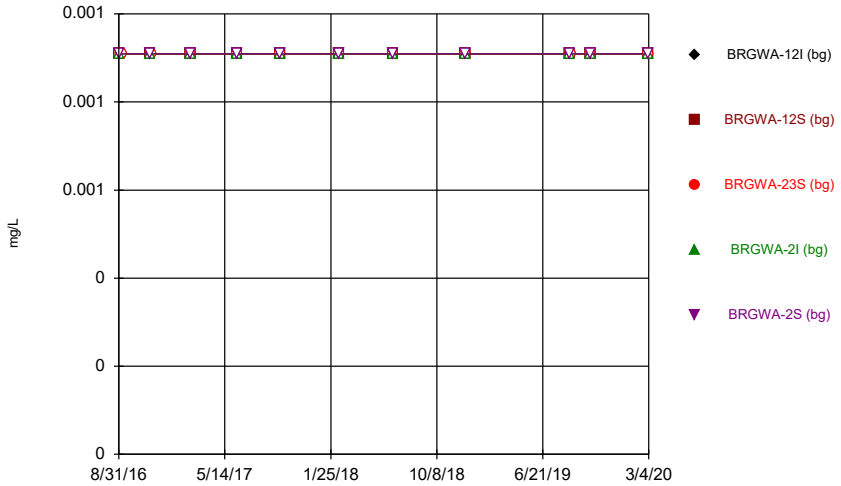
Time Series



Constituent: Sulfate as SO4 Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

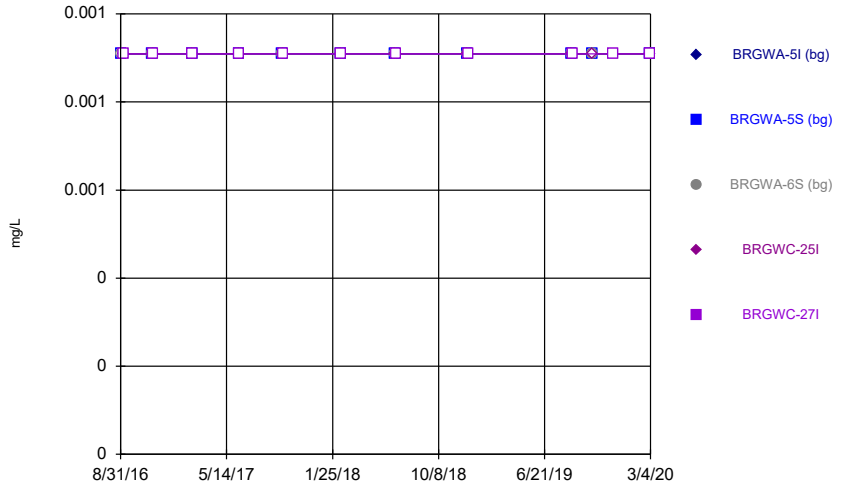
Time Series



Constituent: Thallium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

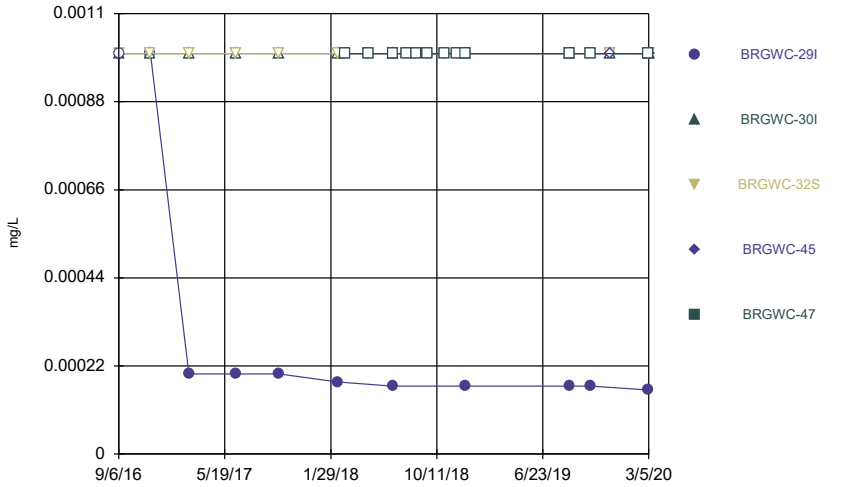
Time Series



Constituent: Thallium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

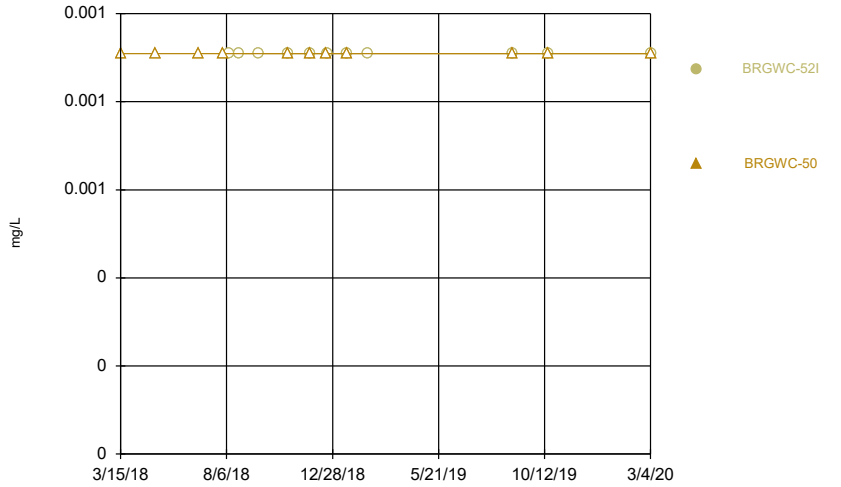
Time Series



Constituent: Thallium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Thallium Analysis Run 5/4/2020 9:52 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0009 (J)	<0.003
9/1/2016	0.0015 (J)	<0.003			
9/6/2016			<0.003		
11/16/2016	<0.003	<0.003 (J)		<0.003	<0.003
11/17/2016			<0.003		
2/21/2017	<0.003	<0.003	<0.003	<0.003	<0.003
6/12/2017				<0.003	
6/13/2017		0.0009 (J)	<0.003		0.0011 (J)
6/14/2017	0.0014 (J)				
9/26/2017	<0.003	0.0032	<0.003	<0.003	<0.003
2/13/2018				<0.003	<0.003
2/14/2018	<0.003	<0.003	<0.003		
6/26/2018	<0.003	<0.003	0.002 (J)	<0.003	<0.003
12/18/2018	0.009	<0.003	<0.003	<0.003	<0.003
8/27/2019	0.0072	<0.003		<0.003	<0.003
8/29/2019			<0.003		
10/15/2019	0.012	<0.003	<0.003	0.00047 (J)	<0.003
3/3/2020	0.0063	<0.003		<0.003	<0.003
3/4/2020			<0.003		

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.003	<0.003			
9/1/2016			<0.003		
9/8/2016				<0.003	<0.003
11/15/2016		<0.003	<0.003		
11/16/2016	<0.003				
11/17/2016				<0.003	
11/18/2016					<0.003
2/20/2017	<0.003	<0.003	<0.003		
2/21/2017				<0.003	<0.003
6/12/2017	<0.003	<0.003	<0.003		
6/13/2017				<0.003	<0.003
9/26/2017	<0.003	<0.003	<0.003		
9/27/2017				<0.003	<0.003
2/13/2018	<0.003	<0.003	<0.003		
2/14/2018				<0.003	<0.003
6/26/2018	<0.003	<0.003	<0.003	<0.003	
6/27/2018					<0.003
12/18/2018	<0.003	0.00087 (J)	<0.003	<0.003	
12/20/2018					<0.003
8/27/2019	<0.003	<0.003	<0.003	<0.003	
8/28/2019					<0.003
10/15/2019	<0.003	<0.003	<0.003	<0.003	
12/4/2019					<0.003
3/3/2020	<0.003	<0.003	<0.003		
3/4/2020				<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.003			
9/8/2016	<0.003		<0.003		
11/21/2016	<0.003	<0.003	<0.003		
2/22/2017	<0.003	<0.003	<0.003		
6/14/2017	0.0007 (J)	<0.003	<0.003		
9/27/2017	<0.003	<0.003	<0.003		
2/14/2018	<0.003	<0.003	<0.003		
3/6/2018				<0.003	<0.003
5/1/2018				<0.003	<0.003 (D)
6/27/2018	<0.003		<0.003		<0.003
6/28/2018		<0.003		<0.003	
7/31/2018				<0.003	
8/1/2018					<0.003
8/23/2018				<0.003	<0.003
9/19/2018				<0.003	<0.003
10/29/2018				<0.003	<0.003
11/28/2018				<0.003	<0.003
12/18/2018	<0.003	<0.003			
12/19/2018			<0.003		<0.003
12/20/2018				0.0024 (J)	
8/27/2019		<0.003	<0.003		
8/28/2019	<0.003			0.00046 (J)	<0.003
10/16/2019	<0.003				<0.003
12/3/2019				0.00088 (J)	
12/4/2019		<0.003	<0.003		
3/4/2020	<0.003				<0.003
3/5/2020		<0.003	0.0014 (J)	0.0016 (J)	

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.003
5/1/2018		<0.003
6/28/2018		<0.003
8/1/2018		<0.003
8/10/2018	<0.003	
8/23/2018	0.00085 (J)	
9/19/2018	<0.003	
10/29/2018	<0.003	<0.003
11/28/2018	<0.003	<0.003
12/19/2018		<0.003
12/20/2018	<0.003	
1/16/2019		<0.003
1/17/2019	<0.003	
2/13/2019	<0.003	
8/29/2019	<0.003	0.00052 (J)
10/16/2019	<0.003	<0.003
3/4/2020	0.00043 (J)	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.005	<0.005
9/1/2016	<0.005	<0.005			
9/6/2016			<0.005		
11/16/2016	<0.005	<0.005		<0.005	<0.005
11/17/2016			<0.005		
2/21/2017	<0.005	<0.005	<0.005	<0.005	<0.005
6/12/2017				0.0007 (J)	
6/13/2017		<0.005	0.0008 (J)		<0.005
6/14/2017	0.0009 (J)				
9/26/2017	0.0012 (J)	0.0006 (J)	0.0012 (J)	0.001 (J)	<0.005
2/13/2018				<0.005	<0.005
2/14/2018	<0.005	<0.005	0.0007 (J)		
6/26/2018	<0.005	<0.005	0.00062 (J)	0.00062 (J)	<0.005
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005 (X)
8/27/2019	<0.005	<0.005		<0.005	<0.005
8/29/2019			<0.005		
10/15/2019	0.00088 (J)	0.00046 (J)	0.00075 (J)	0.0008 (J)	0.00063 (J)
3/3/2020	0.0023 (J)	0.0015 (J)		0.0027 (J)	0.00098 (J)
3/4/2020			<0.005		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.005	<0.005			
9/1/2016			<0.005		
9/8/2016				<0.005	<0.005
11/15/2016		<0.005	<0.005		
11/16/2016	<0.005				
11/17/2016				<0.005	
11/18/2016					<0.005
2/20/2017	<0.005	<0.005	<0.005		
2/21/2017				<0.005	<0.005
6/12/2017	0.0007 (J)	0.0006 (J)	<0.005		
6/13/2017				0.0006 (J)	0.0009 (J)
9/26/2017	0.0009 (J)	0.0007 (J)	0.0007 (J)		
9/27/2017				<0.005	0.0007 (J)
2/13/2018	<0.005	<0.005	<0.005		
2/14/2018				<0.005	<0.005
6/26/2018	<0.005	<0.005	<0.005	0.00072 (J)	
6/27/2018					<0.005
12/18/2018	<0.005 (X)	<0.005 (X)	<0.005 (X)	0.00091 (J)	
12/20/2018					<0.005
8/27/2019	<0.005	<0.005	<0.005	<0.005	
8/28/2019					0.0014 (J)
10/15/2019	0.00058 (J)	0.00039 (J)	<0.005	0.00052 (J)	
12/4/2019					0.0011 (J)
3/3/2020	0.0024 (J)	0.0027 (J)	0.0018 (J)		
3/4/2020				<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.005			
9/8/2016	<0.005		<0.005		
11/21/2016	<0.005 (J)	<0.005	<0.005		
2/22/2017	<0.005	<0.005	<0.005		
6/14/2017	0.002 (J)	<0.005	<0.005		
9/27/2017	0.0016 (J)	<0.005	<0.005		
2/14/2018	<0.005	<0.005	<0.005		
3/6/2018				<0.005 (X)	<0.005 (X)
5/1/2018				0.0021 (J)	0.0018 (JD)
6/27/2018	<0.005		<0.005		0.0016 (J)
6/28/2018		<0.005 (X)		<0.005 (X)	
7/31/2018				<0.005	
8/1/2018					0.0028 (J)
8/23/2018				0.00075 (J)	<0.005
9/19/2018				<0.005	<0.005
10/29/2018				<0.005	0.0012 (J)
11/28/2018				0.00096 (J)	0.0019 (J)
12/18/2018	<0.005	<0.005			
12/19/2018			<0.005		0.00075 (J)
12/20/2018				<0.005	
8/27/2019		<0.005	<0.005		
8/28/2019	0.00051 (J)			0.00058 (J)	0.0018 (J)
10/16/2019	0.00065 (J)				<0.005
12/3/2019				0.0007 (J)	
12/4/2019		0.00056 (J)	0.00053 (J)		
3/4/2020	0.00044 (J)				0.00049 (J)
3/5/2020		<0.005	<0.005	<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.0014 (J)
5/1/2018		<0.005
6/28/2018		<0.005
8/1/2018		0.00074 (J)
8/10/2018	<0.005	
8/23/2018	<0.005	
9/19/2018	0.0013 (J)	
10/29/2018	0.0038 (J)	<0.005
11/28/2018	0.0016 (J)	<0.005
12/19/2018		<0.005
12/20/2018	0.0032 (J)	
1/16/2019		<0.005
1/17/2019	0.0032 (J)	
2/13/2019	<0.005	
8/29/2019	0.00067 (J)	<0.005
10/16/2019	0.0026 (J)	<0.005
3/4/2020	0.0047 (J)	0.00046 (J)

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0239	0.0099 (J)
9/1/2016	0.0454	0.0528			
9/6/2016			0.0624		
11/16/2016	0.0623	0.0509		0.0147	0.0102
11/17/2016			0.109		
2/21/2017	0.0644	0.0531	0.095	0.0109	0.0094 (J)
6/12/2017				0.0094 (J)	
6/13/2017		0.0543	0.0861		0.0094 (J)
6/14/2017	0.0726				
9/26/2017	0.0765	0.0547	0.104	0.0156	0.0096 (J)
2/13/2018				0.0134	0.0102
2/14/2018	0.0786	0.0603	0.129		
6/26/2018	0.063	0.059	0.13	0.014	0.0093 (J)
12/18/2018	0.067	0.056	0.13	0.0076 (J)	0.01
8/27/2019	0.058	0.057		0.012	0.0095 (J)
8/29/2019			0.076		
10/15/2019	0.06	0.053	0.069	0.013	0.0091 (J)
3/3/2020	0.076	0.06		0.017	0.011
3/4/2020			0.087		

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.0273	0.0495			
9/1/2016			0.0142		
9/8/2016				0.0378	0.0184
11/15/2016		0.0512	0.0126		
11/16/2016	0.0365				
11/17/2016				0.0448	
11/18/2016					0.0173
2/20/2017	0.0336	0.0586	0.0142		
2/21/2017				0.0447	0.015
6/12/2017	0.0322	0.0567	0.0134		
6/13/2017				0.0351	0.0143
9/26/2017	0.0364	0.0586	0.0133		
9/27/2017				0.0383	0.017
2/13/2018	0.054	0.054	0.0145		
2/14/2018				0.0327	0.0166
6/26/2018	0.032	0.063	0.014	0.031	
6/27/2018					0.015
12/18/2018	0.038	0.045	0.013	0.03	
12/20/2018					0.015
8/27/2019	0.028	0.056	0.013	0.027	
8/28/2019					0.019
10/15/2019	0.032	0.049	0.013	0.027	
12/4/2019					0.016
3/3/2020	0.028	0.051	0.019		
3/4/2020				0.026	0.015

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		0.0206			
9/8/2016	0.0199		0.0593		
11/21/2016	<0.05 (JB)	<0.05 (JB)	0.0532 (BR)		
2/22/2017	0.0179	0.0219	0.0498		
6/14/2017	0.0157	0.0197	0.0421		
9/27/2017	0.0165	0.0213	0.0411		
2/14/2018	0.0163	0.0236	0.0417		
3/6/2018				0.1	0.0519
5/1/2018				0.084	0.057 (D)
6/27/2018	0.017		0.038		0.046
6/28/2018		0.023		0.067	
7/31/2018				0.087 (J+X)	
8/1/2018					0.043 (J+X)
8/23/2018				0.084	0.038
9/19/2018				0.086	0.036
10/29/2018				0.098 (J+X)	0.041 (J+X)
11/28/2018				0.11	0.039
12/18/2018	0.017	0.029			
12/19/2018			0.036		0.04
12/20/2018				0.093	
8/27/2019		0.027	0.032		
8/28/2019	0.02			0.11	0.035
10/16/2019	0.019				0.032
12/3/2019				0.099	
12/4/2019		0.021	0.028		
3/4/2020	0.018				0.038
3/5/2020		0.025	0.026	0.078	

Time Series

Constituent: Barium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.021
5/1/2018		0.024
6/28/2018		0.021
8/1/2018		0.02 (J+X)
8/10/2018	0.038	
8/23/2018	0.03 (JX)	
9/19/2018	0.03	
10/29/2018	0.025 (J+X)	0.019 (J+X)
11/28/2018	0.017	0.02
12/19/2018		0.02
12/20/2018	0.013	
1/16/2019		0.02
1/17/2019	0.017	
2/13/2019	0.025	
8/29/2019	0.017	0.018
10/16/2019	0.015	0.017
3/4/2020	0.022	0.019

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.003	<0.003
9/1/2016	<0.003	<0.003			
9/6/2016			<0.003		
11/16/2016	<0.003	<0.003		<0.003	<0.003
11/17/2016			<0.003		
2/21/2017	<0.003	<0.003	<0.003	<0.003	<0.003
6/12/2017				<0.003	
6/13/2017		<0.003	<0.003		<0.003
6/14/2017	<0.003				
9/26/2017	<0.003	<0.003	<0.003	<0.003	<0.003
2/13/2018				<0.003	<0.003
2/14/2018	<0.003	<0.003	<0.003		
6/26/2018	<0.003	<0.003	<0.003	<0.003	<0.003
12/18/2018	<0.003	<0.003	<0.003	<0.003	<0.003
8/27/2019	<0.003	<0.003		<0.003	<0.003
8/29/2019			<0.003		
10/15/2019	<0.003	<0.003	<0.003	<0.003	<0.003
3/3/2020	<0.003	<0.003		<0.003	<0.003
3/4/2020			<0.003		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.003	<0.003			
9/1/2016			<0.003		
9/8/2016				<0.003	0.0002 (J)
11/15/2016		<0.003	<0.003		
11/16/2016	<0.003				
11/17/2016				<0.003	
11/18/2016					<0.003 (J)
2/20/2017	<0.003	<0.003	<0.003		
2/21/2017				<0.003	0.0002 (J)
6/12/2017	<0.003	<0.003	<0.003		
6/13/2017				<0.003	0.0002 (J)
9/26/2017	<0.003	<0.003	<0.003		
9/27/2017				<0.003	0.0001 (J)
2/13/2018	<0.003	<0.003	<0.003		
2/14/2018				<0.003	<0.003
6/26/2018	<0.003	<0.003	<0.003	<0.003	
6/27/2018					0.00014 (J)
12/18/2018	<0.003	<0.003	<0.003	<0.003	
12/20/2018					<0.003 (X)
8/27/2019	<0.003	<0.003	<0.003	<0.003	
8/28/2019					0.00012 (J)
10/15/2019	<0.003	<0.003	<0.003	<0.003	
10/17/2019					<0.003
12/4/2019					0.00012 (J)
3/3/2020	<0.003	<0.003	<0.003		
3/4/2020				<0.003	0.00012 (J)

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.003			
9/8/2016	0.0011 (J)		<0.003		
11/21/2016	<0.003 (J)	<0.003	<0.003		
2/22/2017	0.0014 (J)	<0.003	<0.003		
6/14/2017	0.0012 (J)	<0.003	<0.003		
9/27/2017	0.001 (J)	<0.003	<0.003		
2/14/2018	<0.003	<0.003	<0.003		
3/6/2018				<0.003	<0.003
5/1/2018				<0.003	<0.003 (D)
6/27/2018	0.0008 (J)		<0.003		<0.003
6/28/2018		<0.003		<0.003	
7/31/2018				<0.003	
8/1/2018					<0.003
8/23/2018				7.9E-05 (J)	5.5E-05 (J)
9/19/2018				<0.003	<0.003
10/29/2018				<0.003	<0.003
11/28/2018				<0.003	5.6E-05 (J)
12/18/2018	0.00071 (J)	<0.003			
12/19/2018			<0.003		<0.003 (X)
12/20/2018				<0.003	
8/27/2019		<0.003	<0.003		
8/28/2019	0.0008 (J)			<0.003	<0.003
10/16/2019	0.00072 (J)				<0.003
10/17/2019		<0.003	<0.003	<0.003	
12/3/2019				<0.003	
12/4/2019		<0.003	<0.003		
3/4/2020	0.00073 (J)				<0.003
3/5/2020		<0.003	<0.003	<0.003	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.003
5/1/2018		<0.003
6/28/2018		0.003 (J)
8/1/2018		0.0025 (J)
8/10/2018	<0.003	
8/23/2018	<0.003	
9/19/2018	<0.003	
10/29/2018	<0.003	0.0042
11/28/2018	<0.003	0.0029 (J)
12/19/2018		0.0043
12/20/2018	<0.003	
1/16/2019		0.0038
1/17/2019	<0.003	
2/13/2019	<0.003	
8/29/2019	<0.003	0.0029 (J)
10/16/2019	<0.003	0.0027 (J)
3/4/2020	<0.003	0.0052

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0072 (J)	<0.04
9/1/2016	0.0093 (J)	<0.04			
9/6/2016			0.0362 (J)		
11/16/2016	<0.04	<0.04		<0.04	<0.04
11/17/2016			0.0617		
2/21/2017	0.0071 (J)	<0.04	0.0245 (J)	0.0088 (J)	<0.04
6/12/2017				0.0133 (J)	
6/13/2017		<0.04	<0.04		<0.04
6/14/2017	0.0078 (J)				
9/26/2017	<0.04	<0.04	<0.04	0.0093 (J)	<0.04
2/13/2018				0.0141 (J)	<0.04
2/14/2018	0.0068 (J)	<0.04	0.0314 (J)		
6/26/2018	0.008 (J)	<0.04	0.062	0.012 (J)	<0.04
12/18/2018	0.0083 (J)	0.0053 (J)	0.055	0.0086 (J)	<0.04
3/19/2019	0.008 (J)	<0.04	0.068	0.00565 (JD)	<0.04
10/15/2019	0.006 (J)	<0.04	0.022 (J)	0.0067 (J)	<0.04
3/3/2020	0.01 (J)	0.0065 (J)		0.0082 (J)	<0.04
3/4/2020			0.044 (J)		

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.04	<0.04			
9/1/2016			<0.04		
9/8/2016				1.03	1.63
11/15/2016		<0.04 (B)	<0.04 (B)		
11/16/2016	<0.04				
11/17/2016				1.7	
11/18/2016					1.91
2/20/2017	0.0066 (J)	0.0093 (J)	0.0157 (J)		
2/21/2017				1.55	1.39
6/12/2017	<0.04	<0.04	<0.04		
6/13/2017				1.77	1.62
9/26/2017	<0.04	<0.04	<0.04		
9/27/2017				1.75	1.16
2/13/2018	<0.04	<0.04	<0.04		
2/14/2018				1.47	1.17
6/26/2018	0.0042 (J)	0.0056 (J)	0.0041 (J)	1.8	
6/27/2018					1.4 (J+X)
12/18/2018	<0.04	0.0062 (J)	<0.04	1.5	
12/20/2018					1.4
3/19/2019	<0.04	<0.04	<0.04		1.1
3/20/2019				1.5 (D)	
10/15/2019	<0.04	0.006 (J)	0.01 (J)	1.2	
10/17/2019					0.97
12/4/2019					0.89
3/3/2020	<0.04	<0.04	<0.04		
3/4/2020				1.2	0.81

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		1.96			
9/8/2016	1.35		1.28		
11/21/2016	1.74	1.68	1.19		
2/22/2017	1.5	1.48	1.43		
6/14/2017	1.6	1.71	1.57		
9/27/2017	1.83	1.61	1.51		
2/14/2018	1.8	1.47	1.6		
3/6/2018				0.0198 (J)	0.428
5/1/2018				0.015 (J)	0.435 (D)
6/27/2018	1.8 (J+X)		1.5 (J+X)		0.49 (J+X)
6/28/2018		1.4		<0.04 (X)	
7/31/2018				0.035 (J)	
8/1/2018					0.39
8/23/2018				0.022 (J)	0.39
9/19/2018				0.021 (J)	0.43
10/29/2018				0.021 (J)	0.4
11/28/2018				<0.04 (X)	0.51
12/18/2018	1.5	1.6			
12/19/2018			1.6		0.41
12/20/2018				0.028 (J)	
3/19/2019					0.41
3/20/2019	1.5	1.7	1.4	0.043	
10/16/2019	1.2				0.36
10/17/2019		1.7	1.5	0.064	
12/3/2019				0.027 (J)	
12/4/2019		1.6	1.6		
3/4/2020	1.1				0.49
3/5/2020		1.5	1.5	0.044 (J)	

Time Series

Constituent: Boron (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.32
5/1/2018		0.32
6/28/2018		0.34
8/1/2018		0.28
8/10/2018	1.3	
8/23/2018	1.4	
9/19/2018	1.7	
10/29/2018	1.3	0.3
11/28/2018	1.5	0.35
12/19/2018		0.35
12/20/2018	1.6	
1/16/2019		0.37
1/17/2019	1.5	
2/13/2019	1.7	
3/20/2019	1.6 (D)	0.34
10/16/2019	1.3	0.31
3/4/2020	1.4	0.32

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.0025	<0.0025
9/1/2016	<0.0025	<0.0025			
9/6/2016			<0.0025		
11/16/2016	<0.0025	<0.0025		<0.0025	<0.0025
11/17/2016			<0.0025		
2/21/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
6/12/2017				<0.0025	
6/13/2017		<0.0025	<0.0025		<0.0025
6/14/2017	<0.0025				
9/26/2017	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2/13/2018				<0.0025	<0.0025
2/14/2018	<0.0025	<0.0025	<0.0025		
6/26/2018	<0.0025	<0.0025	0.00015 (J)	<0.0025	<0.0025
7/31/2018	<0.0025	<0.0025			
12/18/2018	<0.0025	<0.0025	0.0001 (J)	<0.0025	<0.0025
8/27/2019	<0.0025	<0.0025		<0.0025	<0.0025
8/29/2019			<0.0025		
10/15/2019	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
3/3/2020	<0.0025	<0.0025		<0.0025	<0.0025
3/4/2020			<0.0025		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.0025	<0.0025			
9/1/2016			<0.0025		
9/8/2016				<0.0025	7E-05 (J)
11/15/2016		<0.0025	<0.0025		
11/16/2016	<0.0025				
11/17/2016				<0.0025	
11/18/2016					<0.001 (J)
2/20/2017	<0.0025	<0.0025	<0.0025		
2/21/2017				<0.0025	<0.0025
6/12/2017	<0.0025	<0.0025	<0.0025		
6/13/2017				<0.0025	<0.0025
9/26/2017	<0.0025	<0.0025	<0.0025		
9/27/2017				<0.0025	<0.0025
2/13/2018	<0.0025	<0.0025	<0.0025		
2/14/2018				<0.0025	<0.0025
6/26/2018	<0.0025	<0.0025	<0.0025	<0.0025	
6/27/2018					<0.0025
12/18/2018	<0.0025	<0.0025	<0.0025	<0.0025	
12/20/2018					<0.0025
8/27/2019	<0.0025	<0.0025	<0.0025	<0.0025	
8/28/2019					<0.0025
10/15/2019	<0.0025	<0.0025	<0.0025	<0.0025	
10/17/2019					<0.0025
12/4/2019					<0.0025
3/3/2020	<0.0025	<0.0025	<0.0025		
3/4/2020				<0.0025	<0.0025

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.0025			
9/8/2016	<0.0025		<0.0025		
11/21/2016	<0.0025	<0.001 (J)	<0.001 (J)		
2/22/2017	<0.0025	<0.0025	0.0001 (J)		
6/14/2017	<0.0025	<0.0025	<0.0025		
9/27/2017	<0.0025	<0.0025	<0.0025		
2/14/2018	<0.0025	<0.0025	<0.0025		
3/6/2018				<0.0025	<0.0025
5/1/2018				<0.0025	<0.0025 (D)
6/27/2018	<0.0025		0.00011 (J)		0.00014 (J)
6/28/2018		<0.0025		<0.0025	
7/31/2018				<0.0025	
8/1/2018					0.00011 (J)
8/23/2018				<0.0025	0.00018 (J)
9/19/2018				<0.0025	0.00015 (J)
10/29/2018				9.8E-05 (J)	0.00019 (J)
11/28/2018				<0.0025	0.00022 (J)
12/18/2018	<0.0025	<0.0025			
12/19/2018			<0.0025 (X)		<0.0025
12/20/2018				<0.0025 (X)	
8/27/2019		<0.0025	<0.0025		
8/28/2019	<0.0025			<0.0025	0.00017 (J)
10/16/2019	<0.0025				0.00018 (J)
10/17/2019		<0.0025	<0.0025	<0.0025	
12/3/2019				0.00011 (J)	
12/4/2019		<0.0025	<0.0025		
3/4/2020	<0.0025				0.00024 (J)
3/5/2020		<0.0025	<0.0025	<0.0025	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.038
5/1/2018		0.011
6/28/2018		0.087
8/1/2018		0.042
8/10/2018	<0.0025	
8/23/2018	<0.0025	
9/19/2018	<0.0025	
10/29/2018	<0.0025	0.083
11/28/2018	<0.0025	0.031
12/19/2018		0.042
12/20/2018	<0.0025	
1/16/2019		0.028
1/17/2019	<0.0025	
2/13/2019	<0.0025	
8/29/2019	<0.0025	0.0071
10/16/2019	<0.0025	0.014
3/4/2020	<0.0025	0.013

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				12.6	4.09
9/1/2016	8.98	4.61			
9/6/2016			12.8		
11/16/2016	15.4	4.17		12.1	4.25
11/17/2016			19.2		
2/21/2017	17.4	5	15.1	11.4	4.02
6/12/2017				9.34	
6/13/2017		4.98	10.2		3.84
6/14/2017	18.1				
9/26/2017	19.3	4.49	15	14.3	3.31
2/13/2018				<25	3.94
2/14/2018	<25	<25	<25		
6/26/2018	15.5 (J)	6.4	18.5 (J)	16 (J)	3.6
7/31/2018	18.2 (J)	6.1			
12/18/2018	18.7 (J)	5.5	16.8 (J)	14.5 (J)	3.8
3/19/2019	15.9 (J)	5.9	13.5 (J)	14.3 (JD)	3.9
10/15/2019	15.9	6.2	8.6	15.1	3.7
3/3/2020	19.4	6.8		20	4
3/4/2020			11.5		

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	13.5	19.6			
9/1/2016			3.3		
9/8/2016				59.4	87.2
11/15/2016		21.7	3.44		
11/16/2016	14.9				
11/17/2016				78.4	
11/18/2016					82.4
2/20/2017	13.9	21.1	3.52		
2/21/2017				80.9	75.1
6/12/2017	13.7	21.5	3.11		
6/13/2017				62	61
9/26/2017	14.4	24	3.15		
9/27/2017				65.8	72.6
2/13/2018	<25	<25	3.65		
2/14/2018				58.8	74.1
6/26/2018	13.5 (J)	23.5 (J)	3.3	55.5	
6/27/2018					68.2
12/18/2018	16.4 (J)	19.8 (J)	3.5	54.7	
12/20/2018					63.9
3/19/2019	12.3 (J)	21.4 (J)	3.6		60.2
3/20/2019				53.95 (D)	
10/15/2019	14.4	20	3.5	48.3	
12/4/2019					76.8
3/3/2020	14.9	23.2	5		
3/4/2020				52	72.3

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		63.3			
9/8/2016	93.9		60.5		
11/21/2016	99.1	60.7	31.1		
2/22/2017	105	62.1	67.3		
6/14/2017	91.3	63.5	60.2		
9/27/2017	84	63.5	68.4		
2/14/2018	72.1	62.8	70.2		
3/6/2018				39.5	326
5/1/2018				45.5	302 (D)
6/27/2018	61.1		67.1		340
6/28/2018		73.3		41.9	
7/31/2018				41.5	
8/1/2018					358
8/23/2018				42.3	323
9/19/2018				41.9	321
10/29/2018				40.8	326
11/28/2018				45.1	354
12/18/2018	52.9	102			
12/19/2018			61.2		330
12/20/2018				39	
3/19/2019					335
3/20/2019	55.4	141	52.8	31.2	
10/16/2019	54				338
12/3/2019				43.7	
12/4/2019		92.6	52.7		
3/4/2020	59.3				353
3/5/2020		119	52.1	37.9	

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		233
5/1/2018		225
6/28/2018		242
8/1/2018		246
8/10/2018	410 (O)	
8/23/2018	33.9	
9/19/2018	42.3	
10/29/2018	39.8	236
11/28/2018	38.2	254
12/19/2018		252
12/20/2018	43.2	
1/16/2019		248
1/17/2019	39.4	
2/13/2019	36.9	
3/20/2019	40.85 (D)	222
10/16/2019	48.4	241
3/4/2020	49.5	245

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				2.3	2
9/1/2016	3.3	3.5			
9/6/2016			5.8		
11/16/2016	3.6	3.6		2	1.8
11/17/2016			4.3		
2/21/2017	3.2	3.2	3.5	2	1.8
6/12/2017				2.1	
6/13/2017		3.3	3.2		1.7
6/14/2017	3.1				
9/26/2017	3.3	3.3	3.5	2	1.8
2/13/2018				2.1	1.7
2/14/2018	3.1	3.5	3.8		
6/26/2018	3.4	3.4	3.8	2.4	2.2
7/31/2018	2.6	2.9			
12/18/2018	2.8	2.9	3.9	1.8	1.9
3/19/2019	3.2	3.5	3.8	2.45 (D)	2
10/15/2019	3.1	3.4	3.5	2.2	1.9
3/3/2020	2.6	3.2		1.9	1.9
3/4/2020			3.3		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	4.4	3.6			
9/1/2016			2.5		
9/8/2016				5.5	6
11/15/2016		4	2.3		
11/16/2016	4.4				
11/17/2016				7.7	
11/18/2016					6.3
2/20/2017	4.8	3.9	2.4		
2/21/2017				7.3	5.1
6/12/2017	4.2	3.8	2.2		
6/13/2017				7.5	4.7
9/26/2017	4.4	4.1	2.3		
9/27/2017				7.9	4.9
2/13/2018	4.7	4.1	2.3		
2/14/2018				6.7	5.6
6/26/2018	4.5	4.1	2.6	6.7	
6/27/2018					5.9
12/18/2018	4.5	3.8	2.3	6.2	
12/20/2018					5.6 (J-X)
3/19/2019	4.5	4.2	2.6		5.8
3/20/2019				6.3 (D)	
10/15/2019	4.2	3.7	2.4	5	
12/4/2019					5.6
3/3/2020	3.9	3.6	2.9		
3/4/2020				5	5.1

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		6.7			
9/8/2016	6.4		6.8		
11/21/2016	6.9	6.5	7.8		
2/22/2017	6.2	5.6	7		
6/14/2017	7.2	5.7	7.1		
9/27/2017	8.7	6	7.2		
2/14/2018	7.2	5.9	7.4		
3/6/2018				56.6	8.4
5/1/2018				58.5	5.7 (D)
6/27/2018	6.3		7.1		4.4
6/28/2018		7 (J-X)		50.2 (J-X)	
7/31/2018				59	
8/1/2018					5.2
8/23/2018				54	3.6
9/19/2018				58.4	4.1
10/29/2018				62.6	4.3
11/28/2018				58.1	5.1
12/18/2018	5.4	5.8			
12/19/2018			7 (J-X)		4.5 (J-X)
12/20/2018				47.2 (J-X)	
3/19/2019					4.7
3/20/2019	5.6	5.8	7.3	27.7	
10/16/2019	6.9				4.6
12/3/2019				52.8	
12/4/2019		5	6.6		
3/4/2020	5.8				4.2
3/5/2020		4.3	6	37.1	

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		23.3
5/1/2018		23.4
6/28/2018		24 (J-X)
8/1/2018		25.7
8/10/2018	6.9	
8/23/2018	7.5	
9/19/2018	6.6	
10/29/2018	7.8	24.9
11/28/2018	7.2	24
12/19/2018		23.3 (J-X)
12/20/2018	6.6 (J-X)	
1/16/2019		24.1
1/17/2019	6.4	
2/13/2019	6.5	
3/20/2019	6.7 (D)	23.5
10/16/2019	7	21.9
3/4/2020	6.1	21.6

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.001 (J)	0.0034 (J)
9/1/2016	0.0009 (J)	0.0013 (J)			
9/6/2016			<0.01		
11/16/2016	<0.01 (J)	<0.01 (J)		<0.01	<0.01 (J)
11/17/2016			<0.01		
2/21/2017	0.001 (J)	0.0017 (J)	<0.01	<0.01	0.0036 (J)
6/12/2017				0.0005 (J)	
6/13/2017		0.0019 (J)	<0.01		0.0038 (J)
6/14/2017	0.0012 (J)				
9/26/2017	0.0014 (J)	0.0018 (J)	<0.01	0.0005 (J)	0.0045 (J)
2/13/2018				<0.01	<0.01
2/14/2018	<0.01	<0.01 (o)	<0.01		
6/26/2018	<0.01	0.0022 (J)	<0.01	<0.01	0.008 (J)
12/18/2018	0.0016 (J)	0.0022 (J)	<0.01	<0.01	0.012
8/27/2019	0.0023 (J)	0.0024 (J)		0.0004 (J)	0.0083 (J)
8/29/2019			0.0016 (J)		
10/15/2019	0.0021 (J)	0.0023 (J)	0.0017 (J)	<0.01	0.0083 (J)
3/3/2020	0.0026 (J)	0.0028 (J)		0.00047 (J)	0.0098 (J)
3/4/2020			0.0019 (J)		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.0058 (J)	0.0028 (J)			
9/1/2016			0.0147		
9/8/2016				<0.01	0.001 (J)
11/15/2016		<0.01 (JB)	0.0154 (B)		
11/16/2016	<0.01 (J)				
11/17/2016				<0.01	
11/18/2016					<0.01
2/20/2017	0.0049 (J)	0.0047 (J)	0.014		
2/21/2017				<0.01	<0.01
6/12/2017	0.0052 (J)	0.0041 (J)	0.016		
6/13/2017				<0.01	<0.01
9/26/2017	0.0039 (J)	0.0037 (J)	0.0144		
9/27/2017				<0.01	<0.01
2/13/2018	<0.01	<0.01	0.0144		
2/14/2018				<0.01	<0.01
6/26/2018	0.0053 (J)	0.0043 (J)	0.015	<0.01	
6/27/2018					<0.01
12/18/2018	0.0032 (J)	0.0054 (J)	0.015	<0.01	
12/20/2018					0.003 (J)
8/27/2019	0.0055 (J)	0.0043 (J)	0.015	0.0016 (J)	
8/28/2019					<0.01
10/15/2019	0.0047 (J)	0.0055 (J)	0.014	0.00098 (J)	
12/4/2019					<0.01
3/3/2020	0.0069 (J)	0.0057 (J)	0.011		
3/4/2020				<0.01	<0.01

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.01			
9/8/2016	<0.01		<0.01		
11/21/2016	<0.01	<0.01	<0.01		
2/22/2017	<0.01	<0.01	0.0012 (J)		
6/14/2017	<0.01	<0.01	0.0009 (J)		
9/27/2017	<0.01	<0.01	0.0011 (J)		
2/14/2018	<0.01	<0.01	<0.01		
3/6/2018				<0.01	<0.01
5/1/2018				<0.01	<0.01 (D)
6/27/2018	<0.01		<0.01		<0.01
6/28/2018		<0.01		<0.01	
7/31/2018				<0.01	
8/1/2018					<0.01
8/23/2018				<0.01	<0.01
9/19/2018				<0.01	<0.01
10/29/2018				<0.01	<0.01
11/28/2018				<0.01	<0.01
12/18/2018	<0.01	<0.01			
12/19/2018			<0.01		0.0018 (J)
12/20/2018				<0.01	
8/27/2019		0.0051 (J)	0.0019 (J)		
8/28/2019	<0.01			<0.01	0.00092 (J)
10/16/2019	<0.01				<0.01
12/3/2019				<0.01	
12/4/2019		<0.01	0.0014 (J)		
3/4/2020	0.02				0.00078 (J)
3/5/2020		<0.01	0.0014 (J)	0.00053 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.01
5/1/2018		<0.01
6/28/2018		0.0023 (J)
8/1/2018		0.0046 (J)
8/10/2018	0.0017 (J)	
8/23/2018	<0.01	
9/19/2018	<0.01	
10/29/2018	<0.01	<0.01
11/28/2018	<0.01	<0.01
12/19/2018		<0.01
12/20/2018	<0.01	
1/16/2019		<0.01
1/17/2019	<0.01	
2/13/2019	<0.01	
8/29/2019	<0.01	<0.01
10/16/2019	<0.01	0.0005 (J)
3/4/2020	<0.01	0.00071 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0016 (J)	0.0034 (J)
9/1/2016	<0.005	<0.005			
9/6/2016			0.0028 (J)		
11/16/2016	<0.005	<0.005		<0.005	<0.005
11/17/2016			<0.01 (J)		
2/21/2017	<0.005	<0.005	0.0045 (J)	<0.005	0.0028 (J)
6/12/2017				<0.005	
6/13/2017		<0.005	0.0036 (J)		0.0025 (J)
6/14/2017	<0.005				
9/26/2017	<0.005	<0.005	0.0037 (J)	<0.005	0.002 (J)
2/13/2018				<0.005	<0.005
2/14/2018	<0.005	<0.005	0.0135		
6/26/2018	<0.005	<0.005	0.0098 (J)	<0.005	0.0019 (J)
7/31/2018	<0.005	<0.005			
12/18/2018	<0.005	<0.005	0.0057 (J)	<0.005	0.0032 (J)
8/27/2019	<0.005	<0.005		<0.005	0.0012 (J)
8/29/2019			0.0015 (J)		
10/15/2019	<0.005	<0.005	0.0011 (J)	<0.005	0.00097 (J)
3/3/2020	<0.005	<0.005		<0.005	0.0015 (J)
3/4/2020			0.0012 (J)		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.0013 (J)	<0.005			
9/1/2016			<0.005		
9/8/2016				0.0073 (J)	0.0149
11/15/2016		<0.005	<0.005		
11/16/2016	<0.01 (o)				
11/17/2016				<0.01 (J)	
11/18/2016					0.0131
2/20/2017	0.0012 (J)	0.0009 (J)	<0.005		
2/21/2017				0.0079 (J)	0.0099 (J)
6/12/2017	0.0011 (J)	0.0006 (J)	0.0003 (J)		
6/13/2017				0.0083 (J)	0.0094 (J)
9/26/2017	0.0016 (J)	0.0005 (J)	0.0003 (J)		
9/27/2017				0.0087 (J)	0.0095 (J)
2/13/2018	<0.01 (o)	<0.005	<0.005		
2/14/2018				<0.005	0.0112
6/26/2018	0.0009 (J)	0.00052 (J)	<0.005	0.006 (J)	
6/27/2018					0.0093 (J)
12/18/2018	0.00062 (J)	<0.005	<0.005	0.0055 (J)	
12/20/2018					0.0081 (J)
8/27/2019	0.00068 (J)	0.00042 (J)	<0.005	0.0042 (J)	
8/28/2019					0.01
10/15/2019	0.00083 (J)	<0.005	<0.005	0.0043 (J)	
10/17/2019					<0.04 (J)
12/4/2019					0.0086
3/3/2020	0.00043 (J)	<0.005	0.0011 (J)		
3/4/2020				0.0039 (J)	0.008

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		0.0006 (J)			
9/8/2016	0.0122		0.0025 (J)		
11/21/2016	0.0122	<0.005	<0.01 (J)		
2/22/2017	0.0136	0.0016 (J)	<0.005		
6/14/2017	0.0113	0.0015 (J)	<0.005		
9/27/2017	0.0094 (J)	0.0007 (J)	<0.005		
2/14/2018	<0.005	<0.005	<0.005		
3/6/2018				0.0162	<0.005
5/1/2018				0.015	0.0125 (D)
6/27/2018	0.0069 (J)		<0.005		0.0076 (J)
6/28/2018		0.00078 (J)		0.01	
7/31/2018				0.0098 (J)	
8/1/2018					0.004 (J)
8/23/2018				0.0093 (J)	0.0016 (J)
9/19/2018				0.0084 (J)	0.0018 (J)
10/29/2018				0.0064 (J)	0.0014 (J)
11/28/2018				0.0071 (J)	0.0016 (J)
12/18/2018	0.0067 (J)	0.0011 (J)			
12/19/2018			<0.005		0.0014 (J)
12/20/2018				0.069	
8/27/2019		0.0014 (J)	<0.005		
8/28/2019	0.0061			0.011	0.00037 (J)
10/16/2019	0.0058				0.00032 (J)
10/17/2019		<0.005	<0.005	<0.04 (J)	
12/3/2019				0.0076	
12/4/2019		0.0012 (J)	<0.005		
3/4/2020	0.007				0.0011 (J)
3/5/2020		0.0011 (J)	<0.005	0.0091	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		1.3
5/1/2018		1.4
6/28/2018		1.3
8/1/2018		1.4
8/10/2018	0.0043 (J)	
8/23/2018	0.0026 (J)	
9/19/2018	0.0028 (J)	
10/29/2018	0.0015 (J)	1.4
11/28/2018	0.0012 (J)	1.4
12/19/2018		1.5
12/20/2018	<0.005	
1/16/2019		1.4
1/17/2019	<0.005	
2/13/2019	<0.005	
8/29/2019	0.00063 (J)	1.3
10/16/2019	<0.005	1.4
3/4/2020	<0.005	1.5

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.351 (U)	1 (U)
9/1/2016	0.428 (U)	0.566 (U)			
9/6/2016			0.585 (U)		
11/16/2016	0.799 (U)	0.863 (U)		0.824 (U)	0.43 (U)
11/17/2016			0.804 (U)		
2/21/2017	1.75 (U)	0.318 (U)	0.595 (U)	1.01 (U)	0.96 (U)
6/12/2017				0.532 (U)	
6/13/2017		0.163 (U)	0.618 (U)		0.645 (U)
6/14/2017	2.66				
9/26/2017	0.841 (U)	0.56 (U)	1.26 (U)	0.845 (U)	0.299 (U)
2/13/2018				0.176 (U)	1.01 (U)
2/14/2018	1.13 (UX)	0.537 (U)	1.2 (U)		
6/26/2018	1.42 (J+X)	1.31 (UX)	1.34 (U)	1.02 (U)	1.26 (J+X)
12/18/2018	0.855 (U)	1.31 (J+X)	1.13 (U)	0.487 (U)	0.44 (U)
8/27/2019	1.31	1.32		1.11	1.47
8/29/2019			1.45 (U)		
10/15/2019	1.13 (U)	1.05 (U)	1.69	1.02 (U)	0.807 (U)
3/3/2020	1.29 (U)	1.68		1.18 (U)	0.818 (U)
3/4/2020			1.45		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.62 (U)	0.603 (U)			
9/1/2016			1.33		
9/8/2016				0.862 (U)	1.74
11/15/2016		0.645 (U)	0.412 (U)		
11/16/2016	0.493 (U)				
11/17/2016				1.2 (U)	
11/18/2016					0.571 (U)
2/20/2017	0.534 (U)	1.36	0.633 (U)		
2/21/2017				1.31	1.28 (U)
6/12/2017	0.254 (U)	0.566 (U)	0.112 (U)		
6/13/2017				0.738 (U)	0.521 (U)
9/26/2017	0.62 (U)	0.762 (U)	0.167 (U)		
9/27/2017				0.583 (U)	0.595 (U)
2/13/2018	0.0914 (U)	0.349 (U)	0.347 (U)		
2/14/2018				1.41 (J+X)	1.18 (U)
6/26/2018	1.11 (U)	0.614 (U)	0.903 (U)	0.968 (U)	
6/27/2018					1.3 (U)
12/18/2018	0.42 (U)	0.445 (U)	0.353 (U)	1.13 (U)	
12/20/2018					0.527 (U)
8/27/2019	1.19	1.44	0.65 (U)	0.91 (U)	
8/28/2019					0.643 (U)
10/15/2019	0.714 (U)	0.467 (U)	0.402 (U)	1.06 (U)	
10/17/2019					1.07 (U)
3/3/2020	0.996 (U)	1.5	0.397 (U)		
3/4/2020				1.34	1.18

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		1.01 (U)			
9/8/2016	1.13		0.706 (U)		
11/21/2016	1.59	0.201 (U)	0.0569 (U)		
2/22/2017	1.64	0.57 (U)	1.07 (U)		
6/14/2017	1.32	0.726 (U)	0.459 (U)		
9/27/2017	1.7	0.884 (U)	0.807 (U)		
2/14/2018	1.89 (J+X)	1.14 (U)	1.67 (J+X)		
3/6/2018				1.25 (U)	1.75 (J+X)
5/1/2018				0.423 (U)	2.02 (D)
6/27/2018	1.66 (J+X)		1.34 (UX)		0.878 (U)
6/28/2018		1.4 (UX)		0.283 (U)	
7/31/2018				0.243 (U)	
8/1/2018					0.638 (U)
8/23/2018				1.1 (U)	1.14 (U)
9/19/2018				0.369 (U)	1.45 (UX)
10/29/2018				0.401 (U)	1.09 (U)
11/28/2018				0.901 (U)	1.67 (UX)
12/18/2018	0.759 (U)	0.661 (U)			
12/19/2018			1.21 (U)		1.3
12/20/2018				0.657 (U)	
8/27/2019		1.35	0.86 (U)		
8/28/2019	1.76			0.528 (U)	0.804 (U)
10/16/2019	1.69 (U)				1.28 (U)
10/17/2019		1.25 (U)	1.2 (U)	0.977 (U)	
3/4/2020	1.23				0.862 (U)
3/5/2020		1.35	0.483 (U)	0.921 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		1.31
5/1/2018		1.69 (J+X)
6/28/2018		1.04 (U)
8/1/2018		1.67
8/10/2018	1.91	
8/23/2018	1.86 (J+X)	
9/19/2018	1.64 (UX)	
10/29/2018	1.36 (U)	0.992 (U)
11/28/2018	1.07 (U)	1.76 (UX)
12/19/2018		2.15 (J+X)
12/20/2018	0.892 (U)	
1/16/2019		1.39
1/17/2019	1.1 (U)	
2/13/2019	1.68	
8/29/2019	1.44	1.33
10/16/2019	2.13	2.51
3/4/2020	2.3	1.73

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.11 (J)	0.05 (J)
9/1/2016	0.2 (J)	0.05 (J)			
9/6/2016			0.42		
11/16/2016	<0.3 (J)	<0.3 (J)		<0.3 (J)	<0.3 (J)
11/17/2016			<0.3 (JB)		
2/21/2017	0.16 (J)	0.04 (J)	0.1 (J)	0.14 (J)	0.05 (J)
6/12/2017				0.16 (J)	
6/13/2017		0.008 (J)	0.07 (J)		0.04 (J)
6/14/2017	0.09 (J)				
9/26/2017	0.1 (J)	<0.3	<0.3	0.14 (J)	<0.3
2/13/2018				<0.3	<0.3
2/14/2018	<0.3	<0.3	<0.3		
6/26/2018	0.079 (J)	0.042 (J)	0.053 (J)	0.085 (J)	0.048 (J)
12/18/2018	<0.3	<0.3	<0.3	0.085 (J)	<0.3
3/19/2019	<0.3	<0.3	<0.3	0.0655 (JD)	0.037 (J)
8/27/2019	<0.3	<0.3		<0.3	<0.3
8/29/2019			0.084 (J)		
10/15/2019	0.047 (J)	<0.3	<0.3	<0.3	<0.3
3/3/2020	0.056 (J)	<0.3		0.066 (J)	0.05 (J)
3/4/2020			<0.3		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.07 (J)	0.19 (J)			
9/1/2016			0.06 (J)		
9/8/2016				0.14 (J)	0.31
11/15/2016		<0.3 (J)	<0.3 (J)		
11/16/2016	<0.3 (J)				
11/17/2016				<0.3 (JB)	
11/18/2016					<0.3 (JB)
2/20/2017	0.06 (J)	0.08 (J)	0.04 (J)		
2/21/2017				0.6	0.35
6/12/2017	0.008 (J)	0.07 (J)	0.06 (J)		
6/13/2017				0.19 (J)	0.19 (J)
9/26/2017	<0.3	0.04 (J)	<0.3		
9/27/2017				0.5	0.4
2/13/2018	<0.3	<0.3	<0.3		
2/14/2018				<0.3	<0.3
6/26/2018	0.045 (J)	0.072 (J)	0.041 (J)	0.15 (J)	
6/27/2018					0.26 (J)
12/18/2018	<0.3	<0.3	<0.3	0.29 (J)	
12/20/2018					0.26 (J)
3/19/2019	<0.3	0.06 (J)	0.03 (J)		0.2 (J)
3/20/2019				0.17 (JD)	
8/27/2019	<0.3	<0.3	<0.3	0.15 (J)	
8/28/2019					0.074 (J)
10/15/2019	<0.3	0.045 (J)	<0.3	0.16 (J)	
12/4/2019					0.18 (J)
3/3/2020	<0.3	0.057 (J)	0.09 (J)		
3/4/2020				0.07 (J)	<0.3

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		0.43			
9/8/2016	0.2 (J)		0.15 (J)		
11/21/2016	0.37	<0.3 (J)	<0.3 (J)		
2/22/2017	0.37	0.2 (J)	0.08 (J)		
6/14/2017	0.38	0.15 (J)	0.09 (J)		
9/27/2017	0.4	0.41	<0.3		
2/14/2018	<0.3	<0.3	<0.3		
3/6/2018				0.94	1.1
5/1/2018				<0.3	0.595 (D)
6/27/2018	0.085 (J)		<0.3		0.27 (J)
6/28/2018		0.93 (J+X)		0.69 (J+X)	
7/31/2018				<0.3	
8/1/2018					0.48
8/23/2018				<0.3	0.34
9/19/2018				<0.3	0.23 (J)
10/29/2018				<0.3	<0.3
11/28/2018				<0.3	0.063 (J)
12/18/2018	0.26 (J)	0.54			
12/19/2018			0.23 (J)		0.28 (J)
12/20/2018				0.12 (J)	
3/19/2019					<0.3
3/20/2019	0.091 (J)	0.31	<0.3	0.066 (J)	
8/27/2019		0.12 (J)	<0.3		
8/28/2019	0.055 (J)			<0.3	<0.3
10/16/2019	0.11 (J)				0.076 (J)
12/3/2019				0.19 (J)	
12/4/2019		0.26 (J)	0.11 (J)		
3/4/2020	<0.3				<0.3
3/5/2020		0.051 (J)	<0.3	<0.3	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.84 (JX)
5/1/2018		0.91
6/28/2018		1.1 (J+X)
8/1/2018		2
8/10/2018	1.6 (O)	
8/23/2018	0.32	
9/19/2018	0.22 (J)	
10/29/2018	0.14 (J)	0.24 (J)
11/28/2018	0.24 (J)	0.41
12/19/2018		0.54
12/20/2018	0.3	
1/16/2019		1.1
1/17/2019	0.23 (J)	
2/13/2019	<0.3	
3/20/2019	0.135 (JD)	0.21 (J)
8/29/2019	0.087 (J)	0.41
10/16/2019	0.22 (J)	0.39
3/4/2020	0.1 (J)	0.14 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.005	<0.005
9/1/2016	<0.005	<0.005			
9/6/2016			<0.005		
11/16/2016	<0.005	<0.005		<0.005	<0.005
11/17/2016			<0.005		
2/21/2017	<0.005	<0.005	<0.005	<0.005	<0.005
6/12/2017				8E-05 (J)	
6/13/2017		<0.005	<0.005		<0.005
6/14/2017	<0.005				
9/26/2017	<0.005	<0.005	<0.005	7E-05 (J)	7E-05 (J)
2/13/2018				<0.005	<0.005
2/14/2018	<0.005	<0.005	<0.005		
6/26/2018	<0.005	<0.005	<0.005	<0.005	<0.005
12/18/2018	<0.005	<0.005	<0.005	<0.005	<0.005
8/27/2019	<0.005	<0.005		<0.005	5.8E-05 (J)
8/29/2019			7E-05 (J)		
10/15/2019	<0.005	<0.005	<0.005	<0.005	<0.005
3/3/2020	<0.005	<0.005		<0.005	<0.005
3/4/2020			<0.005		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.005	<0.005			
9/1/2016			0.0001 (J)		
9/8/2016				<0.005	<0.005
11/15/2016		<0.005	<0.005		
11/16/2016	<0.005				
11/17/2016				<0.005	
11/18/2016					<0.005
2/20/2017	<0.005	0.0002 (J)	<0.005		
2/21/2017				<0.005	<0.005
6/12/2017	<0.005	0.0001 (J)	8E-05 (J)		
6/13/2017				<0.005	<0.005
9/26/2017	<0.005	0.0001 (J)	<0.005		
9/27/2017				<0.005	<0.005
2/13/2018	<0.005	<0.005	<0.005		
2/14/2018				<0.005	<0.005
6/26/2018	<0.005	<0.005	<0.005	<0.005	
6/27/2018					<0.005
12/18/2018	<0.005	<0.005	<0.005	<0.005	
12/20/2018					<0.005
8/27/2019	<0.005	0.00036 (J)	<0.005	0.00011 (J)	
8/28/2019					<0.005
10/15/2019	<0.005	7.9E-05 (J)	<0.005	<0.005	
12/4/2019					6.3E-05 (J)
3/3/2020	<0.005	7.9E-05 (J)	7.3E-05 (J)		
3/4/2020				<0.005	<0.005

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.005			
9/8/2016	0.0004 (J)		<0.005		
11/21/2016	<0.005 (J)	<0.005	<0.005		
2/22/2017	0.0005 (J)	<0.005	<0.005		
6/14/2017	0.0004 (J)	<0.005	<0.005		
9/27/2017	0.0006 (J)	<0.005	<0.005		
2/14/2018	<0.005 (o)	<0.005	<0.005		
3/6/2018				<0.005	<0.005
5/1/2018				<0.005	<0.005 (D)
6/27/2018	0.00032 (J)		<0.005		<0.005
6/28/2018		<0.005		<0.005	
7/31/2018				<0.005	
8/1/2018					<0.005
8/23/2018				<0.005	<0.005
9/19/2018				<0.005	<0.005
10/29/2018				<0.005	<0.005
11/28/2018				<0.005	<0.005
12/18/2018	0.00038 (J)	<0.005			
12/19/2018			<0.005		<0.005
12/20/2018				<0.005	
8/27/2019		<0.005	<0.005		
8/28/2019	0.00027 (J)			<0.005	<0.005
10/16/2019	0.00027 (J)				<0.005
12/3/2019				<0.005	
12/4/2019		<0.005	<0.005		
3/4/2020	0.0003 (J)				0.00012 (J)
3/5/2020		<0.005	<0.005	0.00026 (J)	

Time Series

Constituent: Lead (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.005
5/1/2018		<0.005
6/28/2018		0.00054 (J)
8/1/2018		<0.005
8/10/2018	<0.005	
8/23/2018	<0.005	
9/19/2018	<0.005	
10/29/2018	<0.005	0.0003 (J)
11/28/2018	<0.005	<0.005
12/19/2018		<0.005
12/20/2018	<0.005	
1/16/2019		<0.005
1/17/2019	<0.005	
2/13/2019	<0.005	
8/29/2019	<0.005	4.9E-05 (J)
10/16/2019	<0.005	8.5E-05 (J)
3/4/2020	<0.005	0.0001 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0268 (J)	<0.03
9/1/2016	0.0061 (J)	<0.03			
9/6/2016			0.0028 (J)		
11/16/2016	<0.03	<0.03		<0.03	<0.03
11/17/2016			<0.03		
2/21/2017	0.0058 (J)	<0.03	0.0052 (J)	0.0128 (J)	<0.03
6/12/2017				0.0245 (J)	
6/13/2017		<0.03	0.0061 (J)		<0.03
6/14/2017	0.0054 (J)				
9/26/2017	0.0037 (J)	<0.03	0.0087 (J)	0.0549	<0.03
2/13/2018				0.0595	<0.03
2/14/2018	0.0038 (J)	<0.03	0.0104 (J)		
6/26/2018	0.0045 (J)	<0.03	0.0095 (J)	0.089	<0.03
12/18/2018	0.0038 (J)	<0.03	0.0091 (J)	0.024 (J)	<0.03
8/27/2019	0.0039 (J)	<0.03		0.035	<0.03
8/29/2019			0.007 (J)		
10/15/2019	0.0037 (J)	<0.03	0.0069 (J)	0.028 (J)	<0.03
3/3/2020	0.0033 (J)	<0.03		0.055	<0.03
3/4/2020			0.0074 (J)		

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.03	<0.03			
9/1/2016			0.003 (J)		
9/8/2016				<0.03	0.0021 (J)
11/15/2016		<0.03	<0.03		
11/16/2016	<0.03				
11/17/2016				<0.03	
11/18/2016					<0.03
2/20/2017	<0.03	<0.03	0.0025 (J)		
2/21/2017				<0.03	<0.03
6/12/2017	0.0019 (J)	<0.03	0.0027 (J)		
6/13/2017				<0.03	0.0017 (J)
9/26/2017	0.0022 (J)	<0.03	0.0023 (J)		
9/27/2017				<0.03	0.0016 (J)
2/13/2018	0.0041 (J)	<0.03	0.0027 (J)		
2/14/2018				<0.03	0.0018 (J)
6/26/2018	0.0025 (J)	<0.03	0.0029 (J)	<0.03	
6/27/2018					0.0016 (J)
12/18/2018	0.0032 (J)	<0.03	0.0026 (J)	<0.03	
12/20/2018					0.0015 (J)
8/27/2019	0.0019 (J)	<0.03	0.0028 (J)	<0.03	
8/28/2019					0.0016 (J)
10/15/2019	0.002 (J)	<0.03	0.0024 (J)	<0.03	
12/4/2019					0.0014 (J)
3/3/2020	0.0013 (J)	<0.03	0.0026 (J)		
3/4/2020				<0.03	0.0014 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		0.0117 (J)			
9/8/2016	0.004 (J)		<0.03		
11/21/2016	<0.03	<0.03	<0.03		
2/22/2017	0.0043 (J)	0.0103 (J)	0.0023 (J)		
6/14/2017	0.0036 (J)	0.0101 (J)	0.0022 (J)		
9/27/2017	0.0038 (J)	0.0116 (J)	0.0021 (J)		
2/14/2018	0.0034 (J)	0.0115 (J)	0.0023 (J)		
3/6/2018				0.0031 (J)	0.0399 (J)
5/1/2018				0.0038 (J)	0.0475 (D)
6/27/2018	0.0034 (J)		0.0023 (J)		0.044 (J)
6/28/2018		0.013 (J)		0.0028 (J)	
7/31/2018				<0.25 (o)	
8/1/2018					0.039 (J)
8/23/2018				0.0033 (J)	0.044 (J)
9/19/2018				0.0033 (J)	0.043 (J)
10/29/2018				0.003 (J)	0.039 (J)
11/28/2018				0.0035 (J)	0.044 (J)
12/18/2018	0.0032 (J)	0.014 (J)			
12/19/2018			0.0018 (J)		0.043 (J)
12/20/2018				0.003 (J)	
8/27/2019		0.016 (J)	0.0022 (J)		
8/28/2019	0.0033 (J)			0.0034 (J)	0.044
10/16/2019	0.0029 (J)				0.038
12/3/2019				0.0033 (J)	
12/4/2019		0.013 (J)	0.0022 (J)		
3/4/2020	0.0029 (J)				0.042
3/5/2020		0.016 (J)	0.0022 (J)	0.003 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/4/2020 9:56 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		0.038 (J)
5/1/2018		0.042 (J)
6/28/2018		0.04 (J)
8/1/2018		0.036 (J)
8/10/2018	0.0087 (J)	
8/23/2018	0.0089 (J)	
9/19/2018	0.005 (J)	
10/29/2018	0.0048 (J)	0.041 (J)
11/28/2018	0.0052 (J)	0.041 (J)
12/19/2018		0.043 (J)
12/20/2018	0.0042 (J)	
1/16/2019		0.042 (J)
1/17/2019	0.0039 (J)	
2/13/2019	<0.03	
8/29/2019	0.0052 (J)	0.039
10/16/2019	0.0023 (J)	0.034
3/4/2020	0.002 (J)	0.042

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.0005	<0.0005
9/1/2016	<0.0005	<0.0005			
9/6/2016			<0.0005		
11/16/2016	<0.0005	<0.0005		<0.0005	<0.0005
11/17/2016			<0.0005		
2/21/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6/12/2017				4E-05 (J)	
6/13/2017		<0.0005	<0.0005		<0.0005
6/14/2017	6E-05 (J)				
9/26/2017	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
2/13/2018				0.00021	0.00019 (J)
2/14/2018	5.2E-05 (J)	<0.0005	<0.0005		
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8/27/2019	<0.0005	<0.0005		<0.0005	<0.0005
8/29/2019			<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.0005	<0.0005			
9/1/2016			<0.0005		
9/8/2016				<0.0005	<0.0005
11/15/2016		<0.0005	<0.0005		
11/16/2016	<0.0005				
11/17/2016				<0.0005	
11/18/2016					<0.0005
2/20/2017	<0.0005	8E-05 (J)	<0.0005		
2/21/2017				<0.0005	<0.0005
6/12/2017	<0.0005	<0.0005	<0.0005		
6/13/2017				<0.0005	5E-05 (J)
9/26/2017	<0.0005	<0.0005	<0.0005		
9/27/2017				4E-05 (J)	4.7E-05 (J)
2/13/2018	<0.0005	0.00013 (J)	<0.0005		
2/14/2018				<0.0005	<0.0005
6/26/2018	<0.0005	<0.0005	<0.0005	<0.0005	
6/27/2018					<0.0005
12/18/2018	<0.0005	<0.0005	<0.0005	<0.0005	
12/20/2018					<0.0005
8/27/2019	<0.0005	<0.0005	<0.0005	<0.0005	
8/28/2019					<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.0005			
9/8/2016	<0.0005		<0.0005		
11/21/2016	<0.0005	<0.0005	<0.0005		
2/22/2017	<0.0005	<0.0005	<0.0005		
6/14/2017	7E-05 (J)	7E-05 (J)	9E-05 (J)		
9/27/2017	4E-05 (J)	4E-05 (J)	0.0001 (J)		
2/14/2018	<0.0005	<0.0005	<0.0005		
3/6/2018				<0.0005	<0.0005
5/1/2018				<0.0005	<0.0005 (D)
6/27/2018	<0.0005		<0.0005		<0.0005
6/28/2018		<0.0005		<0.0005	
7/31/2018				<0.0005	
8/1/2018					<0.0005
8/23/2018				<0.0005	<0.0005
9/19/2018				<0.0005	<0.0005
10/29/2018				<0.0005	<0.0005
11/28/2018				<0.0005	<0.0005
12/18/2018	<0.0005	<0.0005			
12/19/2018			<0.0005		<0.0005
12/20/2018				<0.0005	
8/27/2019		<0.0005	<0.0005		
8/28/2019	<0.0005			<0.0005	<0.0005

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.0005
5/1/2018		<0.0005
6/28/2018		<0.0005
8/1/2018		<0.0005
8/10/2018	<0.0005	
8/23/2018	<0.0005	
9/19/2018	<0.0005	
10/29/2018	<0.0005	<0.0005
11/28/2018	<0.0005	<0.0005
12/19/2018		<0.0005
12/20/2018	<0.0005	
1/16/2019		<0.0005
1/17/2019	<0.0005	
2/13/2019	<0.0005	
8/29/2019	<0.0005	<0.0005

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				0.0021 (J)	<0.01
9/1/2016	0.002 (J)	<0.01			
9/6/2016			0.0028 (J)		
11/16/2016	<0.01	<0.01		<0.01	<0.01
11/17/2016			<0.01		
2/21/2017	<0.01	<0.01	<0.01	0.0021 (J)	<0.01
6/12/2017				0.0021 (J)	
6/13/2017		<0.01	<0.01		<0.01
6/14/2017	<0.01				
9/26/2017	<0.01	<0.01	<0.01	0.0011 (J)	<0.01
2/13/2018				0.0019 (J)	<0.01
2/14/2018	<0.01	<0.01	<0.01		
6/26/2018	<0.01	<0.01	<0.01	<0.01	<0.01
12/18/2018	<0.01	<0.01	<0.01	<0.01	<0.01
8/27/2019	<0.01	<0.01		<0.01	<0.01
8/29/2019			<0.01		
10/15/2019	<0.01	<0.01	<0.01	<0.01	<0.01
3/3/2020				<0.01	<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	0.004 (J)	<0.01			
9/1/2016			<0.01		
9/8/2016				<0.01	<0.01
11/15/2016		<0.01	<0.01		
11/16/2016	<0.01 (J)				
11/17/2016				<0.01	
11/18/2016					<0.01
2/20/2017	0.0055 (J)	<0.01	<0.01		
2/21/2017				<0.01	<0.01
6/12/2017	0.005 (J)	<0.01	<0.01		
6/13/2017				<0.01	<0.01
9/26/2017	0.0053 (J)	<0.01	<0.01		
9/27/2017				<0.01	<0.01
2/13/2018	0.008 (J)	<0.01	<0.01		
2/14/2018				<0.01	<0.01
6/26/2018	0.0041 (J)	<0.01	<0.01	<0.01	
6/27/2018					<0.01
12/18/2018	0.0048 (J)	<0.01	<0.01	<0.01	
12/20/2018					<0.01
8/27/2019	0.0028 (J)	<0.01	<0.01	<0.01	
8/28/2019					<0.01
10/15/2019	0.0035 (J)	<0.01	<0.01	<0.01	
12/4/2019					<0.01
3/3/2020	0.0023 (J)	<0.01	<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.01			
9/8/2016	<0.01		<0.01		
11/21/2016	<0.01	<0.01	<0.01		
2/22/2017	<0.01	<0.01	<0.01		
6/14/2017	<0.01	<0.01	<0.01		
9/27/2017	<0.01	<0.01	<0.01		
2/14/2018	<0.01	<0.01	<0.01		
3/6/2018				<0.01	<0.01
5/1/2018				<0.01	<0.01 (D)
6/27/2018	<0.01		<0.01		<0.01
6/28/2018		<0.01		<0.01	
7/31/2018				<0.01	
8/1/2018					<0.01
8/23/2018				<0.01	<0.01
9/19/2018				<0.01	<0.01
10/29/2018				<0.01	<0.01
11/28/2018				<0.01	<0.01
12/18/2018	<0.01	<0.01			
12/19/2018			<0.01		<0.01
12/20/2018				<0.01	
8/27/2019		<0.01	<0.01		
8/28/2019	<0.01			<0.01	<0.01
10/16/2019	<0.01				<0.01
12/3/2019				<0.01	
12/4/2019		<0.01	<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.01
5/1/2018		0.0022 (J)
6/28/2018		<0.01
8/1/2018		0.0033 (J)
8/10/2018	0.0032 (J)	
8/23/2018	0.005 (J)	
9/19/2018	0.0061 (J)	
10/29/2018	0.0065 (J)	<0.01
11/28/2018	0.0027 (J)	<0.01
12/19/2018		<0.01
12/20/2018	<0.01	
1/16/2019		<0.01
1/17/2019	<0.01	
2/13/2019	<0.01	
8/29/2019	<0.01	<0.01
10/16/2019	<0.01	<0.01

Time Series

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				7.16	6.2
9/1/2016	6.71	6			
9/6/2016			6.49		
11/16/2016	6.15	6		6.96	6.12
11/17/2016			5.79		
2/21/2017	6.52	6.09	6.15	7.15	6.24
6/12/2017				7.31	
6/13/2017	6.42	6.03	5.87		6.19
6/14/2017	6.51				
9/26/2017	6.42	5.85	5.82	7.02	6.15
2/13/2018				7.44	6.18
2/14/2018	6.48	5.99	5.83		
6/26/2018	6.2	5.86	5.73	6.93	6.05
7/31/2018	6.37	5.99			
12/18/2018	6.5	6.08	5.78	6.76	5.92
3/19/2019	6.28	5.71	5.28	6.87	6.18
8/27/2019	6.35	6		6.79	6.09
8/29/2019			5.64		
10/15/2019	6.8	6.61	5.7	6.57	6.06
3/3/2020	6.33	5.94		6.71	6.1
3/4/2020			5.7		

Time Series

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	6.53	6.59			
9/1/2016			6.49		
9/8/2016				6.07	5.51
11/15/2016		6.67	6.59		
11/16/2016	6.4			5.96	
11/18/2016					5.53
2/20/2017	6.44	6.65	6.61		
2/21/2017				5.98	5.63
6/12/2017	6.4	6.64			
6/13/2017				5.96	5.57
9/26/2017	6.31	6.58	6.47		
9/27/2017				5.85	5.53
2/13/2018	6.62	6.72	6.54		
2/14/2018				5.94	5.83
6/26/2018	6.29	6.43	6.23	5.87	
6/27/2018					5.53
12/18/2018	6.57	6.7	6.71	5.84	
12/20/2018					5.78
3/19/2019	6.45	6.63	6.18		5.75
3/20/2019				6.03	
8/27/2019	6.37	6.49	6.35	6.01	
8/28/2019					5.51
10/15/2019	6.77	7.01	6.36	6	
10/17/2019					6.01 (D)
3/3/2020	6.29	6.49	6.59		
3/4/2020				6.02	5.8

Time Series

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		6.23			
9/8/2016	4.62		5.89		
11/21/2016	4.44	6.23	5.56		
2/22/2017	4.42	6.16	5.87		
6/14/2017	4.45	6.16	5.83		
9/27/2017	4.33	6.16	5.87		
2/14/2018	4.42	6.24	6.01		
3/15/2018				5.26	
5/1/2018				6.14	5.85
6/27/2018	4.37		5.83		5.87
6/28/2018		6.21		5.88	
7/31/2018				6.07	
8/1/2018					5.79
9/19/2018				5.9	5.71
10/29/2018				5.93	5.76
11/28/2018				5.99	5.74
12/18/2018	4.38	6.18			
12/19/2018			5.79		5.8
12/20/2018				6.04	
3/19/2019					5.89
3/20/2019	4.4	6.24	5.88	6.1	
8/27/2019		6.17	5.85		
8/28/2019	4.39			5.86	5.74
10/16/2019	4.79				5.9
10/17/2019		6.43	6.09	5.93	
3/4/2020	4.5				5.76
3/5/2020		5.99	5.74	5.95	

Time Series

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		5.26
5/1/2018		5.38
6/28/2018		5.03
8/1/2018		5.22
8/10/2018	6.28	
8/23/2018	6.75	
9/19/2018	6.48	
10/29/2018	6.77	5.19
11/28/2018	6.44	5.28
12/19/2018		5.15
12/20/2018	6.75	
1/16/2019		5.14
1/17/2019	6.41	
2/13/2019	6.42	
3/6/2019		6.15
3/20/2019	6.59	5.32
8/29/2019	6.27	5.2
10/16/2019	7	5.36
3/4/2020	6.54	5.2

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.01	<0.01
9/1/2016	<0.01	<0.01			
9/6/2016			<0.01		
11/16/2016	<0.01	<0.01		<0.01	<0.01
11/17/2016			<0.01 (J)		
2/21/2017	<0.01	<0.01	0.0018 (J)	<0.01	<0.01
6/12/2017				<0.01	
6/13/2017		<0.01	<0.01		<0.01
6/14/2017	<0.01				
9/26/2017	<0.01	<0.01	<0.01	<0.01	<0.01
2/13/2018				<0.01	<0.01
2/14/2018	<0.01	<0.01	<0.01		
6/26/2018	<0.01	<0.01	0.0036 (J)	<0.01	<0.01
12/18/2018	<0.01	<0.01	0.0044 (J)	<0.01	<0.01
8/27/2019	<0.01	<0.01		<0.01	<0.01
8/29/2019			0.0023 (J)		
10/15/2019	<0.01	<0.01	0.0022 (J)	<0.01	<0.01
3/3/2020	<0.01	<0.01		<0.01	<0.01
3/4/2020			0.0019 (J)		

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.01	<0.01			
9/1/2016			<0.01		
9/8/2016				<0.01	0.0043 (J)
11/15/2016		<0.01	<0.01		
11/16/2016	<0.01				
11/17/2016				<0.01	
11/18/2016					<0.01 (J)
2/20/2017	<0.01	<0.01	<0.01		
2/21/2017				<0.01	0.0025 (J)
6/12/2017	<0.01	<0.01	<0.01		
6/13/2017				<0.01	0.0036 (J)
9/26/2017	<0.01	<0.01	<0.01		
9/27/2017				<0.01	0.004 (J)
2/13/2018	<0.01	<0.01	<0.01		
2/14/2018				<0.01	<0.01
6/26/2018	<0.01	<0.01	<0.01	<0.01	
6/27/2018					0.0014 (J)
12/18/2018	<0.01	<0.01	<0.01	<0.01	
12/20/2018					<0.01
8/27/2019	<0.01	<0.01	<0.01	<0.01	
8/28/2019					0.0017 (J)
10/15/2019	<0.01	<0.01	<0.01	<0.01	
12/4/2019					0.0036 (J)
3/3/2020	<0.01	<0.01	<0.01		
3/4/2020				<0.01	0.0022 (J)

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.01			
9/8/2016	0.0039 (J)		<0.01		
11/21/2016	<0.01 (J)	<0.01	<0.01		
2/22/2017	0.005 (J)	<0.01	0.0017 (J)		
6/14/2017	0.0074 (J)	0.0045 (J)	<0.01		
9/27/2017	0.0068 (J)	0.0034 (J)	0.0019 (J)		
2/14/2018	<0.01	<0.01	<0.01		
3/6/2018				<0.01	<0.01
5/1/2018				<0.01	<0.01 (D)
6/27/2018	<0.01		0.0017 (J)		<0.01
6/28/2018		<0.01		<0.01	
7/31/2018				<0.01	
8/1/2018					0.0015 (J)
8/23/2018				<0.01	<0.01 (X)
9/19/2018				<0.01	0.002 (J)
10/29/2018				<0.01	<0.01
11/28/2018				<0.01	<0.01
12/18/2018	<0.01	<0.01			
12/19/2018			0.0059 (J)		<0.01
12/20/2018				<0.01	
8/27/2019		0.0038 (J)	0.057		
8/28/2019	<0.01			<0.01	<0.01
10/16/2019	<0.01				0.0017 (J)
12/3/2019				0.0029 (J)	
12/4/2019		0.0018 (J)	0.1		
3/4/2020	0.0018 (J)				<0.01
3/5/2020		<0.01	0.1	<0.01	

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.01
5/1/2018		<0.01
6/28/2018		<0.01
8/1/2018		0.0031 (J)
8/10/2018	<0.01	
8/23/2018	<0.01	
9/19/2018	<0.01	
10/29/2018	<0.01	0.002 (J)
11/28/2018	<0.01	0.0017 (J)
12/19/2018		<0.01
12/20/2018	<0.01	
1/16/2019		<0.01
1/17/2019	<0.01	
2/13/2019	<0.01	
8/29/2019	<0.01	<0.01
10/16/2019	<0.01	0.002 (J)
3/4/2020	<0.01	0.0026 (J)

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				7.5	0.38 (J)
9/1/2016	2.7	1.7			
9/6/2016			38		
11/16/2016	3.6	1.2		6.6	<1 (J)
11/17/2016			84		
2/21/2017	3	1.1	39	6.1	1.5
6/12/2017				5	
6/13/2017		1.1	35		0.67 (J)
6/14/2017	2.6				
9/26/2017	2.5	1.3	89	5.4	0.62 (J)
2/13/2018				4.7 (J)	<1
2/14/2018	2.1 (J)	<1	82.2		
6/26/2018	2	0.84 (J)	84.2	6.2	0.69 (J)
7/31/2018	1.9	0.63 (J)			
12/18/2018	2.1	0.66 (J)	83.4	5.9	0.72 (J)
3/19/2019	2.2	0.75 (J)	65	6 (D)	0.78 (J)
10/15/2019	1.9	0.61 (J)	30	5.2	0.47 (J)
3/3/2020	1.8	0.51 (J)		7.1	0.93 (J)
3/4/2020			38.6		

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	2.7	0.81 (J)			
9/1/2016			0.6 (J)		
9/8/2016				280	300
11/15/2016		<1 (J)	<1 (J)		
11/16/2016	3.4				
11/17/2016				200	
11/18/2016					320
2/20/2017	3.9 (B-01)	1 (B-01)	0.98 (J)		
2/21/2017				360	270
6/12/2017	3.7	0.94 (J)	0.54 (J)		
6/13/2017				290	230
9/26/2017	4.1	0.92 (J)	0.53 (J)		
9/27/2017				310	260
2/13/2018	6.6	<1	<1		
2/14/2018				260	232
6/26/2018	3.5	0.91 (J)	0.54 (J)	231	
6/27/2018					205
12/18/2018	4.3	0.68 (J)	0.39 (J)	231	
12/20/2018					200
3/19/2019	3	0.74 (J)	0.68 (J)		199
3/20/2019				235 (D)	
10/15/2019	3.8	0.68 (J)	0.48 (J)	174	
12/4/2019					241
3/3/2020	2.8	0.71 (J)	2.5		
3/4/2020				165	205

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		310			
9/8/2016	460		370		
11/21/2016	500	300	420		
2/22/2017	570	280	380		
6/14/2017	440	290	400		
9/27/2017	380	260	400		
2/14/2018	280	250	383		
3/6/2018				111	1560
5/1/2018				112	1465 (D)
6/27/2018	281		372		1450
6/28/2018		276		109	
7/31/2018				107	
8/1/2018					1560
8/23/2018				108	1470
9/19/2018				117	1500
10/29/2018				127	1720
11/28/2018				133	1730
12/18/2018	293	440			
12/19/2018			370		1520
12/20/2018				113	
3/19/2019					1100
3/20/2019	278	623	409	127	
10/16/2019	266				1560
12/3/2019				105	
12/4/2019		327	293		
3/4/2020	238				1380
3/5/2020		369	269	106	

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		1590
5/1/2018		1550
6/28/2018		1530
8/1/2018		1580
8/10/2018	183	
8/23/2018	145	
9/19/2018	178	
10/29/2018	157	1750
11/28/2018	189	1780
12/19/2018		1650
12/20/2018	150	
1/16/2019		589 (O)
1/17/2019	157	
2/13/2019	169	
3/20/2019	186.5 (D)	1740
10/16/2019	155	1590
3/4/2020	129	1370

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				<0.001	<0.001
9/1/2016	<0.001	<0.001			
9/6/2016			<0.001		
11/16/2016	<0.001	<0.001		<0.001	<0.001
11/17/2016			<0.001		
2/21/2017	<0.001	<0.001	<0.001	<0.001	<0.001
6/12/2017				<0.001	
6/13/2017		<0.001	<0.001		<0.001
6/14/2017	<0.001				
9/26/2017	<0.001	<0.001	<0.001	<0.001	<0.001
2/13/2018				<0.001	<0.001
2/14/2018	<0.001	<0.001	<0.001		
6/26/2018	<0.001	<0.001	<0.001	<0.001	<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	<0.001
8/27/2019	<0.001	<0.001		<0.001	<0.001
8/29/2019			<0.001		
10/15/2019	<0.001	<0.001	<0.001	<0.001	<0.001
3/3/2020	<0.001	<0.001		<0.001	<0.001
3/4/2020			<0.001		

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	<0.001	<0.001			
9/1/2016			<0.001		
9/8/2016				<0.001	<0.001
11/15/2016		<0.001	<0.001		
11/16/2016	<0.001				
11/17/2016				<0.001	
11/18/2016					<0.001
2/20/2017	<0.001	<0.001	<0.001		
2/21/2017				<0.001	<0.001
6/12/2017	<0.001	<0.001	<0.001		
6/13/2017				<0.001	<0.001
9/26/2017	<0.001	<0.001	<0.001		
9/27/2017				<0.001	<0.001
2/13/2018	<0.001	<0.001	<0.001		
2/14/2018				<0.001	<0.001
6/26/2018	<0.001	<0.001	<0.001	<0.001	
6/27/2018					<0.001
12/18/2018	<0.001	<0.001	<0.001	<0.001	
12/20/2018					<0.001
8/27/2019	<0.001	<0.001	<0.001	<0.001	
8/28/2019					<0.001
10/15/2019	<0.001	<0.001	<0.001	<0.001	
12/4/2019					<0.001
3/3/2020	<0.001	<0.001	<0.001		
3/4/2020				<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		<0.001			
9/8/2016	<0.001 (o)		<0.001		
11/21/2016	<0.001 (J)	<0.001	<0.001		
2/22/2017	0.0002 (J)	<0.001	<0.001		
6/14/2017	0.0002 (J)	<0.001	<0.001		
9/27/2017	0.0002 (J)	<0.001	<0.001		
2/14/2018	0.00018 (J)	<0.001	<0.001		
3/6/2018				<0.001	<0.001
5/1/2018				<0.001	<0.001 (D)
6/27/2018	0.00017 (J)		<0.001		<0.001
6/28/2018		<0.001		<0.001	
7/31/2018				<0.001	
8/1/2018					<0.001
8/23/2018				<0.001	<0.001
9/19/2018				<0.001	<0.001
10/29/2018				<0.001	<0.001
11/28/2018				<0.001	<0.001
12/18/2018	0.00017 (J)	<0.001			
12/19/2018			<0.001		<0.001
12/20/2018				<0.001	
8/27/2019		<0.001	<0.001		
8/28/2019	0.00017 (J)			<0.001	<0.001
10/16/2019	0.00017 (J)				<0.001
12/3/2019				<0.001	
12/4/2019		<0.001	<0.001		
3/4/2020	0.00016 (J)				<0.001
3/5/2020		<0.001	<0.001	<0.001	

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		<0.001
5/1/2018		<0.001
6/28/2018		<0.001
8/1/2018		<0.001
8/10/2018	<0.001	
8/23/2018	<0.001	
9/19/2018	<0.001	
10/29/2018	<0.001	<0.001
11/28/2018	<0.001	<0.001
12/19/2018		<0.001
12/20/2018	<0.001	
1/16/2019		<0.001
1/17/2019	<0.001	
2/13/2019	<0.001	
8/29/2019	<0.001	<0.001
10/16/2019	<0.001	<0.001
3/4/2020	<0.001	<0.001

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWA-2I (bg)	BRGWA-2S (bg)
8/31/2016				151	88
9/1/2016	142	69			
9/6/2016			146		
11/16/2016	100	100		69	41
11/17/2016			211		
2/21/2017	71	37	151	68	<10
6/12/2017				161	
6/13/2017		84	130		53
6/14/2017	140				
9/26/2017	149	68	160	167	45
2/13/2018				165	63
2/14/2018	137	138	194		
6/26/2018	142	90	221	188	71
7/31/2018	133	83			
12/18/2018	135	85	208	145 (X)	78 (X)
3/19/2019	132 (JX)	82 (JX)	161 (JX)	146.5 (D)	68
10/15/2019	134	89	124	140	66
3/3/2020	115	72		155	41
3/4/2020			118		

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-6S (bg)	BRGWC-25I	BRGWC-27I
8/31/2016	138	154			
9/1/2016			299		
9/8/2016				460	478
11/15/2016		123	41		
11/16/2016	77				
11/17/2016				611	
11/18/2016					503
2/20/2017	170	158	133		
2/21/2017				497	380
6/12/2017	132	142	61		
6/13/2017				474	354
9/26/2017	108	138	29		
9/27/2017				457	376
2/13/2018	141	150	61		
2/14/2018				431	503 (JX)
6/26/2018	133	154	71	414	
6/27/2018					458 (X)
12/18/2018	138 (X)	147	70 (X)	401	
12/20/2018					344
3/19/2019	130	146	72		334 (JX)
3/20/2019				410.5 (D)	
10/15/2019	175	144	63	380	
12/4/2019					422
3/3/2020	<10	130	54		
3/4/2020				330	326

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-29I	BRGWC-30I	BRGWC-32S	BRGWC-45	BRGWC-47
9/6/2016		505			
9/8/2016	654		607		
11/21/2016	819	515	695		
2/22/2017	721	504	635		
6/14/2017	661	536	635		
9/27/2017	518	432	601		
2/14/2018	487	448	628		
3/6/2018				346	2200
5/1/2018				374	2080 (D)
6/27/2018	648 (X)		2280		31 (OX)
6/28/2018		494		333	
7/31/2018				393	
8/1/2018					2190
8/23/2018				350	2160
9/19/2018				353	2160
10/29/2018				329	2130
11/28/2018				358	2320
12/18/2018	407	715			
12/19/2018			605		2060
12/20/2018				322	
3/19/2019					2050 (JX)
3/20/2019	391	885	564	302	
10/16/2019	2030				2220
12/3/2019				362	
12/4/2019		612	526		
3/4/2020	391				2140
3/5/2020		681	489	297	

Time Series

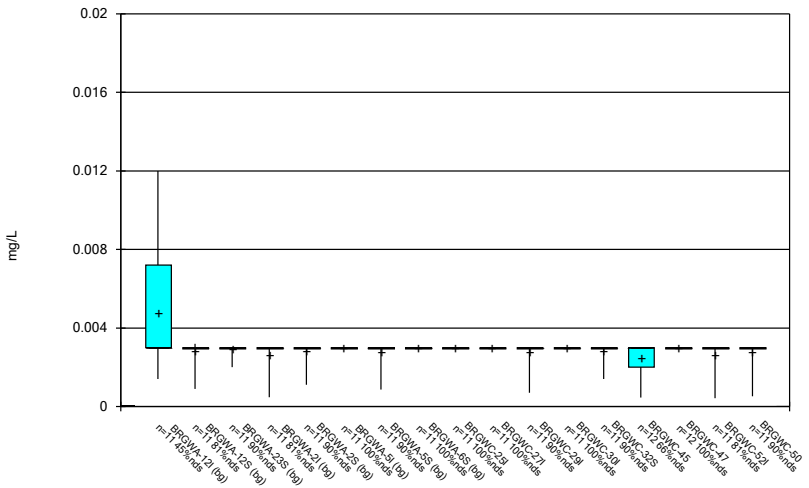
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-52I	BRGWC-50
3/15/2018		2440
5/1/2018		2190
6/28/2018		2290
8/1/2018		2360
8/10/2018	344	
8/23/2018	333	
9/19/2018	364	
10/29/2018	334	2300
11/28/2018	357	2300
12/19/2018		2190
12/20/2018	355	
1/16/2019		2270
1/17/2019	347	
2/13/2019	350	
3/20/2019	360 (D)	2280
10/16/2019	346	2280
3/4/2020	351	2270

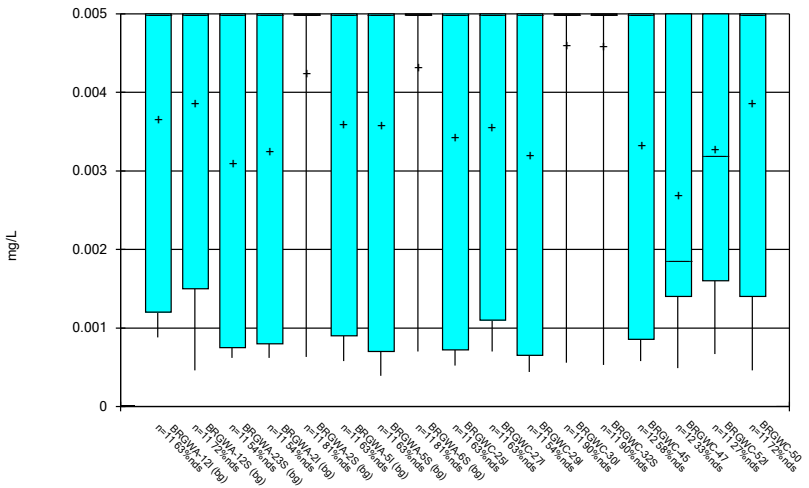
FIGURE B.

Box & Whiskers Plot



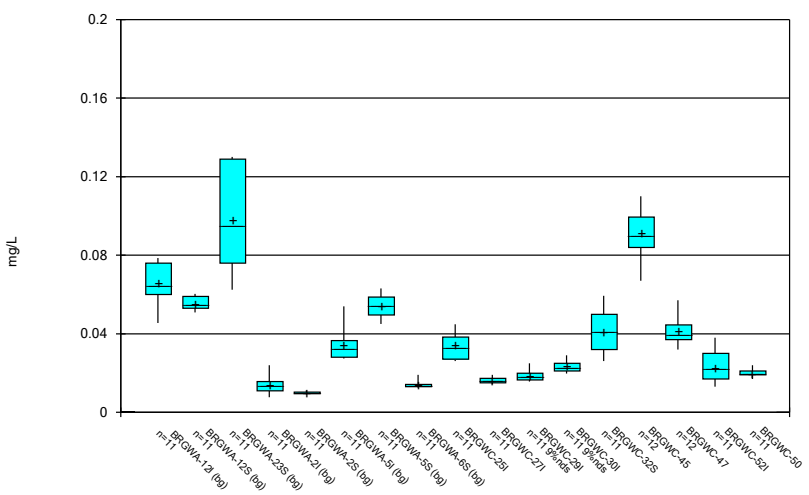
Constituent: Antimony Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



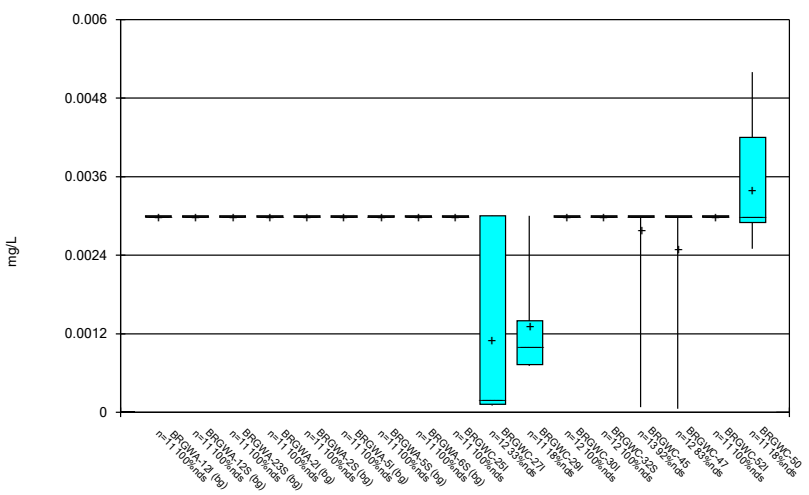
Constituent: Arsenic Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



Constituent: Barium Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

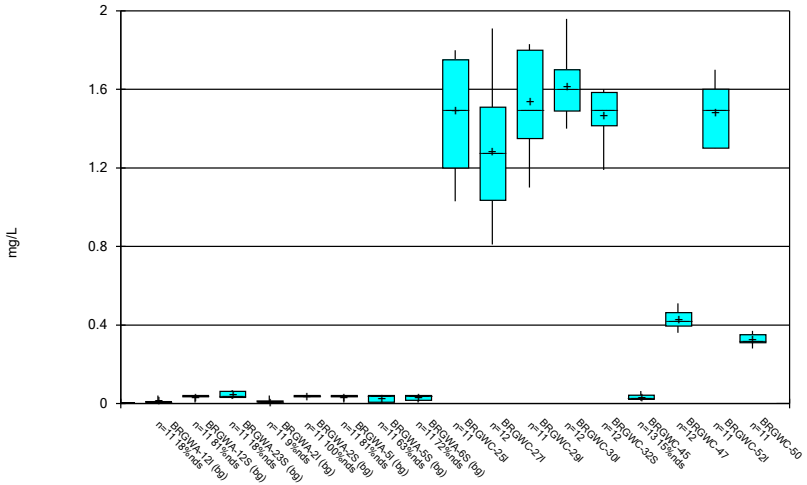
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

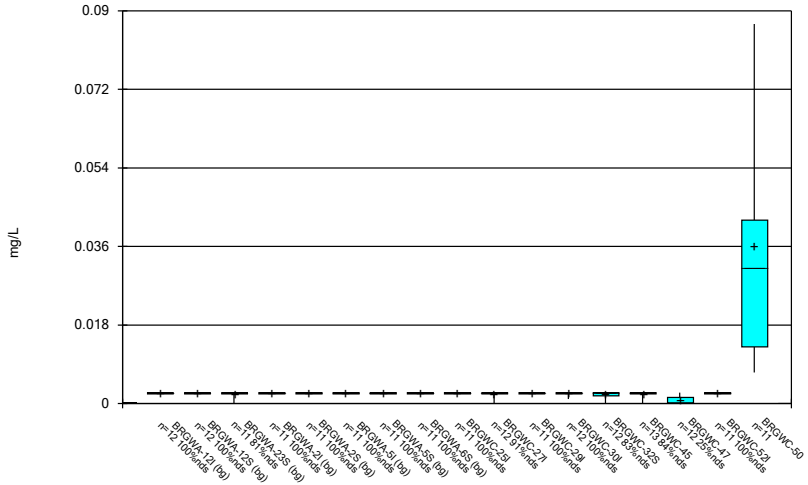
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/4/2020 9:57 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

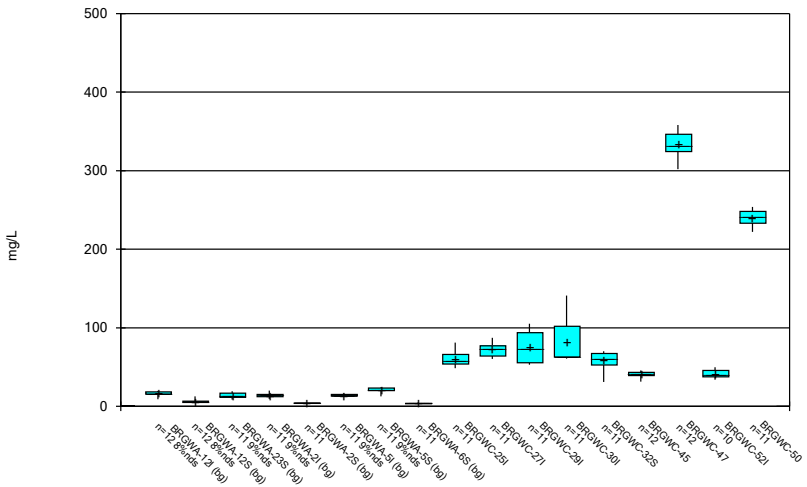
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

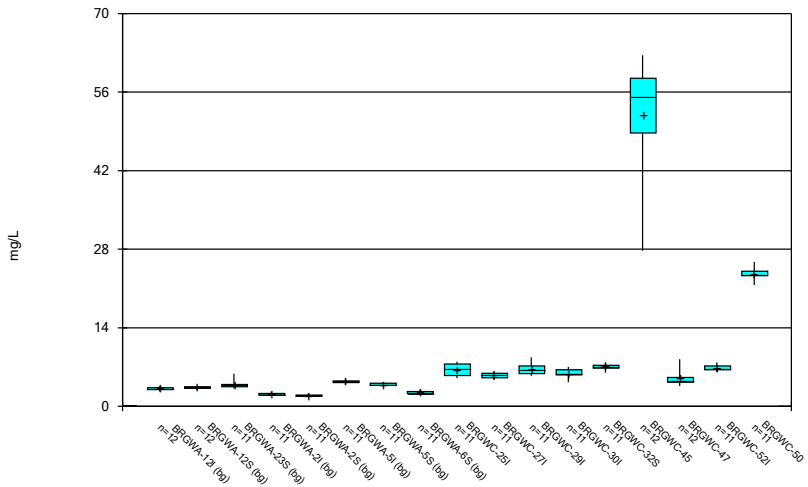
Box & Whiskers Plot



Constituent: Calcium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

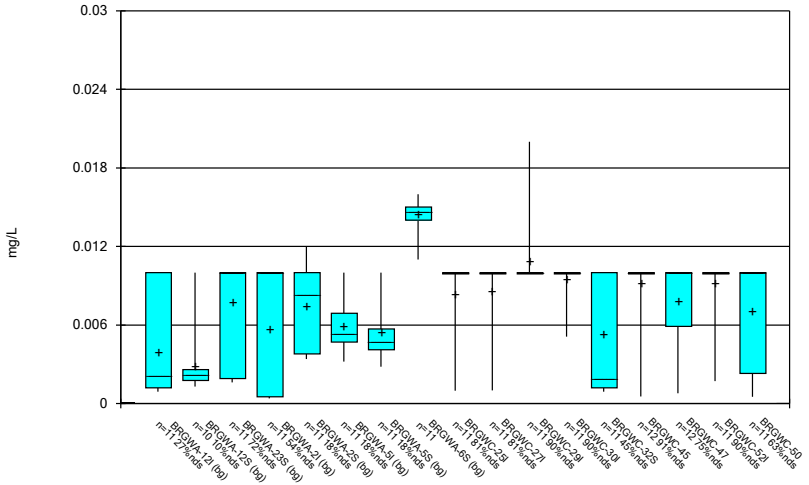
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

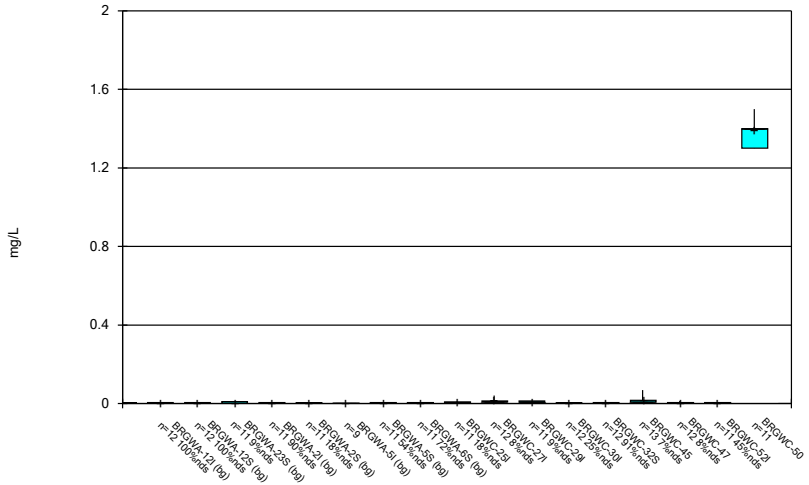
Box & Whiskers Plot



Constituent: Chromium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

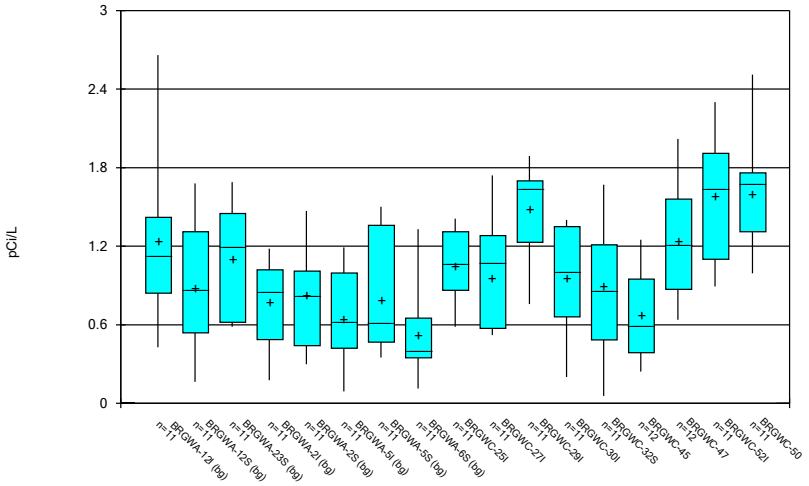
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

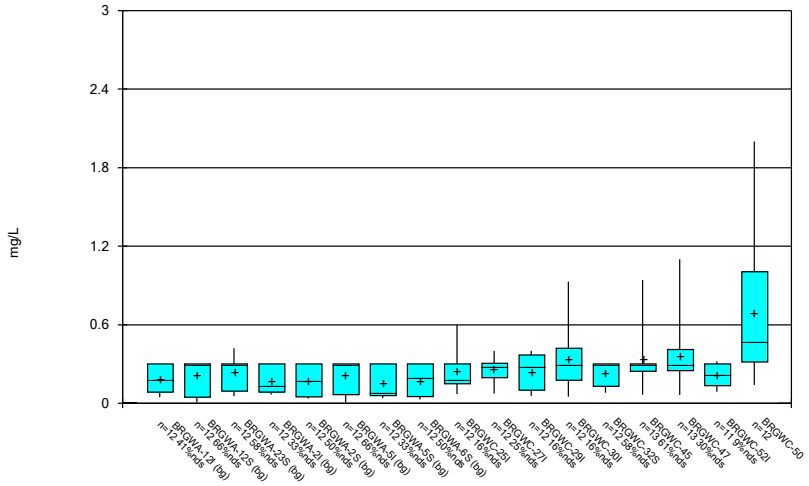
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

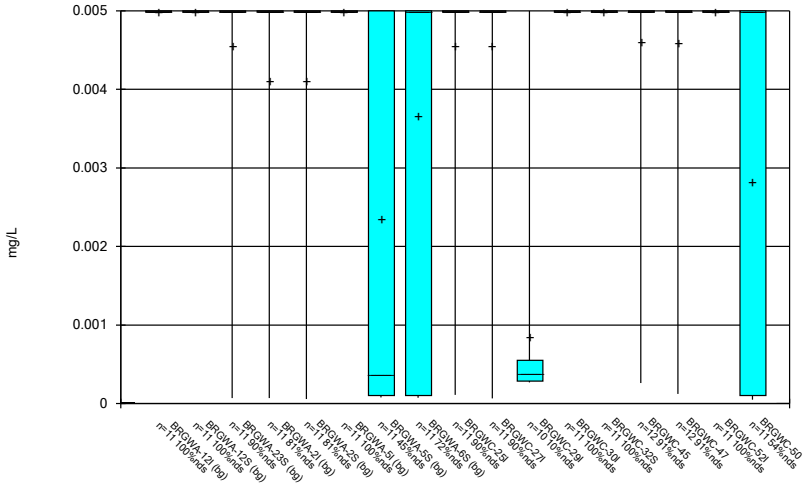
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

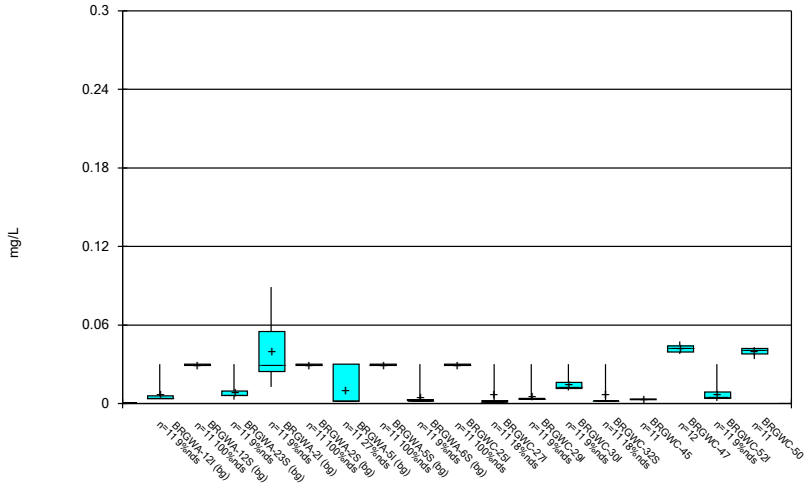
Box & Whiskers Plot



Constituent: Lead Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

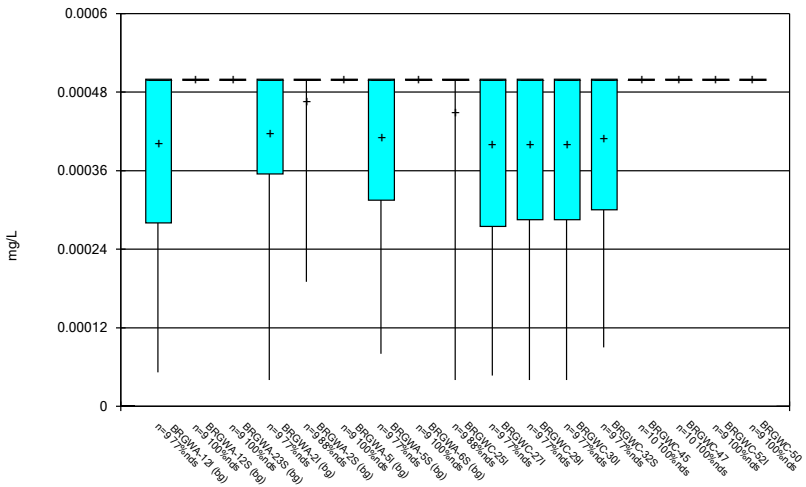
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

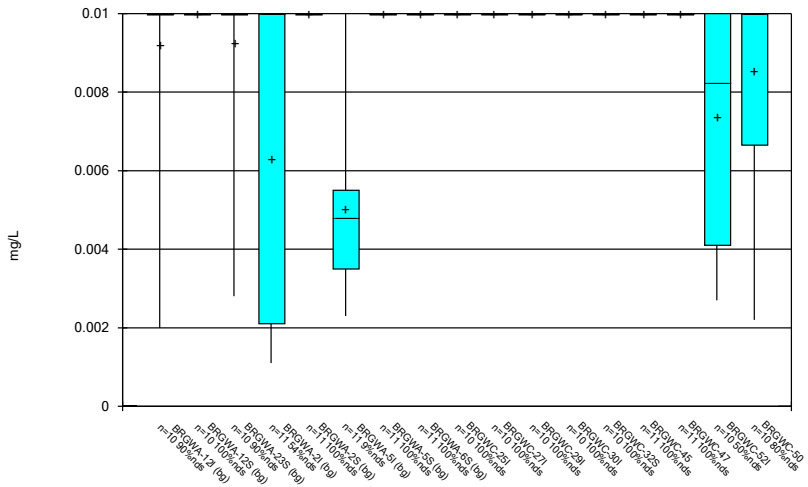
Box & Whiskers Plot



Constituent: Mercury Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

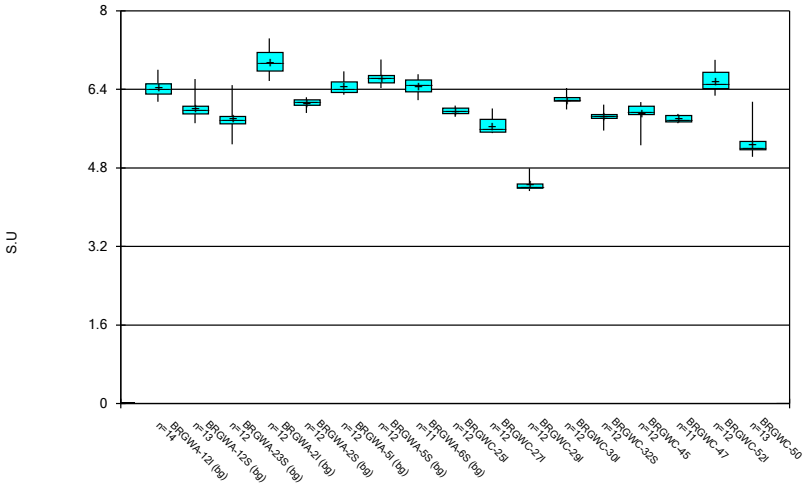
Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Box & Whiskers Plot



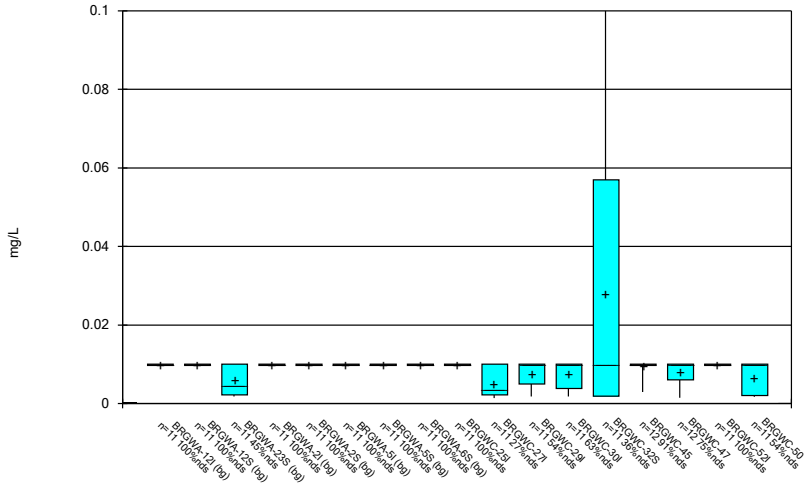
Constituent: Molybdenum Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



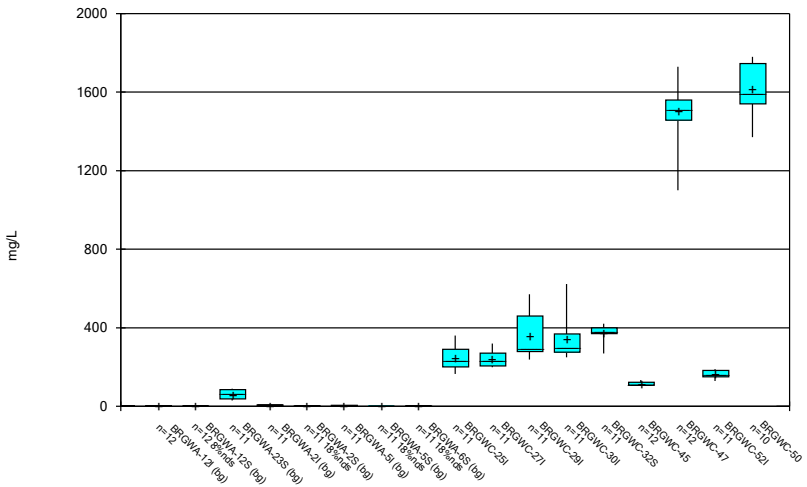
Constituent: pH, Field Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



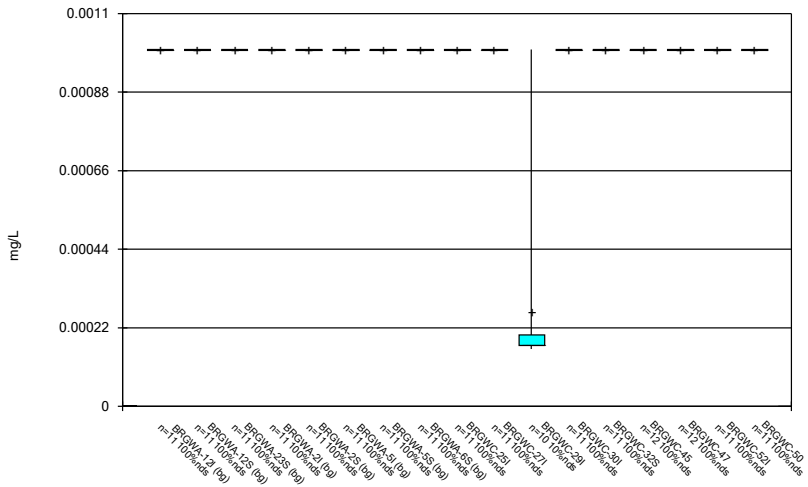
Constituent: Selenium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



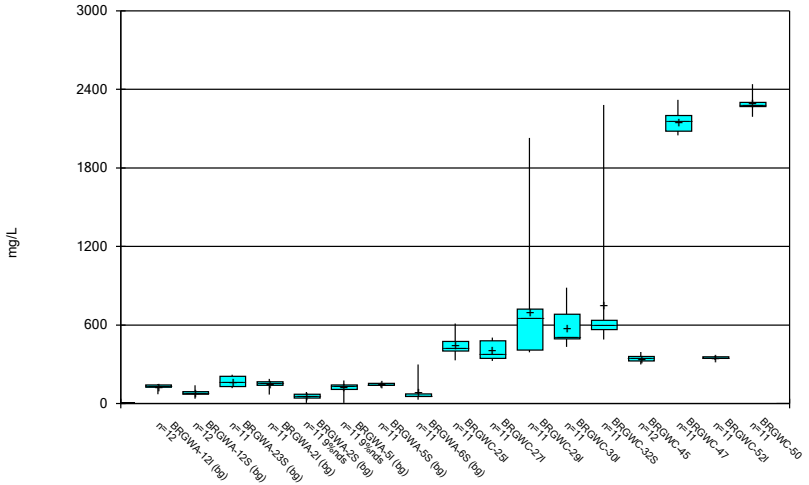
Constituent: Sulfate as SO4 Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 9:58 AM View: Ponds B,C,D App III & IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

FIGURE C.

Outlier Summary

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:51 AM

	BRGWC-52I Calcium (mg/L)	BRGWA-12S Chromium (mg/L)	BRGWA-5I Cobalt (mg/L)	BRGWC-52I Fluoride (mg/L)	BRGWC-45 Lithium (mg/L)	BRGWC-50 Sulfate as SO4 (mg/L)	BRGWC-29I Thallium (mg/L)	BRGWC-47 Total Dissolved Solids [TDS] (mg/L)
9/8/2016						<0.001 (o)		
11/16/2016			<0.01 (o)					
2/13/2018			<0.01 (o)					
2/14/2018		<0.01 (o)						
6/27/2018							31 (OX)	
7/31/2018				<0.25 (o)				
8/10/2018	410 (O)			1.6 (O)				
1/16/2019					589 (O)			

FIGURE D.

Interwell Prediction Limits Summary Table - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Boron (mg/L)	BRGWC-25I	0.068	n/a	3/4/2020	1.2	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-27I	0.068	n/a	3/4/2020	0.81	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-29I	0.068	n/a	3/4/2020	1.1	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-30I	0.068	n/a	3/5/2020	1.5	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-32S	0.068	n/a	3/5/2020	1.5	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-47	0.068	n/a	3/4/2020	0.49	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-52I	0.068	n/a	3/4/2020	1.4	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	BRGWC-50	0.068	n/a	3/4/2020	0.32	Yes	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BRGWC-25I	24	n/a	3/4/2020	52	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-27I	24	n/a	3/4/2020	72.3	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-29I	24	n/a	3/4/2020	59.3	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-30I	24	n/a	3/5/2020	119	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-32S	24	n/a	3/5/2020	52.1	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-45	24	n/a	3/5/2020	37.9	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-47	24	n/a	3/4/2020	353	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-52I	24	n/a	3/4/2020	49.5	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Calcium (mg/L)	BRGWC-50	24	n/a	3/4/2020	245	Yes	90	n/a	n/a	6.667	n/a	0.0002366	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	BRGWC-25I	4.897	n/a	3/4/2020	5	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-27I	4.897	n/a	3/4/2020	5.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-29I	4.897	n/a	3/4/2020	5.8	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-32S	4.897	n/a	3/5/2020	6	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-45	4.897	n/a	3/5/2020	37.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-52I	4.897	n/a	3/4/2020	6.1	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	BRGWC-50	4.897	n/a	3/4/2020	21.6	Yes	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-29I	7.122	5.598	3/4/2020	4.5	Yes	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-50	7.122	5.598	3/4/2020	5.2	Yes	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-25I	89	n/a	3/4/2020	165	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-27I	89	n/a	3/4/2020	205	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-29I	89	n/a	3/4/2020	238	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-30I	89	n/a	3/5/2020	369	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-32S	89	n/a	3/5/2020	269	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-45	89	n/a	3/5/2020	106	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-47	89	n/a	3/4/2020	1380	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-52I	89	n/a	3/4/2020	129	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Sulfate as SO4 (mg/L)	BRGWC-50	89	n/a	3/4/2020	1370	Yes	90	n/a	n/a	7.778	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-25I	299	n/a	3/4/2020	330	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-27I	299	n/a	3/4/2020	326	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-29I	299	n/a	3/4/2020	391	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-30I	299	n/a	3/5/2020	681	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-32S	299	n/a	3/5/2020	489	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-47	299	n/a	3/4/2020	2140	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-52I	299	n/a	3/4/2020	351	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	BRGWC-50	299	n/a	3/4/2020	2270	Yes	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2

Interwell Prediction Limits Summary Table - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Boron (mg/L)	**BRGWC-25I**	**0.068**	**n/a**	**3/4/2020**	**1.2**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-27I**	**0.068**	**n/a**	**3/4/2020**	**0.81**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-29I**	**0.068**	**n/a**	**3/4/2020**	**1.1**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-30I**	**0.068**	**n/a**	**3/5/2020**	**1.5**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-32S**	**0.068**	**n/a**	**3/5/2020**	**1.5**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	BRGWC-45	0.068	n/a	3/5/2020	0.044	No	88	n/a	n/a	55.68	n/a	0.0002487	NP Inter (NDs) 1 of 2
Boron (mg/L)	**BRGWC-47**	**0.068**	**n/a**	**3/4/2020**	**0.49**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-52I**	**0.068**	**n/a**	**3/4/2020**	**1.4**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**BRGWC-50**	**0.068**	**n/a**	**3/4/2020**	**0.32**	**Yes**	**88**	**n/a**	**n/a**	**55.68**	**n/a**	**0.0002487**	**NP Inter (NDs) 1 of 2**
Calcium (mg/L)	**BRGWC-25I**	**24**	**n/a**	**3/4/2020**	**52**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-27I**	**24**	**n/a**	**3/4/2020**	**72.3**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-29I**	**24**	**n/a**	**3/4/2020**	**59.3**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-30I**	**24**	**n/a**	**3/5/2020**	**119**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-32S**	**24**	**n/a**	**3/5/2020**	**52.1**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-45**	**24**	**n/a**	**3/5/2020**	**37.9**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-47**	**24**	**n/a**	**3/4/2020**	**353**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-52I**	**24**	**n/a**	**3/4/2020**	**49.5**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**BRGWC-50**	**24**	**n/a**	**3/4/2020**	**245**	**Yes**	**90**	**n/a**	**n/a**	**6.667**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**BRGWC-25I**	**4.897**	**n/a**	**3/4/2020**	**5**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-27I**	**4.897**	**n/a**	**3/4/2020**	**5.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-29I**	**4.897**	**n/a**	**3/4/2020**	**5.8**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	BRGWC-30I	4.897	n/a	3/5/2020	4.3	No	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	**BRGWC-32S**	**4.897**	**n/a**	**3/5/2020**	**6**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-45**	**4.897**	**n/a**	**3/5/2020**	**37.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	BRGWC-47	4.897	n/a	3/4/2020	4.2	No	90	3.128	0.9075	0	None	0.0008358	Param Inter 1 of 2
Chloride, Total (mg/L)	**BRGWC-52I**	**4.897**	**n/a**	**3/4/2020**	**6.1**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Chloride, Total (mg/L)	**BRGWC-50**	**4.897**	**n/a**	**3/4/2020**	**21.6**	**Yes**	**90**	**3.128**	**0.9075**	**0**	**None**	**0.0008358**	**Param Inter 1 of 2**
Fluoride (mg/L)	BRGWC-25I	0.42	n/a	3/4/2020	0.07	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-27I	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-29I	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-30I	0.42	n/a	3/5/2020	0.051	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-32S	0.42	n/a	3/5/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-45	0.42	n/a	3/5/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-47	0.42	n/a	3/4/2020	0.3ND	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-52I	0.42	n/a	3/4/2020	0.1	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BRGWC-50	0.42	n/a	3/4/2020	0.14	No	96	n/a	n/a	50	n/a	0.0002102	NP Inter (normality) 1 of 2
pH, Field (S.U)	BRGWC-25I	7.122	5.598	3/4/2020	6.02	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-27I	7.122	5.598	3/4/2020	5.8	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	**BRGWC-29I**	**7.122**	**5.598**	**3/4/2020**	**4.5**	**Yes**	**98**	**6.36**	**0.3923**	**0**	**None**	**0.0004179**	**Param Inter 1 of 2**
pH, Field (S.U)	BRGWC-30I	7.122	5.598	3/5/2020	5.99	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-32S	7.122	5.598	3/5/2020	5.74	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-45	7.122	5.598	3/5/2020	5.95	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-47	7.122	5.598	3/4/2020	5.76	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	BRGWC-52I	7.122	5.598	3/4/2020	6.54	No	98	6.36	0.3923	0	None	0.0004179	Param Inter 1 of 2
pH, Field (S.U)	**BRGWC-50**	**7.122**	**5.598**	**3/4/2020**	**5.2**	**Yes**	**98**	**6.36**	**0.3923**	**0**	**None**	**0.0004179**	**Param Inter 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-25I**	**89**	**n/a**	**3/4/2020**	**165**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-27I**	**89**	**n/a**	**3/4/2020**	**205**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**89**	**n/a**	**3/4/2020**	**238**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-30I**	**89**	**n/a**	**3/5/2020**	**369**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-32S**	**89**	**n/a**	**3/5/2020**	**269**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-45**	**89**	**n/a**	**3/5/2020**	**106**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-47**	**89**	**n/a**	**3/4/2020**	**1380**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-52I**	**89**	**n/a**	**3/4/2020**	**129**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Sulfate as SO4 (mg/L)	**BRGWC-50**	**89**	**n/a**	**3/4/2020**	**1370**	**Yes**	**90**	**n/a**	**n/a**	**7.778**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**299**	**n/a**	**3/4/2020**	**330**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**

Interwell Prediction Limits Summary Table - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:03 AM

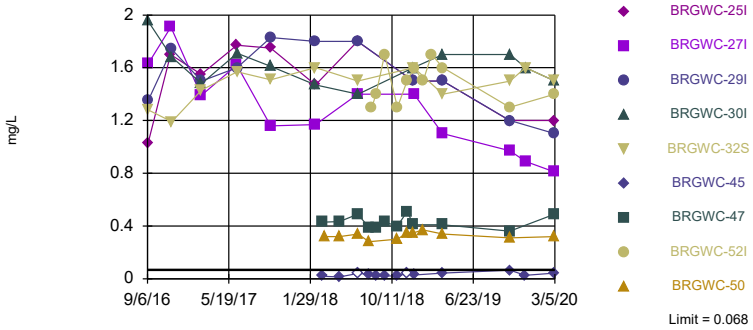
Constituent	Well	Upper Lim.	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Alpha	Method
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-27I**	**299**	**n/a**	**3/4/2020**	**326**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-29I**	**299**	**n/a**	**3/4/2020**	**391**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-30I**	**299**	**n/a**	**3/5/2020**	**681**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-32S**	**299**	**n/a**	**3/5/2020**	**489**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	BRGWC-45	299	n/a	3/5/2020	297	No	90	n/a	n/a	2.222	n/a	0.0002366	NP Inter (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-47**	**299**	**n/a**	**3/4/2020**	**2140**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-52I**	**299**	**n/a**	**3/4/2020**	**351**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-50**	**299**	**n/a**	**3/4/2020**	**2270**	**Yes**	**90**	**n/a**	**n/a**	**2.222**	**n/a**	**0.0002366**	**NP Inter (normality) 1 of 2**

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-52I, BRGWC-50

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 88 background values. 55.68% NDs. Annual per-constituent alpha = 0.004468. Individual comparison alpha = 0.0002487 (1 of 2). Comparing 9 points to limit.

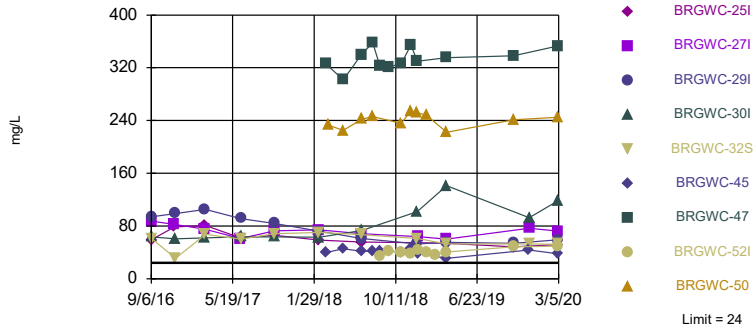
Constituent: Boron Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I,..

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 90 background values. 6.667% NDs. Annual per-constituent alpha = 0.00425. Individual comparison alpha = 0.0002366 (1 of 2). Comparing 9 points to limit.

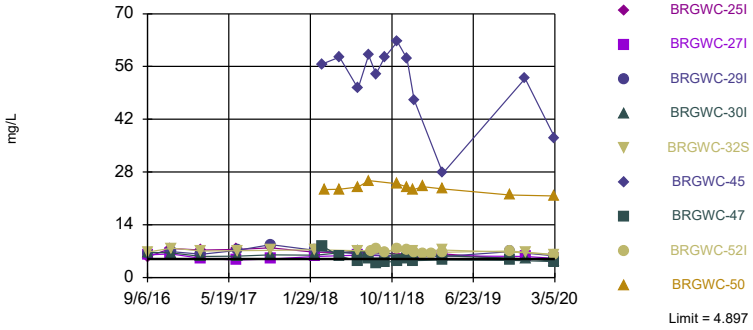
Constituent: Calcium Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-32S, BRGWC-45, BRGWC-52I, BRGWC-50

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.128, Std. Dev.=0.9075, n=90. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.965, critical = 0.961. Kappa = 1.949 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0008358. Comparing 9 points to limit.

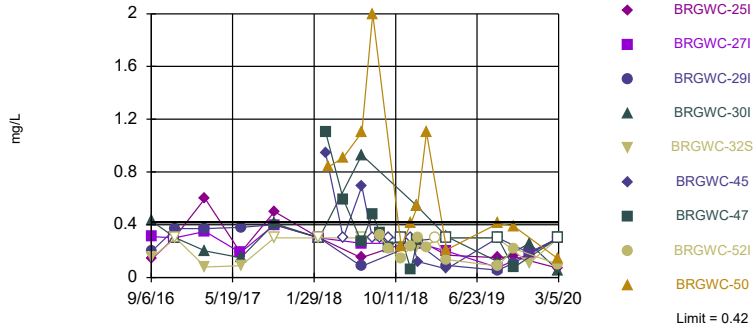
Constituent: Chloride, Total Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



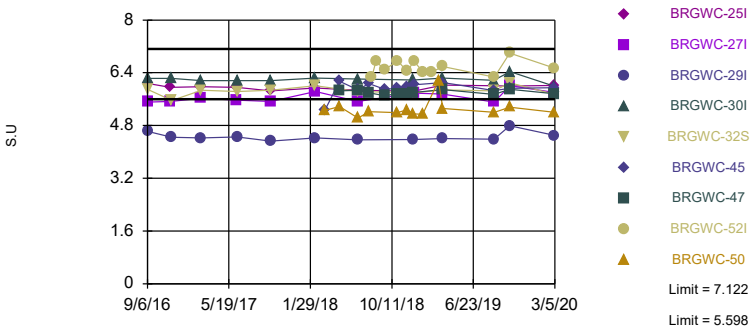
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 96 background values. 50% NDs. Annual per-constituent alpha = 0.003776. Individual comparison alpha = 0.0002102 (1 of 2). Comparing 9 points to limit.

Constituent: Fluoride Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Exceeds Limits: BRGWC-29I, BRGWC-50

Prediction Limit

Interwell Parametric



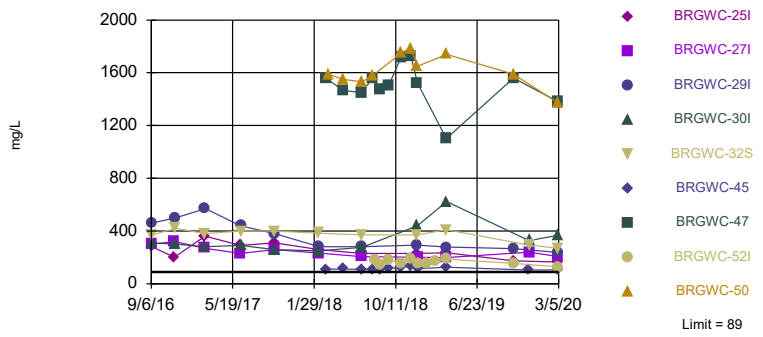
Background Data Summary: Mean=6.36, Std. Dev.=0.3923, n=98. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9898, critical = 0.966. Kappa = 1.943 (c=7, w=9, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004179. Comparing 9 points to limit.

Constituent: pH, Field Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-45, BRGWC-47, BRGWC-52I,..

Prediction Limit

Interwell Non-parametric



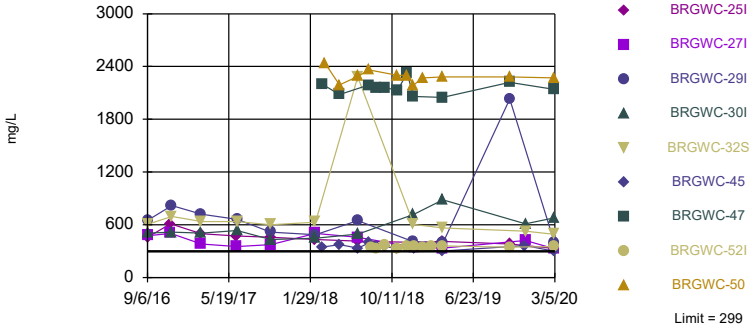
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Francia normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 90 background values. 7.778% NDs. Annual per-constituent alpha = 0.00425. Individual comparison alpha = 0.0002366 (1 of 2). Comparing 9 points to limit.

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Exceeds Limit: BRGWC-25I, BRGWC-27I, BRGWC-29I, BRGWC-30I, BRGWC-32S, BRGWC-47, BRGWC-52I, BRGWC-50

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 90 background values. 2.222% NDs. Annual per-constituent alpha = 0.00425. Individual comparison alpha = 0.0002366 (1 of 2). Comparing 9 points to limit.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:00 AM View: Ponds, B,C,D App III
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-5S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	<0.04	<0.04	<0.04	0.0072 (J)					
9/1/2016					0.0093 (J)	<0.04	<0.04		
9/6/2016								1.96	0.0362 (J)
9/8/2016									
11/15/2016			<0.04 (B)			<0.04 (B)			
11/16/2016	<0.04	<0.04		<0.04	<0.04		<0.04		
11/17/2016									0.0617
11/18/2016									
11/21/2016								1.68	
2/20/2017	0.0066 (J)		0.0093 (J)			0.0157 (J)			
2/21/2017		<0.04		0.0088 (J)	0.0071 (J)		<0.04		0.0245 (J)
2/22/2017								1.48	
6/12/2017	<0.04		<0.04	0.0133 (J)		<0.04			
6/13/2017		<0.04					<0.04		<0.04
6/14/2017					0.0078 (J)			1.71	
9/26/2017	<0.04	<0.04	<0.04	0.0093 (J)	<0.04	<0.04	<0.04		<0.04
9/27/2017								1.61	
2/13/2018	<0.04	<0.04	<0.04	0.0141 (J)		<0.04			
2/14/2018					0.0068 (J)		<0.04	1.47	0.0314 (J)
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.0042 (J)	<0.04	0.0056 (J)	0.012 (J)	0.008 (J)	0.0041 (J)	<0.04		0.062
6/27/2018									
6/28/2018								1.4	
7/31/2018									
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	<0.04	<0.04	0.0062 (J)	0.0086 (J)	0.0083 (J)	<0.04	0.0053 (J)	1.6	0.055
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	<0.04	<0.04	<0.04	0.00565 (JD)	0.008 (J)	<0.04	<0.04		0.068
3/20/2019								1.7	
10/15/2019	<0.04	<0.04	0.006 (J)	0.0067 (J)	0.006 (J)	0.01 (J)	<0.04		0.022 (J)
10/16/2019									
10/17/2019								1.7	
12/3/2019									
12/4/2019								1.6	
3/3/2020	<0.04	<0.04	<0.04	0.0082 (J)	0.01 (J)	<0.04	0.0065 (J)		
3/4/2020									0.044 (J)
3/5/2020								1.5	

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-27I	BRGWC-29I	BRGWC-32S	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	1.63	1.35	1.28	1.03				
11/15/2016								
11/16/2016								
11/17/2016				1.7				
11/18/2016	1.91							
11/21/2016		1.74	1.19					
2/20/2017								
2/21/2017	1.39			1.55				
2/22/2017		1.5	1.43					
6/12/2017								
6/13/2017	1.62			1.77				
6/14/2017		1.6	1.57					
9/26/2017								
9/27/2017	1.16	1.83	1.51	1.75				
2/13/2018								
2/14/2018	1.17	1.8	1.6	1.47				
3/6/2018					0.0198 (J)	0.428		
3/15/2018							0.32	
5/1/2018					0.015 (J)	0.435 (D)	0.32	
6/26/2018				1.8				
6/27/2018	1.4 (J+X)	1.8 (J+X)	1.5 (J+X)			0.49 (J+X)		
6/28/2018					<0.04 (X)		0.34	
7/31/2018					0.035 (J)			
8/1/2018						0.39	0.28	
8/10/2018								1.3
8/23/2018					0.022 (J)	0.39		1.4
9/19/2018					0.021 (J)	0.43		1.7
10/29/2018					0.021 (J)	0.4	0.3	1.3
11/28/2018					<0.04 (X)	0.51	0.35	1.5
12/18/2018		1.5		1.5				
12/19/2018			1.6			0.41	0.35	
12/20/2018	1.4				0.028 (J)			1.6
1/16/2019							0.37	
1/17/2019								1.5
2/13/2019								1.7
3/19/2019	1.1					0.41		
3/20/2019		1.5	1.4	1.5 (D)	0.043		0.34	1.6 (D)
10/15/2019				1.2				
10/16/2019		1.2				0.36	0.31	1.3
10/17/2019	0.97		1.5		0.064			
12/3/2019					0.027 (J)			
12/4/2019	0.89		1.6					
3/3/2020								
3/4/2020	0.81	1.1		1.2		0.49	0.32	1.4
3/5/2020			1.5		0.044 (J)			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	19.6	13.5	4.09	12.6					
9/1/2016					3.3	4.61	8.98		
9/6/2016								63.3	12.8
9/8/2016									
11/15/2016	21.7				3.44				
11/16/2016		14.9	4.25	12.1		4.17	15.4		
11/17/2016									19.2
11/18/2016									
11/21/2016								60.7	
2/20/2017	21.1	13.9			3.52				
2/21/2017			4.02	11.4		5	17.4		15.1
2/22/2017								62.1	
6/12/2017	21.5	13.7		9.34	3.11				
6/13/2017			3.84			4.98			10.2
6/14/2017							18.1	63.5	
9/26/2017	24	14.4	3.31	14.3	3.15	4.49	19.3		15
9/27/2017								63.5	
2/13/2018	<25	<25	3.94	<25	3.65				
2/14/2018						<25	<25	62.8	<25
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	23.5 (J)	13.5 (J)	3.6	16 (J)	3.3	6.4	15.5 (J)		18.5 (J)
6/27/2018									
6/28/2018								73.3	
7/31/2018						6.1	18.2 (J)		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	19.8 (J)	16.4 (J)	3.8	14.5 (J)	3.5	5.5	18.7 (J)	102	16.8 (J)
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	21.4 (J)	12.3 (J)	3.9	14.3 (JD)	3.6	5.9	15.9 (J)		13.5 (J)
3/20/2019								141	
10/15/2019	20	14.4	3.7	15.1	3.5	6.2	15.9		8.6
10/16/2019									
12/3/2019									
12/4/2019								92.6	
3/3/2020	23.2	14.9	4	20	5	6.8	19.4		
3/4/2020									11.5
3/5/2020								119	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-25I	BRGWC-32S	BRGWC-27I	BRGWC-29I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	59.4	60.5	87.2	93.9				
11/15/2016								
11/16/2016								
11/17/2016	78.4							
11/18/2016			82.4					
11/21/2016		31.1		99.1				
2/20/2017								
2/21/2017	80.9		75.1					
2/22/2017		67.3		105				
6/12/2017								
6/13/2017	62		61					
6/14/2017		60.2		91.3				
9/26/2017								
9/27/2017	65.8	68.4	72.6	84				
2/13/2018								
2/14/2018	58.8	70.2	74.1	72.1				
3/6/2018					326	39.5		
3/15/2018							233	
5/1/2018					302 (D)	45.5	225	
6/26/2018	55.5							
6/27/2018		67.1	68.2	61.1	340			
6/28/2018						41.9	242	
7/31/2018						41.5		
8/1/2018					358		246	
8/10/2018								410 (O)
8/23/2018					323	42.3		33.9
9/19/2018					321	41.9		42.3
10/29/2018					326	40.8	236	39.8
11/28/2018					354	45.1	254	38.2
12/18/2018	54.7			52.9				
12/19/2018		61.2			330		252	
12/20/2018			63.9			39		43.2
1/16/2019							248	
1/17/2019								39.4
2/13/2019								36.9
3/19/2019			60.2		335			
3/20/2019	53.95 (D)	52.8		55.4		31.2	222	40.85 (D)
10/15/2019	48.3							
10/16/2019				54	338		241	48.4
12/3/2019						43.7		
12/4/2019		52.7	76.8					
3/3/2020								
3/4/2020	52		72.3	59.3	353		245	49.5
3/5/2020		52.1				37.9		

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-2I (bg)	BRGWA-5S (bg)	BRGWA-2S (bg)	BRGWA-5I (bg)	BRGWA-12I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	2.3	3.6	2	4.4					
9/1/2016					3.3	2.5	3.5		
9/6/2016								5.8	6.7
9/8/2016									
11/15/2016		4				2.3			
11/16/2016	2		1.8	4.4	3.6		3.6		
11/17/2016								4.3	
11/18/2016									
11/21/2016									6.5
2/20/2017		3.9		4.8		2.4			
2/21/2017	2		1.8		3.2		3.2	3.5	
2/22/2017									5.6
6/12/2017	2.1	3.8		4.2		2.2			
6/13/2017			1.7				3.3	3.2	
6/14/2017					3.1				5.7
9/26/2017	2	4.1	1.8	4.4	3.3	2.3	3.3	3.5	
9/27/2017									6
2/13/2018	2.1	4.1	1.7	4.7		2.3			
2/14/2018					3.1		3.5	3.8	5.9
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	2.4	4.1	2.2	4.5	3.4	2.6	3.4	3.8	
6/27/2018									
6/28/2018									7 (J-X)
7/31/2018					2.6		2.9		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	1.8	3.8	1.9	4.5	2.8	2.3	2.9	3.9	5.8
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	2.45 (D)	4.2	2	4.5	3.2	2.6	3.5	3.8	
3/20/2019									5.8
10/15/2019	2.2	3.7	1.9	4.2	3.1	2.4	3.4	3.5	
10/16/2019									
12/3/2019									
12/4/2019									5
3/3/2020	1.9	3.6	1.9	3.9	2.6	2.9	3.2		
3/4/2020								3.3	
3/5/2020									4.3

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-32S	BRGWC-27I	BRGWC-29I	BRGWC-25I	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	6.8	6	6.4	5.5				
11/15/2016								
11/16/2016								
11/17/2016				7.7				
11/18/2016		6.3						
11/21/2016	7.8		6.9					
2/20/2017								
2/21/2017		5.1		7.3				
2/22/2017	7		6.2					
6/12/2017								
6/13/2017		4.7		7.5				
6/14/2017	7.1		7.2					
9/26/2017								
9/27/2017	7.2	4.9	8.7	7.9				
2/13/2018								
2/14/2018	7.4	5.6	7.2	6.7				
3/6/2018					56.6	8.4		
3/15/2018							23.3	
5/1/2018					58.5	5.7 (D)	23.4	
6/26/2018				6.7				
6/27/2018	7.1	5.9	6.3			4.4		
6/28/2018					50.2 (J-X)		24 (J-X)	
7/31/2018					59			
8/1/2018						5.2	25.7	
8/10/2018								6.9
8/23/2018					54	3.6		7.5
9/19/2018					58.4	4.1		6.6
10/29/2018					62.6	4.3	24.9	7.8
11/28/2018					58.1	5.1	24	7.2
12/18/2018			5.4	6.2				
12/19/2018	7 (J-X)					4.5 (J-X)	23.3 (J-X)	
12/20/2018		5.6 (J-X)			47.2 (J-X)			6.6 (J-X)
1/16/2019							24.1	
1/17/2019								6.4
2/13/2019								6.5
3/19/2019		5.8				4.7		
3/20/2019	7.3		5.6	6.3 (D)	27.7		23.5	6.7 (D)
10/15/2019				5				
10/16/2019			6.9			4.6	21.9	7
12/3/2019					52.8			
12/4/2019	6.6	5.6						
3/3/2020								
3/4/2020		5.1	5.8	5		4.2	21.6	6.1
3/5/2020	6				37.1			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-12I (bg)	BRGWA-12S (bg)	BRGWA-6S (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	0.19 (J)	0.07 (J)	0.05 (J)	0.11 (J)					
9/1/2016					0.2 (J)	0.05 (J)	0.06 (J)		
9/6/2016								0.43	0.42
9/8/2016									
11/15/2016	<0.3 (J)						<0.3 (J)		
11/16/2016		<0.3 (J)	<0.3 (J)	<0.3 (J)	<0.3 (J)	<0.3 (J)			
11/17/2016									<0.3 (JB)
11/18/2016									
11/21/2016								<0.3 (J)	
2/20/2017	0.08 (J)	0.06 (J)					0.04 (J)		
2/21/2017			0.05 (J)	0.14 (J)	0.16 (J)	0.04 (J)			0.1 (J)
2/22/2017								0.2 (J)	
6/12/2017	0.07 (J)	0.008 (J)		0.16 (J)			0.06 (J)		
6/13/2017			0.04 (J)			0.008 (J)			0.07 (J)
6/14/2017					0.09 (J)			0.15 (J)	
9/26/2017	0.04 (J)	<0.3	<0.3	0.14 (J)	0.1 (J)	<0.3	<0.3		<0.3
9/27/2017								0.41	
2/13/2018	<0.3	<0.3	<0.3	<0.3			<0.3		
2/14/2018					<0.3	<0.3		<0.3	<0.3
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.072 (J)	0.045 (J)	0.048 (J)	0.085 (J)	0.079 (J)	0.042 (J)	0.041 (J)		0.053 (J)
6/27/2018									
6/28/2018								0.93 (J+X)	
7/31/2018									
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	<0.3	<0.3	<0.3	0.085 (J)	<0.3	<0.3	<0.3	0.54	<0.3
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	0.06 (J)	<0.3	0.037 (J)	0.0655 (JD)	<0.3	<0.3	0.03 (J)		<0.3
3/20/2019								0.31	
8/27/2019	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.12 (J)	
8/28/2019									
8/29/2019									0.084 (J)
10/15/2019	0.045 (J)	<0.3	<0.3	<0.3	0.047 (J)	<0.3	<0.3		<0.3
10/16/2019									
12/3/2019									
12/4/2019								0.26 (J)	
3/3/2020	0.057 (J)	<0.3	0.05 (J)	0.066 (J)	0.056 (J)	<0.3	0.09 (J)		
3/4/2020									<0.3
3/5/2020								0.051 (J)	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-27I	BRGWC-25I	BRGWC-29I	BRGWC-32S	BRGWC-45	BRGWC-47	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	0.31	0.14 (J)	0.2 (J)	0.15 (J)				
11/15/2016								
11/16/2016								
11/17/2016		<0.3 (JB)						
11/18/2016	<0.3 (JB)							
11/21/2016			0.37	<0.3 (J)				
2/20/2017								
2/21/2017	0.35	0.6						
2/22/2017			0.37	0.08 (J)				
6/12/2017								
6/13/2017	0.19 (J)	0.19 (J)						
6/14/2017			0.38	0.09 (J)				
9/26/2017								
9/27/2017	0.4	0.5	0.4	<0.3				
2/13/2018								
2/14/2018	<0.3	<0.3	<0.3	<0.3				
3/6/2018					0.94	1.1		
3/15/2018							0.84 (JX)	
5/1/2018					<0.3	0.595 (D)	0.91	
6/26/2018		0.15 (J)						
6/27/2018	0.26 (J)		0.085 (J)	<0.3		0.27 (J)		
6/28/2018					0.69 (J+X)		1.1 (J+X)	
7/31/2018					<0.3			
8/1/2018						0.48	2	
8/10/2018								1.6 (O)
8/23/2018					<0.3	0.34		0.32
9/19/2018					<0.3	0.23 (J)		0.22 (J)
10/29/2018					<0.3	<0.3	0.24 (J)	0.14 (J)
11/28/2018					<0.3	0.063 (J)	0.41	0.24 (J)
12/18/2018		0.29 (J)	0.26 (J)					
12/19/2018				0.23 (J)		0.28 (J)	0.54	
12/20/2018	0.26 (J)				0.12 (J)			0.3
1/16/2019							1.1	
1/17/2019								0.23 (J)
2/13/2019								<0.3
3/19/2019	0.2 (J)					<0.3		
3/20/2019		0.17 (JD)	0.091 (J)	<0.3	0.066 (J)		0.21 (J)	0.135 (JD)
8/27/2019		0.15 (J)		<0.3				
8/28/2019	0.074 (J)		0.055 (J)		<0.3	<0.3		
8/29/2019							0.41	0.087 (J)
10/15/2019		0.16 (J)						
10/16/2019			0.11 (J)			0.076 (J)	0.39	0.22 (J)
12/3/2019					0.19 (J)			
12/4/2019	0.18 (J)			0.11 (J)				
3/3/2020								
3/4/2020	<0.3	0.07 (J)	<0.3			<0.3	0.14 (J)	0.1 (J)
3/5/2020				<0.3	<0.3			

Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5I (bg)	BRGWA-5S (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWA-23S (bg)	BRGWC-30I
8/31/2016	6.53	6.59	6.2	7.16					
9/1/2016					6.49	6	6.71		
9/6/2016								6.49	6.23
9/8/2016									
11/15/2016		6.67			6.59				
11/16/2016	6.4		6.12	6.96		6	6.15		
11/17/2016								5.79	
11/18/2016									
11/21/2016									6.23
2/20/2017	6.44	6.65			6.61				
2/21/2017			6.24	7.15		6.09	6.52	6.15	
2/22/2017									6.16
6/12/2017	6.4	6.64		7.31					
6/13/2017			6.19			6.03	6.42	5.87	
6/14/2017							6.51		6.16
9/26/2017	6.31	6.58	6.15	7.02	6.47	5.85	6.42	5.82	
9/27/2017									6.16
2/13/2018	6.62	6.72	6.18	7.44	6.54				
2/14/2018						5.99	6.48	5.83	6.24
3/15/2018									
5/1/2018									
6/26/2018	6.29	6.43	6.05	6.93	6.23	5.86	6.2	5.73	
6/27/2018									
6/28/2018									6.21
7/31/2018						5.99	6.37		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	6.57	6.7	5.92	6.76	6.71	6.08	6.5	5.78	6.18
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/6/2019									
3/19/2019	6.45	6.63	6.18	6.87	6.18	5.71	6.28	5.28	
3/20/2019									6.24
8/27/2019	6.37	6.49	6.09	6.79	6.35	6	6.35		6.17
8/28/2019									
8/29/2019								5.64	
10/15/2019	6.77	7.01	6.06	6.57	6.36	6.61	6.8	5.7	
10/16/2019									
10/17/2019									6.43
3/3/2020	6.29	6.49	6.1	6.71	6.59	5.94	6.33		
3/4/2020								5.7	
3/5/2020									5.99

Prediction Limit

Constituent: pH, Field (S.U) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-25I	BRGWC-29I	BRGWC-27I	BRGWC-32S	BRGWC-50	BRGWC-45	BRGWC-47	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	6.07	4.62	5.51	5.89				
11/15/2016								
11/16/2016	5.96							
11/17/2016								
11/18/2016			5.53					
11/21/2016		4.44		5.56				
2/20/2017								
2/21/2017	5.98		5.63					
2/22/2017		4.42		5.87				
6/12/2017								
6/13/2017	5.96		5.57					
6/14/2017		4.45		5.83				
9/26/2017								
9/27/2017	5.85	4.33	5.53	5.87				
2/13/2018								
2/14/2018	5.94	4.42	5.83	6.01				
3/15/2018					5.26	5.26		
5/1/2018					5.38	6.14	5.85	
6/26/2018	5.87							
6/27/2018		4.37	5.53	5.83			5.87	
6/28/2018					5.03	5.88		
7/31/2018						6.07		
8/1/2018					5.22		5.79	
8/10/2018								6.28
8/23/2018								6.75
9/19/2018						5.9	5.71	6.48
10/29/2018					5.19	5.93	5.76	6.77
11/28/2018					5.28	5.99	5.74	6.44
12/18/2018	5.84	4.38						
12/19/2018				5.79	5.15		5.8	
12/20/2018			5.78			6.04		6.75
1/16/2019					5.14			
1/17/2019								6.41
2/13/2019								6.42
3/6/2019					6.15			
3/19/2019			5.75				5.89	
3/20/2019	6.03	4.4		5.88	5.32	6.1		6.59
8/27/2019	6.01			5.85				
8/28/2019		4.39	5.51			5.86	5.74	
8/29/2019					5.2			6.27
10/15/2019	6							
10/16/2019		4.79			5.36		5.9	7
10/17/2019			6.01 (D)	6.09		5.93		
3/3/2020								
3/4/2020	6.02	4.5	5.8		5.2		5.76	6.54
3/5/2020				5.74		5.95		

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	0.81 (J)	2.7	0.38 (J)	7.5					
9/1/2016					0.6 (J)	1.7	2.7		
9/6/2016								310	38
9/8/2016									
11/15/2016	<1 (J)				<1 (J)				
11/16/2016		3.4	<1 (J)	6.6		1.2	3.6		
11/17/2016									84
11/18/2016									
11/21/2016								300	
2/20/2017	1 (B-01)	3.9 (B-01)			0.98 (J)				
2/21/2017			1.5	6.1		1.1	3		39
2/22/2017								280	
6/12/2017	0.94 (J)	3.7		5	0.54 (J)				
6/13/2017			0.67 (J)			1.1			35
6/14/2017							2.6	290	
9/26/2017	0.92 (J)	4.1	0.62 (J)	5.4	0.53 (J)	1.3	2.5		89
9/27/2017								260	
2/13/2018	<1	6.6	<1	4.7 (J)	<1				
2/14/2018						<1	2.1 (J)	250	82.2
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	0.91 (J)	3.5	0.69 (J)	6.2	0.54 (J)	0.84 (J)	2		84.2
6/27/2018									
6/28/2018								276	
7/31/2018						0.63 (J)	1.9		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	0.68 (J)	4.3	0.72 (J)	5.9	0.39 (J)	0.66 (J)	2.1	440	83.4
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	0.74 (J)	3	0.78 (J)	6 (D)	0.68 (J)	0.75 (J)	2.2		65
3/20/2019								623	
10/15/2019	0.68 (J)	3.8	0.47 (J)	5.2	0.48 (J)	0.61 (J)	1.9		30
10/16/2019									
12/3/2019									
12/4/2019								327	
3/3/2020	0.71 (J)	2.8	0.93 (J)	7.1	2.5	0.51 (J)	1.8		
3/4/2020									38.6
3/5/2020								369	

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-25I	BRGWC-32S	BRGWC-27I	BRGWC-29I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	280	370	300	460				
11/15/2016								
11/16/2016								
11/17/2016	200							
11/18/2016			320					
11/21/2016		420		500				
2/20/2017								
2/21/2017	360		270					
2/22/2017		380		570				
6/12/2017								
6/13/2017	290		230					
6/14/2017		400		440				
9/26/2017								
9/27/2017	310	400	260	380				
2/13/2018								
2/14/2018	260	383	232	280				
3/6/2018					1560	111		
3/15/2018							1590	
5/1/2018					1465 (D)	112	1550	
6/26/2018	231							
6/27/2018		372	205	281	1450			
6/28/2018						109	1530	
7/31/2018						107		
8/1/2018					1560		1580	
8/10/2018								183
8/23/2018					1470	108		145
9/19/2018					1500	117		178
10/29/2018					1720	127	1750	157
11/28/2018					1730	133	1780	189
12/18/2018	231			293				
12/19/2018		370			1520		1650	
12/20/2018			200			113		150
1/16/2019							589 (O)	
1/17/2019								157
2/13/2019								169
3/19/2019			199		1100			
3/20/2019	235 (D)	409		278		127	1740	186.5 (D)
10/15/2019	174							
10/16/2019				266	1560		1590	155
12/3/2019						105		
12/4/2019		293	241					
3/3/2020								
3/4/2020	165		205	238	1380		1370	129
3/5/2020		269				106		

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWA-5S (bg)	BRGWA-5I (bg)	BRGWA-2S (bg)	BRGWA-2I (bg)	BRGWA-6S (bg)	BRGWA-12S (bg)	BRGWA-12I (bg)	BRGWC-30I	BRGWA-23S (bg)
8/31/2016	154	138	88	151					
9/1/2016					299	69	142		
9/6/2016								505	146
9/8/2016									
11/15/2016	123				41				
11/16/2016		77	41	69		100	100		
11/17/2016									211
11/18/2016									
11/21/2016								515	
2/20/2017	158	170			133				
2/21/2017			<10	68		37	71		151
2/22/2017								504	
6/12/2017	142	132		161	61				
6/13/2017			53			84			130
6/14/2017							140	536	
9/26/2017	138	108	45	167	29	68	149		160
9/27/2017								432	
2/13/2018	150	141	63	165	61				
2/14/2018						138	137	448	194
3/6/2018									
3/15/2018									
5/1/2018									
6/26/2018	154	133	71	188	71	90	142		221
6/27/2018									
6/28/2018								494	
7/31/2018						83	133		
8/1/2018									
8/10/2018									
8/23/2018									
9/19/2018									
10/29/2018									
11/28/2018									
12/18/2018	147	138 (X)	78 (X)	145 (X)	70 (X)	85	135	715	208
12/19/2018									
12/20/2018									
1/16/2019									
1/17/2019									
2/13/2019									
3/19/2019	146	130	68	146.5 (D)	72	82 (JX)	132 (JX)		161 (JX)
3/20/2019								885	
10/15/2019	144	175	66	140	63	89	134		124
10/16/2019									
12/3/2019									
12/4/2019								612	
3/3/2020	130	<10	41	155	54	72	115		
3/4/2020									118
3/5/2020								681	

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/4/2020 10:03 AM View: Ponds, B,C,D App III

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

	BRGWC-25I	BRGWC-32S	BRGWC-27I	BRGWC-29I	BRGWC-47	BRGWC-45	BRGWC-50	BRGWC-52I
8/31/2016								
9/1/2016								
9/6/2016								
9/8/2016	460	607	478	654				
11/15/2016								
11/16/2016								
11/17/2016	611							
11/18/2016			503					
11/21/2016		695		819				
2/20/2017								
2/21/2017	497		380					
2/22/2017		635		721				
6/12/2017								
6/13/2017	474		354					
6/14/2017		635		661				
9/26/2017								
9/27/2017	457	601	376	518				
2/13/2018								
2/14/2018	431	628	503 (JX)	487				
3/6/2018					2200	346		
3/15/2018							2440	
5/1/2018					2080 (D)	374	2190	
6/26/2018	414							
6/27/2018		2280	458 (X)	648 (X)	31 (OX)			
6/28/2018						333	2290	
7/31/2018						393		
8/1/2018					2190		2360	
8/10/2018								344
8/23/2018					2160	350		333
9/19/2018					2160	353		364
10/29/2018					2130	329	2300	334
11/28/2018					2320	358	2300	357
12/18/2018	401			407				
12/19/2018		605			2060		2190	
12/20/2018			344			322		355
1/16/2019							2270	
1/17/2019								347
2/13/2019								350
3/19/2019			334 (JX)		2050 (JX)			
3/20/2019	410.5 (D)	564		391		302	2280	360 (D)
10/15/2019	380							
10/16/2019				2030	2220		2280	346
12/3/2019						362		
12/4/2019		526	422					
3/3/2020								
3/4/2020	330		326	391	2140		2270	351
3/5/2020		489				297		

FIGURE E.

Trend Tests Summary Table - PL Exceedances - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**BRGWC-27I**	**-0.2397**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-25I**	**-5.666**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-29I**	**-15.54**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**13.31**	**38**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-23S (bg)**	**-0.1005**	**-43**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-2I (bg)**	**-0.1345**	**-40**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12I (bg)**	**-0.3408**	**-48**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12S (bg)**	**-0.2424**	**-41**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**-74.18**	**-43**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**-49.22**	**-47**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests Summary Table - PL Exceedances - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BRGWA-12I (bg)	-0.0004356	-7	-34	No	11	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-12S (bg)	0	-13	-34	No	11	81.82	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-23S (bg)	0.002233	8	34	No	11	18.18	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2I (bg)	-0.001267	-19	-34	No	11	9.091	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-2S (bg)	0	0	34	No	11	100	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5I (bg)	0	3	34	No	11	81.82	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-5S (bg)	0	-10	-34	No	11	63.64	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWA-6S (bg)	0	-5	-34	No	11	72.73	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-25I	-0.08558	-11	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	**BRGWC-27I**	**-0.2397**	**-47**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	BRGWC-29I	-0.07821	-15	-34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-30I	-0.04152	-16	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-32S	0.0498	20	38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-47	-0.006472	-3	-38	No	12	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-52I	0	6	34	No	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	BRGWC-50	0.01484	8	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12I (bg)	0.7337	27	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-12S (bg)	0.6095	32	38	No	12	8.333	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-23S (bg)	-1.016	-15	-34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2I (bg)	1.558	30	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-2S (bg)	-0.08179	-17	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5I (bg)	0.1887	4	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-5S (bg)	0.1446	5	34	No	11	9.091	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWA-6S (bg)	0.1665	23	34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-25I**	**-5.666**	**-41**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-27I	-5.883	-23	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**BRGWC-29I**	**-15.54**	**-39**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**BRGWC-30I**	**13.31**	**38**	**34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	BRGWC-32S	-2.407	-13	-34	No	11	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-45	-2.312	-17	-38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-47	16.09	21	38	No	12	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-52I	8.536	19	30	No	10	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BRGWC-50	5.185	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-12I (bg)	-0.1788	-30	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-12S (bg)	-0.04892	-15	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-23S (bg)	-0.2142	-15	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2I (bg)	0	1	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-2S (bg)	0.03034	9	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5I (bg)	-0.06867	-10	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-5S (bg)	0	0	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWA-6S (bg)	0.05993	17	34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-25I	-0.6791	-27	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-27I	-0.07918	-7	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-29I	-0.2897	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-32S	-0.1629	-13	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-45	-5.92	-24	-38	No	12	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-52I	-0.6083	-20	-34	No	11	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	BRGWC-50	-1.027	-15	-34	No	11	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-12I (bg)	-0.0365	-16	-48	No	14	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-12S (bg)	-0.005359	-6	-43	No	13	0	n/a	n/a	0.01	NP
pH, Field (S.U)	**BRGWA-23S (bg)**	**-0.1005**	**-43**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	**BRGWA-2I (bg)**	**-0.1345**	**-40**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (S.U)	BRGWA-2S (bg)	-0.03789	-29	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5I (bg)	-0.01219	-6	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWA-5S (bg)	-0.01337	-7	-38	No	12	0	n/a	n/a	0.01	NP

Trend Tests Summary Table - PL Exceedances - All Results

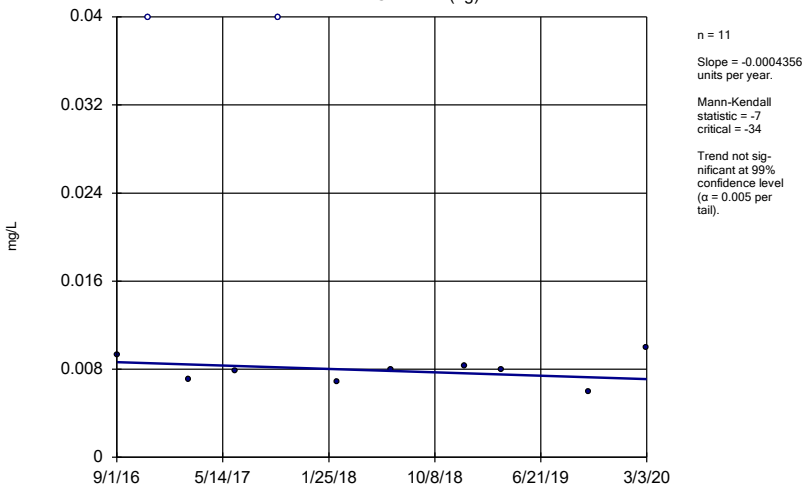
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:09 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
pH, Field (S.U)	BRGWA-6S (bg)	-0.04166	-8	-34	No	11	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-29I	-0.0108	-3	-38	No	12	0	n/a	n/a	0.01	NP
pH, Field (S.U)	BRGWC-50	0.02015	5	43	No	13	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**BRGWA-12I (bg)**	**-0.3408**	**-48**	**-38**	**Yes**	**12**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	**BRGWA-12S (bg)**	**-0.2424**	**-41**	**-38**	**Yes**	**12**	**8.333**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	BRGWA-23S (bg)	-1.669	-7	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2I (bg)	-0.2487	-9	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-2S (bg)	0.09547	18	34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5I (bg)	0.04269	3	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-5S (bg)	-0.04162	-13	-34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWA-6S (bg)	-0.006861	-3	-34	No	11	18.18	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-25I	-39.04	-28	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-27I	-30.26	-34	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	**BRGWC-29I**	**-74.18**	**-43**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate as SO4 (mg/L)	BRGWC-30I	20.99	11	34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-32S	-24.44	-21	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-45	0.7833	1	38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-47	0	-1	-38	No	12	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-52I	-17.42	-10	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate as SO4 (mg/L)	BRGWC-50	8.277	2	30	No	10	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-12I (bg)	-2.808	-15	-38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-12S (bg)	0.7581	2	38	No	12	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-23S (bg)	-7.081	-7	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2I (bg)	6.016	5	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-2S (bg)	4.65	6	34	No	11	9.091	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5I (bg)	-1.132	-2	-34	No	11	9.091	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-5S (bg)	-3.285	-12	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWA-6S (bg)	-3.411	-6	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	**BRGWC-25I**	**-49.22**	**-47**	**-34**	**Yes**	**11**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids [TDS] (mg/L)	BRGWC-27I	-25.03	-26	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-29I	-95.11	-26	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-30I	50.49	19	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-32S	-40.24	-30	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-47	-31.41	-10	-34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-52I	5.448	9	34	No	11	0	n/a	n/a	0.01	NP
Total Dissolved Solids [TDS] (mg/L)	BRGWC-50	-22.67	-17	-34	No	11	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 11

Slope = -0.0004356 units per year.

Mann-Kendall statistic = -7
critical = -34

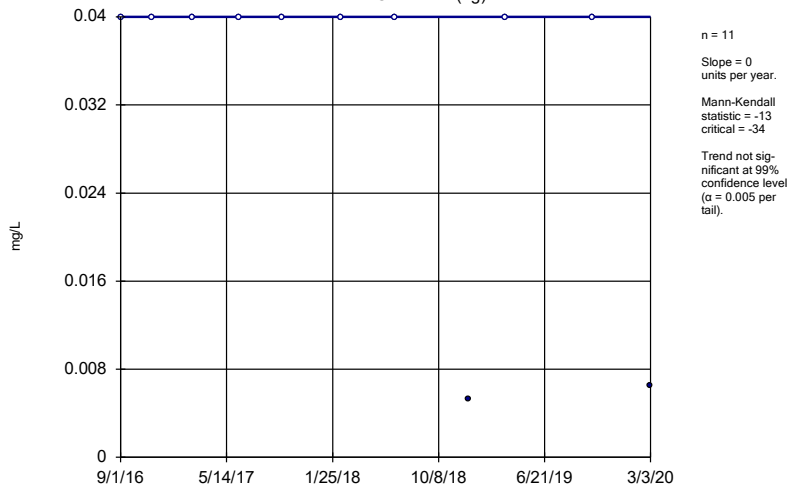
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -34

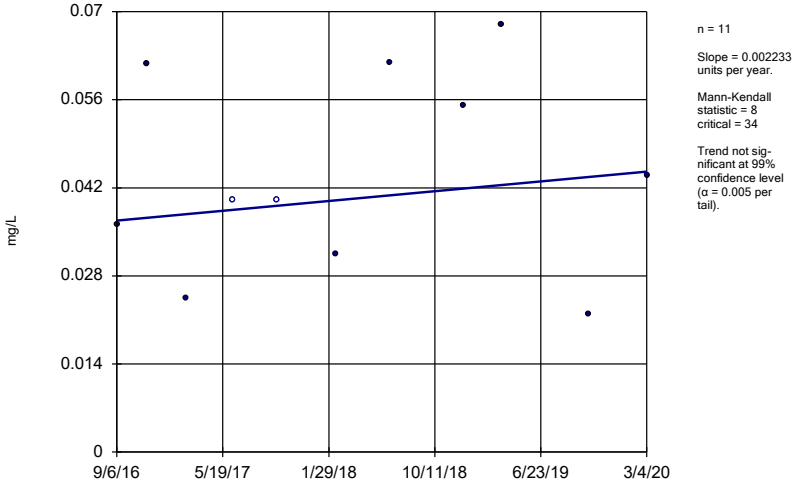
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = 0.002233 units per year.

Mann-Kendall statistic = 8
critical = 34

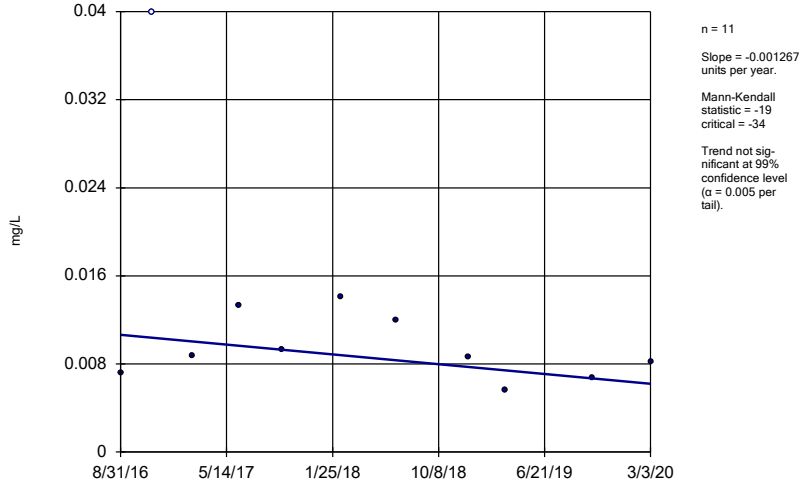
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = -0.001267 units per year.

Mann-Kendall statistic = -19
critical = -34

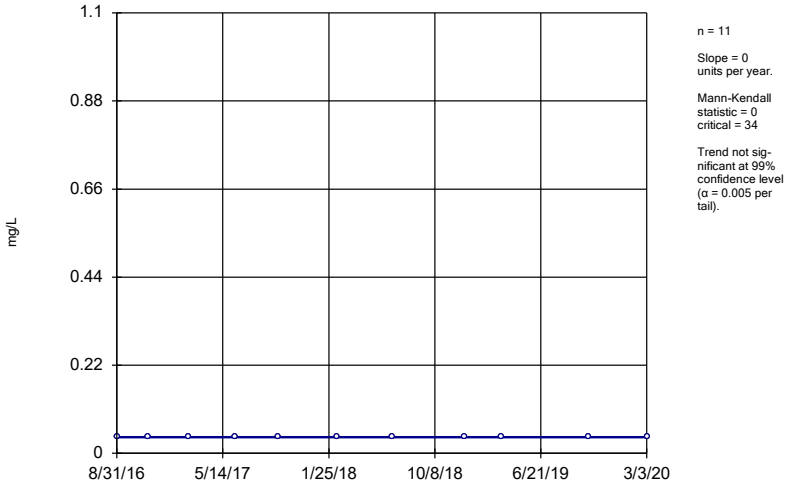
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)

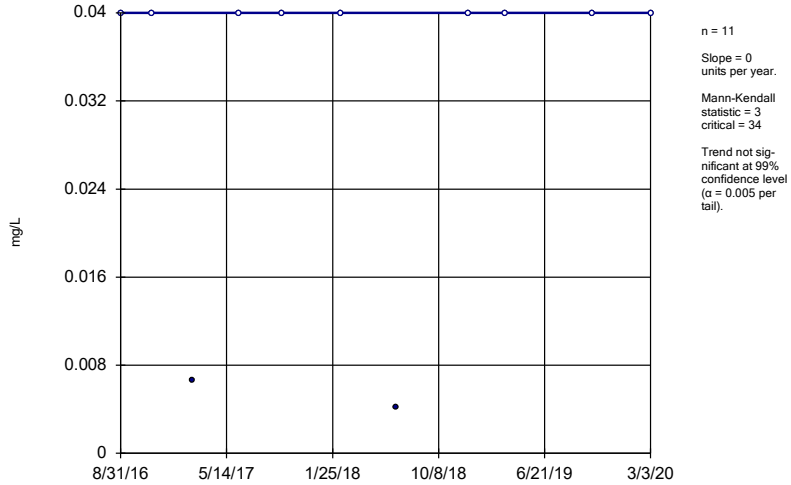


Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)

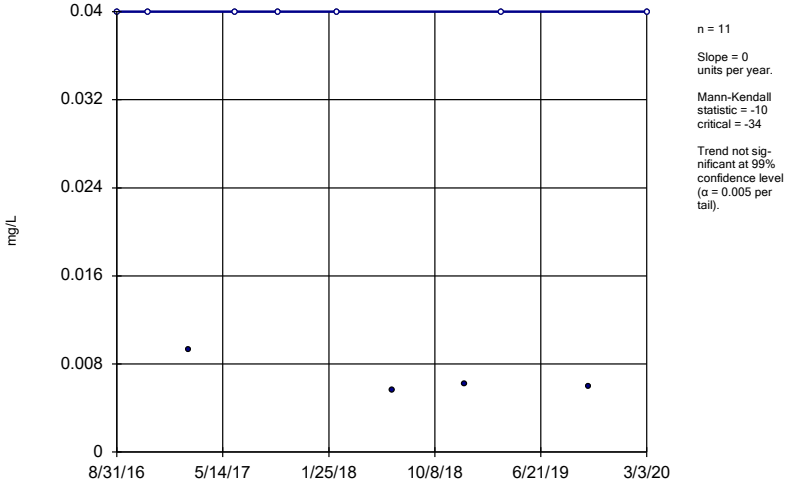


Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)

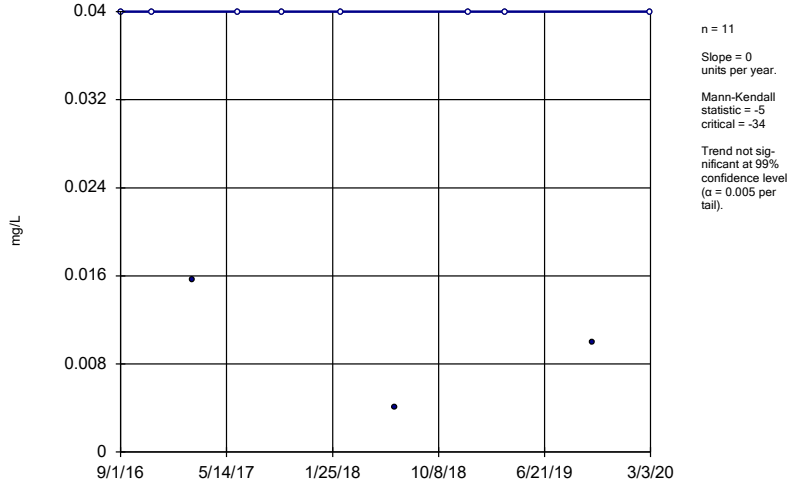


Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

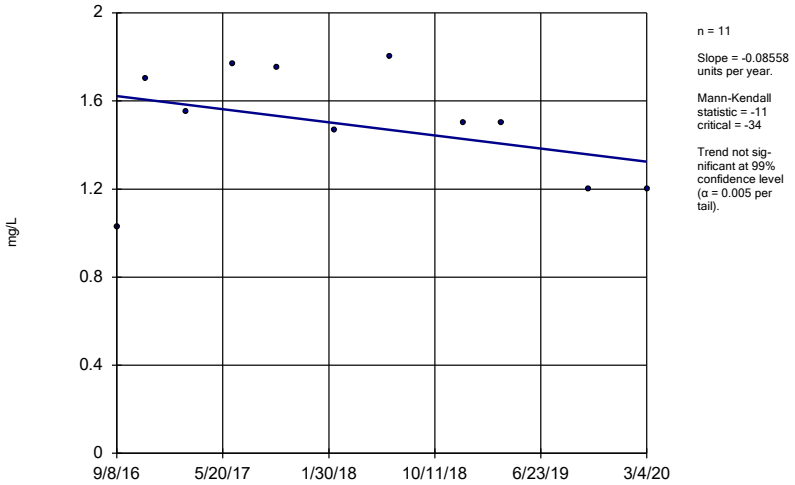
BRGWA-6S (bg)



Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -0.08558 units per year.

Mann-Kendall statistic = -11
critical = -34

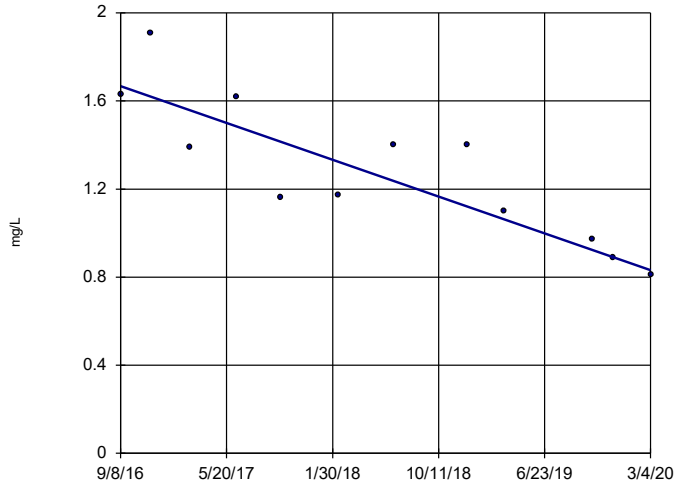
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 12

Slope = -0.2397 units per year.

Mann-Kendall statistic = -47
critical = -38

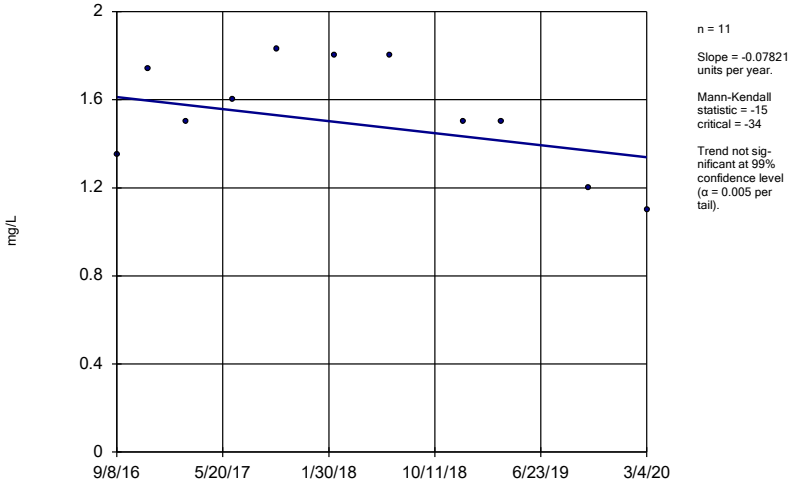
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -0.07821 units per year.

Mann-Kendall statistic = -15
critical = -34

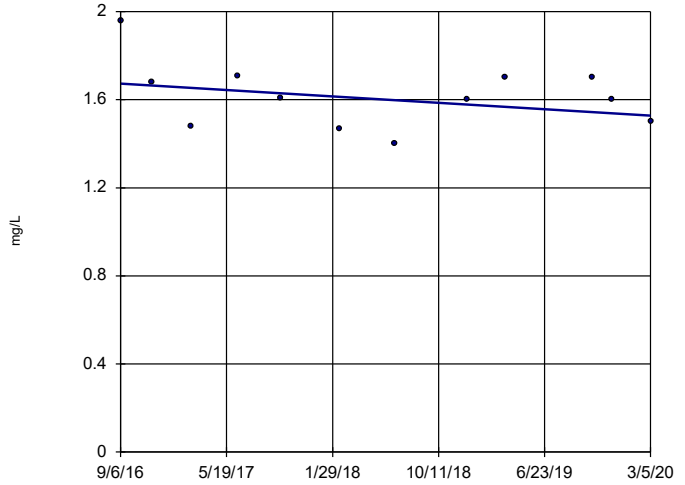
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 12

Slope = -0.04152 units per year.

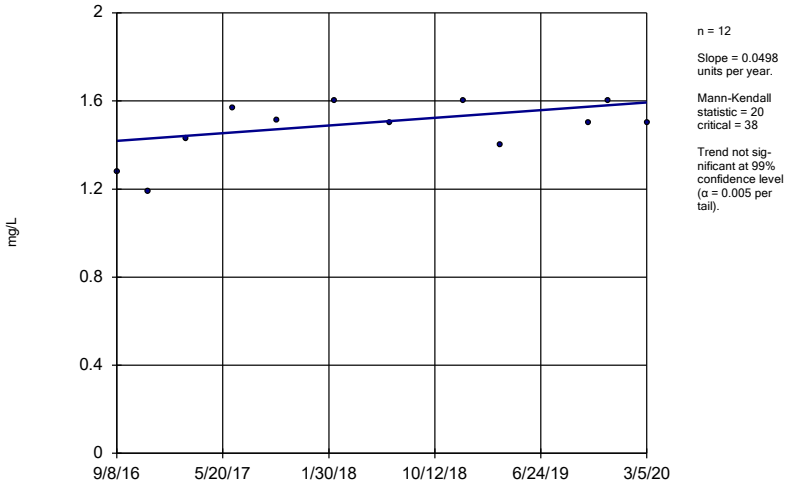
Mann-Kendall statistic = -16
critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-32S



n = 12

Slope = 0.0498 units per year.

Mann-Kendall statistic = 20 critical = 38

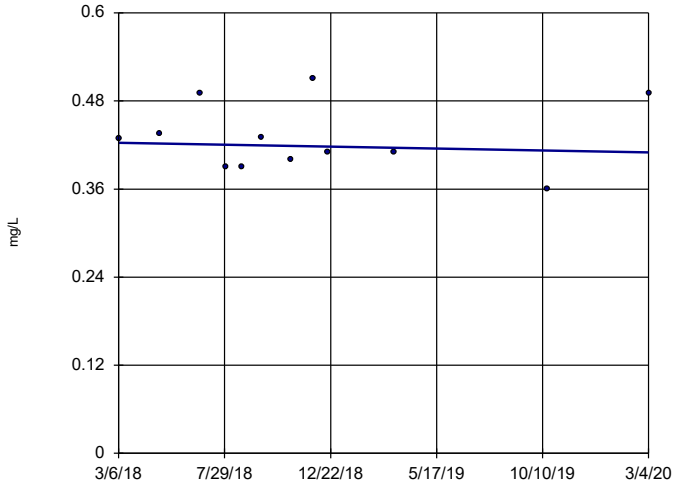
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:07 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 12

Slope = -0.006472 units per year.

Mann-Kendall statistic = -3 critical = -38

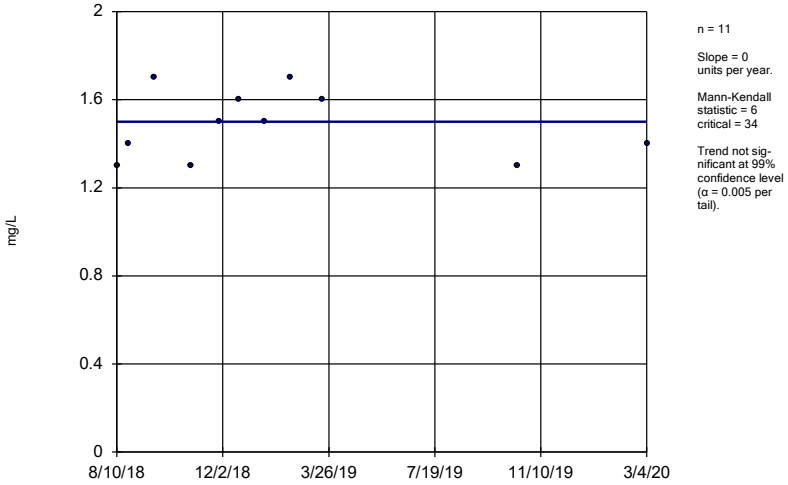
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 6 critical = 34

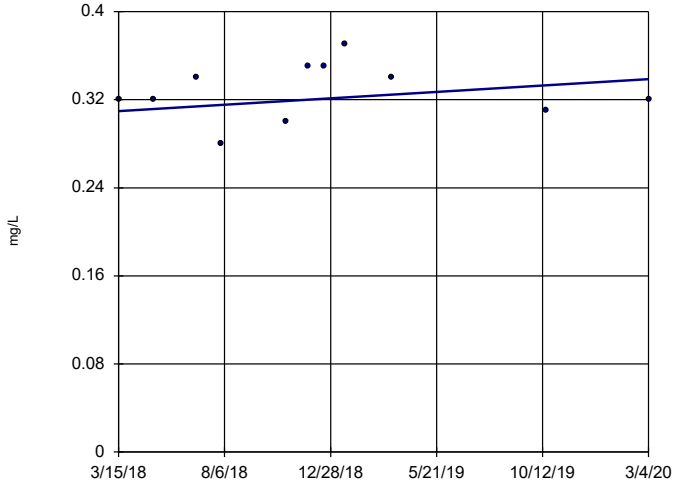
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 11

Slope = 0.01484 units per year.

Mann-Kendall statistic = 8 critical = 34

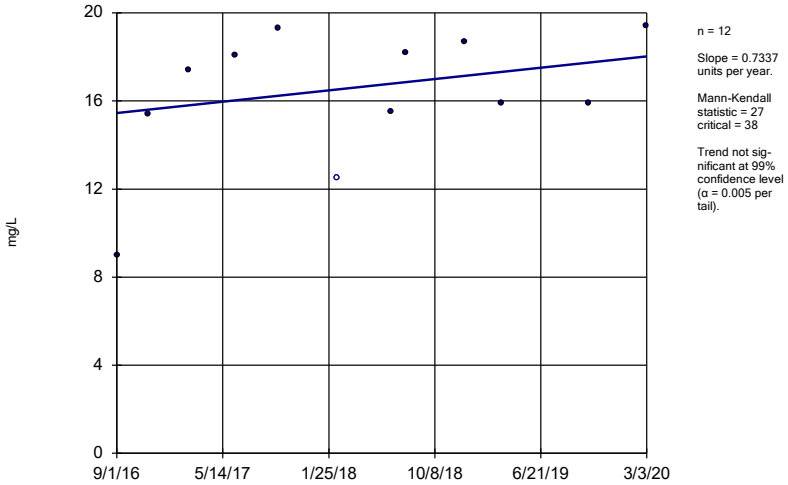
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12I (bg)



n = 12

Slope = 0.7337 units per year.

Mann-Kendall statistic = 27 critical = 38

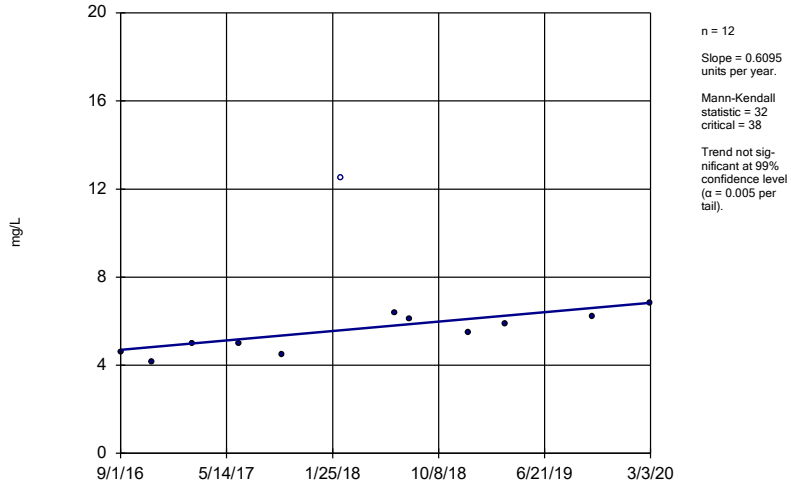
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 12

Slope = 0.6095 units per year.

Mann-Kendall statistic = 32 critical = 38

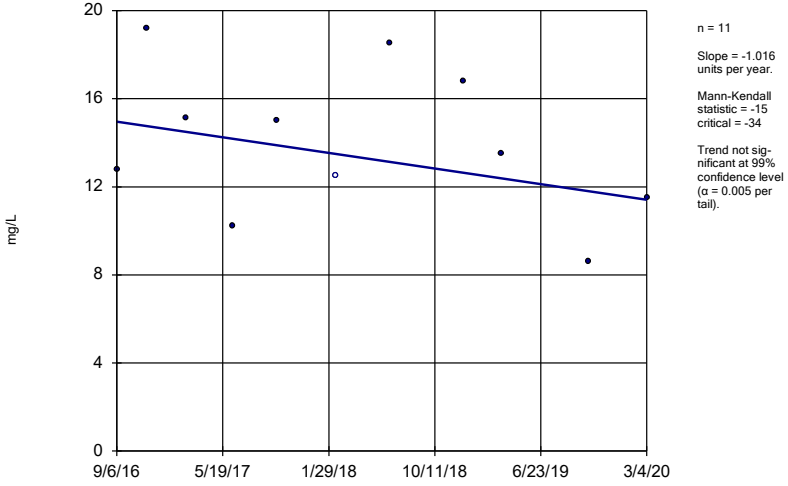
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -1.016 units per year.

Mann-Kendall statistic = -15 critical = -34

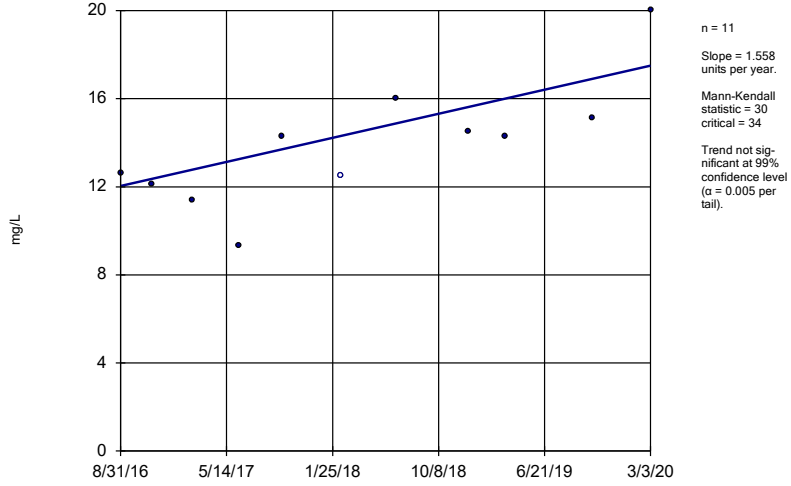
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = 1.558 units per year.

Mann-Kendall statistic = 30 critical = 34

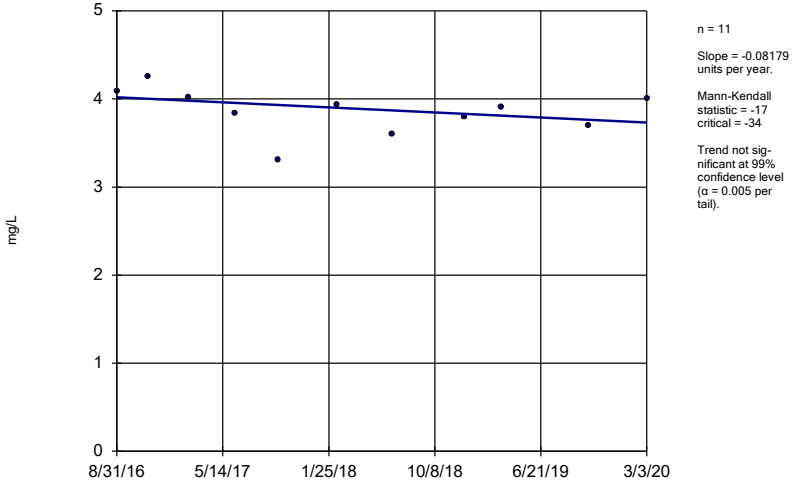
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = -0.08179 units per year.

Mann-Kendall statistic = -17 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

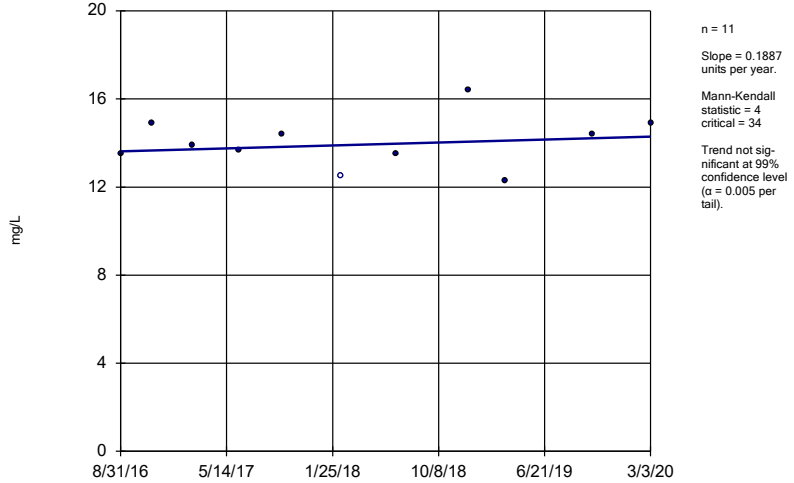
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = 0.1887 units per year.

Mann-Kendall statistic = 4 critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

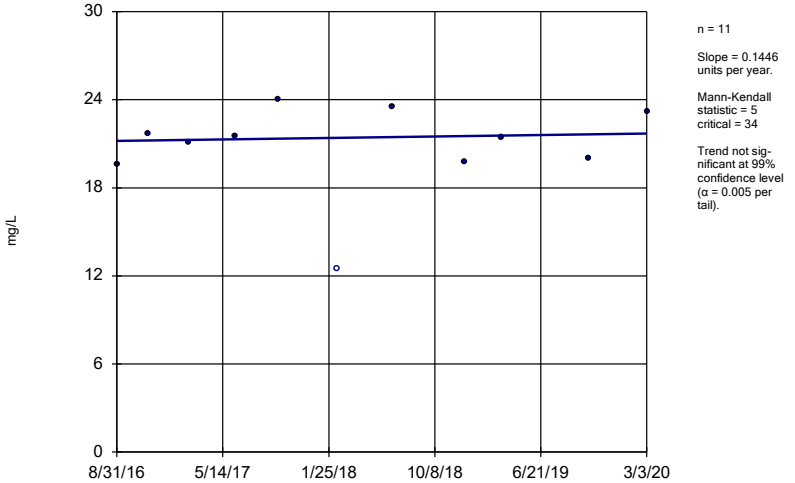
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = 0.1446 units per year.

Mann-Kendall statistic = 5 critical = 34

Trend not significant at 99% confidence level (α = 0.005 per tail).

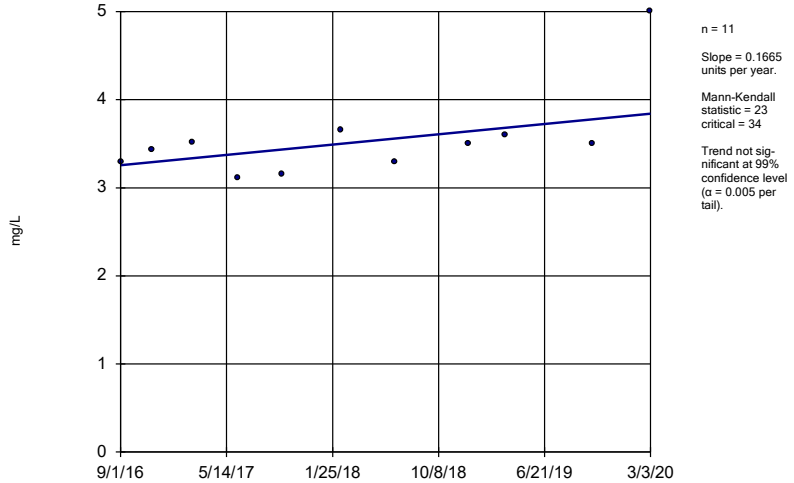
Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = 0.1665 units per year.

Mann-Kendall statistic = 23 critical = 34

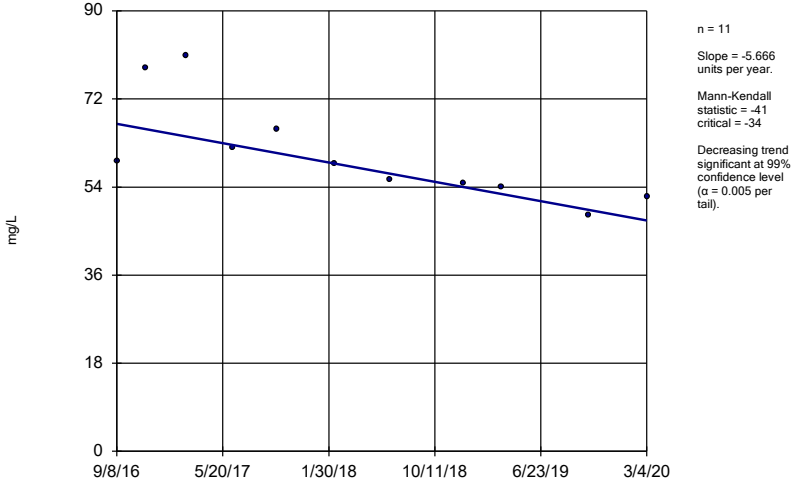
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -5.666 units per year.

Mann-Kendall statistic = -41 critical = -34

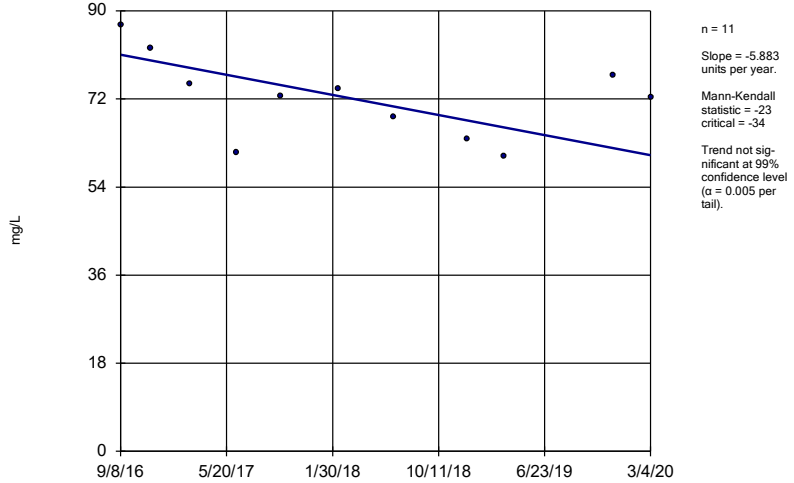
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -5.883 units per year.

Mann-Kendall statistic = -23 critical = -34

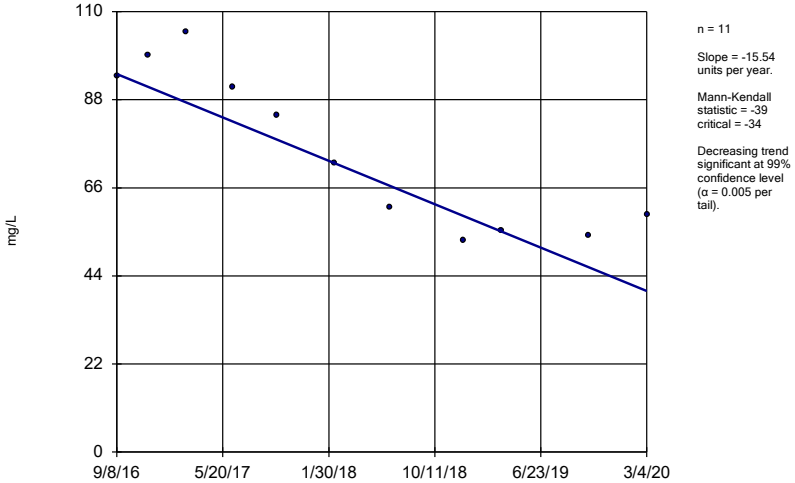
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -15.54 units per year.

Mann-Kendall statistic = -39 critical = -34

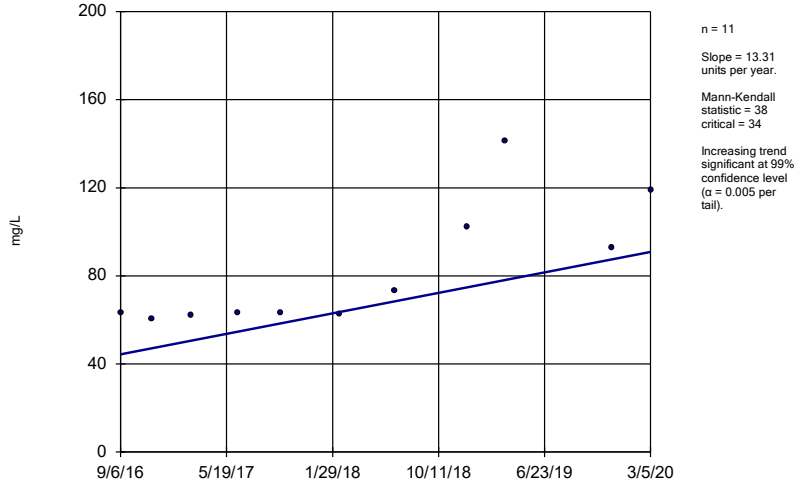
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = 13.31 units per year.

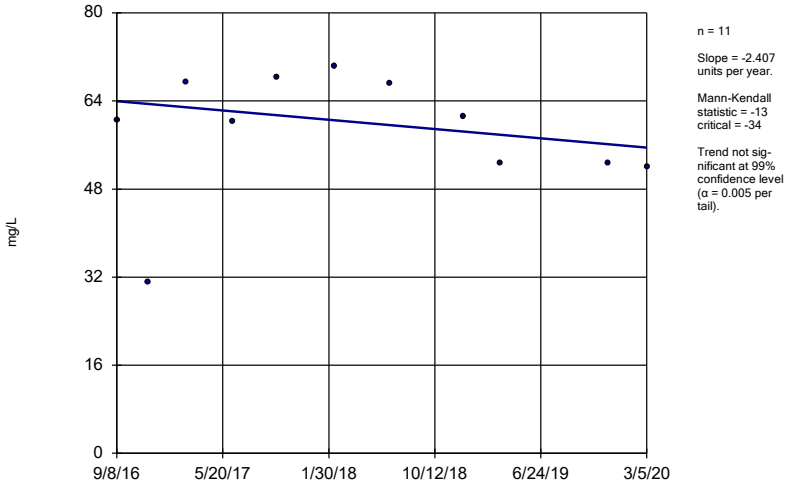
Mann-Kendall statistic = 38 critical = 34

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = -2.407 units per year.

Mann-Kendall statistic = -13
critical = -34

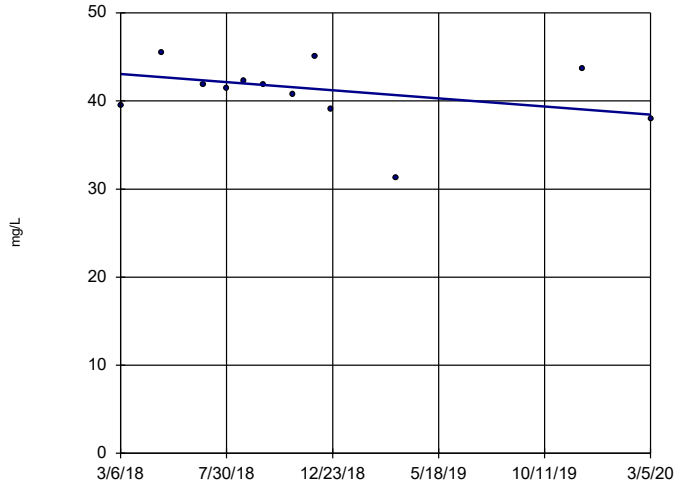
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 12

Slope = -2.312 units per year.

Mann-Kendall statistic = -17
critical = -38

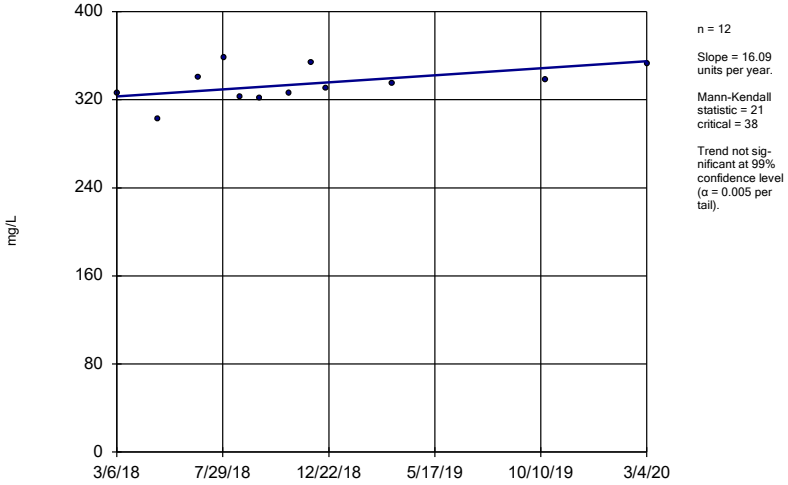
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-47



n = 12

Slope = 16.09 units per year.

Mann-Kendall statistic = 21
critical = 38

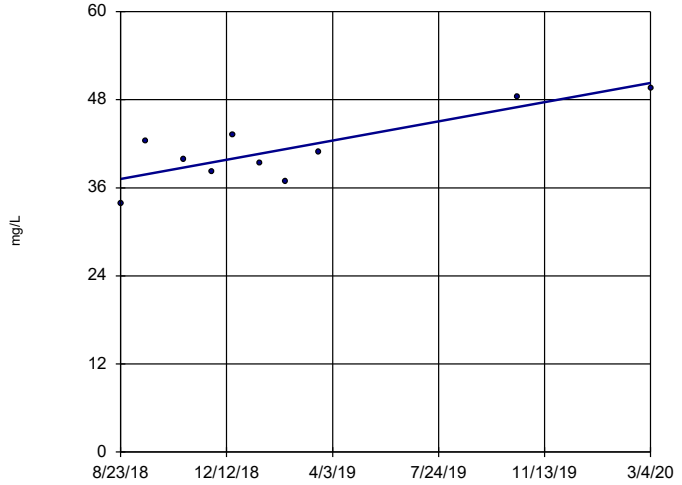
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 10

Slope = 8.536 units per year.

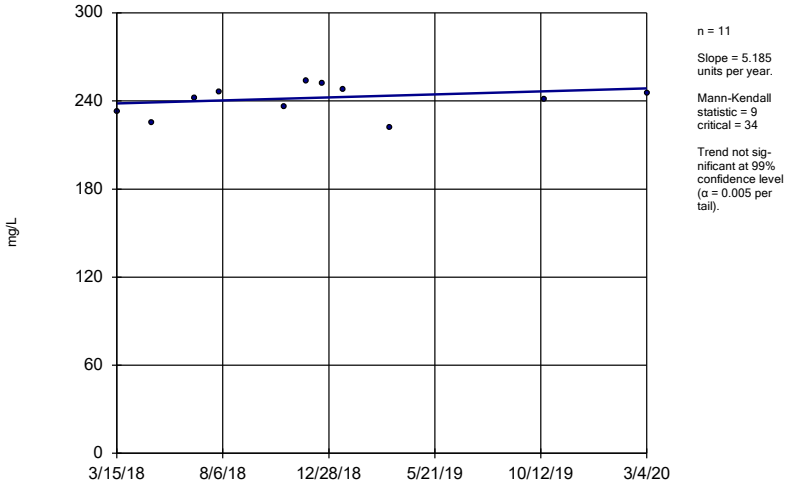
Mann-Kendall statistic = 19
critical = 30

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-50



n = 11

Slope = 5.185 units per year.

Mann-Kendall statistic = 9 critical = 34

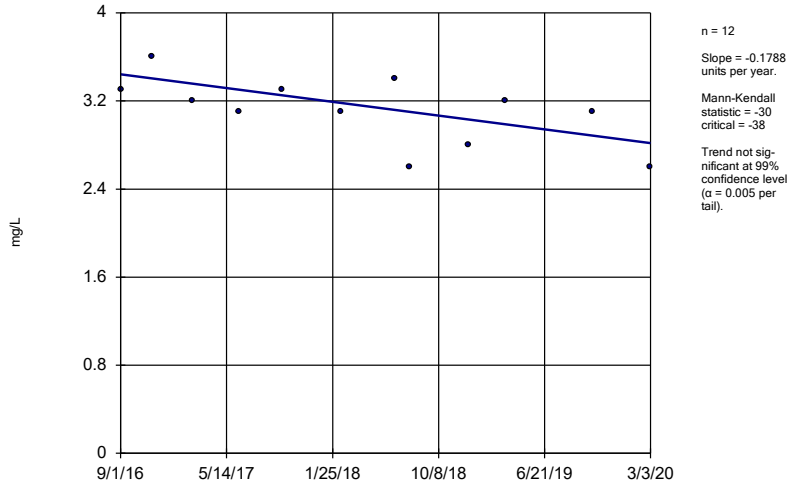
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 12

Slope = -0.1788 units per year.

Mann-Kendall statistic = -30 critical = -38

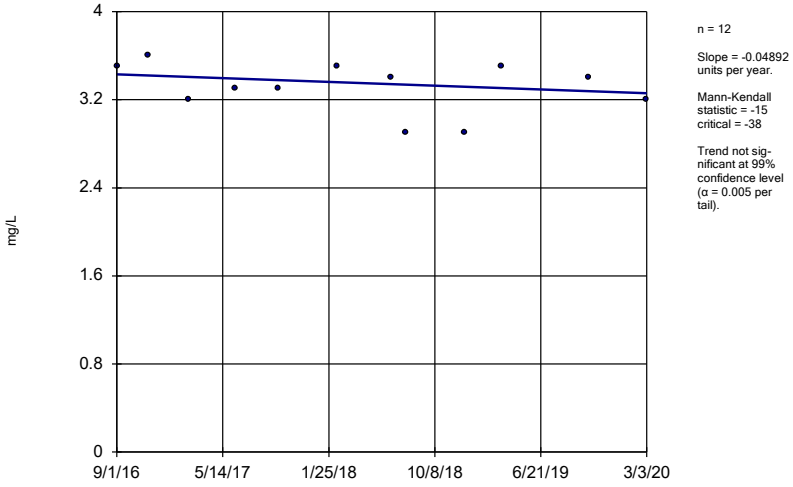
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 12

Slope = -0.04892 units per year.

Mann-Kendall statistic = -15 critical = -38

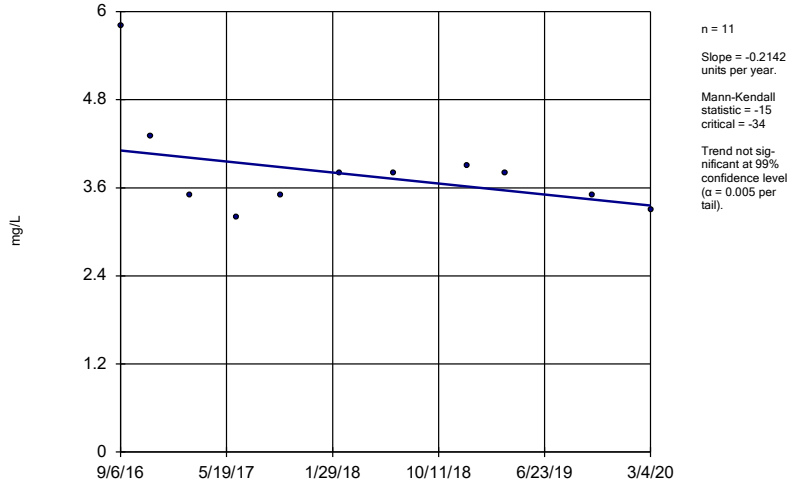
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -0.2142 units per year.

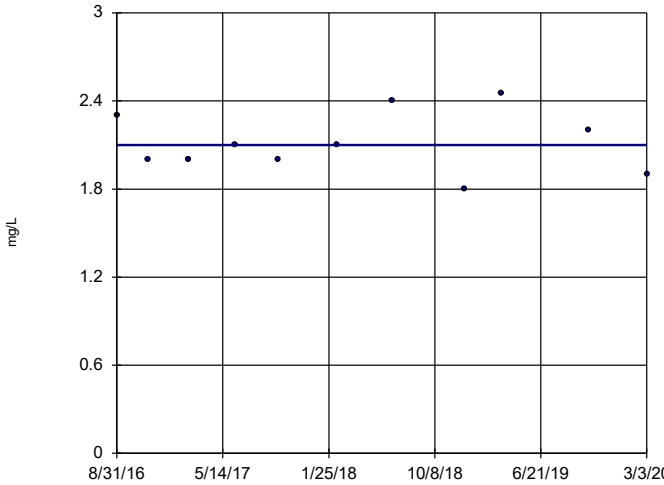
Mann-Kendall statistic = -15 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 1 critical = 34

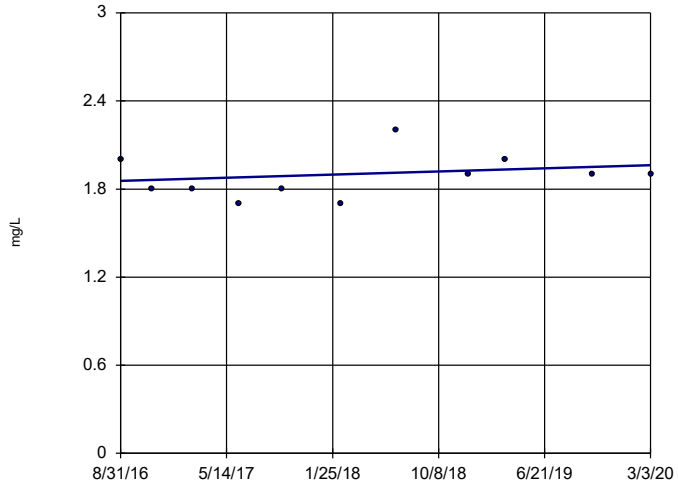
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = 0.03034 units per year.

Mann-Kendall statistic = 9 critical = 34

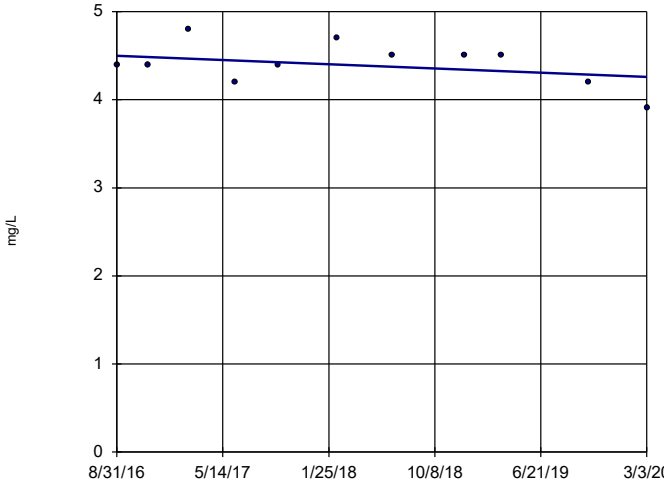
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = -0.06867 units per year.

Mann-Kendall statistic = -10 critical = -34

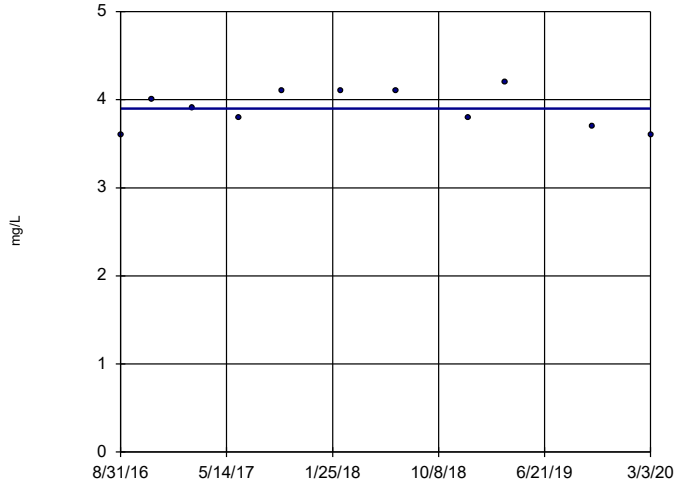
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = 0 units per year.

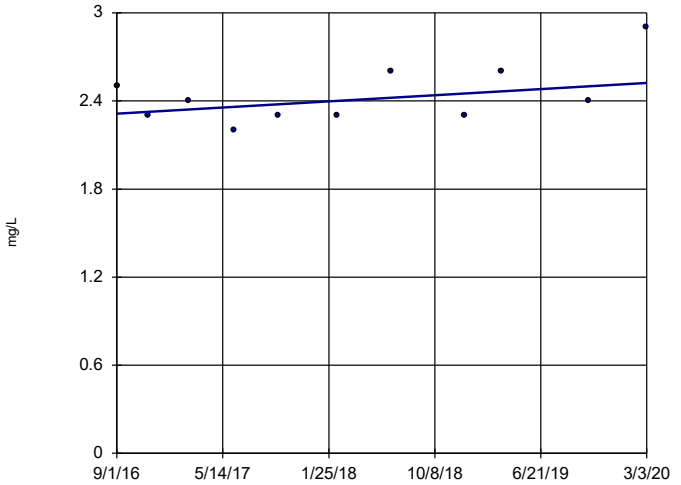
Mann-Kendall statistic = 0 critical = 34

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = 0.05993 units per year.

Mann-Kendall statistic = 17 critical = 34

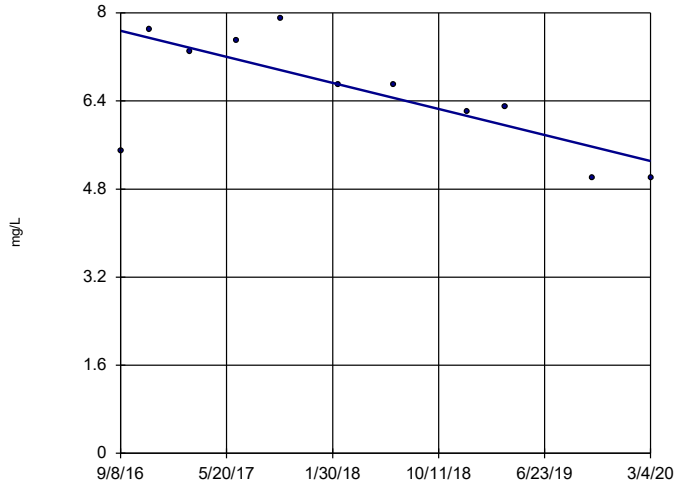
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -0.6791 units per year.

Mann-Kendall statistic = -27 critical = -34

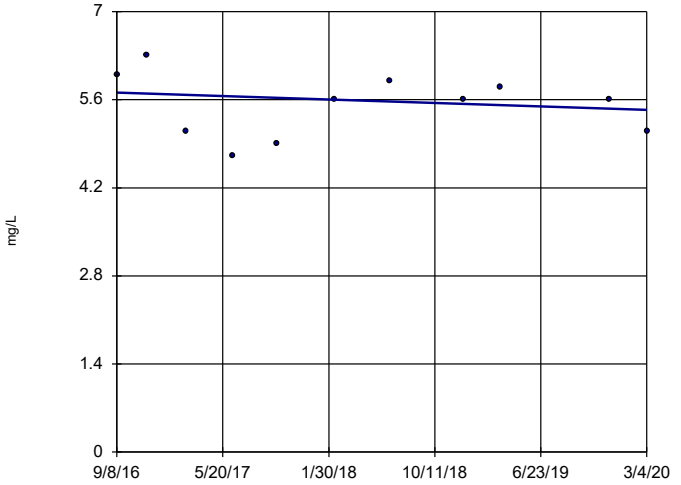
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -0.07918 units per year.

Mann-Kendall statistic = -7 critical = -34

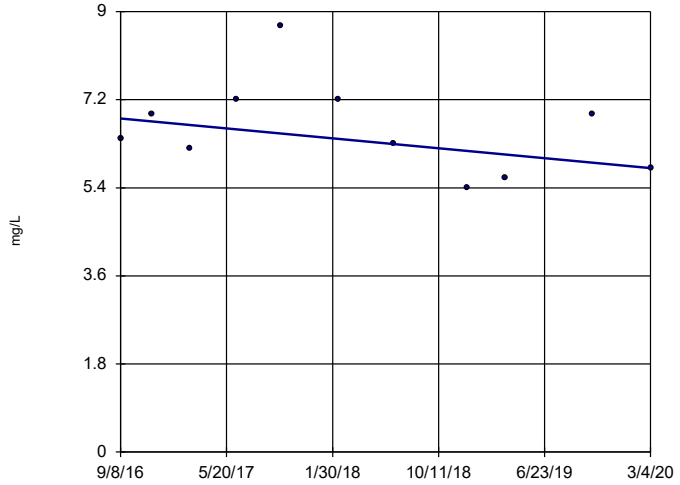
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -0.2897 units per year.

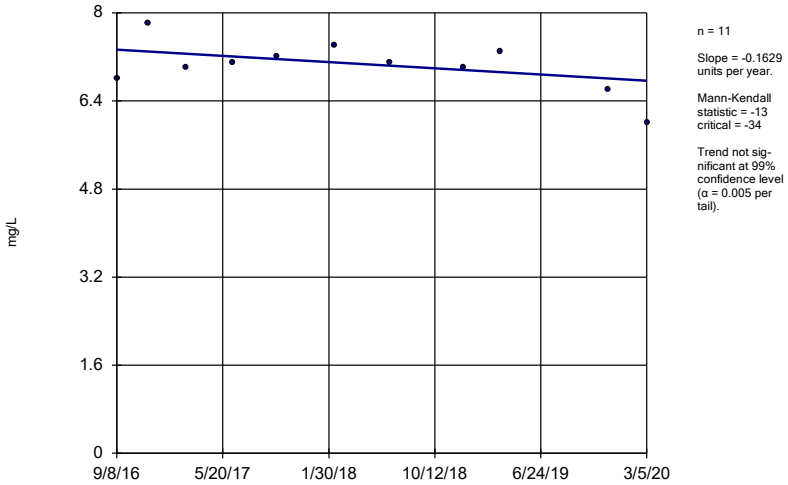
Mann-Kendall statistic = -13 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = -0.1629 units per year.

Mann-Kendall statistic = -13 critical = -34

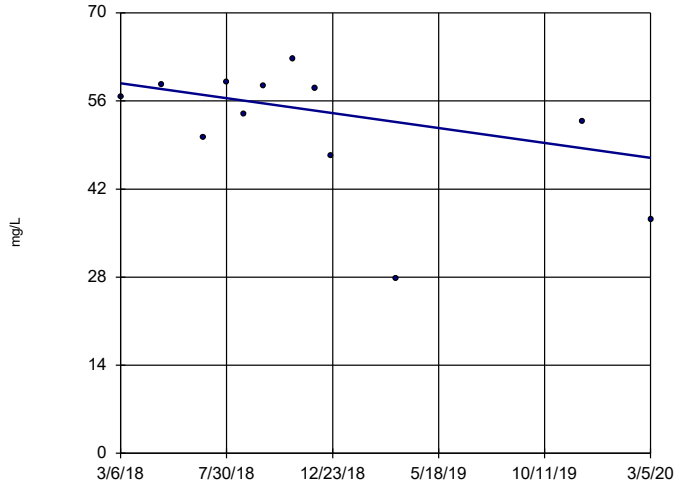
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 12

Slope = -5.92 units per year.

Mann-Kendall statistic = -24 critical = -38

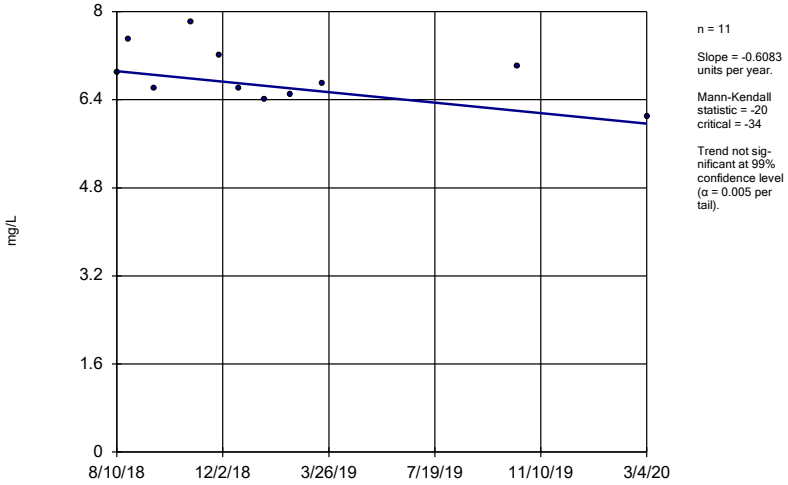
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 11

Slope = -0.6083 units per year.

Mann-Kendall statistic = -20 critical = -34

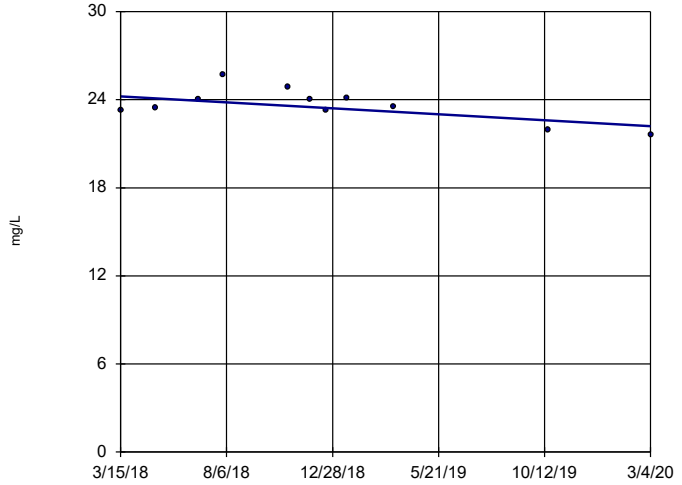
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 11

Slope = -1.027 units per year.

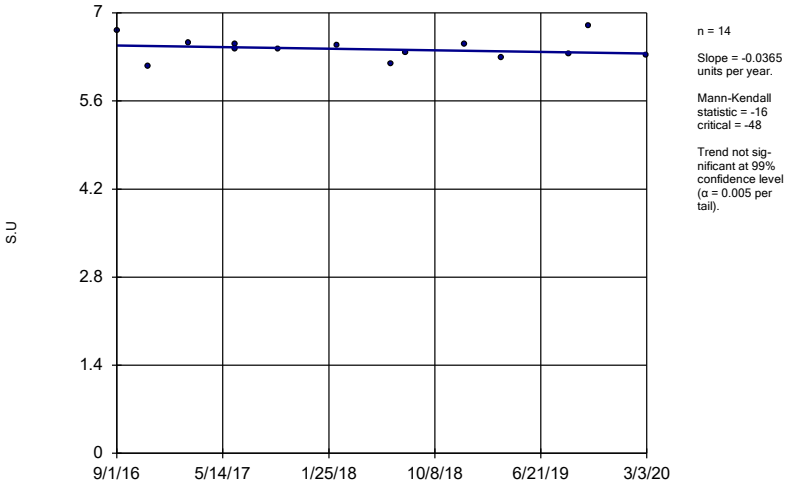
Mann-Kendall statistic = -15 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-12I (bg)



n = 14

Slope = -0.0365 units per year.

Mann-Kendall statistic = -16 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

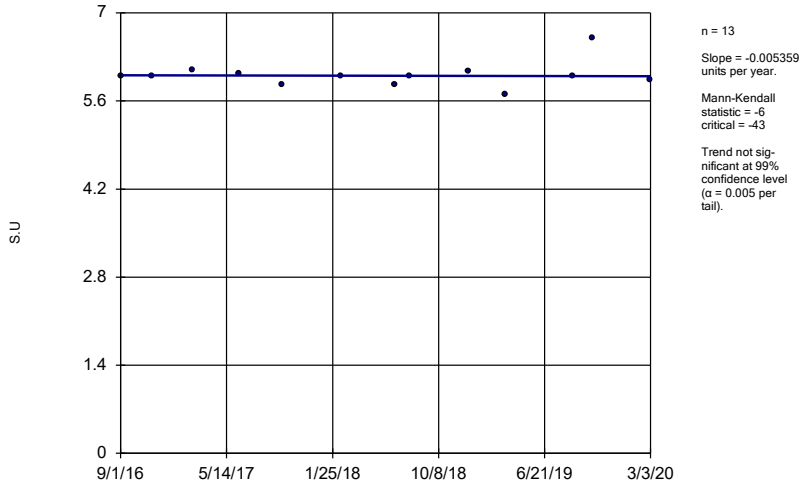
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12S (bg)



n = 13

Slope = -0.005359 units per year.

Mann-Kendall statistic = -6 critical = -43

Trend not significant at 99% confidence level (α = 0.005 per tail).

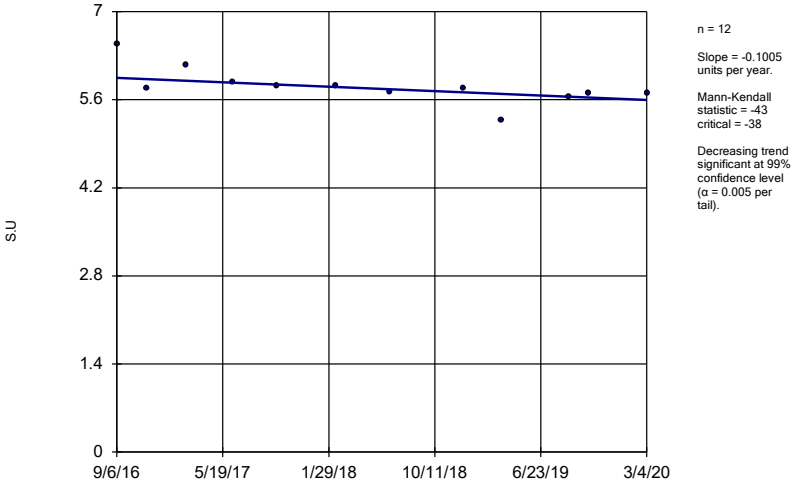
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 12

Slope = -0.1005 units per year.

Mann-Kendall statistic = -43 critical = -38

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

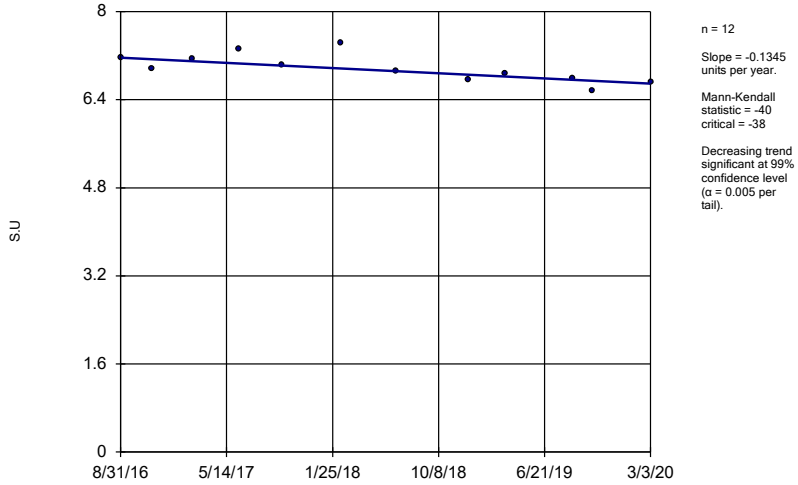
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 12

Slope = -0.1345 units per year.

Mann-Kendall statistic = -40 critical = -38

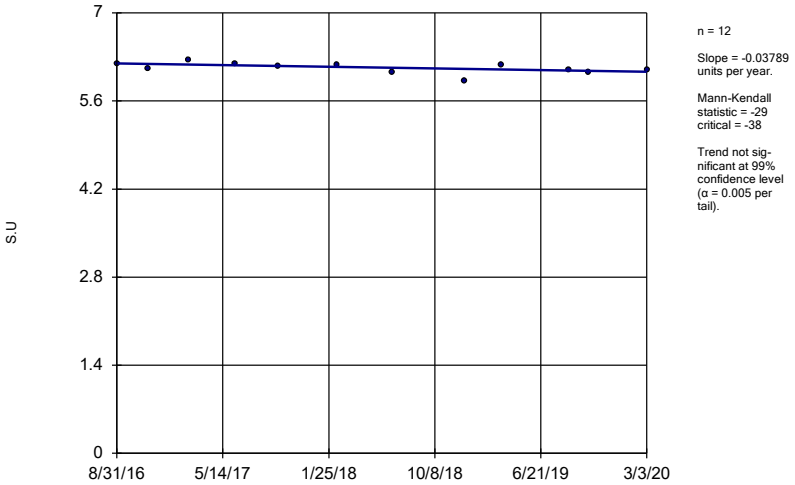
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-2S (bg)



n = 12

Slope = -0.03789 units per year.

Mann-Kendall statistic = -29 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

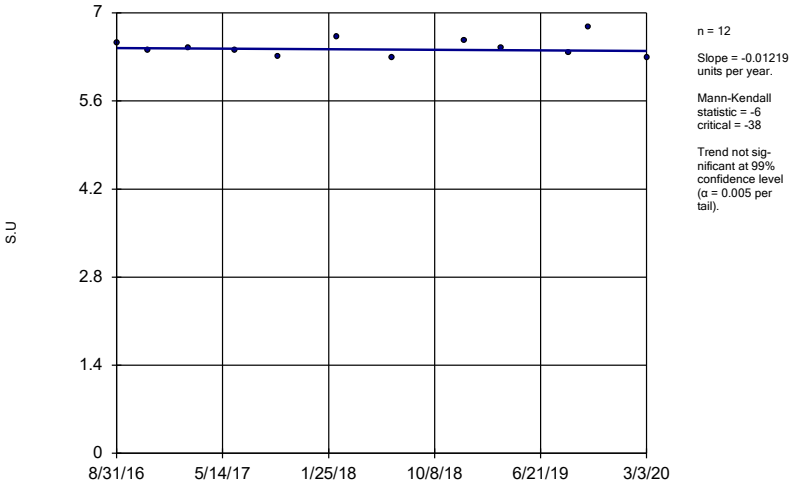
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 12

Slope = -0.01219 units per year.

Mann-Kendall statistic = -6 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

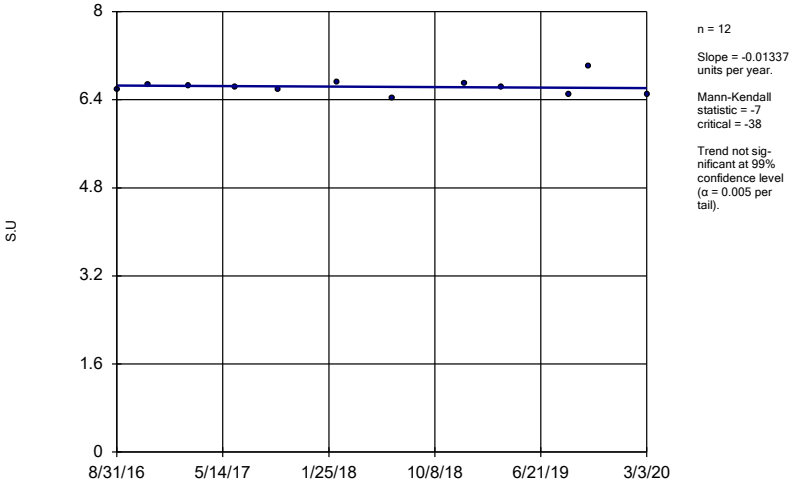
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 12

Slope = -0.01337 units per year.

Mann-Kendall statistic = -7 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

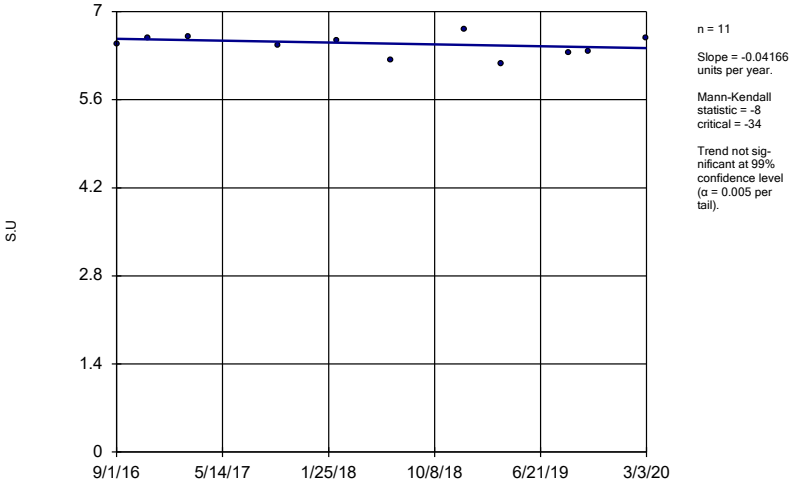
Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = -0.04166 units per year.

Mann-Kendall statistic = -8 critical = -34

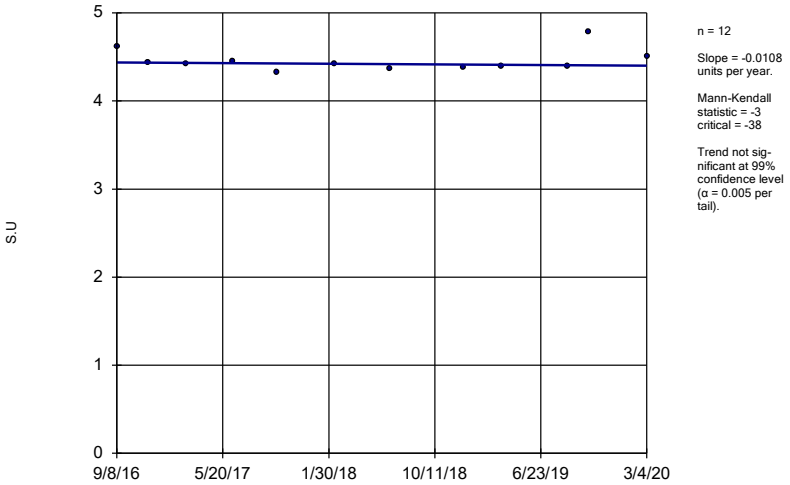
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-29I



n = 12

Slope = -0.0108 units per year.

Mann-Kendall statistic = -3 critical = -38

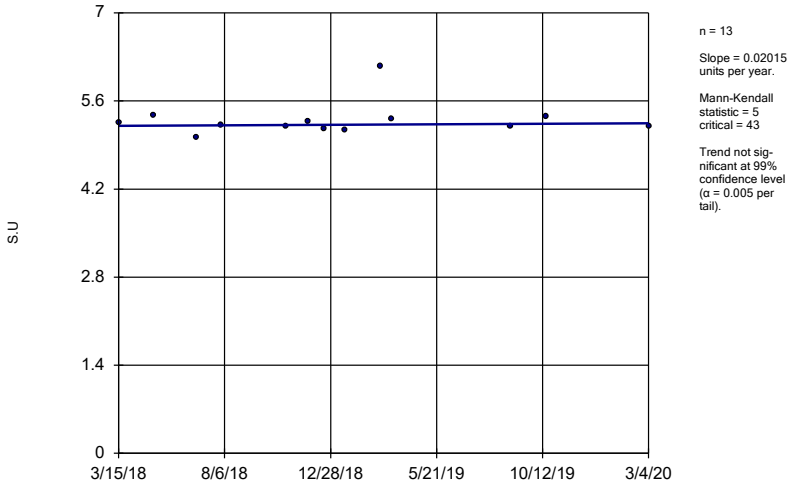
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 13

Slope = 0.02015 units per year.

Mann-Kendall statistic = 5 critical = 43

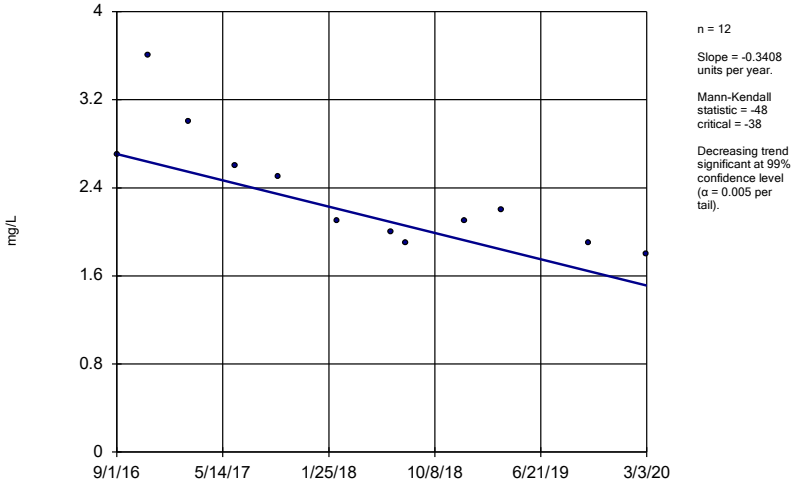
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 12

Slope = -0.3408 units per year.

Mann-Kendall statistic = -48 critical = -38

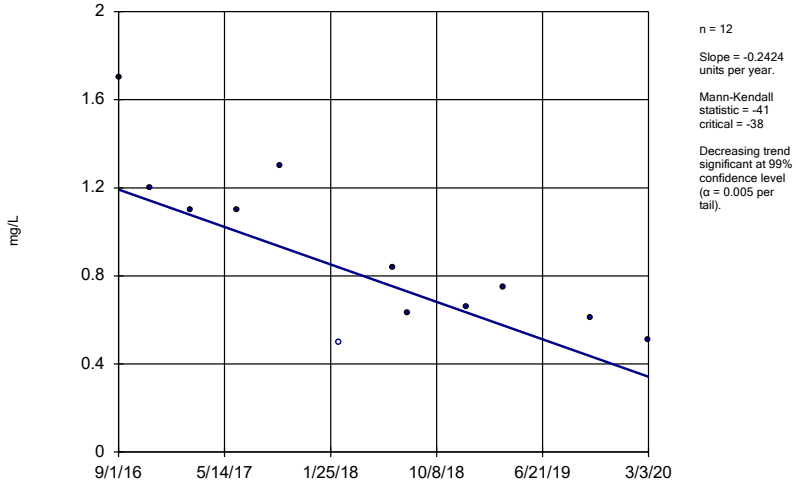
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-12S (bg)



n = 12

Slope = -0.2424 units per year.

Mann-Kendall statistic = -41 critical = -38

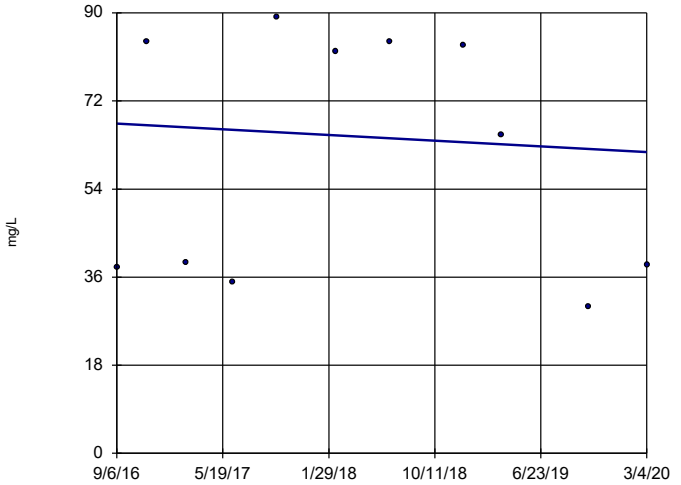
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -1.669 units per year.

Mann-Kendall statistic = -7
critical = -34

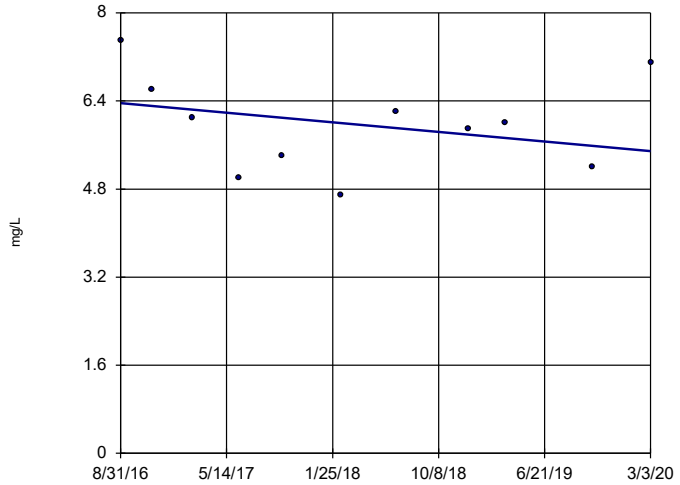
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = -0.2487 units per year.

Mann-Kendall statistic = -9
critical = -34

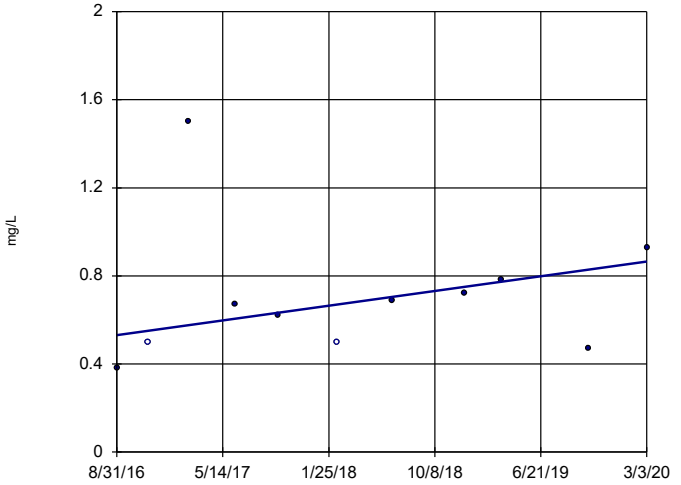
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = 0.09547 units per year.

Mann-Kendall statistic = 18
critical = 34

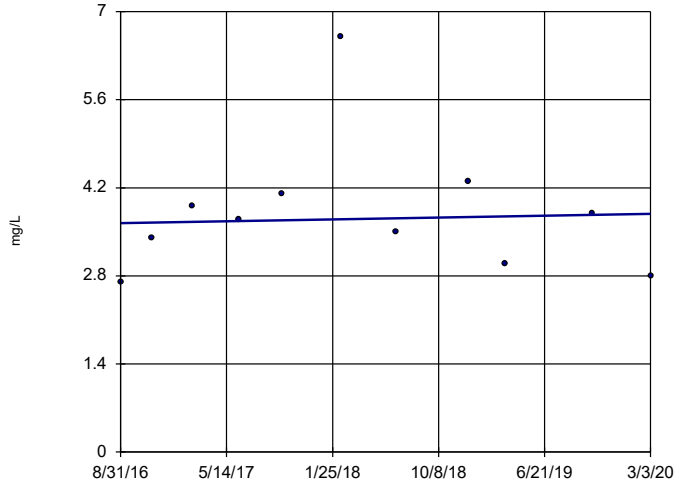
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = 0.04269 units per year.

Mann-Kendall statistic = 3
critical = 34

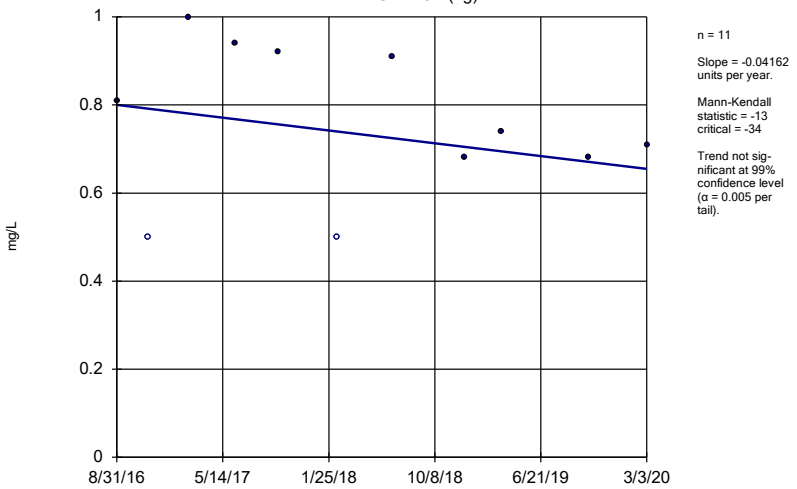
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = -0.04162 units per year.

Mann-Kendall statistic = -13
critical = -34

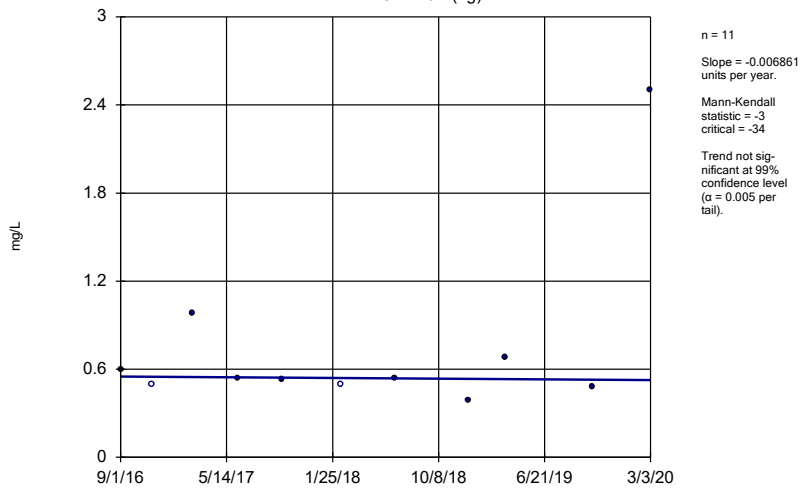
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = -0.006861 units per year.

Mann-Kendall statistic = -3
critical = -34

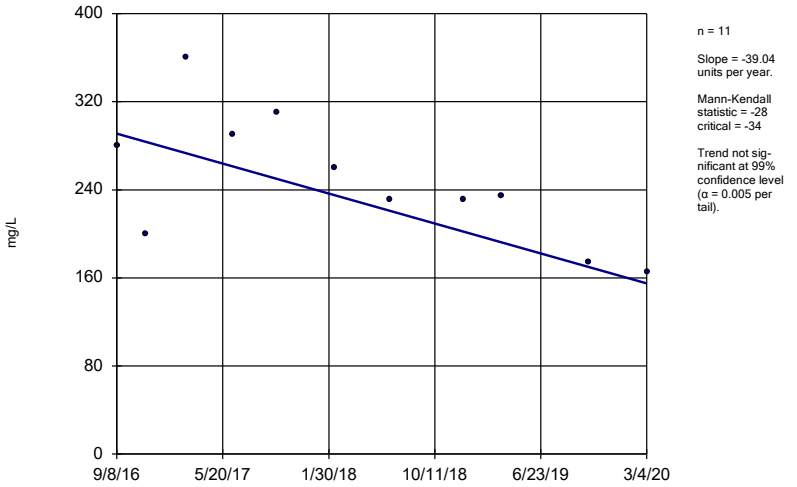
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -39.04 units per year.

Mann-Kendall statistic = -28
critical = -34

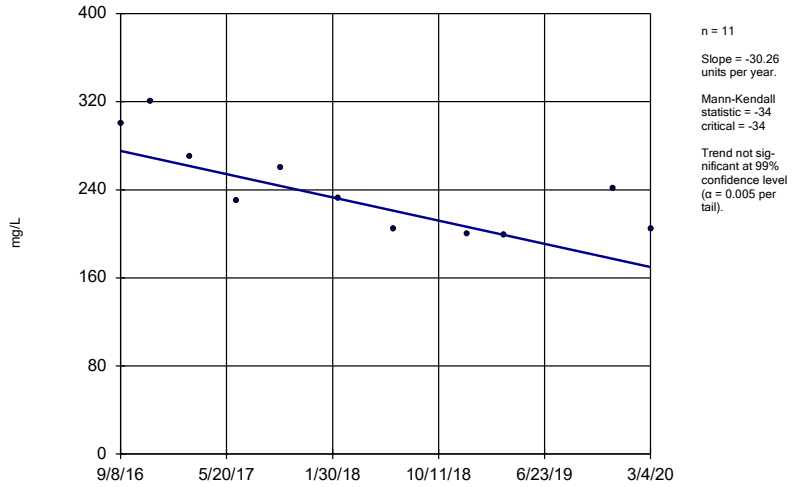
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -30.26 units per year.

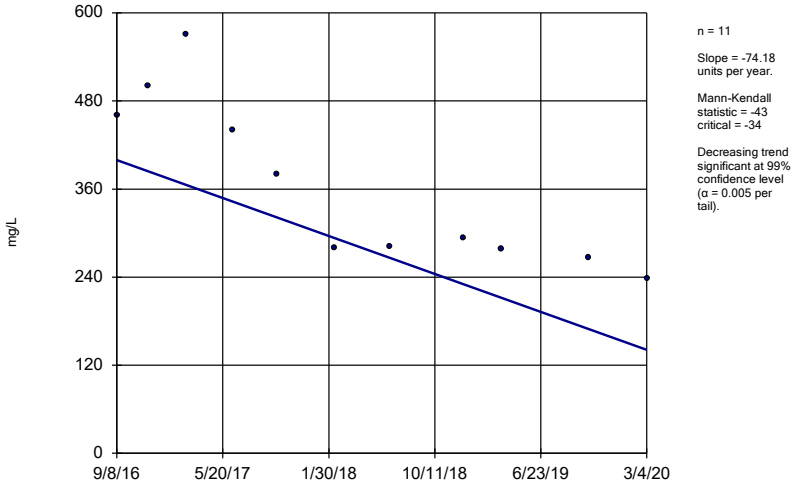
Mann-Kendall statistic = -34
critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -74.18 units per year.

Mann-Kendall statistic = -43 critical = -34

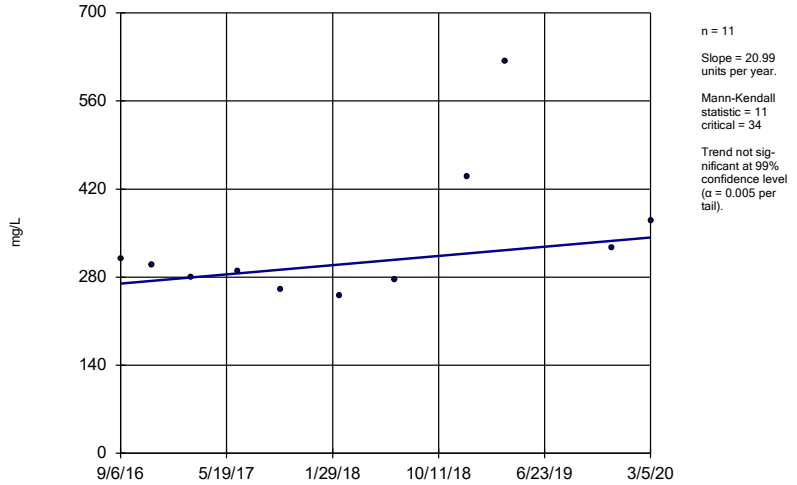
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = 20.99 units per year.

Mann-Kendall statistic = 11 critical = 34

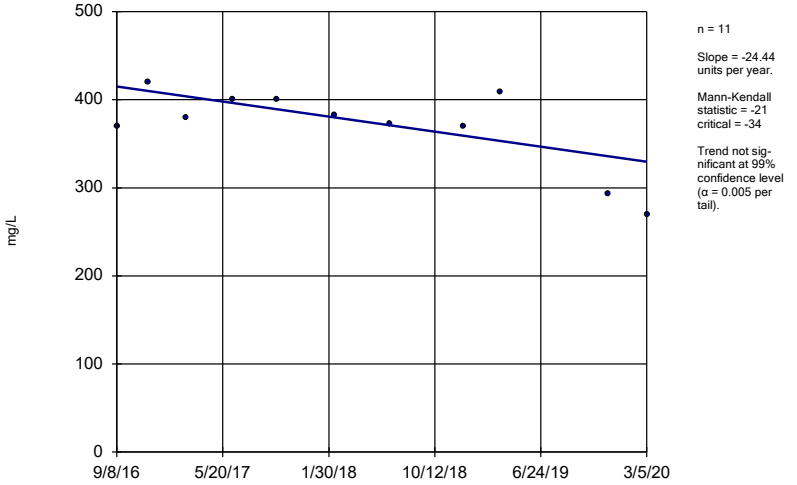
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = -24.44 units per year.

Mann-Kendall statistic = -21 critical = -34

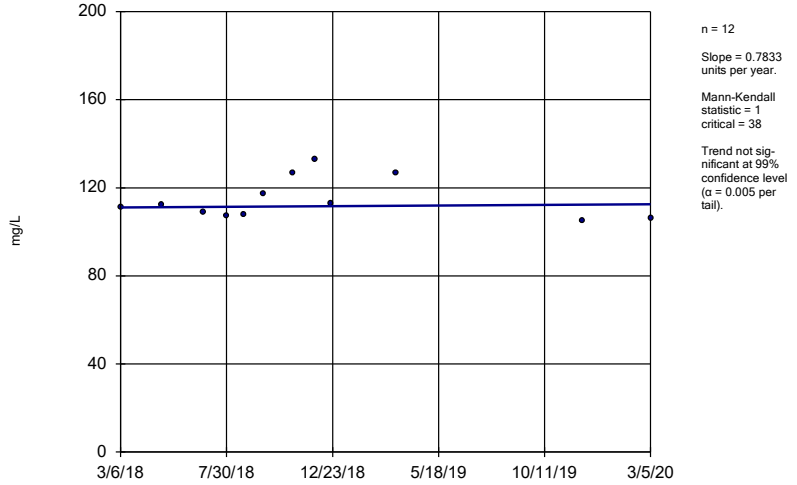
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-45



n = 12

Slope = 0.7833 units per year.

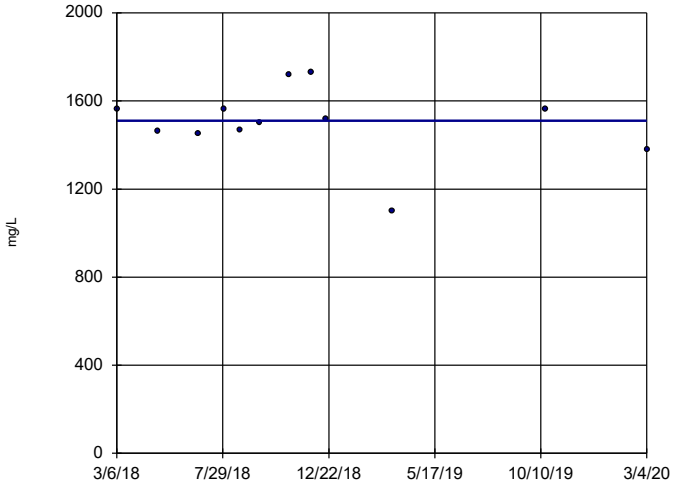
Mann-Kendall statistic = 1 critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-47



n = 12

Slope = 0 units per year.

Mann-Kendall statistic = -1 critical = -38

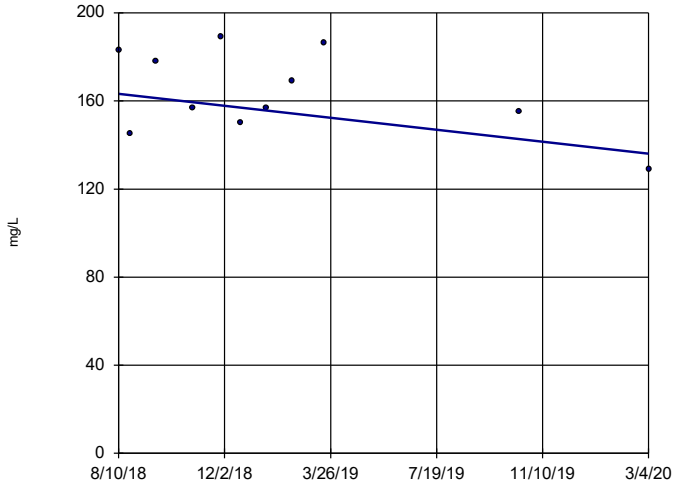
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 11

Slope = -17.42 units per year.

Mann-Kendall statistic = -10 critical = -34

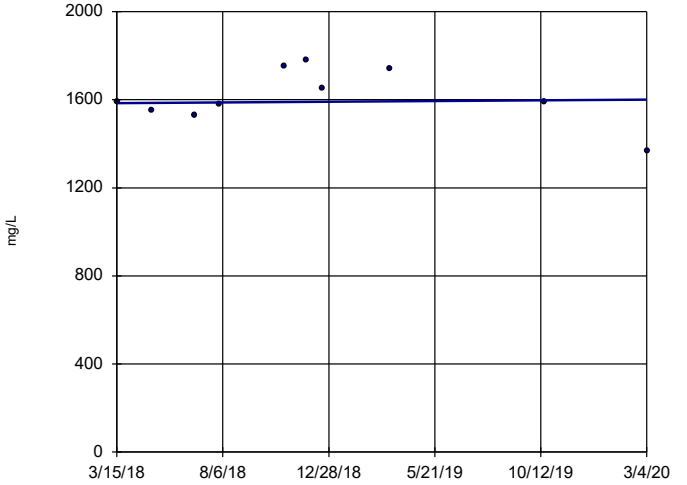
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 10

Slope = 8.277 units per year.

Mann-Kendall statistic = 2 critical = 30

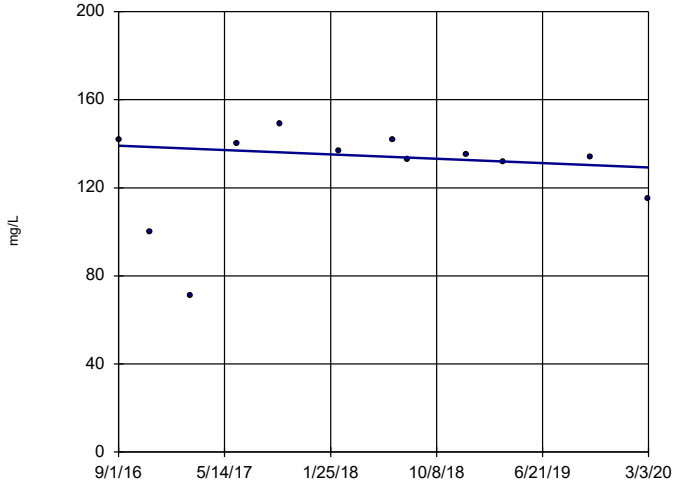
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate as SO4 Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Trend Tests
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-12I (bg)



n = 12

Slope = -2.808 units per year.

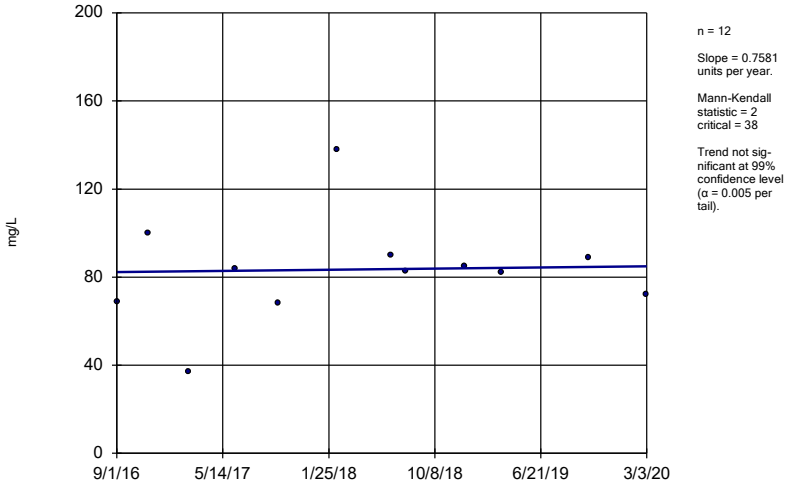
Mann-Kendall statistic = -15 critical = -38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWA-12S (bg)



n = 12

Slope = 0.7581 units per year.

Mann-Kendall statistic = 2
critical = 38

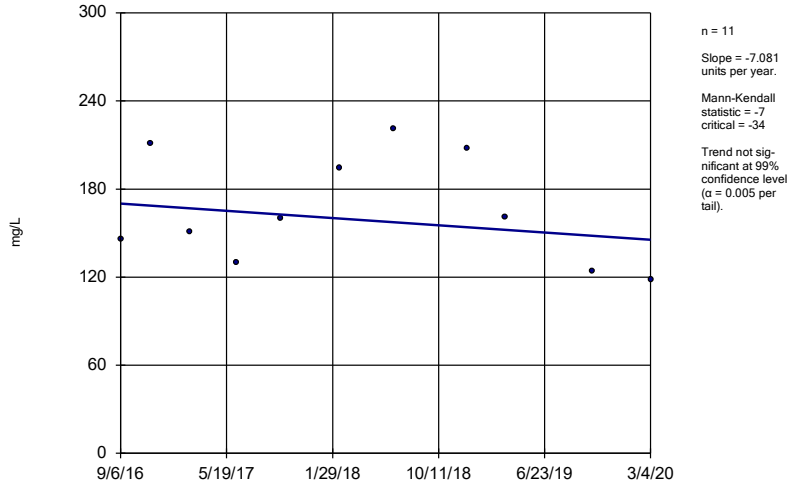
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-23S (bg)



n = 11

Slope = -7.081 units per year.

Mann-Kendall statistic = -7
critical = -34

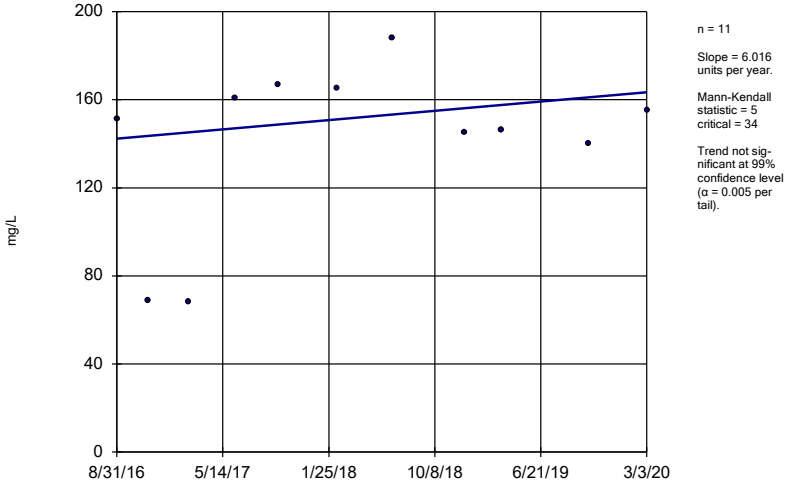
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-2I (bg)



n = 11

Slope = 6.016 units per year.

Mann-Kendall statistic = 5
critical = 34

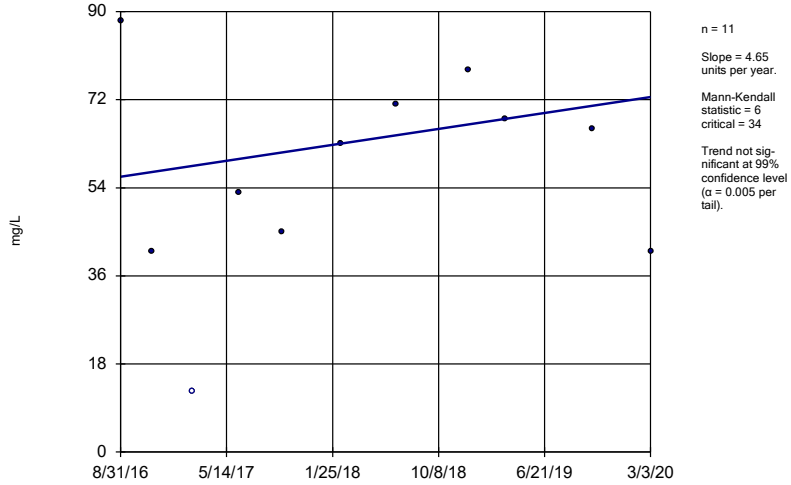
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-2S (bg)



n = 11

Slope = 4.65 units per year.

Mann-Kendall statistic = 6
critical = 34

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

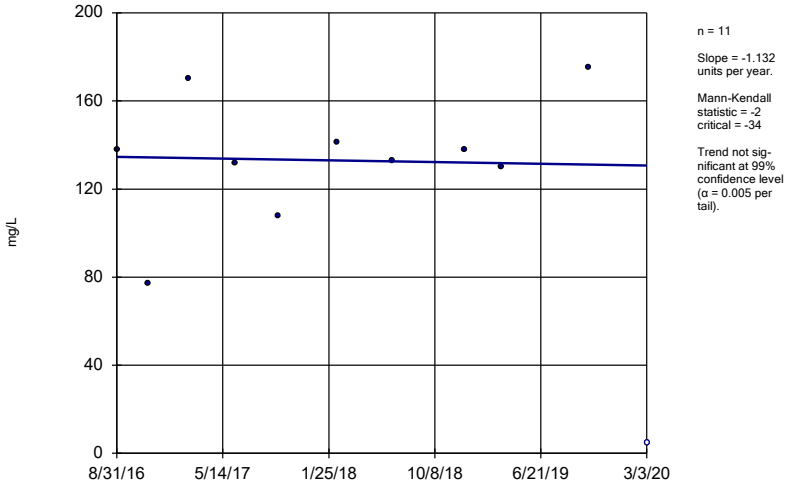
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

BRGWA-5I (bg)



n = 11

Slope = -1.132 units per year.

Mann-Kendall statistic = -2 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

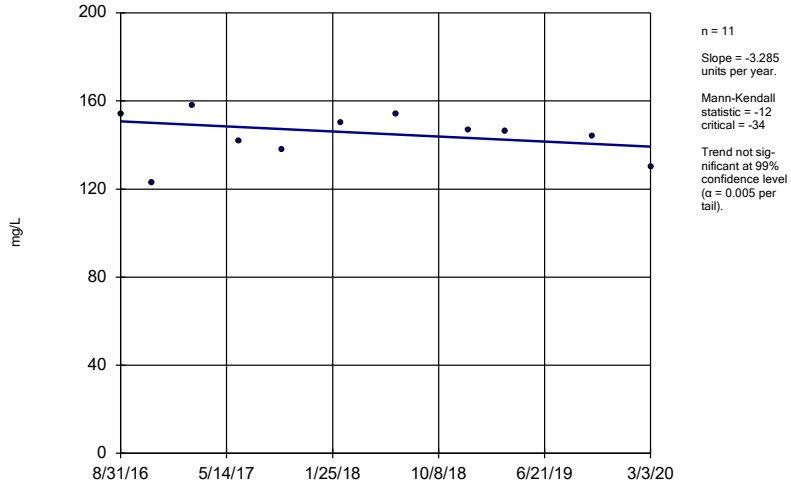
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-5S (bg)



n = 11

Slope = -3.285 units per year.

Mann-Kendall statistic = -12 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

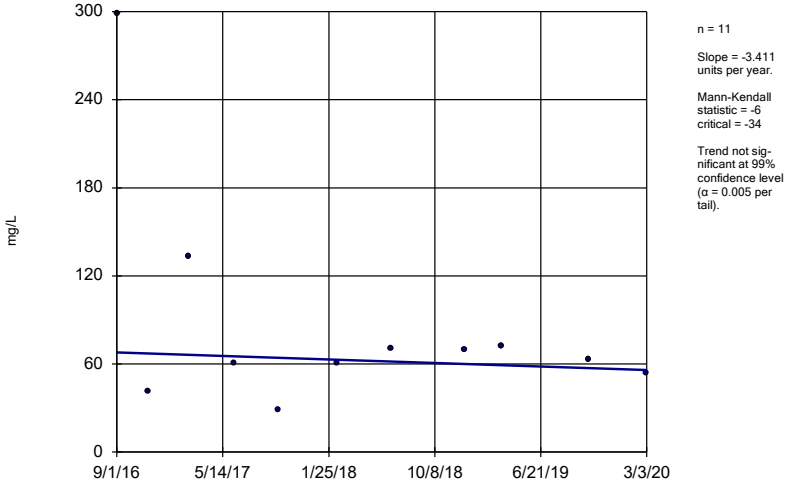
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWA-6S (bg)



n = 11

Slope = -3.411 units per year.

Mann-Kendall statistic = -6 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

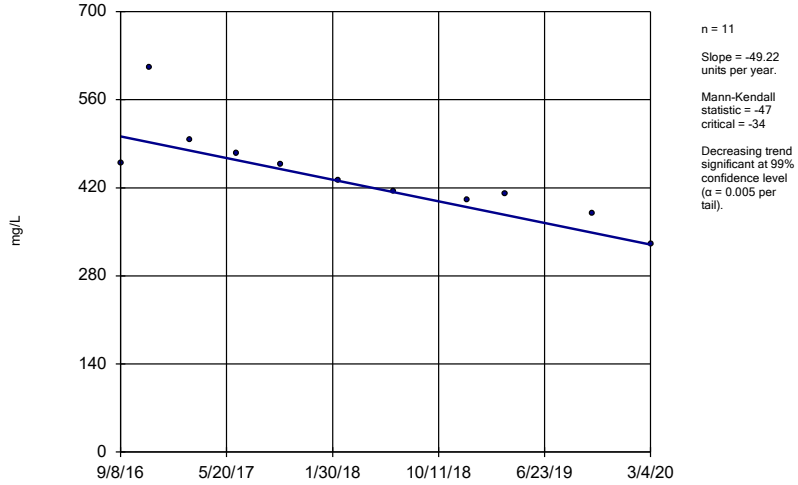
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-25I



n = 11

Slope = -49.22 units per year.

Mann-Kendall statistic = -47 critical = -34

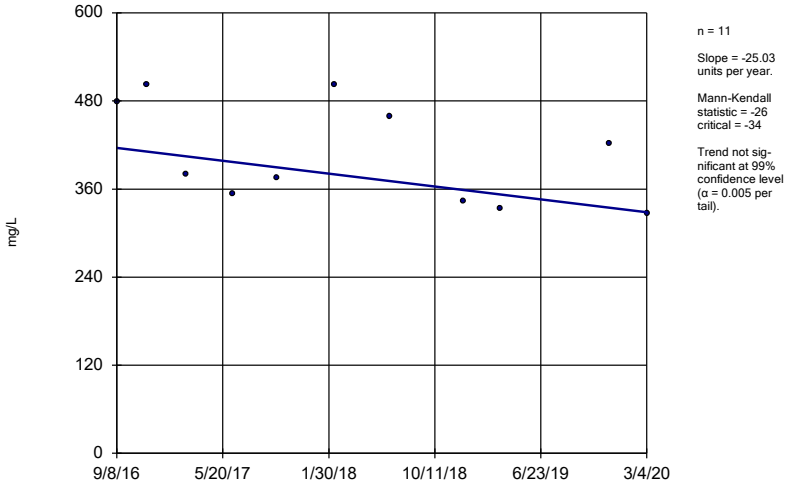
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-27I



n = 11

Slope = -25.03 units per year.

Mann-Kendall statistic = -26 critical = -34

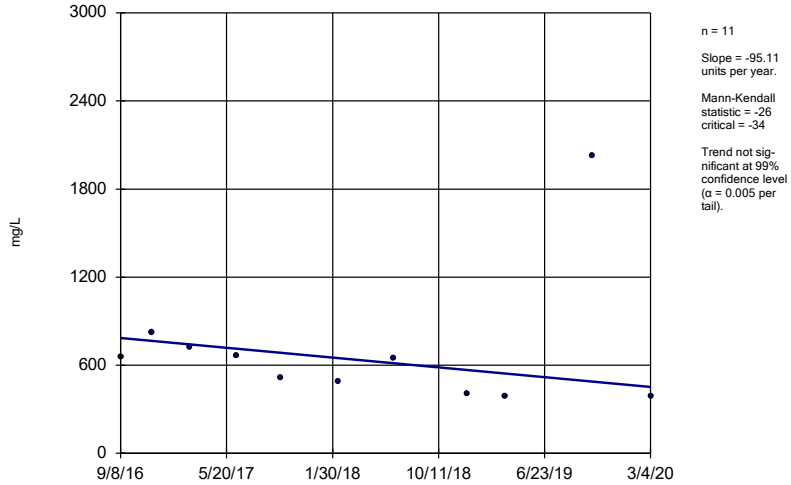
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-29I



n = 11

Slope = -95.11 units per year.

Mann-Kendall statistic = -26 critical = -34

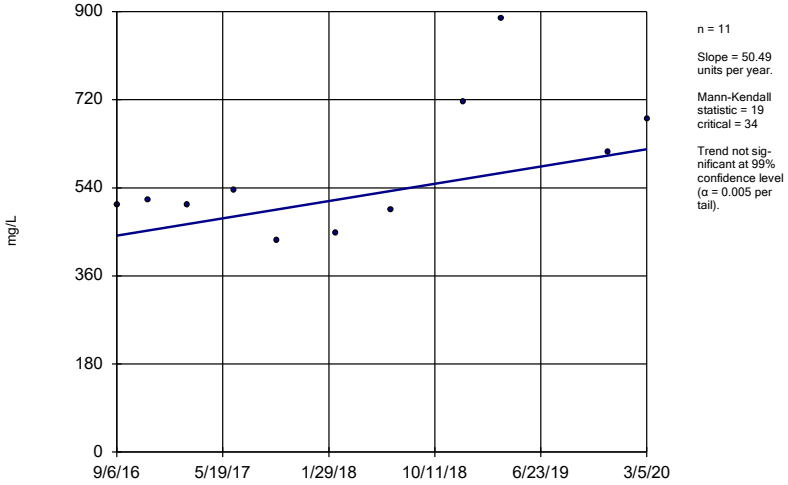
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-30I



n = 11

Slope = 50.49 units per year.

Mann-Kendall statistic = 19 critical = 34

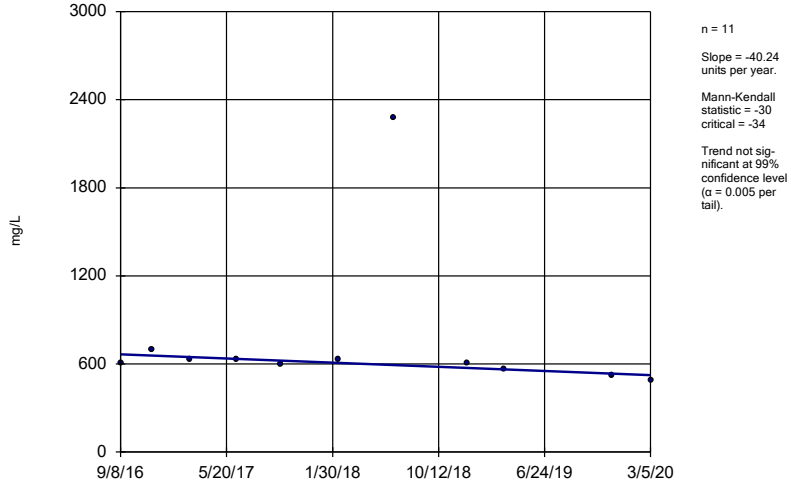
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-32S



n = 11

Slope = -40.24 units per year.

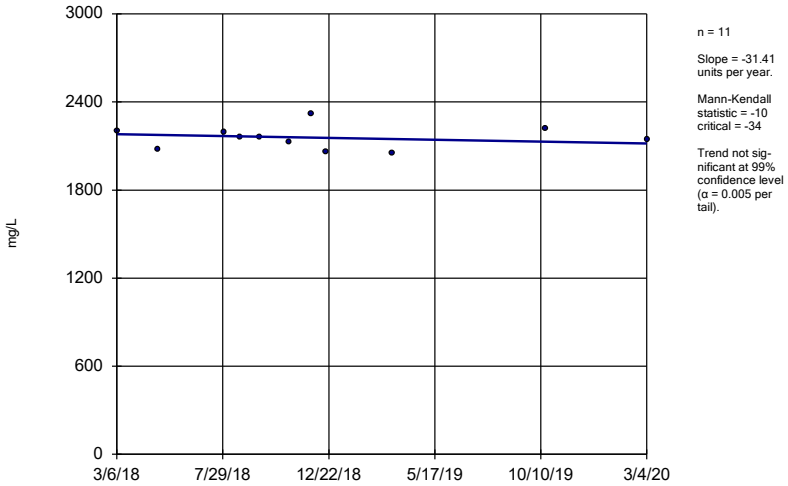
Mann-Kendall statistic = -30 critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sen's Slope Estimator

BRGWC-47



n = 11

Slope = -31.41 units per year.

Mann-Kendall statistic = -10
critical = -34

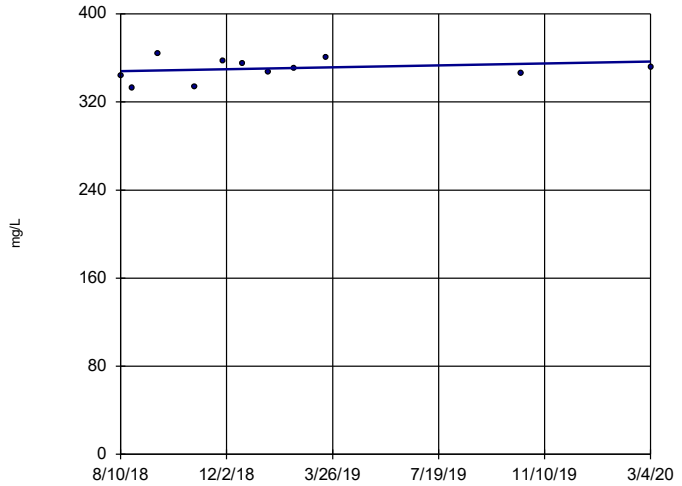
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-52I



n = 11

Slope = 5.448 units per year.

Mann-Kendall statistic = 9
critical = 34

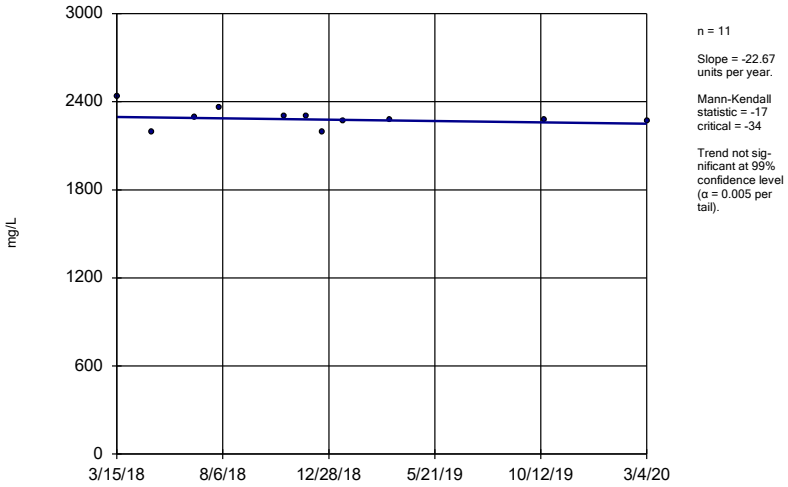
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Sen's Slope Estimator

BRGWC-50



n = 11

Slope = -22.67 units per year.

Mann-Kendall statistic = -17
critical = -34

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/4/2020 10:08 AM View: Ponds B,C,D App III Tre
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

FIGURE F.

Tolerance Limit Summary Table

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 10:23 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.012	n/a	n/a	n/a	n/a	88	n/a	n/a	85.23	n/a	n/a	0.01096	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	88	n/a	n/a	67.05	n/a	n/a	0.01096	NP Inter(NDs)
Barium (mg/L)	n/a	0.13	n/a	n/a	n/a	n/a	88	n/a	n/a	0	n/a	n/a	0.01096	NP Inter(normality)
Beryllium (mg/L)	n/a	0.003	n/a	n/a	n/a	n/a	88	n/a	n/a	100	n/a	n/a	0.01096	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0025	n/a	n/a	n/a	n/a	90	n/a	n/a	97.78	n/a	n/a	0.009888	NP Inter(NDs)
Chromium (mg/L)	n/a	0.016	n/a	n/a	n/a	n/a	87	n/a	n/a	27.59	n/a	n/a	0.01153	NP Inter(normality)
Cobalt (mg/L)	n/a	0.0135	n/a	n/a	n/a	n/a	88	n/a	n/a	57.95	n/a	n/a	0.01096	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	1.903	n/a	n/a	n/a	n/a	88	0.8855	0.2537	0	None	sqrt(x)	0.05	Inter
Fluoride (mg/L)	n/a	0.42	n/a	n/a	n/a	n/a	96	n/a	n/a	50	n/a	n/a	0.007269	NP Inter(normality)
Lead (mg/L)	n/a	0.005	n/a	n/a	n/a	n/a	88	n/a	n/a	84.09	n/a	n/a	0.01096	NP Inter(NDs)
Lithium (mg/L)	n/a	0.089	n/a	n/a	n/a	n/a	88	n/a	n/a	45.45	n/a	n/a	0.01096	NP Inter(normality)
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	n/a	72	n/a	n/a	90.28	n/a	n/a	0.02489	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	85	n/a	n/a	80	n/a	n/a	0.01278	NP Inter(NDs)
Selenium (mg/L)	n/a	0.01	n/a	n/a	n/a	n/a	88	n/a	n/a	93.18	n/a	n/a	0.01096	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	n/a	88	n/a	n/a	100	n/a	n/a	0.01096	NP Inter(NDs)

FIGURE G.

PLANT BRANCH PONDS B,C,D GWPS			
Constituent Name	**MCL**	**Background Limit**	**GWPS**
Antimony, Total (mg/L)	0.006	0.012	0.012
Arsenic, Total (mg/L)	0.01	0.005	0.01
Barium, Total (mg/L)	2	0.13	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	0.016	0.1
Cobalt, Total (mg/L)		0.0135	0.0135
Combined Radium, Total (pCi/L)	5	1.903	5
Fluoride, Total (mg/L)	4	0.42	4
Lead, Total (mg/L)		0.005	0.005
Lithium, Total (mg/L)		0.089	0.089
Mercury, Total (mg/L)	0.002	0.0005	0.002
Molybdenum, Total (mg/L)		0.01	0.01
Selenium, Total (mg/L)	0.05	0.01	0.05
Thallium, Total (mg/L)	0.002	0.001	0.002

**Highlighted cells indicated Background is higher than MCLs*

**MCL = Maximum Contaminant Level*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Confidence Intervals - Significant Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	**BRGWC-50**	**0.05875**	**0.01327**	**0.005**	**Yes**	**11**	**0.03601**	**0.02729**	**0**	**None**	**No**	**0.01**	**Param.**
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.0135**	**Yes**	**11**	**1.391**	**0.07006**	**0**	**None**	**No**	**0.006**	**NP (normality)**

Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	BRGWC-29I	0.003	0.003	0.012	No	11	0.002791	0.0006935	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-32S	0.003	0.003	0.012	No	11	0.002855	0.0004824	90.91	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-45	0.003	0.00088	0.012	No	12	0.002445	0.0009327	66.67	None	No	0.01	NP (NDs)
Antimony (mg/L)	BRGWC-52I	0.003	0.00085	0.012	No	11	0.002571	0.0009593	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	BRGWC-50	0.003	0.003	0.012	No	11	0.002775	0.0007477	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-25I	0.005	0.0006	0.01	No	11	0.003432	0.002178	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-27I	0.005	0.0009	0.01	No	11	0.003555	0.002012	63.64	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-29I	0.005	0.00051	0.01	No	11	0.0032	0.002117	54.55	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-30I	0.005	0.005	0.01	No	11	0.004596	0.001339	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-32S	0.005	0.005	0.01	No	11	0.004594	0.001348	90.91	None	No	0.006	NP (NDs)
Arsenic (mg/L)	BRGWC-45	0.005	0.0007	0.01	No	12	0.003341	0.002084	58.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	BRGWC-47	0.001962	0.0008551	0.01	No	12	0.002695	0.001798	33.33	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	BRGWC-52I	0.003528	0.001325	0.01	No	11	0.003279	0.001587	27.27	Kaplan-Meier	No	0.01	Param.
Arsenic (mg/L)	BRGWC-50	0.005	0.00074	0.01	No	11	0.003873	0.001943	72.73	Kaplan-Meier	No	0.006	NP (NDs)
Barium (mg/L)	BRGWC-25I	0.03965	0.02842	2	No	11	0.03404	0.006738	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-27I	0.01753	0.01494	2	No	11	0.01624	0.001552	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-29I	0.02046	0.01629	2	No	11	0.01839	0.002615	9.091	None	sqrt(x)	0.01	Param.
Barium (mg/L)	BRGWC-30I	0.02578	0.02096	2	No	11	0.02337	0.002891	9.091	None	No	0.01	Param.
Barium (mg/L)	BRGWC-32S	0.04928	0.03203	2	No	11	0.04065	0.01035	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-45	0.1014	0.08129	2	No	12	0.09133	0.0128	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-47	0.04704	0.03578	2	No	12	0.04141	0.007178	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-52I	0.0291	0.01617	2	No	11	0.02264	0.007762	0	None	No	0.01	Param.
Barium (mg/L)	BRGWC-50	0.02142	0.0184	2	No	11	0.01991	0.001814	0	None	No	0.01	Param.
Beryllium (mg/L)	BRGWC-27I	0.003	0.0001	0.004	No	12	0.0011	0.001404	33.33	None	No	0.01	NP (normality)
Beryllium (mg/L)	BRGWC-29I	0.003	0.00072	0.004	No	11	0.001315	0.0008624	18.18	None	No	0.006	NP (normality)
Beryllium (mg/L)	BRGWC-45	0.003	0.000079	0.004	No	13	0.002775	0.0008101	92.31	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-47	0.003	0.000056	0.004	No	12	0.002509	0.001146	83.33	None	No	0.01	NP (NDs)
Beryllium (mg/L)	BRGWC-50	0.00405	0.002619	0.004	No	11	0.003409	0.0008443	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	BRGWC-27I	0.0025	0.001	0.005	No	12	0.002172	0.0007902	91.67	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-32S	0.0025	0.00011	0.005	No	12	0.001976	0.0009735	83.33	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-45	0.0025	0.00011	0.005	No	13	0.002131	0.0008998	84.62	None	No	0.01	NP (NDs)
Cadmium (mg/L)	BRGWC-47	0.0025	0.00014	0.005	No	12	0.0007567	0.001052	25	None	No	0.01	NP (normality)
Cadmium (mg/L)	**BRGWC-50**	**0.05875**	**0.01327**	**0.005**	**Yes**	**11**	**0.03601**	**0.02729**	**0**	**None**	**No**	**0.01**	**Param.**
Chromium (mg/L)	BRGWC-25I	0.01	0.0016	0.1	No	11	0.008416	0.003526	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-27I	0.01	0.003	0.1	No	11	0.008545	0.003267	81.82	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-29I	0.01	0.01	0.1	No	11	0.01091	0.003015	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-30I	0.01	0.01	0.1	No	11	0.009555	0.001477	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-32S	0.01	0.0011	0.1	No	11	0.005264	0.004541	45.45	None	No	0.006	NP (normality)
Chromium (mg/L)	BRGWC-45	0.01	0.00053	0.1	No	12	0.009211	0.002734	91.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-47	0.01	0.00092	0.1	No	12	0.007792	0.004002	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	BRGWC-52I	0.01	0.01	0.1	No	11	0.009245	0.002503	90.91	None	No	0.006	NP (NDs)
Chromium (mg/L)	BRGWC-50	0.01	0.00071	0.1	No	11	0.007101	0.004154	63.64	None	No	0.006	NP (NDs)
Cobalt (mg/L)	BRGWC-25I	0.007708	0.004759	0.0135	No	11	0.006464	0.002081	18.18	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	BRGWC-27I	0.0149	0.0081	0.0135	No	12	0.01267	0.008844	8.333	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-29I	0.01131	0.006181	0.0135	No	11	0.008745	0.003078	9.091	None	No	0.01	Param.
Cobalt (mg/L)	BRGWC-30I	0.005	0.0007	0.0135	No	12	0.002082	0.001786	25	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-32S	0.01	0.0025	0.0135	No	12	0.005208	0.001671	91.67	None	No	0.01	NP (NDs)
Cobalt (mg/L)	BRGWC-45	0.04	0.0071	0.0135	No	13	0.01684	0.01795	7.692	None	No	0.01	NP (normality)
Cobalt (mg/L)	BRGWC-47	0.005189	0.0007867	0.0135	No	12	0.003224	0.003618	8.333	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	BRGWC-52I	0.005	0.0012	0.0135	No	11	0.003457	0.001752	45.45	None	No	0.006	NP (normality)
Cobalt (mg/L)	**BRGWC-50**	**1.5**	**1.3**	**0.0135**	**Yes**	**11**	**1.391**	**0.07006**	**0**	**None**	**No**	**0.006**	**NP (normality)**
Combined Radium 226 + 228 (pCi/L)	BRGWC-25I	1.265	0.828	5	No	11	1.046	0.2622	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-27I	1.308	0.6207	5	No	11	0.9643	0.4124	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-29I	1.769	1.207	5	No	11	1.488	0.3375	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-30I	1.281	0.6362	5	No	11	0.9584	0.3866	0	None	No	0.01	Param.

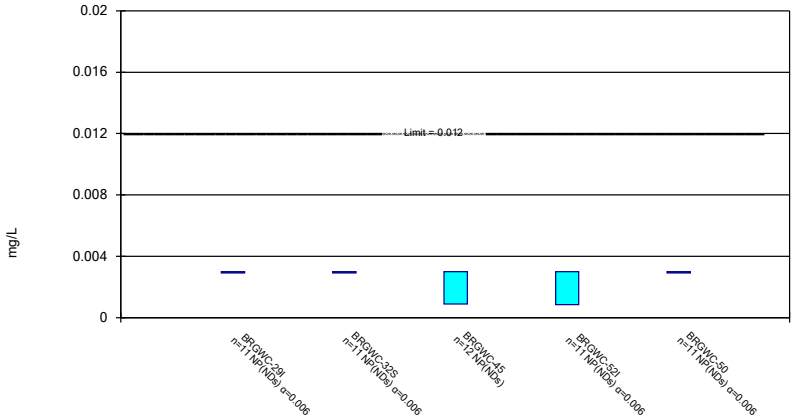
Confidence Intervals - All Results

Plant Branch Client: Southern Company Data: Plant Branch Ash Pond Printed 5/4/2020, 11:14 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Combined Radium 226 + 228 (pCi/L)	BRGWC-32S	1.281	0.5121	5	No	11	0.8965	0.4614	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-45	0.9417	0.4005	5	No	12	0.6711	0.3449	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-47	1.572	0.9088	5	No	12	1.24	0.4223	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-52I	1.958	1.203	5	No	11	1.58	0.4532	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	BRGWC-50	1.977	1.218	5	No	11	1.597	0.455	0	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-25I	0.3211	0.1107	4	No	12	0.2517	0.1579	16.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-27I	0.2949	0.148	4	No	12	0.2603	0.08764	25	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-29I	0.2941	0.09779	4	No	12	0.2434	0.1298	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-30I	0.4938	0.1251	4	No	12	0.3334	0.2333	16.67	Kaplan-Meier	No	0.01	Param.
Fluoride (mg/L)	BRGWC-32S	0.3	0.09	4	No	12	0.23	0.094	58.33	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-45	0.69	0.12	4	No	13	0.3389	0.2312	61.54	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	BRGWC-47	0.4689	0.1301	4	No	13	0.3565	0.2633	30.77	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	BRGWC-52I	0.2768	0.1399	4	No	11	0.2084	0.08217	9.091	None	No	0.01	Param.
Fluoride (mg/L)	BRGWC-50	1.109	0.2724	4	No	12	0.6908	0.5332	0	None	No	0.01	Param.
Lead (mg/L)	BRGWC-25I	0.005	0.005	0.005	No	11	0.004555	0.001474	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-27I	0.005	0.005	0.005	No	11	0.004551	0.001489	90.91	None	No	0.006	NP (NDs)
Lead (mg/L)	BRGWC-29I	0.0006	0.00027	0.005	No	10	0.000844	0.001464	10	None	No	0.011	NP (normality)
Lead (mg/L)	BRGWC-45	0.005	0.00026	0.005	No	12	0.004605	0.001368	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-47	0.005	0.00012	0.005	No	12	0.004593	0.001409	91.67	None	No	0.01	NP (NDs)
Lead (mg/L)	BRGWC-50	0.005	0.000085	0.005	No	11	0.002825	0.002502	54.55	None	No	0.006	NP (NDs)
Lithium (mg/L)	BRGWC-27I	0.025	0.0014	0.089	No	11	0.005882	0.009454	18.18	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-29I	0.0043	0.0029	0.089	No	11	0.005436	0.006503	9.091	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-30I	0.01659	0.01079	0.089	No	11	0.01384	0.004206	9.091	None	ln(x)	0.01	Param.
Lithium (mg/L)	BRGWC-32S	0.025	0.0021	0.089	No	11	0.006327	0.009233	18.18	None	No	0.006	NP (normality)
Lithium (mg/L)	BRGWC-45	0.003463	0.002991	0.089	No	11	0.003227	0.0002832	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-47	0.04447	0.04009	0.089	No	12	0.04228	0.002791	0	None	No	0.01	Param.
Lithium (mg/L)	BRGWC-52I	0.009418	0.002994	0.089	No	11	0.006836	0.006404	9.091	None	ln(x)	0.01	Param.
Lithium (mg/L)	BRGWC-50	0.04217	0.03747	0.089	No	11	0.03982	0.002822	0	None	No	0.01	Param.
Mercury (mg/L)	BRGWC-25I	0.0005	0.00004	0.002	No	9	0.0004489	0.0001533	88.89	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-27I	0.0005	0.000047	0.002	No	9	0.0003997	0.0001991	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-29I	0.0005	0.00004	0.002	No	9	0.0004011	0.0001964	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-30I	0.0005	0.00004	0.002	No	9	0.0004011	0.0001964	77.78	None	No	0.002	NP (NDs)
Mercury (mg/L)	BRGWC-32S	0.0005	0.00009	0.002	No	9	0.00041	0.0001786	77.78	None	No	0.002	NP (NDs)
Molybdenum (mg/L)	BRGWC-52I	0.01	0.0032	0.01	No	10	0.00735	0.003014	50	None	No	0.011	NP (normality)
Molybdenum (mg/L)	BRGWC-50	0.01	0.0033	0.01	No	10	0.00855	0.003068	80	None	No	0.011	NP (NDs)
Selenium (mg/L)	BRGWC-27I	0.003534	0.001816	0.05	No	11	0.004845	0.003436	27.27	Kaplan-Meier	sqrt(x)	0.01	Param.
Selenium (mg/L)	BRGWC-29I	0.01	0.0039	0.05	No	11	0.007718	0.002986	54.55	Kaplan-Meier	No	0.006	NP (NDs)
Selenium (mg/L)	BRGWC-30I	0.01	0.0034	0.05	No	11	0.007591	0.003401	63.64	Kaplan-Meier	No	0.006	NP (NDs)
Selenium (mg/L)	BRGWC-32S	0.01532	0.001391	0.05	No	11	0.02802	0.0388	36.36	Kaplan-Meier	ln(x)	0.01	Param.
Selenium (mg/L)	BRGWC-45	0.01	0.0029	0.05	No	12	0.009408	0.00205	91.67	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-47	0.01	0.0017	0.05	No	12	0.007933	0.00374	75	Kaplan-Meier	No	0.01	NP (NDs)
Selenium (mg/L)	BRGWC-50	0.01	0.002	0.05	No	11	0.006491	0.004047	54.55	Kaplan-Meier	No	0.006	NP (NDs)
Thallium (mg/L)	BRGWC-29I	0.0002	0.00017	0.002	No	10	0.000212	0.0001023	10	None	No	0.011	NP (normality)

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

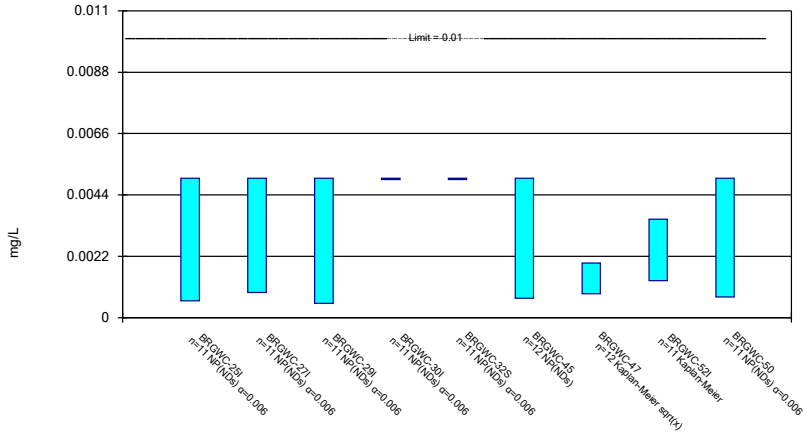


Constituent: Antimony Analysis Run 5/4/2020 11:12 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

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.

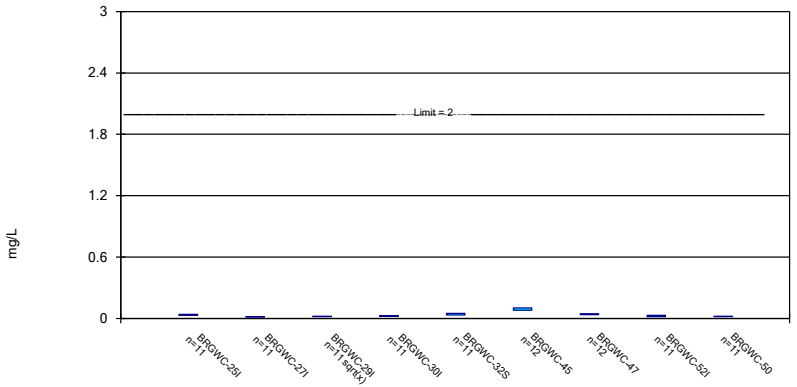


Constituent: Arsenic Analysis Run 5/4/2020 11:12 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

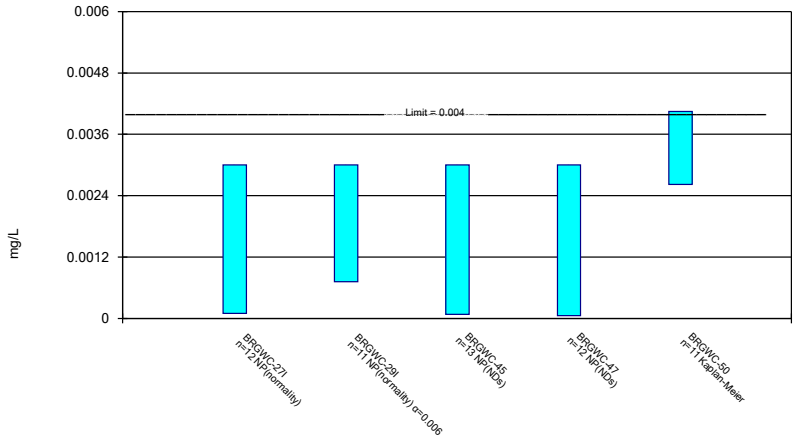


Constituent: Barium Analysis Run 5/4/2020 11:12 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

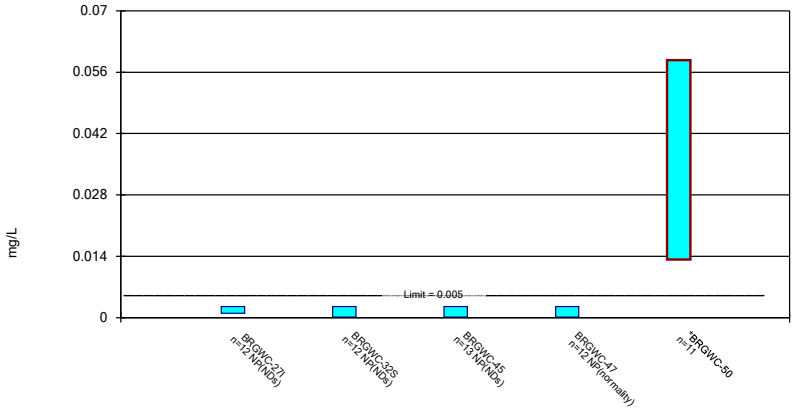
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/4/2020 11:12 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

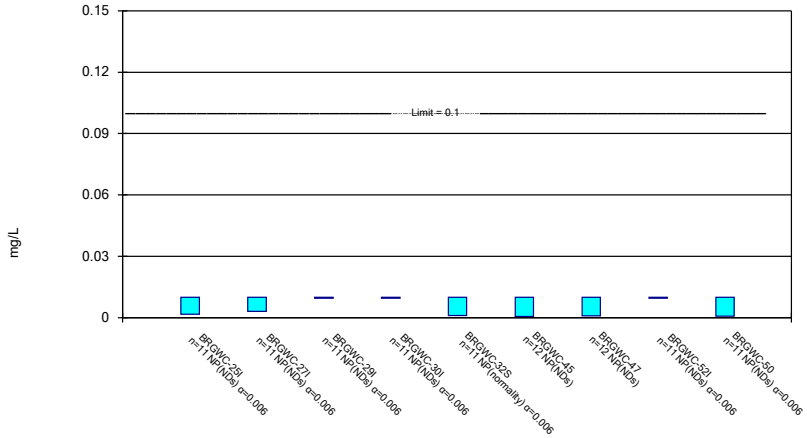
Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/4/2020 11:12 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Non-Parametric Confidence Interval

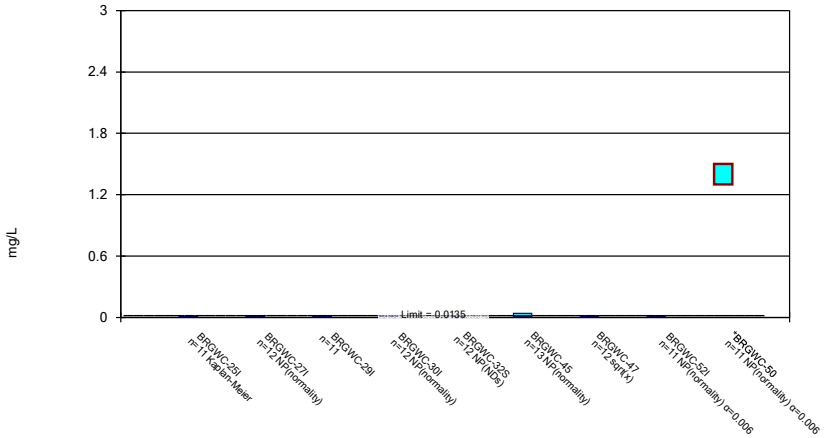
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

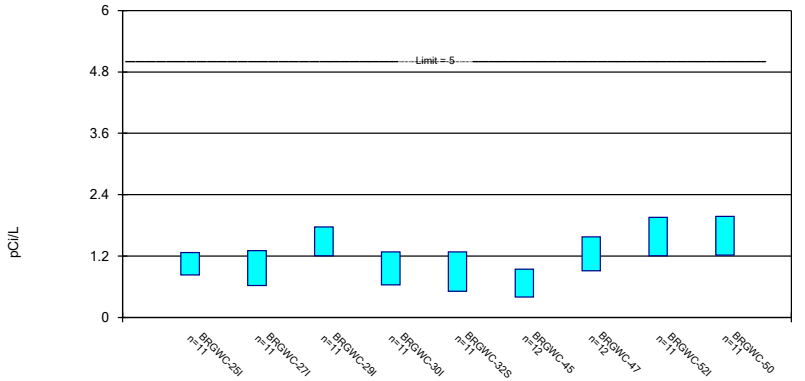
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Parametric Confidence Interval

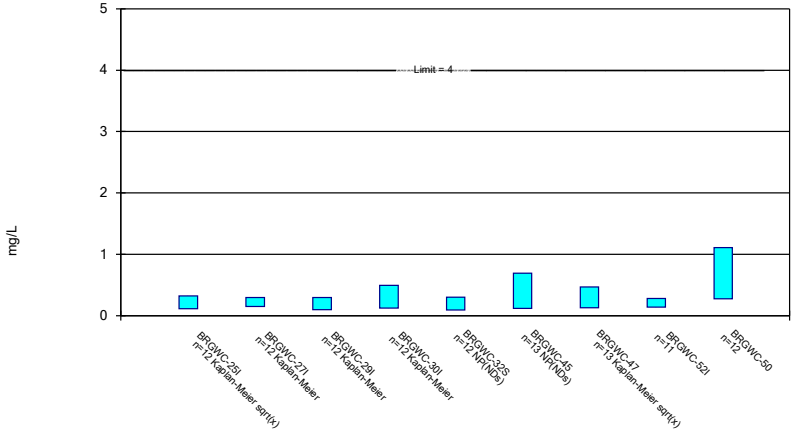
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

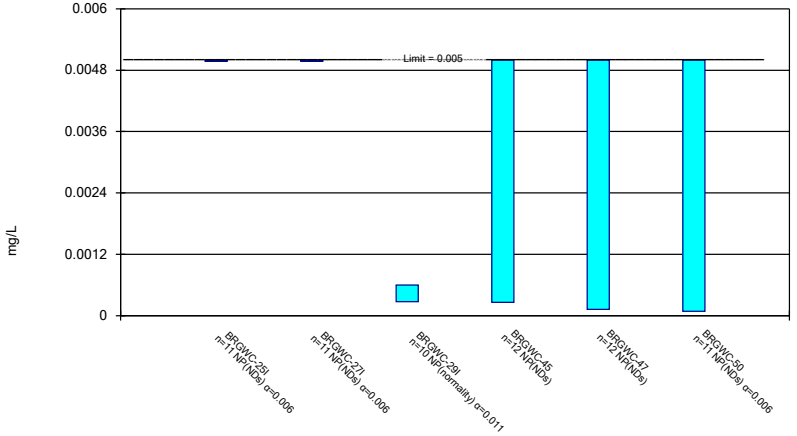


Constituent: Fluoride Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

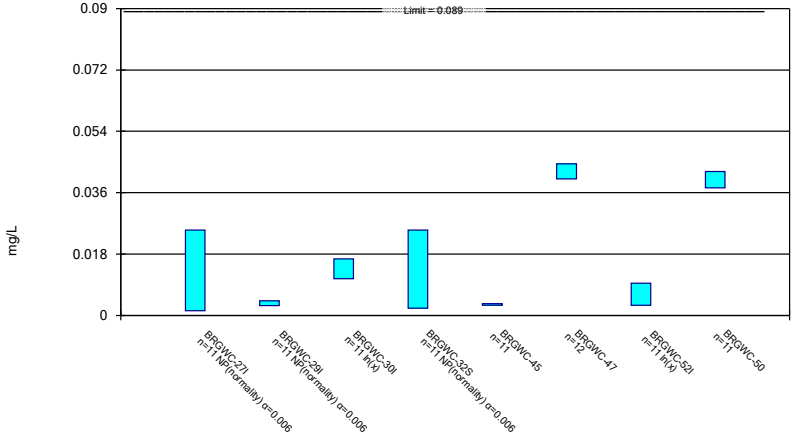


Constituent: Lead Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

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.

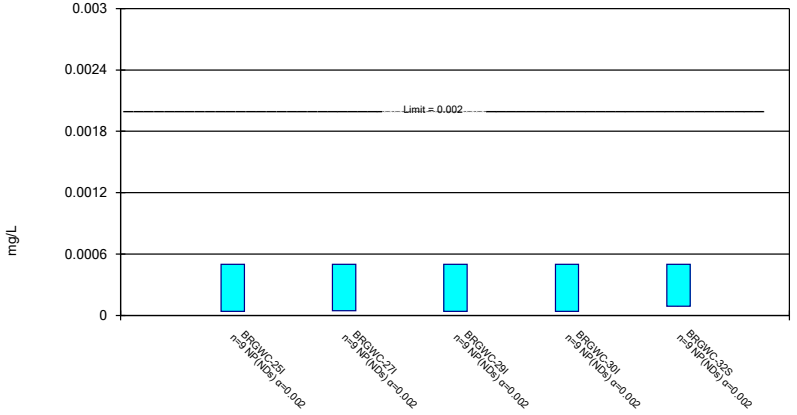


Constituent: Lithium Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

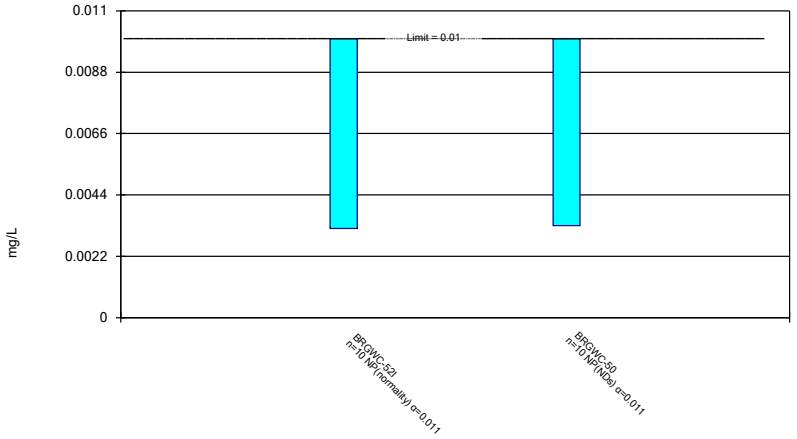


Constituent: Mercury Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

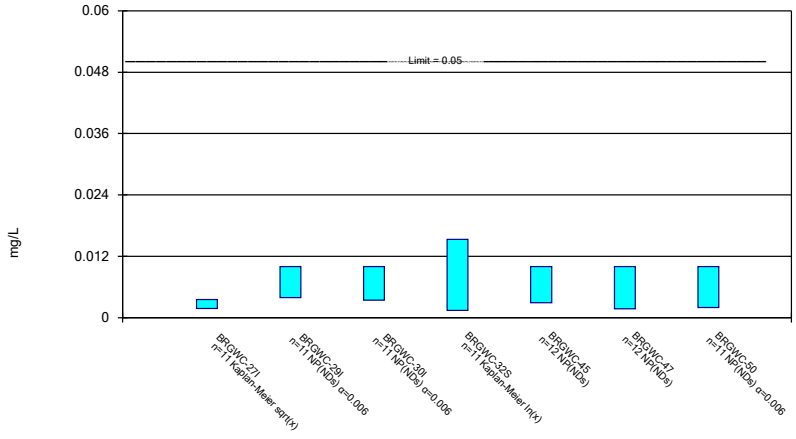


Constituent: Molybdenum Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

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.

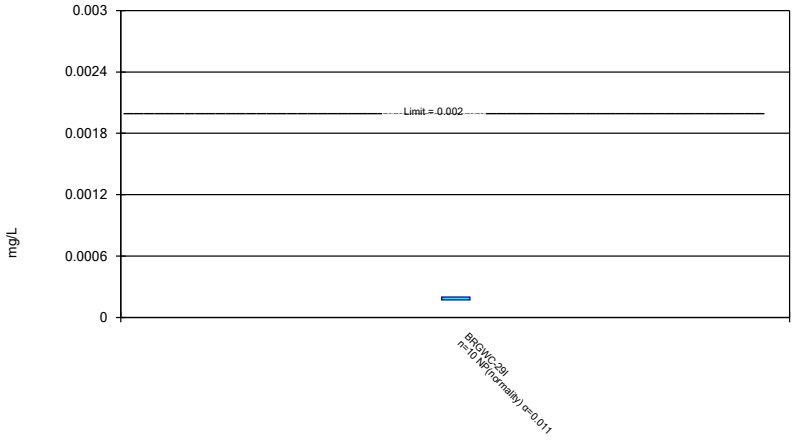


Constituent: Selenium Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

Sanitas™ v.9.6.25 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Thallium Analysis Run 5/4/2020 11:13 AM View: Ponds B,C,D App IV
Plant Branch Client: Southern Company Data: Plant Branch Ash Pond

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